Recipes for Recovery: A Configurational Approach to Developing and Deploying Interorganisational Trust Recovery Solutions Following Service Failure

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Abstract

Trust has been described as “perhaps the single most powerful relationship marketing tool available to a company” (Berry, 1995, p. 242). When one party trusts the other, he or she is willing to risk dependence on the other to obtain a goal. Consequently, trust is a critical influence in the development of business-to-business (B2B) relationships and relationship commitment. Trust is a fundamental construct in relational exchange because relationships characterised by trust are so highly valued that parties will desire to commit themselves to such relationships. Trust is also one of the factors that differentiate relationships from mere transactions (Hess & Story, 2005) and enjoys wide acceptance among scholars as a key facilitator of interorganisational relationship development; however, the construct has not been widely explored within the context of service failure. Undeniably, trust is a central tenet of relationship marketing and a useful construct for measuring the likelihood of customer loyalty as well as for predicting future purchase frequency.

Many studies have considered how trust develops, but there is limited research specifically investigating how trust might be recovered after it has been harmed in the context of B2B relationships. Scholars note that previous research on business relationships and trust have been largely static, cross-sectional and variable-focused correlational explanations of trust (Huang & Wilkinson, 2013). This shortcoming of current research is that it does not show how different variables change and develop, interrelatedly, and what types of relations emerge, in terms of different mixes and values of variables, under different conditions (Wong, Wilkinson, & Young, 2010).
To address this shortcoming, this research features two studies specifically examining trust recovery in B2B relationships following service failure and a breach of trust from the perspective of the buying organisation. Study One presents an exploration of the determinants of trust recovery following service failure through qualitative enquiry and thematic analysis. This analysis reveals eight factors that contribute to trust recovery following service failure of both a cognitive- and affective-dominant nature. Both cognitive- and affective-dominant perceptions are essential causal conditions when seeking to understand buyers’ estimations of trust in a B2B relationship (Franklin & Marshall, 2019) and may be combined in different configurations in order to achieve trust recovery. However, limited research has incorporated these factors to the configurational analysis of high levels of trust recovery success following service failure in a B2B context.

Toward this end, Study Two adopts a configurational approach through qualitative comparative analysis (QCA) to investigate the interrelatedness between both causal and contextual conditions when seeking to recover trust with a buying organisation. This analysis unravels configurations of these causal and contextual conditions, offering theoretical consensus surrounding the role of key constituents of interorganisational trust recovery, and their interrelatedness, in a B2B context. Additionally, this research offers managers guidance regarding different ways to achieve successful trust recovery with their buying organisations. Presenting managers with a variety of optional choices in the design and deployment of reparative solutions invites an economy, or efficiency, in their efforts by choosing the configuration that best fits with the supplying organisation’s strategy, culture or already existing resource availability.
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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

The following publications relate to work undertaken for this thesis:


____________________________________

Drew Franklin

November 22\textsuperscript{nd}, 2019
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Ethics approval from the Auckland University of Technology Ethics Committee (AUTEC) was granted for data collection on 8th May, 2017 with application number 17/108.
1.1 Background

A breadth of relationship marketing research has demonstrated that committed and loyal relationships are predicated on trust (Crosby, Evans, & Cowles, 1990; Morgan & Hunt, 1994; Parasuraman, Berry, & Zeithaml, 1991). In a business-to-business (B2B) relationship context, scholars suggest that trust is even more critical because the actors are relatively fewer, the switching costs are typically higher and more prohibitive, interdependence between organisations is common and the buying process is long and complex (Akrout & Diallo, 2017). Successful B2B relationship development demands an understanding of what drives the propensity to trust between organisations and how best to recover that trust in the event of service failure.

The longer-term, more involved, nature of B2B relationships precludes flawless execution of all service encounters. Service failure is a common occurrence within interorganisational relationships and the trust enjoyed between partners can suffer as a consequence. Successful service recovery is often not sufficient in itself to mitigate relationship decay following service failure. Whilst successful service recovery may satisfy prescribed demands, service failure can introduce a measure of distrust into the relationship. This distrust may enact cautionary action from the victim and repair strategies must address mechanisms to minimise the collateral damage that a trust violation may cause to other aspects of a relationship (Lewicki, McAllister, & Bies, 1998; Lewicki & Bunker, 1996; Lyon, Möllering, & Saunders, 2012). While trust creates a sense of safety and confidence, distrust causes feelings of worry, suspicion and fear (McKnight, Choudhury, & Kacmar, 2002). Thus, overcoming distrust, or the “active expectation that others will behave in ways that
endanger our safety and security” (Truong, 2019, p. 1072), is a critical managerial concern. Only a few studies have considered how trust develops in this context and little extant research has considered how trust might recover after it has been harmed (Schweitzer, Hershey, & Bradlow, 2006). Furthermore, most prevailing work is situated in a business-to-consumer (B2C) context (Lee, Lee, & Tan, 2015; Liu, Xiao, Lim, & Tan, 2017), discounting the importance of a more specific understanding of trust and trust recovery in a B2B context. The success of B2B relationships relies heavily on trust between buyer and supplier organisations, particularly when the buying organisation is a focal company in the supply chain (Rao, Truong, Senecal, & Le, 2007). Thus, the risks of unsuccessful service recovery and, by extension, a loss of trust can be potentially catastrophic to an organisation (Truong, 2019). This research addresses this explicit gap in current knowledge.

1.2 Context for the Research

According to a recent industry report, a lack of trust leads to decreased profitability (cited by 65.5% of surveyed companies) and increased customer attrition (cited by 61% of surveyed companies) (Deloitte, 2015). Yet trust is at a premium for many contemporary organisations. Scholarly reviews, and research, point to a persistent and debilitating scepticism among customers, investors and other stakeholders in the trustworthiness of the business world (Gillespie & Dietz, 2009). The Edelman Trust Barometer, conducted on a global basis, found that trust in business plummeted across the globe after the 2007-08 financial crisis. Critically, in 2018, the Edelman Trust Barometer reported an unprecedented crisis of trust in business within many large, developed countries and an increased expectation of business to be agents of positive change (Edelman, 2018).
Fostering trust within B2B relationships has become increasingly more salient due to these changes to trust dynamics within our postmodern society (Lewis & Weigert, 2012). Increasing polarisation of societal trust in both economic and political spheres has perpetuated the requisite desire of organisations to seek trusted partners in exchange. This is most poignant in Greg Smith’s personal testimony in his op-ed reflection in *The New York Times* upon leaving Goldman Sachs in 2012. Smith affirms what he labels a “basic truth,” emphasising the foundational importance of trust in contemporary finance: “if clients don’t trust you they will eventually stop doing business with you” (Smith, 2012, p. 27).

### 1.3 Motivation for the Research

Past relationship marketing research has defined trust as a conviction that when customers develop a tacit understanding with sellers, they will believe that sellers are reliable and will act for the sake of customers’ benefits, therefore reducing perceived risk by a measure of reliability and honesty (Crosby et al., 1990; Morgan & Hunt, 1994). Buying organisations that develop trust in suppliers based on different relational experiences have good reason to stay in these relationships: they reduce uncertainty and vulnerability (Crosby et al., 1990; Parasuraman et al., 1991; Reast, 2005).

Although the benefits of trust are well documented, creating and sustaining trust is often difficult (Kramer, 1999) and the paucity of research on interorganisational trust recovery is under-representative of its importance. Furthermore, most prior research on trust or trust repair within a B2B context examines trust within either cognitive or affective dimensions, but rarely both. In addition, within contemporary trust research, the exploration of contextual, organisation-level and individual, actor-level traits that may influence trust recovery efforts is markedly absent. In this research, an attempt has been made to
contribute to these gaps in knowledge. By examining the role of both cognitive and affective dimensions of trust in trust recovery efforts and by explicitly investigating the potentially moderating influence of the size of the buying organisation, severity of the trust breach and the individual level of decision-making authority of the focal trustor on trust recovery, this research extends insight and understanding of this complex phenomenon.

1.4 Research Question

The overarching research questions that this work addresses are:

**Research Question One:** What are the characteristics, qualities or behaviours (collectively known as conditions) that best serve to recover interorganisational trust following service failure?

**Research Question Two:** What other contributing factors serve to moderate the influence of these conditions?

This research will investigate trust recovery in B2B relationships from the perspective of the buying organisation after a critical incident involving service failure and a breach of trust. This work seeks to conceptualise the antecedents of trust recovery within a B2B relationship context and develop a series of solutions leading to trust recovery representative of the underlying patterns of cause-effect relationships between these antecedent conditions. This research seeks to distinguish itself from many existing studies that capture trust very broadly (Mollering, 2006) or are only interested in a particular, peripheral aspect of trust, by setting out to examine trust recovery as a central concern from the outset (Lyon et al., 2012).
1.5 Design of the Research

Developing an understanding of what drives trust recovery between organisations demands exploration of the ambiguous, multilevel nature of trust (Lyon et al., 2012). This theoretical ambiguity is borne out of the nature of interorganisational relationships being characterised as an “amalgam of decisions made by individuals” (Lynch, 2004, p. 412); it is individuals trusting, collectively, as an organisation rather than the overall organisations themselves. There are many personal, and often intimate, drivers of the propensity to trust within these individuals; sometimes even at odds with those of the organisation (Kramer, 1999).

As the research questions are complex and demand a comprehensive exploration of interorganisational trust dynamics, this study adopts a sequential mixed methods research design that starts with qualitative enquiry and proceeds to case-based qualitative comparative analysis (QCA) and proposition testing procedures. To overcome the limitations of a single design, mixed methods research takes advantage of using multiple ways to explore a research problem. Of the number of alternative mixed method research designs, which differ in the relative emphasis and sequencing of the qualitative and quantitative stages (Creswell & Plano-Clark, 2007), a sequential mixed methods research design is most appropriate as this work seeks to explore the phenomenon of trust and trust recovery (Creswell & Poth, 2017).

In Study One, in-depth interviews were conducted with a purposive sample of B2B decision makers in both large corporations and small to medium enterprise representative of either executive level decision-makers or operational level decision-makers. Next, thematic analysis of the interviews is undertaken to explore the domain of the phenomenon, verify the theorised conditions and look for any additional conditions worthy of deeper
investigation. The qualitative stage of this research features a particular hybrid approach to thematic analysis, involving directed deductive and inductive reasoning (Swain, 2018). This approach embraces existing theory or prior research that exists about the phenomenon, whilst allowing for prevailing theory to benefit from further description and development (Hsieh & Shannon, 2005). The result of this non-linear, reflexive process is that theory is both a precursor-to and an outcome-of the data analysis (Fereday & Muir-Cochrane, 2006; Swain, 2018). Thematic analysis of the interviews provided insights into the dimensionality of trust and trust recovery and the potential conditions leading to trust recovery between buyer and supplier organisations that are investigated further in Study Two (Braun & Clarke, 2006).

In Study Two a case-based QCA is undertaken to establish how the different trust conditions change and develop and what types of relationships emerge, in terms of different mixes and values of conditions, within the different cases represented by the in-depth interviews (De Villiers & Tipgomut, 2018; Ragin, 2000; Ragin, Rubinson, et al., 2008; Wong et al., 2010). Such an approach serves to reveal much about the dynamics and evolution of trust recovery; it considers feedback effects and two-way causation, the impact of different factors and their interaction effects (Abbott, 1988; Buttriss & Wilkinson, 2006; Hsu, Woodside, & Marshall, 2013; Van de Ven & Engleman, 2004; Woodside, 2017).

1.6 Contributions of the Research

This research will investigate trust recovery in B2B relationships from the perspective of the buying organisation after a critical incident involving service failure and a breach of trust. This research seeks to distinguish itself from many existing studies that capture trust very broadly (Mollering, 2006) or are only interested in a particular, peripheral aspect of trust, by
setting out to examine trust recovery as a central concern from the outset (Lyon et al., 2012).

A comprehensive review of the existing trust literature reveals a need for further exploration of both existing and emerging dimensions of trust recovery within a B2B context. This research is expected to be an important contribution to existing literature and of significance to both academics and practitioners in the areas of relationship marketing and trust research, and offers several theoretical and methodological contributions. Most prior research has examined trust as a static construct; focusing on unidimensional measures of trust that serve to limit the generalisability and practicality of the findings (Doney, Barry, & Abratt, 2007; Schweitzer et al., 2006). Furthermore, Bachmann (2011) argues that the dominant stream of trust literature focuses too much on the micro level of trust building processes and hence promotes a reductionist understanding of the phenomenon. In order for future trust research to provide deeper insight, scholars emphasise the need to place considerably more emphasis on the constitutive embeddedness of actors’ behaviour in the institutional environment. Dirks, Lewicki, and Zaheer (2009, p. 74), state that “as a relationship becomes multiplex or multifaceted, it can simultaneously involve trust and distrust. A complex relationship can at the same time be positive in some facets and negative in others.” To admit to the possibility of “the continuous coexistence of positive and negative states (i.e., ambivalence)” is to envision a very different dynamic from that in which trust is first damaged (and lost) and then repaired (or never regained). Business relationships are almost by definition multiplex and multifaceted, and hence are rarely well served by conceptualisations that dichotomise states and view dynamics only as alternation in modes. The adoption of QCA as a research
approach in Study Two responds to this call in the prevailing trust literature for investigation of trust and trust recovery using methods that embrace the complexity inherent in the phenomenon. This research is one of the few studies adopting QCA to investigate trust, generally, and the only QCA study investigating trust recovery, specifically.

This research also provides a number of useful insights for managers and marketing practitioners. The implications for marketing management are such that a more explicit understanding of how best to recover trust following service failure will lead to more productive and proactive relationship practices. Prevailing research suggests that most organisations respond poorly to trust failures (Bhide & Stevenson, 1992; Mishra, 1996), but that trust can be repaired (Bottom, Gibson, Daniels, & Murnighan, 2002). Given the prevalence of trust failures, and the seriousness of the consequences, knowing how to recover trust is seen as a “critical management competency” (Lewicki & Bunker, 1996, p. 117). Identifying the most appropriate interorganisational trust recovery solutions relative to different contextual conditions affords managers a better understanding of how to influence and manage their buyer organisation relationships (Gillespie, 2017).

1.7 Organisation of the Thesis

This thesis consists of six chapters and is organised as follows. Chapter One has presented an introduction to the thesis and outlined the research question and research aims. Chapter Two will discuss existing research and theory on trust and trust recovery and its proposed dimensions as well as the theoretical foundations of the research. Chapter Three presents the designs of Study One and Study Two with justification for the choice of research paradigm, methodology and methods. Chapter Four presents and discusses the analysis and results of the qualitative enquiry and thematic analysis. Chapter Five presents
and discusses the QCA results, including an in-depth analysis of selected cases. Finally, Chapter Six draws conclusions regarding the research questions, also presenting the theoretical contributions of the thesis, managerial implications of the findings, limitations of the research and areas for future research.
Chapter Two: Literature Review

2.1 Introduction

This chapter contains several sections that review different aspects of the relevant literature, revealing the importance of trust, generally, and in business-to-business (B2B) relationships, specifically. First, an overview of the concept of trust within foundational and contemporary trust research is presented. Second, literature on B2B, or interorganisational, trust is reviewed along with distinctions in trust representative of this relationship context. Third, the most empirically salient causal, or antecedent, conditions influencing trust in the B2B literature are discussed. Fourth, contextual conditions influencing trust within a B2B context are presented. Fifth, the relationship between service recovery and trust recovery is introduced. Finally, the trust recovery literature and the conditions influencing trust repair are presented along with additional contextual conditions influencing trust recovery specific to B2B relationships. This extensive review of the existing trust literature reveals the importance, and the need, for further exploration of both existing and emerging dimensions of trust recovery within a B2B context following service failure. Furthermore, a comprehensive understanding of trust, in general, and interorganisational trust, specifically, provides the insights and direction necessary for a sound research design, detailed in subsequent chapters.

2.2 The Concept of Trust

Trust is a concept that has been studied within various different disciplines and thus encompasses conceptual differences within the psychological, social, organisational and economic bodies of knowledge (Colquitt, Scott, & LePine, 2007). Trust has been
conceptualised, defined, modelled and operationalised in a wide variety of ways. Trust has been viewed as an individual disposition (Rotter, 1967; Worchel, 1979), a psychological state (Lewicki et al., 1998; Rousseau, Sitkin, Burt, & Camerer, 1998), and a behaviour (Deutsch, 1962; Mayer, Davis, & Schoorman, 1995). Within these conceptualisations, different disciplines have emphasised different components such as individual, organisational, and economic aspects of trust. Despite vast research into the concept of trust over several decades, trust researchers have suggested that it remains one of the most challenging concepts to study, “worthy of more thorough analysis and a deeper understanding” (Gundlach, Cannon, & August, 2010, p. 411). Early trust researchers have described trust as “a somewhat mystical and intangible factor, probably defying careful definition” (Giffin, 1967, p. 104) and, even under more contemporary examination, “a bewildering array of meanings and connotations” (Taylor, 1989, p. 85).

Researchers are still far from consensus on an overarching definition of trust (McKnight, Cummings, & Chervany, 1998). In fact, early trust researchers remark that trust definitions are “a confusing potpourri” (Shapiro, 1987, p. 625), a “conceptual confusion” (Lewis & Weigert, 1985, p. 975), and even a “conceptual morass” (Barber, 1983; Carnevale, Pruitt, & Carrington, 1982, p. 473). Trust has even been described as an “elusive concept” (Gambetta, 1988, p. ix). More contemporary trust researchers concur with these previous estimations of the conceptualisation of trust, with Lewicki (2017, p. 206) remarking that “…the work [on trust] has been primitive, and […] has been narrowly and not clearly defined” with the need to gain more sound empirical measurements of the construct and its interrelationships even more important in contemporary business practice. However, whilst a uniform conceptualisation of trust may be elusive, there is profuse, multi-disciplinary
acceptance of the importance of trust as a social foundation of interaction (Lewis & Weigert, 2012) and an “economic primitive” that is a fundamental, underlying aspect of all exchanges (Berg, Dickhaut, & McCabe, 1995; Mathews, 2017); in effect, the glue that holds a business relationship together (Deutsch, Coleman, & Marcus, 2011).

Scholars have reflected on the excitement, and frustration, that the growing community of trust researchers experience; how trust is one of the most fascinating and fundamental social phenomena yet, at the same time, one of the most elusive and challenging concepts to study (Lyon et al., 2012; Möllering, 2006). The debate about how best to define trust and the broad range of definitions posed in recent conceptual and empirical research are well addressed by Rousseau et al. (1998), Möllering (2006) and Dietz and Den Hartog (2006). The many multifaceted definitions and operationalisations of trust have been outlined in recent literature (Castaldo, 2007; Seppänen, Blomqvist, & Sundqvist, 2007) and number as many as 70. This proliferation of views, perspectives and representations has served to cloud the development of, or agreement on, the nature of the internal dynamics of trust (Lewicki et al., 1998; Lyon et al., 2012). Within contemporary marketing literature, there are only a few empirical studies focused principally on trust that allow conclusions to be drawn about the generalisability of the individual findings (Sichtmann, 2007).

Although distinctions exist across the various conceptualisations and definitions of trust, there are common themes that emerge, such as beliefs and expectations about the intentions of another party, and the willingness to accept vulnerability to the actions of another party in exchange (Mayer et al., 1995; McAllister, 1995; Rousseau et al., 1998). This uncertainty on the part of the trustor about the motives and behaviours of the trustee is critical to activating trust (Arrow, 1973; Lewis & Weigert, 1985). An aspect of this
uncertainty also includes the inability to control the trustee and is based on the expectation that the supplying firm will not behave in an opportunistic manner even in the absence of strict controls (Anderson & Weitz, 1992). In effect, trust acts as a mechanism to absorb uncertainty (Ripperger, 1998). Further, scholars note that trust can only be operationalised when both exchange partners can decide whether they want to honour or betray the trust (Sichtmann, 2007). Thus, trust is voluntary (Ripperger, 1998). The trust literature consistently affirms the temporal dimension of trust; that trust applies to events in the future (Luhmann, 1988; Mayer et al., 1995) – that is, trust diagnosis is an extrapolation of past experiences to predict future behaviour of the trustee, the supplying firm.

Consequently, the greater number of positive experiences in which to invest a measure of diagnostic equity, the stronger the buyer’s trust will be.

There is also consistent acceptance in contemporary trust literature that relationship appraisals based on trust employ different diagnostic cues relative to both cognitive- or calculus-based, and affective- or identification-based, relationship characteristics (Dowell, Morrison, & Heffernan, 2015; Rousseau, 1985; Rousseau et al., 1998). It is widely reported that the propensity to trust is rooted in both cognitive and affective evaluations of trust and serves to form an overall evaluation of trust (Sekhon, Roy, Shergill, & Pritchard, 2013). Scholars propose that a phenomenon as complex as trust requires research methodology that reflects trust’s many facets and levels and will lead to a richer understanding of the developmental sequence of trust in relationships (Deutsch et al., 2011; Franklin, Marshall & Kennedy, 2019; Rousseau et al., 1998). In the sections that follow, the distinctions between cognitive- and affective-based dimensions of trust are discussed as well as the interrelatedness between them.
2.2.1 The Concept of Cognitive or Calculus-Based Trust

Cognitive trust represents the rational element of trust within a relationship that is rooted in the knowledge of the other party and their functional capabilities and has been described as a joint learning process (Castaldo, 2007; Sekhon et al., 2013). Typically, deeper levels of trust emerge over time, but if cognitive cues are in place, then trust can develop more quickly and at a higher level (Kim, Ferrin, Cooper, & Dirks, 2004). The cognitive perspective in trust building serves as a “cognitive leap beyond expectations that reason and experience alone would warrant” (Sekhon et al., 2013, p. 77). Cognitive trust is predicated on the assessment of the trustee’s competence, reliability and dependability (Johnson-George & Swap, 1982; McAllister, 1995; Rempel, Holmes, & Zanna, 1985) and typically develops as a result of a history of interactions within which characteristics of the trustee emerge.

In the services management literature, Johnson and Grayson (2005), propose cognitive trust as the confidence or willingness to rely on a service provider who is competent and reliable. In previous research, this proposition has been referred to as reliability (Johnson-George & Swap, 1982) and predictability (Rempel et al., 1985). These terms have been used interchangeably within the trust literature and represent one of the conceptual challenges of contemporary trust research. Cognitive trust has also been posed to include evaluations of satisfaction (Baxter, 2012; Ganesan, 1994; Garbarino & Johnson, 1999) and interorganisational communication (de Ruyter, Moorman, & Lemmink, 2001; Doney et al., 2007; Saleh, Ali, & Quazi, 2013).

2.2.2 The Concept of Affective or Identification-Based Trust
Affective, or identification-based, trust represents the emotional or empathetic element of trust within a relationship and is suitably more complex in both its conceptualisation and empirical investigation. Williams (2001) suggests that it develops over the course of the relationship as a corollary of repeated interactions. Lewis and Weigert (1985) suggest that the sociological foundation of trust is engrained within this emotional element and that trust creates a social situation within which intense emotional investments are made. This component of trust serves to develop, or strengthen, the emotional bond between parties in the relationship (Costigan, Ilter, & Berman, 1998). This kind of relationship is characterised by care and concern between the parties and has been described as the mood felt by the parties and the strong mutual feeling upon which their relationship is based (Sekhon et al., 2013).

Affective trust is seen as a natural extension of cognitive trust as parties develop more intimate, personal relationships as a result of their interactions. This identification with the other’s desires and intensions serves to build trust, as the parties can effectively understand and appreciate one another’s wants (Deutsch et al., 2011). This identification-based trust can graduate to a level that permits a party to serve as the other’s agent and substitute for the other in interpersonal transactions (Deutsch, 1958).

Scholars propose that certain types of activities strengthen affective trust. These activities may include developing a collective identity or strategic alliance, creating joint products or goals, committing to common shared values (Lewicki et al., 1998; Lewicki & Bunker, 1996; Shapiro, Sheppard, & Cheraskin, 1992). At the organisational level, scholars note that identification with an organisation’s goals, or values, leads individuals to trust the organisation and share a presumptive trust of others within it (Kramer, 2001). This form of
trust also serves to stabilise relationships during periods of conflict or negativity. When high levels of affective trust are present, parties experiencing conflict tend to attribute the conflict as the exception rather than the norm within their relationship, thus facilitating quicker conflict resolution (Rempel et al., 1985).

Similar to the concepts of likeability or congeniality, these affect-based behaviours build a level of sympathy within the relationship that scholars have referred to as “the buyer’s assessment that the seller is friendly, nice and pleasant to be around” (Doney & Cannon, 1997, p. 40). The relationship between sympathy and trust has been explored in other literature (Moorman, Rohit, & Gerald, 1993; Swan, Trawick, Rink, & Roberts, 1988) and, with the exception of Moorman et al. (1993) who found that sympathy, or congeniality, has a negative effect on trust, numerous studies affirm the importance of sympathy as a precursor to trust (Abosag & Naudé, 2014; Akrout & Diallo, 2017; Doney et al., 2007; Nicholson, Compeau, & Sethi, 2001). Similarly, scholars have found that sympathetic behaviours tend to encourage favourable attitudes toward others, leading to enhanced interpersonal trust (Crosby et al., 1990; Rotter, 1980).

A corollary of these affective exercises is that the parties develop a deeper knowledge of each other and come to identify with each other. They also understand more clearly what they must do to sustain the trust of the other party. The confidence this instils between parties serves to buoy the sense of security through care and concern demonstrated by the other partner (Johnson-George & Swap, 1982). This functions as a projection of the image that one party will not act opportunistically in their behaviour with the other party (Morrow, Hansen, & Pearson, 2004), and will exercise benevolence toward the other party if presented with an opportunity to do so (Sirdeshmukh, Singh, & Sabol, 2002).
emotional attachment can aid the trustee in accepting vulnerability and risk (Weber, Malhotra, & Murnighan, 2005). Similarly, scholars suggest that affective trust represents a psychological state, similar to enduring attachments or a sense of support (Akrout & Diallo, 2017), which coincides with the vulnerability associated with trust in long-term relationships (Akrout, Diallo, Akrout, & Chandon, 2016). Over time, “affect influences higher stages or ‘deeper’ levels of trust” (Williams, 2001, p. 379), so interpersonal, emotional connections develop. Scholars further posit that such affective trust extends beyond that characterised by calculative and cognitive behaviours, but is not necessarily unconditional (Akrout & Diallo, 2017).

2.2.3 The Iterative Nature of Cognitive and Affective Trust

Cognitive and affective trust develops at different levels, and stages, within relationships. Work, or task, related activities tend to be cognitively-based, but may develop some affective qualities. Personal relationships tend to be affectively-based, but may require a degree of cognitive trust for the parties to coordinate and calibrate their relationship (Deutsch et al., 2011).

All relationships develop as parties share experiences with each other and gain knowledge about each other (Bacon, Williams, & Davies, 2019); a sort of diagnostic equity, or information, on trustworthiness. However, we often approach new relationships with little information about the other party and tend to exercise an inordinate measure of initial trust (Malhotra, 2004; McKnight et al., 1998). Recent research suggests that parties at the start of a social encounter can, in fact, display quite high levels of trust (Jones & George, 1998; McKnight et al., 1998); referred to as high initial trust. Empirical studies have established that despite a lack of incentives and cumulative, interactional knowledge about the other
party, subjects displayed high levels of initial trust (Berg et al., 1995; Kramer, 1994). Some scholars are quick to note, however, that while trust may emerge quickly, it can also be fragile and might be broken just as easily (Kim, Dirks, & Cooper, 2009).

The reciprocal relationship between cognitive and affective trust is also highlighted in the attitude literature (Fishbein & Ajzen, 1975), stating that affective attitudes are influenced by cognitive beliefs. This notion is supported in more contemporary marketing literature by McAllister (1995) who proposes that some level of cognition-based trust might be necessary for affect-based trust to “materialise” with a trustor’s minimum, baseline, expectations for reliability and dependability being met before further investing in the relationship.

This process approach to trust features in social psychology, sociology, and organisational studies that acknowledge the active, dynamic and evolving nature of trust, over time, rather than assuming it exists idly (Mayer et al., 1995). This spiral of reinforcements that serve to reflect the behaviour of each partner and the history of their interactions can graduate the level of trust between parties from fragile to resilient (Lindgreen, 2003). As detailed in Table 2.1, institutional-based trust features as most fragile type of trust, whilst graduations of trust toward that of affective-based trust are the most resilient. This dynamic process of trust development is conceptualised within two formative streams of trust research. The first research stream examines how trust changes slowly, over time, and has established distinct stages (Gabarro, 1978; Rempel et al., 1985), suggesting that trust evolves across levels through standardised and routinised exchanges between parties. The second research stream views trust from an interactive perspective, suggesting that synergies develop between parties that are influenced by inputs and affect outcomes (Zand, 1972).

This evolving nature of trust is reflected in the more psychological approach to trust (Lewicki
& Bunker, 1995; Rempel et al., 1985; Shapiro et al., 1992) that characterises trust as more transformative along a longitudinal path. Many scholars agree, conceptually, that trust develops at a more situational level before graduating to a form based on calculus, then knowledge, and finally identification (Lewicki & Bunker, 1995). Thus, prevailing thought suggests that previous trust stages must be complete before subsequent stages emerge (Akrout & Diallo, 2017).

<table>
<thead>
<tr>
<th>Level of Trust</th>
<th>Definition</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional-Based Trust</strong></td>
<td>An assessment of institutional arrangements; formal contracts, controls, industry norms, standards, values, etc.</td>
<td>(Bachmann &amp; Inkpen, 2011; Connelly, Crook, Combs, Ketchen, &amp; Aguinis, 2018; Girmscheid &amp; Brockmann, 2010; Sydow, 1998)</td>
</tr>
<tr>
<td><strong>Swift or Initial Trust</strong></td>
<td>Structure and procedures serve as a shortcut to ascertain trustworthiness. Considered a weaker form of trust but a pathway to calculus-based and relational trust.</td>
<td>(Lewicki, Tomlinson, &amp; Gillespie, 2006; McKnight, Cummings, &amp; Chervany, 1998)</td>
</tr>
<tr>
<td><strong>Deterrence Trust</strong></td>
<td>A calculation of the potential risks, costs, and benefits that may result from an interaction where the goal is maximising your outcome.</td>
<td>(Rousseau et al., 1998)</td>
</tr>
<tr>
<td><strong>Competence-Based or Calculus-Based Trust</strong></td>
<td>An evaluation of the partner’s ability to fulfil its promise by means of technical, organisational, and communicative abilities – as well as the costs of a potential breach given the sanctions (controls) in place such as penalties and reputational damage.</td>
<td>(Lewicki et al., 2006; Nooteboom, 1999; Sako &amp; Helper, 1998)</td>
</tr>
<tr>
<td><strong>Knowledge-Based Trust</strong></td>
<td>Process of getting to know, and assess, the other party’s needs, preferences, thoughts, and responses in order to predict behaviour.</td>
<td>(Doney, Cannon, &amp; Mullen, 1998; Hexmoor, Wilson, &amp; Bhattaram, 2006; Lewicki et al., 2006)</td>
</tr>
</tbody>
</table>
Table 2.1: Developmental Sequence of Trust

<table>
<thead>
<tr>
<th>Level of Trust</th>
<th>Definition</th>
<th>References</th>
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</thead>
<tbody>
<tr>
<td>Process-Based Trust</td>
<td>These types involve an assessment of the trustee’s level of expertise, benevolence, ability, and integrity. Trust is based on past and expected future exchanges.</td>
<td>(Deakin &amp; Wilkinson, 1998)</td>
</tr>
<tr>
<td>Goodwill Trust or Benevolence Trust</td>
<td>A stronger type of trust that exists when there is a willingness to take initiative over and above what was promised to attain mutual benefit.</td>
<td>(Das &amp; Teng, 2001; Laan, Noorderhaven, Voordijk, &amp; Dewulf, 2011; Sako, 1997; Sako &amp; Helper, 1998)</td>
</tr>
<tr>
<td>Strong Form Trust or Hard-Core Trust</td>
<td>There is an absence of opportunism and the relationship is characterised by fairness, good faith, good intentions and integrity. Internalised norms and principles guide the behaviour of exchange partners independently from specific governance.</td>
<td>(Barney, 1994; Nooteboom, 1999; Nooteboom, 2006)</td>
</tr>
<tr>
<td>Identity-Based Trust</td>
<td>When identity-based trust exists, positive expectations develop about the trustee’s intentions and there is an absence of negative intentions.</td>
<td>(Hexmoor et al., 2006; Lewicki et al., 2006; Rousseau et al., 1998)</td>
</tr>
<tr>
<td>Relational or Affective Trust</td>
<td>A broader stage of trust where attachments and emotions become apparent and there is reciprocated interpersonal care, concern and empathy. Parties have shared values, objectives and norms and can identify with the other’s desires, preferences and intentions.</td>
<td>(Janowicz-Panjaitan &amp; Noorderhaven, 2009; Nooteboom, 2006)</td>
</tr>
</tbody>
</table>

2.3 The Concept of Trust within B2B Relationships

Drawing from a wide cross-section of interdisciplinary research, trust in an organisation has been conceptualised as an expression of security between partners, when one party has confidence in the other’s reliability and integrity (Garbarino & Johnson, 1999; Morgan &
Hunt, 1994; Ranaweera & Prabhu, 2003a), and a belief that the partner in a negotiation will not exploit or take advantage of the other’s vulnerability (Dwyer, Schurr, & Oh, 1987). The vulnerability that the service relationship presents is important in establishing trust; trusting parties must be vulnerable to some extent for trust to become operational (Doney & Cannon, 1997). In other words, decision outcomes must be uncertain and important to the trustor (Deutsch, 1960; Giffin, 1967; Moorman et al., 1993; Schlenker, Helm, & Tedeschi, 1973). Consequently, the majority of researchers view trust as a behavioural intention, or behaviour, that reflects a reliance on a partner and which involves vulnerability and uncertainty (Doney et al., 2007; Giffin, 1967; Moorman et al., 1993).

Parasuraman, Zeithaml and Berry first introduced the notion of trust as a critical success factor in service relationships in 1985. The authors suggested “service customers should be able to trust their service providers, feel safe in their dealings with their service providers and be assured that their dealings are confidential” (Parasuraman, Zeithaml, & Berry, 1985, p. 41). When one party trusts the other, he or she is willing to risk dependence on the other to obtain a goal (Deutsch, 1960). Consequently, trust is a critical influence in the development of business relationships and relationship commitment (Anderson & Weitz, 1989; Morgan & Hunt, 1994). Berry (1995) recognised that when consumers develop trust in their service providers, it serves to mitigate those feelings of vulnerability and lowers uncertainty.

2.3.1 The Benefits of Trust within B2B Relationships

The benefits of high levels of trust between organisations have been well established within many different streams of literature. Moreover, trust has been likened as a basic requirement for successful relationships in complex markets (Doney et al., 2007; Lindgreen,
with vast and varied benefits, both cost and performance (Table 2.2), and relationally-based (Table 2.3).

<table>
<thead>
<tr>
<th>Cost and Performance Benefits of Trust</th>
<th>Reference</th>
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<tbody>
<tr>
<td>Lower negotiation costs and less conflict</td>
<td>(Zaheer, McEvily, &amp; Perrone, 1998b)</td>
</tr>
<tr>
<td>Lower transaction costs including search costs for partners and lower legal and contracting costs</td>
<td>(Dyer &amp; Chu, 2003; Gulati, 1995; Zaheer et al., 1998b)</td>
</tr>
<tr>
<td>Better mobilisation of internal resources including less time required to manage relationships</td>
<td>(Claro, Hagelaar, &amp; Om, 2003; Girmscheid &amp; Brockmann, 2010; McEvily, Peronne, &amp; Zaheer, 2003)</td>
</tr>
<tr>
<td>Better exchange performance</td>
<td>(Palmatier, Dant, &amp; Grewal, 2007)</td>
</tr>
<tr>
<td>Improved sales growth and satisfaction, both economic and non-economic</td>
<td>(Claro et al., 2003; Geykens, Steenkamp, &amp; Kumar, 1998)</td>
</tr>
<tr>
<td>Improved product innovation performance</td>
<td>(Lai, Chen, Chiu, &amp; Pai, 2011)</td>
</tr>
<tr>
<td>A broader scope of opportunities or “adjacencies”</td>
<td>(Fichman, 2003)</td>
</tr>
<tr>
<td>Value creation and additional trust creation</td>
<td>(Doney &amp; Chu, 2003)</td>
</tr>
<tr>
<td>Positive impact on partner’s long-term orientation</td>
<td>(Doney &amp; Cannon, 1997; Shankar Ganesan, 1994)</td>
</tr>
<tr>
<td>Improved business performance</td>
<td>(Aurier &amp; N’ Goala, 2010; Geykens et al., 1998; Jap, 1999; Kumar, Stern, &amp; Achrol, 1992)</td>
</tr>
<tr>
<td>As a buffer against detrimental effects</td>
<td>(Harmeling, Palmatier, Houston, Arnold, &amp; Samaha, 2015)</td>
</tr>
</tbody>
</table>

Table 2.2: Cost and Performance Benefits of Interorganisational Trust

Thus, there is much more than just a utilitarian, or cost-based, benefit to developing trusting relationships between organisations. An actively trusting and mutually beneficial
affiliation can graduate to a much richer, co-creative or collaborative relationship that can even serve as a competitive advantage in the marketplace (Dyer & Chu, 2003; Dyer & Singh, 1998).

<table>
<thead>
<tr>
<th>Relational Benefits of Trust</th>
<th>Reference</th>
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<tbody>
<tr>
<td>Increased joint action and commitment</td>
<td>(Hausman &amp; Johnston, 2010)</td>
</tr>
<tr>
<td>More flexible arrangements, strategic planning and scheduling</td>
<td>(Johnston, McCutcheon, Stuart, &amp; Kerwood, 2004)</td>
</tr>
<tr>
<td>Improved scale and scope of communication</td>
<td>(Dyer &amp; Chu, 2003; Gargiulo &amp; Ertug, 2006)</td>
</tr>
<tr>
<td>Increased level of joint problem solving</td>
<td>(Claro et al., 2003)</td>
</tr>
<tr>
<td>Continuous improvement and learning</td>
<td>(Sako &amp; Helper, 1998)</td>
</tr>
<tr>
<td>Greater ability to obtain information from a partner’s network</td>
<td>(Osarenkhoe, 2010)</td>
</tr>
<tr>
<td>Contributions to innovation</td>
<td>(Lai et al., 2011)</td>
</tr>
<tr>
<td>Provides a basic requirement to compete – a fundamental requirement to even be considered as an exchange partner</td>
<td>(Doney &amp; Cannon, 1997)</td>
</tr>
<tr>
<td>High trust relationships can constitute a competitive advantage</td>
<td>(Dyer &amp; Chu, 2003; Dyer &amp; Singh, 1998)</td>
</tr>
<tr>
<td>Given the benefit of the doubt when “...one party engages in an act that its partner considers destructive.”</td>
<td>(Kumar, 1996, p. 97)</td>
</tr>
<tr>
<td>Trust encouraging deeper knowledge-sharing</td>
<td>(Swift &amp; Hwang, 2013)</td>
</tr>
</tbody>
</table>

*Table 2.3: Relational Benefits of Interorganisational Trust*
However, as trust choices or outcomes are strongly influenced by context, interorganisational trust building efforts might look quite different depending on the context in which they occur (Dietz, Gillespie, & Chao, 2010; Dietz & Hartog, 2006; Lyon et al., 2012). Two important contextual factors within B2B relationships that can influence trust include the level of institutional trust, or controls, between organisations and the relationship orientation between organisations. A central concern of this research is a deeper understanding of the interrelatedness of such factors with trusting behaviours in B2B relationships, thus each will be discussed in turn.

2.3.2 Institutional Trust or Controls within B2B Relationships

Scholars suggest that the increased complexities of B2B interactions necessitate measures of control and coordination that can serve to benefit both supplier and buyer (Sánchez, Vélez, & Ramón-Jerónimo, 2012). The risks and vulnerabilities within asymmetrical and market-oriented relationships have been suggested to warrant both formal control systems and trust to regulate the relationship (Das & Teng, 1998).

The dichotomy presented by institutional trust, or controls acting as a form of trust support, is a fundamental issue within trust research (Shapiro, 1987). Institutional trust, or controls, manifested in laws and reputational sanctions and systems are posed to act as a deterrent to opportunism (Rousseau et al., 1998) and can function as a springboard to the development of affective trust, but are also opposed by some scholars as inhibiting or undermining trust (Coletti, Sedatole, & Towry, 2005; Poppo & Zenger, 2002).

Rousseau (1998) suggests that institutional trust can ease the way toward formulating both cognitive and affective trust. Controls or deterrents are posed to promote trust based on the confidence that “reputation matters”, which permits the relationship to form in the first
place (Rousseau et al., 1998). Other researchers have suggested that institutional controls can act as broad supports for the critical mass of trust that sustains further risk taking and trusting behaviours (Gulati, 1995; Gulati & Sytch, 2008; Ring & Van de Ven, 1992; Sitkin, 1995). Some authors argue that in order to develop closer and more collaborative relationships with their distributors, firms should design formal control systems to foster an atmosphere in which trust grows (Van der Meer-Kooistra & Vosselman, 2000).

Harrison, McKnight and Chervany (1996, p. 11) distinguish between the “trusting intention” and “willingness to depend” on another, based on power. Riker (1974, p. 66) suggests “If one has power over other people [...] then one can by definition control events, bringing them to a desired conclusion. In this sense the man [sic] of power need not trust others to do what he wants because he can coerce them instead.” Other scholars have likened this form of trust to deterrence-based trust, relying on power and control mechanisms such as sanctions and rewards (Lewicki & Bunker, 1995). Malhotra and Murninghan (2002) found that the use of binding contracts could actually harm trust development, as subjects who used binding contracts make situational rather than personal attributions for trustworthy behaviour. Harrison et al. (1996) further suggest that the distinction between power and control measures and “trusting intention” is established on the idea that person who trusts must “trust trust” (Gambetta, 1988, p. 218) or “rely on trust” (Ring & Van de Ven, 1992, p. 93) and must not strictly be determined by control mechanisms.

The manner in which conflicts are managed, and resolved, through this interplay of power and control measures will encourage or discourage buyers from expressing disagreements with a supplier in the future. Thus, the buyer’s attitude toward the possibilities of resolving future conflicts with the seller will influence trust (Frazier & Rody, 1991).
constructively with potential conflicts toward a mutually acceptable solution will help develop trust between the parties (Ndubisi, 2011). In contrast, if a buyer perceives that the supplier employs pressure or coercion, a defensive strategy by the buyer will likely ensue, hampering trust development (Schurr & Ozanne, 1985).

2.3.3 Relationship Orientation within B2B Relationships

Trust has been found to be one of the most important factors in maintaining a long-term relationship within a B2B context (Ryssel, Ritter, & Gemünden, 2004); otherwise known as adopting a relationship orientation. Industrial relationship marketing has been referred to as efforts oriented towards strong, lasting relationships with individual accounts (Jackson, 1985). A predominant theme among most definitions of relationship marketing is the view that buyer-seller encounters accumulate over time so opportunities exist to transform individual and discrete transactions into relational partnerships (Czepiel, 1990).

The prevailing view in this interaction view of relationships between firms, is that value is co-created during interorganisational interactions and is no longer intrinsic with respect to a specific resource, but it is the outcome derived from participation between partners (Corsaro, 2015; Håkansson & Waluszewski, 2013). This shift from a more transactional view to that of a relational view has been conceptualised as a relationship orientation (Ross Brennan, Turnbull, & Wilson, 2003) and aims at developing long-term buyer-seller relationships, composed of trust, commitment and information exchange (Sarkar, Echambadi, Cavusgil, & Aulakk, 2001). Therefore, the ultimate goal within B2B partnerships is that of a long-term relationship orientation. This serves to strengthen already strong relationships and can convert indifferent customers into loyal ones (Parasuraman et al., 1991).
Scholars note that creating a loyal customer base in a B2B context is not only about maintaining customers, over time, but nurturing those relationships to encourage future purchase and a level of advocacy (Ramaseshan, Rabbane, & Laine, 2013; Rauyruen & Miller, 2007). Trust is one of the primary factors that differentiate relationships from mere transactions and can act as an agent toward facilitating future interaction (Hess & Story, 2005) while mitigating estimations of risk in a relationship (Baxter, 2012; Baxter & Kleinaltenkamp, 2015).

The competitive advantage that long-term relationships foster within B2B partnerships has been well established within practice (Reichheld, 1996) (Table 2.2 and Table 2.3). Service firms have discovered that far greater profits are yielded from harvesting existing accounts than from cultivating new customers (Doney et al., 2007). In fact, the net increase of the present value of profits resulting from a five percent increase in customer retention varies between 25 percent and 85 percent over different industries (Oliver, 1999).

Trust and commitment both affect the future purchase intentions of an exchange partner (Garbarino & Johnson, 1999; Sargeant & Lee, 2004). It is well established in the formative commitment-trust perspective literature (Blau, 1964; Kelley & Thibaut, 1978; Thibaut & Kelley, 1959), based on social exchange theory, that commitment is central in business relationships. Additionally, scholars hold a general consensus that commitment as a concept involves both behavioural and attitudinal aspects, with an emphasis on the behavioural aspect (Ashnai, Henneberg, Naudé, & Francescucci, 2016). This is due to the significance of the behavioural focus of the definition, in particular the desire to develop the relationship and the willingness to make sacrifices for the sake of the relationship and the underlying emphasis on intentions to maintain and continue the relationship over the long
term (Anderson & Weitz, 1992; Jap, Shankar, & May, 2000; Mohr & Spekman, 1994), rather than adopting a more transactional view or looking to replace a relational counterpart with another partner (Anderson & Weitz, 1992; Cook & Emerson, 1978). The notion that trust relates to expectations of relationship continuity is well established in the literature (Poppo, Zhou, & Ryu, 2008); a certain trust forms before commitment follows. Thus, “the presence (or absence) of trust in B2B relationships facilitates the development (or destruction) of interorganisational commitment” (Narayandas & Rangan, 2004, p. 73).

Trust also has a positive influence on motivation to improve a mutually beneficial buyer-seller relationship (Selnes, 1998). Meeting, or exceeding, the expectations of customers over time strengthens the reliability of the exchange partner and cultivates further trust (Ganesan, 1994; Hess & Story, 2005; Tax, Brown, & Chandrashekar, 1998). Further economic benefits to an organisation of long-term relationships are suggested to include the reduction of costs of negotiation (Zaheer, McEvily, & Perrone, 1998), as agreements are reached more quickly and easily and adversarial conflict is reduced (Anderson & Narus, 1990; Dwyer et al., 1987). Because firms’ objectives in exchange relationships are rarely identical, disagreements are more likely to be amicably resolved as higher levels of trust serve to harmonise the conflict (Macneil, 1980).

Scholars have also identified high termination costs (Ranaweera & Prabhu, 2003a) as an outcome of higher levels of trust, based on the premise that once trust is built into a relationship, the likelihood of either party ending the relationship decreases (Macintosh, 2009). This phenomenon has been described as a “state of inertia” between buyer and seller which is characterised by the unwillingness of both parties to bring the relationship to
an end unless something went exceptionally wrong (Gounaris, 2005; Gounaris & Venetis, 2002).

With the foundational premises of trust, benefits of trust and contextual distinctions of trust in B2B relationships established, the attention now moves to an investigation and reporting of existing and emerging causal conditions influencing trust within B2B relationships.

2.4 Causal Conditions Influencing Trust within B2B Relationships

An understanding of the causal conditions, or antecedents, of trust in B2B relationships allows for further insight into the importance- and interrelatedness-of factors leading to trust between organisations. When considering contemporary interorganisational trust research, a transaction cost economics perspective (as well as the respective constituent dimensions of trust), has tended to be dominant (Verbeke & Greidanus, 2009). However, some research has differentiated between transaction cost economics theory and relational exchange theory (Lado, Dant, & Tekleab, 2008), introducing the notion of more affectively-driven concerns in trust building. Additionally, the principle of equity and reciprocity has also been frequently applied to interorganisational trust (Dekker & Van den Abbeele, 2010; Gainey & Klaas, 2003; Gulati & Sytch, 2007; Scheer, Kumar, & Steenkamp, 2003). Prior research in management consulting relationships has also examined how relational embeddedness, such as shared membership in networks and reputational concerns, affects interorganisational trust (Glückler & Armbrüster, 2003).

Despite the proliferation of views, perspectives, and representations within different bodies of research lending themselves to our understanding of trust, consensus has emerged within the relationship marketing literature that trust encompasses three essential dimensions; ability, integrity, and benevolence (Doney et al., 2007; Doney & Cannon, 1997;
Dwyer et al., 1987; Ganesan, 1994; Mayer, Davis, & Schoorman, 1995; Reinartz & Kumar, 2002; Scheer & Stern, 1992; Schoorman, Mayer, & Davis, 2007; Thomas, 2009). A partner’s ability is that group of skills, competencies and characteristics that enable a party to have influence within some specific domain (Mayer et al., 1995). A partner’s integrity serves to promise fulfilment of role obligations and demonstrates steadfastness and sincerity in its word (Morgan & Hunt, 1994). A partner’s benevolence is a belief that one’s partner is interested in the firm’s welfare and will not take unexpected actions that would have a negative impact on the partner firm (Doney et al., 2007). Other widely explored antecedents of trust that have been investigated include co-creation, satisfaction, communication, and shared values (Caceres & Paparoidamis, 2007; Giese & Cote, 2000; Mayer et al., 1995; McKnight et al., 2002; Morgan & Hunt, 1994; Rajah, Marshall, & Nam, 2008; Ranaweera & Prabhu, 2003b; Zaheer, McEvily, & Perrone, 1998a).

These cognitive and affective types of trust (as detailed in Sections 2.2.1 and 2.2.2), and the constituent antecedents reported within each, are listed in Table 2.4 and Table 2.5 and reported, in detail, in the sections that follow. An explicit understanding of each of most widely accepted antecedents of trust in the B2B literature allows for a finer-grained insight into how these interorganisational characteristics and behaviours may be further investigated in light of the contextual distinction of a trust recovery, rather than trust building, scenario (Basso & Pizzutti, 2016; Dirks, Kim, Ferrin, & Cooper, 2011).
2.4.1 Competence and Trust within B2B Relationships

Early trust researchers describe the trustor’s perception that the trustee possesses the technical and interpersonal skills required for a job as competence-based trust (Butler & Cantrell, 1984). Barber (1983, p. 9) suggests that expectations of “technically competent role performance” have been considered to “involve some of the fundamental meanings of trust.” Although the construct of competence is similar in some studies to expertise, the operationalisations of the concepts appear to differ (Rajaobelina & Bergeron, 2009).

Competence has been defined as the degree to which customers perceive that the seller “possesses the required skills and knowledge to provide the basic service” (Brown & Swartz, 1989; Grönroos, 1990). Scholars have noted that competent parties are viewed more favourably by their exchange partners if the party possesses the required knowledge and skills (Perry, Cavaye, & Coote, 2002). An exchange partner’s level of knowledge and experience enhances their source credibility with organisational partners, and thereby trustworthiness (Johnson & Grayson, 2005).

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Definition</th>
<th>References</th>
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<tbody>
<tr>
<td>Competence</td>
<td>Competence is conceptualised as the buyer’s perception of the supplier’s technological and commercial competence. These dimensions include the supplier’s market knowledge, ability to provide proper advice, ability to assist the buyer in planning purchases as well as the ability to provide effective sales promotion.</td>
<td>(Crosby et al., 1990; Gummerus, Liljander, Pura, &amp; van Riel, 2004; Johnson &amp; Grayson, 2005; Ndubisi &amp; Wah, 2005)</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>Customer satisfaction is conceptualised as an overall post-purchase evaluation of the final customer solution.</td>
<td>(Giese &amp; Cote, 2000; Oliver, 1993; Ranaweera &amp; Prabhu, 2003a, 2003b)</td>
</tr>
<tr>
<td>Communication</td>
<td>Communication is conceptualised as the formal as well as informal sharing of high quality, meaningful and timely information between firms.</td>
<td>(Anderson, James, &amp; January, 1990; Coote, Forrest, &amp; Tam, 2003; Geykens et al., 1998)</td>
</tr>
</tbody>
</table>

*Table 2.4: Cognitive-type Antecedents of Interorganisational Trust*
Contemporary marketing literature has used the terms ability and competence interchangeably. Both ability and competence have been conceptualised as including the group of skills and characteristics that enable a party to have influence within some specific domain (Mayer et al., 1995). The domain-specific distinction is important, as competency in one technical area does not suggest competency in another technical area. Zand (1972) notes that trust is domain-specific, as an individual may be trusted to do analytic tasks related to his or her technical area, however, the individual may not be trusted to initiate contact with an important customer. This distinction has also been established at an organisational or industry level within, and between, firms (Doney et al., 2007; Mittal, 1999).

The relationship between competence and trust is well reported within literature (Bejou, Ennew, & Palmer, 1998; Coulter & Coulter, 2003; Palvia, 2009) as customers who perceive service quality favourably, enjoy more confidence and, by extension; trust, in the service provider (Jyh-Shen, Droge, & Hanvanich, 2002). Consistently exceeding expected service performance further serves to elicit “projected reliability” (Mittal, 1999) and is an indication that the service supplier can be relied upon to perform well in the future (Doney et al., 2007). Selnes (1998) demonstrated that competence has a positive effect on communication leading to a reduction in uncertainty levels and increased levels of trust amongst exchange partners. Competence has also been found to have a significant effect on trust when relationships are being both developed and fostered over time (Coulter & Coulter, 2003; Palvia, 2009).

Within the sales and service employee literature, competence has been conceptualised as expertise and is frequently cited as an important employee characteristic that contributes
customer trust (Crosby et al., 1990; Macintosh, 2009). Macintosh (2009) found that service employee expertise has a positive impact on customer trust because of a greater perception of the employee’s capability to deliver. Perceived expertise, or competence, has been the most frequently studied and one of the most consistent predictors of trust in contact employees (Crosby et al., 1990; Moorman, Deshpandé, et al., 1993; Swan, Trawick, & Silva, 1985).

Scholars within the services literature suggest that buyers seek “hard evidence” of a service provider’s capabilities and competence when evaluating the value of the service relationship (Doney et al., 2007). This evidence is often revealed after a transactional history of experiences and serves as a prediction of future performance. This functional and technical diagnosis of a seller’s competence refers to “what” the customer receives and “how” it is delivered and what value they possess after the interaction is over. Buyer’s assessments of the degree to which these “deliverables” meet or exceed their expectations of performance will facilitate the building of trust. Chiou et al. (2002, p. 113) suggest “if customers perceive service quality favourably, they will have more confidence in the provider, which in turn will increase their trust in the service provider”.

Industrial marketing scholars suggest that the focus on emergent marketing exercises centered on building multi-layered and collaborative relationships with business customers should not neglect the importance of delivering to customers’ superior performance-value in the core product or service (O’Cass & Ngo, 2012). Lindgreen and Wynstra (2005) suggest that the path to achieving marketplace advantages is through developing and commercialising value offerings that are delivered via specific capabilities, or competencies, such as product innovation and marketing. The technical quality of a seller, conceptualised
as a buyer’s competence, has been found to influence trust. Gounaris and Venetis (2002) found a positive relationship between outcome quality and trust, especially in mature relationships. Similarly, Oderkerken-Schroder et al. (2000b) found that competency attributes of overall service quality significantly contributed to customer trust of the service provider. Chiou et al. (2002) also found that the tangible, physical aspects, or “manifestations,” of service quality influence trust.

2.4.2 Satisfaction and Trust within B2B Relationships

The two relationship constructs of satisfaction and trust are closely interrelated and can appear conceptually analogous. In a marketing context, some scholars suggest that it is impossible to completely detach trust from satisfaction (Hess & Story, 2005). Some conceptualisations of trust even include satisfaction as a component of trust (Sirdeshmukh, Singh, & Sabol, 2002).

Satisfaction with a relationship is viewed in the marketing literature as “an important result of a marketing relationship” (Johnson & Grayson, 2005, p. 501). Satisfaction has been defined as “an overall evaluation based on the total purchase and consumption experience with a good or service over time” (Garbarino & Johnson, 1999, p. 71). Ganesan (1994) confirmed the important role of relationship satisfaction when arguing that, in a continuing business relationship, satisfaction with past outcomes indicates equity in the exchange. This generates confidence that both parties are concerned about each other’s welfare in the relationship (Theron, Terblanche, & Boshoff, 2011).

The more satisfied the customer has been with the supplier in the past, the more the customer will trust the supplier in a future relationship (Walter, Mueller, & Helfert, 2000). Miyamoto and Rexha (2004) confirmed this relationship and reported a positive link
between satisfaction and three types of trust: contractual, competence and goodwill trust. Satisfaction is a prerequisite for building trust in a relationship and increases the intention to continue the relationship beyond a strictly transactional level (Odekerken-Schröder, van Birgelen, Lemmink, de Ruyter, & Wetzels, 2000; Theron, Terblanche, & Boshoff, 2008).

Satisfaction can either refer to transactional measures focusing on a discrete incident or a cumulative construct resulting from a series of transactions, over time (Garbarino & Johnson, 1999; Hess & Story, 2005). Scholars have also likened trust to that of a long-term relationship-oriented consequence of service quality that is not likely to be affected by only one single incident (Odekerken-Schröder et al., 2000). Scholars tend to concur that satisfaction is necessary, but not sufficient for the formation of trust, and not all satisfied customers trust the brand (Moorman, Deshpandé, et al., 1993; Morgan & Hunt, 1994).

Recent industrial marketing literature states that more than 80 percent of companies monitor customer loyalty using satisfaction scores (Ramaseshan et al., 2013). This is in spite of the fact that there is very little correlation between satisfaction and loyalty in business markets (Narayandas, 2005). Trust, however, plays a significant role in relationship marketing, especially in the context of B2B markets (Blois, 1999). Understanding this distinction necessitates looking beyond, strictly, satisfaction to other variables that strengthen relationships such as trust (Hart & Johnson, 1999; Morgan & Hunt, 1994).

Similarly, Jones and Sasser (1995) highlight the need to reduce dependence on satisfaction measures alone, relative to measures of relationship quality.

**2.4.3 Communication and Trust within B2B Relationships**

Communication is a key variable at the beginning of any relationship (Simpson & Mayo, 1997) and Morgan and Hunt (1994) suggest that communication serves as a key antecedent
to trust between buyers and sellers. The positive influence of communication as an antecedent of trust has been well documented and enjoys uniform acceptance among scholars (Anderson & Narus, 1990; Ball, Coelho, & Machás, 2004a, 2004b; de Ruyter et al., 2001; Geykens et al., 1998; Morgan & Hunt, 1994). The quality of communication and information exchange has enjoyed similarly robust acceptance and has been described as “the glue that holds industrial marketing relationships together” (Coote et al., 2003, p. 597).

Open communication has also been established as a key antecedent of high-quality relationships (Ndubisi, 2006; Simpson & Mayo, 1997). It was further found that the effectiveness of communication in a relationship can be increased when service providers keep in touch with valued customers, provide timely and trustworthy information and respond proactively to service failure (Ndubisi & Wah, 2005). The literature has recognised the importance of timely communication as an effective approach to removing suspicion when handling crisis events, providing clear and unifying expectations between partner organisations and to subsequently facilitate trust (Moorman, Zaltman, & Deshpande, 1992; Yousafzai, Pallister, & Foxall, 2005). Moorman et al. (1993) also suggest that timely communication with clients plays an important role in increasing trust in the buyer-seller relationship by enhancing emotional solidarity.

Scholars further advocate that social behaviours, or elements, of communication that build trust include nurturing an interpersonal relationship and demonstrating an understanding and concern for the buyer’s needs (Doney et al., 2007). It has been suggested that organisational members “bond” through personal and social relationships with their counterparts in a partner firm (Williams, Han, & Qualls, 1998). This is in an effort to build trust more strategically through communication than through economic exchanges of
information alone (Mittal, 1999). It has been posited that these social settings for communication provide an informal environment conducive to building closer interpersonal relationships and fostering better understanding of mutual needs (Doney & Cannon, 1997). However, Nilsson and Mattes (2015) suggest that it is not only the frequency and length of interorganisational communication, but also the nature of the interaction that influences the trust creation process (Van Wijk, Jansen, & Lyles, 2008). Face-to-face-interactions, as compared to technology-mediated communication, have been established as particularly effective for creating and repairing knowledge-based trust (Bathelt & Turi, 2011; Jarvenpaa & Leidner, 1999; Nohria & Eccles, 1992; Shapiro et al., 1992; Storper & Venables, 2004).

This is particularly true if the knowledge exchanged is highly complex or nuanced (Becerra, Lunnan, & Huemer, 2008; Jones, Hesterly, & Borgatti, 1997). The face-to-face situation “affords us an optimal situation for gaining access to another’s subjectivity” (Berger & Luckmann, 1991, p. 49). Face-to-face interaction thus enables, though in no way guarantees, deep trust to develop more rapidly (Nilsson & Mattes, 2015), primarily because the amount of social information exchanged is greater than in non-face-to-face situations (Nohria & Eccles, 1992; Turner, 2002).

Anderson and Weitz (1992) also suggest that the formal and informal sharing of information through frequent two-way interactions plays an important role in realising the benefits from a relationship, including relationship commitment. Effective communication has been shown to not only promote relationship commitment, but also the level of trust (Sharma & Patterson, 1999). Both succinct and direct communication has been found to be an important factor in building and sustaining commitment and trust in international strategic alliances (Chu & Fang, 2006; Cullen, Johnson, & Sakano, 2000). Continuous interaction has
been found to build trust and elicit clients’ voluntary participation in business outcome refinements (Carr, 2006). Morgan and Hunt (1994) found that frequent contact with clients promotes trust and service providers who are effective communicators tended to be more trusted than others (Tzafrir, Baruch, & Dolan, 2004).

2.4.4 Integrity and Trust within B2B Relationships

The relationship between integrity and trust refers to the trustor’s perception that the trustee adheres to a set of principles that the trustor finds acceptable (Kim et al., 2004; Mayer et al., 1995). Trust researchers have illustrated why both the adherence to, and the acceptance of, a set of principles that the trustor finds acceptable are important, such as a baseline estimation of trustworthiness before any objective, diagnostic experience in exchange may have transpired (Connelly et al., 2018). McFall (1987) suggests that following some set of principles defines personal integrity, however, if those sets of principles are not deemed acceptable by the trustor, the trustee would not be considered to have integrity. Integrity is domain and context specific and can be judged by the consistency of past actions relative to these principles, credible communications from other parties suggesting a consistency with these principles, and the extent to which activities and actions are congruent with these principles (McFall, 1987).
There is an abundance of research discussing integrity, or very similar constructs, as antecedents to trust. Lieberman (1981) suggested integrity as an important trust factor as did Butler (1991) when considering consistency, integrity, and fairness as conditions of trust. Gabarro (1978), when interviewing respondents about trust, suggested that one of the three bases of trust that emerged was “character”, of which he contends includes integrity. Moorman et al. (1993, p. 84) define integrity as an “unwillingness to sacrifice ethical standards to achieve individual or organisational objectives” and find that integrity is a significant predictor of trust. Mishra (1996) extends this definition of integrity, conceptually, to include honesty and openness as does Tyler and Degoey (1996) who include honesty, fairness, and character within their conceptualisation of integrity.
Scholars have reported that integrity dimensions of trust are determined more by social interaction and citizenship behaviours (Clark, Scholder Ellen, & Boles, 2010) and relate to “...socially accepted moral principles, such as honesty, fairness and sincerity” (Fuoli, van de Weijer, & Paradis, 2017; Gillespie & Dietz, 2009, p. 128). Research that considers breaches of these citizenship behaviours highlights the importance of integrity when examining trust violations between multiple actors, or firms (Kim et al., 2004; Sitkin & Roth, 1993). An integrity violation suggests that one party has intentionally violated an agreed-upon practice or principle and even a single dishonest behaviour is considered to offer a reliable signal of low integrity (Kim, Dirks, Cooper, & Ferrin, 2006; Kim et al., 2004). Breaches of these citizenship behaviours may affect the esteem in which an organisation is held and, by extension, levels of trust (Poppo & Schepker, 2010).

Consequently, organisations that demonstrate integrity are likely to be trusted because they represent a less risky, uncertain and vulnerable relationship (Doney & Cannon, 1997). An organisation’s integrity results from expressions of honesty, the provision of reliable promises, and the sharing of reliable information (Crosby et al., 1990). Collectively, these beliefs serve to establish the perceived trustworthiness of an organisation and, by extension, a customer’s sense of trust (Franklin & Marshall, 2016; Mayer et al., 1995; Sirdeshmukh et al., 2002).

2.4.5 Benevolence and Trust within B2B Relationships

Historically, researchers have included characteristics similar to benevolence as a basis for trust (Mayer et al., 1995). Trustworthiness has been described as the trustee’s motivation to be truthful (Hovland, Janis, & Kelley, 1953) and is related to perceived benevolence in that low benevolence would be inversely related to motivation to be truthful. Some early
trust researchers have considered intentions or motives as important for trust (Cook & Wall, 1980; Deutsch, 1960; Giffin, 1967; Kee & Knox, 1970) and reflect a belief that the trustee’s orientation toward the trustor is important. Frost, Stimpson and Maughan (1978) also suggest that altruism contributes to the level of trust enjoyed within a relationship and Mathews (2017) echo the findings of Schoorman, Mayer and Davis (2007) suggesting that gift-giving between firms is an expression of benevolence that serves as an indicator of trustworthiness – particularly in economically difficult times (Zunk, 2015). Rosen and Jerdee (1977) considered the likelihood that a trustee would put organisational goals before individual goals in a relationship, whilst Butler and Cantrell (1984) identified loyalty among their determinants of dyadic trust. All of these conceptualisations, or constructs, share a similarity to benevolence; the perception of a positive orientation of the trustee toward the trustor in the absence of an extrinsic reward or control mechanism (Mayer et al., 1995).

Benevolence has been described as the “extent to which a trustee is believed to want to do good to the trustor, aside from an egocentric profit motive” (Mayer et al., 1995, p. 718). Alternatively, benevolence within a service relationship has been conceptualised as the extent to which a service provider is well-meaning and actually pursues the customers’ interest ahead of self-interest (Sirdeshmukh et al., 2002). Scholars have likened relationships featuring benevolent trust as exhibiting intimate, relational, and highly relational interactions (Lewicki & Bunker, 1996; Ring, 1996). Benevolence is inherently a relational bond of affective concern and serves to engender feelings of goodwill and amity. The social, or affective, bonds that are present mean that the parties are willing to care for each other beyond the profit motive (Poppo & Schepker, 2010). Benevolence suggests that the trustee has some specific attachment to the trustor (Mayer et al., 1995).
Other conceptualisations of benevolence include “goodwill trust”, defined by Barber, Das and Teng (1983, p. 4; 2001, p. 256) as “the expectation that some others in our social relationship have moral obligations and responsibility to demonstrate a special concern for others’ interests above their own”. Channel relationship research details the most similar meaning of benevolence trust to that of the marketing literature as the extent to which a channel member believes that its partner is genuinely interested in its interests or welfare and is motivated to seek joint gains (Crosby et al., 1990; Kumar & Jan-Benedict, 1995). This definition captures the positive expectation of the partner’s benevolence and has an intuitive nature (Anderson & Narus, 1990; Doney & Cannon, 1997).

Within a B2B relationship, benevolence can serve to reduce perceived relational risk. A buyer’s perceived relational risk is characterised by the risk of opportunistic behaviour on the part of the supplier. However, a relationship enjoying a measure of benevolence trust means the buyer believes the supplier will act in the buyer’s interest, even when the supplier is aware of vulnerabilities (Poppo & Schepker, 2010). Axelrod (1986) suggests that in benevolent relationships, the supplier will shift short-term individual interests to long-term shared interests, even when the supplier might have achieved benefits from short-term opportunistic behaviour. This is particularly valuable within B2B relationships due to the long-term orientation of typical interorganisational relationships. In a B2B relationship that exhibits benevolence, the buyer is more likely to believe that, considering the supplier’s own long-term benefits, that the supplier is not willing to risk losing long-term customers in exchange for short-term opportunistic behaviour. This leads to less perceived relational risk and offers more assurance about future relationship outcomes (Zajac & Olsen, 1993). The strategic alliance literature also suggests that benevolence within a relationship represents
“good intentions” to the alliance operations, serving to lower perceived levels of relational risk between partners (Das & Teng, 2001).

As trust is a key mitigating influence on levels of risk and vulnerability within a relationship, benevolence has been posed to contribute to the behavioural manifestation of assuming risk in a relationship; in effect, operationalising the willingness to take risk (Mayer et al., 1995). Sako (1992, p. 39) notes that a benevolent partner “can be trusted to take initiatives [favouring the customer] while refraining from unfair advantage taking”. These benevolent behaviours provide diagnostic evidence of trust as they go beyond the terms of an explicit “contract” and indicate pro-customer motivations, restraint on self-serving opportunism, and a willingness to assume fiduciary responsibility (Barber, 1983; Ganesan & Hess, 1997; Gasparotto et al., 2018; Morgan & Hunt, 1994). Smith and Barclay (1997) report that character, including “operationalised” benevolence, has a significant impact on buyer-seller relationships. This operationalised benevolence has been established, empirically, to influence both the development and recovery of trust (Gasparotto et al., 2018; Smith & Donald, 1997).

2.4.6 Shared Values and Trust within B2B Relationships

Shared values function to create relationships that are built on trust (Gillespie & Mann, 2004) and serve to enhance feelings of association, encourage the development of social bonds, and build long term relationships (Mukherjee & Nath, 2007). The positive relationship between shared values and trust is well established within literature as well as the positive effect shared values have on partner’s mutual level of commitment to the relationship (Gillespie & Mann, 2004; Kang, Jeon, Lee, & Lee, 2005; MacMillan, Money, Money, & Downing, 2005; Morgan & Hunt, 1994; Mukherjee & Nath, 2007).
The sociology literature reports a number of studies that have investigated the importance of values upon the development of relationships (Kelley et al., 1983). Shared values, by extension, serve to facilitate a common understanding of collective goals and proper ways of acting in a social system (Nahapiet & Ghoshal, 1998). Within marketing and organisational research, scholars have been similarly interested in the investigation of shared values and trust (Chatman, 1989; Meyer & Allen, 1984). A number of researchers have established that shared values and trust are strongly related to each other (Dwyer et al., 1987; Kang et al., 2005; MacMillan et al., 2005; Morgan & Hunt, 1994), thus, organisations that believe a partner organisation holds similar values will enjoy an enhancement of their trust and, by extension, reduced feelings of uncertainty and vulnerability (Kapitan, Kennedy, & Berth, 2018; Kennedy, Kapitan, & Soo, 2016).

Shared values have been shown to play a critical role in the development of affective trust (Akrout et al., 2016). Organisational scholars have established that attitudes and behaviours within an organisation are formulated by similar values (Kelman, 2017) whilst marketing scholars have investigated the importance of values in terms of relationship development (Kennedy, Ferrell, & LeClair, 2001). Ethical values, for example, have been found to help establish and maintain standards that delineate the “right things to do” and the “things worth doing” (Chonko & Hunt, 1985). Therefore, Morgan and Hunt (1994, p. 25) define shared values between organisations as “the extent to which partners have beliefs in common about what behaviours, goals and policies are important or unimportant, appropriate or inappropriate and right or wrong”. Morgan and Hunt (1994, p. 25) continue to expand on the relationship between shared values and affective trust as “the extent to
which the partners have common beliefs about the importance, the veracity or adequacy of certain behaviours, goals and procedures.”

Some authors note that in terms of content, relationships may be governed by these shared norms, or values, pertaining to quality, profitability, sustainability and ethics (de Ruyter & Wetzels, 1999; Morgan & Hunt, 1994) and that these shared common goals help parties to see the potential value of resource exchanges (Kapitan et al., 2018; Kennedy et al., 2016; Tsai & Ghoshal, 1998). These shared values become a kind of social bonding mechanism that assists parties in their intention to share information and knowledge with others (Kapitan et al., 2018; Law, 2008). The perception of shared values indicates membership in the same “clan” or reference group. The close, affective bonds formed result in the partners, in transactions, enjoying a proxy-type relationship where they can act on behalf of each other. It is the shared values that reduce the differences between partners and stimulate their “chemistry” (Lewicki & Bunker, 1995). Other shared values influencing interorganisational trust include a shared organisational climate emphasising morale, leadership credibility and reward equity (Burton, Lauridsen, & Obel, 2004), equity and fairness (Das & Teng, 1998; Robson, Katsikeas, & Bello, 2008; Scheer et al., 2003), business ethics (Kasper-Fuehrera & Ashkanasy, 2001) and cultural diversity values (Stahl, Larsson, Kremershof, & Sitkin, 2011; Stahl & Sitkin, 2005).

Morgan and Hunt (1994) establish that shared values contribute positively to the development of trust and affective commitment. Additionally, scholars note that the more committed partners are to the relationship, the better the chance for “a firm to achieve its individual and mutual goals without the overshadowing risk of engaging in opportunistic
behaviour” (Fontenot & Wilson, 1997, p. 5). A higher level of trust inoculates against this “overshadowing risk” of opportunistic behaviour inherent in any business relationship.

### 2.4.7 Co-Creation and Trust within B2B Relationships

Researchers have suggested that a vital step in the evolution of marketing is exploring approaches for customer-centric marketing strategies (Parasuraman & Grewal, 2000). Co-creation has become a widely used term to describe the shift in thinking from the organisation as a definer of value to a more participative process where people and organisations together generate and develop meaning (Ind & Coates, 2013). This customer-centric focus is a fundamental characteristic of customer co-creation (Sheth, Sisodia, & Sharma, 2000).

In co-creation, the customer is a key actor in contributing to value creation. This reversal of dominant-role dynamics between customer and supplier is in contrast to supplier-centered marketing (Grönroos, 2008; Ramirez, 1999) and has been described as the “next frontier” in advantage seeking behaviours, especially in a B2B context (Bendapudi & Leone, 2003; O’Cass & Ngo, 2007). The concept of co-creation has gained wide acceptance within marketing literature as a reflection of the major shift from a goods-centered to a service-centered perspective (Vargo & Lusch, 2004). Customer co-creation emphasises value creation by customers engaging in the service process toward solving a particular problem, or proposition, using a firm’s prescribed process (Payne et al., 2008).

Since Vargo and Lusch’s (2004) seminal article in the *Journal of Marketing*, there has been a growing interest in the exploration of how co-creation contributes to key marketing outcomes. Co-creation has been established as delivering marketing outcomes for both the buyer and the supplier (Selden & MacMillan, 2006; Tuli, Kohli, & Bharadwaj, 2007) as a
“reciprocal promise of value, operating to and from suppliers and customers seeking an equitable exchange” (Ballantyne & Varey, 2006, p. 335). Engaging stakeholders in a reciprocally useful way can serve to encourage a more sustainable and participatory relationship (Devasirvatham, 2012; Rajah et al., 2008). This reciprocal behaviour is likely to strengthen the bond between organisations and develops a sense of mutual understanding (Bitner, Booms, & Tetreault, 1990; Crosby et al., 1990) and trust (Devasirvatham, 2012; Franklin & Marshall, 2016) between them. Co-creation has also been found to contribute positively in ensuring the satisfaction of customers engaged in service recovery with suppliers (Dong, Evans, & Zou, 2008; Roggeveen, Tsiros, & Grewal, 2012; Xu, Marshall, Edvardsson, & Tronvoll, 2014).

At a tangible level, co-creation has been posed to represent a point of difference for a supplier that is difficult for a competitor to replicate (Grönroos, 2008; Mascarenhas, Kesavan, & Bernacchi, 2004; Sánchez, Vijande, & Gutiérrez, 2010). It is well established within existing marketing literature that on-going collaborations between customers and suppliers that support co-creation are a rich source of competitive advantage (Bonney & Williams, 2009; Kowalkowski, 2011; Sawhney, 2006; Tuli et al., 2007; Woodruff, 1997). Changing market conditions that are driving the development, and adoption, of co-creative activities include increased competitive activity, increasing levels of customer empowerment, widespread information availability, and the adoption of information communication technology (Kandampully, 1998).

At a relational level, the process of co-creation can develop implicit benefits to both customer and supplier. In the process of co-creation, the buyer has the opportunity to contribute jointly to developing a customer-focused solution and, in the process, can
develop strong relational or social bonds with the supplier (Luccini, Marshall, & Franklin, 2018; Rajah et al., 2008). Similarly, the supplier benefits from co-creation by developing a deeper understanding of their customers’ needs and generating customer loyalty (Selden & MacMillan, 2006). This co-creative, relational reciprocity between buyer and supplier constitutes a core variable for explaining loyalty (Sirdeshmukh et al., 2002). Scholars note that this deeper level of interaction, exchange, and joint problem solving between buyer and supplier can contribute to high levels of satisfaction and trust (Devasirvatham, 2012), and trust fosters coherence between the values of buyers and those of suppliers (Vlachos, Tsamakos, Vrechopoulos, & Avramidis, 2009). The exchange relationship is critical to the belief “that a party’s word or promise is reliable and a party will fulfil his or her obligations in an exchange relationship” (Dwyer et al., 1987, p. 11). The growth in involvement between buyer and supplier fosters reciprocity and contributes to relational commitment (Keh & Xie, 2009). Jaworski and Kohli (2006, p. 117) consider co-creation as inherently implying trust, proposing that the co-creation process nurtures commitment based on the rationale that, “because a customer is involved in the process, the customer builds commitment to the resultant offering by the firm.” Thus, trust is built through the equality inherent in dialogue, through which customers and the firm create bonds of integrity and shared risk (Randall, Gravier, & Prybutok, 2011).

A higher-degree of customer co-creation has been suggested to generate higher levels of both types of trust between a buyer and supplier (Evans & Wolf, 2005; Leadbeater, 2006; Lundkvist & Yakhlef, 2004; Mascarenhas et al., 2004). Scholars propose, conceptually, that both cognitive and affective trust can be established within a co-creative exchange. Trust provides a guarantee of the consistent and competent performance of the company (Aurier
& N’Goala, 2010), thus ensuring continued value in future exchange with the supplier. Trust also serves to reduce the risk in exchanges, providing continuity in the relationship and nurturing a feeling of loyalty (Alves & Mainardes, 2017). Scholars also note that cognitive trust is established through assessing performance against calculated expectations, sharing ideas, discussing issues openly and constructively, and that affective trust is established due to the development of emotional bonds, offers of caring advice, and enjoyment of the collaborative experience (Parayitam & Dooley, 2009; Swift & Hwang, 2013; Webber, 2008). The relationship between co-creation and trust, mediated by emotions or affect, has also been established in the front-line services literature (Luccini et al., 2018) and the concept of higher levels of co-creation leading to higher levels of trust has also been empirically studied, and supported, in a B2B context by Rajah (2012) and Franklin and Marshall (2016).

With the most salient causal, or antecedent, conditions influencing trust in B2B relationships established, the attention now moves to an investigation and reporting of contextual conditions influencing trust within B2B relationships.

### 2.5 Contextual Conditions Influencing Trust within B2B Relationships

Scholars propose that the conceptual challenge in exploring the role of trust in interorganisational exchange is extending an inherently individual-level phenomenon to the organisational-level of analysis (Zaheer et al., 1998). Zaheer, McEvily and Perrone (1998a, p. 141) argue that many previous approaches to trust have ignored this dynamic and have “failed to acknowledge that trust occurs between individuals not firms and, as such, have committed cross-level fallacy.” Janowicz-Panjaitan and Krishnan (2009, p. 247) note “one can speak of organisations trusting each other only because they are made up of, and managed by, individuals.” It is then through individuals that inter-firm relationships are
operationalised (Blois, 1999; Inkpen & Currall, 1997; Nooteboom, Berger, & Noorderhaven, 1997). Thus, an understanding of both the individual and organisational contextual conditions influencing trust is critical to understanding how best to recover trust between firms.

The current marketing literature examines trust at both interorganisational and interpersonal levels (Ashnai et al., 2016), and the results generally indicate that interpersonal trust predicts both customer behaviours and organisational performance better than interorganisational trust (Palmatier et al., 2006). It is well accepted in the sales and marketing literature that interorganisational trust is frequently maintained and executed via individuals, or boundary spanners, acting on behalf of their respective organisations (Herjanto & Franklin, 2019; Li, Pieńkowski, van Moorsel, & Smith, 2012). Thus, through interpersonal trust, a buyer can develop confidence in the long-term benefits of the relationship with a supplier (Anderson & Weitz, 1989; Dwyer et al., 1987), their propensity to switch suppliers decreases (Fang, Palmatier, Scheer, & Li, 2008), and the anticipated future interaction with the supplier increases (Doney & Cannon, 1997).

Whilst Zaheer et al. (1998a) suggest that the greater the level of interpersonal trust, the greater the level of interorganisational trust, they also note that interpersonal trust cannot be used exclusively as a proxy for interorganisational trust because other external or contextual factors must be considered. Two such contextual factors that have been investigated in the literature are that of the individuals’ organisational role, position, or level of decision-making authority in the firm and the size, or channel power, of the firm itself.
2.5.1 Individuals’ Organisational Role and Position within B2B Relationships

Scholars have suggested that the position of the buyer in the hierarchy of the firm, such as in the firm’s purchasing, procurement or buying centre structure, might influence the impact of trust-building activities between firms (Akrout & Diallo, 2017). Those individuals who are most typically responsible for processing information from the partner organisation and representing their own organisation in the relationship are commonly referred to as boundary spanners (Adlrich & Herker, 1977). Boundary spanners perform different functions and, consequently, play different roles that serve to affect the development of trust between organisations (Ring & Van de Ven, 1994).

One particular distinction in the literature is that of the systematically different roles, and methods of relationship building, of top management compared to lower levels in the corporate hierarchy (Fang et al., 2008; Ring & Van de Ven, 1994; Zaheer, Lofstrom, & George, 2001). Perrone, Zaheer and McEvily (2003) suggest that roles, such as director versus purchasing manager, influence the degree of trust placed in the agents performing those roles. A director, for example, of whom has greater experience and organisational latitude for managing interorganisational relationships might be able to cultivate more trust with their customer (Akrout & Diallo, 2017). Waseem et al. (2018) extend this role-specific experiential dimension, recognising that an actor’s competence-in and execution-of their work is borne out of much more than the execution of fixed and predictable tasks. The authors consider an actor’s experience as a “stock of knowledge” (Schutz, 1967, p. 199), or an accumulation of their individual work experiences (Sandberg, 2000) that contributes to their understanding-of and interactions-within a job (Katz & Kahn, 1978; Pate, Martin, & Robertson, 2003).
Consistent with these ideas, numerous scholars (Barber, 1983; Lewis, 1995; Meyerson, Weick, & Kramer, 1996) surmise “it is not the person in the role that is trusted so much as the system of expertise that produces and ensures the role-appropriate behaviour of role occupants” (Kramer & Lewicki, 2010, p. 255). As Dawes (1994, p. 24) observes, “we trust engineers because we trust engineering and believe that engineers are trained to apply valid principles of engineering.” By extension, Dawes (1994, p. 24) notes, “we have evidence every day that these principles are valid when we observe airplanes flying.” Thus, the strength of this role-based trust arises from, and is sustained by, people’s common knowledge or beliefs regarding what role occupancy implies or means (Kramer & Lewicki, 2010). These attributions of role-based trust serve to reduce uncertainty relative to the role occupied, lessen the need to verify trustworthiness, or as Kramer and Lewicki (2010, p. 263) posit: “if you are in the role, you are presumed to be up to the task.”

Scholars extend this role-specific insight when investigating trust repair strategies relative to both the executive and operational levels within an organisation. Since the roles of organisational actors vary significantly between hierarchical levels, it stands to reason that the means to both build and repair trust would also vary (Janowicz-Panjaitan & Krishnan, 2009; Janowicz-Panjaitan & Noorderhaven, 2009). Different positions within an organisation are associated with different expectations and, thus, different trustworthiness factors are more prominent when considering trust recovery efforts. These different stakeholder groups have been shown to prioritise different components of trustworthiness based on the type of vulnerabilities they face (Fuoli et al., 2017; Pirson & Malhotra, 2011). Scholars also suggest that when considering trust repair strategies, it becomes increasingly difficult when violations from a partner organisation occur at higher levels of the
organisation, such as a corporate-level violation, as compared with violations that occur at lower levels of the organisation, such as the branch or operational level (Janowicz-Panjaitan & Krishnan, 2009).

2.5.2 Buyer and Supplier Firm Size and Channel Power within B2B Relationships

Fundamental to the most widely adopted definitions of interorganisational trust (Anderson & Weitz, 1989; Doney & Cannon, 1997; Ekici, 2013) is the notion of risk or vulnerability inherent in such relationships. Global outsourcing, joint ventures, strategic alliances, and the prevalence of relational contracting, all contribute to the complexity and uncertainty inherent within interorganisational networks (Kramer, 2006; McEvily et al., 2003). Thus, the facilitative properties of interorganisational trust have become increasingly critical to interorganisational cooperation (Zhong, Su, Peng, & Yang, 2017). As well as a number of internal and focal-relationship-specific factors that contribute to the level of trust between organisations are external factors, such as supplier size and power. Trust researchers have commented on a shortfall of investigation on these external factors, such as supplying company size, channel power, and level of dependence, and the importance of these factors on both present and future relationship evolution (Hanmer-Lloyd, 1996; Jain, Khalil, Johnston, & Cheng, 2014).

From the buyer’s perspective, the overall size of the supplying firm and its market share position can provide a signal to the buying firm that the selling firm can be trusted (Doney & Cannon, 1997). The process of transference suggests a buying firm can draw from the experience of others in the wider network of organisations to infer trustworthiness from supplier size. The premise being that the overall size and market share of the supplying company indicates that many other firms trust this firm enough to do business with them.
This infers a level of consistency in meeting expectations or obligations and fulfilling promises – acting otherwise would not yield a leadership position in their industry (Doney et al., 2007; Doney & Cannon, 1997; Poenaru & Halliburton, 2011). Similarly, less trustworthy and more opportunistic suppliers who are fleeting in their consistency and promise-keeping would not have been able to maintain such a position in the industry, or enjoy the high sales volume or market share, that a high market share position suggests (Hill, 1990). Doney and Cannon (1997) suggest, “as a result, buyers could use this calculative process to determine that larger suppliers incur more significant costs through untrustworthy behaviour than do smaller suppliers.” Because of the significant, and valuable, investment (Dasgupta, 2000) involved in developing a favourable reputation within an industry, firms are reluctant to jeopardise that reputation by demonstrating untrustworthy behaviour (Telser, 1980).

Other industrial marketing research has explored the relationship between behavioural trust and external characteristics of the buying firm in a context such as firm size at different stages of an interorganisational relationship (Akrout & Diallo, 2017). Akrout and Diallo (2017) suggest that a large buying firm might worry that a supplier will exploit sensitive, proprietary information and jeopardise its performance, resulting in a reluctance to invest in the relationship or enact certain relationship activities that could otherwise result in a level of affective-based trust developing. Conversely, smaller firms, which typically have more external relationships, are more likely to share risk with partner organisations and experience more competition for partners (Croonen, 2010). These firms might also be more willing to take risks with their supplier. Croonen (2010) suggests that this shared risk can also serve to induce a higher level of affective-based interorganisational trust, providing a
sense of security and emotional attachment that will gradually displace formal contracts (Harmeling et al., 2015; Wathne & Heide, 2000).

This notion of divergent levels of channel power within interorganisational relationships, and its influence on trust, has attracted increased empirical attention (Fulmer & Gelfand, 2012). Channel power refers to a channel member’s ability to influence decision variables in the marketing strategy of another member at a different level in a given channel (Gaski, 1984; Jain et al., 2014). Scholars note, with some surprise, that as trust inherently involves dependence and vulnerability, an exploration of the influence of channel power on trust is well overdue (Fulmer & Gelfand, 2012). Management studies exploring trust in leaders and among parties with divergent levels of power are numerous, but there is little research on how power differences affect trust dynamics between organisations. Current research that seeks to explore this relationship suggests that channel power is a critical variable in trust development and that the two constructs are complex and interrelated (Tomlinson, 2005).

Stakeholder theory research suggests that this complex relationship may be due to the fact that low-power individuals tend to focus more attention on the trustworthiness of information from high-power individuals, as compared to the reverse (Kramer, 1996), perhaps because the low-power party would benefit more from the high-power party’s trustworthiness (Greenwood & Van Buren III, 2010). Similarly, Sniezek and Van Swol (2001) found that low-power trustors were more motivated to both evaluate the trustworthiness, and place their trust in, a high-power trustee, rather than the opposite. Conversely, Schoorman (2007) suggests that because the higher-power party can afford more risk, they are more likely to trust than lower-power parties. A distinction between types of trust enjoyed between parties may equally arise depending on the relative power in the
relationship. Chua et al. (2008) found that trustors had high cognitive trust but low affective trust toward trustees who outranked them within an organisation, highlighting that interpersonal trust can be more difficult to develop with power differences within a relationship (Korczynski & Ott, 2005).

Similar to the concept of channel power is that of partnership dependence, based on resource dependence theory. Dependence is defined as “the degree to which a target firm relies on the resources and capabilities of the source firm to achieve its desired goals” (Zhong et al., 2017, p. 1056). Dependence is related to interorganisational trust development (Rousseau et al., 1998) because dependence on another party introduces a level of vulnerability to environmental constraints (Woolthuis, Hillebrand, & Nooteboom, 2005). In a B2B context, firms will typically rely on a number of external suppliers to gain valued resources, often through interorganisational cooperation (Hillman, Withers, & Collins, 2009). Central to these cooperation efforts is the conception of channel power, in which firms may choose from different cooperative or competitive behaviours with partner firms based on their power imbalance (Casciaro & Piskorski, 2005).

The influence of power on trust violation and repair has also been explored in the organisational literature. The misuse of power has been shown to erode trust within organisations (Small, 2002), but “high-power people may be less vigilant toward potential violations and pay less attention to expectation-inconsistent information than low-power people are” (Mannix, 1993, p. 5). Kim, Dirks and Cooper (2009) found that during trust repair efforts, high-power trustees are more likely to convince trustees to give them the benefit of the doubt, but because high-power trustees are perceived to be more in control, they may have difficulty attributing the trust violation to situational forces (Fulmer &
Gelfand, 2012). This finding is echoed in Van Dijke and colleagues (2010) research, demonstrating that violations of procedural justice from high-power parties are more damaging than that of low-power parties. Geyskens et al. (1998, p. 242) assert, however, that “relationships are not prisoners of power structure, but whether trust develops depends on how parties feel and behave and on the [resulting] outcome developed.” Thus, to echo the sentiment of Huang and Wilkinson (2013), trust must be manifest in trusting actions, not simply by an accounting of market performance or other external characteristics.

With the contextual conditions influencing trust in B2B relationships established, the attention now moves to an investigation and reporting of the distinctions between service recovery efforts and trust recovery efforts. This distinction is borne out, first, through an examination of the literature on service recovery within B2B relationships. Then, the need for a more explicit, but complementary, focus on trust recovery efforts is highlighted and discussed.

### 2.6 Service Recovery within B2B Relationships

The services marketing literature suggests that a central idea in the theory of partnering is implicit differences in trust and commitment (Berry, 2002). These dimensions feature as the distinction between customer partners and customers with an orientation toward single or repeat transactions (Berry, 1995; Garbarino & Johnson, 1999). Trust is particularly important within service contexts due to characteristics of services, such as intangibility and heterogeneity, which make it more difficult to select and evaluate service providers (Liljander & Roos, 2002; Singh & Sirdeshmukh, 2000). Trust enjoys profuse acceptance
among scholars as a key facilitator of interorganisational relationship diagnosis and development, particularly when other tangible or experiential diagnostic criteria are absent. The longer-term, more involved nature of B2B relationships precludes flawless execution of all service encounters so service failure is a common occurrence within interorganisational exchange (Berry, 1995; La & Choi, 2012). The inevitability that some level of product or service failure will occur during the course of the business relationship necessitates an understanding of customers’ reactions to a firm’s service recovery efforts and the consequences on interorganisational exchange (Hart, Heskett, & Sasser, 1989; Smith, Bolton, & Wagner, 1999).

Service recovery has been defined as those actions in which a firm engages to address a customer complaint regarding a perceived service failure (Grönroos, 1990). Scholars note that because this service recovery response has the potential to strengthen the relationship between itself and their customers or aggravate the situation, service recovery encounters are considered critical “moments of truth” or inflection-points that determine customer relationships (Choi & La, 2013, p. 224; Smith et al., 1999). Well-executed service recovery remedies have been posed as essential to recovery satisfaction, referring to the customer’s evaluation of how well a service provider handled a service failure (Orsingher, Valentini, & de Angelis, 2010; Tax et al., 1998) and their overall satisfaction with the service recovery process (Aaker, Fournier, & Brasel, 2004). The customer’s experience with a service recovery attempt contributes to an overall evaluation of satisfaction with the firm, providing a formative assessment of a firm’s ability, benevolence, and integrity (Berry, 1999).

These service recovery actions have an explicit effect on interorganisational trust. Inappropriate or insufficient service recovery efforts may serve to dilute interorganisational
trust (Basso & Pizzutti, 2016; Gasparotto et al., 2018; Macintosh, 2009). Unsuccessful service recovery efforts may also cause a double-deviation phenomenon (Bitner et al., 1990; Maxham & Netemeyer, 2002), leading customers to extremely negative or critical reactions such as revenge and retaliation (Bechwati & Morrin, 2003). Within a B2B relationship, a service failure represents an opportunity to engender trust whilst making a genuine attempt to remedy service failure (DeWitt, Nguyen, & Marshall, 2008). The failure provides a chance to reaffirm the relationship that organisational partners initially entered into (DeWitt et al., 2008; Gulati & Sytch, 2008) and may also lay the groundwork for future, mutually beneficial reciprocity (Pillutla, Malhotra, & Murnighan, 2003).

According to the services literature (Crosby et al., 1990; DeWulf, Odekerken-Schröder, & Iacobucci, 2001; Sirdeshmukh et al., 2002), the level or strength of a client-company relationship refers to the “extent of the bond that a client has with a particular service provider.” (Pizzutti dos Santos & Basso, 2012, p. 170). Prevailing research suggests two opposing views to explain the effects of service recovery on clients’ post-service recovery evaluations. Within the first perspective, some researchers argue that an otherwise strong relationship with a supplier will serve to magnify the negative response to the service failure (Goodman, Fichman, Lerch, & Snyder, 1995). The increased dissatisfaction with the organisation was due to the fact that they expected much more of the company in terms of keeping promises and delivering high quality services (Bitner, 1995; Grönroos, 1990).

Conversely, some researchers suggest that clients who are engaged in a lasting relationship with a company will exhibit greater tolerance for failure and experience greater complaint handling satisfaction (Berry, 1995). Berry (1995) suggests that consumers involved in affective and social relationships show more tolerance when failures occur whilst Ganesan
(1994) suggests that channel partners in relationships characterised by high continuity, or long-term orientation, believe that inequities caused by poor performance are mitigated, or equalised, over the course of future transactions. Anderson and Sullivan (1993) liken this to “forgiveness” by clients who experience a failure.

The premise that service failures are inevitable, but dissatisfied customers are not, has driven the development of numerous customer retention strategies predicated on service recovery in recent literature (Baron, Warnaby, & Hunter-Jones, 2013). Hart et al. (1989, p. 148) observe that “a good recovery can turn angry, frustrated customers into loyal ones.” Because the decision to re-patronise service providers post-service-failure is characterised by much higher perceived uncertainty and risk, the role of customer trust is likely to become more critical in rebuilding loyalty intention (Schoorman et al., 2007). When customers confront a situation in which they are unsure as to whether the service meets their needs, they are more likely to prioritise trust in selecting service providers (Seppänen et al., 2007). This uncertainty about the service provider’s future performance causes customers to become more trust-dependent (La & Choi, 2012). Therefore, in on-going or long-term service relationships, maintaining a relationship with the customer has been posed as more important than meeting service recovery expectations (Grossman, 1999; Hess, Ganesan, & Klein, 2003; Priluck, 2003).

Service failure exposes customer vulnerability, doubt, and uncertainties, which may undermine firm relationships with customers (Boon & Holmes, 1999). However, very few empirical or theoretical studies exist that have examined customer trust as a means of restoring relationships after service failure (La & Choi, 2012; Tax et al., 1998). La and Choi (2013) suggest that successful recovery satisfaction may not be sufficient to guarantee the
restoration of loyalty unless customer trust is restored. The authors continue to suggest that regaining customer trust is a “critical intermediary step in the process of service recovery” (Choi & La, 2013, p. 229). Trust, unlike satisfaction with service recovery efforts, has what some researchers have alluded-to as a future-oriented component (Schumann et al., 2010). The trustor must gain confidence in the predictability of a trustee’s behaviour (Basso & Pizzutti, 2016), not merely experience a demonstration of satisfactory service recovery efforts. Additionally, when service recovery is poor, trust may be severely eroded (Basso & Pizzutti, 2016) and can represent an additional failure, thereby intensifying the effects of the previous transgression (Bitner et al., 1990). Therefore, rebuilding customer trust is a pivotal and distinct mechanism from that of service recovery as customer satisfaction with service recovery attempts may not itself positively influence trust, build loyalty nor stop a customer from seeking information about other competitors (Pizzutti dos Santos & Basso, 2012).

2.7 Trust Recovery within B2B Relationships

Trust has been well established as critical to successful social interactions and efficient economic systems (Fukuyama, 1995; Haselhuhn, Schweitzer, & Wood, 2010), yet despite its importance, trust is routinely violated (Elangovan & Shapiro, 1998). Scholars note that given the importance of trust and the frequency with which it is broken, researchers know surprisingly little about how trust can be rebuilt following a violation (Haselhuhn et al., 2010). Schoorman et al. (2007) suggest the current trust literature is limited by its predominant focus on trust building rather than trust recovery activities. Whilst there has been a growing concern about the prevalence of trust violations (Adams, Highhouse, & Zickar, 2010; Elangovan & Shapiro, 1998; Morris & Moberg, 1994; Raza-Ullah & Kostis,
little is known about their impact on relationships (Gillespie, 2017; Kramer & Lewicki, 2010; Lewicki & Bunker, 1996).

Despite its role as a vital relational resource, scholars observe that trust is vulnerable to a variety of destructive threats (Xie & Peng, 2009), fragile, and often violated in day-to-day interactions (Tomlinson, 2011). In fact, some scholars note that the very conditions that foster trust, such as the implicit acceptance of future uncertainty and risk, allow for malfeasance (Granovetter, 1985). Trust violations may serve to elicit negative feedback from customers such as negative publicity (Ahluwalia, Unnava, & Burnkrant, 2001; Griffin, Babin, & Attaway, 1991), revenge and retaliation (Bechwati & Morrin, 2003), and negative word-of-mouth (Henneberg, Gruber, Reppel, Ashnai, & Naudé, 2009; Nitzan & Libai, 2011). Notably, some scholars suggest that not only manifest acts, but also simple allegations, may be sufficient to undermine trust (Bell & Loftus, 1989; Fuoli et al., 2017; Kim et al., 2004; Kim & Harmon, 2014). According to Patterson (2012, p. 528), “virtually every company of international renown has had its fair share of negative postings to combat”. These collective events have contributed to a generally increased level of public distrust of corporations (Adams et al., 2010) and a stereotypical view of corporations as “amoral entities that will do almost anything to increase profits – including lie, cheat and steal if need be” (Harris & Wicks, 2010, p. 152). More critically, however, is the work of Lewicki and Bunker (1996) and Lewicki and Wiethoff (2000), who developed theoretical models that consider the implications of trust violations. Their work suggests that trust violations may irrevocably harm trust in a similar vein to that of the work of Slovic (1993) who suggests that lost trust can take a long time to rebuild and that, in some cases, lost trust may never be restored.
A multitude of studies have investigated an assortment of individual trust repair tactics that can be employed following a trust violation, including apologies (Kim et al., 2004; Tomlinson, Dineen, & Lewicki, 2004), explanations (Ohbuchi, Kameda, & Agarie, 1989; Shapiro, 1991), denials (Ferrin, Kim, Cooper, & Dirks, 2007; Kim et al., 2004), excuses (Tomlinson et al., 2004), promises (Schweitzer et al., 2006), reparations (Bottom et al., 2002; Gibson, Bottom, & Murnighan, 1999), and legalistic remedies (Jøsang, Ismail, & Boyd, 2007). Other tactics investigated include practical actions (Gillespie & Dietz, 2009) such as punishing the violator or establishing new regulations (Kim et al., 2004), contract amendments, voluntary sanctions, and supervision (Nakayachi & Watabe, 2005).

Based on the interpersonal trustworthiness perspective (Mayer et al., 1995), researchers have defined interorganisational trust recovery as “the process of restoring and improving the perception of trustworthiness of the trustee from the three aspects of competence, integrity and benevolence after the occurrence of a trust violation” (Nakayachi & Watabe, 2005, p. 1). Kim, Ferrin, Cooper and Dirks (2004) extend this definition by suggesting that the context of trust repair is composed of both trusting beliefs and trusting intentions and Schweitzer, Hershey and Bradlow (2006) and Tomlinson, Dineen and Lewicki (2004, p. 167) define trust repair as “the repair process with a willingness to partially or totally expose one’s vulnerability to another party.”

Similar to trust building efforts, effective trust recovery is not only a matter of cognitive trust repair but also a process of affective trust repair (Li, Li, Ye, & Lin, 2013). Tomlinson and Mayer (2009) propose that in the process of effective trust repair, the victim can be also made to feel hopeful of future cooperation whilst mitigating such negative emotions as anger, fear, and vulnerability. Kramer and Lewicki (2010) lament that the state of research
on trust and, correlative, trust repair, is due to this fragmented view of the very definition of trust itself. As a result, “most approaches to trust repair have only focused on changing the cognitions, and not necessarily addressing emotional or behavioural elements” (Kramer & Lewicki, 2010, p. 250).

Contemporary trust scholars have suggested that in an effort to develop trust building and repair research into more practically fruitful realms, emerging research on trust must re-contextualise trust as a phenomenon that can, in fact, be deliberately created and shaped (Bachmann, 2011) and is not strictly limited to the interpersonal domain. Bachmann (2011, p. 204) suggests that when studying business relationships “we need to go a step beyond such assumptions and try to understand why individual actors (managers) and collective actors (organisations) tend to freely invest trust in their relationships with business partners”. Furthermore, as trust has a notorious tendency to be a deeply contextualised phenomenon, Granovetter (1985) suggests that a sensitivity to contextual influences on trust are critical to developing further insight into the phenomenon. When considering the potential contextual influences on trust recovery efforts, both the type and severity of the trust violation have been posed to feature as impacting interorganisational trust recovery efforts.

2.7.1 Type of Trust Violation within B2B Relationships

Beyond considering the individual, dispositional characteristics of trustors and trustees that contribute to trust building and repair, researchers are increasingly investigating the interactivity of other situational factors on trust recovery (Searle, Nienaber, & Sitkin, 2018). In particular, researchers have paid increased attention to the effectiveness of various trust repair efforts depending on the type of violation that has occurred (Ferrin et al., 2007; Kim
et al., 2004). The most robust work in this area is by Ferrin et al. (2007) and Kim et al. (2004) when they consider the distinction between (a) competence-based violations: when the trust breaker’s behaviour calls his or her ability into question; and (b) integrity-based violations: when the breach of trust is attributed to a lack of moral integrity. Competence-based trust is predicated on an expectation that a partner has the technical skills, experience, and reliability needed to fulfil their obligations (Lui & Ngo, 2004). In contrast, integrity-based trust is predicated on perceptions about a partner’s motives, honesty, and character (Sitkin & Roth, 1993), with an emphasis on the social and attitudinal underpinnings of the relationship (Connelly et al., 2018; Mayer et al., 1995).

Trust can be violated on many bases for assessing trustworthiness (Mayer et al., 1995), however, previous research has found that integrity violations are more detrimental to trust than competence violations. Competence-based violations may be attributed to simple mistakes or poor performance (Kim et al., 2004), whereas integrity-based violations are attributed to moral failings (Ferrin et al., 2007; Kim et al., 2006; Kim et al., 2004; Kim & Harmon, 2014). More specifically, people tend to weigh positive information about competence more heavily than negative information about competence, but they tend to weigh negative information about integrity more heavily than positive information about integrity (Reeder & Brewer, 1979). As Kim et al. (2004, p. 106) suggest, “one single poor performance is typically not taken as a sign of incompetence, but one single act of dishonesty is generally considered as a reliable indication of low integrity.” As such, when considering trust recovery efforts, researchers have found that apologies are more effective than denial in cases of competence-related trust violation, whereas in cases of integrity-
related trust violation, denial has been found to be comparatively more effective (Ferrin et al., 2007; Kim, Cooper, Dirks, & Ferrin, 2013; Kim et al., 2004; Kim & Harmon, 2014).

Lewicki and Weithoff (2000) similarly delineate trust into two different types: calculus-based trust and identification-based trust. Calculus-based trust is built through impersonal interactions, through which positive expectations of the ability of the other party are developed. These types of relationships are typically founded on explanation of expectations, up-front agreements, outlining consequences, and performance-evaluation procedures (Gillespie, 2017; Lewicki & Brinsfield, 2012; Lewicki & Wiethoff, 2000).

Identification-based trust is built through more interpersonal interactions – through which parties discover and develop common interests, shared personal and professional values, motivations, and goals (Lewicki & Wiethoff, 2000). As opposed to calculus-based trust, a strong emotional component is present with identification-based trust, so reactions to trust violations may feel like a direct challenge to a party’s values and beliefs (Kramer & Lewicki, 2010).

The notion that trust develops further over time is well established in the trust literature (Kramer & Lewicki, 2010), and that the level, and type, of trust at the point of betrayal influences subsequent reactions and possibilities for its repair (Grover, Hasel, Manville, & Serrano-Archimi, 2014; Haselhuhn et al., 2010; Schweitzer et al., 2006). However, close, established relationships, that are characterised by a long-term relationship orientation may also develop an immunity or insulation to violations, up to a point, that depends on what Andiappan and Treviño (2011, p. 368) call a “trust reservoir.” Researchers suggest that investigating these contingencies, relative to whether a given trust repair effort might work, and the joint influence of other conditions influencing interorganisational trust “will work to
gain deeper insight into when and why such efforts may sometimes prove more or less effective than others.” (Searle et al., 2018, p. 275). Clearly, trust violations may push the trustor to question more than one aspect of the other party’s trustworthiness (Fuoli et al., 2017), and may generate different attributions based on the type of trust violation experienced. Therefore, fundamental to the possibility of trust recovery is an understanding of how, or what type-of, trust was violated.

2.7.2 Severity of Trust Violation within B2B Relationships

It is well established in the trust literature that trustors experience a range of emotions when their trust is violated such as anger, hurt, fear, and frustration (Elangovan & Shapiro, 1998). Additionally, they assess the situation at a cognitive level (Lewicki & Bunker, 1996). Not surprisingly, both the emotional and cognitive reactions to a violation of trust are exacerbated by the realisation that the objective damages, or outcome severity, may be quite pronounced (Elangovan & Shapiro, 1998; Tomlinson, 2011).

The most common way researchers have treated outcome severity is in terms of magnitude of harm (Lewicki & Bunker, 1996). This concept generally suggests that the greater harm to the victim of the transgression, the less favourable the reaction. Schwartz, Kane, Joseph and Tedeschi (1978) found offenders are regarded more negatively, as more hostile, and their apologies or explanations are less likely to be accepted (Ohbuchi et al., 1989; Shapiro, Buttner, & Barry, 1994), when the magnitude of harm is severe rather than mild. Similarly, willingness to reconcile a relationship after a broken promise is more likely when the magnitude of harm is mild rather than severe (Tomlinson et al., 2004). Experiencing harm as a result of transgression has been shown to manifest more anger, a stronger desire for punishment, less forgiveness, less sympathy and lower morality ratings than if you were not
harmed in the relationship (Gold & Weiner, 2000). These findings are reflected in prior research in the areas of betrayal, victimisation, revenge, and justice (Bies & Tripp, 1996; Bies, Tripp, & Kramer, 1997; Elangovan, Auer-Rizzi, & Szabo, 2015; Elangovan & Shapiro, 1998), with Elangovan and Shapiro (1998) suggesting that the very act of trust violation would result in an erosion of trust regardless of the magnitude of harm experienced. However, the notion of vulnerability and potential harm is so fundamentally central to the conceptualisation of interorganisational trust (Mayer et al., 1995), that this research argues that the level of damage associated with the trust violation will be extraordinarily salient, and have a bigger impact, on the erosion of trust.

From a prospect theory perspective (Kahneman & Tversky, 2013), individuals value gains and losses differently. Negative information weighs more heavily in making trust judgements than positive information and the severity of an outcome “increases the blameworthiness of an interaction partner” (Walster, 1966, p. 73). Further research on the attribution process by Jones and Davis (1965) suggests that individuals qualify their attributions regarding the causes of negative outcomes based on the degree to which they are adversely affected by the other party’s actions. Other researchers have reported that the severity of the transgression can moderate the relationship between a leader’s apology and trustor’s positive emotions, psychological health, and pride (Byrne, Barling, & Dupré, 2014).

Similarly, in the performance appraisal literature, Murphy and Cleveland (1991, p. 186) suggest, “the same behaviour might be evaluated differently, and different causes might be cited for that behaviour, depending on the seriousness of the outcomes of that behaviour”. Harvey and Weary (1981, p. 14) also contend that, “the more hedonically relevant...an act is
for the perceiver, the more likely the perceiver will be to infer that the act reflects a particular intent or disposition on the part of the actor.” Scholars also suggest that as the severity of the negative outcome increases, it is likely to result in greater harm to the relationship (Tomlinson, 2011), suggesting a higher degree of difficulty in repairing the relationship and, as Fehr and Gelfand (2010, p. 40) suggest, “the negative link between harm severity and forgiveness is conceptually intuitive.”

Ample research on interpersonal transgressions and forgiveness has shown that a more extensive reparative effort is required by the offending partner as the level of outcome severity increases (Ohbuchi et al., 1989; Schlenker & Darby, 1981), that the offense severity relates to likelihood of accepting apologies and further reconciliation (Barclay, Whiteside, & Aquino, 2014; Bennett & Earwaker, 1994; Bradfield & Aquino, 1999; Holtz & Harold, 2008; Ohbuchi et al., 1989; Tomlinson et al., 2004), and that the beneficial effects of reparative efforts diminish as the magnitude of the violation increases (Bennett & Earwaker, 1994; Tomlinson et al., 2004). Furthermore, severity appears to be one of the factors that differentiates recoverable from unrecoverable trust violations (Grover, Abid-Dupont, Manville, & Hasel, 2017; Grover et al., 2014), and relates to the likelihood of forgiveness (Boon & Holmes, 1999; Boon & Sulsky, 1997; Fehr et al., 2010). Past research has also identified that even the sincerest reparative efforts may not be accepted if the offence is very serious (Blumstein et al., 1974; Shapiro et al., 1994); otherwise known as a terminal violation of trust.

2.8 Chapter Conclusions

This chapter has provided a review of the relevant literature for the various sections contained within this thesis. Theories and constructs discussed in the present chapter will
be used for developing propositions that explore, and seek to explain, the process of interorganisational trust recovery within a B2B context. The prevailing trust literature, generally, and interorganisational relationship literature, specifically, notes the importance of trust as a key relational dimension. The benefits of trust are wide ranging, but a scarcity in the literature of how best to recover trust after service failure and subsequent breach of trust is sorely lacking. Service failure can, in fact, provide opportunity to reaffirm a business relationship, but more explicit trust recovery efforts must be developed in order to recover previously enjoyed levels of trust. However, B2B relationships are multifaceted and these efforts must consider different causal and contextual factors when seeking to develop trust recovery solutions. The next chapter, Chapter Three, presents the research design for the thesis, including justification for choice of the research paradigm and research methodology, and a description of the two studies undertaken to answer the research question and aims.
Chapter Three: Research Design

3.1 Introduction

This chapter presents the design for the research. First, this chapter considers and reports the research philosophy, including the choice of research paradigm. Second, the choice and justification of research methodology is considered and reported. Third, this chapter justifies the specific methods adopted for each of the two respective studies within the research. The chapter explains the two studies undertaken in two phases of data gathering and analysis; qualitative enquiry featuring thematic analysis and qualitative comparative analysis (QCA), spread over two studies. The aims, sample, methods of data collection, and methods of data analysis are detailed for each study.

3.2 Research Philosophy

This section presents theoretical considerations in the researcher’s choice of research paradigm and justifies the philosophical grounding for the research undertaken.

3.2.1 Justification for the Research Paradigm

Guba and Lincoln (1994) posit that a paradigm is the basic belief system or worldview that guides the investigator. This basic belief system, or worldview, then serves to set the context for a researcher’s study and influences how a researcher goes about obtaining knowledge (Ponterotto, 2005). This worldview defines, for its holder, the nature of the “world”, the individual’s place in it and the range of possible relationships to that world and its parts (Guba & Lincoln, 1994). Guba and Lincoln (1994) discuss the major research paradigms that consist of positivism, post-positivism, constructivism (also referred to as interpretivism) and participatory and critical theory. Functioning as a guide, the
underpinnings of each respective research paradigm enable the researcher to “...explore the issue at hand, establish the appropriate tools to do so and provide principles in which to carry out tasks” (Deshpande, 1983, p. 102). Positivism and interpretivism are widely accepted to reside on opposite ends of the research paradigm continuum within ontological, epistemological and axiological dimensions (Giddings & Grant, 2006). The different tools, participants, instruments, and research methods the researcher employs within this research are best understood relative to what ontological, epistemological and axiological assumptions are made about the research environment, or world at large (Ponterotto, 2005).

3.2.2 Ontological Assumptions

The question of ontology refers to the indication of the researcher regarding the nature of reality and what can be “known” regarding this reality (Guba & Lincoln, 1994; Ponterotto, 2005). Ontology is deeply concerned with the nature of that reality in relation to an individual’s belief system and perception of the social world (Giddings & Grant, 2006; Grant & Giddings, 2002). Positivists, or naïve realists, believe that ‘one true’ reality is apprehensible from the social world and is driven by immutable mechanisms and natural laws (Guba & Lincoln, 1994). However, the central tenets of naïve realism are contrary to my personal ontological assumptions. I believe that a reality exists that can be studied scientifically, but that I construct my own worldview based on perceptions and experiences. This presents a contradiction to that of naïve realism as the fallibility of my construction begets imperfection (Ponterotto, 2005). Therefore, this research reflects the ontological assumptions of critical realism, in an effort to persistently seek, or apprehend, objective reality even though this goal is, ultimately, unattainable due to “basically flawed human intellectual mechanisms” (Guba & Lincoln, 1994, p. 110; Ponterotto, 2005). By extension,
Bryman and Bell (2003) suggest that the role of social science is to develop understanding about the social world in spite of the lack of absolute certainty of attaining, or realising, objective reality.

3.2.3 Epistemological Assumptions

Epistemology falls under the “umbrella” of ontology as ontological assumptions, or positions, are the basis for epistemological assumptions. An epistemology defines the nature of the relationship between “enquirer and known” and serves to define what “counts” as knowledge and on what basis we can make knowledge claims (Grant & Giddings, 2002). As expressed by Hunt (1990, p. 9), a critical realist epistemology serves to “… use its method to improve our perceptual (measurement) processes, separate illusion from reality, and thereby generate the most accurate possible description and understanding of the world.” The constructs, or conditions, under investigation in this research enjoy a wide and well-subscribed research heritage. These constructs are theoretical entities that play a central role in post-positivist research (Creswell & Poth, 2017) and “give us warrant for believing (to the extent such theories are successful) that these entities [constructs] have a real existence and the theories comprising these entitles truly ‘say something’ about the world” (Hunt, 1990, p. 11). This research seeks to explore if the proposed theoretical constructs, or conditions, contributing to trust in a business-to-business (B2B) relationship context are useful in explaining a facet of interorganisational behaviour; namely, how best to recover trust in the event of a service failure, or violation of that trust.

The belief that an objective social reality exists independent of individuals’ perceptions and that a researcher can gain a window into the nature of that reality by studying peoples’
thoughts and feelings is a central tenet of post-positivist epistemology (Hunt, 1990). I do not take individual perceptions as reality *per se*, thus an interpretivist or critical realist paradigm is not appropriate to the current research (Guba & Lincoln, 2005). Rather, I seek insight into a psychological phenomenon more reflective of a post-positivist research paradigm.

As a post-positivist researcher, my epistemological assumptions are such that I believe knowledge is conjectural and not based on solid foundations. This belief intimates that all observations and measures are fallible and are prone to error and that any theory-building can be “revised or withdrawn by merit of further evidence being presented”, or “theory falsification” (Groff, 2004, p. 21; Guba & Lincoln, 1994). The post-positivist researcher is the “expert” and is expected to maintain an objective stance in relation to the subjects of the research (Grant & Giddings, 2002). This objectivity is a central tenet of post-positivist research as they believe they can study the social world without imbuing the research with their beliefs or bias (Guba & Lincoln, 1994). As a post-positivist researcher, I seek to strengthen the validity of my observations by adopting multiple observations, theoretical frameworks and measures in an effort to overcome my intrinsic bias. Measures of fit with existing knowledge and literature as well as a sensitivity to the critical community as “guardians of objectivity” are paramount (Guba & Lincoln, 1994, p. 6).

This post-positivist approach to reasoning reflects a willingness to adopt both inductive and deductive approaches as is appropriate to the inquiry (Myers, 2013). A research project that is purely deductive may preclude new research insights from emerging, while a research project that is purely inductive may neglect to utilise insights from existing research (Perry, 1998). This research adopts a hybrid approach featuring both inductive – in
the qualitative phase of data collection and analysis – and deductive – in both the qualitative and case study based qualitative comparative analysis phases – to formally test the proposed relationships between causal conditions and consequences. This is appropriate as post-positivist researchers adopt both qualitative and quantitative methods to obtain information that can address their research questions (Myers, 2013) and are not mutually exclusive (Creswell & Poth, 2017; Creswell & Plano-Clark, 2007), rather, they can be considered complementary approaches.

3.2.4 Axiological Assumptions

Axiological assumptions relate very closely to epistemological assumptions and serve to edict the role of the researchers’ values, or ethics, within the scope of their inquiry (Mertens, 2007). The axiological positioning of a researcher influences the degree of effort, or energy, exercised toward including, or excluding, personal bias and values within their research (Mertens, 2007). As a post-positivist researcher, my goal is to maintain objectivity and emotional-neutrality throughout the entire research process so as to ensure minimal influence on research subjects; an “objective disembodied researcher” (Grant & Giddings, 2002, p. 15; Mertens, 2007). Ethics serve as extrinsic to the inquiry process itself and are formally “policed” by external mechanisms (Guba & Lincoln, 1994).

3.2.5 Research Paradigm Overview

In summary, relative to the philosophical assumptions I make about the world, I believe the post-positivist paradigm best mirrors my basic beliefs about reality and serves to “shape the way” as a “truth-seeker” that I seek to obtain knowledge within the social world (Guba & Lincoln, 1994). Coupled with an objectivist ontology and critical realist epistemology, the
use of qualitative, quantitative and case-based methodologies to address the research problem at hand is most appropriate (Creswell & Poth, 2017; Myers, 2013).

3.3 Methodology

This section justifies the use of a sequential mixed methods research design, which commences with qualitative enquiry and proceeds to case-based qualitative comparative analysis (QCA) and proposition testing procedures.

3.3.1 Justification for the Research Methodology

The overarching research questions that this work addresses are:

**Research Question One:** What are the characteristics, qualities or behaviours (collectively known as conditions) that best serve to recover interorganisational trust following service failure?

**Research Question Two:** What other contributing factors serve to moderate the influence of these conditions?

As the research questions are complex and demand a comprehensive exploration of interorganisational trust dynamics, this study adopts a sequential mixed methods research design that starts with qualitative enquiry and proceeds to case-based qualitative comparative analysis (QCA) and proposition testing procedures. To overcome the limitations of a single design, mixed methods research takes advantage of using multiple ways to explore a research problem. Of the number of alternative mixed method research designs, which differ in the relative emphasis and sequencing of the qualitative and quantitative stages (Creswell & Plano-Clark, 2007), a sequential mixed methods research design is most appropriate as this work seeks to explore the phenomenon of trust and trust recovery (Creswell & Poth, 2017).
First, qualitative enquiry is performed to explore the domain of the phenomenon, verify the theorised conditions and look for any additional conditions worthy of deeper investigation. Qualitative methodology is appropriate when the researcher wants to understand the details of a phenomenon (Guba & Lincoln, 1994; Patton, 2002; Stake, 2003). Qualitative research tends to feature a small pool of participants and seeks to investigate each person’s experiences in detail in an effort to help the researcher understand how each individual thinks and feels (Taylor & Bogdan, 1998b).

Interviewing B2B decision makers, face-to-face, and having them speak of their experiences and thoughts about their suppliers after a service failure helps reveal aspects of the trust recovery phenomenon under examination (Taylor & Bogdan, 1998a; Taylor, Bogdan, & DeVault, 2015). The interviews were semi-structured (Cohen, Manion, & Morrison, 2002; Robson & McCartan, 2016), providing an operational framework to the researcher, but also the flexibility to probe on certain issues with more open and follow-up questions (Swain, 2018). The adoption of semi-structured, face-to-face personal interviews is also much more conducive to rich detailed insights into decision makers experiences with their suppliers than can be captured using measurements scales (Castro, Kellison, Boyd, & Kopak, 2010).

The qualitative stage of this research features a particular hybrid approach to thematic analysis, involving directed deductive and inductive reasoning (Swain, 2018). This approach is exploratory in nature, suggesting existing theory or prior research that exists about a phenomenon is incomplete or would benefit from further description (Hsieh & Shannon, 2005). This hybrid approach to knowledge-building, featuring both top-down, theoretical-driven processes and a sensitivity to bottom-up, inductive data-driven process produces both a set of a priori (or pre-empirical) codes (Crabtree & Miller, 1999; Fereday & Muir-
Cochrane, 2006; Vaismoradi, Turunen, & Bondas, 2013) informed by prevailing theory and posteriori (or post-empirical) codes (Boyatzis, 1998; Charmaz, 2006; Glaser & Strauss, 2017) derived from an examination of data generated. The result of this non-linear, reflexive process is that theory is both a precursor-to and an outcome-of the data analysis (Fereday & Muir-Cochrane, 2006; Swain, 2018).

Second, a case-based qualitative comparative (QCA) analysis stage is also required to show how different trust conditions change and develop and what types of relationships emerge, in terms of different mixes and values of conditions, within different cases (De Villiers & Tipgomut, 2018; Ragin, 2000; Ragin, Rubinson, et al., 2008; Wong et al., 2010). Such an approach serves to reveal much about the dynamics and evolution of trust; it considers feedback effects and two-way causation, the impact of different factors and their interaction effects (Abbott, 1988; Buttriss & Wilkinson, 2006; Hsu et al., 2013; Van de Ven & Engleman, 2004; Woodside, 2017). Breiger (2009, p. 243) notes that QCA represents “one of the most innovative, most highly developed and most widely influential strategies for moving beyond the well-worn dichotomy of ‘qualitative’ versus ‘quantitative’ approaches to comparative social research”.

QCA is ideal as a second stage of analysis for this work as it is a complementary method to that of qualitative enquiry and thematic analysis. On the research methodology spectrum, QCA resides comfortably in a central position between qualitative and quantitative research (Figure 3.1) (De Villiers & Tipgomut, 2018; De Villiers & Woodside, 2018) so does not prove philosophically incongruent to the wider body of work commenced in Study One. Additionally, qualitative data can be recalibrated to offer data amenable to QCA, thus the
semi-structured interview data collected and analysed in Study One will be recalibrated and subjected to QCA-based case-oriented techniques.

![Figure 3.1: QCA on the Spectrum of Research Methods. Adapted from Jordan et al. (2011, p. 1161)](image)

With respect to the phenomenon under investigation in this work, QCA represents a relatively recent technique that allows the researcher to analytically determine different combinations of conditions that produce the outcome of interest (Jordan et al., 2011), utilising both qualitative and quantitative data. According to Wagemann and Schneider (2007, p. 380), “the general goal of QCA is to support the researcher in the attempt to arrive at a meaningful interpretation of the (causal) patterns displayed by the cases under examination.” In this respect, QCA resembles qualitative case research in that it is inductive, considers case-based data and explanatory variables and compares configurations of variables (or conditions), with an outcome (or lack of outcome) being to review, update or dictate theory. At the same time, it is characteristic of a deductive approach in that prevailing theory informs the criteria and calibration of both the conditions and the outcome(s) under investigation. QCA seeks patterns of data, where a cluster of independent variables, known as a “causal recipe,” is frequently present at the same time as a dependent variable. These frequent patterns can be analysed by checking how often the pattern appears in a dataset, and how uniquely the identified causal recipe occurs in
relationship to the dependent variable of interest. Qualitative comparative analysis can either deal with dichotomous data, which yields crisp number sets (csQCA), or the data can be recalibrated (Ragin, Rubinson, et al., 2008; Russo & Confente, 2019; Schneider & Wagemann, 2010b) to yield three-, four- or five-point scales that lend themselves to fuzzy-set analysis (fsQCA). In this form of QCA, a variable is not described as being present or absent as in crisp-set analysis, but can be partially present in a set. Mixed crisp and fuzzy sets can also be utilised, and this version is known as mixed value (mvQCA) (Legewie, 2013).

This stage of analysis seeks to identify what causal recipes of the antecedent conditions illuminated within the semi-structured interviews and subsequent thematic analysis, result in a situation where trust is recovered. An analysis of the amalgamated data will give a general picture, then separate analyses of each of the cases under investigation will identify similarities and differences between the cases. These comparisons are conducted ex post, but the collection of the case study material has been designed to be used for subsequent comparative analysis (Rihoux & Lobe, 2009). This adds rigour and formalisation to the comparison of the case study material and lends credence to the “scientificity” of the process (Gerring, 2006; Rihoux & Lobe, 2009, p. 223).

In sequential mixed method research designs, the findings from one stage (in this case, qualitative enquiry) inform the second stage (in this case, QCA) (Venkatesh, Brown, & Bala, 2013). As such, a sequential mixed method research design, starting with qualitative enquiry and proceeding to case-based QCA, is an appropriate research design to answer the research questions.
3.4 Methods

This section describes and justifies the choice of methods used in this work. The study follows two phases of data gathering and analysis: qualitative enquiry featuring thematic analysis and qualitative comparative analysis (QCA) spread over two studies. Auckland University of Technology Ethics Committee (AUTEC) approval was obtained to conduct each of these two studies (Appendix 1). In the following sub-sections, details of each of the two studies are presented including aims, sample, data collection and methods of analysis.

3.4.1 Study One – Qualitative Enquiry and Thematic Analysis

3.4.1.1 Aims and Introduction

A qualitative enquiry was conducted to achieve two aims: (1) To help understand which factors contribute to interorganisational trust recovery following service failure, and (2) to identify potential conditions that influence those factors. Because of the ambiguous, multilevel and deeply contextual nature of interorganisational trust development and repair activities (Lyon et al., 2012), a qualitative enquiry presents opportunity to develop a deeper, more nuanced understanding of which factors drive and influence the propensity to trust between organisations.

An important contribution of this work is to understand the role of trust in B2B relationships as a transitory, or diffuse, phenomenon that first manifests at an individual level, then to that of an organisational level (Ashnai et al., 2016). This work considers the nature of interorganisational relationships being characterised as an “amalgam of decisions made by individuals” (Lynch & de Chernatony, 2004, p. 412); it is individuals trusting, collectively, as an organisation rather than the organisations themselves. Thus, trust is viewed as an individual disposition (Rotter, 1967; Worchel, 1979), a psychological state (Lewicki et al.,
1998; Rousseau et al., 1998) and an individual behaviour (Deutsch, 1962; Mayer et al., 1995) contributing to trust and cooperation between organisations. This phenomenon can be explained via lenses such as social exchange theory (Cook & Emerson, 1978), resource dependence theory (Preffer & Salancik, 1978), transaction cost theory (Achrol, 1996; Gundlach, Achrol, & Mentzer, 1995) and the resource-based view of firms (Palmatier et al., 2007; Zhang & Glynn, 2015). Because of this multi-dimensionality of trust, this work seeks to investigate how these aspects of trust relate to each other, from the individual level, through the careful conceptualisation and investigation of interpersonal trust and its impact on interorganisational trust (Ashnai et al., 2016; Seppänen et al., 2007; Wilson, 1995).

Because of this view, the researcher sought to interview individual B2B decision makers in-depth, one-on-one, about their experiences with suppliers post service failure and the role certain conditions might play in recovering trust in the relationship. In the context of the current research, in-depth interviews helped reveal the component elements contributing to trust recovery in a B2B relationship context. The results of the qualitative study “sets the scene” and informs the results of the second qualitative comparative analysis study (QCA) that follows (Creswell & Poth, 2017; Grant & Giddings, 2002; Hsieh & Shannon, 2005).

### 3.4.1.2 Sample Characteristics and Recruiting

Study One features a purposive sample, or judgement sample, as the respondent set has been somewhat handpicked to serve the research purpose (Hair, Anderson, Tatham, & Black, 1998; Tabachnick, Fidell, & Osterlind, 2001) and because it relies on the expert judgement of the researcher selecting the sample (McTavish & Loether, 1999; Wildemuth, 2009). This particular respondent set has been explicitly selected, as they are representative of the population of interest (Wildemuth, 2009); namely, interorganisational
actors, or agents, who rely on a measure of trust within business interactions. The unit of analysis is a supplier relationship, from the perspective of the focal buying company. This distinction is based on social exchange theory that suggests an understanding of complex social structures requires an understanding of simple aspects of individuals’ interpersonal relationships (Cropanzano & Mitchell, 2005; Rosenberg, 1981; Thibaut & Kelley, 1959).

Similarly, Narayandas and Rangan (2004) suggest that interpersonal dynamics affect interorganisational orientations in line with Blois (1999) who suggests the existence or non-existence of trust at the interpersonal level between two companies affects how these two companies rely rationally on each other at the interorganisational level. Consequently, interpersonal trust is expected to positively affect interorganisational reliance (Mouzas, Henneberg, & Naudé, 2007, 2008) as it diffuses within an organisation; when individual decision-makers trust each other, the strength of their relationship can lead to interorganisational trust (Currall & Inkpen, 2006).

As such, a purposive, or judgement, sample is particularly relevant within this study as it is an exploratory design of which seeks perspective on the research question, specifically, rather than a cross-sectional sampling of opinion (Churchill & Iacobucci, 2009; Etikan, Musa, & Alkassim, 2016; Patton, 2002; Teddlie & Yu, 2007). This is a deliberate choice of participant due to the qualities, and experiences, the participant possesses. It is a non-random technique that sets out to find participants who can, and are willing, to provide the information by virtue of their knowledge or experience (Bernard, 2017; Palinkas et al., 2015). This type of sampling is appropriate as it involves identification and selection of individuals that are proficient and well informed with the phenomenon of interest (Cresswell & Plano-Clark, 2011). In addition, Etikan (2016, p. 2) and colleagues note the
importance of availability and willingness to participate, and “the ability to communicate experiences and opinions in an articulate, expressive, and reflective manner.”

Some broad restrictions were put on the sampling frame. Firstly, all individuals younger than the age of 18 were excluded from the population for the study. Secondly, as this study seeks to understand the factors contributing to trust recovery between organisations, and at different organisational levels in a B2B context, it is necessary to seek the explicit representation of B2B decision makers at both the executive and operational level within their respective businesses. Scholars suggest this is a key consideration in B2B research – identifying the decision makers to avoid respondents guessing because they do not know the answer (Etikan et al., 2016; Wind & Webster, 1972). This sampling choice also responds to calls for future research to examine whether certain conditions, antecedents and consequences are applicable across different levels of an organisation (Costa, Fulmer, & Anderson, 2018; Fulmer & Gelfand, 2012; Janowicz-Panjaitan & Noorderhaven, 2009).

Scholars have suggested that research at one level tends to focus on a particular set of variables while overlooking other possibilities. Put differently, as Fulmer and Gelfand (2012, p. 1207) note, “while certain considerations are especially relevant to a level, we believe that many antecedents and consequences can be fruitfully examined at other levels of analysis.” Therefore, decision makers within both executive and operational organisational levels have been identified as suitable for sampling. Finally, B2B research is not only concerned with large corporate organisations or manufacturers, it is also concerned with all businesses, which take many forms. Consequently, a target group of respondent’s representative of different organisational sizes will be obtained so as to reflect the importance of both small business and large enterprise (Patton, 2002).
A purposive sample of 40 B2B decision makers were recruited for interviewing, representing both genders, both levels of organisational decision making, working in both large companies and small to medium enterprises and having at least five years’ B2B decision-making experience (Dowell et al., 2015) (Appendix 2). All interviewees were residents of Auckland, New Zealand and all interviews were conducted in Auckland, New Zealand. Participants were recruited through a combination of snowball sampling techniques, initially through the researcher’s contacts and reaching out to specific secondary contacts who were not personally known to the researcher and, subsequently, through engaging the services of an external B2B research panel service to gain access to the remainder of the research participants (Patton, 2002). After 26 interviews, no new information on the research questions were obtained from interviewees, hence theoretical saturation was reached (Bryman, 2003; Glaser & Strauss, 2017). However, due to the ratio of causal conditions to cases demanded of Study Two featuring QCA (Berg-Schlosser, De Meur, Rihoux, & Ragin, 2009; Marx, 2010; Rihoux & Lobe, 2009; Rihoux & Ragin, 2008), a further 14 participants were recruited for interviewing, representing a total of 40 cases. In reporting of the analysis, the actual names of participants are omitted, but the representative size of their organisation as well as their individual level of decision-making authority are reported.

3.4.1.3 Data Collection, The Semi-Structured Interview

Interviews are one of the most important data-gathering techniques for qualitative researchers in business and management (Myers, 2009) and feature as the most widely used data gathering method in qualitative research (Bryman, 2003; Taylor & Bogdan, 1998a). Scholars have likened the use of interviews to a type of lens that “...permit us to see that which is not ordinarily on view and examine that which is looked at but seldom
seen” (Rubin and Rubin, 2011, p. xv) and the stories that emerge as “data with a soul” (Brown, 2015, p. 48). The journey through the information presented by interviews has been depicted as “…finding a path through the thicket of prose…” due to the nature, and volume, of data generated (Bryman, 2003; Bryman & Bell, 2011, p. 571). Qualitative interviews have also been described as “the art of hearing data” (Rubin & Rubin, 2011, p. xv) and allow the researcher access to a breadth of information from a range of people without prolonged contact between the subject and researcher (Robson, 2002).

Another advantage of the qualitative semi-structured interview is the flexibility offered to the researcher to modify questions as the interview proceeds (Taylor et al., 2015). With license to interject as the interview proceeds, the researcher can ask probing questions to follow up on leads presented in the discourse (Bryman, 2003; Robson, 2002). Another advantage is that interviewees can answer questions freely and express ideas in their own words – a powerful means to elicit narrative data that allows researchers to investigate people’s views in greater depth (Alshenqeeti, 2014; Kvale & Brinkmann, 2009). Cohen (2002, p. 29) notes that interviewing is “a valuable method for exploring the construction and negotiation of meanings in a natural setting.” Interviewing, Dörnyei and colleagues (2003) argue, is “a natural and socially acceptable” way of collecting data as it can be used in various situations covering a variety of topics (Alshenqeeti, 2014). In line with this, semi-structured face-to-face interviews have been adopted as a method of data collection as it facilitates obtaining direct explanations for human actions (Kvale & Brinkmann, 2009).

Scholars note, however, that the interviewing process can be complex and even difficult to follow. Schostak (2006, p. 92) suggests that an interview “…is not a simple tool with which to mine information. It is [rather] a place where views may clash, deceive, seduce, and
enchant”. Subsequently, Creswell (2017) suggests that interviews should be steadily and cautiously shaped in terms of how they are structured, used and reported.

According to Dörnyei and colleagues (2010, p. 140), a good qualitative interview has two key features: “(1) it flows naturally; and, (2) it is rich in detail.” To attain this, it is therefore necessary for “…researchers to remember that they are there to listen, not just speak” (Alshenqeeti, 2014, p. 41). Toward this end, the researcher established an appropriate atmosphere through which interviewees felt more at ease (such as a collegial preface to the conversation with coffee and conversation) and, thus, talked freely about the phenomenon of interest. Interviews were either held at the workplace of the interviewee or an appropriately public space of the interviewee’s choosing (Taylor et al., 2015). Berg (2001, p. 210) also notes that it is important for interviewers to maintain their “interviewee’s motivation by keeping boredom at bay”. This was done by both considering the duration of the interview and by preparing an interview guide. The typical duration of each interview was between 45-50 minutes during a single interview session and is reflective of the time needed to unravel the investigated phenomenon sufficiently (Schostak, 2006).

An interview guide was prepared for use in the qualitative semi-structured interviews (Appendix 3). The interview guide is a series of general questions that guide the interview (Robson, 2002) and help the researcher focus on specific issues of relevance to the research question. In the current study, prior theory informed the interview guide and listed questions and issues to be explored during the interview, providing a focus to the lines of enquiry. Furthermore, the interview guide and all potential interview questions’ syntax and language were pretested and discussed with the researcher’s supervisory team, as were potential interview questioning scenarios. The flexibility of the semi-structured interview
allowed the researcher to change the wording, or sequence, of questions as the interviews proceeded as well as the freedom to omit questions that seemed inappropriate or that had already been reflected-on. Additionally, the first five interviews served as piloting sessions allowing the researcher to refine the wording of questions in the interview and determine its feasibility and usefulness as a research instrument (Creswell & Poth, 2017). As Barbour and Schostak (2005, p. 43) remark, “the shorter the interviewer’s questions and the longer the subject’s answers, the better an interview is.” The design elements of the semi-structured interviews facilitated dialogue that was much more reflective of a conversation (Patton, 2002), whilst ensuring each interviewee addressed all issues under investigation (Taylor & Bogdan, 1998b).

Each interview featured open-ended questions (Robson, 2002), allowing interviewees to express themselves freely, rather than the interviewer supplying predetermined answers (Patton, 2002). This design also allows the interviewer the flexibility to probe on certain issues with more open and follow-up questions (Cohen et al., 2002). Probing questions were used to clarify and elaborate-on interviewees experiences and terms used in their responses (Lincoln & Guba, 1985). Examples of probing questions included: “explain what you mean” and “why do you say that?” (Patton, 2002; Taylor et al., 2015) and invited further reflection and response from interviewees. Although the interviews featured a semi-structured design in that there were a designated series of main questions that every interviewee was asked to respond to, the questions were not necessarily asked in the same order and interviewees were encouraged to talk about, and elaborate on, other connected areas if they felt inclined to do so (Swain, 2018). At the conclusion of the interview, the researcher re-expressed their gratitude to the interviewees, discussed ways of future
contact and interviewees were given the chance to bring up comments or ask questions of the researcher (Talmy, 2010). The interviews were audio-recorded and fully transcribed, verbatim, by an independent transcriber (Appendix 4).

3.4.1.4 Data Analysis, Thematic Analysis

The method employed to analyse the interview transcripts is that of thematic analysis (Braun & Clarke, 2006; Clarke & Braun, 2013). It is well established that observation precedes understanding (Boyatzis, 1998). Thematic analysis provides a means to more systematically engage a wide variety of information that increases accuracy or sensitivity in understanding and interpreting these observations (Boyatzis, 1998). Thematic analysis is considered a way of “seeing” and focuses on identifiable themes and patterns of living and behaviour (Aronson, 1994; Boyatzis, 1998). The recognition of an important moment (seeing), precedes encoding it (seeing it as something), which in turn precedes interpretation (Boyatzis, 1998). Thematic analysis serves to move a researcher through these three phases of inquiry whilst providing a simple method of reporting patterns, or themes, within the data (Braun & Clarke, 2006; Liamputtong, 2009). When employing thematic analysis, the researcher does not need to rely as heavily on specialised knowledge of qualitative methods such as grounded theory and language-based analyses such as discourse, rhetorical, narrative and conversation analysis (Howitt & Cramer, 2011; Marvasti, 2004). Thus, thematic analysis serves as a guide toward “opening the doors” to many forms of information (Boyatzis, 1998).

Whilst some authors have maintained thematic analysis is more of a process than a distinct method (Boyatzis, 1998; Holloway & Todres, 2003; Ryan & Bernard, 2000), others consider thematic analysis a method in its own right (Braun & Clarke, 2006; King, 2004; Leininger,
When thematic analysis is done well, it can function beyond the more “...utilitarian means of organising data...” (Byrne, 2001, p. 904), it can be a way of “seeing” the information, enabling the researcher to interpret various aspects of the research topic (Floersch, Longhofer, Kranke, & Townsend, 2010; Rubin & Rubin, 2011). This process of organising and describing the qualitative data in rich detail enables the researcher to yield stronger insights into a phenomenon (Braun & Clarke, 2006). The framework that Braun and Clarke (2006) posit serves to attach a linear process to thematic analysis in order to facilitate progress through the breadth of data. In reality, however, the process is being constantly revised (Braun & Clarke, 2006; King & Horrocks, 2010) and is more of a recursive process. Movement back and forth between phases is common (Butler-Kisber, 2010) and as ideas develop, a clearer picture of the data may emerge and requires the researcher to alter and modify codes, and themes, as they see fit (Howitt & Cramer, 2011). This movement serves as a quality check and can occur at any stage of the process (King & Horrocks, 2010).

The researcher was guided by the research aims and the literature, yet was open to new codes that may not have been revealed in the literature review but emerged from the dataset. Data was analysed at the semantic level; that is, coding and theme development reflect the explicit content of the data (Braun & Clarke, 2006). This approach involves much more than simply describing what is said; rather, it focuses on interpreting and explaining it (Maguire & Delahunt, 2017). A semantic theme development process (Braun & Clarke, 2006, p. 84) approaches the data “...within the explicit or surface meaning of the data and the analyst is not looking for anything beyond what a participant has said or what has been written.”
3.4.1.5 Thematic Analysis, Hybrid Approach to Coding and Theme Development

The analysis followed a hybrid approach to deductive and inductive coding and theme development. This approach superimposes a directed, theory-driven structure and procedural rigour (Crabtree & Miller, 1999; Fereday & Muir-Cochrane, 2006; Hsieh & Shannon, 2005) on to an equally rigorous, but more conventional, approach to thematic analysis (Braun & Clarke, 2006); allowing theory-driven and data-driven insights to emerge in tandem. Fabricating evidence can be a common problem in the process of interpreting data (Crabtree & Miller, 1999). Even though this is not an intentional process, it can “...constitute the unintentional, unconscious ‘seeing’ of data that researchers expect to find” (Crabtree & Miller, 1999, p. 170). The corroborating influence of this hybrid approach serves to confirm the findings as part of a complementary process offering an additional layer of rigour, and validity, to the process. The purpose of this hybrid approach is not at all to propose a “better” approach, but rather to propose a complementary approach, potentially leading to some new, but highly complementary and useful insights (Creswell & Plano-Clark, 2007).

As the prevailing literature enjoys a depth of exploration into the dimensions of trust, the most salient conditions from the literature will be employed as themes, or a code manual, prior to coding the interview transcripts (Braun & Clarke, 2006; Crabtree & Miller, 1999; Swain, 2018), reflecting the deductive coding approach where coding and theme development are directed by existing concepts or theories. However, one of the advantages of thematic analysis is that it is a recursive, iterative and systematic process (Braun & Clarke, 2006) and features frequent reviews.
In addition, thematic analysis is theoretically flexible (Braun & Clarke, 2006) and can incorporate manifest and latent aspects of the data, providing a rich and detailed, yet complex account of data (King, 2004). The analysis of latent data content is an inseparable part of the manifest analysis approach employed in this work (Braun & Clarke, 2006; Vaismoradi et al., 2013). This represents a different approach to that of strictly content analysis-based processes that are more objective, systematic and concerned with the surface meaning of the data (Bloor & Wood, 2006; Vaismoradi et al., 2013). Rather than adopting an exclusively systematic coding and categorisation approach that simply seeks to describe the structural characteristics of the data (Bloor & Wood, 2006), thematic analysis seeks to identify coherent but distinctive themes (Braun & Clarke, 2006; Ryan & Bernard, 2000) resulting in “...the identification of a story, which the researcher tells about the data in relation to the research question or questions” (Vaismoradi et al., 2013, p. 403). The frequent, reflective revision of the data from both a deductive and inductive perspective allows for codes or themes that may not be immediately apparent to contribute toward validating, or extending conceptually, a theoretical framework or theory (Hsieh & Shannon, 2005).

Scholars note that the flexibility thematic analysis enjoys as a method does demand a sensitivity to consistency and coherence when deriving or developing themes from the research data (Holloway & Todres, 2003; Nowell, Norris, White, & Moules, 2017). Thus, consistency and cohesion are promoted by applying, and making explicit, the epistemological position underpinning this work’s empirical claims (Holloway & Todres, 2003). The two modalities of approach, represented by both deductive and inductive methods, are becoming increasingly less mutually exclusive of each other in thematic
analysis. Scholars note that this hybrid method has been widely used across a range of epistemologies and research questions (Nowell et al., 2017) and acts as a translator (Boyatzis, 1998) for those speaking the languages of qualitative and quantitative analysis, “...enabling researchers who use different research methods to communicate with each other” (Nowell et al., 2017, p. 2). Vaismoradi and colleagues (2013) note the complementary nature of the two approaches; they may both begin with a theory about the target phenomenon or a framework for collecting or analysing data, but that does not mean there is a commitment to stay within this theory or framework (Sandelowski, 2010). According to Sandelowski (2010), a lot of energy is spent focusing on philosophical details to the detriment of methodological revision, echoing the sentiment of Becker (1996, p. 57) when he observed:

“A lot of energy is wasted hashing over philosophical details, which often have little or nothing to do with what researchers actually do ... Researchers work these positions out in practice ... accommodating to the realities of social life ... Their activity thus cannot be accounted for or explained fully by referring to philosophical positions.”

Nowell (2017, p. 82) adds that the dynamic nature of methods and the “intellectual craftsmanship” and “inevitability of methodological border crossings” are reflective of the fact that the performance of a method is always situated in the real world of research practice and must be developed to produce a noteworthy piece of qualitative scholarship (Beck, 2003; Mills, 2000). Whilst the question of whether a study demands a deductive, inductive or hybrid analysis technique can be answered by matching the specific research purpose and the state of science in the area of interest to the appropriate analysis technique (Hsieh & Shannon, 2005), Bondas and Hall (2007) note that the actual
implementation of the methods and understanding of their subtleties in the data analysis process merit close attention and detail.

The analysis process followed the six steps recommended by Braun and Clarke (2006); i.e., (1) to become familiar with the data by reading through each interview transcript; (2) to generate initial codes; (3) to search for themes; (4) review themes; (5) define and name themes; and (6) write up the analysis. The analysis process also adopts, as a hybrid approach, the deductive a priori template of codes approach outlined by Crabtree and Miller (1999) and Fereday and Muir-Cochrane (2006). This approach complements the research questions by allowing the tenets of a directed approach (Fereday & Muir-Cochrane, 2006; Hsieh & Shannon, 2005) to be integral to the process of deductive thematic analysis, while allowing for themes to emerge direct from the data using inductive coding (Boyatzis, 1998; Braun & Clarke, 2006). A benefit of the directed approach is that it uses existing theory or prior research as a starting point in identifying key concepts or variables as initial coding categories as well as operational definitions for each category (Hsieh & Shannon, 2005; Potter & Levine-Donnerstein, 1999). Although this work adopts a flexible, hybrid approach to coding (Fereday & Muir-Cochrane, 2006), the work is still systematic, rigorous and the process as visible, or transparent, as possible (Braun & Clarke, 2006; Swain, 2018). The trail of evidence presented should help to demonstrate not only the credibility and veracity of the process (Koch, 2006), but also its competence.

**3.4.1.5.1 Thematic Analysis: Step One – Familiarity with the Data**

The first, and most critical, stage of thematic analysis is becoming familiar with the data (Riessman, 1993). It is quite likely that prior to any analysis, all a researcher will see is unstructured chaos within the data (Henwood & Pidgeon, 1992). It is this familiarity that
allows the development of sound and insightful qualitative research (Howitt & Cramer, 2011). At this stage of the process, the goal is to identify those parts of the interview transcript that are likely to be helpful in addressing the research question (N. King & Horrocks, 2010) and features as “a key phase of data analysis within interpretative qualitative methodology” (Bird, 2005). The researcher must also decide between analysing each transcript independently or analysing all cases through a cross-case analysis (Byrne, 2001). This research seeks to analyse all interview data, concurrently, in an effort to generate rich insights from salient themes throughout all 40 responses. As such, a cross-case analysis has been undertaken and this step was commenced after all 40 interviews had concluded and interview recordings were transcribed (Braun & Clarke, 2006; Chamberlain, Camic, & Yardley, 2003).

3.4.1.5.2 Thematic Analysis: Step Two – Generating Initial Codes

To ensure that the analysis is accurate, the researcher must suitably choose how the information is coded (Owen, 1984). Scholars concur that there are no absolute rules that dictate how best to code raw data, however, the nature of the data and the direction that the research question presents will influence how the data is coded (Howitt & Cramer, 2011). Identifying the basic elements, or segments, of the raw data aids the researcher in deriving themes in a meaningful way (Fereday & Muir-Cochrane, 2006; Saldana, 2012). This process required scrutinising each interview transcript, line by line, to identify ideas (or “codes”) that related to the research aims (Glaser & Strauss, 2017). This step utilised a code manual for theory-driven, or deductive, coding (Crabtree & Miller, 1999) and served as a data management tool for organising segments of similar or related text to assist in interpretation (Fereday & Muir-Cochrane, 2006). Seven broad code categories
(competence, satisfaction, communication, integrity, benevolence, shared values and co-creation) formed the code manual or coding scheme (detailed further in Chapter Four), and were written in reference to Boyatzis (1998) and Fereday and Muir-Cochrane (2006). These seven categories were identified by the code label or name, the definition of what the theme concerns and a description of how to know when the theme occurs. These broad code categories served as a provisional template to use on the full data set (King, 2004). At this stage, any text that could not be categorised with the deductive, or theory-driven, coding scheme would be given a new code (Hsieh & Shannon, 2005), thus inviting a “…set of analytical interventions under the classification of generating initial codes” (Vaismoradi et al., 2013, p. 402), characteristic of a more data-driven, or inductive, approach to capturing something important in relation to the overall research question (Braun & Clarke, 2006; Spencer, Ritchie, & O’Connor, 2003).

Coding proceeded until no new ideas were identified, theory-driven or data-driven, a point at which “theoretical saturation” had been reached (Glaser & Strauss, 2017). Interview transcripts were coded manually, working systematically through the entire dataset, giving full and equal attention to each data item (Braun & Clarke, 2006). An electronic record of all excerpts of transcripts relating to all codes identified and a research diary was kept detailing the iterative and recursive coding process (Braun & Clarke, 2006). A process of constant comparison and peer review by experts in the field was undertaken. Codes were reviewed and rationalised and appropriate pairs of codes were collapsed if they expressed, substantially, the same idea (Braun & Clarke, 2006; Nowell et al., 2017).
**3.4.1.5.3 Thematic Analysis: Step Three – Searching for Initial Themes**

As the researcher begins to look for similarities between the initial codes, themes begin to emerge (Braun & Clarke, 2006). During this phase, the researcher undertakes to define codes that go beyond describing relevant features of participants’ accounts and focus more on interpretation of their meaning (King & Horrocks, 2010). Similar codes are organised into categories and the researcher seeks to attempt the merging of overlapping codes into more general themes (Attride-Stirling, 2001; Braun & Clarke, 2006). It is important to recognise that this process is also iterative in nature. Alteration and adjustment is common as the researcher refers back to the transcripts to help keep themes in context (King & Horrocks, 2010).

Themes that emerged from the participants’ interviews formed a more “comprehensive picture of their collective experience” (Aronson, 1994, p. 2). This “bringing together of components or fragments of ideas or experiences” (Leininger, 1985, p. 60) yields a coherent pattern of meaning from the dataset, as a whole. The coherence of ideas “…rests with the analyst who has rigorously studied how different components fit together in a meaningful way when linked together” (Leininger, 1985, p. 60). This “linking together” bears resemblance to the process of connecting the codes and identifying themes that Crabtree and Miller (1999) and Fereday and Muir-Cochrane (2006) detail in their hybrid approach to theme development. The analytic template technique that Crabtree and Miller (1999) developed seeks to apply the theory-driven codes from the codebook to the text with the intent of identifying meaningful units of text. At this stage, analysis of the text is guided, but not confined by, the preliminary codes featured in the theory-driven codebook (Crabtree & Miller, 1999). During this coding stage, any inductive or data-driven codes that were
observed in the text were assigned to segments of data that described the new theme (Boyatzis, 1998).

The distinction between what constitutes a “code” and what constitutes a “theme” has enjoyed some discussion and debate in the literature (Swain, 2018). Often, a code is seen as something shorter, more succinct, or basic, whereas themes are usually expressed in a greater number of words and are seen as being “broader” (Braun & Clarke, 2006, p. 18). Fereday and Muir-Cochrane (2006) contend, however, that a number of codes can be connected to form a theme, whereas Boyatzis (1998, p. 161) defines a theme as “a pattern in the information that at minimum describes and organises the possible observations and at maximum interprets aspects of the phenomenon.” The pragmatism attached to a hybrid approach to coding and theme development, involving both deductive and inductive reasoning, allows for a measure of analytic flexibility (Swain, 2018). Boyatzis (1998, p. 1) describes a good code as “…something that captures the qualitative richness of the phenomenon.” A code at its most basic is “something that seems of interest to the researcher, which they think might help them answer their question or problem” (Swain, 2018, p. 9). In the interview transcripts, this might be a word, phrase, sentence or even paragraph that relates to the phenomenon of interest, and thus becomes an analytic unit of meaning that the researcher denotes with a word or simple term. As such, some hybrid approaches use the terms “code” and “theme” interchangeably (Swain, 2018). The “connecting” process is consistent, however, between approaches; the process of discovering themes and patterns in the data by connecting codes that are present in the data (Crabtree & Miller, 1999). This connecting of codes and clustering them into themes,
under headings that directly relate to the research questions, starts to indicate areas of consensus or conflict in the data (Fereday & Muir-Cochrane, 2006).

**3.4.1.5.4 Thematic Analysis: Step Four – Reviewing Initial Themes**

A further refinement of the themes is presented within the scope of step four (Braun & Clarke, 2006). This phase serves to refine themes that are specific enough to be isolated and broad enough to summarise a set of ideas contained in the segment (Attride-Stirling, 2001). It is not necessary to refer to every constituent code within each theme, rather, the researcher should focus refinement on those themes that most strongly illustrate what the theme is covering and which most effectively address the research question (King & Horrocks, 2010). This involves identifying the meaning of each theme as it related to the research question, and collapsing any themes with similar meanings into overall themes. Braun and Clarke (2006) posit that the aim is not merely to provide a descriptive summary, but rather to build a narrative that tells the reader how your findings have cast light upon the topic-at-hand.

In building this narrative, a benefit of the hybrid approach is that existing theory or prior research serves as a starting point in identifying key concepts, variables or themes, as well as operational definitions for each (Hickey & Kipping, 1996; Hsieh & Shannon, 2005; Potter & Levine-Donnerstein, 1999). This provides a valid argument for choosing and identifying the themes (Aronson, 1994) and allows for inferences to be made from the interview data. Aronson (1994, p. 2) suggests, “when the literature is interwoven with the findings, the story that the interviewer constructs is one that stands with merit.” Once the themes have been collected, both theory-driven and data-driven, the researcher reviews the themes (Aronson, 1994) and is ready to formulate theme statements to develop a narrative.
Additionally, a review of the themes allows a researcher to identify if the themes form coherent patterns (Braun & Clarke, 2006; Bryman, 2003; Bryman & Bell, 2011). Again, at this stage, it is imperative to assess whether the reviewed themes accurately reflect the meanings in the data set relative to your research question (Coffey & Atkinson, 1996) and epistemological underpinnings, thus the researcher again invited expert and peer review of the interpretations.

### 3.4.1.5.5 Thematic Analysis: Step Five & Step Six – Defining, Naming and Reporting

**Themes**

The final stages of the thematic analysis serve to construct concepts based on the themes identified in the previous phase (Braun & Clarke, 2006) and report them appropriately. As a researcher, during this phase of the data analysis we should “define and refine” possible themes. Braun and Clarke (2006) state that identifying the core of what each theme is about precedes determining what aspect of the data each theme captures. This final stage shares a similarity with the corroborating and legitimising of coded themes stage in the more directed approach to thematic analysis (Crabtree & Miller, 1999; Fereday & Muir-Cochrane, 2006). This stage required further scrutiny to ensure that the clustered themes were representative of the initial data analysis and the assigned codes and that the set of themes “accurately [reflected] the meanings evident in the dataset as a whole” (Braun & Clarke, 2006, p. 91).

The results of the thematic analysis were written up, including an account of the codes and themes identified and supporting extracts of interviews. These extracts consider how the themes fit into the broader overall narrative of the phenomenon of interest (Braun & Clarke, 2006; Clarke & Braun, 2013) and “…tell the complicated story of your data” (Braun &
Clarke, 2006, p. 93), weaving together the analytic narrative and data extracts (Clarke & Braun, 2013). The extracts featured in the reporting stage are particularly vivid examples of the concepts represented in the data and are easily identifiable as an example of the issue or insight and contextualise the analysis in relation to existing literature.

The thematic analysis explored further the potential characteristics, qualities or behaviours (collectively known as conditions) that best serve to recover interorganisational trust following service failure. As can be seen from the discussion, above, a hybrid approach to thematic analysis allows both theory-driven and data-driven insights to emerge in tandem; informing subsequent stages of investigation in a more epistemologically appropriate way, reflecting the research paradigm of the researcher and research questions.

3.4.1.5.6 Reliability and Validity of Qualitative Results

Several procedures were employed to enhance the reliability (dependability), objectivity (confirmability) and validity (credibility and transferability) of the qualitative research findings (Bryman, 2003; Bryman & Bell, 2011; Lincoln & Guba, 1985; Nowell et al., 2017). The procedures for fulfilling these trustworthiness criteria are equally as pragmatic as they are ontologically- or epistemologically-based and feature a number of elements and interventions (Nowell et al., 2017). These procedures encompassed following an interview guide, verbatim transcription of interviews, keeping a trail of evidence, triangulation of sources and methods of analysis and peer audit and validity checks (Koch, 2006).

Interviews followed a standard interview guide (Appendix 3), providing a consistency to the engagement and data collection stages. By following the interview guide, all interviewees were asked similar questions of a non-leading nature (Taylor & Bogdan, 1998a; Taylor et al., 2015). A complete and accurate record of each interview was achieved, as all interviews
were fully audio-recorded then transcribed by an independent transcriber, producing a full, verbatim record of each interview. Triangulation of sources was achieved by importing the digital transcripts of the 40 separate interviews (Taylor & Bogdan, 1998a), into the NVivo™ software platform for analysis. The software maintains a trail of evidence, linking themes to codes, to excerpts of interview transcripts, to full interview transcripts for each respective interviewee, thus providing an audit trail (Koch, 2006). This audit trail was again assessed, along with the research diary and theme exemplars, through additional expert and peer review for triangulation of both the research outcome and process.

Additional interventions designed to increase the credibility of the study included peer debriefing with the supervisory team (Lincoln & Guba, 1985) to provide an external check on the research process as well as examining referential adequacy (Tobin & Begley, 2004) as the study and coding progressed to check preliminary findings and interpretations against the raw data. Reliability of the codes is an essential step in the development of a useful framework for analysis (Fereday & Muir-Cochrane, 2006) and is critical to determining the validity and applicability of the code to the raw information (Boyatzis, 1998). One sample interview transcript from the five initial pilot interviews was selected as a test piece after initial analysis by the researcher. Following the coding process of the document using the theory-driven codes, a second coder familiar with qualitative enquiry methods checked the reliability of the coding. The results were compared, and no modifications to the theory-driven code template were required. Additionally, a further coder, who is familiar with the domain and phenomenon of interest, was invited to validate the theory-driven code definitions. Similarly, no modifications to the theory-driven code template definitions were required. This step is critical as observers of the data rely heavily on sufficient definition, by
the researcher, of each theme so it is clear what the theme captures (Howitt & Cramer, 2011). This process of peer debriefing, with experts familiar with the research domain, phenomenon of interest and method of thematic analysis helped (Nowell et al., 2017, p. 10) “…expose the researcher to aspects of the research that might otherwise remain unspoken.”

The claim that triangulation enhances the validity of qualitative research is disputed in the literature (King & Horrocks, 2010), thus this study does not employ a second data coder for inter-rater reliability. This scepticism is borne out of the pure qualitative nature of thematic analysis and the value of such testing (Vaismoradi et al., 2013). Braun and Clarke (2006), emphasise that inter-rater reliability scores in thematic analysis can only show that two researchers are trained to code data in the same way. Thus, the reliability check does not establish that the codes are objective; merely that two people can apply the same subjective perspective to the text (Joffe & Yardley, 2004). Krippendorff (2004) suggests one of the best ways for judging the quality of findings is whether new insights into the studied phenomenon have been provided; if so (Krippendorff, 2018, p. 277), “…the study should have increased the understanding of particular phenomena or informed practical actions.”

3.4.2 Study Two – Qualitative Comparative Analysis (QCA)

3.4.2.1 Aims and Introduction

Qualitative comparative analysis (QCA) was conducted to achieve two aims; to confirm the findings of the exploratory qualitative enquiry into the factors, or conditions, contributing to interorganisational trust recovery following service failure, and to identify the role that certain contextual conditions play in influencing these factors. QCA enjoys a suite of
analytical techniques that strives to gather in-depth insight into the different cases under investigation whilst capturing the complexity, or intimacy, of the cases; all whilst producing some level of generalisation over a relatively limited number of cases (Braumoeller & Goertz, 2000; Ragin, 1987). These techniques allow the systematic comparison of cases, with the help of overarching research principles and formalised tools, serving to bridge the divide between qualitative and quantitative approaches (Berg-Schlosser et al., 2009; Rihoux, 2006; Woodside & Zhang, 2012).

### 3.4.2.2 Methodological Diversity and Trust Research

Bachmann (2011) argues that the dominant stream of trust literature focuses too much on the micro-level of trust building processes and hence promotes a reductionist understanding of the phenomenon. By extension, scholars have emphasised the need to place considerably more emphasis on the constitutive embeddedness of actors’ behaviour in the institutional environment. Dirks, Lewicki, and Zaheer (2009, p. 74), state that “as a relationship becomes multiplex or multifaceted, it can simultaneously involve trust and distrust. A complex relationship can at the same time be positive in some facets and negative in others.” To admit to the possibility of “the continuous coexistence of positive and negative states (i.e., ambivalence)” is to envision a very different dynamic from that in which trust is first damaged (and lost) and then repaired (or never regained). There is much advantage in developing this perspective. Business relationships are almost, by definition, multiplex and multifaceted, and are rarely well served by conceptualisations that dichotomise states and view dynamics only as alternation in modes. Broadening the methodological toolkit in an effort to include these patterns of change in trust has been the subject of much discussion in prevailing literature (Dirks et al., 2009; Fulmer & Gelfand,
2013; Lewicki & Bunker, 1996; MacKenzie, 2008; Spedale, Van Den Bosch, & Volberda, 2007). In particular, calls for methodological diversity in the study of trust to illustrate the convergence of research findings (Fulmer & Gelfand, 2012) and to identify nonlinear patterns in trust processes through asymmetric methods have received scant response in the marketing literature (Franklin & Marshall, 2019; Fulmer & Gelfand, 2012).

3.4.2.3 QCA Overview

Scholars suggest that in order to overcome the telling weaknesses of symmetric-based theory and research (Hubbard, 2015; Ziliak & McCloskey, 2008), researchers must investigate the marketspace with tools that achieve a better theory-tools matching. To deal with this situation, the sociologist Charles Ragin (2000, 2008, 2009a) developed the technique of qualitative comparative analysis (QCA), which is based not on probabilities, but on distributions and set membership. Statistical analyses using symmetric tests suffer the shortcoming that they are based on probabilities, and thus dependent on a large-enough sample size and a consequently satisfactory dispersion of data-points of the variables analysed to yield normal distributions (Woodside, 2018). Adopting QCA serves to free a researcher of the distributive and sample size restrictions of statistics and is a common analytical method in engineering and natural sciences, but enjoys relatively scarce adoption in the marketing literature (De Villiers & Woodside, 2018; Hsu et al., 2013). QCA distinguishes itself from the more frequently applied statistical methods (with a large number of cases and a small number of variables) in that it investigates the phenomenon represented by a small or medium number of cases with a number of variables in a configurational way (De Villiers, 2015; De Villiers & Woodside, 2018; Woodside, De Villiers, & Marshall, 2016). As Ragin and Rioux (2009, p. 6) note, “this means that each individual
case is considered as a complex combination of properties, a specific ‘whole’ that should not be lost or obscured in the course of the analysis – this is a holistic perspective.”

QCA places special emphasis on a context- and problem-oriented approach to investigating complex concepts (Berg-Schlosser, 2018), such as interorganisational trust dynamics, and draws heavily from prevailing theory to investigate conditions of occurrence. In Ragin’s words, “social scientists have devoted far too much time to measures that indicate only the positions of cases in distributions and not nearly enough time to developing procedures that ground measures in substantive and theoretical knowledge” (Ragin, Rubinson, et al., 2008, p. 197). This approach allows the researcher to remain much closer to problems and cases under investigation, achieving a greater validity and practical applicability in the process (Berg-Schlosser, 2018). By extension, however, this approach requires a high-level of theoretical and case-specific expertise. The richness of the in-depth interview data provides, what Berg-Schlosser (2018, p. 357) calls, the “thick knowledge of problems and cases s/he may acquire”, allowing for meaningful insight into a highly complex field such as interorganisational trust. Qualitative comparative analysis, thus, “…allows for more carefully adapted, better empirically grounded and theoretically justified measurements than purely mechanical statistical procedures” (Berg-Schlosser, 2018, p. 356).

The choice of QCA as an analytical technique in Study Two follows from a similar sentiment to Yin (2003, p. 1), who states “in general, case studies are the preferred strategy when ‘how’ and ‘why’ questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context.” The choice to opt for a multiple case-based research design is also aligned with a recent resurgence of interest in case-based research (Braumoeller & Goertz, 2000; De
Villiers & Tipgomut, 2018; Jordan et al., 2011; Miethe & Drass, 1999; Woodside, 2013).

Additionally, QCA introduces a level of academic rigour in its procedural requirements as a set of analytic techniques (Ragin, 1987; Ragin, Rubinson, et al., 2008) (Figure 3.2). Ragin (1987, pp. 51-52) points out that the case-based approach enjoys a number of benefits:

“First, they [cases] are designed to uncover patterns of invariance and constant association […] second, the method is relatively insensitive to the frequency distribution of types of cases […] third, case-oriented methods force investigators to consider their cases as whole entities … [and] fourth, case-oriented methods stimulate rich dialogue between ideas and evidence.”

Thus, this choice of analytical method affords insight into a combination of causal factors contributing to trust recovery between organisations, rather than the net effect of a set of independent variables. Put differently, it allows for the possibility that the phenomenon can be explained by, or result from, several causal recipes, with several combinations of causal conditions generating the same outcome (Ragin, 1987). Similarly, the adoption of QCA contributes to a challenge posed by Scharpf (1997, p. 29) who argues:

“In a world that is exceedingly complex and in which we will often be studying unique cases, we must have a good idea of what to look for if we wish to discover anything worthwhile. Since a single data point can be ‘explained’ by any number of regression lines, post hoc explanations are too easy to invent and usually (unless invented with the trained skill of the master historian) totally useless. The implication is that our search for explanations must be disciplined by strong prior expectations and that we must take the disconfirmation of such expectations as a welcome pointer to the development of more valid explanations.”
When designing the QCA investigation, researchers carefully determine likely propositions and anticipated outcomes to ensure that the number of cases, causal conditions and other issues affecting the outcome are either controlled and measured, or altered and measured, so that all changes in causal and outcome conditions can be closely monitored and the data gathered (De Villiers, 2017). In particular, the development of propositions before the “analytical moment” (Ragin, 2000) is critical to expressing the complex theoretical expectations of a study (Emmenegger, Kvist, & Skaaning, 2013) and assists in interpreting the results of the formal QCA techniques.

Ragin (2000, p. 40) emphasises that multiple conjunctural causation is a key feature of configurational thinking, meaning that, “the effect of any particular causal condition may depend on the presence or absence of other conditions, and several different conditions ... may be causally equivalent at a more abstract level.” Fundamentally, configuration thinking suggests that the same set of causal conditions can lead to different outcomes, depending
on how such conditions are arranged (Doty, Glick, & Huber, 1993). Consequently, QCA allows the researcher to identify these complex relationships in the form of multiple conjunctural causation, that is, how different combinations of conditions are connected to similar outcomes (Ragin, Rubinson, et al., 2008). The application of QCA techniques, therefore, may lead the researcher to conclude that individual conditions are not sufficient or necessary (Schneider & Wagemann, 2010b). However, it is critical to sound QCA design, based on configuration thinking, to feature the interplay between conditions when formulating propositions (Emmenegger et al., 2013).

Scholars suggest that “too little attention has been paid to the specification of theory preceding the analysis” and that “theoretical propositions should not be formulated as correlational arguments but as set-theoretical relationships, that is, in terms of necessary and (often jointly) sufficient conditions” (Emmenegger et al., 2013, p. 186). If the theoretical claims are not stated appropriately, the correspondence between the propositions to be tested and the actual test can be blurred. Emmenegger et al. (2013, p. 186) continue in their estimations of the value of studies featuring robust formulation of propositions in set-theoretical terms when they suggest “…a study with concrete hypotheses based on an elaborate theoretical framework is generally more convincing and interesting than a study that simply includes the “usual suspects” of explanatory conditions and lets the data speak for itself.” At its core, simplifying complexity is the fundamental goal of comparative research, thus, diluting the strictly theoretically-guided core of the QCA approach is antithetical to the QCA research strategy (Vink & Van Vliet, 2009). Additionally, a robust formulation of propositions assists with the complementary qualitative discussion of the different solution terms resulting from the different analytical QCA techniques. It is
this iterative discussion, and explanation, of patterns in the data that help to guide the
development of detailed explanations of social phenomena, particularly in the development
of mid-range theories (Legewie, 2013). As Ragin (2000, p. 283) notes, the formal tools of
QCA are not a substitute for the purposive study of cases “just as reading a detailed map is
not a substitute for taking a hike in the mountains.”

QCA is a powerful tool to develop and test theoretically-driven models and expectations in
an effort to generate more precise predictions because “…it is deterministic in nature
(explaining all the cases) while at the same time allowing for multiple causal conjunction
within a given model” (Marx, 2006, p. 23). In other words, QCA can make a significant
contribution when exploring trust recovery between organisations, of which are
characterised by a unique series- and graduation-of conditions, because it allows for
multiple causal paths to explain the phenomenon of interest. The ability of QCA to
“corroborate or refute assumptions and theories” as well as “slowing one to elaborate new
assumptions or theories … and lead[ing] the researcher to formulate new segments of
theory” (Rihoux, 2006, p. 684) is of particular importance to this work, which seeks to
extend the theoretical proposals of the prevailing interorganisational trust literature. The
four phases of the QCA research process are detailed, as follows, along with the constituent
stages within each phase.

### 3.4.2.3.1 QCA Phase One: Research Design

The four main stages of the QCA research design phase are identifying and defining
outcomes of interest, selecting causal conditions and cases and populating the raw data
table (Berg-Schlosser et al., 2009; Jordan et al., 2011). Jordan et al. (2011, p. 1160) suggest
QCA is an appropriate set of configurational comparative techniques to employ when “the
underlying question is which combination of conditions trigger a given outcome” so it is critical to commence QCA with an explicit identification of the outcome of interest.

**Stage One: Identifying and Defining Outcomes of Interest**

The phenomenon under investigation, in this case the level of trust recovery following service failure in a B2B relationship, is conceptualised as an observable change or discontinuity in the phenomenon and serves as the outcome condition in this study. Developing this distinction is a critical step in the QCA process as it informs the next step in the process, that of case selection. Without suitably identifying an outcome of interest, the researcher is unable to identify a set of cases exhibiting a range of these outcomes during the analysis (Jordan et al., 2011). The causal conditions leading to such an observable change or discontinuity are considered as sets. Both causal and outcome conditions may be assigned either binary or multiple values depending on the variant of QCA employed (Table 3.1) and features as part of the fourth stage of the QCA research design phase.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Name</th>
<th>Variable Range</th>
<th>Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td>csQCA</td>
<td>Crisp-set</td>
<td>Dichotomous</td>
<td>When variables can be defined or approximated into binary categories of present (1) or absent (0).</td>
</tr>
<tr>
<td>fsQCA</td>
<td>Fuzzy-set</td>
<td>Continuous</td>
<td>When finer graduations in the dataset are significant and each variable can be assigned a value along a continuous range.</td>
</tr>
<tr>
<td>mvQCA</td>
<td>Multi-value</td>
<td>Multichotomous</td>
<td>When attribute values under study can reasonably be summarised into a small number of discrete options.</td>
</tr>
</tbody>
</table>

*Table 3.1: Variants of QCA*
Stage Two: Selecting Causal Conditions

Conditions are the variables that distinguish one case from another and, similarly to independent variables in statistical analysis, may influence the outcome under analysis (Jordan et al., 2011). Figure 3.3 outlines the terms used in the following discussion. The use of QCA in this work is, largely, for exploratory and theory-building purposes, seeking to synthesise the findings of Study One into prevailing theory. The data and insights from Study One, both theory-driven and data-driven, provide the key “ingredients” for considering which causal conditions to select (Rihoux & Lobe, 2009). This step also relies heavily on case knowledge and case expertise, of which has been realised in Study One through the thematic analysis of the interview, or case, data. The iterative, recursive process of thematic analysis invites an “intimacy” with the case data (Rihoux & Lobe, 2009; Schneider & Wagemann, 2010b). This deep level of knowledge and familiarity with the cases not only offers a level of utility and insight before the analysis, but also during and after the analysis. During the analysis, it is useful for the selection of parameters (such as consistency values) and after the analysis it facilitates the interpretation of the results (Rihoux & Lobe, 2009; Schneider & Wagemann, 2007, 2010b). Collier, Brady and Seawright (2004, p. 252) suggest the additional information from this causal process observation “enhances the possibility to draw causal inferences, even though the number of variables or cases remains the same.”
This sentiment is shared by Schneider and Wagemann (2010b) when they suggest that QCA should not be applied as the only data analysis technique in a research project. The complementary nature of QCA and thematic analysis, undertaken in Study One, serves to achieve a measure of triangulation and validation. The knowledge and familiarity borne out of the academic rigour achieved in Study One is indispensable for a QCA-based data analysis (Schneider & Wagemann, 2010b). Similarly, the results produced by QCA provide more detailed information about which (combinations-of) factors from the resulting thematic analysis are sufficient for the outcome condition to manifest in a certain group of cases under investigation. This is where QCA is distinct from more superficial statistical techniques; it offers more precise insights about which further steps could be undertaken in realising the outcome variable of interest.

Berg-Schlosser and De Meur (2009, p. 28) offer some guidance in determining the number of conditions to include in a QCA study, relative to the number of cases available for examination:

**Figure 3.3: QCA Terms and Sample Raw Data Table (mvQCA). Adapted from Jordan et al. (2011, p. 1164)**
“A good balance must be reached between the number of cases and the number of conditions. The ideal balance is not a purely numerical one and will most of the time be found by trial and error. A common practice in an intermediate-N analysis (say, 10 to 40 cases) would be to select from 4 to 6-7 conditions.”

This selection of conditions to analyse is a critical step in QCA and is typically an iterative process (Jordan et al., 2011). Schneider and Wagemann (2010b, p. 17) caution against the temptation to simply “feed the computer with data and [to] just see which results can be produced” as, in the process, the method loses one of its major strengths. Legewie (2013, p. 3) shares a similar sentiment when he notes QCA is not a “push-button process”, rather, it “relies on the copious efforts of the users to reflect on whether identified patterns could describe a causal link” (Rihoux, 2009, p. 368; Schneider & Wagemann, 2010b). This explorative element of approaching the data is stronger in QCA than in statistical techniques, with Ragin (1987, p. 164) likening the process to “the dialogue between theoretical ideas and empirical evidence.” The flexibility that QCA offers when selecting conditions to analyse presents one of its major strengths as an analytical technique; QCA has the ability to both build and confirm theory. Thus, the selection of conditions may only have a loose theoretical basis and may be selected via inductive reasoning (Jordan et al., 2011) or may be grounded in theory and more logically constructed via deductive reasoning (Amenta & Poulsen, 1994). Amenta and Poulsen (1994) and Yamasaki and Rihoux (2009) have identified six strategies for selecting causal conditions (Table 3.2).
### Selection Strategy

<table>
<thead>
<tr>
<th>Selection Strategy</th>
<th>Definition</th>
</tr>
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<tbody>
<tr>
<td>Comprehensive</td>
<td>Where the full array of possible factors from existing theory is considered in an iterative process.</td>
</tr>
<tr>
<td>Perspective</td>
<td>Where a mixed set of conditions representing two or three theories from empirical literature are tested.</td>
</tr>
<tr>
<td>Significance</td>
<td>Where the conditions are selected on the basis of statistical significance.</td>
</tr>
<tr>
<td>Second-Look</td>
<td>Where the researcher adds one or several conditions that are considered as important although dismissed in a previous analysis.</td>
</tr>
<tr>
<td>Conjunctural</td>
<td>Where conditions are selected based on joint interactions among theories, which predict multiple causal combinations for a certain outcome.</td>
</tr>
<tr>
<td>Inductive</td>
<td>Where conditions are mostly selected on the basis of case knowledge and not on existing theories.</td>
</tr>
</tbody>
</table>

**Table 3.2: Causal Condition Selection Strategies in QCA**

This work adopts the perspective approach (Amenta & Poulsen, 1994) as the conditions and outcome have been selected and conceptualised on the basis of adequate theoretical and empirical prior knowledge (Schneider & Wagemann, 2010b). The perspective approach (Amenta & Poulsen, 1994; Yamasaki & Rihoux, 2009) allows for a mixture of theory-derived conditions from the main theoretical perspectives in the empirical literature to inform the research design. Additionally, at the same time, this approach allows the researcher to “develop a way to adjudicate between competing explanations and to allow for ‘interaction effects’ among certain conditions” (Berg-Schlosser & De Meur, 2009, p. 8). The limiting of conditions under analysis is an important consideration in QCA as, similarly to more statistically-based analyses where too many independent variables “destroy” the results simply because coefficients will not be significant, a high number of conditions can also prove dysfunctional in QCA (Schneider & Wagemann, 2010b). In QCA, if the researcher
includes too many conditions in the analysis, very complex results can be produced that can be hard to interpret on the basis of theory (Marx, 2006, 2010).

**Stage Three: Selecting Cases**

When considering the choice of case selection, the literature in comparative methods is very well developed (Collier, Mahoney, & Seawright, 2004; King, Keohane, & Verba, 1994) and provides well-developed criterion; the general rules of which also hold for QCA (Schneider & Wagemann, 2010b). An obvious inference from the comparative methods literature is that cases should not be selected because they are merely convenient or readily available, or that they are best suited to prove one’s own hypotheses or propositions. According to Byrne and Ragin (2009), it is most beneficial to select cases that exhibit the greatest possible variety of configurations (where a configuration is defined as each case’s set of outcome and condition variables) in order to ensure robust analysis (Jordan et al., 2011). Although the conscious selection of cases with certain conditions and outcomes may appear to be an improper manipulation of the dataset, the resulting heterogeneity of outcome and condition variables is appropriate for QCA, since the method’s logic is not probabilistic. Qualitative comparative analysis considers causality, it does not consider whether few or many cases exhibit certain characteristics (Berg-Schlosser & De Meur, 2009; Berg-Schlosser et al., 2009), rather, QCA is interested in whether specific combinations of causal conditions and outcomes exist at all (Jordan et al., 2011; Legewie, 2013). Qualitative comparative analysis is most concerned with the identification of cases exhibiting maximum heterogeneity of condition and outcome values contributing to the richest possible explanations of relationships among the widest array of data (Gross & Garvin, 2011).
Case selection in QCA does not reflect a statistics-style sampling procedure, as every case must be selected purposefully (Berg-Schlosser & De Meur, 2009; Ragin, 2004; Ragin & Rihoux, 2004). As such, the QCA literature avoids rigid case selection size requirements, since data set size is closely linked to the outcome of interest and the number of conditions considered likely to affect it, but the literature does offer some research design direction. Additionally, the decision as to how many cases to include, either by design or deliberation, is driven by the size of the logic space which, in turn, is determined by the possible combinations of causal condition values (Jordan et al., 2011). By extension, the number of possible configurations depends on the variant of QCA employed (Fiss, 2009; Jordan et al., 2011) (Table 3.1). In his work on the practical considerations of case selection in QCA, Fiss (2009) offers valuable insight regarding the ratio of cases to variables necessary to ensure that “real data” can be distinguished from “random data” (Table 3.3). Marx (2006) also warns of the danger of situations where the ratio of cases drops below tested thresholds as the set size, and resulting logic space, grows exponentially with each additional causal condition. This is because the process of identifying patterns in the data table, using the basic QCA algorithm, supplements observed configurations with hypothetical cases in order to fill the data table with configurations representing absent combinations of variables. In short, the greater the number of conditions (both causal and outcome) and possible values (based on crisp- fuzzy- or multi-value-set), the larger the data space which must be filled by either real or hypothetical cases. These hypothetical cases are termed logical remainders (Ragin, 1987, 2000). These logical remainders are not inherently objectionable (Ragin, 2004; Rihoux, 2006), since it is generally impossible to locate cases exhibiting every possible configuration (Jordan et al., 2011), but the explanatory strength of QCA increases as more of the logic space is covered by observed data (Berg-Schlosser & De Meur, 2009; Berg-
In QCA, the logic space is defined by all of the possible value combinations of the causal conditions (Ragin, 1987). If too many causal conditions are included in this logic space, it is likely that QCA techniques will yield a unique explanation for each case, making it difficult to reveal patterns of associations across sets of cases or observations (Jordan et al., 2011; Schneider & Wagemann, 2010b).

In this situation, Schneider and Wagemann (2006) advocate a “two-step” model, in which one can limit the complexity of the logic space by differentiating between “remote” and “proximate” conditions. This two-step process can analytically organise causal processes in two (or more) combined QCA steps, thus helping to mitigate the problems of causal complexity and limited diversity (Schneider & Wagemann, 2006, 2010b). Diversity is described as “limited” when logically possible configurations of relevant conditions do not appear empirically and is an issue typically associated with having a low number of cases to investigate. This work investigates eight causal conditions, considered a moderate and appropriate number of conditions (Berg-Schlosser & De Meur, 2009; Fiss, 2009; Marx, 2006), drawn from the findings of Study One (Chapter Four). In addition, this work investigates the combination of these eight causal conditions within one of four contextual conditions. This number of causal conditions demands an intermediate-$N$ number of cases be investigated (Berg-Schlosser & De Meur, 2009; Fiss, 2009) and represents an appropriate level of “logic space” complexity. Additionally, Schneider and Wagemann (2010b) suggest the number of conditions can be slightly higher for individual data as this data is usually characterised by a higher level of heterogeneity than macro unit data.
<table>
<thead>
<tr>
<th>Number of Causal Conditions</th>
<th>Suggested Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>10 – 12+ Cases</td>
</tr>
<tr>
<td>5</td>
<td>13 – 15+ Cases</td>
</tr>
<tr>
<td>6</td>
<td>16 – 25+ Cases</td>
</tr>
<tr>
<td>7</td>
<td>27 – 29+ Cases</td>
</tr>
<tr>
<td>8</td>
<td>36 – 45+ Cases</td>
</tr>
</tbody>
</table>

Table 3.3: Ratio of Causal Conditions to Cases (Fiss, 2009; Marx, 2006)

In QCA, the researcher must still consider cases on the basis of clearly specified scope conditions (Walker & Cohen, 1985), explicitly defining the relevant population of interest (Ragin & Becker, 1992), in order to generalise to “...the universe of cases for which the causal relationship examined is claimed to hold” (Schneider & Wagemann, 2010b, p. 21). All 40 cases investigated in Study One are effectively the units of analysis for this study and exhibit a particular, purposive combination of characteristics (see section 3.4.1.2). Each individual case is considered as part of the investigation and is well known to the researcher; what Berg-Schlosser et al. (2009, p. 6) suggest is “a considerable advantage [in QCA] that enables the researcher to go back to these cases [...] to clarify further aspects of cases or to check and improve the relevant data.” This is an important consideration when determining the number of individual cases that feature in the investigation as a researcher must maintain a sufficiently rich and empirically intimate knowledge about each individual case (Berg-Schlosser & De Meur, 2009; Berg-Schlosser et al., 2009). All cases exhibit graduations of the causal and outcome variables of interest, are comparable along certain specified dimensions (Berg-Schlosser & De Meur, 2009) and are alike enough to permit comparisons.
Stage Four: Populating the Raw Data Table

The entirety of this first phase in QCA, the research design, relies heavily on engaging in dialogue between each step and the respective case knowledge (Rihoux & Lobe, 2009). This iterative process follows the logic of feedback loops and cycling (Lobe & Vehovar, 2009) and can be defined as “analytic cycling”. This cycling process serves to “move back and forth to improve the analytic model before entering the analytic, computer-aided part” (Rihoux & Lobe, 2009, p. 233). This is a fundamental tenet of QCA as a research approach, not merely a research tool, insomuch that QCA is conceptualised as a method at the interface between case-oriented and quantitative variable-oriented research; presentation and interpretation have to reflect both the case and the variable perspective (Schneider & Wagemann, 2010b). As such, the population of the raw data table represents an iterative refinement of case-based accounts, serving as a powerful foundation for other QCA techniques (Legewie, 2013).

3.4.2.3.2 QCA Phase Two: Conditioning and Calibration

Once the outcome and causal conditions are identified and the cases under investigation are selected, the second phase of QCA, conditioning and calibration, commences with the collection and quantifying of the raw data into a data table. Schneider and Wagemann (2012, p. 32) describe this step as “the process of using empirical information on cases for assigning set membership to them.” This step introduces one of the key strengths of QCA as an analytical technique, namely, the ability to enjoy some of the key strengths of statistical, quantitative research methods. In QCA, both causal and outcome conditions involve explicit criterion and calibration, therefore “researchers should use external, substantive criteria to define the phenomenon of interest and to evaluate its degree of expression” (Ragin, 2004,
Using Boolean algebra, membership in either the causal sets or the outcome condition can be quantified and can vary from full membership (1.0) to a cross-over point or indifference point (0.5) to full non-membership (0.0); the original version developed by Ragin (1987) known as crisp-set QCA (csQCA). Of course, such a procedure does not correspond to the “often highly differentiated (and anti-dichotomous) character of social science data and theoretical reasoning” (Schneider & Wagemann, 2010b, p. 8), so other QCA variants were developed as a reaction to this shortcoming (Table 3.1). A later iteration of QCA, fuzzy-set QCA (fsQCA), uses fuzzy-set logic to allow variables between the two qualitative states (full-membership and non-membership) to vary in degree of membership, forming a continuous “fuzzy set” (Seawright, 2005). A further variant of QCA, multi-value-set QCA (mvQCA) allows researchers to create a more genuine representation of multi-categorical nominal data, ordinal data and interval data, opening up the possibility of a more flexible analysis (Cronqvist, 2005; Cronqvist & Berg-Schlosser, 2009; Schneider & Wagemann, 2010b). Thus, information about causal conditions and outcomes are transformed into sets of variables by creating a calibrated set ranging between the two thresholds of non-membership (0.0) and full-membership (1.0).

In order to arrive at the calibrated set of membership variables, QCA researchers use theoretical information and arguments as well as a collected knowledge of the cases to determine which empirical evidence to consider (Schneider & Wagemann, 2010b). This process makes QCA especially attractive for researchers employing qualitative data, of which provides “…a detailed, context-rich source of information on processes, mechanisms and the production of meaning” (Mahoney, 2010, p. 124). Scholars note that this transformation of qualitative data into crisp-, fuzzy- or multi-value-sets is an important
analytic step that has a strong influence on the results of QCA (Basurto & Speer, 2012). This process is distinct from that of the treatment of quantitative data as qualitative data needs to be coded and summarised before set values can be determined (Ragin, Rubinson, et al., 2008). But researchers cannot simply “plug in” data such as in-depth interviews to a QCA analysis (Legewie, 2017), rather, researchers should adopt systematic steps and rules for assigning calibrated membership of which should be transparent and replicable (Glaesser & Cooper, 2014).

The challenges of assigning membership scores are compounded when using qualitative data in QCA, because of “the ambiguity, subtleness and context-dependence” of qualitative data (Sivesind, 1999, p. 361). Basurto and Speer (2012) also suggest that the calibration of qualitative case data demands a different technique to that of quantitative data. As the direct and indirect methods typically associated with the calibration of quantitative data in QCA (Ragin, Rubinson, et al., 2008) do not suitably allow for the depth of information provided by qualitative data to inform calibration, the dialogue between theory and evidence may be muted. A qualitative data calibration process “…allows the researcher to adjust the theoretically guided definitions of set anchor points by providing more detailed information on the empirical context in which the conditions and the outcome are assessed (Basurto & Speer, 2012, p. 157).

This qualitative calibration process has been realised as part of Study One in a comprehensive thematic analysis of the interview, or case, transcripts (Basurto & Speer, 2012). This approach echo’s the sentiment of Ragin (2008, p. 30), when he suggests “…regardless of whether one uses quantitative data, qualitative interview data, historical documents, or secondary text data, the determination of set values should be based on a
researcher’s theoretical and substantive knowledge and not on internal criteria such as the mean or the mode.”

Once the QCA outcome and causal conditions values are established, case data are tabulated for each objective under study, resulting in a truth table. In a truth table, variables are no longer isolated or distinct aspects of cases, but are treated as components of configurations that still allow for the retention of the uniqueness of each case (Fiss, 2007; Ragin, 2007). It is this aggregated form of the raw data that serves as the basis for all subsequent QCA techniques (Schneider & Wagemann, 2010b) as the focus shifts from diversity between cases to similarities across cases (Verweij & Gerrits, 2015). A truth table sorts the cases by the combinations of causal conditions they exhibit, using reasonable subsets of these conditions from “recipes that seem especially promising” (Ragin, Rubinson, et al., 2008; Woodside et al., 2016). Scholars note that concluding this step of the QCA process is a significant milestone, particularly the process of distilling appropriate outcomes, cases, conditions and values into a data table (Jordan et al., 2011) and subsequent truth table. Ragin and Rihoux (2004, p. 22) note “…analysable truth tables are not the starting point of comparative research; rather they are formed near the end of a long process of case-oriented comparative investigation.”

Transparency throughout the QCA process is critical in producing a valid, replicable study (Emmenegger et al., 2013; Jordan et al., 2011). This is a critical feature within all phases in the QCA process (Ragin, Rubinson, et al., 2008) and includes providing information about how causal and outcome variables were determined, how raw data sources were obtained and how condition threshold values were established (Legewie, 2013). Additionally, the QCA research process features a number of key internal validity testing steps worth reiterating at
this stage of the QCA process: Reporting case diversity, contradictory configurations
treatment methods and inter-rater reliability tests. As detailed in the previous section, case
diversity is described as “limited” when logically possible configurations of relevant
conditions do not appear empirically and is an issue typically associated with having a low
number of cases to investigate (Schneider & Wagemann, 2010b, 2012). Once the truth
table has been generated, the researcher should check the diversity of the cases featured in
the configurations to ensure a diversity of both causal conditions and outcomes are present.

In addition, before analysis can proceed, it is necessary to resolve any “contradictory
configurations”. These are configurations that have identical causal conditions but different
outcomes (Rihoux, 2009). The difference in the outcome, thus, cannot be explained by the
causal conditions that feature in the configuration. Rihoux and De Meur (2009) offer a
number of methods for resolving contradictory configurations before any technical solution
is applied, such as improving case specification, including additional causal variables and re-
conceptualising the outcome variable (Schneider & Wagemann, 2010b).

Finally, the operationalisation of all variables must be clearly defined, including a description
of how threshold values were determined and assigned (Russo & Confente, 2019). This is
particularly relevant in this work as it features qualitative case data that was calibrated by a
team of expert coders. The rubrics used to convert these measurements into quantitative
values (Schneider & Wagemann, 2010b) as well as typical, statistical tests for inter-rater
reliability should be performed (Jordan et al., 2011). This level of systemisation and
formalisation of the QCA process allows the data analysis and findings to be more
“retraceable” to the reader (George, Bennett, Lynn-Jones, & Miller, 2005) which “increases
the persuasiveness of argumentation and is a characteristic of good qualitative research” (King et al., 1994, p. 26).

3.4.2.3.3 QCA Phase Three: Analysis, Reporting and Interpretation

Once a valid, contradiction-free truth table is established, the next step is to condense, or minimise, the table to highlight patterns of conditions that correspond to the outcomes of interest (Jordan et al., 2011; Ragin, Rubinson, et al., 2008). This process of minimisation serves to reduce a complex expression into a minimal formula, resulting in “pathways” of causal conditions that produce an outcome and is based on the set-theory and complex causality concepts of equifinality, conjunctural causation and asymmetry (Table 3.4). This analysis is based on Boolean algebra and features three basic operations that are applied to the subsets: intersection, union and negation (Ragin, 2009a). Figure 3.4 provides an overview of these operations, with the dashed areas in the graphics demarcating the result of the respective operations.

Figure 3.4: Boolean Operations in QCA – Set Intersection, Set Union and Set Negation (Respectively)

Set intersection (logical AND, “∗”) is the operation that assesses a case’s membership score in a combination of causal conditions, such as the “causal recipes” identified through formalised QCA techniques (Schneider & Wagemann, 2010b). Set union (logical OR, “+”) is the operation that assesses the membership score in alternative conditions in a given outcome condition, such as alternative pathways to the outcome condition. Set negation
(logical NOT, “∼”) is the operation that includes the absence of a condition or an outcome in the analysis. Whilst the QCA software computes these set operations, scholars suggest it is important to understand the basic logic behind the operations and the notations used to describe them in set-theoretic, configurational-thinking syntax (Legewie, 2013). These operations form the main principles dominating the technical aspect of QCA; namely, the examination of set-theoretic relationship between causally relevant conditions and a clearly specified outcome (Schneider & Wagemann, 2010b).

<table>
<thead>
<tr>
<th>Key Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equifinality</strong></td>
<td>Multiple conditions or ‘paths’ (configurations) can produce the outcome.</td>
</tr>
<tr>
<td><strong>Conjunctural Causation</strong></td>
<td>Combinations of conditions produce an outcome.</td>
</tr>
<tr>
<td><strong>Asymmetry</strong></td>
<td>Presence of a condition for an outcome does not imply absence of that condition for the opposite outcome.</td>
</tr>
</tbody>
</table>

*Table 3.4: Set Theory and Complex Causality Key Terms*

The different empirical patterns that QCA techniques serve to identify can include one, or several, single conditions, but also combinations of two or more conditions. Mahoney (2008, p. 418) suggests, “assertions about individual conditions that are sufficient for outcomes are rare in the social sciences.” Similarly, Goertz and Levy (2007) state, “in empirical reality, one will usually find combinations of conditions being sufficient for an outcome rather than single ones”. As such, these set-theoretic relationships between combinations of conditions are then interpreted in terms of necessity and sufficiency (Figure 3.5). Through the process of minimisation, QCA provides information regarding the causal conditions (or combinations of conditions) that are necessary or sufficient to produce the outcome of interest (Jordan et al., 2011). Necessary causal conditions must be present, but alone may not be sufficient, to result in the outcome of interest (Ragin, 1987). Similarly,
sufficient causal conditions (or, again, combinations of conditions) are able by themselves, but may not be necessary, to result in the outcome of interest (Ragin, 1987). In identifying potential combinations of both necessary and sufficient conditions in accounting for an outcome of interest, QCA can also identify a causal condition that is neither alone sufficient nor alone necessary, termed an “INUS” condition (Schneider & Wagemann, 2010b). This acronym denotes an “insufficient but necessary part of a condition which is itself unnecessary but sufficient for the result” (Goertz, 2003, p. 68; Mackie, 1974, p. 62).

Figure 3.5: Graphical Representation of Relationships of Necessity (Left) and Sufficiency (Right) of Causal Condition (A) on Outcome Condition (Y). Adapted from Legewie (2013, p. 7).

This complex, set-theoretic output can be expressed more concisely in subsequent iterations of the analysis by generalising the observed data to include simplifying assumptions (Befani, Ledermann, & Sager, 2007; De Meur, Rihoux, & Yamasaki, 2009; Glaesser & Cooper, 2014; Jordan et al., 2011). Based on case and theoretical knowledge, the researcher can consider which assumptions would be most appropriate and include logical remainders (non-observed cases) in the analysis along with the observed data (Rihoux & Lobe, 2009). Depending on the approach to simplifying assumptions, QCA analysis will yield three different solution terms: complex, parsimonious and intermediate (Ragin, Rubinson, et al., 2008, pp. 148-150). The complex solution does not allow for any simplifying assumptions to be included in the analysis and, as a result, is hardly reduced in
complexity. This solution tends to prove difficult in helping with data analysis, and explanation, especially when operating with more than a few causal conditions (Legewie, 2013).

The parsimonious solution reduces the “causal recipe” to the smallest number of conditions possible to realise the outcome of interest. These conditions are termed “prime implicants”, meaning they cannot be left out of any solution in the truth table. The parsimonious solution features automatic decisions on logical remainders “without regard to theoretical or substantive arguments on whether a simplifying assumption makes sense” (Schneider & Wagemann, 2007, p. 106). This simplifying assumption is rooted in the idea that “history optimises”, so unobserved configurations do not exist because they have been “selected out” via evolutionary pressures (Mahoney & Barrenechea, 2019). Ragin (2008) argues strongly against such a use of simplifying assumptions as does Kogut (2010, p. 149), who argues “this type of survivor bias reasoning is quite frequently made, and only sometimes with justification.” Finally, the intermediate solution includes selected simplifying assumptions to reduce complexity, but should not include assumptions that might be inconsistent with theoretical or case-based empirical knowledge (Ragin & Sonnet, 2004; Ragin,Rubinson, et al., 2008). Schneider and Wagemann (2012, p. 172) suggest the intermediate solution can be best understood as “the complex solution reduced by the conditions that run counter to fundamental theoretical or substantive knowledge.”

This simplifying step typically results in a more succinct expression of data patterns as well as further insight into the phenomenon of interest (Jordan et al., 2011; Soda & Furnari, 2012). Ragin (1987, p. 112) considers QCA’s explicit acknowledgement of such non-observed cases as a strength of the method when suggesting “direct consideration of
combinations of causal conditions that do not exist in the data … forces the investigator to confront the theoretical assumptions that permit more general causal statements.” From a more technical and analytical perspective, De Meur et al. (2009, p. 153) note “logical remainders that receive an outcome value and subsequently become simplifying assumptions are, structurally, never in contradiction with the observed cases. In other words, the inclusion of the logical remainders does not change anything about the properties of the empirical (observed) cases.”

An important test for the validity of a research instrument or theoretical mode is fit validity or performance validity (Wright, 1999). Two quantitative measures to assess the level of correspondence between the theoretically assigned conditions and the anticipated outcomes in QCA are consistency and coverage (Ragin, 2006a). These metrics rate the “goodness of fit” between the causal and outcome conditions (Ragin, 2004) and express the adequacy of the analysis. Consistency measures the degree to which one condition is a subset of an outcome. According to Ragin (2008, p. 45), “consistency, like significance, signals whether an empirical connection merits the close attention of the investigator. If a hypothesised subset relation is not consistent, then the researcher’s theory or conjecture is not supported.” Consistency can be understood as the number of cases for which a given condition and outcome are present, divided by the number of cases for which only the outcome is present. That is, how often does the outcome condition appear to be caused by a particular set of causal conditions as a proportion of the total number of times that the outcome variable appears? This is not a regression coefficient, but can be thought of as such a statistic, as it defines the consistent relationship between a group of causal, independent variables to a dependent, outcome variable. Ragin (2000; 2008) suggests that a consistency
score should be above 0.70, ideally above 0.75, to indicate useful models (also called “paths”, “solutions” or “causal recipes”) (Ragin, 2006a; Schneider & Wagemann, 2007). Any observed consistency scores below 0.70 require substantive theoretical or empirically-based grounds for inclusion (Ragin, 2004, 2006a), however, researchers should not “hide” cases based exclusively on any minimum values of consistency (Schneider & Wagemann, 2010b, 2012). The second measurement, coverage, helps to assess relevance and is calculated only after the consistency relationship is determined. Coverage is described as a “gauge of the empirical relevance or importance of configurations of conditions” (Ragin, 2006a, p. 301) and assigns weights to the different paths of an equifinal solution. This helps to improve the interpretations of the solution formula (Schneider & Wagemann, 2010b). Coverage can be understood as the score representing the number of cases containing a given solution model divided by the total number of cases with the same outcome. This is the uniqueness factor and is akin to an effect size measurement in statistics (Hsu et al., 2013). When coverage is too small, then there are numerous ways to achieve the outcome and the studied configuration of conditions does not do a useful (“good”) job of explaining the link between high membership of the configuration of conditions and high membership of the outcome (De Villiers, 2017; Ragin, 2006a).

However, both Woodside (2013) and Schneider and Wagemann (2010b) caution researchers against considering fit validity in isolation; it needs to be considered alongside the predictive validity of tested models and theory. Schneider and Wagemann (2010b, p. 20) note, “...empirical significance of a path, measured by the degree of coverage of the outcome to be explained, is not equivalent to theoretical significance. Some paths with a high coverage
can be theoretically uninteresting or even trivial.” Thus, QCA, like any other data analysis technique needs theory to bridge empirical results with analytic interpretation.

3.4.2.3.4 QCA Phase Four: Within-Case and Cross-Case Analysis

The final step in QCA is that of the within-case and cross-case analysis of the analytic findings. Rihoux and Lobe (2009, p. 235) stress that this is a crucial operation in the QCA process “otherwise the whole point of QCA is missed and, once again, ‘returning to the cases’ plays a central role.” This continuous dialogue with the cases is not without theoretical sensitivity, however. If a dilemma can be solved without re-examining some cases by relying mostly on theory, it is perfectly acceptable as long as the argumentation is sound and transparent (Rihoux & Lobe, 2009). Legewie (2013, 2017) suggests approaching this dialogue between cases and QCA results from three complementary steps: (1) reassessing cases; (2) recipes, and; (3) single conditions. Rihoux and Lobe (2009), similarly adopt a three-step approach in interpreting and reporting the analytic findings of QCA, which is complementary to Legewie (2013). These steps serve to build on each other, but the analytic process should not be understood as simply a linear process from one to the next (Greckhamer, Furnari, Fiss, & Aguilera, 2018).

The first step, reassessing the cases, suggests the researcher reassesses their understanding of the cases in light of the identified causal recipes. Legewie (2013, p. 16) notes, “each causal recipe a case is a member of can be seen as a formula for understanding how the outcome came about in that case. The first step is to identify what cases are members of which recipes.” By developing a causal explanation of a conjunction, or sequence of events, that leads to the occurrence of the outcome, the researcher engages in a deeper, qualitative within-case analysis to help explain the phenomenon (Blatter, 2012; George et al., 2005;
Gerring, 2006). By providing this “causal account” for each recipe, the researcher is providing an interpretation of more “causal questions about ingredients and mechanisms producing (or not) an outcome of interest” (Rihoux & Lobe, 2009, p. 235). An in-depth analysis of cases can also serve to bring the relevance of other dimensions to the fore, such as the temporal dimension, in understanding social phenomena (Caren & Panofsky, 2005; Ragin & Strand, 2007; Schneider & Wagemann, 2010b). This case-oriented interpretation of the core conditions indicated by the QCA minimal formulae is central to the QCA research strategy; QCA is precisely conceived as a lever to better understand purposefully selected cases (Curcho, Dumez, & Jeunemaître, 2004). Rihoux and Lobe (2009) liken the cases under investigation to “a ‘black box’, and the QCA minimal formula acts like a flashlight which indicates some precise spots to be looked at to better understand the outcome.” In more technical language, Grekhamer et al. (2018, p. 484) share a similar sentiment when they note “QCA can handle causal complexity at a fine-grained level and enable researchers to unpack situations of first- and second-order equifinality, substitution or complementary effects between elements.”

The second step, reassessing the recipes, serves to focus the researcher on each causal recipe represented in the QCA results. The logic of this step is very similar to the first and alludes to the iterative nature of QCA. The guiding question in this step is “how the recipes work” (Legewie, 2013, p. 23). During this step, it is possible to further “summarise” the minimal formulae (or “causal recipes”) that the more technical criterion of consistency and coverage served to achieve in the computer-aided QCA analysis. If we consider the minimal formulae as a standard linear algebraic equation, a theory- or case-informed summarising strategy can assist in factoring-out some conditions in order to make them more visible.
(Rihoux, 2003; Rihoux & Rüdig, 2006). This is a strictly formal operation based on the fact that there is some overlap between the “causal recipes” (Legewie, 2013) that, in an effort to further reduce the complexity of the solutions, could be subsumed under a more general concept (Goertz, 2006; Goertz & Mahoney, 2005). Other scholars have similarly described this process as “moving up the ladder of generality” (Sartori, 1991, p. 254) to find the true, often more abstract, theoretical reason for the occurrence of the outcome (Schneider, 2008). This can serve to illuminate conditions that are more proximate to the occurrence of the outcome of interest (Schneider & Wagemann, 2006) and invite further reflection on the combination of conditions included in the study (De Meur et al., 2009; Rihoux, 2001; Rihoux & Rüdig, 2006). As Schneider and Wagemann (2010b, p. 27) note the importance of this step in the interpretation of QCA results:

“Sometimes an empirically less important path (a path covering only a few, probably even only one case) can nonetheless be more interesting and important theoretically and substantively than other paths covering many cases. A low coverage path might provide an explanation for cases that hitherto have remained deviant or misunderstood. At the same time, high coverage paths might simply state the obvious, contributing little to theoretical and empirical knowledge.”

Expanding on the “thick” case narratives, and insights, from the previous step, the researcher looks at how well the analytical QCA results (the “causal recipes”) work as more general explanations of the outcome. By considering how each recipe works across all cases that are clustered, or enjoy membership in a particular set, the researcher is able to “make sense of multiple-case narratives in order to identify common [parts of] narratives across several cases” (Rihoux & Lobe, 2009, p. 236). This comparison of case narratives helps us make several “local” and “thick” comparisons across small groups of cases (Abbott, 1992),
describing their characteristic functioning, or different types of functioning (Legewie, 2013). Scholars note that researchers should always give explicit justification when considering one (or more) “paths” toward the outcome of interest within these case narratives as deemed more important that others (Schneider & Wagemann, 2010b). If simply inferring a premium “causal recipe” via empirical measures of coverage, researchers risk “hiding” paths of theoretical or substantive importance (Schneider & Wagemann, 2010b) as empirical relevance is fundamentally different from theoretical relevance.

At this stage, graphical representation through XY plots are suggested as particularly useful in displaying either the entire solution formula and/or different paths toward the outcome for each respective case (Schneider & Wagemann, 2010a). This is “...the ultimate test of whether or not the results generated by the logical minimisation make sense, both theoretically and empirically. Only if the results are useful for understanding the cases has the primary goal of QCA been achieved” (Schneider & Wagemann, 2010b, p. 14). XY plots are a straightforward representation of where single cases fall on the scales of the outcome variable of interest and the conjunctural condition (Figure 3.6). Additionally, an XY plot provides “a series of information relevant for assessing the quality of the results” (Schneider & Wagemann, 2007, p. 197).

![Figure 3.6: XY Plots of Relationships of Necessity (Left) and Sufficiency (Right) of Causal Condition (A) on Outcome Condition (Y). Adapted from Legewie (2013, p. 7).](image)
First, XY plots show whether a specific condition is necessary (lower triangular plot) or sufficient (upper triangular plot). Second, they give an impression how consistent a given condition is with the statement of being a necessary or a sufficient condition, respectively. Third, XY plots offer graphical insights regarding how relevant empirically a sufficient condition is, and whether or not a necessary condition might be trivial empirically (and thus also often theoretically) (Goertz, 2006; Legewie, 2013; Schneider & Wagemann, 2010a).

The final step, reassessing the single conditions, approaches the dialogue between case data and QCA data from the perspective of single conditions. This process serves to better understand each condition’s role in the causal recipes and reflect upon their relative importance for the outcome (Legewie, 2013). Again, this step relies on insights gained from the previous two steps and forces analysis of single conditions identified as necessary for the outcome of interest. At this stage, the researcher scrutinises inclusion-of the condition on theoretical and empirical grounds and seeks to identify deviant cases, or cases that are inconsistent with how the condition usually works or are misunderstood (Schneider & Rohlfing, 2013, 2016). This insight invites the researcher to analyse these “contrarian” cases in the case-based data to deepen the understanding of the relationship between positive (negative) causal conditions and negative (positive) outcome conditions (Hsiao, Jaw, Huan, & Woodside, 2015; Woodside, 2014; Wu, Yeh, & Woodside, 2014). Again, the case-based data provides a depth of evidence to reflect-on, offering the researcher a deeper “causal narrative” to allow a nuanced contrarian analysis (Russo & Confente, 2019). However, scholars caution against the interpretation of any one condition as being overtly important in isolation. At its epistemological core, QCA is a configurational method and rests on the
assumption that the interplay between conditions produces an outcome, not any one condition exclusively (Schneider & Wagemann, 2010a).

Toward the end of this third, and last, phase, the researcher can cycle between steps within this phase, moving iteratively between case-to-case interpretation, cross-case interpretation and individual-condition interpretation. More importantly, Rihoux and Lobe (2009, p. 235) suggest is that “...we once gain loop back to the initial case knowledge in order to make meaningful and case-based interpretations of the minimal formulae.” Whilst a fundamentally iterative and often labour-intensive process, Rihoux and Lobe (2009, p. 237) suggest the researcher should consider the “cost” and potential “benefits” of each return to the cases, noting “if a problem can be solved without re-examining some cases (e.g. by relying mostly on theory), it is perfectly acceptable as long as the argumentation is correct and clearly laid-out.”

This interpretation and reporting phase seek to “go beyond the observed cases and ... what is immediately perceived” (Rihoux & Lobe, 2009, p. 236) and offer a level of generalisation, with appropriate caution, to other similar cases. In more concrete terms, “a well-executed QCA should go beyond plain description, and [...] results used in support of ‘limited historical generalisation’” (Ragin, 1987, p. 31). For QCA as a set of techniques, “modest generalisation” can be achieved but “permanent causality is not assumed” (Rihoux, 2006, p. 9). This phase of QCA goes beyond simply describing the models resulting from the QCA and seeks to predict outcomes in additional cases, of which share a reasonable number of features with the cases that were the subject of the QCA (Berg-Schlosser et al., 2009; Rihoux, 2009; Rihoux & Lobe, 2009). This satisfies a “modest generalisation” as the predictions only serve those additional cases that are sufficiently close to the initial
“homogeneity space” of the observed cases. Rihoux and Lobe (2009) note that “…this view on generalisation is much more modest than statistical inference which allows very broad generalisations”. However, this view invites cumulation; namely, it is possible for other researchers, taking a given QCA analysis as a starting point, to re-visit an analysis and in doing so, yield some different minimal formulae (Rihoux, 2003, 2006; Rihoux & Lobe, 2009).

The iterative nature of QCA analyses, between researchers, is an unquestionable virtue of QCA as a research strategy (Rihoux & Lobe, 2009) rather than strictly a set of analytical tools. As Ragin (2008, p. 173) notes “social research […] is built upon a foundation of substantive and theoretical knowledge, not just methodological technique.”

3.5 Chapter Conclusions

This chapter has presented the design for the research. Firstly, the chapter considered philosophical and methodological issues in researching the characteristics, qualities or behaviours (collectively known as conditions) that best serve to recover interorganisational trust following service failure as well as other contributing factors that serve to moderate the influence of these conditions. The chapter then explained the two studies conducted to investigate this phenomenon; qualitative enquiry and thematic analysis followed by QCA. The following chapter presents the results of the qualitative enquiry and generation of the B2B relationship conditions that best serve to recover interorganisational trust following service failure, leading to the development of propositions for QCA in Chapter Five.
Chapter Four: Study One - Qualitative Enquiry & Thematic Analysis

4.1 Introduction

This chapter reports the findings of Study One, qualitative enquiry, based on analysis of transcripts of interviews with 40 business-to-business (B2B) decision makers. Thematic analysis agglomerated the qualitative data from all participants interviewed and sought to identify common ideas (codes) and themes across the entire dataset.

4.2 Data Collection: Semi-Structured Interview Procedure

The semi-structured interview schedule first examined the context of the relationship between buyer and supplier followed by an examination of critical incidents representing a trust violation. The beginning of the interview protocol asked the buyer to describe the supply relationship, including how the seller interacts with the buyer, and then describe the nature of the working relationship with the supplier (see Appendix 3 for interview guide). After gaining an understanding of the context and the tenor of the relationship, the researcher then explored a violation of trust by the seller, which constitutes the critical incident for analysis. The researcher first told participants “I am interested in how much you willingly place yourself in situations that your supplier can influence the outcomes of your business”. Then, the researcher asked, “Do you trust that your supplier looks out for your best interests?” The researcher explored the answers with a variety of probes, asking for examples. Subsequently, if it hadn’t come up previously in the interview, the researcher asked, “Now think of a situation in which your supplier has let you down”, followed by “Has there been a situation in which your supplier has done something that has significantly reduced your trust in their ability or willingness to look after your company’s well-being?”
The researcher continued to probe these answers until a thorough understanding of the trust violation incident was realised. In all 40 interviews, participants were able to identify an episode of trust violation. These episodes were the critical incidents that served as the focus of the analysis (Edvardsson & Roos, 2001; Flanagan, 1954). Additionally, the researcher added questions to explore estimations of the severity of the trust violation and whether, and how, the buyer engaged in trust repair behaviours and activities and how the buyer gave the seller the opportunity to restore trust.

4.3 Data Analysis: Hybrid Approach to Deductive and Inductive Coding

As detailed in Chapter Three, this analysis followed a hybrid approach to deductive and inductive coding and theme development. This approach superimposes a directed, theory-driven structure and procedural rigour (Crabtree & Miller, 1999; Fereday & Muir-Cochrane, 2006; Hsieh & Shannon, 2005) on to an equally rigorous, but more conventional, approach to thematic analysis (Braun & Clarke, 2006); allowing theory-driven and data-driven insights to emerge in tandem. Because of this directed, theory-driven feature of the coding of interview transcript data, a clearly defined code manual of existing concepts or ideas that serve as initial coding categories is necessary (Hickey & Kipping, 1996; Potter & Levine-Donnerstein, 1999). Operational definitions for each category are then determined using prevailing theory (Hsieh & Shannon, 2005). The development of an explicit code manual prior to coding the interview transcripts also serves to achieve dependability (Lincoln, 1995; Tobin & Begley, 2004), confirmability in the research process (Guba & Lincoln, 1994; Koch, 2006) and transparency of the research decision trail (Sandelowski, 1986), resulting in a robust audit trail. The following sub-sections explain the process of identifying the critical trust violation event and the development and definitions within the coding manual.
4.3.1 Identifying Critical Events and Patterns of Trust Recovery

Researchers have explored the influences contributing to the building of trust at the interpersonal level (Kim et al., 2004; Kramer & Lewicki, 2010; Tomlinson et al., 2004) and at the interorganisational level (Elangovan et al., 2015; Gillespie & Dietz, 2009), providing insight into the behaviours and activities an organisation may engage-in toward building trust (Kramer & Lewicki, 2010). However, there is a dearth of systematic inquiries into the dynamics of trust recovery (Elangovan et al., 2015; Elangovan & Shapiro, 1998), particularly what behaviours are representative of those “...activities directed at making a trustor’s trusting beliefs and trusting intentions more positive after a violation is perceived to have occurred” (Kim et al., 2004, p. 105).

Trust is considered violated when the trustor perceives the trustee as acting in a way that does not fulfil his or her expectations (Elangovan & Shapiro, 1998; Sitkin & Roth, 1993) and serves as the trigger that prompts the trustor to assess the situation at both a cognitive and an affective level (Bies & Tripp, 1996; Lewicki & Bunker, 1996; Tripp, Bies, & Aquino, 2007). Cognitive-dominant trust refers to the expectation that a partner organisation will perform at a set level (Dowell & Heffernan, 2004) and is defined as “that group of skills, competencies and characteristics that enable a party to have influence within some specific domain” (Mayer et al., 1995, p. 717). Affective-dominant trust refers to a willingness to perform to a greater level than is formally expected, prioritising another party’s interests over one’s own (Sako, 1992) and is defined as “the perception of a positive orientation of the trustor” (Mayer et al., 1995, p. 716); focusing on the intentions and the motives of the relationship partners (Ganesan, 1994). This cognitive and affective distinction is important when considering trust recovery strategies an organisation may pursue in an effort to repair
or restore violated trust with a buyer. The notion that trust is not only a mental process of the trustor, but also a social process involving the interaction of trustor and trustee with each other in their constituent trust-building activities (Möllering, 2013; Nikolova, Möllering, & Reihlen, 2015).

The most widely accepted definitions of trust recovery and repair are concerned with what Dirks et al. (2011, p. 88) describe as “a process in which a trustee is attempting to increase trust following a situation in which a transgression (i.e. untrustworthy behaviour) is perceived to have occurred” (Searle et al., 2018). In other words, the “relationship repair occurs when a transgression causes the positive state(s) that constitute(s) the relationship to disappear and/or negative states to arise, as perceived by one or both parties, and activities by one or both parties to substantively return the relationship to a positive state” (Dirks et al., 2009, p. 69). Thus, interorganisational trust recovery is predominantly concerned with restoring cooperation and re-establishing the trustor’s positive expectations of the other party and, in turn, the “willingness to be vulnerable” (Desmet, De Cremer, & van Dijk, 2011; Kramer & Lewicki, 2010).

This stage of the analysis began by identifying critical events, or “critical incidents when parties engaged in actions related to the development of their relationship” (Ring & Van de Ven, 1994, p. 112). Specifically, the researcher looked for events that buyers saw as important for their trust perceptions toward the seller (Brattström, Faems, & Mähring, 2018). To capture trust perceptions, the researcher adopted definitions of trust in a sensitising way (Graebner, 2009; Miles & Huberman, 1994). First, the researcher considered Lewicki, McAllister and Bies’ (1998) definition of trust and distrust, looking for statements that described both positive and negative trust perceptions, whilst treating trust and
distrust as two conceptually distinct constructs. Second, the researcher followed Franklin and Marshall (2019) by making a conceptual distinction between cognitive-dominant and affect-dominant trust perceptions. Third, the researcher followed Currall and Inkpen’s (2002) distinction between different trusted referents, such as trust perceptions toward the buyer as an organisation and toward individual buyer organisation members. All interviewees provided statements describing positive or negative trust perceptions toward the buyer as an organisation; therefore, this work focuses on the buyer organisation as the trusted referent of analysis.

4.3.2 Deductive, Theory-Driven Coding: Code Development and Definitions

The focus of this work is on the recovery of trust in the referent of an organisation from the perspective of the buyer, of which is widely accepted as a central factor underlying establishing and sustaining buyer-seller relationships (Ashnai et al., 2016; Seppänen et al., 2007). Previous studies note that interorganisational trust evolves as a result of experiences related to actions and interactions taking place between individual buyers and sellers within their respective organisations (Biedenbach, Bengtsson, & Wincent, 2011; Huang & Wilkinson, 2013).

These individual factors, related to perceptions, attitudes, behaviours and performance (Dirks & Ferrin, 2001), are what demonstrate both cognitive-dominant and affective-dominant dimensions of trustworthiness when seeking to recover from a violation of trust. A comprehensive analysis of the trust literature has identified the seven most salient antecedents of trust, both cognitive-dominant and affective-dominant, within business to business marketing relationships as: competence, satisfaction, communication, integrity, shared values, benevolence and co-creation. Explicit definitions of each of these
Antecedents of trust (Table 4.1) provide direction for the theory-driven (Braun & Clarke, 2006; Fereday & Muir-Cochrane, 2006; Hayes, 1997), semantic-level coding of the interview transcripts (Boyatzis, 1998). Additionally, a concise definition of the trust concept in a B2B decision-making context is clearly identified in order to assist in interpretation of the presence (or not) of trust following restorative efforts (Crabtree & Miller, 1999).

The antecedent definitions borne out of prevailing theory feature explicit distinctions in their conceptualisation so as to minimise conceptual overlap. Of particular note is the explicit definition of the “communication” construct as interorganisational communication as opposed to inter-personal communication. This explicit distinction is to avoid confound with the “co-creation” construct, of which inter-personal communication is a key tenet. Also, of particular note is the explicit definition of the “integrity” construct as a set of principles that the trustor finds acceptable. This explicit distinction is to avoid overlap with the “shared values” construct of which a set of principles would be shared as opposed to merely accepted. Similarly, the “benevolence” construct features the explicit omission of profit motive as a reflection of benevolence as a motivation toward profit is deemed a fundamental premise of business and partnership and does not suggest, exclusively, a benevolent disposition.
This study adopts the conceptualisation of trust presented within contemporary trust literature encompassing the following qualities:

- Trust is a psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or behaviour of another (Rousseau et al., 1998).
- Trust is a willingness to be vulnerable to another party based on both the trustor’s propensity to trust others in general, and on the trustor’s perception that the particular trustee is trustworthy (Mayer et al., 1995).
- Trust is a belief in, and willingness to act on the basis of, the words, actions and deeds of another (McAllister, 1995).
- Institutional measures, or controls, are conceptually separate from the notion of trust (Bachmann & Inkpen, 2011). Trust may only develop in the absence of overtly controlling or monitoring functions between partners as where behavioural control
is achieved by means of institutional rules, trust can neither flourish nor is trust necessary (Shapiro, 1987).

This study adopts the definition of trust as posed by Garbarino and Johnson (1999), Mayer et al. (1995), Morgan and Hunt (1994) and Ranaweera and Prabhu (2003b) and is conceptualised as existing when there is a willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party.

4.3.2.2 Competence as Contributing to Trust Recovery within B2B Relationships

This study adopts the definition of competence as proposed by Crosby et al. (1990), Gummerus et al. (2004), Johnson and Grayson (2005) and Ndubisi and Wah (2005) comprising of technical, functional and commercial ability and is defined as the buyer’s perception of the supplier’s technological and commercial competence. These dimensions include the supplier’s market knowledge, ability to provide proper advice, ability to assist the buyer in planning purchases as well as the ability to provide effective sales promotion and quick responsiveness to requests.
4.3.2.3 Satisfaction as Contributing to Trust Recovery within B2B Relationships

This study adopts the construct definition of satisfaction as proposed by Geyskens et al. (1999), Giese and Cote (2000), Oliver (1993) and Ranaweera and Prabhu (2003a, 2003b) that details the global, cumulative effect of satisfaction and is defined as an overall post-purchase evaluation of the final customer solution.

4.3.2.4 Communication as Contributing to Trust Recovery within B2B Relationships

This study adopts the construct definition of communication as proposed by Anderson and Narus (1990) and Coote et al. (2003) and Geykens et al. (1998) that details the social and institutional elements of communication within a business to business environment and is
defined as the formal as well as informal sharing of high quality, meaningful and timely information between firms.

4.3.2.5 **Integrity as Contributing to Trust Recovery within B2B Relationships**

This study adopts the construct definition of integrity as proposed by Franklin and Marshall (2016), Mayer et al. (1995), McKnight et al. (2002), Moorman et al. (1993), Morgan and Hunt (1994), Schoorman et al. (2007) and Zaheer et al. (1998a) and is defined as the perception that the trustee adheres to a set of principles that the trustor finds acceptable.
4.3.2.6 Benevolence as Contributing to Trust Recovery within B2B Relationships

This study adopts the construct definition of benevolence as proposed by Casalo et al. (2010), Gasparotto et al. (2018), Mayer et al. (1995), McKnight et al. (2002), Schoorman et al. (2007), and Siguaw et al. (1998) and is defined as the extent to which a trustee is believed to want to do good to the trustor, aside from profit motive.

4.3.2.7 Shared Values as Contributing to Trust Recovery within B2B Relationships

This study adopts the construct definition of shared values proposed by Beugelskijk and Klasing (2016), Gillespie and Mann (2004), Morgan and Hunt (1994), Poppo et al. (2016), and Klasing (2016), Gillespie and Mann (2004), Poppo, Zhou and Li (2016) and Morgan and Hunt
(1994) and is defined as the extent to which partners have beliefs in common about what behaviours, goals and policies are important or unimportant, appropriate or inappropriate and right or wrong.

### 4.3.2.8 Co-Creation as Contributing to Trust Recovery within B2B Relationships

![Co-Creation](image)

This study adopts the construct definition of co-creation as proposed by Ballantyne and Varey (2006; 2008), Franklin and Marshall (2016; 2019), Kothandaraman and Wilson (2001), Lundkvist and Yakhlef (2004), Payne et al. (2008), Ulaga (2001) and Ulaga and Eggert (2006) and is defined as the active participation, interactions, dialogue and collaboration of the buyer and seller and other actors in the marketing exchange to develop a deeper understanding of the customer problem solving context. The joint problem solving generates a customer solution, or a reconfigured customer solution, the value of which is drawn from the perceptions of the buyer.
4.3.3 Deductive, Theory-Driven Coding: Applying the Template Analytic Technique

Using this template analytic technique (Crabtree & Miller, 1999), the researcher applied the codes from the codebook (Table 4.1 and Table 4.2) to the interview transcript text with the intent of identifying meaningful units of text (Fereday & Muir-Cochrane, 2006). The interview transcripts were entered as project documents into the NVivo™ software platform, the codes developed for the manual entered as nodes and coding commenced with matching the codes with segments of interview transcript data selected as representative of the code. In this stage of analysis, the researcher explored how participants described and interpreted violations of trust and reparative activities in order to understand how and why these activities drove trust perceptions. Analysis of the interview transcripts was guided, but not confined, by these preliminary codes.
<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
<th>References</th>
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<tr>
<td>Competence</td>
<td>Competence is conceptualised as the buyer’s perception of the supplier’s technological and commercial competence. These dimensions include the supplier’s market knowledge, ability to provide proper advice, ability to assist the buyer in planning purchases as well as the ability to provide effective sales promotion and quick responsiveness to requests.</td>
<td>(Crosby et al., 1990; Gummerus et al., 2004; Johnson &amp; Grayson, 2005; Ndubisi &amp; Wah, 2005)</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>Customer satisfaction is conceptualised as an overall post-purchase evaluation of the final customer solution.</td>
<td>(Giese &amp; Cote, 2000; Oliver, 1993; Ranaweera &amp; Prabhu, 2003a, 2003b)</td>
</tr>
<tr>
<td>Communication</td>
<td>Communication is conceptualised as the formal as well as informal sharing of high quality, meaningful and timely information between firms.</td>
<td>(Anderson et al., 1990; Coote et al., 2003; Geykens et al., 1998)</td>
</tr>
<tr>
<td>Integrity</td>
<td>Integrity is conceptualised as the perception that the trustee adheres to a set of principles that the trustor finds acceptable.</td>
<td>(Franklin &amp; Marshall, 2016; Mayer et al., 1995; McKnight et al., 2002; Moorman et al., 1993; Morgan &amp; Hunt, 1994; Schoorman et al., 2007; Zaheer et al., 1998)</td>
</tr>
<tr>
<td>Benevolence</td>
<td>Conceptualised as the extent to which a trustee is believed to want to do good to the trustor, aside from profit motive.</td>
<td>(Casalo et al., 2010; Gasparotto et al., 2018; Mayer et al., 1995; McKnight et al., 2002; Schoorman et al., 2007; Siguaw et al., 1998)</td>
</tr>
<tr>
<td>Shared Values</td>
<td>Shared values are conceptualised as the extent to which partners have beliefs in common about what behaviours, goals and policies are important or unimportant, appropriate or inappropriate and right or wrong.</td>
<td>(Beugelsdijk &amp; Klasing, 2016; N. Gillespie &amp; Mann, 2004; Morgan &amp; Hunt, 1994; Poppo et al., 2016)</td>
</tr>
<tr>
<td>Co-Creation</td>
<td>Co-creation is conceptualised as the active participation, interactions, dialogue and collaboration of the buyer and seller and other actors in the marketing exchange to develop a deeper understanding of the customer problem solving context. The joint problem solving generates a customer solution or a reconfigured customer solution. The value of the co-created solution is drawn from the perceptions of the buyer.</td>
<td>(Ballantyne &amp; Varey, 2006; Ballantyne &amp; Varey, 2008; Franklin &amp; Marshall, 2016, 2019; Kothandaraman &amp; Wilson, 2001; Lundkvist &amp; Yakhlef, 2004; Payne et al., 2008; Ulaga, 2001; Ulaga &amp; Eggert, 2006)</td>
</tr>
</tbody>
</table>

*Table 4.1: Theory-Driven Code Definition within B2B Relationships*
4.3.4 Inductive, Data Driven Coding: Code Development and Definition

Throughout the data analysis process, the researcher searched for similarities and
dissimilarities between the extant models of interorganisational trust development, repair
and recovery (Kroeger, 2012; Möllering, 2013; Nikolova et al., 2015; Schilke & Cook, 2013;
Zaheer et al., 1998) and emergent constructs. During the coding of the interview
transcripts, inductive codes were assigned to segments of data that described a new theme
observed in the text (Boyatzis, 1998). As a result of this process, the researcher found that
transparency emerged as a salient theme amongst participants as contributing to
estimations of trust recovery following service failure. As such, the researcher investigated
the trust literature outside the adopted models to make sense of the data (Brattström et al.,
2018). In particular, the literature on an individual’s subjective perception of being
informed about relevant actions by an interorganisational partner (Eggert & Helm, 2003) as
well as the more specific dimensions of information disclosure, clarity and accuracy as more
concrete mechanisms available to organisations when seeking to manage transparency
(Schnackenberg & Tomlinson, 2016). Additionally, more contemporary conceptualisations
of transparency in light of its “…dynamics, paradoxes and performative characteristics” by
Albu and Flyverbom (2019, p. 268) contribute to articulating the underlying forces of
organisational transparency when considering its impact on trust recovery. As a result, the
concepts, or codes, within the interview transcripts reflective of the theme of transparency
resulted in this becoming a separate new data-driven code (Fereday & Muir-Cochrane,
2006) (Table 4.2).
4.3.4.1 Transparency as Contributing to Trust Recovery within B2B Relationships

This study adopts the construct definition of transparency as an individual’s subjective perception of being informed about the relevant actions and properties of the other party in the interaction. The perception of information exchange around important characteristics such as economic situation, technical abilities or organisational structure all contribute to perceptions of transparency. In the case of supplier transparency, these include the supplier’s economic situation, technical abilities or the organisational structure of the supplier firm (Albu & Flyverbom, 2019; Eggert & Helm, 2003; Schnackenberg & Tomlinson, 2016). Interorganisational transparency is considered a complex construct that can be researched from the buyer or supplier perspective; however, the focus of this work is on relationship transparency from the perspective of the buyer.

Additionally, the degree of transparency perceived by one party can differ from the other party at both an individual and organisational level (Albu & Flyverbom, 2019). This can lead to symmetric (both parties perceive the same degree of transparency) or asymmetric transparency situations (the one party’s perception of the degree of transparency differs from the perception of the other party) (Pirson & Malhotra, 2011).
In the context of the relationship management literature, augmenting transparency is an explicit exercise with an interaction partner designed to “...reduce operational, managerial and strategic costs with the aim to improve the deployment of resources, to raise the potential value of the relationship and to reduce non-value-added activities (Eggert & Helm, 2003, p. 2). In the context of the trust building or trust repair literature, the role of transparency is less clear (Schnackenberg & Tomlinson, 2016). As Schnackenberg and Tomlinson (2016) note in their work on managing trust in organisation-stakeholder relationships, prior empirical attempts to explain the impact of transparency on stakeholder trust have been met with mixed results. As such, their work serves to conceptualise the mechanisms toward managing transparency within interorganisational relationships. These mechanisms are conceptualised as a three-dimensional model; an individual’s perception of disclosure, clarity and accuracy.

This systematic development of the transparency concept asserts “...a new theory of transparency as a stand-alone concept ripe for further theoretical and empirical advancement” (Schnackenberg & Tomlinson, 2016, p. 1803). Additionally, explicating these concrete mechanisms that organisations have available to them in order to manage transparency perceptions helps to contribute to theoretical development of “transparency strategy” (Granados, Gupta, & Kauffman, 2005, 2008) and invites investigation of specific approaches to managing changes in transparency that may prove instrumental in repairing damaged trust (McManus, Holtzman, Lazarus, Anderberg, & Jahansoozi, 2006).
Coding of the interview transcripts revealed 137 unique first-order codes, as detailed in the following sections. These codes represent 41 sub-themes, of which represent eight overall themes in the data, as follows (Table 4.3): (1) participants spoke at length of the role that estimations of competence played in the recovery of trust following service failure, the outcomes of which were both positive and negative; (2) participants recognised the importance of a satisfactory, overall post-purchase evaluation of the final customer solution; (3) the potential dimensions of the most effective means of communication, both formal and informal, between firms were revealed; (4) participants spoke of the integrity of the principles the transgressing firm adheres-to and operationalised as contributing to post-service-failure trust recovery; (5) participants spoke to estimations of shared values in what behaviours, goals and policies are important or unimportant and appropriate or inappropriate to post-service-failure trust recovery; (6) the extent to which a transgressing firm is believed to want to do good to the trustor, outside of profit motive, was a regular theme in participant’s conversations concerning trust recovery; (7) insight was gained into the role co-creation plays in trust recovery following service failure; and, (8) a deeper, more explicit insight into the role transparency plays in recovering trust after interorganisational service failure was highlighted and features as a major finding in this study.

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparency</td>
<td>An individual’s subjective perception of being informed about the relevant actions and properties of the other party in the interaction. The perception of information exchange around important characteristics such as economic situation, technical abilities or organisational structure all contribute to perceptions of transparency.</td>
<td>(Albu &amp; Flyverbom, 2019; Eggert &amp; Helm, 2003; Pirson &amp; Malhotra, 2011; Schnackenberg &amp; Tomlinson, 2016)</td>
</tr>
</tbody>
</table>
### Table 4.3: Themes Representative of Trust Recovery within B2B Relationships

<table>
<thead>
<tr>
<th>Theme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td>The value buyers attribute to suppliers’ rational and objective efforts to demonstrate ability, knowledge and procedural utility with the final reparative solution.</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>The value buyers attribute to suppliers’ overall efforts toward achieving a high level of satisfaction with the final, reparative solution.</td>
</tr>
<tr>
<td>Communication</td>
<td>The value buyers attribute to suppliers’ communication content, style and efforts when designing and deploying the final, reparative solution.</td>
</tr>
<tr>
<td>Integrity</td>
<td>The value buyers attribute to suppliers’ demonstrations of integrity when designing and deploying the final, reparative solution.</td>
</tr>
<tr>
<td>Benevolence</td>
<td>The value buyers attribute to suppliers’ demonstrations of both indirect and direct acts of benevolence when designing and deploying the final, reparative solution.</td>
</tr>
<tr>
<td>Shared Values</td>
<td>The value buyers attribute to suppliers’ establishing and expression of shared organisational values when designing and deploying the final, reparative solution.</td>
</tr>
<tr>
<td>Co-Creation</td>
<td>The value buyers attribute to suppliers’ development-of and exercising-of co-creation activities and outcomes when designing and deploying the final, reparative solution.</td>
</tr>
<tr>
<td>Transparency</td>
<td>The value buyers attribute to suppliers’ efforts in exhibiting and operationalising transparency when designing and deploying the final, reparative solution.</td>
</tr>
</tbody>
</table>

In the discussion that follows, each of these eight themes is explored in depth, together with codes and sub-themes that comprise each theme. Sample excerpts of interview transcripts are provided in support of each theme. Please note, expletives or profanities have been omitted from exemplars and are denoted by an underscored line. Similarly, participant names or organisation names have been omitted and are denoted by parentheses. Please also note, participants are identified as being representative of either a small to medium enterprise, denoted by “SME”, or a large corporation, denoted by “Corporate”, in theme and sub-theme exemplars. Additionally, participants’ individual level
of decision-making authority is identified as being representative of either operational-level or middle-management, denoted by “operational”, or executive-level or senior-management, denoted by “executive”.

4.4.1 Demonstrations of Competence Contributing to Trust Recovery

Buyers spoke at length about the role of demonstrations of competence in recovering trust between the buying and supplier organisations. A substantial number of quotes (102) relate to the value buyers attribute to suppliers’ rational and objective efforts to demonstrate competence after a service failure and breach of trust. These codes are categorised into five sub-themes: signalling ability and utility; knowledge and negotiation; rigour and responsiveness; aligning resources and processes and diagnosis; and remedial expectations. The five sub-themes comprise the “Competence” theme (Table 4.4). Each of the competence sub-themes are explained in the following sections.
<table>
<thead>
<tr>
<th>Sub-Theme</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Signalling Ability &amp; Utility</strong></td>
<td>Ability</td>
<td>Demonstrating the ability to fix the problem and to restore the product or service to specification.</td>
</tr>
<tr>
<td></td>
<td>Quality</td>
<td>Producing a high-quality product at, or above, specification.</td>
</tr>
<tr>
<td></td>
<td>Diligence</td>
<td>Persisting with developing a fix for the product or service.</td>
</tr>
<tr>
<td></td>
<td>Delivery</td>
<td>Delivering the product or service to specification, on time and in full.</td>
</tr>
<tr>
<td></td>
<td>Expertise</td>
<td>Having the right people with the right experience and expertise on the job.</td>
</tr>
<tr>
<td></td>
<td>Consistency</td>
<td>Consistent product or service delivery, over time, to specification.</td>
</tr>
<tr>
<td></td>
<td>Qualifications</td>
<td>Exhibiting the appropriate professional qualifications, either individually or organisationally.</td>
</tr>
<tr>
<td></td>
<td>Flexibility</td>
<td>Looking for ways to fix a problem more efficiently than existing mechanisms.</td>
</tr>
<tr>
<td></td>
<td>Confidence</td>
<td>Signalling confidence in the product or service being manufactured or supplied or in the procedures adopted.</td>
</tr>
<tr>
<td><strong>Knowledge &amp; Negotiation</strong></td>
<td>Market Knowledge</td>
<td>Overall market knowledge, including trends and historical movement.</td>
</tr>
<tr>
<td></td>
<td>Product Knowledge</td>
<td>Specific product knowledge, including constituent parts of product or service.</td>
</tr>
<tr>
<td></td>
<td>Supply Chain Knowledge</td>
<td>Demonstrating knowledge of the influence of supply chain implications on product or service delivery.</td>
</tr>
<tr>
<td></td>
<td>Customer Knowledge</td>
<td>Signalling a knowledge of your customer and their downstream customers and other influences.</td>
</tr>
<tr>
<td></td>
<td>Negotiation with Supply</td>
<td>Ability to negotiate positive outcomes with upstream suppliers.</td>
</tr>
<tr>
<td><strong>Rigour &amp; Responsiveness</strong></td>
<td>Agility</td>
<td>Distinct organisational qualities that allow buyers to respond rapidly without losing momentum.</td>
</tr>
<tr>
<td></td>
<td>Promptness</td>
<td>Being punctual and responding and arriving at a supplier solution when agreed-upon.</td>
</tr>
<tr>
<td></td>
<td>Responsiveness</td>
<td>Reacting quickly and positively to buyer problems and prompts.</td>
</tr>
<tr>
<td></td>
<td>Urgency</td>
<td>An insistence and determination to reach a resolution.</td>
</tr>
<tr>
<td></td>
<td>Proactiveness</td>
<td>Being proactive in the design and deployment of a resolution to an issue or problem before engaging with the buyer.</td>
</tr>
</tbody>
</table>

*Table 4.4: Sub-Themes & Codes Representative of the Competence Theme*
<table>
<thead>
<tr>
<th>Sub-Theme</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aligning Resources and Processes</td>
<td>Combining Resources</td>
<td>Aligning current resources, both individual and organisational in an effort to fix a problem.</td>
</tr>
<tr>
<td></td>
<td>New Resources</td>
<td>Investing in new resources, both individual and organisational, to fix a problem.</td>
</tr>
<tr>
<td></td>
<td>Corrective Processes</td>
<td>Initiating new corrective processes to minimise repeat product or service failure.</td>
</tr>
<tr>
<td>Diagnosis and Remedial Expectations</td>
<td>Buyer-Centric Investigation</td>
<td>Understanding the problem from the perspective of the buyer and implications to their business.</td>
</tr>
<tr>
<td></td>
<td>Supplier Diagnosis</td>
<td>Engaging in a clear, determinate process of identifying the symptoms of product or service failure at the supplier level.</td>
</tr>
<tr>
<td></td>
<td>Clear Expectations</td>
<td>Developing and defining a clear set of expectations from the buyer, both current- and future-oriented.</td>
</tr>
<tr>
<td></td>
<td>Objective Outcomes</td>
<td>Prescribing and realising a clear set of objective outcomes agreed-upon by both buyer and supplier.</td>
</tr>
</tbody>
</table>

Table 4.4: Sub-Themes & Codes Representative of the Competence Theme, Continued

4.4.1.1 Signalling Ability and Utility

Demonstrations of ability and utility by the supplying organisation include representations of the constituent characteristics that signal ability, quality, expertise and efficiency at both the organisational-level, with features such as capital equipment, systems and processes, as well as at the individual-level, with features such as “the right people for the job” and individual professional qualifications representative of a level of objective competence:

*Competence and skills and qualifications are extremely important, especially in today’s environment where we have to comply with health and safety. You have to comply with the actual building regulations because if there are comebacks there’s issues that will reflect on our business and liability as well so it could have impact on our liability insurance if we have to claim because people haven’t been skilled or competent enough.* (Participant 16, SME, Operational)

Yeah so recently they have employed a very senior, very experienced, very capable academic out of universities in Australia who has a lot of credibility, is not really interested in selling product but ultimately, she has to earn her keep, I understand
that, and so it is about sort of transformational projects and services across the university. (Participant 2, Corporate, Executive)

Participants also spoke, at length, about the importance of validating quality demands when seeking to recover trust, especially in high-involvement product buying situations:

Yeah, the most important is their expertise and being able to deliver a high-quality product at a reasonable price. It’s quite expensive actually but worth it. (Participant 2, Corporate, Executive)

Absolutely quality is essential yeah essential and that’s why you kind of stick with the tried and true if you like. Concrete is something that is very expensive to pull it all out. It happens but it’s very expensive to pull it all out once it’s all gone down and you know it’s just not right, it’s not to strength or cracking or whatever it’s quite crucial. (Participant 35, Corporate, Operational)

Actually, all the industries I’ve worked in quality has been very important, but this is much higher importance. So, quality is number one. (Participant 38, Corporate, Operational)

4.4.1.2 Knowledge and Negotiation

The supplying organisation exhibiting a breadth and depth of market, product and supply chain knowledge, as well as the appropriate negotiation skills to maximise reparative efforts or efficiencies within each, is described by participants as contributing to trust recovery.

So that is one of the things that destroys the trust a bit just because you are expecting them to sort of know what they are talking about and if they are telling you stuff that’s not true it doesn’t really help. (Participant 6, SME, Executive)

There was another reason behind the move, the fact that he didn’t dig into what I needed, twice, he didn’t do his research twice and it was pretty much the final straw. (Participant 12, SME, Operational)

So, what can they do, here is the product now, what can they do to change it to improve it. Are there alternative materials you can find for us? It’s managing their suppliers to ensure we get supply, so make sure there is no end of life issues. We are also looking at making sure they are managing their supply chain efficiently. (Participant 38, Corporate, Operational)
4.4.1.3 Rigour and Responsiveness

Participants described the aspects of rigour and responsiveness, when engaging with a buyer organisation in response to a service failure, as contributing to trust recovery. The way a supplying organisation responds, initially and as the reparative solution is presented and enacted, is described as consisting of estimations of urgency in reacting to the problem:

Very, very challenging because you are imploring them to recognise the problem and fix it because there is nothing worse than someone walking around with a bleeding wound and I’m fine, no worries, it’s all good, you know, thanks for your business. *(Participant 20, SME, Operational)*

I think it’s relatively fresh. It’s relatively recent. But we have had some pretty serious conversations about it and at the root of it has been I want to do this in a more agile cost-effective way, not that way that you have been proposing, and they have tried to address that. So, I guess they are working quite hard to try and make it right but I don’t feel that they are capable of making it, of doing it, of changing quickly enough or changing effectively enough. I feel that they are still wedded to the old way of doing things even though they are trying. I’ve got a lot of doubt. I am very dubious, I have a lot of doubt, but I have given them the opportunity to fix it. *(Participant 26, Corporate, Executive)*

Additionally, participants describe estimations of proactiveness to reach a solution and the organisational means to operationalise the solution as contributing to trust recovery:

I guess how they (re)build trust essentially is they pre-empt any like back orders or they provide us with any insight on price changes before it actually happens. So, they are pretty responsive in that regard. So that’s what I guess if they drop the ball they always reply and give us an SLA when we get stuff, so they are pretty responsive in that regard. *(Participant 30, Corporate, Operational)*

So, if they have let us down because they underestimated the time of production and it has taken them longer than they thought then in a relationship like this they will typically come to us with a solution. So rather than come to us and say sorry it’s going to be late, then us going back to them and saying well it can’t be late, you need to do X, Y, Z to fix it, typically they will come to us proactively and say we are going to be late, this is what we’re going to do about it. There’s a faster boat that comes out of Shanghai so we’ll ship it out of Shanghai instead of Ningbo, it’s going to cost us a bit more to get it there but it is what it is, but we’ll do it. So often they will come to us
proactively with a solution. You won’t get that from a normal supplier relationship. You’ll just get them saying it’s late and then it’s up to us to go well what can you do about it, can you do this, can you do that and that is sort of hard work. *(Participant 24, Corporate, Executive)*

4.4.1.4 Aligning Resources and Processes

When considering the resources and processes inherent in a successful reparative solution, participants revealed that the combining-of and investment-in new resources and corrective processes contributes to trust recovery:

*If they have only done a one off and they write to you and say look can we combine resources, we are really doing our best to make sure this never happens again then you think okay that’s alright, whereas if they have multiple violations and they go you know that’s just part of life, we don’t worry about them, then that will start you to worry about whether you can trust them to put the resources in the right place.* *(Participant 10, Corporate, Executive)*

*And that is also another thing we look for in ongoing relationships, is how good their correction action is. This supplier has made a few errors but they have corrected them. To be honest this supplier now is probably our number one supplier to the company, both from a quality level and a business point of view but they made a few mistakes.* *(Participant 38, Corporate, Operational)*

Participants also reveal that investments in new human resource contribute to trust recovery following a service failure:

*And so that relationship took a real hit in probably early to mid-2016 and now a year later that organisation has hired good replacements, they have invested in them and they have communicated about their investment with us through the representative that we have a really good relationship with. As an organisation they have responded to a brokenness in trust.* *(Participant 20, SME, Operational)*

*They have a key account manager and they have a cross functional team as well. So, their account structure is the key account manager and then for each key customer they will have a special team. So, they will have someone in engineering, someone in quality, someone in project management. And they are dedicated 100%. If the account is big enough they will dedicate 100% to us. So that’s what they’ve done.* *(Participant 38, Corporate, Operational)*
4.4.1.5 Diagnosis and Remedial Expectations

Aspects of diagnosis and remediation featured in buyer’s estimations of activities leading to trust recovery following service failure. Participants advised that the investigative method, diagnostic process and the resultant objectives and expectations form a basis for trust recovery:

*They changed the profile. They increased the cost of their product to produce without changing their price to us. They trialled gas flushing it. They produced it in three or four different locations. They changed their emulsifying process on it. They changed the ingredients about three or four times. They did some testing on light and what was causing it to go green. They did everything that I can think of that goes into a piece of luncheon short of going across to the opposition and buying theirs at retail and sell it to you at cost, which pretty much would have been helpful.* (Participant 25, Operational)

*So, you’ve got to go inside out when you need to restore trust. That’s got to take time and there’s actions not words, just like any relationship.* (Participant 22, Corporate, Executive)

Additionally, participants reported that the objective outcome and efficacy of the final reparative solution contributed to trust recovery:

*We couldn’t have done it without that sense of trust as long as the metrics are clear, as long as the deliverables are, as long as I am not favouring him in person or favouring his company because of personal interest or whatever sort of non-business non-ethical you name it, interest, as long as the requirements are very clear, very open for everybody the metrics to measure them are unified it is most important especially when I am dependent on him in this manner.* (Participant 15, Corporate, Operational)

*Ultimately, it’s down to the final result of the work that was requested and I guess just what people had responded to any feedback about that and whether they were confident that the company had done a good job.* (Participant 23, Corporate, Operational)
4.4.2 Experiences of Satisfaction Contributing to Trust Recovery

Buyers shared experiences of satisfaction that contributed to recovering trust between the buying and supplier organisations. A large number of quotes (57) relate to the value buyers attribute to suppliers’ overall efforts toward achieving a high level of satisfaction with the final, reparative solution. These codes are categorised into four sub-themes: compensatory satisfaction; relational satisfaction; solution performance; and solution consistency. The four sub-themes constitute the “Satisfaction” theme (Table 4.5). Each of the satisfaction sub-themes are explained in the following sections.

<table>
<thead>
<tr>
<th>Sub-Theme</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compensatory Satisfaction</strong></td>
<td>Compensation for Time</td>
<td>Consideration and economic compensation for time lost due to a service failure.</td>
</tr>
<tr>
<td></td>
<td>Compensation for Costs</td>
<td>Consideration and economic compensation for costs associated to a service failure, either manufacturing costs or opportunity costs.</td>
</tr>
<tr>
<td><strong>Relational Satisfaction</strong></td>
<td>Supplier Staff Likeability</td>
<td>Supplier-side employee qualities that bring about a favourable regard; pleasant and agreeable.</td>
</tr>
<tr>
<td></td>
<td>Listening &amp; Understanding</td>
<td>Estimations of supplier-side employee’s ability to actively listen and understand the problem throughout the service failure remedy process.</td>
</tr>
<tr>
<td></td>
<td>Supportive</td>
<td>Supplier-side ability to be conscious-of and reactive-to buyer’s unique organisational needs when remedying problem.</td>
</tr>
<tr>
<td></td>
<td>Engagement</td>
<td>Supplier-side engagement with wider buyer team throughout problem identification and remedy.</td>
</tr>
<tr>
<td></td>
<td>Motivated</td>
<td>Supplier’s motivation to identify and react to buyer’s problem in a timely manner.</td>
</tr>
<tr>
<td><strong>Solution Performance</strong></td>
<td>Delivery of Product</td>
<td>Delivery of goods or services, as agreed-upon, relative to reparative solution.</td>
</tr>
<tr>
<td></td>
<td>Follow-Through on Promises</td>
<td>Implementing outcomes or activities, to completion, relative to reparative solution.</td>
</tr>
<tr>
<td></td>
<td>Comprehensive Solution</td>
<td>Effective solutions, at both the supplier-side employee level and supplier-side systems level, resulting in a satisfactory reparative solution.</td>
</tr>
</tbody>
</table>

*Table 4.5: Sub-Themes & Codes Representative of the Satisfaction Theme*
Table 4.5: Sub-Themes & Codes Representative of the Satisfaction Theme, Continued

### 4.4.2.1 Compensatory Satisfaction

Estimations of compensatory satisfaction included consideration and economic compensation for both time lost due to a service failure and other core and peripheral costs associated with the service failure:

> We expect them to rectify the mistake. We expect them to maybe in some cases we expect some form of compensation. But any form of compensation has to be on a negotiation face to face or directly because there is always a force majeure situation, often where a ship has been late or a plane is late, it’s outside of their control or something that has happened that the part from the supplier has done something. Often it is force majeure or they can claim force majeure, so often you have to work any form of compensation, consequential costs have to be done face to face or directly. *(Participant 38, Corporate, Operational)*

Additionally, participants detailed how compensatory satisfaction can be realised over time, or long term, rather than simply in the short term:

> They could just wash it all away and they don’t really care, but the guy did stand up and say well yes, we’ve got a problem and he couldn’t refund me, he couldn’t replace the stock all in one complete shipment but he offered to do 50% reduction in price on the next container and then the next container after that to recompense us. *(Participant 1, SME, Executive)*
So, a good supplier, a good one that we would then continue to do business with long term would say look we have caused you a lot of damage here and then we would come to some mutual agreement. They might say that we give you a discount, 10-15% parts for the next ten years. It might not be cash out. It will be an agreement which does the same thing, for example reduction of production costs or whatever.  
(Participant 38, Corporate, Operational)

4.4.2.2 Relational Satisfaction

Relational satisfaction was described by participants through both procedural elements, such as engagement with the wider team on designing and deploying a reparative solution, as well as attitudinal and behavioural elements such as listening and demonstrating motivation in developing a solution:

So got the team engaged, made them really important, over-communicated, got the dealers to realise that they were the biggest catalyst to rebuilding trust through their relationship, helped them go back to analogue in terms of dealing with customers and getting that real simple form of communication that expresses the gift of time and so what happened is our top line sales plateaued, pulled all advertising...let’s pull it, pulled everything and staff satisfaction went like that [pointing “up”], staff engagement went like that [pointing “up”], customer satisfaction went like that [pointing “up”]. We won the Roy Morgan Customer Satisfaction award in the middle of the crisis for our category. Dealer engagement went up, dealer profitability increased, customer loyalty increased and our sales plateaued but I guess our market share plateaued but the value of that share increased. (Participant 22, Corporate, Executive)

I just said to (name redacted) our strategist I said if they don’t pump me up, if they don’t get me excited I am just going to be slashing my wrists by the end of these two (meetings). So, it is important you know. You want to feel like people are hungry as well that they want to have a relationship that it is just not just we have got to do this. (Participant 4, Corporate, Executive)
4.4.2.3 Solution Performance

Participants described solution performance as consisting of actual delivery of the reparative solution as well as following through on promises of a multi-level remediation of the problem. Similarly, participants described a satisfactory solution performance as involving a measure of simplicity to develop and deploy, whilst adhering to objective standards and guidelines:

*A lot of it for us is about delivery promise, because you are really only as good as your last order and a big part of that satisfaction comes from we delivered what we said we would and we delivered it in a timeframe at the price that we said we would. (Participant 20, SME, Operational)*

*They don’t run from it. It’s not, I’ve passed it on to the public relations department and they’ll get back to you shortly but no, the person we deal with will take it away and will come back with an answer and send you an article. Whether that satisfies the person’s needs or not the answer, but they get an answer and we get an answer. (Participant 40, SME, Executive)*

*The second piece of it is the experience once you know what experience you actually have once you start interacting with that business and it is what I call the say do ratio, they said they were going to do this, what did they do I think is critical. Like any individual relationship if there is a gap there then trust will dissipate really quickly. (Participant 5, Corporate, Executive)*

Furthermore, participants described a distinction between acknowledging and assigning culpability for an issue when seeking to develop a specific and comprehensive reparative solution:

*So, if they are willing to own them, solve the problem come up with a solution than that is key. I don’t want to be solving the problem for the mistake that they have made or them denying that there is a mistake or blaming it on you and all that sort of stuff. So that is what really impresses me is that mistakes get made but they own the mistakes and come up with solutions. (Participant 19, Corporate, Operational)*

*If the supplier is poor often we will see with suppliers who aren’t particularly up to scratch they will just say something like oh the operator made a mistake. That is just completely unacceptable. We need some fool proof or some mechanisms to ensure*
that whether it’s tools or gauges or testers or whatever, to make sure it doesn’t happen again. We don’t expect just to say it’s the operator you know. (Participant 38, Corporate, Operational)

4.4.2.4 Solution Consistency

Solution consistency, encompassing product and delivery consistency as well as consistency in supplier-side service personnel, is described as contributing to trust recovery. Product consistency denotes a consistency in the product characteristics of the final reparative solution, delivery consistency alludes to a dependability of delivery of the reparative solution and consistency in people is in reference to the institutional knowledge of the issue or reparative solution that is embodied in the buyer organisation service personnel:

If anything, it strengthens because you have more faith. Sorry, there’s two aspects to it. You have more faith that when things happen in the future that you’ve got the relationship and the way of working to be able to deal with it. And secondly, it’s just part of, it’s part of the game when sourcing from China or any other country for that matter. ____ happens and it happens a lot. And part of our role is just resolving issues. (Participant 24, Corporate, Executive)

And that consistency of delivery. There hasn’t been any change of people. They have always been the same one and then the same two. (Participant 26, Corporate, Executive)

Buyers described the consistency of people as important to recovering trust after a service failure. Inherent to this concern is the notion that reparative processes would need to be reinitiated if institutional knowledge was lost due to high supplier organisation employee turnover:

So, we met with them and said why has this happened and that and it was the changing of the guard and it was that whole institutional knowledge that hadn’t been passed to the new people. And so there is a young operations manager, she would have only been about 23 or 24 but she was very good and she drilled into the problem, she set up a mitigating so that it didn’t happen again and they bring staff on now on a public holiday to make sure that they are compounding that chemotherapy to be able to get that extra load delivered, because they are not just
our DHB, they are doing it for all metro. It’s a big issue if they can’t get us that drug.  

(Participant 8, Corporate, Operational)

We are sharing resource with one other customer but generally we get a very good response. So, we get very good response to inquiries. The key things we are looking for now, day to day, operationally, is a strong relationship with those key people. They also don’t have a high turnover, so there is not a high change of people. In the four years we have been doing business there has only been a couple of changes. That is very important. Especially in a long growth business like us, we are not changing things a lot and we are looking at our horizons of four, five, ten years. If they are changing staff all the time it would be a big problem. So, stability of their team.  

(Participant 38, Corporate, Operational)

4.4.3 Communication Characteristics and Content Contributing to Trust Recovery

Buyers conveyed the characteristics and content of communication that contributed to recovering trust between the buying and supplier organisations. The most significant number of quotes (126) relate to the value buyers attribute to suppliers’ communication content, style and efforts when designing and deploying the final, reparative solution. These codes are categorised into eight sub-themes: pre-emptive communication; demonstrating open interactions; turnaround and timeliness; personal interactions and activities; communication style; communication content; signalling sincerity and acknowledgement; and demonstrating availability and alternatives. The eight sub-themes comprise the “Communication” theme (Table 4.6). Each of the communication sub-themes are explained in the following sections.
<table>
<thead>
<tr>
<th>Sub-Theme</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-emptive Communication</td>
<td>Pre-emptive</td>
<td>Communicating before a problem either becomes an issue with a buyer or before a buyer is aware of a problem.</td>
</tr>
<tr>
<td></td>
<td>Foresight</td>
<td>Actively forecasting potential problems, such as lead times due to supply chain issues, and communicating with buyers accordingly.</td>
</tr>
<tr>
<td>Demonstrating Open Interaction</td>
<td>Information Sharing</td>
<td>Sharing information on issues, opportunities or innovations, including reparative processes and outcomes across different levels of the buyer and supplier organisation.</td>
</tr>
<tr>
<td></td>
<td>Transparency</td>
<td>Open communication between all representative parties on both buyer and supplier-side.</td>
</tr>
<tr>
<td></td>
<td>Honesty</td>
<td>Demonstrating truthful and straightforward conduct in sincere communication.</td>
</tr>
<tr>
<td></td>
<td>Constructive Critique</td>
<td>The process of offering valid and well-reasoned opinions about the work of others, usually involving both positive and negative comments, in a friendly manner rather than an oppositional one.</td>
</tr>
<tr>
<td>Turnaround &amp; Timeliness</td>
<td>Timely</td>
<td>Communicating in a timely manner, allowing a buyer time to react to an issue affecting their own downstream processes or customers.</td>
</tr>
<tr>
<td></td>
<td>Responsive</td>
<td>Responding to communications or queries in a reasonably responsive manner with good turnaround.</td>
</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>Communicating frequently and regularly through a series of scheduled communication means such as meetings.</td>
</tr>
<tr>
<td>Personal Interactions &amp; Activities</td>
<td>Personal Contact</td>
<td>Having a personal, and sometimes exclusive, point of contact of whom serves as a key enabler of the solution.</td>
</tr>
<tr>
<td></td>
<td>Dialogue</td>
<td>Initiating and engaging-in two-way communication with the buyer; iterative and dialogical.</td>
</tr>
<tr>
<td></td>
<td>Face-to-Face</td>
<td>Engaging-in face-to-face communications, in person, as opposed to digital interactions.</td>
</tr>
<tr>
<td></td>
<td>Rapport</td>
<td>Initiating and engaging-in rapport-building activities such as extracurricular activities for the sake of the relationship development or repair.</td>
</tr>
<tr>
<td>Communication Style</td>
<td>Personable</td>
<td>Engaging in communications in an agreeable or pleasing manner; affable and amiable in nature.</td>
</tr>
<tr>
<td></td>
<td>Cultural Fit</td>
<td>Demonstrating a communication style that is appropriate to that of the buyer organisations’ culture and organisational norms.</td>
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</tbody>
</table>

*Table 4.6: Sub-Themes & Codes Representative of the Communication Theme*
<table>
<thead>
<tr>
<th>Sub-Theme</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication Content</strong></td>
<td>Detail</td>
<td>The level of objective detail, such as a break-down of invoices into more granular line items, relative to face-to-face and electronic communications.</td>
</tr>
<tr>
<td></td>
<td>Clarity</td>
<td>The level of coherence, or intelligibility, of communications in the use of appropriate language or vernacular. Appropriate explanation of topic being communicating.</td>
</tr>
<tr>
<td></td>
<td>Feedback</td>
<td>The level of feedback, discussion and post-communicative follow-up, such as meeting notes or minutes, in order facilitate understanding and action.</td>
</tr>
<tr>
<td><strong>Signalling Sincerity &amp; Acknowledgement</strong></td>
<td>Contrition</td>
<td>The act of acknowledging an issue and accepting responsibility, where appropriate, for both the service failure and recovery; owning-up to the issue; acquiescence.</td>
</tr>
<tr>
<td></td>
<td>Authenticity</td>
<td>The absence of pretence, deceit or hypocrisy in communications; acting and communicating in good faith.</td>
</tr>
<tr>
<td><strong>Demonstrating Availability &amp; Alternatives</strong></td>
<td>Multiple Channels</td>
<td>Demonstrating availability via multiple means of communication, such as phone, email, video conferencing with the supplier-side agent.</td>
</tr>
<tr>
<td></td>
<td>Wider Network Support</td>
<td>Actively establishing more than one means of communication with the supplier organisation, such as backup personnel, as well as different levels of organisational contact for escalation of issues.</td>
</tr>
</tbody>
</table>

**Table 4.6: Sub-Themes & Codes Representative of the Communication Theme, Continued**

**4.4.3.1 Pre-emptive Communication**

Buyers describe pre-emptive communication as contributing to trust recovery following service failure. Fundamental to this type of communication is the active initiation of communication prior to an issue occurring or being realised by the buyer, or the active forecasting and communication of an upstream supply chain issue that will affect the buyer organisation:

> We had an issue a few years ago, we’d been 12 years sourcing the product from them, had an issue with the quality of the delivery we never ever knew about. Out of the blue I go an email from the then owner of the company telling us that this batch had to be withdrawn from the market immediately, that they’d found a quality issue and that they were reiterating immediately replacement stock. To me that just spoke volumes of their integrity that they had the foresight and the honesty to face up to
the issue. We didn’t even know we had a problem; the product wasn’t failing. We had no issue with the customers that were using the product. It was just a complete out of the blue so that’s always endeared me to that company. (Participant 1, SME, Executive)

We always tell our suppliers let us know as soon as you know because then we can help you to deal with it right? But still you have suppliers who will not actually communicate that evenly and that well and you have certain disconnects but it happens as long as they learn from that aspect it is fine and we will continue to do business. (Participant 3, Corporate, Executive)

I think they potentially will give us a heads up if there is something maybe going to change within the market, so we will get word of that first, because we’ve got a lot of back office systems or online booking tools or things that we may need to adapt or change, so it’s actually giving us that heads up. (Participant 13, Corporate, Operational)

4.4.3.2 Demonstrating Open Interaction

Participants described demonstrations of open interaction by the supplying organisation as a factor contributing to trust recovery. Open interaction is exhibited by the sharing of information, opportunities or innovations in a transparent, honest and constructive manner across organisational levels:

And I think what it does is it means you are sharing information about your business that you might not normally share. It demonstrates that you have a care for them and that you care about their business enough to tell them and there is also a personal thing that is about me wanting to make sure that you and I have a trusting relationship by me telling you what I think is possibly coming down so you can manage it well before it turns up. And so that kind of no surprise’s thing seems to work quite well and you often hear people say I’ve got a heads up on something and it didn’t play out the way it is but I was really appreciative that someone cared enough to give me a call. (Participant 10, Corporate, Executive)

When it’s an environment where it’s relatively low trust then both parties tend to be much opaquer with what they are handing over and you become much less able to have open and honest conversations because you are not quite sure whether they are going to lead. It’s quite hard to go from having a relationship of low trust relationship of high trust if all those behaviours are already in place because from get go it
doesn’t feel like it is going to be a partnership that works. *(Participant 10, Corporate, Executive)*

This sentiment extends into a demonstration of open interaction relative to upstream supply chain issues that may serve to impact the buying organisation, not just the focal supplying organisation:

*Most people in manufacturing realise that ___ happens. As long as you, you know I’ve got a machine down at the moment and you know it’s going to happen to them at some stage is how they react. Had it carried on and they established another supplier I suppose that supply chain may have been at risk but from what I saw they kept them informed.* *(Participant 40, SME, Executive)*

### 4.4.3.3 Turnaround and Timeliness

The critical importance of timely, responsive and frequent communication was described by participants as contributing to the recovery of trust. These distinct characteristics, and processes, of communication serve to elicit higher levels of trust recovery following a service failure, particularly when the breach is of a critical nature:

*I had a question, sent it, flicked it through, picked up the phone and spoke to the guy there and within there was an answer within minutes and the answer that he gave was so good, it was almost like magic. It was really, really good. I’ve got a very positive impression of those guys. So being responsive is a really important part of it. If it takes a wee bit of time for a question to be answered that’s okay. If you’ve got something on you mind and you want an answer, you kind of want an answer now right, don’t want to wait for it.* *(Participant 21, SME, Executive)*

*So, I said to this guy before we do anything mate we’ve got to go inside out. My team and the five or six or seven hundred people that represent this business in this country, step one is restoring their faith in the business and the brand and how we’re going to do that is we’re going to communicate to them frequently and openly and honestly because that will equal authenticity.* *(Participant 22, Corporate, Executive)*

*So, we meet with the suppliers every couple of months. They come and they give us a breakdown. They provide full issues of quality issues, any issues relating to the last three months of supply to customers. So, we sit around the table for an hour and we*
discuss how the contract has gone and what challenges and what we need to improve and it generally works very well. (Participant 7, Corporate, Operational)

4.4.3.4 Personal Interactions and Activities

The personal, interactive and iterative nature and means of communication was expressed by participants as critical to recovering trust. In particular, the importance of face-to-face interactions and rapport-building activities are described as serving to elicit a more trusting disposition toward supplying organisations following service failure:

I think if it wasn’t for again having a good rep and a good sales person I would just become another person in the wash, even though I think I spend a fair bit each month. I know I am only small compared to some of the people out there. I think it’s a pretty good two-way relationship in the tier I’m in. (Participant 39, SME, Executive)

I think possibly listening to what we have to say, so for instance I guess initially in conversations they started by email and then meetings and then video conference as well, it’s all about listening to what we think is important. (Participant 23, Corporate, Operational)

So that includes him taking me out for lunch, talking about what they can do better for us and what areas they can improve in and if we are happy with their service and yeah over the three years it’s grown to a closer relationship, like personal relationship as well as a business relationship with him. (Participant 6, SME, Executive)

Participants also spoke at length about the importance of face-to-face, in-person communication and the need for proximity when seeking to recover trust:

Face to face is important. It becomes more and more difficult as even a Skype conversation is not yeah, it’s not the real thing because we as human beings, we are hard-wired in our brain, as you well know, for this interaction yeah. So, we need to read the body language. We need to have a look at the bigger picture. (Participant 29, SME, Executive)

Again, back to my word that I have been using several times, it’s having a face, not sitting behind an email. My strongest relationships are based on account managers that come out and see me. And from a sales point of view surely, they get more sales
done from coming to see me and me order on the spot than they do by being quite faceless behind a computer. Like, sending me a spreadsheet saying would you like to do an order, it’s quite different to coming out and seeing me. I work in retail and like retailers are surely, because they are so short staffed, have got to be the busiest people. I order on the spot all the time. And so, the question was, what is the most important thing? Having a face.  

(Participant 34, SME, Executive)

4.4.3.5 Communication Style

When considering the style that best serves the recovery of trust after a service failure, participants describe the nature of the communication as being representative of an affable and amiable nature. Additionally, participants described the tone, composition and manner of appropriate communication as representing a cultural and organisational fit:

Most people accept a reasonable explanation. So, it does boil back a lot to the communication connection that you have with people and if you are not kind of screaming and yelling down the phone every five minutes about every little thing that has gone on wrong, then that invites honest communication as well. We are really sorry. We had this in the yard. It was on the system like this and I do this myself sometimes as a supplier. We go out and there is one in the system. It’s not on the shelf. I then have to say sorry, we screwed up, we made a mistake, it’s not real. And for us it’s about communication and the way we communicate and the honesty in which ... it’s pretty critical to the service aspect of our business because without it people will go elsewhere.  

(Participant 20, SME, Operational)

I had a contractor that would swear at and abuse us and he was one of these ones that had been there for a long time and did a reasonably good job but if you tried to question anything he would just tell you to ____ off and so you were quite anxious when you had to deal with him. And so, he went off at me this one day and this is like non-stop swearing for like five minutes. And so, I spoke to my boss about it and actually ended up putting something in writing, a sort of a complaint to say this is not okay and this is in breach of their contract or whatever and I felt like that contractor should have had some consequences, whatever they might be.  

(Participant 19, Corporate, Operational)
4.4.3.6 Communication Content

Participants expressed the objective content contained within post service failure communications as contributing to trust recovery. As well as other attitudinal or behavioural aspects of communication, the objective detail, coherence or intelligibility and functional feedback loops developed to ensure understanding of communications all promote trust recovery:

Eventually we get the answer but when it comes to the work being done, no problem with that but sometimes there are issues with supplying invoices or breaking down details or getting quotes and things like that maybe if they had a mechanism whereby they could generate responses quicker and again communication but because they’re doing so well on the floor itself we’re able to overlook some of that and bear with them until they get that result. (Participant 16, SME, Operational)

Not if they have explained the situation. As we know, a lot of things are out of your control. You are relying on four or five different steps along the way, so anything can go wrong. It goes back to the old communication, if they let you know ... I’m sure there has been things where things haven’t been delivered and we couldn’t do a job and so we have told the customer, sorry. But they will explain it. (Participant 35, Corporate, Operational)

Participants also reported that ongoing, purposive communication can serve to forewarn the buying organisation of any potential issues in the future and is best served with scheduled, formalised meetings and interactions:

So, we meet with the suppliers every couple of months. They come and they give us a breakdown. They provide full issues of quality issues, any issues relating to the last three months of supply to customers. So, we sit around the table for an hour and we discuss how the contract has gone and what challenges and what we need to improve and it generally works very well. (Participant 7, Corporate, Operational)

So, they need to work with us, but also, they might have hidden it previously and then just gone oh here it is and then we’ve got to scramble, whereas now they probably give us advanced notice and I think at a higher level than me they meet regularly, probably on a quarterly basis as well to discuss strategies and initiatives and what may be coming up. (Participant 3, Corporate, Executive)
4.3.7 Signalling Sincerity and Acknowledgement

The undertaking of acceptance, or acquiescence, in communication was expressed by participants as important when seeking to recover trust with the buying organisation. A genuine, authentic signalling of the acknowledgement of an issue in an open and good-faith fashion are described as contributing to recovering trust:

Some people don’t want to hear apologies. They just want it to be right. But for me it goes a long way, for me if a supplier just says sorry, I screwed up, let me fix it and I go okay, that’s fine. I can live with an honest apology every day of the week because it’s just that is just human. (Participant 20, SME, Operational)

Honesty really, I suppose. If they do make a mistake put their hand up. They are not going to get crucified over it. Being honest about making mistakes and that’s what we try to do as a business as well. If we do make a mistake we put our hand up and say yes, we have done that and that does build trust very quickly. At the end of the day we are all human. We all make mistakes. Doesn’t matter what you do. That is probably the biggest thing. (Participant 11, SME, Executive)

4.3.8 Demonstrating Availability and Alternatives

Participants described the availability of means, or mechanisms, of communication, both online and offline, as contributing to trust recovery following service failure. Additionally, participants expressed the necessity of more than one means of contact, point of contact and level of contact with the supplier organisation:

Communication is so important. You can’t afford to do it mono dimensionally. You have to be prepared ... like we talked about before, you have to be prepared to jump on a Skype meeting if required or jump on the conference call or use a new system to be able to communicate, and so having an openness to not being afraid of the technology is a pretty big thing in communication. (Participant 20, SME, Operational)

So, I think we have different channels. We have email, we have a mobile. I got the managers details if I need to talk to, which is a rarity, but yeah so, we’ve got different options, different escalation points for not getting what we need from them. (Participant 30, Corporate, Operational)
I guess for me as a person once we have crossed our T’s and dotted our I’s, we’ve done this, let’s start afresh or start moving forward so that everything is all kosher. She kind of understands. If she is not available she has a 2IC that monitors her Inbox as well. I think on the flipside the result of the situation enabled her to better provide a support network for her account that she looks after too as well. *(Participant 30, Corporate, Operational)*

### 4.4.4 Demonstrating and Institutionalising Integrity as Contributing to Trust Recovery

Buyers conveyed the importance of demonstrations of integrity when seeking to recover trust between buying and supplier organisations. Additionally, buyers expressed the significance of operationalising, or institutionalising, these undertakings of integrity in procedural practice. A considerable number of quotes (64) relate to the value buyers attribute to suppliers’ integrity when designing and deploying the final, reparative solution. These codes are categorised into five sub-themes: displaying honesty, truthfulness and empathy; signalling open and accepting behaviour; establishing corporate ethics and values; demonstrating commitment and consistency; and procedural and institutional fairness and equity. The five sub-themes comprise the “Integrity” theme (Table 4.7). Each of the integrity sub-themes are explained in the following sections.
<table>
<thead>
<tr>
<th>Sub-Theme</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Displaying Honesty, Truthfulness and Empathy</strong></td>
<td>Honesty</td>
<td>Demonstrating a moral correctness and lack of ulterior motive in reparative behaviours and methods; lack of deception.</td>
</tr>
<tr>
<td></td>
<td>Accountability</td>
<td>Being accountable-for and taking responsibility-for issues; being willing to answer for the outcomes resulting from organisational behaviours, choices or outcomes.</td>
</tr>
<tr>
<td></td>
<td>Truthfulness</td>
<td>The objective fact of being realistic or true to life; realism in response to an issue. Demonstrating professional candour.</td>
</tr>
<tr>
<td></td>
<td>Genuineness</td>
<td>Demonstrating sincerity and authenticity in response to an issue; signalling empathy.</td>
</tr>
<tr>
<td></td>
<td>Honourable</td>
<td>An unsupervised, or non-formal, arrangement or agreement; handshake agreement.</td>
</tr>
<tr>
<td><strong>Signalling Open and Accepting Behaviour</strong></td>
<td>Forthright</td>
<td>Being direct, clear and non-evasive in response-to or development-of reparative activities.</td>
</tr>
<tr>
<td></td>
<td>Transparent</td>
<td>Demonstrating an obligation to share information with a buyer before, during or after an issue is identified.</td>
</tr>
<tr>
<td></td>
<td>Contrite in Actions</td>
<td>Exhibiting a willingness to accept an issue and take ownership of the response and reparative activities, both with the buyer and downstream customers.</td>
</tr>
<tr>
<td><strong>Establishing Corporate Ethics and Values</strong></td>
<td>Code of Ethics</td>
<td>Exhibiting or developing a form of applied or professional ethics that offers a code of conduct when presented with particular moral or ethical problems arising in business relationships.</td>
</tr>
<tr>
<td></td>
<td>Re-establishing Values</td>
<td>Reiterating both corporate and personal values that serve to demonstrate moral fortitude in business relationships.</td>
</tr>
<tr>
<td></td>
<td>Respectfulness</td>
<td>Demonstrating respect-for a buyer organisation and their respective customers when designing and deploying a reparative activity; professional conduct and courtesy.</td>
</tr>
<tr>
<td><strong>Demonstrating Commitment and Consistency</strong></td>
<td>Commitment</td>
<td>Acting in good faith toward realising a positive reparative response; committing to response and not absconding from responsibility.</td>
</tr>
<tr>
<td></td>
<td>Consistency</td>
<td>Demonstrating a consistency in behaviour before, during and after the service failure; not a “fair-weather” business partner.</td>
</tr>
<tr>
<td><strong>Procedural and Institutional Fairness and Equity</strong></td>
<td>Procedural Fairness</td>
<td>Establishing a reparative mechanism that is fair, impartial and unbiased, such as fair payment terms.</td>
</tr>
<tr>
<td></td>
<td>Equitable</td>
<td>Instituting or demonstrating an equitable reparative response irrespective of market characteristics, such as overseas market membership, staff profile or channel power imbalance between buyer and supplier organisations.</td>
</tr>
</tbody>
</table>

*Table 4.7: Sub-Themes & Codes Representative of the Integrity Theme*
### 4.4.4.1 Displaying Honesty, Truthfulness and Empathy

Participants conveyed the behavioural characteristics signalling integrity as being represented by displays of honesty, truthfulness and empathy. These behavioural aspects are critical in corroborating communications, or interactions, that may otherwise attest-to integrity with tangible outcomes:

They again, they did stand by and replaced the stock completely. They were a bigger company but I think that was more the fact the company was partly Japanese owned, that they had the honourable thing to do to make it right. (Participant 1, SME, Executive)

That trumps everything, integrity, authenticity. As (name omitted) says, people like doing business with people they like, people like people who are authentic, who sort of come across as they are not trying to ________ you, they are not trying to be something they are not. I would say integrity is really, really important, absolutely critical. (Participant 21, SME, Executive)

I think you know people understand that of course there is deliberate trying to take short cuts that go on but I think when you see that there is a genuine, hey we had some subbie that came onto site that day, because they have always got excuses, and they didn’t quite for whatever reason follow the you know and we didn’t mean to do that and we’ll make sure that we’ll work really hard. I think as humans we may sort of apologise for the mistake, then we are okay and we live in hope that it’s going to be better. (Participant 19, Corporate, Operational)

### 4.4.4.2 Signalling Open and Accepting Behaviour

The importance of open and accepting behaviour was expressed by participants as being characterised by a direct, clear and non-evasive approach as well as an obligation to share information with a buyer even in the absence of mandated necessity, such as a contract or governance framework. Additionally, buyers describe a willingness to accept an issue and take ownership developing a reparative solution as contributing to trust recovery:

You’ve just got to be totally honest. The incumbent company here tried to destroy their product, so much so that we couldn’t get stock and they de-blistered products
and sent back and we couldn’t get stock and they dumped it on the market. I was open and showed them what was happening and whatever and they came to the party with an amount of money and I was able to go out into the trade where they had dumped the product and get it back and resurrect the brand and it was a very successful brand but having that sort of support that you can rely on is essential.  

(Participant 17, SME, Executive)

As I was saying to you before, with all relationships they are not always going to be perfect or they are going to have rough weeks or they are going to make mistakes but underlying all of that is that you like that person, they are just trying to do their job, you make mistakes in your own job and you believe in them, yeah, you believe in them to sort of ... you know that they care about doing a good job and so they have just got that credibility and trust, but yeah you’ve got to work through things when they come through. There might be other people you are dealing with in situations where you don’t have that and they do mistakes and you just think I am never going to work with you again. (Participant 19, Corporate, Operational)

We have a very cute caricature on a list of company attributes that sits on the wall. I can show it to you, that basically is a picture of a bull with a little pile on the ground and it says we don’t ________ customers. And so, the reverse is true in the sense that most of the managers in the company have a pretty attuned ________ indictor when they are dealing with suppliers or even when we deal with the parent company.  

(Participant 20, SME, Operational)

4.4.4.3 Establishing Corporate Ethics and Values

The establishment of a set of corporate ethics and values was expressed by participants as the manifestation of deliberations or desires between buying and supplying organisations. This form of applied or professional ethics was described as offering a code of conduct when presented with particular moral or ethical problems as well as a rallying point for re-establishing relational norms. Furthermore, developing relationship tenets, such as professional conduct and courtesy were expressed as contributing to trust recovery:

It’s huge because there are all the clichés about trust around it takes so long to build and it can be disintegrated very quickly. And we almost sign up to almost a sort of code of ethics with them and say this is what we expect from you around honesty and integrity around honest quoting. (Participant 24, Corporate, Executive)
Integrity was something like in our ethical, we have got a whole code of ethics, conduct and stuff that we expect every employee to sit through and understand am I doing the right thing. So, for us I mean we are in healthcare and we are providing equipment so for us integrity is crucial. (Participant 14, Corporate, Executive)

You’ve got to have the same sort of values and ethics when it comes to dealing with consumers and also when it comes to dealing with each other, yeah definitely. If you don’t have the same sort of values towards honesty and integrity then it’s very hard to form a relationship with someone who just values things differently to you. (Participant 34, SME, Executive)

4.4.4.4 Demonstrating Commitment and Consistency

Participants conveyed the importance of commitment, or acting in good faith toward enacting and realising the reparative solution, as contributing to trust recovery following service failure. Moreover, a consistency in this behaviour, over time and beyond the initial signing of a contract, was paramount to recovering trust most effectively:

So, we got some internal repair capability and there were some misunderstandings about when they would get up to a certain level of work. We thought it was straight away and they thought it was building up over time, so when it comes down to it, it’s how that supplier behaves once you’re through the honeymoon period I guess and when there is not a crises, but there is a problem, how do they behave with you then, because quite often what you see is that suppliers are on their best behaviour at the RFP phase because they are trying to win business … so those suppliers that commit to or they stand behind their commitments, that they continue to work with you and be a partner beyond just winning the contract, that’s the ones that you have trust in. (Participant 9, Corporate, Operational)

So yeah there are contractors where you feel like they are variation hungry or greedy so they are just always coming back for extras financially. And so that can become a negative factor in you not wanting to continue dealing with them in the past. Say you have a one off contract with (company omitted) or something and that contract lasts for three months and then they are building something or delivering something and then that whole time and you just feel like they are just in it to make money, they are being difficult to deal with, they are taking up a lot of my time to manage them so you know I wouldn’t deal with them again. (Participant 19, Corporate, Operational)
4.4.4.5 Procedural and Institutional Fairness and Equity

The enacting of an equitable reparative response that is fair, impartial and unbiased was described by participants as contributing to trust recovery following service failure. Participants also expressed that any genuinely equitable reparative response should be instituted irrespective of marketplace norms or channel power imbalance between affected organisations:

*Again, I think it does provide some benchmarks in terms of what we feel is good behaviour and appropriate but to be honest we would probably more provide, the benchmarks we use would be our own benchmarks that we would have with our own clients. We have built up a massive commercial base of in our B2B world what is appropriate what is inappropriate what is reasonable what is not reasonable in terms of the way you interact within B2B (relationships) and so we would take that back to our suppliers as well. So, we are not a company or person that would say for example require different payment terms that what we are prepared to sign up for ourselves.* *(Participant 5, Corporate, Executive)*

*So, it’s really important that we’ve got a high level of integrity and that includes give and take. That includes saying okay well can you give me a cheaper price here if I take a dearer price over here and I will pay more, whereas the typical line from businesses is lowest possible cost. I am not going to pay a cent more than I have to but we will work with you in that way, integrity from the point of view of commitments and orders.* *(Participant 24, Corporate, Executive)*

4.4.5 Demonstrations of Benevolence as Contributing to Trust Recovery

Buyers describe the importance of demonstrations of benevolence by the supplying activities organisation when seeking to recover trust with buying organisations. Participants describe both indirect and direct situations where acts of benevolence have resulted in the recovery of trust after a service failure. A moderate number of quotes (36) relate to the value buyers attribute to suppliers’ benevolence when designing and deploying the final, reparative solution. These codes are categorised into five sub-themes: representative types of benevolence; exhibiting genuine sentiment; representing courtesy and care;
experiencing sacrifice and concession; and establishing connections. The five sub-themes comprise the “Benevolence” theme (Table 4.8). Each of the benevolence sub-themes are explained in the following sections.

<table>
<thead>
<tr>
<th>Sub-Theme</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Representative Types of Benevolence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect</td>
<td></td>
<td>Demonstrating a benevolent disposition in a way that indirectly benefits the business relationship, such as gratuities and small perks.</td>
</tr>
<tr>
<td>Direct</td>
<td></td>
<td>Demonstrating a benevolent disposition in a way that directly and objectively benefits business outcomes, such as expedited shipping.</td>
</tr>
<tr>
<td><strong>Exhibiting Genuine Sentiment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authentic</td>
<td></td>
<td>Activities or behaviours that are not contrived or purposefully attention-getting; unseen, unannounced or unobserved to those outside of sphere of relationship.</td>
</tr>
<tr>
<td>Unrequited</td>
<td></td>
<td>Activities or behaviours from which there is no expectation of reciprocity from the buyer; no expectation of future favour.</td>
</tr>
<tr>
<td>Informal</td>
<td></td>
<td>Activities or behaviours that are outside of formal consideration; agile and unofficial in nature.</td>
</tr>
<tr>
<td><strong>Representing Courtesy and Care</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consideration</td>
<td></td>
<td>Considering the wider network of impact to that of the buyer’s customers and stakeholders of a potential issue or reparative activity; thoughtfulness.</td>
</tr>
<tr>
<td>Concern</td>
<td></td>
<td>Exhibiting care or concern for the wider network of impact to that of the buyer’s customers and stakeholders of a current issue or reparative activity.</td>
</tr>
<tr>
<td><strong>Experiencing Sacrifice and Concession</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extra-curricular</td>
<td></td>
<td>Activities or behaviours that are outside of the expected concessions or reparative demands of a contract or other governance mechanism; out of the ordinary.</td>
</tr>
<tr>
<td>Generous</td>
<td></td>
<td>Activities or behaviours that are considered above-and-beyond the bare minimum, or expected, requirements; going the extra mile in cooperation on other peripheral costs or activities.</td>
</tr>
<tr>
<td>Sacrificial</td>
<td></td>
<td>Activities or behaviours that represent an economic cost to the supplier organisation.</td>
</tr>
<tr>
<td><strong>Establishing Connections</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sociable &amp; Personable</td>
<td></td>
<td>Engaging in interpersonal activities and interactions that serve to encourage personal connections between organisations.</td>
</tr>
<tr>
<td>Involvement &amp; Alignment</td>
<td></td>
<td>Engaging in interorganisational activities and interactions that serve to align the buyer and supplier organisations’ goals and shared community.</td>
</tr>
</tbody>
</table>

*Table 4.8: Sub-Themes & Codes Representative of the Benevolence Theme*
4.4.5.1 Representative Types of Benevolence

Participants described two types of representative act of benevolence as demonstrated by the supplying organisation; indirect and direct. Indirect benevolence is described as those acts that indirectly benefit the business relationship, such as gratuities or perks, and direct benevolence is described as those acts that objectively benefit the business, such as airfreighting late stock. Participants also describe the interplay between the two types of benevolence:

*So, we do get value out of suppliers that is not strictly what they are contracted or committed to do, but actually is some of the stuff that they are willing to do that works for us and works for them. And I guess that means that the partnership is much more wedded together than it might be if they weren’t doing those things.*  
*(Participant 10, Corporate, Executive)*

*And anyway, it got escalated to the guy that owns the business and he came in and visited us and he bought us both my boss and I some beautiful venison salami that was home farmed from his own venison and it was amazing but he brought this in as a personal apology and he was really sorry and it is interesting because that stuff sticks with you. But we gave them another chance.*  
*(Participant 14, Corporate, Executive)*

*So, in some cases we’ll go we want you to airfreight the product. Now the cost of that is literally ten times what it costs to sea freight. Very, very expensive. Now they could go oh it’s not our fault, so sorry. But on occasions they have said okay. We are now not going to make any money on that order from you but we know we are going to get other orders from you and we know it’s going to help the relationship and we know it’s for a very important launch or whatever it might be so we will airfreight it to you at our cost and we’ll send it.*  
*(Participant 24, Corporate, Executive)*

4.4.5.2 Exhibiting Genuine Sentiment

Participants reflected on the activities and behaviours that best represent benevolence from the supplying organisation. The responses suggest genuinely benevolent sentiment is composed of authentic, unrequited and informal acts:
Yeah, oh no, we’ll drop that around, or if you have a job that has gone horrible wrong, a couple of times they would come to the party and supply us with some product, not our fault or their fault, but they have just jumped in to help us out, like you would with a good client, you know. I mean we do it to our good clients, if they get in the ____ we just help them out. We won’t charge them half the time. (Participant 36, SME, Executive)

And they notified us that we were out of machines. And I spoke to the regional manager in Australia and we came to an agreement where they would continue to supply these machines, again on a goodwill basis until we got the extension of the contract. And that is quite a commitment. (Participant 7, Corporate, Operational)

Because they do stuff off their own bat that isn’t overt and wasn’t part of the original relationship but it’s just stuff that they do because of the nature of who they are. And sometimes that’s stuff that doesn’t have commercial value attached to it but it has a whole lot of other value attached to it, but unless you are writing it down and really clear about what it is, you kind of miss it a bit. (Participant 10, Corporate, Executive)

4.4.5.3 Representing Courtesy and Care

The importance of both thoughtful consideration for the wider network of impact of a service failure as well as a care or concern for those network members is central to representations of courtesy and care by the supplying organisation when seeking to recover trust. Buyers suggest that reparative solutions need to be sensitive to their wider impact – both upstream and downstream – whilst demonstrating courtesy and care:

So, if people understand that we’ve got to go the extra mile, that customer experience is at the heart of everything we do, we need our dealer network to be profitable and that our purpose is that our stakeholders are profitable then of course you’ve got to go the extra mile. (Participant 20, SME, Operational)

I think that is really helpful in maintaining that integrity on the floor for work for them as well because if they see that their client is in trouble because of them, they are willing to fix it even though it was beyond what the contract states, I think that shows that they are willing to go to any extent to help their (downstream) customers, which is important. (Participant 32, SME, Executive)
This supplier actually travelled to Hamilton and slept you know near the property so they could finish the job, Auckland based but just went out of their way to do something special to finish the job quicker and minimise the cost of it. That’s what we like about them, nothing is a problem, not to say they are faultless. We do at times have to chase them for things but it’s certainly I think a mutually beneficial relationship. (Participant 16, SME, Operational)

4.4.5.4 Experiencing Sacrifice and Concession

Participants described benevolent reparative actions as being representative of activities or behaviours that were outside of what governance frameworks, such as contracts, prescribed. Additionally, buyers indicated that a genuinely benevolent act must be sacrificial in nature and, quite often, is considered quite generous by the buying organisation:

It very much does boil down to those extra relational things. I don’t think there is ever much in the contract. It’s the people whom recognise the relationship is important, that it’s two-way. (Participant 20, SME, Operational)

It’s like you tell them you’ve got a problem so we want to grow, develop a new product say or a new service and they will say ... and you just might mention it to them and then next thing a whole lot of research arrives about that product and how it works internationally etc. and you think _____, I didn’t ask for all that. But that’s good, but then it’s a little bit peripheral, it’s not the core thing. (Participant 33, SME, Executive)

4.4.5.5 Establishing Connections

Establishing or encouraging the development of interorganisational social activities and interactions was described by participants as an important recalibrating exercise when seeking to recover trust following a service failure. Buyers also describe these activities as serving to further engender involvement and alignment between the organisations and a feeling of shared community:
They just come around for a chat and just to hang out and be sociable, whereas as I said with the other merchants that are out there, they are just too big and corporate... but it just goes to show that they, no matter if you are small or large, they pretty much try to take care of you no matter what. *(Participant 12, SME, Operational)*

*What we do expect them to do is a few things around how they, what they can do better is how they can impact the community that they actually do business with them so we have lots of things we do with hospitals, with groups we actually try and get a lot more involvement so one thing we could do more is our suppliers could actually do a little more of community involvement that we don’t see that often for the moment.* *(Participant 13, Corporate, Operational)*

### 4.4.6 Establishing and Exhibiting Shared Values as Contributing to Trust Recovery

Buyers described the importance of the supplying organisation’s activities toward establishing and exhibiting shared values when seeking to recover trust following service failure. Participants describe both commercially and non-commercially-focused values that can serve as a means to govern interorganisational structures, processes and conduct. This ecosystem of values is expressed, both focally within the buyer-supplier relationship and externally within the wider network of community and context, as a set of pragmatic values-based objectives. A moderate number of quotes (44) relate to the value buyers attribute to suppliers’ shared values when designing and deploying the final, reparative solution. These codes are categorised into five sub-themes: demonstrating community and communal values; reiterating customer centricity; developing, deploying and delineating values; establishing an ecosystem of values; and creating pragmatic values-based objectives. The five sub-themes comprise the “Shared Values” theme (Table 4.9). Each of the shared values sub-themes are explained in the following sections.
<table>
<thead>
<tr>
<th>Sub-Theme</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demonstrating Community and Communal Values</strong></td>
<td>Non-Commercial</td>
<td>Demonstrating or signifying values that fall outside of the scope of business activities or undertakings.</td>
</tr>
<tr>
<td>Community</td>
<td></td>
<td>Demonstrating or signifying values that are community-based to the buyer organisation and are a sign of community involvement and investment.</td>
</tr>
<tr>
<td>Interpersonal &amp; Experiential</td>
<td></td>
<td>Referring to the personal attributes of the supplier organisation personnel; likability and congeniality in their interactions.</td>
</tr>
<tr>
<td><strong>Reiterating Customer Centricity</strong></td>
<td>Customer Reorientation</td>
<td>Demonstrating a focus, or refocus, on customer or buyer-centred values, principles or beliefs.</td>
</tr>
<tr>
<td>Aligning Passions</td>
<td></td>
<td>Demonstrating an alignment, or realignment, to higher-order values such as altruism or motivations for improving customer outcomes.</td>
</tr>
<tr>
<td><strong>Developing, Deploying and Prioritising Values</strong></td>
<td>Community Code of Conduct</td>
<td>A set of rules outlining social norms, business practice and roles and responsibilities with the wider community as the focal context. Alludes to higher-order practice such as treatment of the environment and employees.</td>
</tr>
<tr>
<td>Values-Based Governance</td>
<td></td>
<td>A set of structures and processes that are designed to ensure accountability and responsiveness based on shared values between organisations.</td>
</tr>
<tr>
<td>Prioritising Values</td>
<td></td>
<td>The process of determining the order for dealing with customer or market considerations according to their relative importance; core values, such as safety, subsuming peripheral values, such as increased margin.</td>
</tr>
<tr>
<td><strong>Establishing an Ecosystem of Values</strong></td>
<td>Culture and Commonality</td>
<td>Demonstrating an alignment and reiterating commonality and similarity in organisational culture; cultural fit between organisations.</td>
</tr>
<tr>
<td>Business Boundaries</td>
<td></td>
<td>Demonstrating values and attributes that serve to create business and decision-making boundaries between organisations, even if subscribing to them results in an objective loss.</td>
</tr>
<tr>
<td>Diffusion of Values</td>
<td></td>
<td>Considering the wider network within which the supplier organisation operates and the ethics and values represented throughout.</td>
</tr>
</tbody>
</table>

*Table 4.9: Sub-Themes & Codes Representative of the Shared Values Theme*
<table>
<thead>
<tr>
<th>Sub-Theme</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Creating Pragmatic Values-Based Objectives</strong></td>
<td>Work Ethic</td>
<td>Signifying roles, responsibilities and a set of values centered on the importance of the virtue and value of the outcome of the business relationship.</td>
</tr>
<tr>
<td></td>
<td>Definitive and Guiding</td>
<td>Developing and deploying specific, guiding principles and feedback mechanisms that are borne out of values inherent within the organisations.</td>
</tr>
<tr>
<td></td>
<td>Long-term View</td>
<td>Demonstrating a long-term view of the business relationship and the values representative of a deeply embedded and enmeshed partnership; future ambition for the relationship.</td>
</tr>
</tbody>
</table>

*Table 4.9: Sub-Themes & Codes Representative of the Shared Values Theme, Continued*

### 4.4.6.1 Demonstrating Community and Communal Values

Actively and authentically demonstrating community and communal values that are shared between the buying and supplying organisations is described as contributing to trust recovery. These expressions of shared values fall outside of objective, business-level values or activities, such as profitability or market share, and include demonstrating or signifying values that are community- or market-minded as well as those interpersonal and experiential dimensions of congeniality and likeability of the supplying organisation and its agents:

*They were easy to deal with. You could call up and we would get really good service. Their product knowledge was really good. The team wasn’t changing often. So yeah it had just a really good culture feel about it and we like to have beers and they would bring beers around and we would talk rubbish. It was a good working relationship really.* *(Participant 36, SME, Executive)*

*We had another time there where again they just emailed out of the blue and said that part of their corporate responsibility was that they donated annually a $US5,000 gift to one of their distributors to be gifted to a charity of their choice. I never knew this existed, it was not something they publicised and they asked me to select a charity that I felt was appropriate which we did. It was the Child Cancer Foundation ... I went down and we had this lady come along representing the Waikato Division of the Child Cancer Foundation. She came along with a little girl that had a terminal brain tumour, and eight or nine-year-old girl and accepted the*
cheque … it was a very dramatic, but again to me just spoke volumes of what that company was about. (Participant 1, SME, Executive)

4.4.6.2 Reiterating Customer Centricity

Participants described how the reiterating downstream customer centricity through a focus, or refocus, on customer or buyer-centred values, principles or beliefs can serve to recover trust following service failure. Buyers also detail how these efforts can achieve a realignment of passions, or higher order values, in the relationship to further engender trust:

So we put customer front and centre but before we did that we put the team front and centre so they were the lifeblood and still are the lifeblood of the business and we gave them something to believe in and forced them to make a decision around do you want to be on this bus or not with (company omitted) it’s going to get tougher before it gets worse and you make a decision. (Participant 22, Corporate, Executive)

It’s when they say they are going to do something and then they don’t do it, you’ve got to chase them and chase them … because most of it, people understand that health care, you know, there is a patient at the end of it. It’s not, you are not supplying a piece of wood for a building. You are supplying health care. (Participant 8, Corporate, Operational)

You have to share, you have to have confidence in a health care facility that your suppliers share your values of patients first and let’s get the business done second. (Participant 7, Corporate, Operational)

4.4.6.3 Developing, Deploying and Prioritising Values

The importance of structural, procedural and prioritising mechanisms when considering the operationalisation of shared values, institutionally, was described by participants as contributing to trust recovery following service failure. Developing a code of conduct based on those shared values and a means of value-based governance and prioritising of those
shared values was articulated by participants as critical to fostering trust between buying and supplying organisations:

So, you’ve got to have this cultural alignment. If you don’t have that it doesn’t matter how good your plan is or your strategy or what you’re going to do, if you don’t have a cultural alignment it won’t work. (Participant 22, Corporate, Executive)

It’s huge because there are all the clichés about trust around it takes so long to build and it can be disintegrated very quickly. And we almost sign up to almost a sort of code of ethics with them and say this is what we expect from you around honesty and integrity around honest quoting. (Participant 24, Corporate, Executive)

So, for us listening is part of that cause someone who fits our culture actually cares because they are aligned deeply with what we are trying to do which is all about care for young people and caring for the environment. (Participant 14, Corporate, Executive)

4.4.6.4 Establishing an Ecosystem of Values

The wider implications of organisational shared values were described by participants as important when considering demonstrations of alignment and commonality that contribute to trust recovery. Additionally, establishing more of a network, or ecosystem, view of shared values serves to create business and decision-making boundaries that diffuse into the wider network within which the buyer and supplier organisations operate:

I see the companies that we have worked with the longest and where the relationship has gone the deepest is where there has been a close personal relationship between people on our side and people on their side and one really important part of that close relationship is it has to be shared values. (Participant 21, SME, Executive)

New Zealand is a village and especially in the industry that we’re in, it’s quite a small industry however partnerships are built through a commonality of purpose and a commonality of values so you can come across someone or some business and if you see that that business shares the same values and beliefs it happens to offer a service or a product, then that’s how you form a relationship. (Participant 22, Corporate, Executive)
I think even now a lot of companies are looking to environmentally friendly companies so of course we would love to choose the company which we know will look after environment and it’s clean and green you know, so for us it is important also to know that the product that we are buying is environmentally friendly. (Participant 31, SME, Executive)

4.4.6.5 Creating Pragmatic Values-Based Objectives

Participants described the specific outcomes, or objectives, that serve to signify subscription to a set of organisational shared values. By developing pragmatic guidelines or mechanisms around how to develop, deploy and recognise these shared values, supplying organisations can recover trust with buying organisations more effectively:

Business like your relationship with your family or your kids or your parents, everything is about a relationship and the guiding principles of a relationship and expectations need to be laid out up front and that’s actually where the most robust relationships actually work is when there’s due respect and there’s a mechanism to give good solid feedback all the time and then over time that’s where in my view trust is built actually. (Participant 22, Corporate, Executive)

I see the passion that she has for what we are trying to achieve that she actually can’t help herself and she kind of goes well I went off and did this little bit extra but that is all because she loves doing it and I think that values and share passion for what we are trying to achieve and the love of our business and what we are trying to achieve because we are saving lives. (Participant 14, Corporate, Executive)

Part of what we are going to go through is ... about trying to be the customer’s champion and explain to them how the customer is at the centre of every decision that we make and we’ve got a little diagram to show that. So, they interact with key functions in our business, sourcing, buying, design and so we are going to illustrate to them this is how our design team works, this is how our sourcing team works. This is how our buying team works and this is how what they do relates to a customer and we want to demonstrate, we don’t want it just to be words to say that customer is important to us, we want to show that we are saying the customer is at the centre of all our decision making and this is how it happens. (Participant 24, Corporate, Executive)
4.4.7 Developing Co-Creation Activities and Outcomes as Contributing to Trust Recovery

Buyers described the importance of the supplying organisation’s activities toward developing co-creation activities and outcomes when seeking to recover trust following service failure. Participants describe the characteristics of a collaborative relationship, including the cross-section of parties best represented in any such activity, and the ability to understand the issue and influences as contributing to trust recovery. Creating the conditions conducive to co-creation as well as practical outcomes of the activity were central to participants reflections. A large number of quotes (50) relate to the value buyers attribute to suppliers’ co-creation activities and outcomes when designing and deploying the final, reparative solution. These codes are categorised into five sub-themes: developing a collaborative partnership; establishing inclusive invitation and participation; demonstrating understanding of problem influences; creating conditions conducive to co-creation; and developing procedural and practical co-creation outcomes. The five sub-themes comprise the “Co-Creation” theme (Table 4.10). Each of the co-creation sub-themes are explained in the following sections.

<table>
<thead>
<tr>
<th>Sub-Theme</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing a Collaborative Partnership</td>
<td>Share Learnings</td>
<td>The active sharing of information, innovations or experience toward developing reparative outcomes.</td>
</tr>
<tr>
<td></td>
<td>Collaborative Restoration</td>
<td>Both buyer and supplier organisation being active members of whom are working together to achieve a common goal; active rather than passive.</td>
</tr>
<tr>
<td></td>
<td>Persistent Partnership</td>
<td>The act of persisting with the design or deployment of a reparative activity or mechanism; perseverance.</td>
</tr>
<tr>
<td></td>
<td>Coaching</td>
<td>A much more intimate and involved process of one-on-one association between buyer and supplier organisational agents to maximise performance; on the job training.</td>
</tr>
</tbody>
</table>

Table 4.10: Sub-Themes & Codes Representative of the Co-Creation Theme
<table>
<thead>
<tr>
<th>Sub-Theme</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishing Inclusive Invitation and Participation</td>
<td>Non-Hierarchical</td>
<td>The co-creative reparative process is not exclusive to one particular decision-making level within an organisation, whether executive-level or operational-level.</td>
</tr>
<tr>
<td>Engagement with All Teams</td>
<td></td>
<td>The process of engaging with all teams within both the buyer and supplier organisations in order to develop the most appropriate reparative solution.</td>
</tr>
<tr>
<td>Participation with All Stakeholders</td>
<td></td>
<td>The invitation and inclusion of all affected stakeholders, such as downstream customers and upstream suppliers, in order to develop the most appropriate reparative solution.</td>
</tr>
<tr>
<td>Demonstrating Understanding of Problem Influences</td>
<td>Internal Organisational Influences</td>
<td>Identifying internal influences within the buyer or supplier organisation network that impact efficiencies or outcomes in reparative actions, such as people, processes or protocols.</td>
</tr>
<tr>
<td></td>
<td>External Market Influences</td>
<td>Identifying external influences that impact efficiencies or outcomes in reparative actions, such as political, environmental or other market forces; outside of direct network.</td>
</tr>
<tr>
<td></td>
<td>Problem Solving Process</td>
<td>Demonstrating an iterative process of investigation and feedback between both buyer and supplier.</td>
</tr>
<tr>
<td></td>
<td>Alignment &amp; Agreement</td>
<td>Identifying a shared orientation and agreement on a reparative action or processes.</td>
</tr>
<tr>
<td>Creating Conditions Conducive to Co-Creation</td>
<td>Flexibility</td>
<td>Demonstrating an ability to cope with changes in circumstances whilst considering reparative activities in novel, creative ways.</td>
</tr>
<tr>
<td></td>
<td>Honesty &amp; Transparency</td>
<td>Acting in a way that demonstrates openness and accountability without ulterior motive; being open about reparative opportunity, or actions.</td>
</tr>
<tr>
<td></td>
<td>Active Listening</td>
<td>Demonstrating an active, participatory dialogue; fully concentrating on what is being said rather than passively hearing; listening to understand, not simply to respond.</td>
</tr>
<tr>
<td></td>
<td>Empathy</td>
<td>The ability to sense a buyer’s emotions, coupled with the ability to imagine what the buyer might be thinking or feeling; awareness and sensitivity.</td>
</tr>
<tr>
<td>Developing Practical and Procedural Co-Creation Outcomes</td>
<td>Common Goal, Solution and Success</td>
<td>Operationalising a shared orientation and agreement on a reparative action or processes; harmonious.</td>
</tr>
<tr>
<td></td>
<td>Meaningful &amp; Scalable</td>
<td>Designing and deploying a reparative activity or solution that is fit for purpose and can be expanded, if demanded.</td>
</tr>
</tbody>
</table>

*Table 4.10: Sub-Themes & Codes Representative of the Co-Creation Theme, Continued*
Table 4.10: Sub-Themes & Codes Representative of the Co-Creation Theme, Continued

<table>
<thead>
<tr>
<th>Sub-Theme</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing Practical and Procedural Co-Creation Outcomes</td>
<td>Future Process Frameworks</td>
<td>Establishing specific processes, protocols or feedback mechanisms to ensure efficiencies and avoid future service failures.</td>
</tr>
<tr>
<td></td>
<td>Routine Audits</td>
<td>Regularly audit processes and protocols in order to update expectations and estimations of value.</td>
</tr>
</tbody>
</table>

4.4.7.1 Developing a Collaborative Partnership

Participants described the importance of developing a collaborative partnership in order to encourage the manifestation of co-creative activities and behaviours. Buyers expressed a desire to engage in co-creative relationships that were representative of committed and involved interactions, sharing of information and an active, persistent motivation to restore the relationship collaboratively:

*Some of them are just going to be transactional. But these ones where we do see value, particularly with the larger programmes of product and the larger categories, we want to invest in strategic relationships. And it really does become a partnership and it feels that way.* *(Participant 24, Corporate, Executive)*

*So, we might say okay this supplier have made some errors but we are prepared to put in resources to assist … So, what we have decided to do is, and we have been spending a lot of time flying to Whanganui, is we are going to put someone on the ground for three months full time, one of our engineering guys to help them develop tools. And we’ve also got a cross functional steering committee that we set up to try and work with them too. So, we are putting in a lot of costs, a lot of time and a lot of effort and resources, because it’s critical.* *(Participant 38, Corporate, Operational)*

*They say okay I don’t see what I am going wrong but if you can show me a better way we will sit down and discuss it. For example, one wiring card supplier agreed to change his lines to make it one piece. He didn’t do it previously and he didn’t think it is doable especially with this particular product and he said that the productivity coming out is the best productivity that can be obtained. When I shared with him how things are done differently all what he needed at the time he said okay I need a coach. I understand what you are saying now but I am not sure that I can go on my own and do it I need a coach and I was happy to take a couple of hours weekly from*
the supply quality engineer who took care of that trusted supplier. *(Participant 15, Corporate, Operational)*

### 4.4.7.2 Establishing Inclusive Invitation and Participation

Participants conveyed the importance of ensuring the co-creative reparative process is not exclusive to one particular decision-making level within the buying and supplying organisations, rather, all teams should be involved. Furthermore, in order to best co-create a reparative solution that serves to recover trust in the relationship, other affected stakeholders within the network should also be involved in the design and deployment of the solution:

> And we try and do multiple levels of connection, so we have a very operational relationship which works really well and is very much about getting tasks done and then we have a relationship at the next level up which is a mix between the people within our organisation that make use of that supplier and procurement and that is kind of a joint business which meets with their sales team which typically you wouldn’t because they don’t need to sell us anything, but it has that nice connection. And then we try and connect operation to operation at more senior levels and then have a connection at the next level above that. So, it kind of has multi-tiers. *(Participant 10, Corporate, Executive)*

> There are communications on two or three different levels right. One is directly from that client relationship, the account manager ... And then there is much more the user community. And I think everybody that uses most products that you would use at enterprise level, not just the Learn[ing] Management system, the most effective support is from the user community which is kind of not really the relationship with the company but it’s the relationship with the people that are using that product. *(Participant 2, Corporate, Operational)*

### 4.4.7.3 Demonstrating Understanding of Problem Influences

Of particular significance to participants was the demonstration of a co-creative process indicative of a sound and iterative problem-solving process. When considering the characteristics representative of a co-creative trust recovery mechanism, buyers suggested...
an understanding of both internal and external influences contributing to the problem was critical:

So, they expect the same from us so that when we are saying this is the price we need, now let’s work with you to understand what specs we might need to adjust to get to that price, this is why we need it, this is the retail price we need to hit. This is who we are competing against in the market. So, we are not trying to drive you down to the lowest possible cost because we’re mean. There is a reason behind it … we take them back through the journey to explain why. (Participant 24, Corporate, Executive)

I think if you’ve got a good relationship you’ve got to take that (external influences) into account. It’s too easy and too bloody minded to say not my problem, I’ve ordered the product. You’ve got to make sure you are going to get it to me or you are going to pay. So, ____ happens and its typhoons, whatever it may be, it’s all those things, raw materials in short supply. Every week there will be a new challenge and we’ve just got to deal with it. (Participant 24, Corporate, Executive)

4.4.7.4 Creating Conditions Conducive to Co-Creation

Buyers describe the conditions conducive to a developing a co-creative reparative solution as needing to be present before, and during, the process when seeking to recover trust.

Participants expressed requirements such as flexibility, or an ability to cope with changes in circumstances, and honesty and transparency in the process of interacting. Additionally, active listening and empathy were important to buyers when considering the characteristics of participatory dialogue:

So, it’s very, very close and they are an extension of us, we are an extension of them and ideally the client sees my company and the supplier as one entity. They know we are not. We have separate agreements, but they do see that they work cooperatively, they discuss things, we are open, we don’t have to be too careful, we can trust. And clients pick up when that’s not working. (Participant 27, SME, Executive)

They have been a big company, you are a small company ... so ... you have kind of got to, this is our service offering, if you want it, take it, if you don’t want it, that’s it, don’t take it. They don’t have that flexibility to create a solution that is completely unique to you whereas this other company, (company omitted), they listen to
everything you say. You just get the sense that they are trying to make your life easy, they are trying to deliver a solution that is fit for purpose for your organisation and not just copy it for any other airline in the world. (Participant 9, Corporate, Operational)

But what is the most important factor to earn the trust... I think there are two aspects to it, I think there is one your deep empathising or consultative approach but how genuinely do you understand the other company’s business. I think that is absolutely critical. (Participant 5, Corporate, Executive)

4.4.7.5 Developing Practical and Procedural Co-Creation Outcomes

Whilst the characteristics, qualities and process of co-creative interactions between buyers and supplying organisations are important, the practicalities and outcomes of the process are described by buyers as equally important when seeking to recover trust. Operationalising an agreement on a co-creative reparative solution as well as the solution being fit for purpose are critical, practical elements to consider. Additionally, participants expressed the need for procedural frameworks and routine audits to ensure these co-creative reparative solutions are realised and reviewed:

A lot of the time it is yeah and I think that is probably our business and our industry as well, whether it’s hotels, airlines or our client, it’s that collaborative approach to come out with the best outcome for all parties. (Participant 3, Corporate, Executive)

I think what that does is institute a framework for conditions and policies going forward that we very politely discuss around the fringes ... What’s your process for this and then look at well what is your process for dealing with conflict between a marketing manager who thinks he knows better and you know us as the customer. (Participant 20, SME, Operational)

Because we wanted to build a longer-term relationship we would say okay well to help you build capability in terms of manufacturing those products that you don’t current do, what can we do to help you. Oh, if you give us more detailed specifications then we can do a better job at understanding what our capability needs to be. Okay fine. We’ll give you, we’ll work on some detailed specs for you or whatever it might be. (Participant 24, Corporate, Executive)
4.4.8 Exhibiting and Operationalising Transparency as Contributing to Trust Recovery

Buyers described the importance of the supplying organisation’s activities toward exhibiting and operationalising transparency when seeking to recover trust following service failure. Participants describe the significance of active and overt demonstrations of transparency throughout the process of designing and deploying a reparative solution. Participants illustrated these characteristics of a transparent process as exhibiting candidness in the dialogue between buying and supplying organisations as well as a consistent “open book” policy and process. A sound reasoning and justification for the respective dimensions of a reparative solution are also conveyed as critical to recovering trust. A significant number of quotes (70) relate to the value buyers attribute to suppliers’ transparency when designing and deploying the final, reparative solution. These codes are categorised into four sub-themes: demonstrating truthfulness and candidness; establishing an explicit and visible process; signalling equity and impartiality; and demonstrating rigour and reasoning. The four sub-themes comprise the “Transparency” theme (Table 4.11). Each of the transparency sub-themes are explained in the following sections.

<table>
<thead>
<tr>
<th>Sub-Theme</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrating Rigour and Reasoning</td>
<td>Clarity</td>
<td>Designing and deploying a reparative solution, or process, that features clear milestones and metrics; understandable.</td>
</tr>
<tr>
<td></td>
<td>Realistic</td>
<td>Designing and deploying a reparative solution, or process, that features realistic and reasonable outcomes.</td>
</tr>
<tr>
<td></td>
<td>Accurate</td>
<td>Performing a detailed and accurate account of the constituent dimensions and expectations of the reparative solution; granularity.</td>
</tr>
<tr>
<td></td>
<td>Reasoning &amp; Justification</td>
<td>Providing a reasoning for any design, designation, or deviation in service delivery or reparative solution dimensions; justification of change or charge.</td>
</tr>
</tbody>
</table>

*Table 4.11: Sub-Themes & Codes Representative of Transparency Theme*
<table>
<thead>
<tr>
<th>Sub-Theme</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demonstrating Truthfulness and Candidness</strong></td>
<td>Honesty</td>
<td>Demonstrating truthfulness and an absence of lying or deceit.</td>
</tr>
<tr>
<td></td>
<td>Forthright</td>
<td>Engaging in active dialogue about issues or opportunities that may arise in advance of their taking place; shared anticipation of issues.</td>
</tr>
<tr>
<td></td>
<td>Taking Responsibility</td>
<td>Demonstrating ownership-of and responsibility-for an issue and the development of a reparative solution.</td>
</tr>
<tr>
<td></td>
<td>Candour</td>
<td>Demonstrating an upfront estimation of the ability and efficacy of a reparative solution to be realised; frankness and sincerity.</td>
</tr>
<tr>
<td><strong>Establishing an Explicit and Visible Process</strong></td>
<td>Overt</td>
<td>The development and deployment of reparative solutions in an openly and plainly visible way; not manifest in secret.</td>
</tr>
<tr>
<td></td>
<td>No Surprises</td>
<td>No hidden agendas, ulterior motives or hidden side deals when designing or deploying reparative solutions; unreserved and up front.</td>
</tr>
<tr>
<td></td>
<td>Regularly Corresponding</td>
<td>The act of regularly communicating, via different and appropriate means, the ongoing process and progress of reparative solutions; updating and recalibrating.</td>
</tr>
<tr>
<td><strong>Signalling Equity and Impartiality</strong></td>
<td>Consistent</td>
<td>Validating that the reparative solution, and ongoing business, is consistent across buyer organisations; equity between organisations in representative reparative value or utility.</td>
</tr>
<tr>
<td></td>
<td>Open Book</td>
<td>The process of a buyer and seller agreeing on which costs are remunerable and the margin that the supplier can add to these costs; based on actual costs incurred plus the agreed margin.</td>
</tr>
<tr>
<td></td>
<td>Referencing &amp; Auditing</td>
<td>Establishing other reference buyer organisations to attest-to or support estimations of efficacy of solution; appointing external auditors to appraise or adjudicate.</td>
</tr>
</tbody>
</table>

*Table 4.11: Sub-Themes & Codes Representative of Transparency Theme, Continued*

### 4.4.8.1 Demonstrating Truthfulness and Candidness

When considering the supplier organisation behaviours that best serve to demonstrate truthfulness and candidness, participants expressed the importance of honesty, forthrightness and candour. When seeking to recover trust, buyers described these qualities and behaviours as further contributing to the efficacy of the reparative solution:
But fortunately, our relationship with them has been restored by the fact that they recognised a problem, they were honest about it because they told us what was going on. They told my managers at the highest level, really sorry, it’s not an excuse but this is the explanation. We accepted the explanation. (Participant 20, SME, Operational)

Things can go wrong and out of the supplier’s control, but how do they rebuild that again, I guess just by being upfront and saying look we’ve got this problem and we are aiming to solve it this way and just dealing with it. (Participant 32, SME, Executive)

So, for me a major is how problems are dealt with. If they’re not dealt with in an upfront manner with transparency, it doesn’t actually matter what the _____ up was, it’s how it’s dealt with. In any relationship or business or personal, you’re going to have issues. The major is that if it’s not dealt with respect of the partner and sometimes with respect of the partner in the partnership the best mechanism of showing real respect is to be very open and honest and sometimes that causes dramas, sometimes by saying actually does my ____ look big in this, yeah it does. (Participant 22, Corporate, Executive)

4.4.8.2 Establishing an Explicit and Visible Process

Participants described how the development of an explicit and visible reparative process is critical to trust recovery with the buying organisation. The overt nature of the development and deployment of the reparative solution as well as behaving and communicating in an up-front and unreserved manner both contribute to recovering trust:

Probably the one (relationship) where we have a high trusting relationship we are both very overt with information and we’ll tell them if there’s stuff we don’t want them to disclose any further but you kind of push the limits on things that you are willing to discuss. When it’s an environment where it’s relatively low trust then both parties tend to be much opaquer with what they are handing over and you become much less able to have open and honest conversations because you are not quite sure whether they are going to lead. It’s quite hard to go from having a relationship of low trust relationship of high trust if all those behaviours are already in place because from get go it doesn’t feel like it is going to be a partnership that works. (Participant 10, Corporate, Executive)
I think it comes down to probably two or three key elements, one being the ability to share their learnings with us so we are an innovation-based company and having suppliers really sharing innovation with us and without the fear of actually being stolen or anything like that is a huge step in the right direction so that is one aspect of it. We are quite comfortable when people start sharing ideas and sharing their own experiences on products and technology and really is a good sign for us, number one. \textit{(Participant 13, Corporate, Operational)}

Look, it’s a business at the end of the day. We want to make money. They want to make money. So, we are not just in there for sunshine and rainbows. We are there to make money but we think we’ve got a better chance of achieving that goal and of them achieving that goal, so create a win-win scenario, by being open with them and sharing with them this is what we’re thinking and this is why we’re thinking it. So, it gives them the context rather than them just seeing a Westerner come in and bang the table and say I want five cents cheaper type of thing. \textit{(Participant 24, Corporate, Executive)}

I think a no surprises environment and so for us that means with some of our suppliers that we will ... if we are doing something that is going to impact on their business we tell them in advance that it is going to happen and what the impact is and if they are doing something that is in another part of their business that they think might impact that, they ring us and tell us. \textit{(Participant 10, Corporate, Executive)}

\subsection*{4.4.8.3 Signalling Equity and Impartiality}

The importance of signalling equity and impartiality was described by participants as contributing to trust recovery. The validation of consistency, in scope or magnitude, of the utility of the reparative solution was expressed by buyers as being best represented by an “open book” policy or methodology as well as the establishment of reference sites and auditors to attest-to or adjudicate the reparative solution:

\begin{quote}
So we work on open book and having suppliers that actually committing to that open book methodology is also another step because they trust you to not use that information against them and in return what we provide them is assurances that this is not a margin cutting exercise as long as you get the returns from the business you need to stay in business and that is what you are do so as well. \textit{(Participant 13, Corporate, Operational)}
\end{quote}
Actually, he gave me open book cost build up as well so at times I needed to make sure that none of my suppliers are excess rating in the margins. He was one of the most co-operative one of the most intelligent and cunning sometimes still but up front and as soon as we established a trust worthy communication he didn’t mean any harm. (Participant 15, Corporate, Operational)

We ask for transparency from them, because from a transparency point of view we won’t order a bean from a factory until it’s been ethically audited and approved. So, we’ve got very high ethical sourcing standards around child labour, working hours, working conditions for people in factories. We’ve got external auditors that we engage with to do that. And to be approved they have to be transparent because many will lie. Many will say here’s our books, here’s the working hours of our team, but it’s a different set of books. We see it often. So, we will say to them tell us the truth. (Participant 24, Corporate, Executive)

**4.4.8.4 Demonstrating Rigour and Reasoning**

Buyers described the importance of demonstrating rigour and reasoning in the design and deployment of a reparative solution. Participants conveyed that the clarity and accuracy of a reparative solution, as well as the reasoning, justification for a reparative solution, are important attributes to consider when seeking to recover trust:

> Obviously, they did what they, from what I can see from correspondence they were reasonably open and honest about what had gone wrong. They had a problem at the plant, took it down for six weeks, brought it back up running again, had the same problem and so they from the correspondence I’ve seen they were pretty open and honest but it did affect this business and that’s why I suppose we’re looking for an alternative for a while, business didn’t have one. So again, as long as they tell you what’s going on. (Participant 40, SME, Executive)

For me personally I think it’s very important. Without that I just wouldn’t respect the person at all. I need to get inside his mind, his wallet and the whole process. I need to get in. If they won’t do that then there’s something not quite right. So, for me openness, information sharing, all that sort of stuff, it’s got to be done. There is no point climbing into bed with someone if they are not going to tell you half the story. (Participant 37, Corporate, Operational)
But now the open transparency we have is one of the key things we want to look for now, means there is nothing to hide both ways. So, if they come to us and say look the material price has gone up and they can show us then that’s fine, we agreed to it. We might say okay let’s look for an alternative supplier, but there is transparency. *(Participant 38, Corporate, Operational)*

**4.4 Chapter Conclusions**

Having analysed violations of trust following service failure from the perspective of the buying organisation and the subsequent reparative activities exercised by the supplying organisation, eight key themes were identified in the qualitative dataset. Thematic analysis of the interview transcripts revealed the importance of demonstrations of competence, experiences of satisfaction and communication characteristics and content. Additionally, the significance of demonstrating and institutionalising integrity, benevolence and shared values was revealed. Developing co-creation activities and outcomes was also revealed as an important contributor to trust recovery. Finally, exhibiting and operationalising transparency has emerged as a key contributor to trust recovery following service failure.

With the qualitative enquiry and thematic analysis complete, attention now shifts to qualitative comparative analysis (QCA) of the dataset, of which serves as a series of thick, case-based narratives (Rihoux & Lobe, 2009). Qualitative comparative analysis of these cases allows for identification of specific combinations of the causal conditions, or themes revealed in the thematic analysis, that lead to trust recovery following service failure in a B2B relationship context.
Chapter Five: Study Two - Qualitative Comparative Analysis (QCA)

5.1 Introduction

This chapter reports the findings of Study Two, qualitative comparative analysis (QCA). As discussed in Chapter Three, QCA uses Boolean algebra and set relationships to investigate phenomena of interest rather than correlations between dependent and independent variables. This study investigates the presence, absence or combination of factors associated with successful trust recovery following service failure in a business-to-business (B2B) relationship. The findings of Study One, reported in Chapter Four, serve as a foundational premise to QCA when building the configurational model (Greckhamer et al., 2018). Additionally, the in-depth interviews central to Study One also serve as thick, case-based narratives (Berg-Schlosser et al., 2009; Rihoux & Lobe, 2009) that are amenable to both within- and between-case QCA analyses featured within this chapter (Kahwati & Kane, 2018; Nair & Gibbert, 2016).

Scholars have noted that previous research on business relationships and trust has been largely static, cross-sectional and variable-focused correlational type of explanations of trust (Huang & Wilkinson, 2013). This shortcoming of current research is that it does not show how different variables change and develop over time and what types of relations emerge, in terms of different mixes and values of variables, under different conditions (Wong, Wilkinson, & Young, 2010). Additionally, such an approach does not reveal much about the dynamics and evolution of trust. To address this shortcoming, this study examines trust recovery following a violation of trust in B2B relationships by unravelling configurations of causally related sets of factors. Relationships between two factors (e.g., X, Y) are complex and the presence of one (X) may lead to the presence of the other (Y), indicating sufficiency.
Also, factor Y may be present even when factor X is absent, thus the presence of X is a sufficient but unnecessary condition for Y to occur. With the presence of additional factors, X may be necessary but insufficient for Y to occur. This study posits that there is a synergy between both cognitive- and affect-dominant factors in explaining trust recovery in B2B relationships. Furthermore, this work suggests that there is not one single, optimal configuration of such factors. Instead, multiple and equally effective configurations of causal conditions exist, which may include different combinations of cognitive- and affect-dominant factors. Depending on how they combine, they may or may not explain buyer’s evaluations of post-violation trust recovery in a supplier organisation.

To conceptualise these relationships, a theoretically-derived and case-based model is proposed (Figure 5.1), illustrating three types of conditions and their intersections. The overlapped areas represent possible combinations among factors, that is areas that one factor may exist together with the rest, for example combinations that explain successful trust recovery are included within the outcome of interest area. Drawing on complexity theory and the principle of equifinality, a result may be equally explained by alternative sets of causal conditions (Fiss, 2007). These conditions may be combined in sufficient configurations to explain the outcome of interest (Fiss, 2011; Woodside, 2014).
The structure of this chapter is as follows. Firstly, the chapter identifies and defines the outcome of interest and causal conditions in order to identify and develop research propositions and appropriately representative cases for investigation. Additionally, this step includes the process of transforming the qualitative interview data to allow population of the raw data table (Berg-Schlosser et al., 2009; Jordan et al., 2011). Secondly, once the outcome and causal conditions are identified and the cases under investigation are selected, the conditioning and testing phase of QCA is reported and includes the collection and quantifying of the raw data into a data table, termed calibration, with a resulting truth table. Thirdly, once a valid, contradiction-free truth table is established, the next step of QCA is condensing or minimising the truth table to highlight patterns of conditions that correspond to the outcomes of interest (Jordan et al., 2011; Ragin, Rubinson, et al., 2008). This step reports and reduces the complex Boolean algebra expressions into a minimal formula, resulting in “pathways” of causal conditions termed “causal recipes,” that produce

**Figure 5.1: Conceptual Model Illustrating Three Sets of Constructs and Intersections**
an outcome (Schneider & Wagemann, 2010b). Finally, a within- and cross-case analysis is performed to investigate unique representative phenomena within cases that reflect representative pathways of interest as well as cases that may otherwise be considered inconsistent, or deviant, from that of the main body of observation (Nair & Gibbert, 2016; Schneider & Rohlfing, 2013).

5.2 Qualitative Comparative Analysis, Phase One: Research Design

The four main stages of the QCA research design phase are identifying and defining the outcome of interest, developing research propositions, selecting causal conditions and cases and populating the raw data table (Berg-Schlosser et al., 2009; Jordan et al., 2011). Each main stage is detailed, as follows.

5.2.1 Identifying and Defining the Outcome of Interest

The phenomenon under investigation, in this case the level of trust recovery following service failure in a B2B relationship, is conceptualised as an observable change or discontinuity in the phenomenon and serves as the outcome condition in this study. Scholars note that effective trust recovery is not only a matter of cognitive trust repair but also a process of affective trust repair (Franklin & Marshall, 2019; Li et al., 2013). The findings of Study One echo this sentiment as both cognitive- and affective-dominant dimensions of trust were reflected, and qualified collectively, as contributing to trust recovery following service failure. Accordingly, estimations of the presence, or not, of the outcome of interest are conceptualised as including both cognitive and affective dimensions of trust (Franklin & Marshall, 2019). QCA is well suited to recognise that different combinations of conditions may cause the outcome of interest in this study; otherwise known as multiple conjunctural causation (Ragin, 2007).
5.2.2 Developing Research Propositions

When designing the QCA investigation, researchers carefully determine likely propositions and anticipated outcomes to ensure that the number of causal conditions, cases and other issues affecting the outcome are either controlled and measured, or altered and measured, so that all changes in causal and outcome conditions can be closely monitored and the data gathered (De Villiers, 2017). In particular, the development of propositions before the “analytical moment” (Ragin, 2000) is critical to expressing the complex theoretical expectations of a study (Basurto, 2013; Emmenegger et al., 2013) and assists in interpreting the results of the formal QCA techniques. QCA is widely recognised and applied as a method of causal analysis (Mahoney, 2000; Ragin, 1987, 2000; Rihoux, 2006) and is fundamentally empirical in nature, seeking to investigate a phenomenon within a particular context by first consulting the prevailing literature to seek theoretical expectations.

Although sets of testable propositions are often developed exclusively from an inspection of current knowledge, thematic analysis of the cases themselves in Study One yielded new insights of which inform the development of research propositions. This pre-QCA step (Schneider & Rohlfing, 2013) is well established in the methodological QCA literature as serving to help in ascertaining the specific cases of which are to be investigated (Ragin, 2000) as well as assisting in the refining of causal arguments and addressing “empirical refutation of initial arguments” (Ragin & Schneider, 2012, p. 78). The underlying assumptions of investigations into complex causal phenomena, such as is present in the context of a violation of trust, suggest that the trust recovery process will at least tend to place a more salient emphasis on different causal conditions and could quite possibly demand a different configuration of conditions altogether depending on different
contextual conditions. Thus, the overarching configural research question that this study seeks to investigate is:

**What combinations of causal conditions are found among cases that demonstrate high levels of trust recovery following service failure?**

Theory and existing knowledge should always guide the development of more specific research propositions (Table 5.1). As Kahwati and Lane (2018, p. 21) suggest, “posing many configural questions without theory or grounding in the known literature on the topic is nothing more than data mining, and often results in interpretation challenges, implausible findings, or an incoherent narrative.” Central to QCA are the tenets of complexity theory, including the principle of equifinality, based on which the outcome of interest can be equally explained by alternative sets of causal conditions that combine in sufficient configurations for the outcome (Fiss, 2011; Woodside, 2014). Both cognitive- and affectivedominant perceptions are essential causal conditions to understand buyers’ estimations of trust recovery following service failure in a B2B relationship (Franklin & Marshall, 2019) and may be combined in different configurations in order to achieve the outcome. However, limited research has incorporated these factors to the configurational analysis of high levels of trust recovery success following service failure in a B2B context. Consequently, consensus surrounding key constituents of interorganisational trust recovery, and their interrelations, remains absent.

Complexity theory and QCA further propose the occurrence of causal asymmetry, whereby conditions leading to the presence of the outcome differ from those leading to its absence (Fiss, 2011) depending on how a condition combines with one or more other causal conditions (Woodside, 2014, 2018). Therefore, while there may be many configurations
leading to the presence of trust recovery following service failure, these may not be causally symmetrical when examining the absence of trust recovery. The notion of causal asymmetry suggests that no single factor is likely to be sufficient or necessary when analysing the complexities of trust recovery following service failure, and research that focuses solely on examining the presence of trust recovery is unlikely to shed light on the causes of the absence of trust recovery. Furthermore, alternative configurations leading to high levels of trust recovery may include the presence, or absence, of combinations of both cognitive- or affective-dominant conditions (Ragin, 2000; Ragin, Rubinson, et al., 2008).

Consequently, and more specifically, this study seeks to investigate the following as the first of a series of both theoretically-informed and qualitatively-derived research propositions:

**Proposition 1:** No single best configuration of buyers’ cognitive- and affective-dominant perceptions leads to high trust recovery following service failure, but there exist multiple, equally effective configurations of both cognitive- and affective-dominant causal factors.

**Proposition 2:** Single causal conditions may be present or absent within configurations leading to high trust recovery following service failure, depending on how they combine with other causal conditions.

Researchers have paid particular attention to the effectiveness of various trust repair efforts depending on the type of violation that has occurred (Ferrin et al., 2007; Kim et al., 2004). The most robust work in this area is by Ferrin et al. (2007) and Kim et al. (2004) when they consider the distinction between competence-based violations, or when the trust breaker’s behaviour calls his or her ability into question, and integrity-based violations, when the breach of trust is attributed to a lack of moral integrity. A wide body of literature suggests that cognitive- and affective-type trust breaches are quite distinct in their effects on B2B relationships. After a cognitive-type breach of trust, estimations of ability or competence
may come into question, however, after an affective-type breach, estimations of incongruence of values or opportunism may be more salient. Hence, this study proposes the following:

**Proposition 3:** A different combination of conditions features as sufficient for trust recovery following service failure in cognitive- versus affective-type trust breaches.

Ample research on interpersonal transgressions and forgiveness has shown that a more extensive reparative effort is required by the offending partner as the level of outcome severity increases (Ohbuchi et al., 1989; Schlenker & Darby, 1981), that the offense severity relates to likelihood of accepting apologies and further reconciliation (Barclay et al., 2014; Bennett & Earwaker, 1994; Bradfield & Aquino, 1999; Holtz & Harold, 2008; Ohbuchi et al., 1989; Tomlinson et al., 2004) and that the beneficial effects of reparative efforts diminish as the magnitude of the violation increases (Bennett & Earwaker, 1994; Tomlinson et al., 2004). Consequently, it is plausible that a very severe trust breach will require different reparative efforts than that of a less severe breach of trust. It is important to note, however, that this implies the breach of trust is not terminal to the relationship and that there is even a remote chance of reconciliation. Hence, this study proposes the following:

**Proposition 4:** A different combination of conditions features as sufficient for trust recovery following service failure in high- versus low-severity trust breaches.

The notion of divergent levels of channel power within interorganisational relationships, and its influence on trust, is attracting increased empirical attention (Fulmer & Gelfand, 2012). Industrial marketing research has explored the relationship between behavioural trust and external characteristics of the buying firm in a context such as firm size (Akrout & Diallo, 2017; Bacon et al., 2019), suggesting that there are different evaluative criteria
considered when diagnosing trustworthiness. Akrout and Diallo (2017) suggest that a large buying firm might worry that a supplier will exploit sensitive, proprietary information and jeopardise its performance, whilst a smaller buying firm is more likely to seek and share risk with partner organisations as they experience more competition for partners (Croonen, 2010). By extension, the conditions representing the best-fitting recipe for trust recovery following a breach of trust should differ. Hence, this study proposes the following:

**Proposition 5:** A different combination of conditions features as sufficient for trust recovery following service failure for large enterprise versus small to medium enterprise buying organisations.

Scholars have suggested that the position of the buyer in the hierarchy of the firm might influence the impact of trust-building activities between firms (Akrout & Diallo, 2017), such as distinctions between operational- and executive-level decision-making. Whilst the nomenclature is borne out of prevailing organisational theory, and fits the task at hand, the syntax is not to suggest executive-level decision makers are not operational, rather they tend to be tasked with more strategic-level decision-making tasks. However, since the roles of organisational actors vary significantly between these hierarchical levels, it stands to reason that the means to both build and recover trust would also vary (Janowicz-Panjaitan & Krishnan, 2009; Janowicz-Panjaitan & Noorderhaven, 2009). Different positions within an organisation are associated with different expectations and, thus, different trustworthiness factors are more prominent when considering trust recovery efforts. Hence, this study proposes the following:

**Proposition 6:** A different combination of conditions features as sufficient for trust recovery following service failure for operational- versus executive-level decision-makers.
In sum, the six research propositions that will direct the following analyses and serve to guide the selection of cases, causal conditions and contextual conditions under investigation (Ordanini, Parasuraman, & Rubera, 2014) are detailed in Table 5.1.

<table>
<thead>
<tr>
<th>Proposition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>No single best configuration of buyers’ cognitive- and affective-dominant perceptions leads to high trust recovery following service failure, but there exist multiple, equally effective configurations of both cognitive- and affective-dominant causal factors.</td>
</tr>
<tr>
<td>Two</td>
<td>Single causal conditions may be present or absent within configurations leading to high trust recovery following service failure, depending on how they combine with other causal conditions.</td>
</tr>
<tr>
<td>Three</td>
<td>A different combination of conditions features as sufficient for trust recovery following service failure in cognitive- versus affective-type trust breaches.</td>
</tr>
<tr>
<td>Four</td>
<td>A different combination of conditions features as sufficient for trust recovery following service failure in high- versus low-severity trust breaches.</td>
</tr>
<tr>
<td>Five</td>
<td>A different combination of conditions features as sufficient for trust recovery following service failure for large enterprise versus small to medium enterprise buying organisations.</td>
</tr>
<tr>
<td>Six</td>
<td>A different combination of conditions features as sufficient for trust recovery following service failure for operational- versus executive-level decision-makers.</td>
</tr>
</tbody>
</table>

Table 5.1: Study Two, Qualitative Comparative Analysis (QCA) Research Propositions

5.2.3 Selecting Causal Conditions

QCA is an approach to addressing a research question, as well as an analytic technique (Schneider & Wagemann, 2012). Hence, QCA requires that researchers “carefully plan data collection so that the data collected for cases, conditions and the outcome support the analytic technique” (Kahwati & Kane, 2018, p. 45). The data and insights from Study One, both theory- and data-driven, provide the key “ingredients” for considering which causal conditions to select for investigation (Rihoux & Lobe, 2009, p. 222) and are guided explicitly
by case knowledge and an iterative process of analysis (Grechhamer et al., 2018; Toth, Henneberg, & Naude, 2017; Tóth, Thiesbrummel, Henneberg, & Naudé, 2015). These insights are used to identify causal and outcome conditions at a more granular level (Basurto, 2013; Toth et al., 2017) and assist in developing a nomological model for this study (Schneider & Sadowski, 2010; Van der Heijden, 2015; Verweij, Klijn, Edelenbos, & Van Buuren, 2013). Additionally, the theory- and data-driven insights provide justification as to why the researcher takes a configurational view (Basurto, 2013; Wang, 2016).

For this study there are two types of conditions under investigation: (1) causal conditions and (2) contextual conditions, of which are detailed in Table 5.2. The causal conditions include cognitive-dominant antecedents of trust recovery (1) competence, (2) satisfaction, (3) communication; and (4) transparency, as well as affect-dominant antecedents of trust recovery (5) integrity; (6) benevolence; (7) shared values; and (8) co-creation. The contextual conditions include (1) type of trust breach; (2) severity of trust breach; (3) size of the buying organisation and, (4) individual level of decision-making authority of the focal trustor in the buying organisation. Both the presence and the absence of causal and contextual conditions are considered in potential configurations of causal conditions leading to an outcome of interest; namely, trust recovery.
<table>
<thead>
<tr>
<th>Causal Conditions</th>
<th>Notation</th>
<th>Contextual Conditions</th>
<th>Notation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td>COMP ~COMP</td>
<td>Type of Breach</td>
<td>TYPE ~TYPE</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>SATIS ~SATIS</td>
<td>Severity of Breach</td>
<td>SEVER ~SEVER</td>
</tr>
<tr>
<td>Communication</td>
<td>COMM ~COMM</td>
<td>Size of Buying Organisation</td>
<td>SIZE ~SIZE</td>
</tr>
<tr>
<td>Transparency</td>
<td>TRAN ~TRAN</td>
<td>Decision-Making Authority</td>
<td>AUTH ~AUTH</td>
</tr>
<tr>
<td>Integrity</td>
<td>INTEG ~INTEG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benevolence</td>
<td>BENE ~BENE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared Values</td>
<td>SHVAL ~SHVAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-Creation</td>
<td>COCR ~COCR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: “~” denotes the absence of a causal condition and the negation of a contextual condition (i.e. negation of “TYPE” denotes cognitive-dominant type of breach, presence of “TYPE” denotes affective-dominant type of breach as detailed in the following sections).

Table 5.2: List of Causal and Contextual Conditions, Presence and Absence

5.2.4 Selecting Cases

This study examines data based on in-depth interviews with a purposive sample of 40 B2B decision-makers, each representing 40 in-depth case studies (Appendix 4). Purposive sampling is considered a standard of good practice in QCA as identification of the population of cases to sample from is borne out of consideration of the outcome of interest (Greckhamer et al., 2018). When selecting cases for investigation, random sampling is not suitable for researchers predominantly interested in exploring the diversity of cases as both a diversity of the outcome of interest and causal conditions “…should appear across all the examined cases in order to investigate the configurations of these conditions” (Toth et al., 2017, p. 193). A purposive sampling design and selection of cases, iteratively, serves to
better develop theoretical knowledge (Greckhamer, Misangyi, & Fiss, 2013) and is more rooted in the case-oriented comparative tradition of QCA (Ragin, Rubinson, et al., 2008; Rihoux & Ragin, 2008). The number of cases represented in the sample is important as, whilst there is no strict limitation in terms of the number of cases needed for QCA, inadequate sample might have analytical trade-offs (Toth et al., 2017). The number of cases featured in this study (n = 40) is within the suggested ratio intervals detailed by Marx (2006, 2010) and Fiss (2009, 2011) and features as an intermediate-N QCA study (Maggetti & Levi-Faur, 2013). The cases are representative of perceptions of buying organisation decision makers working in both large companies (N = 21) and small to medium enterprises (N = 19) at both an executive (N = 22) and operational (N = 18) decision-making level and having at least five years’ B2B decision making experience (Dowell et al., 2015) (Appendix 2). The criteria for size of the buying organisation are drawn from the New Zealand Ministry of Business, Innovation and Employment (MBIE) guidelines. Small to medium enterprises (SMEs) are defined as firms with 6 – 49 employees and large companies are defined as firms with 50+ employees (Ministry of Business, Innovation and Employment, 2018).

5.2.5 Transformation of Qualitative Data for QCA

At the conclusion of data gathering, a raw data table is prepared. This raw data table (Appendix 5) serves as an aggregate of all representative case data prior to the conditioning and testing phase of QCA, the result of which is a calibrated set of membership variables. In order to arrive at the calibrated set of membership variables, QCA researchers use theoretical information and arguments as well as a collected knowledge of the cases to determine which empirical evidence to consider (Schneider & Wagemann, 2010b). This process makes QCA especially attractive for researchers employing qualitative data, which provides “…a detailed, context-rich source of information on processes, mechanisms and
the production of meaning” (Mahoney, 2010, p. 124). Scholars note that this transformation of qualitative data into crisp-, fuzzy- or multi-value-sets is an important analytic step that has a strong influence on the results of QCA (Basurto & Speer, 2012; Russo & Confente, 2019; Toth et al., 2017). This process is distinct from that of the treatment of quantitative data as qualitative data needs to be coded, transformed and summarised before set values can be determined (Ragin, Rubinson, et al., 2008).

Eight factors that contribute to trust recovery following service failure are identified in the qualitative analysis featured in Study One: competence, satisfaction, communication, shared values, integrity, co-creation, benevolence, and transparency. Three independent judges familiar with the context and topic were asked to perform subjective, scaled assessments (using a single, 7-point scale for each factor) on the extent to which these factors contribute to trust recovery in each of the critical service failure incidents transcribed within the interviews (Appendix 6). Another four independent judges familiar with the context and topic were asked to perform a dichotomous judgement of whether the critical incident representing the breach of trust was of a cognitive- or affective-dominant nature (Appendix 7). In addition, these four judges performed a scaled judgement of severity of breach (using three, 7-point scale items) (Appendix 7).

The use of single-item scales is widely accepted within QCA research (Muñoz & Kibler, 2016; Pappas, Mikalef, Giannakos, & Pavlou, 2017; Schmitt, Grawe, & Woodside, 2017) and, although not as common, single-item semantic scales are also employed (Seate, Joyce, Harwood, & Arroyo, 2015). By adopting these scales for the judgement task, it afforded the researcher the imposition of a numerical assessment of the presence of each condition (Bacon et al., 2019) when investigating the extent of the presence of trust recovery. This
coding and transformation of the qualitative data proceeds through three stages; judgement training, triangulation and re-training and scale inspection.

5.2.5.1 Judgement Training

In the first stage of the coding and transformation of qualitative data, three independent, mature judges were first selected. One is a female doctoral student in marketing, another two are male, business-experienced graduate students in a marketing post-graduate program at the researcher’s university. All three judges were paid and performed their judgements over a one-week period, commensurate with the level of judgment required. Each judge took approximately eight hours to complete his or her judgements during the one-week period (Appendix 8).

The researcher initially sat with the three judges for approximately three hours and carefully explained to them what each coding variable means, how it is defined and how it is represented using a systematic coding scheme (Basurto & Speer, 2012; Van der Heijden, 2015) and coding instrument. This is a critical step in the process of coding and transforming the data as Toth et al. (2017, p. 195) suggest “not having any initial template might result in not being able to identify the same conditions across the cases.” After discussing and clarifying the variable meanings (featured in both Chapter Two and Chapter Four), the three judges made an independent judgement, on a single seven-point Likert scale, on the extent to which demonstrations of the condition in question contributes to trust recovery in the transcription of the first case study.

Judgements of all eight conditions, plus the judgement of the extent to which trust was recovered, were made. At this point, the researcher discussed their judgements with the judgement team and considered any variations, until the researcher was satisfied that all
the judges had the same perception of the variables and a good grasp of the judgement task. This flexible and iterative template coding process (King, 2004) provided the analytical process with rigour (Toth et al., 2017) and helped to execute the analysis in a structured way that aligns with the aims of a QCA study (Crilly, 2011; Forkmann, Henneberg, Witell, & Kindström, 2017).

5.2.5.2 Triangulation and Re-Training

In the second stage of the coding and transformation of the qualitative data process, the judges were asked to perform, independently, their judgements of the next three cases. The correlations matrix indicating the results of a comparison of these judgements is detailed in Table 5.3. At the conclusion of this step, two of the judges’ responses correlate highly, but the third does not. Thus, the researcher then sat with the judges once more and the group discussed and reconciled their judgements. The correlation matrix of the three final judgement sets reveals a high level of agreement, and so it was deemed that sufficient training had been completed such that a single, averaged, set of judgement data can be constructed for the first three cases. At this point, the judges were asked to continue with their judgement task for the remainder of the cases.
Judge | Initial Judgements | Re-trained Judgements
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>1</strong> Pearson’s correlation</td>
<td>.845**</td>
<td>.343</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.9</td>
<td>.9</td>
</tr>
<tr>
<td><strong>2</strong> Pearson’s correlation</td>
<td>.845**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.9</td>
<td>.9</td>
</tr>
<tr>
<td><strong>3</strong> Pearson’s correlation</td>
<td>.343</td>
<td>.473</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.9</td>
<td>.9</td>
</tr>
<tr>
<td>N</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>

* p < .05; ** p < .01; *** p < .001

Table 5.3: Results of Correlation Analysis of Judges’ Initial and Re-trained Judgements

This coding and transformation of the qualitative data process is replicated in a second round to judge severity of breach and type of breach, but in this instance the researcher also joined the judgement team as a fourth judge. Again, no issues were revealed and the judges were asked to continue with their judgement task for the remainder of the cases.

5.2.5.3 Scale Inspection

For the eight factors revealed in Study One that contribute to trust recovery following service failure, single-item judgement scales for each factor were adopted; reliability is assured through the triangulation process described above. For the judgement of the severity of the trust breach, a three-item scale is adopted (Appendix 9). In line with Crilly (2011) and Misangyi et al. (2017), when performing judgements on the severity of the trust breach, the judges paid attention to both the coding of the condition and its features, such as language, syntax and cadence of the responses. As a measure of internal consistency, Cronbach’s alpha is employed (Churchill, 1979). Each item contributes to the scale (Table 5.4) and the items within the scales have an acceptable level of reliability identified by a Cronbach’s alpha score of 0.946, more than meeting the commonly accepted, minimum
absolute value of 0.70, indicating good internal consistency (Field, 2009; Spector, 1991).

<table>
<thead>
<tr>
<th>Scale</th>
<th>Items</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Cronbach’s Alpha</th>
<th>Cronbach’s Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>SEV1</td>
<td>4.30</td>
<td>1.87</td>
<td>0.946</td>
<td>0.921</td>
</tr>
<tr>
<td></td>
<td>SEV2</td>
<td>4.63</td>
<td>1.68</td>
<td></td>
<td>0.906</td>
</tr>
<tr>
<td></td>
<td>SEV3</td>
<td>3.84</td>
<td>1.97</td>
<td></td>
<td>0.940</td>
</tr>
</tbody>
</table>

*Table 5.4: Reliability Analysis, Severity of Breach Scale*

For the more objective judgement of the type of breach represented by the critical service failure incident, there is a 100% agreement between the four judges regarding the more objective judgement of type of breach for the first three cases (Appendix 10). At this point, the judges were asked to continue with their judgement task for the remainder of the cases. Preliminary, statistical exploration of the judgement results indicates a valid and robust transformation of the data, in line with both theoretical expectations and case knowledge (Greckhamer et al., 2018). First, a correlation for all the variables shows a high degree of relationship between the causal conditions (independent variables) and the outcome condition (dependent variable), detailed in Table 5.5.
Second, to provide some further congruent validity, a standard linear regression analysis is performed (Table 5.6), where trust recovery is the dependent variable and all other factors are independent variables. A standard multiple regression assesses how much variance the eight factors (independent variables) explain in the overall trust recovery (dependent variable). The model explains 71% of the variance in the overall trust recovery outcome ($R^2 = 0.71$). Only two explanatory variables, competence and satisfaction, have statistically significant coefficients. The competence factor shows a strong relationship to overall trust recovery ($\beta = 0.268, p = 0.049$) and the satisfaction factor presents a stronger relationship ($\beta = 0.507, p = 0.001$). This serves to provide a measure of face validity to the data transformation process as theoretical expectations and case knowledge suggest a relationship between these two variables and trust recovery. Additionally, these complementary statistical techniques and parameters facilitate evaluation of potential QCA models (Cooper & Glaesser, 2016; Fiss, Sharapov, & Cronqvist, 2013; Greckhamer et al., 2013; Thomann & Maggetti, 2017). A configurational approach, as follows, allows further exploration of this complex phenomenon within B2B relationships (Santos, Mota, & Baptista, 2018).

<table>
<thead>
<tr>
<th></th>
<th>Competence</th>
<th>Satisfaction</th>
<th>Communication</th>
<th>Shared values</th>
<th>Integrity</th>
<th>Co-creation</th>
<th>Benevolence</th>
<th>Transparency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson’s correlation</td>
<td>0.642*</td>
<td>0.756**</td>
<td>0.346*</td>
<td>0.637**</td>
<td>0.547**</td>
<td>0.237</td>
<td>0.516**</td>
<td>0.286</td>
</tr>
<tr>
<td>Sig. (2 tailed)</td>
<td>0.001</td>
<td>&lt;0.001</td>
<td>0.029</td>
<td>&lt;0.001</td>
<td>0.003</td>
<td>0.141</td>
<td>0.001</td>
<td>0.073</td>
</tr>
<tr>
<td>N</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
</tbody>
</table>

Dependent Variable: Trust Recovery

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 5.5: Results of Correlation Analysis
<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardised</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>SE</td>
<td>β</td>
<td>t</td>
<td>Sig.</td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.023</td>
<td>0.607</td>
<td>0.038</td>
<td>0.970</td>
<td></td>
</tr>
<tr>
<td>Competence</td>
<td>0.269</td>
<td>0.131</td>
<td>0.268*</td>
<td>2.046</td>
<td>0.049</td>
</tr>
<tr>
<td>Communication</td>
<td>-0.041</td>
<td>0.141</td>
<td>-0.047</td>
<td>-0.291</td>
<td>0.773</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>0.488</td>
<td>0.130</td>
<td>0.507**</td>
<td>3.740</td>
<td>0.001</td>
</tr>
<tr>
<td>Shared values</td>
<td>0.291</td>
<td>0.190</td>
<td>0.286</td>
<td>1.533</td>
<td>0.135</td>
</tr>
<tr>
<td>Integrity</td>
<td>-0.167</td>
<td>0.129</td>
<td>-0.193</td>
<td>-1.295</td>
<td>0.205</td>
</tr>
<tr>
<td>Co-creation</td>
<td>-0.014</td>
<td>0.137</td>
<td>-0.014</td>
<td>-0.099</td>
<td>0.922</td>
</tr>
<tr>
<td>Benevolence</td>
<td>0.057</td>
<td>0.158</td>
<td>0.061</td>
<td>0.358</td>
<td>0.722</td>
</tr>
<tr>
<td>Transparency</td>
<td>0.146</td>
<td>0.138</td>
<td>0.164</td>
<td>1.055</td>
<td>0.299</td>
</tr>
</tbody>
</table>

\[ R^2 \] 0.71

Adjusted \[ R^2 \] 0.63

* \( p < .05; ** \( p < .01; *** \( p < .001

Table 5.6: Regression Analysis Results

5.3 Qualitative Comparative Analysis, Phase Two: Conditioning and Calibration

The two main stages of the QCA conditioning and calibration phase are calibration of the outcome and causal conditions and applying set membership values for each condition (Berg-Schlosser et al., 2009; Greckhamer et al., 2018; Jordan et al., 2011). Each main stage is detailed, as follows.

5.3.1 Calibration of Outcome and Causal Conditions

As QCA is a set-theoretic method, both the outcome and conditions are conceptualised as sets, of which require calibration. Calibration is representative of degrees of membership within a set (Greckhamer et al., 2018; Ragin, Strand, et al., 2008; Rihoux & Ragin, 2008).
Greckhamer et al. (2008, p. 488) describe effective calibration as a half-conceptual, half-empirical process of identifying thresholds that “meaningfully represent differences in kind and differences in degree among cases.” At inception, QCA relied exclusively on a “crisp” set approach (Ragin, 1987), distinguishing cases’ full membership and full non-membership into differences in kind, however, Ragin (2000) later expanded QCA to include a fuzzy-set approach, enabling researchers to also capture differences in degree of membership. This calibration process is a critical step within QCA and a central point where QCA departs from statistical analysis (Russo & Confente, 2019). Ragin, Strand, & Rubinson (2008) suggest several techniques for recalibrating the data for further analysis. Two of these techniques are adopted in the current study, relative to the two types of conditions under investigation; crisp-set calibration and fuzzy-set calibration.

In the calibration process, some conditions are clearly binary, categorical conditions so are amenable to crisp-set calibration, such as type of trust breach, size of the buying organisation and individual-level of decision-making authority. Each crisp-set condition will feature as either exhibiting full-membership within the set (1) or exhibiting full non-membership within the set (0). In the fuzzy-set calibration process, a combination of theoretical and case-based knowledge is adopted to guide the direct method of calibration (Ragin, 2009b), resulting in three qualitative anchors (Ordanini et al., 2014) within each fuzzy-set condition. These qualitative anchors require specification regarding threshold values as boundaries for full-membership within the set (1), full non-membership within the set (0), and the point of maximum level of ambiguity, or cross-over point (0.5) (Fiss, 2011; Ragin, 2000; Schneider & Wagemann, 2010a). This may well be different for different conditions, depending on the information gleaned from an inspection of the sample-based
properties, and also from the theoretical nature of the condition and case-based knowledge (Tóth et al., 2015). For each fuzzy-set condition, the single-item semantic differential scales are inspected and three points selected. After defining the set membership anchors, values were determined for cases in between these anchor values using the logistical function included in the fsQCA 3.0 software package (Ragin & Davey, 2014; Ragin, 2009a; Schneider & Wagemann, 2010a).

It is a major advantage of QCA that the raw data is calibrated in this way, as the resultant data is anchored in empirical reality rather than merely expressing a relative value, and thus has greater validity than scale data typically employed in statistical analysis (Thomann & Maggetti, 2017). Calibration differs from uncalibrated statistical measures in that uncalibrated measurement treats all variance equally, while calibration identifies “whether the found variance corresponds to meaningful thresholds that distinguish differences in kind” among cases (Misangyi et al., 2017, p. 262). In the original scaled responses, judgements are made on a comparative basis; in the calibration process each scale distribution is carefully reviewed (Grechhamer, 2016), the contextual circumstances considered (Toth et al., 2017), and a judgement is made as to what constitutes full inclusion, full exclusion and at what point a score on the scale is considered ambivalent, or could arguably be considered more “in” than “out”, or vice versa.

This triangulation of external criteria, theoretical knowledge and use of an expert panel of judges (Grechhamer et al., 2018) allows for the development of qualitative anchors, or breakpoints (Väätäinen & Dickenson, 2019), so as to avoid unnecessary information-loss that may otherwise occur (Tóth et al., 2015). Additionally, the adoption of 7-point Likert-type scale judgements by an expert panel allows for the capture of “qualitative statements
of agreement, disagreement and indifference” (Emmenegger, Schraff, & Walter, 2014, p. 3), thereby complementing QCA’s membership gradation, or calibration, process.

This calibration process is so central to QCA that in the following sections the outcome, contextual and causal conditions are reported, in turn, and the calibration of each is discussed in detail. This process serves to increase the rigour of the QCA process (Greckhamer et al., 2008; Thomann & Maggetti, 2017) as the researcher must be able to clearly and transparently justify all threshold values on theoretical or empirical grounds to ensure reliability of the study and its results (Rihoux & De Meur, 2009). The calibration decisions (Table 5.18) were completed by the primary researcher, in consultation with the supervisory team, and are based on prevailing theory (Franklin & Marshall, 2019), case-based insights (Oyemomi, Liu, Neaga, Chen, & Nakpodia, 2019), contextual knowledge (Misangyi & Acharya, 2014; Ordanini et al., 2014), and limited sample-based properties such as cumulative data distribution or frequency or density distribution (Greckhamer, 2016).

**5.3.1.1 Calibration of Outcome Condition: Trust Recovery**

The outcome condition, trust recovery, is calibrated to that of a fuzzy-set variable. This variable consists of scaled judgements reported on a 7-point Likert scale by three judges as reported in the previous section. These judgements were combined and validated in the statistical analysis described previously (Section 5.2.4). The combined items yield a single mean score of the variable (from 1 to 7) for each case.

As detailed in Table 5.7 and Figure 5.2, a complementary, sample-based characteristics approach suggests that a score of 6 and above (out of 7), representing 25% of the case judgements, indicates a high level of trust recovery. Similarly, there is a gap in the distribution where a number of cases, representing 47.5% of the case judgements, clearly
do not represent high levels of trust recovery, scoring between 1 and 4 (out of 7). However, those cases scoring 5 (out of 7), representing 25% of the case judgements, are considered ambivalent; trust has been somewhat recovered but there still seems a level of ambiguity. As such, the calibration threshold value for full membership is denoted as 6, the cross-over point as 5 and full non-membership as 4 (Fiss, 2011; Greckhamer et al., 2018).

<table>
<thead>
<tr>
<th>Score</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
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<td>7.5</td>
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</tr>
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</tr>
<tr>
<td>Total</td>
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<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.7: Descriptive Statistics, Trust Recovery Judgements

Figure 5.2: Trust Recovery Judgement Scores Distribution
These estimations of full-membership, full non-membership and the point of ambivalence also reflect both theoretical and case-based knowledge. When conceptualising trust recovery as an outcome condition, this research draws from extant literature on interorganisational trust when developing calibration gradations (Schneider & Wagemann, 2006, 2012). When considering some of the central tenets of interorganisational trust, the reliability of the other party (Ashnai et al., 2016; Morgan & Hunt, 1994), the confidence in an exchange partner’s reliability and integrity (Squire, Cousins, & Brown, 2009) and estimations of reliance and vulnerability (Blois, 1999; Mouzas et al., 2007), calibration must consider the violation of these objective criteria, as well as more affect-dominant criteria (Franklin & Marshall, 2019), when determining qualitative anchor points representing the recovery of trust. Similarly, case-based knowledge offers support to theoretical estimations of the return to a process of more calculative, or explorative, diagnosis of trust recovery (Gillespie, 2017) following service failure:

*But if they have corrected the problem and we are getting good quality product then there’s [still] damage done for sure. Every time there is an incident like this the damage is done. For any time, there is a problem, whether it’s quality, delivery, anything, the noise that generates is incredible. It’s like reverberation through the business. So, it might only be one component, one small problem but it comes through and it reverberates. It’s those whispers you get through the business. One guy says oh I’ve got a problem with supply X, next time the engineers look at the project and saying oh I see they are using this supplier, maybe I won’t because there is a problem, so it can cause a lot of grief and suppliers need to understand that.*

(Participant 38, Corporate, Operational)

A more pronounced, high-level value for full-membership is supported by theory, case-based and limited sample-based knowledge and represents a structured balance between qualitative and quantitative insight when calibrating outcome and causal conditions (Toth et al., 2017). This process is adopted throughout the calibration of the remaining contextual and causal conditions and is amenable to this study as the researcher enjoys an engagement
and intimacy with all the cases (Thomann & Maggetti, 2017); a pivotal consideration when seeking to establish measurement and internal validity in QCA (Berg-Schlosser, 2018; Berg-Schlosser & De Meur, 2009).

5.3.1.2 Calibration of Contextual Conditions: Type of Trust Breach, Severity of Trust Breach, Size of the Buying Organisation, Individual-Level of Decision-Making Authority

The contextual conditions, type of trust breach, severity of trust breach, size of the buying organisation and the individual level of decision-making authority of the focal trustor are all calibrated as per Table 5.19. Type of trust breach, size of the buying organisation and the individual level of decision-making authority all feature as dichotomous, categorical conditions and are calibrated as crisp-set variables, with calibration scores of 1 representing “fully-in” and calibration scores of 0 representing “fully-out”. The cross-section of representative cases is detailed in Table 5.8 and features an acceptable level of representation of all dichotomous, categorical contextual conditions.

<table>
<thead>
<tr>
<th>Contextual Condition</th>
<th>Number of Representative Cases</th>
<th>Percentage of Representative Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Breach</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive-dominant</td>
<td>24</td>
<td>60%</td>
</tr>
<tr>
<td>Affective-dominant</td>
<td>16</td>
<td>40%</td>
</tr>
<tr>
<td><strong>Size of Buying Organisation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SME</td>
<td>21</td>
<td>53%</td>
</tr>
<tr>
<td>Corporate</td>
<td>19</td>
<td>47%</td>
</tr>
<tr>
<td><strong>Organisational Authority</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operational</td>
<td>18</td>
<td>45%</td>
</tr>
<tr>
<td>Executive</td>
<td>22</td>
<td>55%</td>
</tr>
</tbody>
</table>

*Table 5.8: Descriptive Statistics, Contextual Conditions*
Severity of trust breach is calibrated as a fuzzy-set variable. This variable consists of scaled judgements reported on a 3-item, 7-point Likert scale by three judges as detailed in the previous section. These judgements were combined and validated in the statistical analysis described previously (Section 5.2.4). The combined items yield a single mean score of the variable (from 1 to 7) for each case. As detailed in Table 5.9 and Figure 5.3, a complementary, sample-based characteristics approach suggests that a score of 6 and above (out of 7), representing 22.5% of the case judgements, indicates a high level of trust breach severity. Similarly, the distribution of case judgements reveals a number of cases, representing 47.5% of the case judgements, that clearly do not represent high levels of trust breach severity, scoring between 1 and 4 (out of 7). However, those cases scoring 5.67 (out of 7), representing 12.5% of the case judgements, are considered ambivalent with the distribution of the judgements reflecting a distinct cross-over point. As such, the calibration threshold values for full membership are denoted as 6, the cross-over point as 5.67 and full non-membership as 4 (Fiss, 2011; Greckhamer et al., 2018).
### Severity of Breach Variable Distribution

<table>
<thead>
<tr>
<th>Score</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
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<td>5.0</td>
<td>5.0</td>
</tr>
<tr>
<td>1.67</td>
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<td>5.0</td>
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<td>10.0</td>
</tr>
<tr>
<td>2.00</td>
<td>2</td>
<td>5.0</td>
<td>5.0</td>
<td>15.0</td>
</tr>
<tr>
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<td>3</td>
<td>7.5</td>
<td>7.5</td>
<td>22.5</td>
</tr>
<tr>
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<td>5.0</td>
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</tr>
<tr>
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<td>2.5</td>
<td>50.0</td>
</tr>
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<td>4.67</td>
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<tr>
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<td>12.5</td>
<td>77.5</td>
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<td>85.0</td>
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<tr>
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<td>7.5</td>
<td>7.5</td>
<td>92.5</td>
</tr>
<tr>
<td>6.67</td>
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<td>2.5</td>
<td>2.5</td>
<td>95.0</td>
</tr>
<tr>
<td>7.00</td>
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<td>5.0</td>
<td>5.0</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*Table 5.9: Descriptive Statistics, Severity of Breach Judgements*

![Severity of Breach Judgement Scores Distribution](image)

*Figure 5.3: Severity of Breach Judgement Scores Distribution*
These estimations of full-membership, full non-membership and the point of ambivalence also reflect both theoretical and case-based knowledge. When conceptualising severity of breach as a contextual condition, this research draws from extant literature on service failure and trust breach outcome severity in terms of magnitude of harm (R. J. Lewicki & Bunker, 1996). This concept generally suggests that the greater harm to the victim of the transgression, the less favourable the reaction. Subsequently, offending organisations efforts are regarded more negatively, and their apologies or explanations are less likely to be accepted, when the magnitude of harm is severe rather than mild (Ohbuchi et al., 1989; Shapiro et al., 1994). Similarly, case-based knowledge offers support to theoretical estimations of the severity of a breach following service failure contributing to the effectiveness of reparative solutions:

I suppose the minor ones [breaches] are really probably around not honouring dates, saying they’re going to be then letting it out at the last minute, but doing that multiple times. You’d still probably see that as mild. As long as the reasons were okay. It’s when they continue, that same scenario can become a major when they continue to do it and they continue to give you different stories against that. I suppose it’s that constant, they look like they’re transparent but you know full well you catch them out lying blatantly lying and that’s hard. It goes from being a relationship to being a transactional relationship. You know the relationship is over when you start pulling out the terms and conditions and saying well what are the [terms], the minute you do that, it’s over. Divorce papers are out. You’ve been to see the lawyer. (Participant 40, SME, Executive)

5.3.1.3 Calibration of Causal Conditions: Competence, Satisfaction, Communication, Transparency, Integrity, Benevolence, Shared Values and Co-Creation

The causal conditions, competence, satisfaction, communication, transparency, integrity, benevolence, shared values and co-creation, are calibrated to that of fuzzy-set variables. These variables consist of scaled judgements reported on a 7-point Likert scale by three judges as detailed in the previous section. These judgements were combined and validated.
in the statistical analysis described previously (Section 5.2.4). The combined items yield a single mean score of the variable (from 1 to 7) for each case.

The template analysis to thematic coding approach featured in Study One was purposively developed to combine with QCA in the analysis of the qualitative data where quantitative anchors are not available (Toth et al., 2017); particularly when investigating those causal conditions contributing to trust recovery following service failure. The template coding approach translates well into the QCA calibration process in this study as the thematic codes and sub themes serve as rich, case-based indicators of graduations of the presence of each respective causal condition (Table 5.10) (Nenonen, Storbacka, Sklyar, Frow, & Payne, 2019; Thornton, Henneberg, Leischnig, & Naudé, 2019). This approach “embraces the qualitative nature of the research” (Toth et al., 2017, p. 196), invites a more in-depth understanding of the phenomenon (Basurto & Speer, 2012; Forkmann et al., 2017) and serves to avoid an artificial simplification on to the analytical process (Ragin, 2009a). A more detailed reflection on the theoretical (Chapter Three and Four) and case-based (Chapter Four) knowledge can be found in previous chapters. Accordingly, the following section details the complementary, sample-based approach for the causal conditions of competence, satisfaction, communication, transparency, integrity, benevolence, shared values and co-creation.
Table 5.10: Conceptualisation of Type and Causal Conditions Contributing to Trust Recovery Drawn from Study One

<table>
<thead>
<tr>
<th>Type of Trust</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive-Dominant</td>
<td>Competence</td>
<td>The value buyers attribute to suppliers’ rational and objective efforts to demonstrate ability, knowledge and procedural utility with the final reparative solution.</td>
</tr>
<tr>
<td></td>
<td>Satisfaction</td>
<td>The value buyers attribute to suppliers’ overall efforts toward achieving a high level of satisfaction with the final, reparative solution.</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
<td>The value buyers attribute to suppliers’ communication content, style and efforts when designing and deploying the final, reparative solution.</td>
</tr>
<tr>
<td></td>
<td>Transparency</td>
<td>The value buyers attribute to suppliers’ efforts in exhibiting and operationalising transparency when designing and deploying the final, reparative solution.</td>
</tr>
<tr>
<td>Affective-Dominant</td>
<td>Integrity</td>
<td>The value buyers attribute to suppliers’ demonstrations of integrity when designing and deploying the final, reparative solution.</td>
</tr>
<tr>
<td></td>
<td>Benevolence</td>
<td>The value buyers attribute to suppliers’ demonstrations of both indirect and direct acts of benevolence when designing and deploying the final, reparative solution.</td>
</tr>
<tr>
<td></td>
<td>Shared Values</td>
<td>The value buyers attribute to suppliers’ establishing and expression of shared organisational values when designing and deploying the final, reparative solution.</td>
</tr>
<tr>
<td></td>
<td>Co-Creation</td>
<td>The value buyers attribute to suppliers’ development-of and exercising-of co-creation activities and outcomes when designing and deploying the final, reparative solution.</td>
</tr>
</tbody>
</table>

Competence is calibrated into a fuzzy-set variable. This variable consists of scaled judgements reported on a single, 7-point Likert scale by three judges as detailed in the previous section. These judgements were combined and validated in the statistical analysis described previously (Section 5.2.4). The combined items yield a single mean score of the variable (from 1 to 7) for each case. As detailed in Table 5.11 and Figure 5.4, a complementary, sample-based characteristics approach suggests that a score of 6 and
above (out of 7), representing 35% of the total case judgements, indicates a high level of competence. Similarly, the distribution of case judgements reveals a number of cases, representing 47.5% of the total case judgements, clearly do not represent high levels of competence, scoring between 1 and 4 (out of 7). However, those cases scoring 5 (out of 7), representing 17.5% of the total case judgements, are considered ambivalent and the distribution of the judgements reflect a distinct cross-over point. As such, the calibration threshold values for full membership are denoted as 6, the cross-over point as 5 and full non-membership as 4 (Fiss, 2011; Greckhamer et al., 2018). Both theoretical and case-based knowledge offers support for these membership calibration values when considering estimations of competence as contributing to trust recovery following service failure.

<table>
<thead>
<tr>
<th>Score</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
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</thead>
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<td>5.0</td>
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</tr>
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<td>2.5</td>
<td>2.5</td>
<td>30.0</td>
</tr>
<tr>
<td>4.00</td>
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<td>17.5</td>
<td>17.5</td>
<td>47.5</td>
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<td>17.5</td>
<td>65.0</td>
</tr>
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</tr>
<tr>
<td>7.00</td>
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</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

*Table 5.11: Descriptive Statistics, Competence Judgements*
Satisfaction is also calibrated as a fuzzy-set variable. This variable consists of scaled judgements reported on a single, 7-point Likert scale by three judges as detailed in the previous section. These judgements were combined and validated in the statistical analysis described previously (Section 5.2.4). The combined items yield a single mean score of the variable (from 1 to 7) for each case. As detailed in Table 5.11 and Figure 5.5, a complementary, sample-based characteristics approach suggests that a score of 6 and above (out of 7), representing 25% of the case judgements, indicates a high level of satisfaction. Similarly, the distribution of case judgements reveals a number of cases, representing 27.5% of the case judgements, clearly do not represent high levels of competence, scoring between 1 and 3 (out of 7). However, those cases scoring 4 (out of 7), representing 25% of the case judgements, are considered ambivalent and the distribution of the judgements reflect a distinct cross-over point. The calibration threshold values for full membership is thus denoted as 6, the cross-over point as 4 and full non-membership as 3 (Fiss, 2011; Greckhamer et al., 2018). Both theoretical and case-based knowledge offers
support for these membership calibration values when considering estimations of satisfaction as contributing to trust recovery following service failure.

<table>
<thead>
<tr>
<th>Score</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
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</thead>
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<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>2.00</td>
<td>4</td>
<td>10.0</td>
<td>10.0</td>
<td>20.0</td>
</tr>
<tr>
<td>3.00</td>
<td>3</td>
<td>7.5</td>
<td>7.5</td>
<td>27.5</td>
</tr>
<tr>
<td>4.00</td>
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<td>25.0</td>
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</tr>
<tr>
<td>5.00</td>
<td>9</td>
<td>22.5</td>
<td>22.5</td>
<td>75.0</td>
</tr>
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<td>6.00</td>
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<td>15.0</td>
<td>15.0</td>
<td>90.0</td>
</tr>
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<td></td>
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<td><strong>100.0</strong></td>
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</tr>
</tbody>
</table>

Table 5.12: Descriptive Statistics, Satisfaction Judgements

Communication is another variable calibrated as fuzzy-set. This variable consists of scaled judgements reported on a single, 7-point Likert scale by three judges as detailed in the
previous section. These judgements were combined and validated in the statistical analysis described previously (Section 5.2.4). The combined items yield a single mean score of the variable (from 1 to 7) for each case. As detailed in Table 5.12 and Figure 5.6, a complementary, sample-based characteristics approach suggests that a score of 6 and above (out of 7), representing 62.5% of the case judgements, indicates a high level of communication. Similarly, the distribution of case judgements reveals a number of cases, representing 27.5% of the case judgements, clearly do not represent high levels of communication, scoring between 1 and 4.67 (out of 7). However, those cases scoring 5 (out of 7), representing 10% of the case judgements, are considered ambivalent and the distribution of the judgements reflect a distinct cross-over point. As such, the calibration threshold values for full membership is denoted as 6, the cross-over point as 5 and full non-membership as 4.67 (Fiss, 2011; Greckhamer et al., 2018). Both theoretical and case-based knowledge offers support for these membership calibration values when considering estimations of communication as contributing to trust recovery following service failure.

<table>
<thead>
<tr>
<th>Score</th>
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<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
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</tr>
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<td>2.00</td>
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<td>7.5</td>
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</table>

**Table 5.13: Descriptive Statistics, Communication Judgements**
Transparency is also calibrated as a fuzzy-set variable. This variable also consists of scaled judgements reported on a single, 7-point Likert scale by three judges as detailed in the previous section. These judgements were combined and validated in the statistical analysis described previously (Section 5.2.4). The combined items yield a single mean score of the variable (from 1 to 7) for each case. As detailed in Table 5.13 and Figure 5.7, a complementary, sample-based characteristics approach suggests that a score of 6 and above (out of 7), representing 40% of the case judgements, indicates a high level of transparency. Similarly, the distribution of case judgements reveals a number of cases, representing 42.5% of the case judgements, clearly do not represent high levels of transparency, scoring between 1 and 4 (out of 7). However, those cases scoring 5 (out of 7), representing 17.5% of the case judgements, are considered ambivalent and the distribution of the judgements reflect a distinct cross-over point. Consequently, the calibration threshold values for full membership is denoted as 6, the cross-over point as 5 and full non-membership as 4 (Fiss, 2011; Greckhamer et al., 2018). Both theoretical and case-based
knowledge offers support for these membership calibration values when considering estimations of transparency as contributing to trust recovery following service failure.

<table>
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<td>100.0</td>
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</tr>
</tbody>
</table>

Table 5.14: Descriptive Statistics, Transparency Judgements

Integrity is another variable that suits fuzzy-set calibration. Again, this variable consists of scaled judgements reported on a single, 7-point Likert scale by three judges as detailed in the previous section. These judgements were combined and validated in the statistical
analysis described previously (Section 5.2.4). The combined items yield a single mean score of the variable (from 1 to 7) for each case. As detailed in Table 5.14 and Figure 5.8, a complementary, sample-based characteristics approach suggests that a score of 6 and above (out of 7), representing 32.5% of the case judgements, indicates a high level of integrity. Similarly, the distribution of case judgements reveals a number of cases, representing 40% of the case judgements, clearly do not represent high levels of integrity, scoring between 1 and 4 (out of 7). However, those cases scoring 5 (out of 7), representing 25% of the case judgements, are considered ambivalent and the distribution of the judgements reflect a distinct cross-over point. The calibration threshold values for full membership is consequently denoted as 6, the cross-over point as 5 and full non-membership as 4 (Fiss, 2011; Greckhamer et al., 2018). Both theoretical and case-based knowledge offers support for these membership calibration values when considering estimations of integrity as contributing to trust recovery following service failure.

<table>
<thead>
<tr>
<th>Score</th>
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</tr>
</tbody>
</table>

*Table 5.15: Descriptive Statistics, Integrity Judgements*
Benevolence is another scaled judgement transformed into a fuzzy-set variable. The original variable consists of scaled judgements reported on a single, 7-point Likert scale by three judges as detailed in the previous section. These judgements were combined and validated in the statistical analysis described previously (Section 5.2.4). The combined items yield a single mean score of the variable (from 1 to 7) for each case. As detailed in Table 5.15 and Figure 5.9, a complementary, sample-based characteristics approach suggests that a score of 6 and above (out of 7), representing 10% of the case judgements, indicates a high level of benevolence. Similarly, the distribution of case judgements reveals a number of cases, representing 67.5% of the case judgements, clearly do not represent high levels of benevolence, scoring between 1 and 4 (out of 7). However, those cases scoring 5 (out of 7), representing 20% of the case judgements, are considered ambivalent and the distribution of the judgements reflect a distinct cross-over point. A calibration threshold value for full membership is denoted as 6, the cross-over point as 5 and full non-membership as 4 (Fiss, 2011; Greckhamer et al., 2018). As with the similar judgements made thus far, both theoretical and case-based knowledge offers support for these membership calibration
values when considering estimations of benevolence as contributing to trust recovery following service failure.

<table>
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</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

*Table 5.16: Descriptive Statistics, Benevolence Judgements*

*Figure 5.9: Benevolence Judgement Scores Distribution*

The penultimate variable, shared values, is also calibrated to that of a fuzzy-set variable. This variable consists, as the prior case, of scaled judgements reported on a single, 7-point
Likert scale by three judges as detailed in the previous section. These judgements were combined and validated in the statistical analysis described previously (Section 5.2.4). The combined items yield a single mean score of the variable (from 1 to 7) for each case. As detailed in Table 5.16 and Figure 5.10, a complementary, sample-based characteristics approach suggests that a score of 6 and above (out of 7), representing 22.5% of the case judgements, indicates a high level of shared values. Similarly, the distribution of case judgements reveals a number of cases, representing 52.5% of the case judgements, clearly do not represent high levels of benevolence, scoring between 1 and 4 (out of 7). However, those cases scoring 5 (out of 7), representing 22.5% of the case judgements, are considered ambivalent and the distribution of the judgements reflect a distinct cross-over point.

Leading from this reasoning, the calibration threshold values for full membership is denoted as 6, the cross-over point as 5 and full non-membership as 4 (Fiss, 2011; Greckhamer et al., 2018). Once again, consideration of theory and case-based knowledge validate these membership calibration values.

<table>
<thead>
<tr>
<th>Score</th>
<th>Frequency</th>
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<th>Valid Percent</th>
<th>Cumulative Percent</th>
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</tr>
<tr>
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<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Table 5.17: Descriptive Statistics, Shared Values Judgements*
Finally, co-creation is also calibrated to form a fuzzy-set variable. This variable also consists of scaled judgements reported on a single, 7-point Likert scale by three judges as detailed in the previous section. The combined items yield a single mean score, from 1-7, of the variable for each case. As detailed in Table 5.17 and Figure 5.11, a complementary, sample-based characteristics approach suggests that a score of 6 and above (out of 7), representing 22.5% of the case judgements, indicates a high level of co-creation. Similarly, the distribution of case judgements reveals a number of cases, representing 45% of the case judgements, clearly do not represent high levels of benevolence, scoring between 1 and 3 (out of 7). However, those cases scoring 4 (out of 7), representing 7.5% of the case judgements, are considered ambivalent and the distribution of the judgements reflect a distinct cross-over point. The calibration threshold values for full membership is thus denoted as 6, the cross-over point as 4 and full non-membership as 3 (Fiss, 2011; Greckhamer et al., 2018). Once again, both theory and consideration of the cases provide congruent validity for the calibration.
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</tr>
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<td>25.0</td>
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</tr>
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*Table 5.18: Descriptive Statistics, Co-Creation Judgements*

*Figure 5.11: Co-Creation Judgement Scores Distribution*
### Descriptive Statistics

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<th>Cross-Over Point</th>
<th>Full Non-Membership</th>
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</tbody>
</table>

*Table 5.19: Overview of the Fuzzy-Set Calibration Rules*

#### 5.3.2 Applying Set Membership Values for Each Condition

At this point of the conditioning and calibration phase, the calibration rules are applied to the raw data table through the fsQCA software package, Version 3.0 (Ragin & Davey, 2014). The fsQCA software then provides a log transformation of the data to provide a calibrated scale from 0 to 1 for each condition. Because cases with fuzzy-set membership scores of precisely 0.5 (the cross-over point) cause difficulties when intersecting fuzzy sets, Ragin (Ragin, 2009b) recommends avoiding the use of a precise 0.5 fuzzy-set membership score for causal and outcome conditions. To address this issue, a constant of 0.001 was added to all causal conditions with fuzzy-set membership scores less than 1 after logistical calibration (Fiss, 2011) before the next phase of QCA. Similarly, cases with crisp-set membership scores of 1 (full-membership) were recoded as 0.9 and cases with crisp-set membership scores of 1
(full non-membership) were recoded as 0.1 (Ragin & Rihoux, 2004; Ragin, Rubinson, et al., 2008). The conclusion of this phase of QCA results in set membership values for each condition and the outcome that can be used in Phase Three; analysis, reporting and interpretation.

5.4 Qualitative Comparative Analysis, Phase Three: Analysis, Reporting and Interpretation

The three main stages of the QCA analysis, reporting and interpretation phase are conducting a necessary conditions analysis, constructing and refining the truth table and analysing, evaluating and reporting the results (Berg-Schlosser et al., 2009; Fiss, 2011; Fiss, Marx, & Cambré, 2013; Greckhamer et al., 2018; Jordan et al., 2011). Each main stage is detailed, as follows.

5.4.1 Necessary Conditions Analysis

Using set theory, QCA conceptualises causality in terms of relations of necessity and sufficiency (Ragin, 2000; Ragin, Rubinson, et al., 2008). A configuration that is a consistent superset of the outcome, that is, all occurrences of the outcome exhibit the configuration, indicates a situation consistent with necessity (Greckhamer et al., 2008). A condition is necessary if whenever the outcome is present, the condition is also present (Toth et al., 2017). However, there can be cases that are members of the condition, but not the outcome (Schneider & Wagemann, 2010a, 2010b) so each single causal condition’s necessity is assessed through a series of criteria. These criteria for meaningful claims of necessity include empirical consistency, empirical relevance and conceptual meaningfulness (Ragin, Rubinson, et al., 2008; Schneider, 2018).
In the first step of assessing necessity, consistency is investigated which represents “how closely a perfect subset relation [between a configuration and an outcome] is approximated” (Ragin, 2009b, p. 44). A condition is regarded as necessary if the consistency score exceeds the threshold of 0.90 (Greckhamer, 2016; Schneider & Wagemann, 2010b, 2012), a higher criterion than sufficiency analyses due to the nature of necessary conditions as crucial explanatory factors (Thomann & Maggetti, 2017), without which a given event could not have occurred (Goertz, 2003, 2006; Schneider & Wagemann, 2012). Additionally, it is also important to investigate necessary conditions that contribute to the absence of an outcome of interest as “the explanation of the absence of the outcome (i.e. the negation of the phenomenon under analysis, denoted as “¬”) ... [is not in general] directly derived from the explanation of the presence of the outcome” (Wagemann, Buche, & Siewert, 2016, p. 2533). This investigation seeks to confirm whether, or not, the identified necessary conditions are logically inconsistent; the same condition cannot be necessary for both the outcome and the outcome complement (i.e. the negation of the outcome of interest) (Kahwati & Kane, 2018). Additionally, the condition and its complement (i.e. the negation of the causal condition, denoted as “¬”) cannot both be a necessary condition for the outcome and as Väätäinen & Dickenson (2019, p. 254) note, “when the same simple necessary configurations appear in both the presence and absence of the same outcome they are considered trivial and removed from further analysis”. This assessment is similarly diagnosed by thresholds of consistency of 0.90 or above for necessity relations.

As a final estimation of empirical consistency, Schneider and Rohlfing (2013) suggest if a set relation displays too many deviant cases consistency in kind (i.e. low levels of the necessary condition are present in high instances of the outcome of interest), it should not be
considered a necessary condition even if it passes the consistency threshold (Schneider, 2018). Deviant cases can be identified, if present, by executing an XY plot of the consistency of any necessary conditions relative to the outcome of interest in the fsQCA software (Ragin & Davey, 2014).

A necessary conditions analysis of the causal conditions contributing to successful trust recovery include competence, satisfaction, communication, transparency, integrity, benevolence, shared values and co-creation. Of these conditions, only satisfaction is considered necessary (Table 5.19), exceeding the consistency threshold of 0.90 (Schneider & Wagemann, 2012) with a consistency score of 0.91. Additionally, satisfaction features as a logically consistent necessary condition as it is not necessary for both the outcome and the outcome complement as denoted by a consistency score of 0.47 (Table 5.19) (satisfaction → ~trust recovery) nor is its complement necessary for the presence of trust recovery (~satisfaction → trust recovery) as denoted by a consistency score of 0.31.

An XY plot illustrating the presence of deviant cases (Figure 5.12) similarly supports empirical estimations of the necessity of the satisfaction condition as only one case (Case 31) features in the top left quadrant of an XY plot, of which will be more explicitly investigated as part of the within-case analysis in Phase Four (Schneider & Rohlfing, 2013). As an additional outcome of the analysis of necessary conditions is the finding that the absence of benevolence (~benevolence) is a necessary condition for the absence of trust recovery (~trust recovery). An XY plot illustrating the presence of deviant cases (Figure 5.13) similarly supports empirical estimations of the necessity of the absence of the benevolence condition as only one case (Case 8) features in the top left quadrant of an XY plot (Schneider & Rohlfing, 2013). This finding highlights a strength of QCA as a research
approach relative to the investigation of causally asymmetric relationships and invites further exploration as part of a within-case analysis (Berg-Schlosser et al., 2009; Rihoux & Lobe, 2009) in order to assist in complementing causal inferences (Thomann & Maggetti, 2017).

Figure 5.12: Necessary Conditions Deviant Case Analysis: (Satisfaction → Trust Recovery)

Figure 5.13: Necessary Conditions Deviant Case Analysis: (~Benevolence → ~Trust Recovery)
In the second step of establishing necessity, coverage is assessed which gauges a condition’s “empirical relevance or importance” (Ragin, 2009b, p. 44) and is only investigated after consistency has been assessed. Similar to tests assessing necessary conditions consistency, tests assessing necessary conditions coverage feature a higher criterion than sufficiency analyses. Whilst there is no lower bound threshold for measures of coverage (Haesebrouck, 2019), Schneider and Wagemann (2012, p. 146) suggest, “research practice indicates that coverage values below 0.50 are rarely seen for necessary conditions”. An inspection of the necessary conditions analysis table (Table 5.20) indicates that both (satisfaction $\rightarrow$ trust recovery) and ($\sim$benevolence $\rightarrow$ $\sim$trust recovery) feature coverage values in excess of 0.50.

Additionally, an inspection of an XY plot can reveal trivial necessary conditions. A trivial necessary condition results when the outcome represents a very small subset of the condition or “the outcome and conditions represent very large sets and are nearly constants” (Kahwati & Kane, 2018, p. 122) and should be discounted from any further analysis. A trivial necessary condition is denoted by all (or the majority) of cases featuring in the bottom right quadrant of the XY plot when the outcome is a small subset of the condition and features as a very rare event or in the top right quadrant of the XY plot when the condition represents a common contextual factor that is nearly always present in the background such that there is almost no instance of its absence.
<table>
<thead>
<tr>
<th>Condition</th>
<th>Presence</th>
<th>Absence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consistency</td>
<td>Coverage</td>
</tr>
<tr>
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</tr>
<tr>
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<td>0.26</td>
</tr>
<tr>
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<td>0.66</td>
</tr>
<tr>
<td>~Satisfaction</td>
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<td>0.28</td>
</tr>
<tr>
<td>Communication</td>
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<td>0.49</td>
</tr>
<tr>
<td>~Communication</td>
<td>0.27</td>
<td>0.31</td>
</tr>
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<td>Transparency</td>
<td>0.58</td>
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</tr>
<tr>
<td>~Transparency</td>
<td>0.51</td>
<td>0.39</td>
</tr>
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<td>Integrity</td>
<td>0.67</td>
<td>0.61</td>
</tr>
<tr>
<td>~Integrity</td>
<td>0.48</td>
<td>0.35</td>
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<tr>
<td>Benevolence</td>
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<tr>
<td>~Benevolence</td>
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<td>0.37</td>
</tr>
<tr>
<td>Shared Values</td>
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</tr>
<tr>
<td>~Shared Values</td>
<td>0.61</td>
<td>0.35</td>
</tr>
<tr>
<td>Co-Creation</td>
<td>0.56</td>
<td>0.44</td>
</tr>
<tr>
<td>~Co-Creation</td>
<td>0.72</td>
<td>0.37</td>
</tr>
</tbody>
</table>

Table 5.20: Necessary Conditions Analysis, Causal Conditions in the Presence and Absence of Trust Recovery

The deviant case analysis illustrated in both Figure 5.12 (satisfaction $\rightarrow$ trust recovery) and Figure 5.13 (~benevolence $\rightarrow$ ~trust recovery) support empirical estimations of the non-trivial necessity of the conditions as all (or the majority) of cases do not feature exclusively in the top right or bottom right quadrants of their respective XY plots (Schneider & Rohlfing, 2013). Therefore, when developing simplifying assumptions, or rules, about counterfactual configurations in the next stage of the analysis phase, the non-occurrence of satisfaction when considering the presence of trust recovery (satisfaction $\rightarrow$ trust recovery) and the complement of benevolence when considering the complement of trust recovery
(~benevolence → ~trust recovery) will be considered untenable when seeking to identify the configurations of conditions that are related to the outcome of interest (Ragin, 2000, 2009b; Santos et al., 2018; Schneider & Wagemann, 2012). Any configuration of conditions that does not feature these necessary conditions will be discounted from further analysis (Mannewitz, 2011; Schneider, 2018; 2019).

The final step of assessing necessity is that of diagnosing conceptual meaningfulness. QCA should not revert to a strictly Boolean algebraic position, rather than social science reasoning, when seeking to identify necessary conditions (Schneider, 2018). The notion that satisfaction is necessary, but not sufficient, when considering configurations of conditions leading to trust recovery solutions is central to this research. Prevailing theory suggests that satisfaction can either refer to explicit, transactional measures focusing on a discrete incident or a cumulative construct resulting from a series of transactions, over time (Garbarino & Johnson, 1999; Hess & Story, 2005). This theoretical premise lends support to the notion that satisfaction features as a valid reflection of an overall reparative solution, as conceptualised. Additionally, scholars tend to concur that satisfaction is necessary, but not sufficient for the (re)formation of trust, and not all satisfied customers trust the organisation simply because they are satisfied (Moorman et al., 1993; Morgan & Hunt, 1994).

The empirical findings in this study serve to support these conceptual and theoretical estimations of the role of satisfaction in trust recovery and do not merely represent a “formalist [and] problematic argument when dealing with real social science theories and data” (Schneider, 2018, p. 248). This work is concerned with the combination of both necessary and sufficient conditions, within different contextual conditions, that lead to high
levels of trust recovery. This “idea that the researcher must ‘make sense’ of causal conditions identified as necessary [...] is very important” (Ragin, 2000, p. 209). Many QCA methodologists concur that single necessary (but not sufficient) conditions are critically important for social science theory and practice (Dul, 2016; Thomann & Maggetti, 2017).

A necessary conditions analysis of the contextual conditions contributing to successful trust recovery include type of breach, severity of breach, size of buying organization and individual level of decision-making authority of the focal trustor. None of these conditions are considered necessary (Table 5.20) as no conditions exceed the consistency threshold of 0.90 (Schneider & Wagemann, 2012), therefore no further assessments of necessity are performed.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Presence</th>
<th>Absence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consistency</td>
<td>Coverage</td>
</tr>
<tr>
<td>Type</td>
<td>0.37</td>
<td>0.36</td>
</tr>
<tr>
<td>~Type</td>
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<td>0.44</td>
</tr>
<tr>
<td>Severity</td>
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</tr>
<tr>
<td>~Severity</td>
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<td>0.49</td>
</tr>
<tr>
<td>Size</td>
<td>0.66</td>
<td>0.50</td>
</tr>
<tr>
<td>~Size</td>
<td>0.36</td>
<td>0.30</td>
</tr>
<tr>
<td>Authority</td>
<td>0.52</td>
<td>0.38</td>
</tr>
<tr>
<td>~Authority</td>
<td>0.50</td>
<td>0.45</td>
</tr>
</tbody>
</table>

**Note:** “Type” denotes “Type of Breach”; “Severity” denotes “Severity of Breach”; “Size” denotes “Size of Buying Organisation”; “Authority” denotes “Individual Level of Decision-Making Authority of Focal Trustor”.

*Table 5.21: Necessary Conditions Analysis, Contextual Conditions in the Presence and Absence of Trust Recovery*
5.4.2 Constructing and Refining the Truth Table

Sufficiency should always be assessed after necessity (Wagemann et al., 2016) and involves three steps (Fiss, 2011; Ragin, 2000, 2009b): construction, preparation and analysis of a data matrix called the truth table. Based on the set membership scores calibrated in Phase Two, each observation is assigned to a particular configuration in the truth table, otherwise known as the logic space (Ragin & Sonnet, 2004; Ragin, 1987). Each row of the truth table displays a specific combination of conditions with the truth table consisting of \(2^k\) configurations, where \(k\) represents the number of logically possible configurations observed empirically in the data. Additionally, configurations that exist logically, but lack empirical instances feature in the truth table; otherwise known as logical remainders (Schneider & Wagemann, 2012). The next steps in the analysis seek to reduce the complexity of the number of logically possible configurations so as to ensure a feasibility and economy of managerial application of the findings.

<table>
<thead>
<tr>
<th>Truth Table Analysis</th>
<th>Number of Logically Possible Configurations (k)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Causal Conditions)</td>
<td>256</td>
</tr>
<tr>
<td>(Causal Conditions) • Type of Breach</td>
<td>512</td>
</tr>
<tr>
<td>(Causal Conditions) • Severity of Breach</td>
<td>512</td>
</tr>
<tr>
<td>(Causal Conditions) • Size of Buying Organisation</td>
<td>512</td>
</tr>
<tr>
<td>(Causal Conditions) • Individual Level of Decision-Making Authority</td>
<td>512</td>
</tr>
</tbody>
</table>

Table 5.22: Truth Table Analyses, Number of Logically Possible Configurations

The presence of the causal conditions for successful trust recovery were analysed for type of trust breach, severity of trust breach, size of buying organisation and individual level of
decision-making authority of the focal trustor. Five different truth table analyses are conducted for both the presence and absence of trust recovery within each of the four different contextual conditions, as well as an overall truth table analysis with no contextual distinction (Table 5.21). The truth table analyses are conducted separately in an effort to avoid possible threats to internal validity arising from limited empirical diversity (Marx & Dusa, 2011; Thomann & Maggetti, 2017) when considering the suggested cases to conditions ratio in QCA (Fiss, 2011; Marx, 2006).

A QCA approach focused on substantive interpretability suggests reducing limited diversity a priori in the research design by holding contextual factors constant (Schneider & Wagemann, 2006) or considering a two-level approach to investigating “outcome-enhancing contexts” (Mannewitz, 2011, p. 15); especially for those mechanisms for which extant theory is rather clear (Misangyi & Acharya, 2014). Investigating these contextual factors offers a deeper explanation of trust recovery by conceptualising causal conditions at different levels of analysis that relate to one another (Goertz & Mahoney, 2005; Leischnig & Kasper-Brauer, 2016). The basic premise of these additional truth table analyses is that causal conditions leading to trust recovery may operate at different levels, and interact within and across these levels, thus forming complex causal patterns within these distinct contexts (Rohlfing, 2012). These analyses serve to differentiate between structural, contextual conditions that feature as theoretically-derived factors, whilst simultaneously capturing more agency-oriented conditions “which are shorter-term and can easily be influenced, altered or instrumentalised by the actors” (Tomini & Wagemann, 2018, p. 689). This approach allows the researcher to analyse potential “outcome-triggering contexts”
(Schneider, 2019, p. 1123) and interpret each sufficient term in light of the contextual-causal distinction.

This approach remains in line with the causal diversity and the foundational tenets of QCA as “while it is useful to take a look at the entire solution, it is equally important to consider the individual paths one after another in order to understand the diverse ways in which the outcome comes about (Ragin, 1987, p. 168). Therefore, this approach considers that “the effects of conditions on the micro [causal] level may depend on the presence of certain macro [contextual] conditions, but the macro [contextual] conditions may also be irrelevant for individual paths” (Rohlfing, 2012, p. 501). This allows for distinct ways in which the outcome of interest can result whether a contextual condition is part of the solution, or not, and is useful when investigating under which specific circumstances the recovery of trust may be further explained or understood. Additionally, this distinction is of practical relevance (Greckhamer et al., 2008) and supports “substantive interpretability” (Thomann & Maggetti, 2017, p. 22) in light of existing theoretical and substantive knowledge. An approach emphasising substantive interpretability “entails relatively demanding procedures to deal with logical remainders and interpret the often-complex results” (Thomann & Maggetti, 2017, p. 22). The five truth table analyses, and their respective data matrices representing the logic space (Appendices 11 – 15), were subject to further refinement into meaningful configurations before further analysis and interpretation. This analytic step is critical in QCA as it serves to identify, prior to analysis, the most salient combinations of conditions for the outcome; otherwise termed logical minimisation, Boolean reduction or minimisation of the truth table (Kahwati & Kane, 2018).
The first step in refining the truth tables is to simplify the representative configurations based on frequency of observed instances of the configuration. This is the minimum level researchers accept configurations are empirically relevant and is usually based on a study’s number of empirical instances under investigation (Tóth et al., 2015). As this work is representative of an intermediate-$N$ QCA study (Schneider & Wagemann, 2010b, 2012), a frequency cut-off of one case is adopted to ensure that the assessment of the fuzzy subset relations occurs only for those configurations exceeding a minimum of one observed case (Fiss, 2011; Ragin, 2009b). This also assists in within-case analysis in the next phase of QCA as specific cases can be identified that are representative of a solution, inviting a thick case-based narrative of the phenomena of interest (Berg-Schlosser et al., 2009; Rihoux & Lobe, 2009).

The second step in refining the truth tables is to consider minimum consistency levels for configurations, which assesses the degree to which the cases sharing a given causal condition, or combination of causal conditions, agree in exhibiting the outcome in question (Fiss, 2011; Greckhamer et al., 2018; Ragin, 2006a). For sufficiency analysis, a well-established consistency benchmark is $\geq 0.80$ for raw consistency (Greckhamer et al., 2018; Ragin, 2009a; Schneider & Wagemann, 2012) and features in this study as the consistency cut-off point. Causal conditions exceeding this predefined consistency cut-off value of 0.80 are regarded as sufficient for the outcome and configurations below this cut-off value are considered as not sufficient (Tóth et al., 2015). To aid in the robustness of the findings, a sensitivity analysis was carried out by checking configurations at different consistency levels of 0.75 and 0.90 (Emmenegger et al., 2014), but only minor changes were observed regarding neutral permutations that occur and the specific number and type of solutions.
(Toth et al., 2017) and the interpretation of the results remained substantively the same (Fiss, 2011).

The third step in refining the truth tables, if necessary conditions are found, is to discount from further analysis any configurations that do not feature necessary conditions identified in the necessary conditions analysis. The algorithm-driven process of logical minimisation of the truth table in QCA can result in untenable simplifying assumptions on logical remainder rows (Schneider & Rohlfing, 2013; Schneider & Wagemann, 2012), of which can result in incoherent assumptions contradicting a finding of necessity (Kahwati & Kane, 2018). Scholars note, “truth table rows (no matter if existing empirically or as logical remainders) that do not show this condition can be automatically excluded from further consideration” (Wagemann et al., 2016, p. 2535). Consequently, all rows indicating the absence of satisfaction in the presence of trust recovery (~satisfaction → trust recovery) and all rows indicating the presence of benevolence in the absence of trust recovery (benevolence → ~trust recovery) are removed from the truth tables before analysis and interpretation (Schneider & Wagemann, 2012).

In the fourth and final step, simplifying assumptions are made regarding the expected theoretical direction of relationships between each causal condition and the outcome condition (Ragin & Sonnet, 2004) when crafting intermediate solution terms (Schneider & Wagemann, 2012; Thomann & Maggetti, 2017). Expectations must be formulated in line with the logic of QCA (Schneider & Wagemann, 2012) and this is not synonymous with hypothesis testing on net correlational effects of single variables (Schneider & Wagemann, 2010b; Thomann & Maggetti, 2017). Rather, “directional expectations for single conditions [are] used for counterfactual reasoning under an approach emphasising substantive
interpretability” (Thomann & Maggetti, 2017, p. 20). This process serves to “minimise away irrelevant factors” as expectations can target the relevance or irrelevance of some factors to an outcome (Thomann & Maggetti, 2017, p. 20). The directional expectations for each truth table analysis are detailed in Appendix 16 and indicates whether the condition theoretically or substantively should, or should not, contribute to a case having membership in the outcome set (Ragin & Sonnet, 2004; Schneider & Wagemann, 2010b). For the causal conditions under investigation, directional expectations are set to “present” (causal conditions → trust recovery) to indicate a positive directional expectation, however, for contextual conditions directional expectations are set to “present or absent” (contextual conditions → trust recovery; ~contextual conditions → trust recovery). This is due to the presence, or absence, of contextual conditions potentially offering substantively different interpretations (Schneider & Wagemann, 2010b, 2012), of which set-theoretic methods are ideally suited to assess (Emmenegger et al., 2013).

At this point the simplified truth tables (Appendices 17 – 21) are analysed using the Quine-McCluskey algorithm as implemented in the fsQCA software (Ragin & Davey, 2014), resulting in five separate analyses for each of the contexts under investigation. The truth table rows were reduced to simplified combinations based on Boolean algebra (Rihoux & Ragin, 2008) that resulted in the solution formulas with multiple paths; otherwise known as equifinality. It is also good practice in QCA to analyse separately the configurations for the presence and the absence of an outcome of interest (Fiss, 2011; Greckhamer et al., 2018; Schneider & Wagemann, 2012). As Greckhamer et al. (2018, p. 490) note, “the occurrence and the non-occurrence of an outcome may constitute two qualitatively different phenomena and it is good practice to provide separate explanations for them”; they may
potentially even require different causal models (Schneider & Wagemann, 2012).
Therefore, for each of the contextually distinct truth table analyses, a separate analysis of
the configurations of causal conditions present in the complement of the outcome of
interest (~trust recovery) is undertaken (Fiss, 2011).

5.4.3 Analysing, Evaluating and Reporting the Results
The final step in Phase Three of QCA is analysing, evaluating and reporting the results of the
truth table analyses. The fsQCA software (Ragin & Davey, 2014) reports three types of
solution: a complex solution, a parsimonious solution and an intermediate solution
(Appendices 22 – 26). The three types of solutions differ to the extent in which logical
remainders have been considered in the counterfactual analysis (Fiss, 2011; Ragin, 2009b).
The complex solution does not consider any logical remainder and produces the most
complex result, limiting its interpretability and the practicality of findings (Ragin, Rubinson,
et al., 2008; Schneider & Wagemann, 2012). The parsimonious solution considers any
logical remainder that will help generate a logically simpler solution and represents the
most concise result (Fiss, 2011). Finally, the intermediate solution considers those logical
remainders that represent “easy counterfactuals”. The distinction between “easy” and
“difficult” counterfactuals is based on information regarding the connection between each
causal condition and the outcome (Ragin, 2009b). Whilst easy counterfactuals represent
“redundant causal conditions that are added to a combination of causal conditions that by
itself already leads to the outcome in question (Fiss, 2011, p. 403), difficult counterfactuals
refer to “situations in which a causal condition is eliminated from a configuration leading to
the outcome in question, based upon the premise that this causal condition is redundant”
(Fiss, 2011, p. 403). Put differently, Legewie (2013, p. 14) describes the intermediate
solution as including “selected simplifying assumptions to reduce complexity, but should not
include assumptions that might be inconsistent with the theoretical and/or empirical knowledge”, including the retention of necessary conditions during the minimisation process (Ren, Tsai, & Eisingerich, 2016). Thus, the intermediate solution represents a compromise between inclusions of either no, or all, logical remainders in the counterfactual analysis (Forkmann et al., 2017) and will be presented and interpreted as follows.

To assist in the visualisation and interpretation of QCA results, researchers should focus on both the parsimonious and the intermediate solutions, which allows for identifying core and peripheral conditions as part of a configuration. As Fiss (2011, p. 403) notes, “…core conditions are those that are part of both parsimonious and intermediate solutions, and peripheral conditions are those that are eliminated in the parsimonious solution and thus only appear in the intermediate solution”. Thus, inspection of the parsimonious and intermediate solutions allows researchers to draw conclusions regarding the causal essentiality of specific combinations of causal conditions (Fiss, 2011). This distinction between core and peripheral conditions also allows for presentation of the results in the form of graphical tables suggested by Fiss (2011) and Ragin (2009b). In the reported solution tables, each column represents one path (or configuration) of the solution formula that leads to trust recovery in the respective contextually distinct analyses. Solid circles denote the required presence of a condition in that path and crossed-out circles denote it’s required absence. Additionally, large circles represent core conditions and small circles represent peripheral conditions. Unfilled cells indicate immaterial conditions, representing a situation in which the condition may be either present or absent without altering the causal relation between the configuration and the outcome (Ragin & Fiss, 2008). The solution tables also report standard measures of fit: consistency, raw coverage and unique
coverage of each path as well as overall consistency and coverage for the solution formula. First, as with the necessary conditions analysis, consistency measures the extent to which a configuration corresponds to the outcome (Ragin, 2009b). However, for analyses of sufficiency, the accepted consistency threshold is lower and widely accepted at ≥ 0.80 (Ragin, 2009b; Schneider & Wagemann, 2012). Secondly, coverage assesses the proportion of cases that follow a particular path and captures the empirical importance of an identified configuration (Fiss, 2007). Coverage values indicate the percentage of cases that take a given pathway to the outcome of interest through two different types of coverage score (Ragin, 2006b). Raw coverage represents the extent to which each configuration can explain the outcome, whilst unique coverage represents the proportion of cases that can be explained exclusively by the configuration and should meet a threshold of at least 0.01 (Ragin, 2006b; Russo, Confente, Gligor, & Cobelli, 2019), otherwise it should be eliminated (Toth et al., 2017).

In the subsections that follow, two types of truth table analysis are reported; causal conditions with no contextual conditions and causal conditions with the four contextual conditions. The findings for each truth table analysis are discussed individually in relation to the propositions developed in Section 5.2.2. As such, each subsection reports the intermediate solution tables featuring visualisations of the solutions identified for both the presence and the absence of the outcome. The solution tables indicate whether, for each configuration, a different pattern of core, peripheral as well as neutral conditions exist (Fiss, 2011). Next, Boolean expressions of the visualisations of findings incorporating a conjunctive statement and outcome are presented. Finally, XY plots for those solutions that feature as the most consistent and empirically relevant in the presence and absence of trust
recovery are generated using the Tosmana fsQCA software XY plotting tool (Cronqvist, 2011) and reported for each truth table analysis (Aversa, Furnari, & Haefliger, 2015; Greckhamer et al., 2018).

5.4.3.1 Analysis of Configurations Sufficient for Supplier Trust Recovery, Causal Conditions with No Contextual Conditions

The results of the sufficiency analysis reveal five solutions, or configurations of causal conditions, leading to the presence of trust recovery (causal conditions → trust recovery) (Table 5.24). The solution table details each of the configurations as exhibiting acceptable consistency ($\geq 0.80$) as well as being empirically relevant with an overall solution coverage of 0.71 indicating that the five combined solutions account for 71% of the membership in the outcome; the presence of trust recovery. An overall solution consistency of 0.96 indicates a robust relationship between trust recovery and the combination of configurations (Fiss, 2011; Schneider & Wagemann, 2010b; Woodside, 2013) with each of the individual configurations exhibiting consistency between 0.91 and 1. The relatively small differences observed in consistency across the configurations have no diagnostic significance (Ragin, 2006b). Although coverage is generally used descriptively rather than diagnostically (Mellewigt, Hoetker, & Lütkewitte, 2018), of the five configurations, Solution 3 features the highest raw coverage (a value of 0.40) suggesting that this combination of attributes is empirically most relevant as part of the overall solution (Forkmann et al., 2017; Russo et al., 2019). Again, this is not to be interpreted as probabilistic (Schneider & Wagemann, 2010b), as a configuration with low coverage “might be particularly interesting if it indicated a path to a desirable outcome that few firms had implemented” (Mellewigt et al., 2018, p. 1219).
A graphical relationship of sufficiency of Solution 3 is further illustrated in Figure 5.14 where most cases fall above the diagonal (Kahwati & Kane, 2018), suggesting that a relationship of sufficiency can be inferred. Furthermore, the configurations indicate the presence of both core and peripheral conditions pointing to the existence of multiple solutions sufficient for the presence of trust recovery; namely, equifinality (Fiss, 2011). The presence of multiple sufficient configurations with high raw coverage and consistency scores, coupled with low unique coverage scores reflects the complexity of the phenomenon (Scarpi, Pizzi, Raggiotto, & Mason, 2018; Schneider & Wagemann, 2012) and is not indicative of model ambiguity. Finally, the presence of satisfaction features in all sufficient solutions, as is to be logically expected, as it features as a necessary condition for the presence of trust recovery in previous analyses (Schneider, 2019; Schneider & Wagemann, 2012).

The subsets, or conditions, representative in Solutions 1 – 5 allow examination of a point that is widely recognised, but seldom explored in the buyer-supplier literature (Franklin & Marshall, 2019); namely, recognising and operationalising the role of both cognitive- and affective-dominant dimensions of trust. None of the configurations observed contain exclusively cognitive- or affective-dominant combinations of the dimensions of trust, as conceptualised, lending support to Proposition 1 (Table 5.2). Solutions 1 – 5 present combinations of conditions that lead to high levels of trust recovery in a supplier organisation following service failure, in which the causal conditions may either be present (i.e. high) or absent (i.e. low) (Woodside, 2019), lending support to Proposition 2 (Table 5.23). As is good practice in QCA (Woodside, 2013), the Boolean expressions of the conjunctive statements are detailed in Table 5.25.
<table>
<thead>
<tr>
<th>Proposition</th>
<th>Description</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>No single best configuration of buyers’ cognitive- and affective-dominant perceptions leads to high trust recovery following service failure, but there exist multiple, equally effective configurations of both cognitive- and affective- dominant causal factors.</td>
<td>✓</td>
</tr>
<tr>
<td>Two</td>
<td>Single causal conditions may be present or absent within configurations leading to high trust recovery following service failure, depending on how they combine with other causal conditions.</td>
<td>✓</td>
</tr>
</tbody>
</table>

*Table 5.23: Empirical Support for Proposition One and Proposition Two*
<table>
<thead>
<tr>
<th>Conditions</th>
<th>Solution 1</th>
<th>Solution 2</th>
<th>Solution 3</th>
<th>Solution 4</th>
<th>Solution 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Communication</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Transparency</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Integrity</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Benevolence</td>
<td>●</td>
<td></td>
<td></td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Shared Values</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Co-Creation</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

| Consistency         | 0.98       | 0.91       | 0.93       | 0.98       | 1          |
| Raw Coverage        | 0.31       | 0.31       | 0.40       | 0.15       | 0.20       |
| Unique Coverage     | 0.05       | 0.06       | 0.05       | 0.08       | 0.06       |
| Overall Solution Coverage | 0.71       |            |            |            |            |
| Overall Solution Consistency | 0.96       |            |            |            |            |

**Note:** Frequency cut-off: 1, consistency cut-off: 0.88. Solid black circles indicate the presence of a condition, whereas empty circles with an “X” indicate the absence of a condition. Large circles indicate core conditions, whereas small circles indicate peripheral conditions. Blank spaces indicate a specific condition is not considered in a solution and may be present or absent.

**Table 5.24: Sufficient Configurations for Presence of Trust Recovery, Causal Conditions with No Contextual Conditions**

Solution 1 reveals a combination of causal conditions that includes the presence of competence, satisfaction and communication, which are representative of core conditions (i.e. being causally more essential than the other peripheral conditions) sufficient for trust recovery. In this configuration, the absence of co-creation plays a peripheral, or
subordinate role, suggesting buying organisations represented by this configuration are not as concerned with high levels of co-creation when diagnosing whether trust has been recovered; all remaining factors are immaterial, or are not trust recovery-enhancing in this solution.

Solution 2 reveals a similar combination of causal conditions, including the presence of competence, satisfaction and communication as core conditions sufficient for trust recovery in the absence of high-level demonstrations of integrity; all remaining factors are immaterial. Similarly, Solution 3 combines the presence of competence, satisfaction and communication as core conditions, in the absence of high-level demonstrations, or perceptions, of shared values; all remaining factors are immaterial. Whilst these first three solutions (1 – 3) share a commonality in the presence of three core conditions (competence, satisfaction and communication), these solutions cannot be considered substitutable, or “neutral permutations” (Fiss, 2011, p. 398), as Solutions 2 and 3 differ in the core absence of two conditions (integrity and shared values, respectively) so persist as independently equifinal means to achieving trust recovery.

Solution 4 reveals a configuration containing the presence of competence, satisfaction, integrity, shared values and co-creation in the absence of high-level demonstrations of transparency. In Solution 4, the presence of demonstrations of competence and satisfaction are core factors whilst demonstrations of integrity, shared values, co-creation are peripheral, or supporting, conditions. In this configuration, the absence of transparency plays a peripheral, or subordinate role suggesting buying organisations represented by this configuration are not as concerned with high levels of transparency when diagnosing whether trust has been recovered when combined with the other factors; benevolence
remains as an immaterial factor, or is not trust recovery-enhancing, in this solution.

Interestingly, the role of high levels of perceived integrity, shared values and co-creation and the role of the absence, or low levels, of perceived transparency is exacerbated in Solution 4 when high levels of communication are neither present nor absent.

Finally, in Solution 5, the presence of core conditions satisfaction and communication and peripheral conditions transparency, integrity and benevolence combined with the absence of high-level demonstrations of shared values concomitantly lead to trust recovery. Again, the more explicit role of demonstrations of transparency, integrity, benevolence and the absence of high-level demonstrations of shared values are illuminated in Solution 5 when high-level demonstrations of competence are neither present or absent.

<table>
<thead>
<tr>
<th>Solution</th>
<th>Boolean Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>COMP • SATIS • COMM • ¬COCR +</td>
</tr>
<tr>
<td>2</td>
<td>COMP • SATIS • COMM • ¬INTEG +</td>
</tr>
<tr>
<td>3</td>
<td>COMP • SATIS • COMM • ¬SHVL +</td>
</tr>
<tr>
<td>4</td>
<td>COMP • SATIS • ¬TRAN • INTEG • SHVL • COCR +</td>
</tr>
<tr>
<td>5</td>
<td>SATIS • COMM • TRAN • INTEG • BENE • ¬SHVL ≤ TREC</td>
</tr>
</tbody>
</table>


Table 5.25: Boolean Expressions of Sufficient Configurations for Presence of Trust Recovery, Causal Conditions with No Contextual Conditions
As configurations leading to trust recovery might be quite different from those leading to its absence, the possibility of causal asymmetry needs to be investigated (Greckhamer, 2016; Greckhamer et al., 2018; Ragin, 2009b; Woodside, 2013). The results of the sufficiency analysis reveal three solutions, or configurations of causal conditions, leading to the absence of trust recovery (causal conditions $\rightarrow \sim$trust recovery) (Table 5.27). The solution table details each of the configurations as exhibiting acceptable consistency ($\geq 0.80$) as well as being empirically relevant with an overall solution coverage of 0.91 indicating that the three combined solutions account for 91% of the membership in the outcome; the absence of trust recovery. An overall solution consistency of 0.84 indicates a robust relationship between trust recovery and the combination of configurations (Fiss, 2011; Schneider & Wagemann, 2010b; Woodside, 2013) with each of the individual configurations exhibiting consistency between 0.93 and 0.99. Of the three configurations, Solution 1 features the highest raw coverage (a value of 0.60) suggesting that this combination of attributes is
empirically most relevant as part of the overall solution (Forkmann et al., 2017; Russo et al., 2019).

A graphical relationship of sufficiency of Solution 3 is further illustrated in Figure 5.15 where most cases fall above the diagonal (Kahwati & Kane, 2018), suggesting that a relationship of sufficiency can be inferred. Furthermore, the configurations indicate the presence of both core and peripheral conditions pointing to the existence of multiple solutions sufficient for the absence of trust recovery; namely, equifinality (Fiss, 2011). Finally, the absence of benevolence features in all sufficient solutions, as is to be logically expected, as it features as a necessary condition for the absence of trust recovery in previous analyses (Schneider, 2019; Schneider & Wagemann, 2012). Solutions 1 – 3 present combinations of conditions that lead to low levels of trust recovery in a supplier organisation following service failure, in which the causal conditions may either be present (i.e. high) or absent (i.e. low) (Woodside, 2019). As is good practice in QCA (Woodside, 2013), the Boolean expressions of the conjunctive statements are detailed in Table 5.26.

<table>
<thead>
<tr>
<th>Solution</th>
<th>Boolean Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>~SATIS • ~BENE • ~SHVL +</td>
</tr>
<tr>
<td>2</td>
<td>~TRAN • ~INTEG • ~BENE • ~SHVL • COCR +</td>
</tr>
<tr>
<td>3</td>
<td>~COMP • TRAN • ~INTEG • ~BENE • ~SHVL ≤ ~TREC</td>
</tr>
</tbody>
</table>


*Table 5.26: Boolean Expressions of Sufficient Configurations for Absence of Trust Recovery, Causal Conditions with No Contextual Conditions*
<table>
<thead>
<tr>
<th>Conditions</th>
<th>Solution 1</th>
<th>Solution 2</th>
<th>Solution 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transparency</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Integrity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benevolence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared Values</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-Creation</td>
<td></td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Consistency</td>
<td>0.95</td>
<td>0.99</td>
<td>0.93</td>
</tr>
<tr>
<td>Raw Coverage</td>
<td>0.60</td>
<td>0.16</td>
<td>0.26</td>
</tr>
<tr>
<td>Unique Coverage</td>
<td>0.09</td>
<td>0.05</td>
<td>0.04</td>
</tr>
<tr>
<td>Overall Solution Coverage</td>
<td>0.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Solution Consistency</td>
<td>0.84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Frequency cut-off: 1, consistency cut-off: 0.87. Solid black circles indicate the presence of a condition, whereas empty circles with an “X” indicate the absence of a condition. Large circles indicate core conditions, whereas small circles indicate peripheral conditions. Blank spaces indicate a specific condition is not considered in a solution.

**Table 5.27: Sufficient Configurations for Absence of Trust Recovery, Causal Conditions with No Contextual Conditions**

Solution 1 reveals a combination of three causal conditions with the absence of satisfaction playing a core role in the absence of trust recovery. Additionally, the absence of benevolence and shared values play a peripheral, or subordinate role, in this solution; all remaining factors are immaterial. Solution 2 reveals a combination of causal conditions
leading to the absence of trust recovery including the absence of peripheral conditions transparency, integrity, benevolence, and shared values even in the presence of high levels of co-creation, of which plays a core role in this solution.

Finally, in Solution 3, the absence of competence, integrity, benevolence and shared values, even in the presence of high levels of transparency, leads to the absence of trust recovery. In Solution 3, the absence of competence is a core condition whilst the absence of integrity, benevolence and shared values are peripheral conditions.

![Figure 5.15: Plot of the Relationship Between Solution 1 and the Absence of Trust Recovery](image)

These findings provide clear evidence of asymmetric causality: different sets of core and peripheral conditions are observable for the existence and non-existence of trust recovery, which do not merely constitute a reversal of the same conditions (Ragin, 2009b; Tóth et al., 2015). This means that explanations of the presence of trust recovery do not automatically provide insights for the absence of trust recovery. In fact, a more pronounced absence of affective-dominant dimensions of trust is highlighted when considering those sufficient
combinations of conditions leading to the absence of trust recovery; an asymmetrical finding to that of the sufficiency analysis for the presence of trust recovery that featured a more pronounced focus on cognitive-dominant dimensions of trust.

5.4.3.2 Analysis of Configurations Sufficient for Supplier Trust Recovery, Causal Conditions and Type of Trust Breach Contextual Condition

The results of the sufficiency analysis reveal seven solutions, or configurations of causal conditions, leading to the presence of trust recovery when considering the contextual distinction between affective- and cognitive-dominant types of breach (causal conditions • type of breach → trust recovery) (Table 5.29). The solution table details each of the configurations as exhibiting acceptable consistency (≥ 0.80) as well as being empirically relevant with an overall solution coverage of 0.64 indicating that the seven combined solutions account for 64% of the membership in the outcome; the presence of trust recovery. An overall solution consistency of 0.96 indicates a robust relationship between trust recovery and the combination of configurations (Fiss, 2011; Schneider & Wagemann, 2010b; Woodside, 2013) with each of the individual configurations exhibiting consistency between 0.90 and 1. Of the seven configurations, Solutions 1 and 2 feature very similar high raw coverage scores (values of 0.24 and 0.27, respectively) suggesting that these combinations of attributes are empirically most relevant as part of the overall solution (Forkmann et al., 2017; Russo et al., 2019).

A graphical relationship of sufficiency of Solutions 1 and 2 is further illustrated in Figures 5.16 and 5.17 where most cases fall above the diagonal (Kahwati & Kane, 2018), suggesting that relationships of sufficiency can be inferred. Furthermore, the configurations indicate the presence of both core and peripheral conditions pointing to the existence of multiple
solutions sufficient for the presence of trust recovery; namely, equifinality (Fiss, 2011).

Finally, the presence of satisfaction features in all sufficient solutions, as is to be logically expected, as it features as a necessary condition for the presence of trust recovery in previous analyses (Schneider, 2019; Schneider & Wagemann, 2012).

The subsets, or conditions, representative in Solutions 1 – 7 allow examination of the role of type of trust breach, in combination with both cognitive- and affective-dominant dimensions of trust, in the presence of high levels of trust recovery. None of the configurations observed contain exclusively cognitive- or affective-dominant combinations of the dimensions of trust, as conceptualised, lending further support to Proposition 1 (Table 5.28). Similarly, the observed configurations feature distinct equifinal paths for both cognitive- and affective-dominant types of breach, as well as neutral permutations of configurations, lending support to Proposition 3 (Table 5.28). Solutions 1 – 7 present combinations of conditions that lead to high levels of trust recovery in a supplier organisation following service failure, in which the causal conditions may either be present (i.e. high) or absent (i.e. low) and the contextual condition present (i.e. affective-dominant type of breach) or absent (i.e. cognitive-dominant type of breach) (Woodside, 2019), lending further support to Proposition 2 (Table 5.28). As is good practice in QCA (Woodside, 2013), the Boolean expressions of the conjunctive statements are detailed in Table 5.30.

Solution 1 reveals a combination of causal conditions including the presence of competence, satisfaction and communication as core conditions, coupled with the absence of integrity in a cognitive-dominant breach type contextual condition. This configuration suggests that, despite the absence of high-level demonstrations of integrity, trust recovery can be achieved when the breach is of a cognitive-dominant nature provided that the reparative
solution features demonstrations of competence, communication and satisfies prescribed demands; all remaining factors are immaterial. Solution 2 reveals a similar combination of causal conditions, including the presence of competence, satisfaction and communication as core conditions sufficient for trust recovery, however, when the type of trust breach is neither present or absent, the presence of integrity in the absence of shared values feature more explicitly as sufficient for trust recovery.

Solutions 3 and 4 feature an almost parallel configuration of causal conditions, including the core presence of satisfaction, integrity and benevolence in a cognitive-dominant type of breach context, however, when demonstrations of competence are neither present or absent (Solution 4), the core role of the presence of high levels of communication in the absence of transparency plays an increased role in trust recovery. In Solutions 5 and 6, the role of co-creation in trust recovery becomes increasingly salient, particularly when high levels of communication are neither present or absent (Solution 6). Similar to Solution 2, Solution 5 features the presence of core conditions competence, satisfaction, communication and integrity, but provides for an additional path to trust recovery in an affective-dominant type of breach contextual condition in the absence of co-creation. Solution 6, in an affective-dominant type of breach contextual condition, features the presence of core conditions competence, satisfaction and integrity in the absence of high-level demonstrations of transparency.

In Solution 6, the presence of shared values and co-creation play a peripheral, but more pronounced, role when high levels of communication are neither present or absent. Finally, Solution 7 presents a rather complex, but sufficient, pathway to trust recovery when the type of breach contextual condition is neither present or absent. The presence of
competence, satisfaction and communication again feature as core conditions, but are combined with the presence of benevolence and the absence of integrity as core conditions. Solution 7 also features the presence of shared values and co-creation as peripheral conditions, but also includes the presence of high levels of transparency. Interestingly, the role of high levels of perceived benevolence and transparency are exacerbated in Solution 7 when high levels of integrity are absent, suggesting an alternative pathway to trust recovery when high-level demonstrations of integrity are not feasible or practical.

<table>
<thead>
<tr>
<th>Proposition</th>
<th>Description</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>One</strong></td>
<td>No single best configuration of buyers’ cognitive- and affective-dominant perceptions leads to high trust recovery following service failure, but there exist multiple, equally effective configurations of both cognitive- and affective-dominant causal factors.</td>
<td>☑️</td>
</tr>
<tr>
<td><strong>Two</strong></td>
<td>Single causal conditions may be present or absent within configurations leading to high trust recovery following service failure, depending on how they combine with other causal conditions.</td>
<td>☑️</td>
</tr>
<tr>
<td><strong>Three</strong></td>
<td>A different combination of conditions features as sufficient for trust recovery following service failure in cognitive- versus affective-type trust breaches.</td>
<td>☑️</td>
</tr>
</tbody>
</table>

*Table 5.28: Empirical Support for Proposition One - Proposition Three*
<table>
<thead>
<tr>
<th>Conditions</th>
<th>Solution</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Transparency</td>
<td></td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Integrity</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Benevolence</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Shared Values</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Co-Creation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Type of Breach</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

|                  | Consistency | 0.90 | 0.97 | 0.99 | 1    | 0.96 | 0.96 | 1    |
| Raw Coverage     | 0.24        | 0.27 | 0.17 | 0.18 | 0.09 | 0.07 | 0.06 |     |
| Unique Coverage  | 0.06        | 0.02 | 0.03 | 0.06 | 0.02 | 0.03 | 0.03 |     |
| Overall Solution | Coverage     | 0.64 |     |     |     |     |     |     |
| Consistency      | 0.96        |     |     |     |     |     |     |     |

**Note:** Frequency cut-off: 1, consistency cut-off: 0.92. Solid black circles indicate the presence of a condition, whereas empty circles with an "X" indicate the absence of a condition. Large circles indicate core conditions, whereas small circles indicate peripheral conditions. Blank spaces indicate a specific condition is not considered in a solution. Type of Breach: presence indicates affective-dominant breach, whereas absence indicates cognitive-dominant breach.

*Table 5.29: Sufficient Configurations for Presence of Trust Recovery, Causal Conditions with Type of Breach Contextual Condition*
### Solution 1

**Boolean Expression**

COMP • SATIS • COMM • ~INTEG • ~TYPE

### Solution 2

**Boolean Expression**

COMP • SATIS • COMM • INTEG • ~SHVL

### Solution 3

**Boolean Expression**

COMP • SATIS • INTEG • BENE • ~TYPE

### Solution 4

**Boolean Expression**

SATIS • COMM • TRAN • INTEG • BENE • ~TYPE

### Solution 5

**Boolean Expression**

COMP • SATIS • COMM • INTEG • ~COCR • TYPE

### Solution 6

**Boolean Expression**

COMP • SATIS • ~TRAN • INTEG • SHVL • COCR • TYPE

### Solution 7

**Boolean Expression**

COMP • SATIS • COMM • TRAN • ~INTEG • BENE • SHVL • COCR ≤ TREC


**Table 5.30:** Boolean Expressions of Sufficient Configurations for Presence of Trust Recovery, Causal Conditions with Type of Breach Contextual Condition

**Figure 5.16:** Plot of the Relationship Between Solution 1 and the Presence of Trust Recovery
As configurations leading to trust recovery might be quite different from those leading to its absence, the possibility of causal asymmetry needs to be investigated (Greckhamer, 2016; Greckhamer et al., 2018; Ragin, 2009b; Woodside, 2013). The results of the sufficiency analysis reveal five solutions, or configurations, of causal conditions leading to the absence of trust recovery when considering the contextual distinction between affective- and cognitive-dominant types of breach (causal conditions $\bullet$ type of breach $\rightarrow$ ~trust recovery) (Table 5.31). The solution table details each of the configurations as exhibiting acceptable consistency ($\geq 0.80$) as well as being empirically relevant with an overall solution coverage of 0.82 indicating that the three combined solutions account for 82% of the membership in the outcome; the absence of trust recovery. An overall solution consistency of 0.89 indicates a robust relationship between the absence of trust recovery and the combination of configurations (Fiss, 2011; Schneider & Wagemann, 2010b; Woodside, 2013) with each of the individual configurations exhibiting consistency between 0.83 and 0.99. Of the five
configurations, Solutions 1 and 2 feature very similar high raw coverage scores (values of 0.41 and 0.38, respectively) suggesting that these combinations of attributes are empirically most relevant as part of the overall solution (Forkmann et al., 2017; Russo et al., 2019).

A graphical relationship of sufficiency of Solutions 1 and 2 is further illustrated in Figures 5.18 and 5.19 where most cases fall above the diagonal (Kahwati & Kane, 2018), suggesting that relationships of sufficiency can be inferred. Furthermore, the configurations indicate the presence of both core and peripheral conditions pointing to the existence of multiple solutions sufficient for the absence of trust recovery; namely, equifinality (Fiss, 2011).

Finally, the absence of benevolence features in all sufficient solutions, as is to be logically expected, as it features as a necessary condition for the absence of trust recovery in previous analyses (Schneider, 2019; Schneider & Wagemann, 2012). Solutions 1 – 5 present combinations of conditions that lead to low levels of trust recovery in a supplier organisation following service failure, in which the causal conditions may either be present (i.e. high) or absent (i.e. low) and the contextual condition present (i.e. affective-dominant type of breach) or absent (i.e. cognitive-dominant type of breach) (Woodside, 2019). As is good practice in QCA (Woodside, 2013), the Boolean expressions of the conjunctive statements are detailed in Table 5.32.

Solution 1 reveals a combination of four causal conditions with the absence of satisfaction and benevolence playing a core role in the absence of trust recovery in a cognitive-dominant type of breach context. Additionally, the absence of shared values plays a peripheral, or subordinate role, in this solution; all remaining factors are immaterial.
<table>
<thead>
<tr>
<th>Conditions</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Competence</td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td></td>
</tr>
<tr>
<td>Transparency</td>
<td></td>
</tr>
<tr>
<td>Integrity</td>
<td></td>
</tr>
<tr>
<td>Benevolence</td>
<td></td>
</tr>
<tr>
<td>Shared Values</td>
<td></td>
</tr>
<tr>
<td>Co-creation</td>
<td></td>
</tr>
<tr>
<td>Type of Breach</td>
<td></td>
</tr>
</tbody>
</table>

Consistency: 0.94 0.99 0.99 0.83 0.97
Raw Coverage: 0.41 0.38 0.23 0.09 0.07
Unique Coverage: 0.11 0.04 0.12 0.04 0.01
Overall Solution Coverage: 0.82
Overall Solution Consistency: 0.89

Note: Frequency cut-off: 1, consistency cut-off: 0.85. Solid black circles indicate the presence of a condition, whereas empty circles with an “X” indicate the absence of a condition. Large circles indicate core conditions, whereas small circles indicate peripheral conditions. Blank spaces indicate a specific condition is not considered in a solution. Type of Breach: presence indicates affective-dominant breach, whereas absence indicates cognitive-dominant breach.

Table 5.31: Sufficient Configurations for Absence of Trust Recovery, Causal Conditions with Type of Breach Contextual Condition

Solution 2 reveals a combination of causal conditions leading to the absence of trust recovery when the type of breach contextual condition is neither present or absent, including the absence of core conditions satisfaction and benevolence and the absence of
peripheral conditions transparency, integrity and shared values. In Solution 3, the absence of competence plays a more pronounced role than that of Solution 2 when the type of breach is affective-dominant. In Solution 3, the core absence of benevolence and peripheral absence of integrity and shared values combine with the absence of competence in the absence of trust recovery.

Solution 4 offers an alternative pathway to the absence of trust recovery insomuch that the absence of peripheral conditions competence, transparency, shared values and co-creation and the core absence of benevolence lead to the absence of trust recovery in spite of the presence (i.e. high levels) of demonstrations of integrity when the type of breach contextual condition is neither present or absent. Finally, in Solution 5, when the type of breach is cognitive-dominant, the presence of high levels of co-creation, alone, in combination with the core absence of benevolence and peripheral absence of transparency, integrity and shared values still leads to the absence of trust recovery.

<table>
<thead>
<tr>
<th>Solution</th>
<th>Boolean Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>~SATIS • ~BENE • ~SHVL • ~TYPE +</td>
</tr>
<tr>
<td>2</td>
<td>~SATIS • ~TRAN • ~INTEG • ~BENE • ~SHVL +</td>
</tr>
<tr>
<td>3</td>
<td>~COMP • ~TRAN • ~INTEG • ~BENE • ~SHVL • TYPE +</td>
</tr>
<tr>
<td>4</td>
<td>~COMP • ~TRAN • INTEG • ~BENE • ~SHVL • ~COCR +</td>
</tr>
<tr>
<td>5</td>
<td>~TRAN • ~INTEG • ~BENE • ~SHVL • COCR • ~TYPE ≤ ~TREC</td>
</tr>
</tbody>
</table>


**Table 5.32:** Boolean Expressions of Sufficient Configurations for Absence of Trust Recovery, Causal Conditions with Type of Breach Contextual Condition
These findings provide clear evidence of asymmetric causality: different sets of core and peripheral conditions are observable for the existence and non-existence of trust recovery,
which do not merely constitute a reversal of the same conditions (Ragin, 2009b; Tóth et al., 2015). This means that explanations of the presence of trust recovery do not automatically provide insights for the absence of trust recovery in this contextual condition.

5.4.3.3 Analysis of Configurations Sufficient for Supplier Trust Recovery, Severity of Trust Breach Contextual Condition

This analysis seeks to investigate what combinations of causal conditions and the contextual condition of severity of breach further explains the presence of trust recovery following service failure. The results of the sufficiency analysis reveal five solutions, or configurations of causal conditions, leading to the presence of trust recovery when considering the contextual distinction between severe and not-severe breaches of trust (causal conditions • severity of breach → trust recovery) (Table 5.34). The solution table details each of the configurations as exhibiting acceptable consistency (≥ 0.80) as well as being empirically relevant with an overall solution coverage of 0.70 indicating that the five combined solutions account for 70% of the membership in the outcome; the presence of trust recovery. An overall solution consistency of 0.96 indicates a robust relationship between trust recovery and the combination of configurations (Fiss, 2011; Schneider & Wagemann, 2010b; Woodside, 2013) with each of the individual configurations exhibiting consistency between 0.93 and 1. Of the five configurations, Solutions 1 and 5 feature very similar high raw coverage scores (values of 0.31 and 0.38, respectively) suggesting that these combinations of attributes are empirically most relevant as part of the overall solution (Forkmann et al., 2017; Russo et al., 2019).

A graphical relationship of sufficiency of Solutions 1 and 5 is further illustrated in Figures 5.20 and Figure 5.21 where most cases fall above the diagonal (Kahwati & Kane, 2018),
suggesting that relationships of sufficiency can be inferred. Furthermore, the configurations indicate the presence of both core and peripheral conditions pointing to the existence of multiple solutions sufficient for the presence of trust recovery; namely, equifinality (Fiss, 2011). Finally, the presence of satisfaction features in all sufficient solutions, as is to be logically expected, as it features as a necessary condition for the presence of trust recovery in previous analyses (Schneider, 2019; Schneider & Wagemann, 2012).

The subsets, or conditions, representative in Solutions 1 – 5 allow examination of the role of severity of trust breach, in combination with both cognitive- and affective-dominant dimensions of trust, in the presence of high levels of trust recovery. None of the configurations observed contain exclusively cognitive- or affective-dominant combinations of the dimensions of trust, as conceptualised, lending further support to Proposition 1 (Table 5.3). Similarly, the observed configurations feature distinct equifinal paths for both severe and not-severe breaches of trust, as well as neutral permutations of configurations, lending support to Proposition 4 (Table 5.3). Solutions 1 – 5 present combinations of conditions that lead to high levels of trust recovery in a supplier organisation following service failure, in which the causal conditions may either be present (i.e. high) or absent (i.e. low) and the contextual condition present (i.e. severe breach of trust) or absent (i.e. not-severe breach of trust) (Woodside, 2019), lending further support to Proposition 2 (Table 5.3). As is good practice in QCA (Woodside, 2013), the Boolean expressions of the conjunctive statements are detailed in Table 5.35.
<table>
<thead>
<tr>
<th>Proposition</th>
<th>Description</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>No single best configuration of buyers’ cognitive- and affective-dominant perceptions leads to high trust recovery following service failure, but there exist multiple, equally effective configurations of both cognitive- and affective-dominant causal factors.</td>
<td>✓</td>
</tr>
<tr>
<td>Two</td>
<td>Single causal conditions may be present or absent within configurations leading to high trust recovery following service failure, depending on how they combine with other causal conditions.</td>
<td>✓</td>
</tr>
<tr>
<td>Four</td>
<td>A different combination of conditions features as sufficient for trust recovery following service failure in high- versus low-severity trust breaches.</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 5.33: Empirical Support for Proposition One, Proposition Two and Proposition Four

Solution 1 features a combination of causal conditions including the presence of core conditions competence, satisfaction and communication in the core absence of integrity in a not-severe breach context. Solution 2, however, is representative of combination of conditions leading to trust recovery in a severe breach context and features a different combination of causal conditions. Solution 2 includes the presence of core conditions competence and satisfaction, but also includes the presence of benevolence as a core condition and integrity as a peripheral condition. Interestingly, the role of perceptions of high levels of both benevolence and integrity is more pronounced in the severe breach of trust context when high perceived levels of communication are neither present or absent.

Similarly, Solution 3 in the severe breach of trust context, features the presence of core conditions competence and satisfaction and the peripheral presence of high levels of integrity. Interestingly, in Solution 3, when benevolence is neither present or absent, the role of high-level demonstrations of shared values and co-creation are more pronounced.
<table>
<thead>
<tr>
<th>Conditions</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Competence</td>
<td>●</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>●</td>
</tr>
<tr>
<td>Communication</td>
<td>●</td>
</tr>
<tr>
<td>Transparency</td>
<td>●</td>
</tr>
<tr>
<td>Integrity</td>
<td>▼</td>
</tr>
<tr>
<td>Benevolence</td>
<td>●</td>
</tr>
<tr>
<td>Shared Values</td>
<td>●</td>
</tr>
<tr>
<td>Co-Creation</td>
<td>●</td>
</tr>
<tr>
<td>Severity of Breach</td>
<td>▼</td>
</tr>
<tr>
<td>Consistency</td>
<td>0.93</td>
</tr>
<tr>
<td>Raw Coverage</td>
<td>0.31</td>
</tr>
<tr>
<td>Unique Coverage</td>
<td>0.03</td>
</tr>
<tr>
<td>Overall Solution Coverage</td>
<td>0.70</td>
</tr>
<tr>
<td>Overall Solution Consistency</td>
<td>0.96</td>
</tr>
</tbody>
</table>

**Note:** Frequency cut-off: 1, consistency cut-off: 0.89. Solid black circles indicate the presence of a condition, whereas empty circles with an “X” indicate the absence of a condition. Large circles indicate core conditions, whereas small circles indicate peripheral conditions. Blank spaces indicate a specific condition is not considered in a solution. Severity of Breach: presence indicates a severe breach, whereas absence indicates not-severe breach.

**Table 5.34: Sufficient Configurations for Presence of Trust Recovery, Causal Conditions with Severity of Breach Contextual Condition**

Solution 4 offers a rather complex, but similarly sufficient path to trust recovery in a not-severe breach condition, when demonstrations of competence are neither present or absent, with the core presence of satisfaction, communication and benevolence. The
peripheral presence of transparency and integrity in the absence of high-level
demonstrations of shared values is sufficient for trust recovery. Finally, Solution 5 offers a
very similar path to trust recovery as represented in Solution 1, with the interchangeability
of the core absence of high-level demonstrations of shared values being the only distinction
between these solutions leading to trust recovery in a not-severe trust breach context.
Interestingly, within the solutions leading to trust recovery in the severe breach of trust
contextual condition, Solutions 2 and 3 feature the presence of conditions more
representative of affective-dominant dimensions of trust than those solutions representing
not-severe breaches of trust.

<table>
<thead>
<tr>
<th>Solution</th>
<th>Boolean Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>COMP • SATIS • COMM • ~INTEG • ~SEVER +</td>
</tr>
<tr>
<td>2</td>
<td>COMP • SATIS • BENE • INTEG • SEVER +</td>
</tr>
<tr>
<td>3</td>
<td>COMP • SATIS • SHVL • INTEG • COCR • SEVER +</td>
</tr>
<tr>
<td>4</td>
<td>COMM • SATIS • ~SHVL • INTEG • BENE • TRAN • ~SEVER +</td>
</tr>
<tr>
<td>5</td>
<td>COMP • SATIS • COMM • ~SHVL • ~SEVER ≤ TREC</td>
</tr>
</tbody>
</table>


Table 5.35: Boolean Expressions of Sufficient Configurations for Presence of Trust Recovery, Causal Conditions with Severity of Breach Contextual Condition
Figure 5.20: Plot of the Relationship Between Solution 1 and the Presence of Trust Recovery

Figure 5.21: Plot of the Relationship Between Solution 5 and the Presence of Trust Recovery

As configurations leading to trust recovery might be quite different from those leading to its absence, so the possibility of causal asymmetry needs to be investigated (Greckhamer, 2016; Greckhamer et al., 2018; Ragin, 2009b). The results of the sufficiency analysis reveal
five solutions, or configurations, of causal conditions leading to the absence of trust recovery when considering the contextual distinction between severe and not-severe breaches of trust (causal conditions: severity of breach → ~trust recovery) (Table 5.3). The solution table details each of the configurations as exhibiting acceptable consistency (≥ 0.80) as well as being empirically relevant with an overall solution coverage of 0.88 indicating that the five combined solutions account for 88% of the membership in the outcome; the absence of trust recovery. An overall solution consistency of 0.88 indicates a robust relationship between the absence of trust recovery and the combination of configurations (Fiss, 2011; Schneider & Wagemann, 2010b; Woodside, 2013) with each of the individual configurations exhibiting consistency between 0.93 and 0.99. Of the five configurations, Solutions 1, 2 and 3 feature very similar high raw coverage scores (values of 0.33, 0.36 and 0.37, respectively) suggesting that these combinations of attributes are empirically most relevant as part of the overall solution (Forkmann et al., 2017; Russo et al., 2019).

A graphical relationship of sufficiency of Solutions 1 - 3 is further illustrated in Figures 5.22 – 5.24, where most cases fall above the diagonal (Kahwati & Kane, 2018), suggesting that relationships of sufficiency can be inferred. Furthermore, the configurations indicate the presence of both core and peripheral conditions pointing to the existence of multiple solutions sufficient for the absence of trust recovery; namely, equifinality (Fiss, 2011). Finally, the absence of benevolence features in all sufficient solutions, as is to be logically expected, as it features as a necessary condition for the absence of trust recovery in previous analyses (Schneider, 2019; Schneider & Wagemann, 2012).
Solutions 1 – 5 present combinations of conditions that lead to low levels of trust recovery in a supplier organisation following service failure, in which the causal conditions may either be present (i.e. high) or absent (i.e. low) and the contextual condition present (i.e. severe breach) or absent (i.e. not-severe breach) (Woodside, 2019). As is good practice in QCA (Woodside, 2013), the Boolean expressions of the conjunctive statements are detailed in Table 5.37.

Solution 1 features a combination of causal conditions leading to the absence of trust recovery in a severe breach context, including the absence of satisfaction as a core condition and the absence of benevolence and shared values as peripheral conditions; all other conditions are immaterial and can be either present or absent in the absence of trust recovery. Solution 2, when the severity of breach contextual condition is neither present or absent, includes the core absence of high-level demonstrations of both competence and co-creation as well as the peripheral absence of transparency, benevolence and shared values.

Solution 3 offers an alternative pathway to the absence of trust recovery when the breach is not-severe with the core absence of competence and peripheral absence of integrity, benevolence and shared values. Solution 4 highlights that, even in the presence of high levels of co-creation, in a severe breach of trust context the peripheral absence of communication, transparency and benevolence leads to the absence of trust recovery. Finally, Solution 5 also highlights the presence of high-level demonstrations of co-creation, in the absence of demonstrations of transparency, integrity, benevolence and shared values, still leads to the absence of trust recovery in a not-severe breach of trust context. Solutions 4 and 5 suggest that high levels of co-creation, alone, are not sufficient to mitigate the absence of other attenuating conditions in the absence of trust recovery.
<table>
<thead>
<tr>
<th>Conditions</th>
<th>Solution</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td></td>
<td>✗</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✗</td>
</tr>
<tr>
<td>Transparency</td>
<td></td>
<td></td>
<td></td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Integrity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benevolence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared Values</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-Creation</td>
<td></td>
<td>✗</td>
<td></td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Severity of Breach</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consistency</td>
<td>0.93</td>
<td>0.95</td>
<td>0.96</td>
<td>0.99</td>
<td>0.98</td>
<td></td>
</tr>
<tr>
<td>Raw Coverage</td>
<td>0.33</td>
<td>0.36</td>
<td>0.37</td>
<td>0.06</td>
<td>0.11</td>
<td></td>
</tr>
<tr>
<td>Unique Coverage</td>
<td>0.13</td>
<td>0.05</td>
<td>0.05</td>
<td>0.02</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>Overall Solution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coverage</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Solution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consistency</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Frequency cut-off: 1, consistency cut-off: 0.86. Solid black circles indicate the presence of a condition, whereas empty circles with an “X” indicate the absence of a condition. Large circles indicate core conditions, whereas small circles indicate peripheral conditions. Blank spaces indicate a specific condition is not considered in a solution. Severity of Breach: presence indicates a severe breach, whereas absence indicates not-severe breach.

*Table 5.36: Sufficient Configurations for Absence of Trust Recovery, Causal Conditions with Severity of Breach Contextual Condition*
### Table 5.37: Boolean Expressions of Sufficient Configurations for Absence of Trust Recovery, Causal Conditions with Severity of Breach Contextual Condition

<table>
<thead>
<tr>
<th>Solution</th>
<th>Boolean Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(~\text{SATIS} \cdot \sim\text{BENE} \cdot \sim\text{SHVL} \cdot \text{SEVER} + )</td>
</tr>
<tr>
<td>2</td>
<td>(~\text{COMP} \cdot \sim\text{TRAN} \cdot \sim\text{BENE} \cdot \sim\text{SHVL} \cdot \sim\text{COCR} + )</td>
</tr>
<tr>
<td>3</td>
<td>(~\text{COMP} \cdot \sim\text{INTEG} \cdot \sim\text{BENE} \cdot \sim\text{SHVL} \cdot \sim\text{SEVER} + )</td>
</tr>
<tr>
<td>4</td>
<td>(~\text{COMM} \cdot \sim\text{TRAN} \cdot \sim\text{BENE} \cdot \text{COCR} \cdot \text{SEVER} + )</td>
</tr>
<tr>
<td>5</td>
<td>(~\text{TRAN} \cdot \sim\text{INTEG} \cdot \sim\text{BENE} \cdot \sim\text{SHVL} \cdot \text{COCR} \cdot \sim\text{SEVER} \leq \sim\text{TREC} )</td>
</tr>
</tbody>
</table>

**Note:** Outcome Condition: Absence of Trust Recovery. “COMP” denotes Competence, “SATIS” denotes Satisfaction, “COMM” denotes Communication, “TRAN” denotes Transparency, “INTEG” denotes Integrity, “BENE” denotes Benevolence, “SHVL” denotes Shared Values, “COCR” denotes Co-Creation, “SEVER” denotes severity of breach. “\(\sim\)” denotes the absence of a causal condition and the negation of a contextual condition (i.e. negation of “SEVER” denotes a not-severe breach, presence of “SEVER” denotes a severe breach).

**Figure 5.22: Plot of the Relationship Between Solution 1 and the Absence of Trust Recovery**
These findings again provide clear evidence of asymmetric causality: different sets of core and peripheral conditions are observable for the existence and non-existence of trust recovery.
recovery, which do not merely constitute a reversal of the same conditions (Ragin, 2009b; Tóth et al., 2015). This means that explanations of the presence of trust recovery do not automatically provide insights for the absence of trust recovery in this contextual condition.

5.4.3.4 Analysis of Configurations for Supplier Trust Recovery, Size of Buying Organisation Contextual Condition

This analysis seeks to investigate what combinations of causal conditions and the contextual condition of the size of buying organisation further explains the presence of trust recovery following service failure. The results of the sufficiency analysis reveal five solutions, or configurations of causal conditions, leading to the presence of trust recovery when considering the contextual distinction between large and not-large buying organisations (causal conditions • size of buying organisation → trust recovery) (Table 5.39). The solution table details each of the configurations as exhibiting acceptable consistency (≥ 0.80) as well as being empirically relevant with an overall solution coverage of 0.71 indicating that the seven combined solutions account for 71% of the membership in the outcome; the presence of trust recovery. An overall solution consistency of 0.96 indicates a robust relationship between trust recovery and the combination of configurations (Fiss, 2011; Schneider & Wagemann, 2010b; Woodside, 2013) with each of the individual configurations exhibiting consistency between 0.87 and 1. Of the five configurations, Solution 1 features the highest raw coverage (value of 0.31) suggesting that this combination of attributes is empirically most relevant as part of the overall solution (Forkmann et al., 2017; Russo et al., 2019).

A graphical relationship of sufficiency of Solution 1 is further illustrated in Figure 5.25 where most cases fall above the diagonal (Kahwati & Kane, 2018), suggesting that relationships of
sufficiency can be inferred. Furthermore, the configurations indicate the presence of both core and peripheral conditions pointing to the existence of multiple solutions sufficient for the presence of trust recovery; namely, equifinality (Fiss, 2011). Finally, the presence of satisfaction features in all sufficient solutions, as is to be logically expected, as it features as a necessary condition for the presence of trust recovery in previous analyses (Schneider, 2019; Schneider & Wagemann, 2012).

The subsets, or conditions, representative in Solutions 1 – 5 allow examination of the role of the size of the buying organisation, in combination with both cognitive- and affective-dominant dimensions of trust, in the presence of high levels of trust recovery. None of the configurations observed contain exclusively cognitive- or affective-dominant combinations of the dimensions of trust, as conceptualised, lending further support to Proposition 1 (Table 5.3). Similarly, the observed configurations feature distinct equifinal paths for both large and not-large buying organisations, as well as neutral permutations of configurations, lending support to Proposition 5 (Table 5.3). Solutions 1 – 5 present combinations of conditions that lead to high levels of trust recovery in a supplier organisation following service failure, in which the causal conditions may either be present (i.e. high) or absent (i.e. low) and the contextual condition present (i.e. large enterprise buying organisation) or absent (i.e. small to medium enterprise buying organisation) (Woodside, 2019), lending further support to Proposition 2 (Table 5.3). As is good practice in QCA (Woodside, 2013), the Boolean expressions of the conjunctive statements are detailed in Table 5.40.
<table>
<thead>
<tr>
<th>Proposition</th>
<th>Description</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>No single best configuration of buyers’ cognitive- and affective-dominant perceptions leads to high trust recovery following service failure, but there exist multiple, equally effective configurations of both cognitive- and affective-dominant causal factors.</td>
<td>✓</td>
</tr>
<tr>
<td>Two</td>
<td>Single causal conditions may be present or absent within configurations leading to high trust recovery following service failure, depending on how they combine with other causal conditions.</td>
<td>✓</td>
</tr>
<tr>
<td>Five</td>
<td>A different combination of conditions features as sufficient for trust recovery following service failure for large enterprise versus small to medium enterprise buying organisations.</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Table 5.38: Empirical Support for Proposition One, Proposition Two and Proposition Five**

Solution 1 reveals a combination of causal conditions that includes the core presence of competence, satisfaction, communication and integrity in the large enterprise buying organisation contextual condition; all other factors are immaterial. Solution 2, in the small to medium enterprise buying organisation contextual condition, also includes a combination of core, high-level demonstrations of competence, satisfaction and integrity, but also features the absence of transparency as a peripheral condition. In addition, Solution 2 also includes the presence of peripheral, high-level demonstrations of shared values and core, high-level demonstrations of co-creation when both benevolence and communication are neither present or absent.

Solution 3 includes a rather complex, but sufficient path to trust recovery with large enterprise buying organisations with the core presence of satisfaction, communication, integrity and co-creation and the peripheral presence of transparency and benevolence when demonstrations of competence are neither present nor absent. Solution 4, in the small to medium enterprise buying organisation contextual condition, includes the core
presence of high-level demonstrations of competence, satisfaction and communication and the absence of shared values.

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Competence</td>
<td>●</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>●</td>
</tr>
<tr>
<td>Communication</td>
<td>●</td>
</tr>
<tr>
<td>Transparency</td>
<td>●</td>
</tr>
<tr>
<td>Integrity</td>
<td>●</td>
</tr>
<tr>
<td>Benevolence</td>
<td>●</td>
</tr>
<tr>
<td>Shared Values</td>
<td>●</td>
</tr>
<tr>
<td>Co-Creation</td>
<td>●</td>
</tr>
<tr>
<td>Size of Buying Organisation</td>
<td>●</td>
</tr>
<tr>
<td>Consistency</td>
<td>0.98</td>
</tr>
<tr>
<td>Raw Coverage</td>
<td>0.31</td>
</tr>
<tr>
<td>Unique Coverage</td>
<td>0.02</td>
</tr>
<tr>
<td>Overall Solution Coverage</td>
<td>0.71</td>
</tr>
<tr>
<td>Overall Solution Consistency</td>
<td></td>
</tr>
</tbody>
</table>

Note: Frequency cut-off: 1, consistency cut-off: 0.92. Solid black circles indicate the presence of a condition, whereas empty circles with an “Х” indicate the absence of a condition. Large circles indicate core conditions, whereas small circles indicate peripheral conditions. Blank spaces indicate a specific condition is not considered in a solution. Size of Buying Organisation: presence indicates a large enterprise, whereas absence indicates a small to medium enterprise.

Table 5.39: Sufficient Configurations for Presence of Trust Recovery, Causal Conditions with Size of Buying Organisation Contextual Condition
Finally, Solution 5, in the large enterprise buying organisation contextual condition, shares the core presence of demonstrations of competence, satisfaction and communication as in Solution 1, however, when demonstrations of integrity are neither present or absent, the core presence of co-creation along with the peripheral presence of transparency plays a more pronounced role in achieving high levels of trust recovery.

<table>
<thead>
<tr>
<th>Solution</th>
<th>Boolean Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>COMP ● SATIS ● COMM ● INTEG ● SIZE +</td>
</tr>
<tr>
<td>2</td>
<td>COMP ● SATIS ● ~TRAN ● INTEG ● SHVAL ● COCR ● ~SIZE +</td>
</tr>
<tr>
<td>3</td>
<td>SATIS ● COMM ● TRAN ● INTEG ● BENE ● COCR ● SIZE +</td>
</tr>
<tr>
<td>4</td>
<td>COMP ● SATIS ● COMM ● ~SHVL ● ~SIZE +</td>
</tr>
<tr>
<td>5</td>
<td>COMP ● SATIS ● COMM ● TRAN ● COCR ● SIZE ≤ TREC</td>
</tr>
</tbody>
</table>


**Table 5.40:** Boolean Expressions of Sufficient Configurations for Presence of Trust Recovery, Causal Conditions with Size of Buying Organisation Contextual Condition
As configurations leading to trust recovery might be quite different from those leading to its absence, so the possibility of causal asymmetry needs to be investigated (Greckhamer, 2016; Greckhamer et al., 2018; Ragin, 2009b). The results of the sufficiency analysis reveal three solutions, or configurations, of causal conditions leading to the absence of trust recovery when considering the contextual distinction between large and not-large buying organisations (causal conditions • size of buying organisation → ~trust recovery) (Table 5.42). The solution table details each of the configurations as exhibiting acceptable consistency (≥ 0.80) as well as being empirically relevant with an overall solution coverage of 0.78 indicating that the five combined solutions account for 78% of the membership in the outcome; the absence of trust recovery. An overall solution consistency of 0.88 indicates a robust relationship between the absence of trust recovery and the combination of configurations (Fiss, 2011; Schneider & Wagemann, 2010b; Woodside, 2013) with each of the individual configurations exhibiting consistency between 0.91 and 0.96. Of the three
configurations, Solution 1 features high raw coverage (value of 0.55) suggesting that this combination of attributes is empirically most relevant as part of the overall solution (Forkmann et al., 2017; Russo et al., 2019).

A graphical relationship of sufficiency of Solution 1 is further illustrated in Figure 5.26, where most cases fall above the diagonal (Kahwati & Kane, 2018), suggesting that relationships of sufficiency can be inferred. Furthermore, the configurations indicate the presence of both core and peripheral conditions pointing to the existence of multiple solutions sufficient for the absence of trust recovery; namely, equifinality (Fiss, 2011). Finally, the absence of benevolence features in all sufficient solutions, as is to be logically expected, as it features as a necessary condition for the absence of trust recovery in previous analyses (Schneider, 2019; Schneider & Wagemann, 2012).

Solutions 1 – 3 present combinations of conditions that lead to low levels of trust recovery in a supplier organisation following service failure, in which the causal conditions may either be present (i.e. high) or absent (i.e. low) and the contextual condition present (i.e. large enterprise buying organisation) or absent (i.e. small to medium enterprise buying organisation) (Woodside, 2019). As is good practice in QCA (Woodside, 2013), the Boolean expressions of the conjunctive statements are detailed in Table 5.41.

Solution 1 reveals a combination of four causal conditions with the absence of satisfaction and benevolence playing a core role in the absence of trust recovery. Additionally, the absence of integrity and shared values play a peripheral role in this solution; all other factors are immaterial. Solution 2, in the large enterprise buying organisation contextual condition, includes the core absence of satisfaction and benevolence and the peripheral
absence of shared values, as in Solution 1. However, Solution 2 is distinct in the role of integrity, of which is neither present or absent in this solution. Finally, Solution 3 includes the core absence of both competence and benevolence combined with the peripheral absence of integrity and shared values even in the presence of high levels of communication. This solution suggests that the absence of trust recovery can be realised even in the presence of high levels of communication if there remains an absence of demonstrations of competence, benevolence, shared values and integrity.

<table>
<thead>
<tr>
<th>Solution</th>
<th>Boolean Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>~SATIS • ~SHVL • ~INTEG • ~BENE +</td>
</tr>
<tr>
<td>2</td>
<td>~SATIS • ~SHVL • ~BENE • SIZE +</td>
</tr>
<tr>
<td>3</td>
<td>~COMP • COMM • ~SHVL • ~INTEG • ~BENE ≤ ~TREC</td>
</tr>
</tbody>
</table>


Table 5.41: Boolean Expressions of Sufficient Configurations for Absence of Trust Recovery, Causal Conditions with Size of Buying Organisation Contextual Distinction
<table>
<thead>
<tr>
<th>Conditions</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Competence</td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>🌟</td>
</tr>
<tr>
<td>Communication</td>
<td></td>
</tr>
<tr>
<td>Transparency</td>
<td>🌟</td>
</tr>
<tr>
<td>Integrity</td>
<td>🌟</td>
</tr>
<tr>
<td>Benevolence</td>
<td>🌟</td>
</tr>
<tr>
<td>Shared Values</td>
<td>🌟</td>
</tr>
<tr>
<td>Co-Creation</td>
<td></td>
</tr>
<tr>
<td>Size of Buying Organisation</td>
<td></td>
</tr>
<tr>
<td>Consistency</td>
<td>0.96</td>
</tr>
<tr>
<td>Raw Coverage</td>
<td>0.55</td>
</tr>
<tr>
<td>Unique Coverage</td>
<td>0.21</td>
</tr>
<tr>
<td>Overall Solution Coverage</td>
<td>0.78</td>
</tr>
<tr>
<td>Overall Solution Consistency</td>
<td>0.88</td>
</tr>
</tbody>
</table>

**Note:** Frequency cut-off: 1, consistency cut-off: 0.81. Solid black circles indicate the presence of a condition, whereas empty circles with an “X” indicate the absence of a condition. Large circles indicate core conditions, whereas small circles indicate peripheral conditions. Blank spaces indicate a specific condition is not considered in a solution. Size of Buying Organisation: presence indicates a large enterprise, whereas absence indicates a small to medium enterprise.

*Table 5.42: Sufficient Configurations for Absence of Trust Recovery, Causal Conditions with Size of Buying Organisation Contextual Condition*
These findings provide clear evidence of asymmetric causality: different sets of core and peripheral conditions are observable for the existence and non-existence of trust recovery, which do not merely constitute a reversal of the same conditions (Ragin, 2009b; Tóth et al., 2015). This means that explanations of the presence of trust recovery do not automatically provide insights for the absence of trust recovery in this contextual condition.

5.4.3.5 Analysis of Configurations Sufficient for Supplier Trust Recovery, Individual Level of Decision-Making Authority Contextual Condition

This analysis seeks to investigate what combinations of causal conditions and the contextual condition of the individual level of decision-making authority of the focal trustor further explains the presence of trust recovery following service failure. The results of the sufficiency analysis reveal six solutions, or configurations of causal conditions, leading to the presence of trust recovery when considering the contextual distinction between executive and non-executive decision makers (causal conditions • individual level of decision-making authority).
authority → trust recovery) (Table 5.4). The solution table details each of the configurations as exhibiting acceptable consistency (≥ 0.80) as well as being empirically relevant with an overall solution coverage of 0.76 indicating that the six combined solutions account for 76% of the membership in the outcome; the presence of trust recovery. An overall solution consistency of 0.93 indicates a robust relationship between trust recovery and the combination of configurations (Fiss, 2011; Schneider & Wagemann, 2010b; Woodside, 2013) with each of the individual configurations exhibiting consistency between 0.91 and 1. Of the six configurations, Solutions 1 and 2 feature very similar high raw coverage scores (values of 0.27 and 0.23, respectively) suggesting that these combinations of attributes are empirically most relevant as part of the overall solution (Forkmann et al., 2017; Russo et al., 2019).

A graphical relationship of sufficiency of Solutions 1 and 2 is further illustrated in Figures 5.27 and 5.28 where most cases fall above the diagonal (Kahwati & Kane, 2018), suggesting that relationships of sufficiency can be inferred. Furthermore, the configurations indicate the presence of both core and peripheral conditions pointing to the existence of multiple solutions sufficient for the presence of trust recovery; namely, equifinality (Fiss, 2011). Finally, the presence of satisfaction features in all sufficient solutions, as is to be logically expected, as it features as a necessary condition for the presence of trust recovery in previous analyses (Schneider, 2019; Schneider & Wagemann, 2012).

The subsets, or conditions, representative in Solutions 1 – 6 allow examination of the role of the individual level of decision-making authority of the focal trustor, in combination with both cognitive- and affective-dominant dimensions of trust, in the presence of high levels of trust recovery. None of the configurations observed contain exclusively cognitive- or
affective-dominant combinations of the dimensions of trust, as conceptualised, lending further support to Proposition 1 (Table 5.43). Similarly, the observed configurations feature distinct equifinal paths for both executive and non-executive decision makers, as well as neutral permutations of configurations, lending support to Proposition 6 (Table 5.43).

Solutions 1 – 6 present combinations of conditions that lead to high levels of trust recovery in a supplier organisation following service failure, in which the causal conditions may either be present (i.e. high) or absent (i.e. low) and the contextual condition present (i.e. executive-level decision-making authority) or absent (i.e. operational-level decision-making authority) (Woodside, 2019), lending further support to Proposition 2 (Table 5.43). As is good practice in QCA (Woodside, 2013), the Boolean expressions of the conjunctive statements are detailed in Table 5.45.

<table>
<thead>
<tr>
<th>Proposition</th>
<th>Description</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>No single best configuration of buyers’ cognitive- and affective-dominant perceptions leads to high trust recovery following service failure, but there exist multiple, equally effective configurations of both cognitive- and affective-dominant causal factors.</td>
<td>✓</td>
</tr>
<tr>
<td>Two</td>
<td>Single causal conditions may be present or absent within configurations leading to high trust recovery following service failure, depending on how they combine with other causal conditions.</td>
<td>✓</td>
</tr>
<tr>
<td>Six</td>
<td>A different combination of conditions features as sufficient for trust recovery following service for operational- versus executive-level decision-makers.</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 5.43: Empirical Support for Proposition One, Proposition Two and Proposition Six
<table>
<thead>
<tr>
<th>Conditions</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Competence</td>
<td>●</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>●</td>
</tr>
<tr>
<td>Communication</td>
<td>●</td>
</tr>
<tr>
<td>Transparency</td>
<td></td>
</tr>
<tr>
<td>Integrity</td>
<td>●</td>
</tr>
<tr>
<td>Benevolence</td>
<td>●</td>
</tr>
<tr>
<td>Shared Values</td>
<td></td>
</tr>
<tr>
<td>Co-Creation</td>
<td>●</td>
</tr>
<tr>
<td>Decision-Making Authority</td>
<td>●</td>
</tr>
<tr>
<td>Consistency</td>
<td>0.98</td>
</tr>
<tr>
<td>Raw Coverage</td>
<td>0.27</td>
</tr>
<tr>
<td>Unique Coverage</td>
<td>0.03</td>
</tr>
</tbody>
</table>

| Overall Solution Coverage | 0.76 |
| Overall Solution Consistency | 0.93 |

**Note:** Frequency cut-off: 1, consistency cut-off: 0.92. Solid black circles indicate the presence of a condition, whereas empty circles with an “X” indicate the absence of a condition. Large circles indicate core conditions, whereas small circles indicate peripheral conditions. Blank spaces indicate a specific condition is not considered in a solution. Decision-Making Authority: presence indicates executive-level decision-making authority, whereas absence indicates operational-level decision-making authority.

*Table 5.44: Sufficient Configurations for Presence of Trust Recovery, Causal Conditions with Individual Level of Decision-Making Authority Contextual Condition*

Solution 1 reveals a combination of causal conditions leading to trust recovery with executive-level decision makers that includes the presence of core conditions competence, satisfaction and communication in the absence of co-creation as a peripheral condition.
This configuration suggests that executive-level decision makers are not as concerned with high-levels of co-creation when diagnosing trust recovery, regardless of the presence or absence of transparency, benevolence and shared values. Solution 2 presents an alternative path to trust recovery with executive-level decision makers insomuch that high-level demonstrations of competence, satisfaction and communication still play a core role, however, they are sufficient for trust recovery in the core absence of integrity when co-creation (and all other factors) are neither present or absent.

Solution 3 offers a pathway to trust recovery with operational-level decision-makers that includes the core presence of high-level demonstrations of competence, satisfaction, integrity and benevolence in the peripheral absence of co-creation, irrespective of the buyer’s perceptions of other factors leading to trust recovery. This solution suggests that the role of integrity and benevolence is more pronounced with operational level decision-makers when communication is neither present or absent – a distinction between Solution 3 and Solutions 1 – 2.

Solution 4 presents a solution sufficient for trust recovery when the contextual distinction between executive- and operational-level decision makers is neither present or absent including the core presence of competence, satisfaction and communication combined with the presence of transparency in a peripheral, or supporting, role in the absence of demonstrations of shared values. Interestingly, the role of co-creation emerges as more pronounced in Solution 4 when other affective-dominant dimensions of trust are neither present or absent.

Solution 5, with operational-level decision makers, features the same core presence of competence, satisfaction and co-creation, however, in the absence of transparency the role
of both integrity and shared values play a more distinct role toward trust recovery. Finally, Solution 6 provides a sufficient path for trust recovery with executive-level decision makers in the core presence of satisfaction, communication, integrity, benevolence and the peripheral presence of transparency even in the absence of co-creation and when demonstrations of competence and share values are neither present or absent.

<table>
<thead>
<tr>
<th>Solution</th>
<th>Boolean Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>COMP ● SATIS ● COMM ● ~COCR ● AUTH +</td>
</tr>
<tr>
<td>2</td>
<td>COMP ● SATIS ● COMM ● ~INTEG ● AUTH +</td>
</tr>
<tr>
<td>3</td>
<td>COMP ● SATIS ● INTEG ● BENE ● ~COCR ● ~AUTH +</td>
</tr>
<tr>
<td>4</td>
<td>COMP ● SATIS ● COMM ● TRAN ● ~SHVL ● COCR +</td>
</tr>
<tr>
<td>5</td>
<td>COMP ● SATIS ● ~TRAN ● INTEG ● SHVL ● COCR ● ~AUTH +</td>
</tr>
<tr>
<td>6</td>
<td>SATIS ● COMM ● TRAN ● INTEG ● BENE ● ~COCR ● AUTH ≤ TREC</td>
</tr>
</tbody>
</table>


**Table 5.45:** Boolean Expressions of Sufficient Configurations for Presence of Trust Recovery, Causal Conditions with Individual Level of Decision-Making Authority Contextual Condition
Figure 5.27: Plot of the Relationship Between Solution 1 and the Presence of Trust Recovery

Figure 5.28: Plot of the Relationship Between Solution 2 and the Presence of Trust Recovery
As configurations leading to trust recovery might be quite different from those leading to its absence, so the possibility of causal asymmetry needs to be investigated (Greckhamer, 2016; Greckhamer et al., 2018; Ragin, 2009b). The results of the sufficiency analysis reveal four solutions, or configurations, of causal conditions leading to the absence of trust recovery when considering the contextual distinction between executive and non-executive decision makers (causal conditions • individual level of decision-making authority → ~trust recovery) (Table 5.46). The solution table details each of the configurations as exhibiting acceptable consistency (≥ 0.80) as well as being empirically relevant with an overall solution coverage of 0.96 indicating that the four combined solutions account for 96% of the membership in the outcome; the absence of trust recovery. An overall solution consistency of 0.83 indicates a robust relationship between the absence of trust recovery and the combination of configurations (Fiss, 2011; Schneider & Wagemann, 2010b; Woodside, 2013) with each of the individual configurations exhibiting consistency between 0.94 and 0.99. Of the four configurations, Solution 3 features high raw coverage (value of 0.58) suggesting that this combination of attributes is empirically most relevant as part of the overall solution (Forkmann et al., 2017; Russo et al., 2019).

A graphical relationship of sufficiency of Solution 3 is further illustrated in Figure 5.29, where most cases fall above the diagonal (Kahwati & Kane, 2018), suggesting that relationships of sufficiency can be inferred. Furthermore, the configurations indicate the presence of both core and peripheral conditions pointing to the existence of multiple solutions sufficient for the absence of trust recovery; namely, equifinality (Fiss, 2011). Finally, the absence of benevolence features in all sufficient solutions, as is to be logically
expected, as it features as a necessary condition for the absence of trust recovery in previous analyses (Schneider, 2019; Schneider & Wagemann, 2012).

Solutions 1 – 4 present combinations of conditions that lead to low levels of trust recovery in a supplier organisation following service failure, in which the causal conditions may either be present (i.e. high) or absent (i.e. low) and the contextual condition present (i.e. executive-level decision making) or absent (i.e. operational-level decision making) (Woodside, 2019). As is good practice in QCA (Woodside, 2013), the Boolean expressions of the conjunctive statements are detailed in Table 5.47.

Solution 1 features a combination of two causal conditions sufficient for the absence of trust recovery with executive-level decision makers; the core absence of benevolence in combination with the presence of high levels of co-creation. Solution 2 offers an alternative solution when individual level of decision-making authority is neither present or absent in the core absence of demonstrations of both competence and benevolence in combination with the peripheral absence of demonstrations of shared values and co-creation. In Solution 2, the peripheral absence of co-creation can be considered substitutable with that of the peripheral presence of co-creation in Solution 2 as both substitutable conditions are peripheral (Fiss, 2011).

In Solution 3 when decision-making authority is neither present or absent, the core absence of both competence and benevolence leads to the absence of trust recovery in combination with the peripheral absence of integrity and shared values. Finally, Solution 4 includes the core absence of both satisfaction and benevolence, combined with the peripheral absence of transparency, integrity and shared values leading to the absence of trust recovery.
<table>
<thead>
<tr>
<th>Conditions</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Competence</td>
<td>✗</td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td></td>
</tr>
<tr>
<td>Transparency</td>
<td></td>
</tr>
<tr>
<td>Integrity</td>
<td></td>
</tr>
<tr>
<td>Benevolence</td>
<td>✗</td>
</tr>
<tr>
<td>Shared Values</td>
<td></td>
</tr>
<tr>
<td>Co-Creation</td>
<td>✗</td>
</tr>
<tr>
<td>Decision-Making Authority</td>
<td></td>
</tr>
</tbody>
</table>

| Consistency                | 0.97      | 0.95      | 0.94      | 0.99      |
| Raw Coverage               | 0.24      | 0.43      | 0.58      | 0.38      |
| Unique Coverage            | 0.03      | 0.03      | 0.11      | 0.04      |
| Overall Solution Coverage  | 0.96      |           |           |           |
| Overall Solution Consistency| 0.83     |           |           |           |

**Note:** Frequency cut-off: 1, consistency cut-off: 0.80. Solid black circles indicate the presence of a condition, whereas empty circles with an “X” indicate the absence of a condition. Large circles indicate core conditions, whereas small circles indicate peripheral conditions. Blank spaces indicate a specific condition is not considered in a solution. Decision-Making Authority: presence indicates executive-level decision-making authority, whereas absence indicates operational-level decision-making authority.

*Table 5.46: Sufficient Configurations for Absence of Trust Recovery, Causal Conditions with Individual Level of Decision-Making Authority Contextual Condition*
<table>
<thead>
<tr>
<th>Solution</th>
<th>Boolean Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>COCR • ~BENE • AUTH +</td>
</tr>
<tr>
<td>2</td>
<td>~COMP • ~SHVL • ~COCR • ~BENE +</td>
</tr>
<tr>
<td>3</td>
<td>~COMP • ~SHVL • ~INTEG • ~BENE +</td>
</tr>
<tr>
<td>4</td>
<td>~SATIS • ~SHVL • ~INTEG • ~BENE • ~TRAN ≤ ~TREC</td>
</tr>
</tbody>
</table>


**Table 5.47:** Boolean Expressions of Sufficient Configurations for Absence of Trust Recovery, Causal Conditions with Individual Level Decision-Making Authority Contextual Condition

![Figure 5.29: Plot of the Relationship Between Solution 3 and the Absence of Trust Recovery](image)

These findings provide clear evidence of asymmetric causality: different sets of core and peripheral conditions are observable for the existence and non-existence of trust recovery, which do not merely constitute a reversal of the same conditions (Ragin, 2009b; Tóth et al.,...
2015). This means that explanations of the presence of trust recovery do not automatically provide insights for the absence of trust recovery in this contextual condition.

### 5.4.4 Adopting and Supporting Substantive Interpretability of Findings

The analytical moment in QCA does not open the “black box of causality” in itself (Goldthorpe, 1997, p. 14) as QCA does not describe a process, rather, the conditions that are present or absent when an outcome of interest is observed or not observed (De Meur et al., 2009). The results of the analyses of necessity and sufficiency do not directly, nor fully, explain the underlying processes or the more concrete interplay among variables (Pattyn, Molenveld, & Befani, 2019). The QCA minimal formula “...act like a flashlight, which indicates some precise spots to be looked at to better understand the outcome” (Rihoux & Lobe, 2009, p. 486). Consequently, the next – and final – step in QCA in order to support substantive interpretability of the findings is to enter a dialogue between the researcher’s knowledge of the cases and the conditions highlighted by QCA (Berg-Schlosser et al., 2009). This process allows the researcher to add an in-depth knowledge and qualitative evidence of the analysed phenomenon to the findings, significantly increasing the explanatory power (i.e. internal validity) of the study (Nair & Gibbert, 2016).

### 5.5 Qualitative Comparative Analysis, Phase Four: Within-Case and Cross-Case Analysis

Case-oriented QCA studies are best served to complement their analyses with case knowledge before, during and after truth table analysis in order to support substantive interpretability (Thomann & Maggetti, 2017). The strong case orientation in this study implies a number of explicit steps to help interpret QCA findings (Grechhamer et al., 2018). This within-case “intimacy” complements cross-case comparisons with analyses of individual
cases (Ragin, 1987, p. 84), adding additional insights from both typical, deviant and unique cases (Kahwati & Kane, 2018; Rohlfing, 2012; Schneider & Rohlfing, 2013). Rather than trying to resolve or ignore deviant cases, an approach embracing the investigation of paradoxical cases allows for further theory development (Välikangas, Hoegl, & Gibbert, 2009; Yin, 2017) and may reveal other areas of empirical interest.

This type of post-solution exploration is of interest in this study as the findings help identify the causal mechanisms for necessity or sufficiency underlying the solution and “parameters of fit are not an end in themselves” (Schneider & Wagemann, 2012, p. 150). A post-solution exploration of typical and deviant cases can help to contextualise, or operationalise, findings as well as potentially identify missing conditions (Schneider & Rohlfing, 2013). An in-depth analysis of typical cases is an investigation of those cases that are in the solution set and outcome set and are “in line with the empirical results that the analysis produced” (Kahwati & Kane, 2018, p. 169). In the analysis that follows, one or more cases covered by each solution term that are considered the most empirically relevant (from the previous analyses) in the presence of trust recovery are investigated. Where feasible, a case is selected that enjoys unique membership in a solution term leading to trust recovery (Schneider & Rohlfing, 2013). These cases are superior choices for within-case analysis compared to cases with joint membership (George et al., 2005) and have been otherwise likened to “pathway cases” (Gerring, 2007, p. 231). A focus on these cases serves to unravel and operationalise the mechanisms through which the solution contributes to the outcome.

Additionally, investigation of deviant cases for consistency and coverage, or cases that are not “in line” with the empirical findings, allows for cross-case analysis. Deviant cases for consistency are the cases that exhibit the combination of conditions that the analysis has
identified as necessary or sufficient for the outcome, yet they do not reflect the outcome and may serve to identify missing causal or contextual conditions that are uniquely representative of the case (Kahwati & Kane, 2018). Deviant cases for coverage are representative of cases that exhibit the outcome of interest, but do not reflect the combination of conditions identified as necessary or sufficient by the analysis. Exploration of deviant cases allows for a deeper understanding of potentially important insights that may run contrary to prevailing theory or knowledge.

These within- and cross-case analyses enhances the ability to explore causal heterogeneity (Schneider & Rohlfing, 2013), offer substantive interpretability to the findings (Thomann & Maggetti, 2017; Thomann & Manatschal, 2016), and present a depth of reflection on the causal mechanisms within the cases (Gerring, 2004). This analysis can be performed within one case representative of each solution (within-case analysis) or by comparing two or more cases (cross-case analysis) in order to offer a stronger basis for causal inference (Schneider & Wagemann, 2012). The two main stages of the QCA within- and cross-case analysis phase are an in-depth analysis of typical and deviant cases of necessity and an in-depth analysis of typical and deviant cases of sufficiency (Berg-Schlosser et al., 2009; Greckhamer et al., 2018; Nair & Gibbert, 2016; Schneider & Rohlfing, 2013). For the sake of brevity, economy of interpretation (Rihoux & Lobe, 2009; Schneider & Wagemann, 2012), and resource constraints precluding all within-case analyses (Schneider & Rohlfing, 2019), up to two typical cases of necessity and sufficiency are profiled where feasible and appropriate, representative of the necessary condition (in-depth analysis of necessity) or the most empirically relevant solution within each truth table analysis (in-depth analysis of sufficiency). Additionally, where feasible and appropriate, one case of which features as a
deviant case for consistency (in-depth analysis of necessity and sufficiency) along with one case of which features as a deviant case for coverage (in-depth analysis of sufficiency) is profiled that is not otherwise explicated as part of another in-depth analysis (Forkmann et al., 2017; Rihoux & Lobe, 2009; Schneider & Rohlfing, 2013). Each main stage is detailed, as follows.

5.5.1 In-Depth Analysis of Typical and Deviant Cases of Necessity

A necessary conditions analysis reveals that the presence of satisfaction is a necessary condition for the presence of trust recovery, as detailed in Section 5.4.1. The satisfaction condition has a consistency of 0.91 and coverage of 0.66 in the presence of trust recovery, as illustrated in Figure 5.30. In the XY plot, typical cases of necessity are all cases in the top right quadrant below the diagonal and display maximum set membership scores in the subset and the superset. Cases 14 and 38 feature as typical cases of necessity (Figure 5.30, both cases represented within the green circle), with qualitative evidence describing the representation of satisfaction within these cases is detailed in Table 5.48.

Figure 5.30: Plot of the Relationship of Necessity Between Satisfaction and the Presence of Trust Recovery
Table 5.4: Qualitative Evidence, Typical Cases Representative of the Necessity of Satisfaction in Presence of Trust Recovery

<table>
<thead>
<tr>
<th>Condition</th>
<th>Qualitative Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>SATIS</td>
<td>I do give people another shot [...] if you are not making mistakes you are not trying the impossible you are not doing things that are difficult so mistakes are fine. And I apply that principle with our suppliers so a mistake is fine. It is totally fine don’t worry about it as long as that knowledge that it was an error and they do due diligence to fix it that is fine, we always [give] people another chance but when it is repeated and it is consistent then there is a problem.</td>
</tr>
<tr>
<td>SATIS</td>
<td>So, any form of defect or problem we would issue an NCR (non-conformance report) straight away and then they would have to respond to that. The NCR might be [...] they have to use the tools they use to come up with some sort of report as to what happened and why. Then they would come back through our supply quality team and if it’s deemed acceptable, their response is acceptable and their corrective action is correct, then we would sign off the NCR.</td>
</tr>
</tbody>
</table>

Note: Outcome Condition: Presence of Trust Recovery. “SATIS” denotes Satisfaction.

Case 31 (Figure 5.30, represented within the red circle) is representative of a deviant case for consistency in the relationship of necessity between satisfaction and trust recovery and can be explored by means of a detailed case vignette (Crilly, 2011; Forkmann et al., 2017; Ordanini et al., 2014) (Table 5.49). The exploration of the interplay of causal mechanisms within Case 31 allows for an iterative case-based reflection on potentially missing conditions that might explain the deviancy (Rihoux & Lobe, 2009; Rihoux & Ragin, 2008).
### Qualitative Evidence

#### Necessary Condition: SATIS

#### Deviant Case for Consistency: Case 31

**Small to Medium Enterprise, Executive Level Decision-Maker**

Case 31 is representative of a small to medium enterprise communications infrastructure supplier and installer. The focal service failure from a very established, long-term supplier (more than 20 years) revolves around a persistent level of incorrect pricing being assigned to their orders, resulting in a great deal of additional work for their own staff in checking orders, purchase orders and issuing requests for amendments to invoices:

> So, we know exactly what they are supplying to us. Then when the invoices come we are matching it with the packing slip. We are matching it with the order number. So that means we trust them but we as a company we check everything. So, we check if the product which we order came, which quantity and we check the price.

The attribution of the breach, in this case, is focused on the employees of the company, not the company itself; even though the buying organisation attests that the supplying company should know better when hiring their staff:

> So, this is how we are sort of [...] even we trust them, like I mentioned before, it’s not the company we don’t trust. Sometimes we know it depends who is working, so the employees of the company, the key for us to know you know we could trust the company.

So, whilst the buying organisation is not satisfied with the overall reparative solution and is, in fact, still actively auditing purchase orders and invoices, they attribute the failure to the agents (individuals) of the supplier organisation rather than the collective organisation, introducing a potentially interesting contextual condition; namely, the length of time (or tenure) of the buyer-supplier relationship on attributions of service failure culpability by their representative agents:

> Absolutely yeah sometimes can be the best company but if you have the wrong people it’s not the company’s fault. Well, it is since the company should know but I’ve been working for the suppliers over 20 years and I notice to work with one company and then the employees change, completely the company changes everything, the look of the company and the relationship and everything.

---

**Note:** Outcome Condition: Presence of Trust Recovery. “SATIS” denotes Satisfaction.

*Table 5.49: Case Vignette, Deviant Case for Consistency in the Relationship of Necessity Between Satisfaction and the Presence of Trust Recovery*
5.5.2 In-Depth Analysis of Typical and Deviant Cases of Sufficiency

The previous analyses of sufficiency include five separate truth table analyses of the combinations of conditions that are present (i.e. high), absent (i.e. low) or immaterial (i.e. neither present or absent) in the presence of trust recovery. These analyses include causal conditions with no contextual conditions, causal conditions with type of breach contextual condition, causal conditions with severity of breach contextual condition, causal conditions with size of buying organisation contextual condition and causal conditions with individual level of decision-making authority of the focal trustor contextual condition. Cases are assigned to configurations on the basis of their membership of at least 0.5 in the configuration. Each in-depth analysis of typical and deviant cases of sufficiency is detailed as follows.

5.5.2.1 In-Depth Analysis of Typical and Deviant Cases: Causal Conditions with No Contextual Conditions

The in-depth analyses, below, are representative of the analysis of sufficiency of the causal conditions leading to the presence of trust recovery with no contextual conditions. Solution 3 is the most empirically relevant solution in this truth table analysis with a coverage value of 0.40. In the XY plot (Figure 5.31), typical cases of sufficiency are all cases in the top right quadrant above the diagonal and display maximum set membership scores in the subset and the superset. Cases 2 and 3 (Figure 5.31, represented within the green circles) feature as typical cases of sufficiency via Solution 3 and are not represented by any other empirically relevant path to trust recovery. Qualitative evidence describing the representation of Solution 3 within these cases is detailed in Table 5.50.
Figure 5.31: Plot of the Relationship of Sufficiency Between Solution 3 and the Presence of Trust Recovery

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Qualitative Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solution 3: COMP &amp; SATIS &amp; COMM &amp; ~SHVL</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Typical Case: Case 2</strong></td>
<td><strong>Typical Case: Case 13</strong></td>
</tr>
<tr>
<td>Large Enterprise, Operational Level Decision-Maker</td>
<td>Large Enterprise, Operational Level Decision-Maker</td>
</tr>
<tr>
<td><strong>COMP</strong></td>
<td>Yeah so recently they have employed a very senior, very experienced, very capable academic out of universities in Australia who has a lot of credibility. So, abilities [are] absolutely critical because we are looking to do the next best thing not always we are successful obviously, ability is absolutely critical.</td>
</tr>
<tr>
<td><strong>SATIS</strong></td>
<td>Functionally it does the job. We’ve got, you know, a thousand lecturers using it, 1200 lecturers using it, 25,000-30,000 students using it. If you can’t deliver to our [breadth-of] high-quality standards then you might as well not worry about it.</td>
</tr>
<tr>
<td><strong>COMM</strong></td>
<td>Communication is crucial. There are communications on two or three different levels right. It is about communicating that and giving us enough time to react that is the only thing that we expect.</td>
</tr>
</tbody>
</table>
### Qualitative Evidence, Continued

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Qualitative Evidence, Continued</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solution 3:</strong> COMP ● SATIS ● COMM ● ~SHVL</td>
<td></td>
</tr>
</tbody>
</table>
| **Typical Case:** Case 2  
Large Enterprise, Operational Level Decision-Maker | **Typical Case:** Case 13  
Large Enterprise, Operational Level Decision-Maker |
| ~SHVL | The difficulty is that there’s always the devil you know right [...] all systems have problems, all systems have bugs, all systems have delays in development and there are [contradicting] priorities and so on. | It is always a balance that you have to draw but in terms of values [...] we have kept it to a point where there are not rules and regulations they are [balanced] values-based governance principles. |


**Table 5.50: Qualitative Evidence, Typical Cases Representative of Solution 3 in Presence of Trust Recovery, Causal Conditions with No Contextual Conditions**

Case 11 is representative of a deviant case for consistency (Table 5.51) and Case 18 is representative of a deviant case for coverage (Table 5.52) in Solution 3 (Figure 5.31, represented within the red circles) and can be explored by means of a detailed case vignette (Crilly, 2011; Forkmann et al., 2017; Ordanini et al., 2014). The exploration of the interplay of causal mechanisms within Cases 11 and 18 allows for an iterative case-based reflection on potentially missing conditions that might explain the deviancy (Rihoux & Lobe, 2009; Rihoux & Ragin, 2008).
## Qualitative Evidence

**Solution 3: COMP ● SATIS ● COMM ● ~SHVL**

### Deviant Case for Consistency: Case 11

**Small to Medium Enterprise, Executive Level Decision-Maker**

Case 11 is representative of a small to medium enterprise buying organisation who supply and install plumbing equipment to both domestic and corporate clients. The relationship with their supplier organisation is long-term (approximately 10 years) and the level of trust representative of the relationship has been built up over the course of this period. However, when considering deviancy of consistency of Solution 3 in this case, two main influences are illustrated in the case-based narrative. First, the breach of trust was quite a shock to the buyer and represented an explicit breach:

> We were the first customer that they had and we kind of got them off the ground in a lot of respects. No one else would back them. And we were pretty much the only people who were supporting them, getting them off the ground and pretty much put all the business their way [...] and other big customers come along and you get washed aside.

Even though this breach was not terminal to the relationship, it acts as a “lens” or “filter” through which to consider the diagnostic equity of future interactions. Second, the previous, somewhat innocuous, shortcomings with this supplier have served to “taint” the relationship insomuch that a number of smaller, more discrete violations have collectively resulted in a sense of distrust in this supplier. This, effectively, has diluted the supplier’s efforts and can contribute to our understanding of the network effect of trust violations in a buyer-supplier relationship:

> They [supplier] have had multiple occasions where the same thing has happened over the course of a long period of time. Beforehand it was always blamed on the salesperson, you know, the salesperson was getting the pricing wrong or the service wrong [...] and then it would happen again.


**Table 5.51: Qualitative Evidence, Deviant Case for Consistency Representative of Solution 3 in Presence of Trust Recovery, Causal Conditions with No Contextual Conditions**
Case 18 is representative of a small to medium enterprise buying organisation who act as an agent for consumer-level pharmaceutical brands in New Zealand. The relationship with their supplier organisation is long-term (at least 10 years) and the level of trust representative of the relationship has been built up over the course of this period. However, when considering deviancy of coverage of Solution 3 in this case, two main influences are illustrated in the case-based narrative. First, the relationship between the buyer organisation agent and the seller organisation agent is still rather transactional, which is not typical of a relationship built-up over this amount of time, as evidenced by the following when considering communication and interactions:

> It’s not something that they look forward to or [...] they are polite but they would really rather you didn’t ask, even though you get the fake happy to help, really not. But that’s okay. I get that. They work them extremely hard within the office so I understand their situation as well.

This interplay represents a potentially interesting, missing condition – the level of affect in the buyer/supplier relationship influencing the trust recovery efforts, or solution, rather than simply the tenure of the relationship acting as a proxy for relational embeddedness. Second, the buying organisation agent also exercises a high level of forgiveness in their interactions with the supplier organisation, as evidenced by the following:

> Well nothing is quite that simple I guess really and so you have to operate with quite an amount of forgiveness in everyday [interactions and failures] because you would hope that that would be the same for you.

Again, this introduces a particularly interesting, potential condition that would explain the recovery of trust outside of the causal conditions represented in Solution 3; namely, the propensity to forgive by the buying organisation that has not otherwise been explicitly investigated.

---


**Table 5.52:** Qualitative Evidence, Deviant Case for Coverage Representative of Solution 3 in Presence of Trust Recovery, Causal Conditions with No Contextual Conditions
5.5.2.2 In-Depth Analysis of Typical and Deviant Cases: Causal Conditions and Type of Breach Contextual Condition

The in-depth analyses, below, are representative of the analysis of sufficiency of the causal conditions leading to the presence of trust recovery in combination with the type of breach contextual condition. Solution 1 is the most empirically relevant solution in this truth table analysis with a coverage value of 0.24. In the XY plot (Figure 5.32), typical cases of sufficiency are all cases in the top right quadrant above the diagonal and display maximum set membership scores in the subset and the superset. Consequently, Cases 6 and 15 (Figure 5.32, represented within the green circles) feature as typical cases of sufficiency via Solution 3 and are not represented by any other empirically relevant path to trust recovery. Qualitative evidence describing the representation of Solution 1 within these cases is detailed in Table 5.53.

Figure 5.32: Plot of the Relationship of Sufficiency Between Solution 1 and the Presence of Trust Recovery
<table>
<thead>
<tr>
<th>Conditions</th>
<th>Qualitative Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMP</strong></td>
<td>So that is one of the things that destroys the trust a bit just because you are expecting them to sort of know what they are talking about and if they are telling you stuff that’s not true it doesn’t really help.</td>
</tr>
<tr>
<td><strong>SATIS</strong></td>
<td>With [supplier] we know what the standard is now. They have set the standard in service and sort of personal relationships and I guess the other ones have to sort of be up at that level otherwise not really going to give them much of the business and stuff.</td>
</tr>
<tr>
<td><strong>COMM</strong></td>
<td>When I phoned up to sort stuff out [...] he had been working there quite a while. He knew all the products and what was going to be best and stuff. He was just the easiest to deal with.</td>
</tr>
<tr>
<td>~<strong>INTEG</strong></td>
<td>I know the guy quite well and he does know his stuff quite well but I think his stubborn arrogant side can get in the way of it sometimes and he thinks he knows it all so that can get in the way of the relationship I guess.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solution 1: COMP ● SATIS ● COMM ● ~INTEG ● ~TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Typical Case: Case 6</strong></td>
</tr>
<tr>
<td>Small to Medium Enterprise, Executive Level Decision-Maker</td>
</tr>
<tr>
<td><strong>Typical Case: Case 15</strong></td>
</tr>
<tr>
<td>Large Enterprise, Operational Level Decision-Maker</td>
</tr>
</tbody>
</table>

The [supplier] would dedicate good technicians and engineers in place to investigate with my guys the subject make sure that they reach a proper root cause analysis, conduct all the [analysis] and come up with this is the problem how to handle it, how to deal with it.

I would always keep an eye to make sure gain as I told you earlier that he is on track [...] that his documents cycle is intact that whatever has been reflected [...] and he do all what I ask him, what I train him even to do. Make sure that this is really happening and then we move forward.

I wouldn’t know I wouldn’t be able to tell however for him to regain this trust he made sure to have this officially communicated among his team and he shared it back with us, he shared the document the work instruction.

[supplier] tried to make excuses in other stages, denial after denial and so on until when it was admitted that this was wrong we agreed otherwise and he was [able to] regain the relationship. Again, I am not sure whether I am happy here or not.
### Table 5.53: Qualitative Evidence, Typical Cases Representative of Solution 1 in Presence of Trust Recovery, Causal Conditions with Type of Breach Contextual Condition

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Qualitative Evidence, Continued</th>
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<tbody>
<tr>
<td>Solution 1: COMP ● SATIS ● COMM ● ~INTEG ● ~TYPE</td>
<td></td>
</tr>
<tr>
<td>Typical Case: Case 6</td>
<td>Typical Case: Case 15</td>
</tr>
<tr>
<td>Small to Medium Enterprise, Executive Level Decision-Maker</td>
<td>Large Enterprise, Operational Level Decision-Maker</td>
</tr>
<tr>
<td><strong>~TYPE</strong></td>
<td>[cognitive-dominant] One of the main guys working there, a few times we’ve had issues with him telling us wrong information about products or about gear.</td>
</tr>
<tr>
<td></td>
<td>[cognitive-dominant] [supplier] changed the costing [structure]. Hoping that I won’t notice basically and when I brought it up when we discussed it […] he didn’t follow up on that to make sure that he has done it right.</td>
</tr>
</tbody>
</table>


Case 21 is representative of a deviant case for consistency (Table 5.54) and Case 8 is representative of a deviant case for coverage (Table 5.55) in Solution 1 (Figure 5.32, represented within the red circle) and can be explored by means of a detailed case vignette (Crilly, 2011; Forkmann et al., 2017; Ordanini et al., 2014). The exploration of the interplay of causal mechanisms within Cases 11 and 18 allows for an iterative case-based reflection on potentially missing conditions that might explain the deviancy (Rihoux & Lobe, 2009; Rihoux & Ragin, 2008).
### Qualitative Evidence

<table>
<thead>
<tr>
<th>Solution 1:</th>
<th>COMP • SATIS • COMM • ~INTEG • ~TYPE</th>
</tr>
</thead>
</table>

#### Deviant Case for Consistency: Case 21
Small to Medium Enterprise, Executive Level Decision-Maker

Case 21 is representative of a small to medium enterprise buying organisation that works with a number of domestic and international clients in the supply of their market research support tool. The relationship with this particular supplier was rather new (less than 12 months) and the inference from the case data is that the buying organisation agent was satisfied with the responses at a cognitive-level from the supplier organisation, however, the efficacy of these efforts was not sufficient for trust recovery. A potentially interesting reflection is born out of the conceptualisation reciprocity, or feedback, from the buying organisation agent as part of the pathway to trust recovery:

> The relationship has to be ultimately reciprocal for it to persist. Non-reciprocal relationships don’t last as long as reciprocal relationships. Money flows one way, services flow the other or goods flow the other and if that flow is reciprocal you’ve got a good long-lasting relationship.

The case data suggests that the respective efforts were objectively satisfactory, but strained:

> If someone is working extra hours on something that is done for a one off you really appreciate it. You might even give them a bit of a bonus so there is a bit of reciprocal going that way. But if that is happening every night for three weeks, you are going to [discharge] that supplier because they are going to burn out.


*Table 5.54: Qualitative Evidence, Deviant Case for Consistency Representative of Solution 1 in Presence of Trust Recovery, Causal Conditions with Type of Breach Contextual Condition*
Case 8 is representative of a large government health board body that manages suppliers (including requests for proposals, managing tenders and ongoing supplier relationships) to major acute and chronic care facilities throughout a major city in New Zealand. The focal breach of trust was of a cognitive-dominant nature as the product was not delivered on time, but it was a time-critical product (oxygen supply) which is considered life-sustaining for at-home patients of the District Health Board (DHB):

There have been a few hiccups with some of their drivers not going through to the person’s home and the person waiting for oxygen delivery.

The supplier has designed an intervention, largely on the efforts of one agent of the supplying company, to ensure this service failure does not happen again, but all of the conditions within Solution 1 are not represented in these efforts. However, there still exists a high level of trust, largely borne out of the estimations of the supplying organisations’ sentiments toward the DHB:

You feel like they are an honest company. At the end of the day I think that they have a heart in their company.

The situational context is that the supplying company has been supplying oxygen for four years without a contract in place to protect them and with no price increases in that period of time, thus enamouring themselves to the buying organisation. There is a great deal of inherent trust in this supplier organisation, perhaps creating a trust buffer, of sorts. This “trust reservoir” creates a situation within which any deviation is considered the exception rather than the norm; even when explicitly reflecting on trust recovery as opposed to overall levels of trust.


<table>
<thead>
<tr>
<th>Qualitative Evidence</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Table 5.5:</strong> Qualitative Evidence, Deviant Case for Coverage Representative of Solution 1 in Presence of Trust Recovery, Causal Conditions with Type of Breach Contextual Condition</td>
<td></td>
</tr>
</tbody>
</table>
5.5.2.3 In-Depth Analysis of Typical and Deviant Cases: Causal Conditions and Severity of Breach Contextual Condition

The in-depth analyses, below, are representative of the analysis of sufficiency of the causal conditions leading to the presence of trust recovery in combination with the severity of breach contextual condition. Solution 5 is the most empirically relevant solution in this truth table analysis with a coverage value of 0.38. In the XY plot (Figure 5.33), typical cases of sufficiency are all cases in the top right quadrant above the diagonal and display maximum set membership scores in the subset and the superset. Cases 1 and 14 (Figure 5.33, both represented within the green circle) feature as typical cases of sufficiency via Solution 5 and are not represented by any other empirically relevant path to trust recovery. Qualitative evidence describing the representation of Solution 5 within these cases is detailed in Table 5.56.

![Figure 5.33: Plot of the Relationship of Sufficiency Between Solution 5 and the Presence of Trust Recovery](image-url)
<table>
<thead>
<tr>
<th>Conditions</th>
<th>Qualitative Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solution 5: COMP • SATIS • COMM • ~SHVAL • ~SEVER</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Typical Case: Case 1</strong></td>
<td><strong>Typical Case: Case 14</strong></td>
</tr>
<tr>
<td>Small to Medium Enterprise, Executive Level Decision-Maker</td>
<td>Large Enterprise, Executive Level Decision-Maker</td>
</tr>
<tr>
<td><strong>COMP</strong></td>
<td>So yeah, the [supplier] I was mentioning before about the high integrity out of the Netherlands you could just set your watch by the quality. You’d just know that shipment by shipment it’s going to be good. You just have that confidence.</td>
</tr>
<tr>
<td><strong>SATIS</strong></td>
<td>I think they certainly work off a different song sheet to the [other supplier] but that was one tremendous experience that I had with them.</td>
</tr>
<tr>
<td><strong>COMM</strong></td>
<td>Out of the blue I go an email from the then owner of the company telling us that this batch had to be withdrawn from the market immediately, that they’d found a quality issue and that they were reissuing immediately replacement stock.</td>
</tr>
<tr>
<td><strong>~SHVAL</strong></td>
<td>We had another time there where again they just emailed out of the blue and said that part of their corporate responsibility was that they donated annually a $US5,000 gift to one of their distributors to be gifted to a charity of their choice.</td>
</tr>
</tbody>
</table>
Table 5.5: Qualitative Evidence, Typical Cases Representative of Solution 5 in Presence of Trust Recovery, Causal Conditions with Severity of Breach Contextual Condition

Case 6 is representative of a deviant case for consistency (Table 5.57) and Case 5 is representative of a deviant case for coverage (Table 5.58) in Solution 5 (Figure 5.33, represented within the red circles) and can be explored by means of a detailed case vignette (Crilly, 2011; Forkmann et al., 2017; Ordanini et al., 2014). The exploration of the interplay of causal mechanisms within Cases 6 and 5 allows for an iterative case-based reflection on potentially missing conditions that might explain the deviancy (Rihoux & Lobe, 2009; Rihoux & Ragin, 2008).
Table 5.5: Qualitative Evidence, Deviant Case for Consistency Representative of Solution 5 in Presence of Trust Recovery, Causal Conditions with Severity of Breach Contextual Condition

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<thead>
<tr>
<th>Qualitative Evidence</th>
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<tbody>
<tr>
<td>Solution 5: COMP ● SATIS ● COMM ● ~SHVAL ● ~SEVER</td>
</tr>
</tbody>
</table>

Deviant Case for Consistency: Case 6
Small to Medium Enterprise, Executive Level Decision-Maker

Case 6 is representative of a small-to-medium enterprise electrical services and supply company. The focal supplier relationship is with an electrical supply company of which has featured as a key supplier since the incorporation of the buying organisation. The severity of the breach is relatively low insomuch that the buying organisation was given the wrong information on specifications and product details:

_We’ve had issues with him telling us wrong information about products or about gear, so examples are we would go in there, ask oh can we get, we maybe need a replacement of a certain electrical component. We say oh can we get this component in and he would be like oh no they don’t stock that component anymore, they don’t make that component anymore, you have to get something else, and then us going away and actually finding out oh we can get that component from somewhere else._

The breach itself is not overtly sinister, but the occurrences of this type of breach were increasingly common, even in spite of demonstrations representative of Solution 5, so the cumulative effect was one of low levels of trust recovery:

_There’s been a few examples like that where we’ve gone in and been told something that is not true or not right. So yeah there’s been a few times and I guess it adds onto each other._

There is also an attitude of ambivalence in the level of trust recovery insomuch that the buying organisation is basing their estimations of trust recovery on already established conditions in more of a formative, rather than reflective, mode:

_I do to a degree [trust the supplier] because the company I am actually talking about, they are the ones that actually signed us up right from the start when we started our company [...] they were there for us at the start because they are a slightly smaller wholesaler [...] but yeah we just found as I guess we settled in with them and stuff we were let down occasionally with the different little things._

Case 5 is representative of a large enterprise in New Zealand that collects, supplies and investigates property insights, analytics, property-related risk management and geospatial location intelligence for commercial and government contracts. The focal supplier was their own property management supplier of whom they lease their premises from. The severity of the breach of trust was not severe and was represented by the failure of some fittings in the building of which needed fixing in a hurry; all of which were performed satisfactorily:

*I have to say in terms of minor things that are important like response time to telephone calls, email follow up, just the hygiene stuff really, they were impeccable, it was very good.*

The relationship the buying organisation enjoyed with their property supplier has been built-up over a long period of time and this failure was rather minor with very little opportunity for a substantive reparative solution to be presented. However, the trust relatively minor reparative activity served to confirm otherwise pre-existing estimations of trustworthiness borne out of a reciprocity of trusting behaviours, particularly when re-signing their lease:

*Again, nothing is ever guaranteed but I said I am 99% certain that this is going to go through, there won’t be a problem but you just have to trust us that it is going to take one more month than what you wanted to take. And he accepted that, in some ways he had no choice but he was okay with it and then in the end it came through exactly what I said would happen, happened and so he was relieved as well so I think it kind of builds up a bit of mutual trust as well.*

This mutual trust, or reciprocity, borne out of a context or situation representative of high levels of mutual vulnerability acts as an explorative milestone in this relationship and helps to explain why the level of trust recovery is so high when membership in the solution is so low; a higher-order diffusion of trust into other post note-severe service failure, estimations of trust recovery.


**Table 5.58: Qualitative Evidence, Deviant Case for Coverage Representative of Solution 5 in Presence of Trust Recovery, Causal Conditions with Severity of Breach Contextual Condition**
5.5.2.4 In-Depth Analysis of Typical and Deviant Cases: Causal Conditions and Size of Buying Organisation Contextual Condition

The in-depth analyses, below, are representative of the analysis of sufficiency of the causal conditions leading to the presence of trust recovery in combination with the size of buying organisation contextual condition. Solution 1 is the most empirically relevant solution in this truth table analysis with a coverage value of 0.31. In the XY plot (Figure 5.34), typical cases of sufficiency are all cases in the top right quadrant above the diagonal and display maximum set membership scores in the subset and the superset. In this instance, Cases 3 and 8 (Figure 5.33, represented within the green circles) feature as typical cases of sufficiency via Solution 1 and are not represented by any other empirically relevant path to trust recovery. Qualitative evidence describing the representation of Solution 5 within these cases is detailed in Table 5.59.

![Figure 5.34: Plot of the Relationship of Sufficiency Between Solution 1 and the Presence of Trust Recovery](image-url)
<table>
<thead>
<tr>
<th>Conditions</th>
<th>Qualitative Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solution 1: COMP ● SATIS ● COMM ● INTEG ● SIZE</strong></td>
<td></td>
</tr>
<tr>
<td>Typical Case: Case 3  Large Enterprise, Executive Level Decision-Maker</td>
<td>Typical Case: Case 8  Large Enterprise, Operational Level Decision-Maker</td>
</tr>
<tr>
<td><strong>COMP</strong></td>
<td><strong>SATIS</strong></td>
</tr>
<tr>
<td><em>Some people can come in gung-ho and say promise the world and they never deliver it but if they came in and we saw action in those first few months [...] then yeah it can build to be a strong relationship [again].</em></td>
<td><em>She was very good and she drilled into the problem, she set up a mitigating so that it didn’t happen again and they bring staff on now on a public holiday to make sure that they are compounding that chemotherapy to be able to get that extra load delivered.</em></td>
</tr>
<tr>
<td><strong>SATIS</strong></td>
<td><strong>COMM</strong></td>
</tr>
<tr>
<td><em>They go through their moments still. You can go through and I guess not see them for a while but I think from what we get now to what we were getting probably four or five years ago, I think yeah, it’s probably reverted around and recovered.</em></td>
<td><em>Yeah and it took a few weeks and it took a few meetings but yeah, they were able to kind of drill down into what the issue was and then come up with a fix.</em></td>
</tr>
<tr>
<td><strong>COMM</strong></td>
<td><strong>INTEG</strong></td>
</tr>
<tr>
<td><em>I think they potentially will give us a heads up if there is something maybe going to change within the market, so we will get word of that first, because we’ve got a lot of back office systems or online booking tools or things that we may need to adapt or change, so it’s actually giving us that heads up.</em></td>
<td><em>Sometimes there might be issues in that and you can just email the person that manages it and she gets back to you and you know that she has looked into it in the background and she sorted that, and that is quite good to know that if there is an issue with a patient in the community with oxygen.</em></td>
</tr>
<tr>
<td><strong>INTEG</strong></td>
<td></td>
</tr>
<tr>
<td><em>I mean there is always going to be issues regardless of any supplier that you deal with but I think it’s been open and transparent, honest with other.</em></td>
<td><em>And I think if they are true to their word and they go away and say I am going to go and do this and I will get back to you and they do then the relationship can move forward.</em></td>
</tr>
</tbody>
</table>
Table 5.59: Qualitative Evidence, Typical Cases Representative of Solution 1 in Presence of Trust Recovery, Causal Conditions with Size of Buying Organisation Contextual Condition

Case 19 is representative of a deviant case for consistency (Table 5.60) and Case 24 is representative of a deviant case for coverage (Table 5.61) in Solution 1 (Figure 5.34, represented within the red circles) and can be explored by means of a detailed case vignette (Crilly, 2011; Forkmann et al., 2017; Ordanini et al., 2014). The exploration of the interplay of causal mechanisms within Cases 19 and 24 allows for an iterative case-based reflection on potentially missing conditions that might explain the deviancy (Rihoux & Lobe, 2009; Rihoux & Ragin, 2008).

<table>
<thead>
<tr>
<th>Qualitative Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solution 1</strong>: COMP • SATIS • COMM • INTEG • SIZE</td>
</tr>
</tbody>
</table>

**Deviant Case for Consistency: Case 19**

**Large Enterprise, Operational Level Decision-Maker**

Case 19 is representative of a large government enterprise, within which the focal exercise or activities within the operational department in question are care, maintenance and investment in new parklands and associated equipment and infrastructure. The focal supplier in question is representative of a long-term relationship (more than 10 years) in a highly regulated and protocol-driven tendering business. Most business in this operation is tender-driven business and suppliers can gain “preferred supplier” status after a number of successful contract deliveries. However, this can result in suppliers taking advantage of their status and the lack of competitive alternatives:

> So yeah there are contractors where you feel like they are variation hungry or greedy so they are just always coming back for extras financially. And so that can become a negative factor in you not wanting to continue dealing with them [...] you just feel like they are just in it to make money, they are being difficult to deal with, they are taking up a lot of my time to manage them so you know I wouldn’t deal with them again.

Even in the presence of objective demonstrations of trust representative of Solution 1, because these suppliers are often entrenched in the relationship they become like “insiders” and the breach of trust feels much more explicit:

> And these external contractors, you would deal with them so much, almost like they were a part of your workplace, you know. They are not like an outsider because you are dealing with them so much on a daily basis. When they perform badly it almost becomes difficult to even deal with because it’s so ingrained, you know what I mean. I’m like you’ve told me ten times you were going to do that. It’s like talking to your husband or something, you know. So that is quite interesting.

This introduces a potentially interesting contextual condition that may influence the development of trust after service failure; namely, the level of competitive alternatives of supply.


**Table 5.60**: Qualitative Evidence, Deviant Case for Consistency Representative of Solution 1 in Presence of Trust Recovery, Causal Conditions with Size of Buying Organisation Contextual Condition
### Qualitative Evidence

**Solution 1: COMP ● SATIS ● COMM ● INTEG ● SIZE**

**Deviant Case for Coverage: Case 24**

**Large Enterprise, Operational Level Decision-Maker**

Case 24 is representative of a large enterprise of which features as one of the top consumer goods and homeware retailers in New Zealand with a very well-established supply chain. The focal breach of trust in the supply of faulty homeware product was by an overseas supplier of whom they had slowly, over time, built up a trusted relationship. However, the volume of product required of this buying organisation was in excess of what the supplier organisation could supply directly, hence the need for a third-party supplier, contracted by the supplier organisation:

*We buy so much product from them now that they can’t make it all [...] they have had to outsource some of that manufacture [capacity]. So, there is a lot of trust. We are now relying on them to manage another external factory that they don’t own. We literally buy hundreds of thousands of units of products from them now.*

As such, the buying organisation has a very explicit contract and “code of ethics” that serves as a proxy for this direct level of trust with each respective third-party supply organisation:

*And we almost sign up to almost a sort of code of ethics with them [...] tell us when you can’t do something as well as when you can do something. We expect high service levels. So, we are pretty clear in terms of laying out what we expect from them.*

This code of ethics, or trust “safety net”, appears to act as a buffer to trust decay following service failure providing additional insight into why non-membership in Solution 1 does not result in non-membership in the outcome of interest. This agreement provides for sufficient confidence in the direct supplier in the absence of high-level demonstrations of the constituent conditions within Solution 1:

*If anything, it strengthens because you have more faith. [...] you have more faith that when things happen in the future that you’ve got the relationship and the way of working to be able to deal with it.*


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**Table 5.61: Qualitative Evidence, Deviant Case for Coverage Representative of Solution 1 in Presence of Trust Recovery, Causal Conditions with Size of Buying Organisation Contextual Condition**
5.5.2.5 In-Depth Analysis of Typical and Deviant Cases: Causal Conditions and Individual Level of Decision-Making Authority Contextual Condition

The in-depth analyses, below, are representative of the analysis of sufficiency of the causal conditions leading to the presence of trust recovery in combination with the individual level of decision-making authority of the focal trustor contextual condition. Solution 1 is the most empirically relevant solution in this truth table analysis with a coverage value of 0.27. In the XY plot (Figure 5.35), typical cases of sufficiency are all cases in the top right quadrant above the diagonal and display maximum set membership scores in the subset and the superset. As such, Case 5 (Figure 5.35, represented within the green circle) is the only uniquely typical case of sufficiency via Solution 1 that is not represented by any other empirically relevant path to trust recovery. Qualitative evidence describing the representation of Solution 1 within this case is detailed in Table 5.62.

Figure 5.35: Plot of the Relationship of Sufficiency Between Solution 1 and the Presence of Trust Recovery
Table 5.62: Qualitative Evidence, Typical Cases Representative of Solution 1 in Presence of Trust Recovery, Causal Conditions with Individual Level of Decision-Making Authority Contextual Condition

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Qualitative Evidence</th>
</tr>
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<tbody>
<tr>
<td><strong>Solution 1:</strong> COMP • SATIS • COMM • ~COCR • AUTH</td>
<td></td>
</tr>
</tbody>
</table>
| **Typical Case:** Case 5  
Large Enterprise, Executive Level Decision-Maker |
| **COMP** | We have had some repairs and some damage to the building, some back door nearly fell off for example. And they respond very quickly [...] they will just send somebody down to have a look [...] so they are very good at what they do [in response to service failure]. |
| **SATIS** | The second piece of it is the experience once you know what experience you actually have once you start interacting with that business and it is what I call the ‘say:do’ ratio, they said they were going to do this, what did they do I think is critical. Like any individual relationship if there is a gap there then trust will dissipate really quickly. |
| **COMM** | But I think in terms of trust and I think the key difference just thinking as we talk about it the key difference is that personal interaction as well. B2B, it is still really P2P really; it is a person to person thing really. |
| **~COCR** | I will say just one more thing which is they were quite consultative in their approach which is what we try to be with our clients as well and it struck me. |
| **AUTH** | [representative of executive-level decision-maker] |

There are no cases that are exclusively representative of deviant cases for consistency in Solution 1 in this truth table analysis. As such, the in-depth analysis proceeds to an investigation of Case 4, a deviant case for coverage (Table 5.63) in Solution 1 (Figure 5.35, represented within the red circle), of which can be explored by means of a detailed case vignette (Crilly, 2011; Forkmann et al., 2017; Ordanini et al., 2014). The exploration of the interplay of causal mechanisms within Case 4 allows for an iterative case-based reflection on potentially missing conditions that might explain the deviancy (Rihoux & Lobe, 2009; Rihoux & Ragin, 2008).
Qualitative Evidence

<table>
<thead>
<tr>
<th>Solution 1: COMP • SATIS • COMM • ~COCR • AUTH</th>
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Deviant Case for Coverage: Case 4
Large Enterprise, Executive Level Decision-Making Authority

Case 4 is representative of a large enterprise that supplies both corporate travel services to large clients and direct-to-consumer travel services through their consumer-branded stores and websites. The focal breach of trust is represented by a sudden retirement of a key support system, a booking engine, in their business of which has left them exposed competitively:

We basically got told we are sunsetting it and we are bringing out a new one and I was like really? And they press released it now that is actually quite a risk to us because our competitors, are, what are we going to replace it with what is it going to look like and haven’t got anything built so that is a low [point].

This is an interesting case insomuch that the supplier organisation has a pronounced competitive edge in its share of the global market and a much more superior product:

[Supplier] they are very successful they are multi, they are bigger than [other supplier] bigger than anything on earth, they have like 850 engineers in Nice alone, they are huge it is just a ridiculously sizable – [the supplier] powers pretty much most of the airlines in technology, the conveyor belts and check in counters the check in kiosks they are just massive, a booking engine in the scheme of it [...] also you look at their competitors and go well the devil you know it is really quite sad.

This is a potentially interesting context offering additional explanatory power as to why the buying organisation is still exercising a high level of trust in the supplier organisation; namely, a superior product and a lack of a competitive alternative. Thus, the buying organisation is forced to exercise a more tenuous level of trust for the sake of their business and customers:

I think [the supplier relationship] is a long journey one [...] we have got to work with them we may not like how they have been carrying on but we have just got to work with them because is the product is damn good and so you kind of go forget all the nutters we have got to go with this product is that going to be good for the customer.
5.6 Chapter Conclusions

This chapter has reported and discussed the findings of Study Two, qualitative comparative analysis (QCA), in depth and in doing so addressed the research aims. The procedures and protocols within each of the four distinct phases of QCA have been suitably and transparently detailed (Greckhamer et al., 2018; Schneider & Wagemann, 2010b), providing “...fine-grained ways to not only interpret the causal complexity underlying the outcome but also to distinguish the importance and validity of each of the equifinal configurations identified” (Greckhamer et al., 2018, p. 491). The pathways of causal conditions, or “causal recipes”, that lead to trust recovery within different contextual conditions inherent of B2B relationships have been reported and discussed. The reduction of the complex Boolean algebraic expressions into these minimal formula result in “pathways” of causal conditions that produce an outcome, offering a practical and efficient insight for supplying organisations into the configurations of conditions that lead to trust recovery with buying organisations. Finally, case-level analyses, through an in-depth analysis of typical and deviant cases, help to interpret the essence of the configurations and serve to support and qualify the QCA findings through qualitative analysis (Rihoux, 2009; Rihoux & Lobe, 2009; Rihoux & Ragin, 2008). This allows for a richer understanding of the complex interactions between buyer and supplier organisations when seeking to recover trust following service failure.

Chapter 6, following, briefly discusses the contributions of the research to theory, methodological contributions, managerial implications, limitations of the studies and directions for future research.
Chapter Six: Conclusions, Contributions, Limitations and Future Research Opportunities

6.1 Introduction

Research on trust in business-to-business (B2B) relationships is suitably complex and demands sensitivity to the multiplex, multifaceted nature of the phenomenon (Bachmann & Inkpen, 2011). Furthermore, trust research has been posed to be most productive when examining the interplay of causal mechanisms at both an interpersonal and interorganisational level (Huang & Wilkinson, 2013; 2014). This sensitivity forces a view that doesn’t rely, exclusively, on organisational governance frameworks to act as a proxy for trust, but rather embraces the complexity of individual perceptions of trust nested-within those organisational contexts. However, one of the most challenging aspects underpinning the theorising of trust between organisations is that the majority of trust research has employed linear, variance-based theories and methods; tested mainly through cross-sectional surveys (Jarratt & Ceric, 2015). As Thompson and Young (2014, p. 30) suggest: “In variance methods, the properties of systems are often conceptualized as random variables [...] however, random variables are artefacts of statistical theory which do not necessarily reflect the data structure produced by complex systems.”

This work has served to embrace the complexity inherent in B2B relationships by first, investigating the drivers of trust recovery following service failure through qualitative enquiry and thematic analysis of in-depth interviews with buyer organisation decision-makers, inviting a depth of reflection, insight and interpretation toward understanding trust recovery in B2B relationships. Second, as part of a qualitative comparative analysis (QCA)
based on set-theoretic and case-oriented approaches, this work has analysed these cases in order to describe the combinations of attributes, or configurations of causal conditions, as well as the contextual conditions that combine with these causal conditions, that relate to the outcome of interest; namely, trust recovery. Because set-theoretic methods consider configurations of causal conditions, they represent valuable analytic tools to examine situations of complex causality (Zaefarian, Thiesbrummel, Henneberg, & Naudé, 2017). QCA is such a tool designed to examine a situation of complex causality, such as trust recovery, and responds to prevailing empirical commentary on the topic that suggests a number of multi-causality concerns in the current literature (Dirks et al., 2009; Gillespie, 2017; Lewicki & Brinsfield, 2012; Tomlinson et al., 2004).

Toward investigating this complex causal interplay of conditions leading to trust recovery, the specific research questions posed by this work were as follows:

**Research Question One:** What are the characteristics, qualities or behaviours (collectively known as conditions) that best serve to recover interorganisational trust following service failure?

**Research Question Two:** What other contributing factors serve to moderate the influence of these conditions?

The findings and discussions in Chapter Four (Study One) and Chapter Five (Study Two) respond directly to these research questions, providing a cumulation of insights resulting in a “richness and specificity to the findings” (Rihoux & Lobe, 2009, p. 237) for theorists, methodologists and managers, alike. This chapter commences by reporting the most pronounced contributions of the research to theory, methodological contributions,
managerial implications, limitations of the studies, and directions for future research. The chapter then concludes by offering some closing remarks on the wider impact of the work.

6.2 Theoretical Contributions

6.2.1 Recognising and Operationalising Transparency as Contributing to Trust Recovery

A key finding represented in Study One, the qualitative enquiry and thematic analysis, is that of the recognition and operationalisation of supplier transparency as a significant contributing factor toward trust recovery following service failure. Within the wider relationship management literature, transparency has enjoyed some empirical attention, however, a more explicit investigation of the role of transparency in the trust literature is lacking and remains under-representative of its importance.

In the context of the wider relationship management literature, demonstrations of transparency are described as serving to “…reduce operational, managerial and strategic costs with the aim to improve the deployment of resources, to raise the potential value of the relationship and to reduce non-value-added activities” (Eggert & Helm, 2003, p. 2). In the context of the prevailing trust literature, the empirically established role of transparency is less clear (Schnackenberg & Tomlinson, 2016), with prior empirical attempts to explain the impact of transparency on trust having mixed results. Current relationship management insights into the concept of transparency gravitate more toward perceptions of information exchange around important organisational characteristics such as economic situation, technical abilities or organisational structure (Albu & Flyverbom, 2019; Eggert & Helm, 2003; Schnackenberg & Tomlinson, 2016). Similarly, prior work in the trust domain has considered transparency as a key element of calculative, or cognitive-dominant, assessments of trust through information sharing and the development of transparent
processes and systems (Doney & Cannon, 1997). However, new sub-themes emerged from the findings in Study One that offer an additional depth of understanding to the role of transparency in trust recovery in B2B relationships. In particular, findings within the sub-themes of “Signalling Equity and Impartiality” and “Establishing an Explicit and Visible Process”, representative of the “Transparency” theme in Study One, has theoretical implications. This finding is distinct from prevailing conceptualisations of transparency in the literature and suggests a more explicit representation of not only procedural, systems and information-sharing transparency, but also deployment of the reparative solution in a distributive, overtly open, and impartial manner. Additionally, these findings suggest voluntary reference site feedback from other buying organisations that work with the supplier, and the appointment of external auditors or adjudicators, can represent transparency when seeking to recover trust after service failure. These findings extend the conceptualisation of transparency in B2B relationships, graduating the role of transparency in trust recovery efforts from an emphasis on institutional information sharing (Tapscott & Ticoll, 2003) and monitoring (Bush, Bush, Orr, & Rocco, 2007) to one of relationship reinforcement and the development of trust and commitment (Eggert & Helm, 2003; Lamming, Caldwell, & Harrison, 2004).

One specific finding illustrating the more explicit role of transparency in trust recovery than previously represented in the literature, is in the QCA solutions from Study Two (representative of all analyses) that feature neither the presence or absence of demonstrations of competence. In all five of these representative solutions, transparency plays a more pronounced role in trust recovery when demonstrations of competence are considered immaterial. This systematic development of the transparency concept responds
to academic invitations to explore “...a new theory of transparency as a stand-alone concept ripe for further theoretical and empirical advancement” (Schnackenberg & Tomlinson, 2016, p. 1803). Additionally, explicating the concrete mechanisms that organisations have available to them in order to manage transparency perceptions helps to contribute to theoretical development of “transparency strategy” (Granados et al., 2005, p. 80; 2008) and invites investigation of specific approaches to managing changes in transparency that may prove instrumental in repairing damaged trust (McManus et al., 2006).

6.2.2 Establishing the Interdependence and Asymmetry of Conditions as Contributing to Trust Recovery

A central motivation of this work, represented in Study Two featuring QCA, is that of an inaugural attempt to apply configuration logic and set-theoretic methods in the relationship marketing and trust research domains within B2B relationships. The results of this study advance the extant relationship marketing and trust literature by shedding light on several specific issues: (1) the interdependence among causal conditions; (2) causal conditions are represented within the configurations as either necessary or sufficient for trust recovery; (3) that contextual conditions are important to understanding trust recovery; and, (4) configurations leading to trust recovery are quite different from those leading to its absence.

First, the results reported in Chapter Five illuminate the interdependence among causal conditions (competence, satisfaction, communication, transparency, integrity, benevolence, shared values and co-creation) in determining the level of trust recovered by a supplier organisation after service failure, as the conditions sufficient for high levels of trust recovery encompass a variety of combinations. The QCA findings, unique to this work, confirm that
the efficacy of demonstrations of trust indeed depend on the combined effects, not the net
or additive effects, of the conditions in order to recover trust. Additionally, these conditions
are representative of both cognitive- and affective-type dimensions of trust. Whilst the
individual solutions leading to trust recovery feature, almost exclusively, the presence of
cognitive-dominant dimensions of competence, satisfaction, and communication, these
solutions are also representative of affective-dominant dimensions. Quite markedly, every
solution leading to trust recovery within all truth table analyses features a combination of
both cognitive- and affective-dominant demonstrations of trust.

These findings contribute to a burgeoning stream of relationship marketing literature
espousing the benefits of research into both rational and emotional facets of B2B
relationships and their respective relational outcomes (Franklin & Marshall, 2019;
Kleinaltenkamp, Karpen, Plewa, Jaakkola, & Conduit, 2019; Prior & Keränen, 2019). In
addition, this research disentangles the precise contributory nature of these dimensions of
trust, in terms of whether they can be regarded as being essential or being less important
(or even exchangeable) within a configuration. These findings, following the work of Fiss
(2011, p. 411), identify equifinal recipes for the presence and absence of trust recovery
decomposed into a “configurational core and periphery based on causal relations with an
outcome.” By performing this analysis, new underlying patterns of cause-effect
relationships between conditions when seeking to recover trust are revealed (Goertz &
Levy, 2007; Mahoney & Goertz, 2004).

Second, an examination of the solutions leading to high levels of trust recovery also informs
the ongoing theoretical dialogue in the services literature as to the importance of an overall
level of satisfaction with the reparative solution when seeking to recover trust. The findings
in this work suggest that satisfaction, by itself, is necessary but not sufficient for trust recovery, while the other causal conditions (competence, communication, transparency, integrity, benevolence, shared values, and co-creation) are neither necessary nor sufficient.

The QCA results do not mean that causal conditions otherwise not categorised as necessary are irrelevant; on the contrary, they play a significant role but, individually, the “ingredients” are meaningful only within proper configurations, within the “recipes”. What matters for trust recovery to occur is whether the causal conditions, within their respective contextual conditions, are appropriately aligned. By establishing that the efficacy of a configuration of conditions leading to trust recovery is contingent on overall levels of satisfaction with the reparative solution, this study extends extant knowledge and clarifies ambiguities concerning the links between satisfaction and trust. Satisfaction alone does not imply that trust in a B2B relationship will be recovered, but these findings offer some clarity to its role in the development of trusting dispositions and deeper relational bonds (Murphy & Sashi, 2018). Without satisfaction, the relationship may dissolve, but if suppliers satisfy buyers, trust recovery becomes possible. Put differently, satisfaction is trust recovery enabling, but not exclusively sufficient. These findings echo those of the seminal work of Ganesan (1994) who found that satisfaction with previous outcomes is associated with the long-term orientation of both retail buyers and their vendors, but also offers additional insight into the links between satisfaction and other relational conditions and outcomes.

Furthermore, the QCA findings reveal which combinations of characteristics are conducive to trust recovery in certain contextual situations (type of breach, severity of breach, size of buying organisation and individual level of decision-making authority). To focus on the causal conditions, alone, risks missing an important point that the pattern of results
demonstrates; that trust recovery rarely has a single cause, the causes are interdependent and the direction of the effect of specific causes may change within different contextual conditions (Greckhamer et al., 2018). Contextual conditions are expected to affect the level of trust recovery between a buying and supplying organisation. Thus, although the findings with no contextual distinction offer pathways toward trust recovery, an overall evaluation of the remaining analyses suggest that their importance is contingent on contextual conditions with which they combine. These findings point to the importance of developing contextual theories of trust recovery, which consider combinatory effects and go beyond individual driver analysis of trust recovery.

The results with respect to the type of breach contextual condition, particularly an affective-dominant breach, illustrate this distinction. When a buying organisation has experienced an affective-dominant breach of trust, the pathways to trust recovery feature much more explicit demonstrations of affective-dominant dimensions of trust. These findings offer support to prevailing trust literature on the distinctions in response to different types of trust violation, however, offer a more detailed representation of what those responses should demonstrate. Current research in cognitive-based, or cognitive-dominant, violations of trust conceptualise this type of breach as more of an annoyance with limited emotional impact (Deutsch, Coleman, & Marcus, 2011). However, identification-based, or affect-dominant, violations of trust are conceptualised as a direct challenge to an individual’s most central and cherished values (Lewicki & Bunker, 1995) and are likely to result in feelings of upset, anger or even foolishness. These findings contribute to this body of literature by offering a series of relationship interventions designed to recover trust depending on the type of trust breach.
Interestingly, the findings within this analysis also offer a pathway to trust recovery after an affective-dominant type of breach when communication is neither present nor absent. This finding responds to a more explicit call in the trust literature for insight into how best to address trust violations when parties cannot, or will not, communicate about a major problem in their relationship (Lewicki et al., 1998; Lewicki & Stevenson, 1997); a situation that is likely to end the relationship. In addition, the findings in Study One extend empirical insight into the type of communication that is most appropriate when designing reparative solutions, with a number of cases representing the need for face-to-face communications when seeking to recover trust after service failure:

*In that moment with [supplier] that I am talking about, we actually had one of their regional New Zealand managers get on a plane and he came up to Auckland and he visited us and every other customer that had been upset and disappointed, because it wasn’t just us in the pot. There was a whole lot of other people they upset as well. They were in deep water with a whole bunch of people. But that manager got on a plane, put his best suit on, got on a plane, did the rental car thing, came here and officially apologised.* (Participant 20, SME, Operational)

The findings in this work support similar estimations of the importance of face-to-face, rather than exclusively electronic, means of communication in a crisis situation (Dawar & Pillutla, 2000; Yannopoulou, Koronis, & Elliott, 2011), but extends these insights into, more focally, the trust and trust recovery domains.

In QCA, a specific cause may have different (i.e. positive and negative) effects depending on the context, thereby indicating asymmetry (Greckhamer et al., 2008). Conditions found to be related in one configuration might be unrelated or inversely related in another (Ragin, 2000). This means that explanations of the presence of trust recovery do not automatically provide insights for the absence of trust recovery. In light of this, Study Two also accounts for possible causal asymmetry by investigating configurations for the absence of trust
recovery, or recipes for trust recovery failure. To date, most studies on interorganisational
trust have neglected this issue (Fang et al., 2008; Palmatier et al., 2007; Palmatier, Houston,
Dant, & Grewal, 2013). The extant literature on trust and trust repair provides considerable
insights regarding potential reparative strategies (Dirks et al., 2011; Dirks et al., 2009; Ferrin
et al., 2007), however, it has also highlighted that trust repair and recovery are not always
successful (Basso & Pizzutti, 2016; Pizzutti dos Santos & Basso, 2012). Understanding
drivers of trust recovery failure and contrasting them with drivers of success has remained
an important research gap. The findings in this work reveal that configurations leading to
high levels of trust recovery are distinct from (and thus not just the reverse of) those leading
to low levels of trust recovery.

Most notably, the necessary conditions analysis in the absence of trust recovery found that
the absence of benevolence (an affective-dominant dimension of trust) is a necessary
condition. Put differently, benevolence is always absent in the absence of trust recovery.
These findings suggest that the failure of trust recovery efforts is always driven by
configurations that include the absence of benevolence, across all contextual conditions,
therefore strengthening the importance of the role of benevolence in recovering trust.
Conversely, the necessary conditions analysis in the presence of trust recovery found that
the presence of satisfaction (a cognitive-dominant dimension of trust) is a necessary
condition. Put differently, satisfaction is always present in the presence of trust recovery.
This finding advocating for the importance of satisfaction echoes similar sentiment in the
trust and B2B literature (Murphy & Sashi, 2018), however, the more nuanced findings
represented in Study Two suggest satisfaction, exclusively, is not sufficient for trust recovery
and must be combined with other demonstrations of trust.
Furthermore, these findings strongly advocate future research to broaden possible outcomes of trust recovery efforts beyond mere success factors to gain more fine-grained insights into the mechanisms underlying the failure of trust recovery efforts. Additionally, these findings extend recent trust recovery research by Gasparotto et al. (2018) and Basso et al. (2016) who suggest attributions of benevolence mediate the effect of trust recovery tactics on trust after a double deviation (i.e. failed service recovery efforts) occurs. However, this extant work conceptualises benevolence as strictly constituent-of regulatory and financial compensation. Thus, the findings in this work extend the benevolence construct to include more affective-dominant demonstrations of trust, in support of recent trust building literature within a more specific B2B relationship context (Franklin & Marshall, 2019).

6.3 Methodological Contributions

The findings represented in this research have established QCA as a valuable addition to the methodological toolkit of relationship marketing and trust researchers. This work demonstrates how QCA can advance our understanding of a fundamental and enduring issue in trust research: what combination of causal and contextual conditions leads to the recovery of trust following service failure. These findings illustrate the causal complexity that underlies the determination of trust recovery by a buying organisation, illustrating an equifinality of responses to a breach of trust that are sufficient for attaining trust recovery. The multiple pathways to trust recovery represented in these findings suggest that various combinations of attributes can be sufficient for attaining the same outcome and that “any particular attribute may have different and even opposite effect depending on the presence or absence of other attributes.” (Greckhamer et al., 2018, p. 720). The extant literature on
trust and trust recovery mostly follows a net driver perspective by analysing the impact of individual dimensions of trust on the business relationship. Although this has considerably advanced our understanding of trust and trust recovery, analysing individual dimensions of trust in isolation provides only a partial view. This work adopts a configuration theory approach so that “rather than searching for universal relationships that hold true across all firms [...] relationships can be best understood in terms of sets of conditions that commonly occur together.” (Vorhies & Morgan, 2003, p. 101). Thus, the adoption of a configurational perspective “...helps to examine and explain the complex interactions among constructs of different domains without overly simplifying the phenomena under study.” (Zaefarian et al., 2017, p. 72).

This application of QCA also makes a broader methodological contribution to mixed-methods design applications in relationship marketing and trust research. QCA is considered to be an “inherently mixed” technique (Teddlie & Tashakkori, 2009, p. 273), because it combines within one analysis qualitative inductive reasoning, since data are analysed by case and not by variable (Ragin, 2000), and quantitative empirical testing, since sufficient and necessary conditions can be derived through analytical methods (Schneider & Wagemann, 2012). For analysing phenomena characterised by complex and interlinked questions, such as trust recovery, the use of such mixed-method techniques is beneficial, because “...the plurality of perspectives embedded in them leads to more robust and interesting findings” (Venkatesh et al., 2013, p. 50). Existing theorising on trust in B2B relationships speaks of the importance of adopting methods that embrace the complexity inherent within these relationships (Gillespie, 2017), however, the use of QCA in this domain is still in its infancy. To the knowledge of the researcher, this work represents the first study
investigating trust recovery following service failure adopting QCA as a research strategy and analytical method. This approach provides a foundation for “both context-rich qualitative research that scrutinises a small number of cases and quantitative studies that validate simplified relationships between factors for a large number of firms” (Ganter & Hecker, 2014, p. 7).

Additionally, this research enjoys membership in an emerging stream of specifically-QCA studies in the marketing literature that feature the coding and calibration of qualitative, case-based data using a hybrid template approach. This approach allowed the use of calibrated measures of actual buyer perceptions of the causal and contextual conditions leading to trust recovery rather than simply using behavioural intentions or psychological constructs. These perceptual responses were elicited after the focal service failure and breach of trust was committed, thus forming a true test of the predictive validity of the QCA solutions. Furthermore, the use of calibrated measures of actual buying organisation decision-makers perceptions adds to the ecological validity of the studies.

Finally, this research responds to calls from other contemporary QCA scholars to contribute to the acceptance of complexity theory within the field of social sciences as a solid theoretical foundation on which future studies can expand (Russo et al., 2019). This work echoes the sentiments of Sterman and Wittenberg (1999, p. 338) when they argue:

“Developing the full potential of complexity theory, especially in the social sciences, requires more rigorous theory development and fewer popular articles extolling the virtues of the ‘new paradigm’, more studies testing the new theories and fewer anecdotal claims of efficacy, greater development of tools tailored for particular contexts, and fewer claims of universality. Without such rigour, social scientists face
the danger that, despite its high potential, ‘complexity theory’ will soon be discarded, perhaps prematurely, as yet another unfortunate case of physics envy.”

6.4 Managerial Implications

For managers, this work provides guidance regarding different ways to achieve successful trust recovery. Set theoretic methods such as QCA are particularly useful for examining equifinality, which is an assumption of configuration theory (Fiss, 2007, 2011). Equifinality argues that different recipes for successful trust recovery exist in which “a system can reach the same final state from different initial conditions and by a variety of different paths” (Katz & Kahn, 1978, p. 30). The equifinal configurations presented in this work are treated as logically equivalent and thus substitutable. Identification of the equifinal solutions leading to trust recovery is important for managers as it provides buying organisations with a variety of optional choices in the design and deployment of reparative solutions (Zaefarian et al., 2017). Thus, the potential exists for efficiency gains by choosing the configuration that best fits with the supplying organisation’s strategy, culture or already existing resource endowment (Fiss, 2011). Because these resources are typically scarce, managers have to choose where best to focus their recovery efforts. Likewise, managers are required to decide how to manage their business relationships effectively, placing emphasis on economising their resources on some but not all identified conditions leading to trust recovery. This points to the importance of developing reparative solutions that are not based on a single, ideal company profile (Forkmann et al., 2017) as different “recipes for success” exist (Ordanini et al., 2014, p. 134). Furthermore, “more is not always better” (Forkmann et al., 2017, p. 285), and in certain configurations, specific conditions ought to be absent to drive trust recovery success; an insight which is not provided by ‘traditional’ variable-based analyses (Fiss, 2007).
The QCA findings can help managers uncover alternative ways for combining the representative conditions within the solutions in order to realise trust recovery, or as Zaefarian and colleagues (2017, p. 79) succinctly note: “...for each situation a specific set of relational characteristics need to be in place, and different recipes for success provide a menu of choices.” Specifically, managers will benefit from the guidance in these studies regarding not only their own but also their buying organisations’ individual and organisational contextual conditions to ensure successful trust recovery. These insights improve the effectiveness of reparative strategies because they help managers to develop an informed typology of potential reparative activities by uncovering what leads to trust recovery within different contextual conditions. For instance, the solutions representative of successful trust recovery with an executive-level decision maker differ from that of an operational-level decision maker. The solutions representative of trust recovery with an operational-level decision maker include more pronounced membership of affective-dominant dimensions of trust such as demonstrations of integrity, benevolence and shared values. Conversely, reparative strategies targeted toward executive-level decision makers would feature minimal representations of benevolence and shared values, but focus more explicitly on demonstrations of transparency and communication. In short, based on the QCA results in this work, supplier organisation relationship managers and organisational agents can appropriately customise their reparative strategies relative to the individual level of decision-making authority of the focal trustor.

This distinction is also borne out within the analyses investigating the solutions sufficient for trust recovery between small to medium enterprises and large enterprises. The solutions representative of trust recovery with a small to medium enterprise include the exclusive
combination of demonstrations of shared values with other causal conditions. The solutions representative of trust recovery with a large enterprise do not include shared values as it is considered an immaterial condition (neither present nor absent). This offers opportunity for supplier organisations to design reparative solutions in alignment with the requirements that best serve to recover trust with each respective buying organisation.

In addition, the analyses investigating the solutions sufficient for trust recovery after a severe or not-severe breach of trust offer implications for managerial practice. In the two solutions leading to trust recovery representative of cases in the severe breach contextual condition, the presence of demonstrations of integrity, benevolence, shared values and co-creation all feature in combinations sufficient for trust recovery when communication is immaterial. This finding does not mean that communication is unimportant, per se, rather it is not trust recovery enhancing in these solutions’ representative of a severe breach of trust. Thus, for managers who may not have opportunity, or enough credibility, to rely on high-level demonstrations of communication in the reparative solution, these results offer compensatory alternatives when seeking to recover trust.

Finally, these insights also offer a plausible explanation to managers as to why some reparative solutions may be more successful than others, by relating them to their context as part of the implementation of a specific reparative solution. Some contextual conditions may be more, or less, salient in discrete service failure scenarios (i.e. some contextual conditions are more obvious, like size of buying organisation, whilst some are less obvious, like the buyer’s perceptions of the severity of breach). Whilst one equifinal solution might ultimately be less successful in recovering trust with a buying organisation due to otherwise
unknown contextual influences, these findings offer managers more than one potentially successful recipe for recovering trust following service failure.

6.5 Limitations and Future Research

Although this study offers new insights into configurations of conditions that lead to trust recovery following service failure, it is subject to several limitations that indicate opportunities for future research. Furthermore, QCA, as any research approach, has limitations and involves analytical assumptions that must be considered when interpreting the results (Forkmann et al., 2017).

First, the sample in both Study One and Study Two was restricted to participants (i.e. cases) in New Zealand. As is the case in any single country study, the findings should be generalised with caution. The rationale for the design choice was motivated by access, economy and previous experiential insight of the researcher in buyer-supplier relationship marketing in New Zealand. However, the observation that building effective and successful business relationships, of which trust is critical to fostering and flourishing, is particularly relevant for supplier firms operating in industrialised countries such as New Zealand (Baxter, 2012; Fonfara, Ratajczak-Mrozek, & Leszczyński, 2018; Forkmann, Henneberg, & Mitrega, 2018).

Furthermore, there is a need to consider the transferability of these findings to other cultural contexts. In particular, comparative research between developed and emerging economies is lacking (Zaefarian et al., 2017), as they differ significantly in terms of the specifics of cultural issues as well as the overall business systems (Klein et al., 2019; Malik, Ngo, & Kingshott, 2018). Given the rise of emerging and developing economies, representing both buyer and supplier organisation parent company markets, this research
should be extended to verify whether the same set of causal conditions work equally effectively in different cultural settings (Biggemann & Fam, 2011). The effects of these cultural influences on trust are notoriously difficult to gauge (Eadie & Su, 2018) and cultural values may have an overt impact on trust recovery efforts (Ferrin & Gillespie, 2010).

Secondly, data were obtained from a single key-informant in each representative case. Thus, the evaluation of the reparative characteristics (i.e. conditions) and the performance of those characteristics (i.e. outcome) are inclined toward subjective biases. In an effort to attenuate this bias in the data, as described within Study Two, this work featured a complementary sample-based characteristics approach to calibrating the cut-off points for membership in each respective condition. The similarities, and distinct cut-off points, of values between representative organisations instil confidence in the data and that, at a minimum, the relationships observed are not radically atypical between cases.

Another limitation of the current research at this level of analysis is the use of buyer organisation boundary spanners (Janowicz-Panjaitan & Noorderhaven, 2009) and relationship managers (Muthusamy & White, 2005) to assess interorganisational trust. While this approach has proved to be useful in extant research (Fulmer & Gelfand, 2012), and as evidenced by this work, some scholars have cautioned against the use of individual informants in understanding organisational-level phenomena (Currall & Inkpen, 2002; Kozlowski & Klein, 2000). However, these existing studies tend to be at the macro-level of organisational research (Fulmer & Gelfand, 2013), it is well accepted that interorganisational trust is frequently maintained and executed via individuals, or boundary spanners, acting on behalf of their respective organisations (Li et al., 2012).
In future investigations, the current research could be extended to that of a multi-level study within one large organisation to investigate the diffusion of individual-level estimations of trust recovery efforts (and influences) on an overall, organisational-level estimation of trust recovery as one participant alluded-to, below:

Every time there is an incident like this the damage is done. So, what can happen and so suppliers need to understand that. For any time, there is a problem, whether it’s quality, delivery, anything, the noise that generates is incredible. It’s like reverberation through the business. So, it might only be one component, one small problem but it comes through and it reverberates. It’s those whispers you get through the business. (Participant 38, Corporate, Operational)

This attention to network characteristics of trust offers a promising area of future research as few studies have examined the role of networks in trust building and recovery processes (Costa et al., 2018). Understanding trust recovery processes and influences from different trust referents within a buying organisation (such as peers, team members, subordinates, superiors, other customers and even the prevailing trust climate at the organisational level) allows for a better understanding of the cross-fertilisation of conditions conducive to trust recovery. Additionally, this study purposively sought to investigate the perceptions of the buying organisation relative to demonstrations of causal conditions leading to trust recovery. Future research may consider investigating trust recovery from a dyadic perspective, exploring the complementarity of conditions most representative of trust recovery between both buyer and supplier organisations.

The final limitations of this work are QCA-specific. The first QCA-specific limitation is that the model encompasses only eight causal conditions and four contextual conditions that jointly impact trust recovery between a buying and supplying organisation. Thus, the identified conditions might not cover the full range of factors promoting interorganisational trust recovery following service failure. Although the conditions investigated (Study Two)
are based on a comprehensive review of the extant literature and established theory and prior empirical results (Study One), omitting a condition or adding an additional condition would likely yield different configurations; perhaps revealing new relationships among the currently included conditions. That is, an identified configuration may be better or worse for achieving trust recovery depending on the specific context.

Future researchers could usefully include alternative conditions, with the deviant case analyses in Study Two suggesting several fruitful possibilities. These analyses highlighted a number of potential causal and contextual conditions worthy of future investigation, such as a buying organisation agents’ propensity to forgive, the level of organisational (versus individual) attribution of culpability in the breach, the cumulative effect of minor breaches and the level of supply-side alternatives in the marketplace. However, a strength of QCA, as not only a research technique but a research strategy, is that it demands transparency from the investigator, thus embracing the possibility for this type of cumulative research (Rihoux & Lobe, 2009). This allows for the possibility of other researchers to adopt this study as a starting point and to “…re-visit the analysis, for instance taking a few cases out or bringing a few cases in, adding one or two conditions, changing the way some conditions have been calibrated […] in order to most probably yield some different formulae, which in turn will further enrich cross-case interpretation” (Rihoux & Lobe, 2009).

The second QCA-specific limitation is that QCA does not account for temporality in its analysis (Jordan et al., 2011). Therefore, the QCA study results are representative of a description of causal conditions and outcomes only at one particular, static point in time (Boswell & Brown, 1999). Trust is widely accepted as a complex and dynamic psychological construct with multiple co-existing components that evolve and change over time (Gillespie,
QCA methodologists suggest complementary techniques to attenuate the effects of this limitation (Berg-Schlosser et al., 2009; De Meur et al., 2009), such as a return to the cases to obtain a more qualitative, detailed understanding of the mechanisms at work, including any chronological causality. Toward that end, this research features a move beyond the formula obtained through QCA to that of a case-based, qualitative assessment of deviant cases for consistency and coverage. Findings in this analysis included a potentially fruitful area of future research in the investigation of the diffusion of expectations across different service failure situations, over time.

Future work in this domain might also include another contextual condition that varies the nature of the buyer-supplier relationship, such as a long, loyal relationship versus a limited, weak relationship. Additionally, future researchers may consider adopting a variant of QCA in the analysis of time-series implications of reparative activities, temporal QCA (tQCA) (Caren & Panofsky, 2005). Temporal QCA accommodates sequences of events, and all of the logical combination of sequences, by adding new conditions to the analysis that establish the order of events (i.e. ‘A’ must happen, first, for ‘B’ to occur). However, tQCA can only accommodate a small number of sequences in the analysis and, for the complex phenomenon represented in these studies, was inappropriate and outside the bounds of the research questions (Ragin & Strand, 2007). Therefore, future studies may consider using these findings as a starting point toward investigating more limited, specific sequences of causal conditions that lead to trust recovery in B2B relationships.

6.6 Closing Remarks

This work set out to investigate what role both cognitive and affective dimensions of trust might play as an explanation for supplier organisation trust recovery in B2B relationships.
following service failure. Furthermore, this work sought a deeper understanding of how these sets of conditions combined in order to realise trust recovery, rather than treating them as competing in explaining the outcome. This research also aimed to examine what influence contextual conditions might have on trust recovery in combination with these causal conditions. The findings in this work provide a better understanding of the combinations of causal and contextual conditions that serve to recover trust between a supplying and buying organisation as well as a nuanced case-based representation, or operationalisation, of those conditions in practice.

During the course of this thesis, there has been a great deal of dialogue, both academic and editorial, on the importance of trust in business specifically, and society, in general. Increasing commentary suggests we are operating as marketers in a unique context of distrust in many of our most central institutions (Edelman, 2019). By extension, businesses, generally, and marketing, specifically, are also experiencing a more pronounced impact of distrust in the marketplace. Many business activities and marketing instruments are increasingly scrutinised due to this latent distrust, such as B2B procurement activities (Truong, 2019), interfirm alliance mechanisms (Raza-Ullah & Kostis, 2019) and other peripheral marketing tactics (Song, Kim, Lee, & Jang, 2019). However, when considering how best to respond to this scepticism in the marketplace, particularly in the restoration of trust within B2B relationships, the findings in this work feature a common thread; the need for less transactional and more relational engagement:

As soon as you’ve got a contract out it’s over. So, if you have to engage, contract is hygiene and governance but if you’re using it to drive a relationship it’s very, then it’s on a very autocratic, technical basis [...] if you’ve got a contract out it’s all over. It goes from being a relationship to being a transactional relationship. You know the relationship is over when you start pulling out the terms and conditions and saying
This work represents a first, but significant, step for the researcher toward recognising and qualifying the role of both cognitive (i.e. transactional or rational) and affective (i.e. relational or emotional) determinants of trust recovery in B2B relationships. In particular, integrating the role of emotions in B2B relationship repair was professionally fulfilling as “...emotions are an intrinsic part of institutional work and collective practices” (Voronov & Vince, 2012, p. 60), with this work providing a unique opportunity to “…build more emotion-integrative frameworks that reflect the reality of human nature and interactions in business settings” (Kleinaltenkamp et al., 2019, p. 19). Thus, these findings seek to contribute toward supporting the restoration of the often elusive “communal relationship state” (Zhang, Watson, Palmatier, & Dant, 2016, p. 66) between organisations, even after a violation of one of its most foundational tenets: trust.
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Appendices

Please find, beginning overleaf, all appendices referenced throughout this work.
Appendix 1: Ethical Approval for Study One and Study Two

Please find, overleaf, ethics application (EA1) approval from the Auckland University of Technology Ethics Committee (AUTEC) along with copies of both the participant information sheet and participant consent form.

Please Note: Roger Marshall is listed on the formal letter of approval as primary supervisor of this research.
10 May 2017

Roger Marshall
Faculty of Business Economics and Law

Dear Roger

Ethics Application: 17/108 Restoring violated trust: Developing inter-organisational trust recovery mechanisms following service failure

I wish to formally advise you that the Auckland University of Technology Ethics Committee (AUTEC) approved your ethics application at its meeting of 8 May 2017.

This approval is for three years, expiring 8 May 2020.

Standard Conditions of Approval

1. A progress report is due annually on the anniversary of the approval date, using form EA2, which is available online through http://www.aut.ac.nz/researchethics.
2. A final report is due at the expiration of the approval period, or, upon completion of project, using form EA3, which is available online through http://www.aut.ac.nz/researchethics.
3. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form: http://www.aut.ac.nz/researchethics.
4. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
5. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.

Non-Standard Conditions of Approval

1. The committee suggests that the Information Sheet be attached with the advertisement on LinkedIn.

Please quote the application number and title on all future correspondence related to this project.

AUTEC grants ethical approval only. If you require management approval for access for your research from another institution or organisation then you are responsible for obtaining it. If the research is undertaken outside New Zealand, you need to meet all locality legal and ethical obligations and requirements.

For any enquiries, please contact ethics@aut.ac.nz

Yours sincerely,

Kate O’Connor
Executive Manager
Auckland University of Technology Ethics Committee

Cc: dfrankli@aut.ac.nz; Ann-Marie Kennedy
Participant Information Sheet

Date Information Sheet Produced:
31st March, 2017

Project Title
Restoring Violated Trust: Developing Inter-Organisational Trust Recovery Mechanisms Following Service Failure

An Invitation
My name is Drew Franklin and I am a PhD Candidate in the Department of Marketing, Advertising, Retailing and Sales at AUT University in Auckland, New Zealand. I am conducting research on the dynamics of inter-organisational relationships in a business-to-business (B2B) context as part of my PhD thesis. I would like to invite you to participate in this research. Data collected will be used for the stated purpose below. Participation in this research is voluntary and all information collected will be kept confidential. You may withdraw your participation any time before the completion of the research project without any effect to your rights.

What is the purpose of this research?

The purpose of this study is to draw attention to, and develop a deeper understanding of, the concept of trust within a business to business environment. A deeper understanding of trust, and what drives the propensity to trust, will highlight how best to engender trust within firms and their partners – a critical component of long-term business relationships. This more explicit understanding of how best to recover trust following service failure will lead to more productive and proactive service recovery practices. I am conducting this study for my PhD thesis requirement at AUT University in New Zealand as well as an opportunity to present the findings of this study at conferences and publish articles in academic journals.

How was I identified and why am I being invited to participate in this research?

You were initially identified as you are an English-speaking adult (18 and above) and work within a business-to-business environment interacting with third-party suppliers. You were selected because you are likely to have knowledge and/or experiences within this context. The introduction to this study was made using the LinkedIn networking site. I would like to ask for your voluntary expression of interest to participate in the study.

How do I agree to participate in this research?

You can agree to participate in this research by following the link provided in the initial invitation to participate notification on LinkedIn. Once this form is submitted, I will respond with a Consent Form for you to review. I will also have copies of the Consent Form that will be physically available for you to complete prior to the actual interview. Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. You are able to withdraw from the study at any time. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

What will happen in this research?

Following your acceptance to take part in this study, I will email you within two days to confirm receipt, answer any queries you may have and include a Consent Form for you to sign. An interview would take place at your time of convenience at a place of your choosing (but not in a private home). The interviews usually take between 45-60 minutes. These will be audio recorded and I will also be writing notes. Questions will relate to your experiences with suppliers. You will be asked to provide identifying information which will remain confidential, and only pseudonyms will be used in the final reporting. Generic workplace title (e.g. “general manager”, “CEO”), company size (e.g. “large corporation”, “small to medium enterprise”) may be revealed in final reporting but will not enable your identification.

After transcription of the interview, you will receive a copy of the transcript for you to check (which should not take longer than 30 minutes to review) to ensure you are satisfied with the information provided as well as an opportunity for you to add further details if you wish to do so.

What are the discomforts and risks?

There may be very minor discomforts involved in answering questions as you will be asked about...
your thoughts and interactions with third-party suppliers, however, this is extremely unlikely. To minimise this, I assure you that questions are non-invasive as I am not seeking a level of detail that may identify you or create any discomfort. Similarly, I am not seeking knowledge of any interactions or activities that could be deemed illegal, immoral or unethical.

How will these discomforts and risks be alleviated?

Participation is voluntary and if for any reason you feel uncomfortable, you are able to decline answering certain questions or even withdraw from the research project at any time prior to the study’s completion without any consequences. Additionally, you will have the opportunity of choosing a suitable time for participation to take place.

What are the benefits?

This research has several benefits for you as the participant, the wider community, and the researcher. As a token of appreciation for participating in this study, you will also have access to the results of the research and may use this information to add to your understanding of trust-building, and recovery, exercises within a B2B environment. For the wider community, this study will provide both academics and practitioners with beneficial information regarding how business relationships are best created and sustained in competitive markets. This research will also allow me as the primary researcher, to fulfil the requirement for the award of PhD from AUT University in New Zealand.

How will my privacy be protected?

Participation in this study is strictly voluntary. Your identity will remain confidential and will not be disclosed to anyone except to the primary researcher and project supervisor. To ensure that privacy and confidentiality are respected, your name will be changed to pseudonyms and contact information will not be disclosed in final reporting. Given the nature of the research and representative sample, there is a small risk of being recognised from your answers. Consequently, I am only able to offer limited confidentiality for this research. Any data that the researcher extracts from the interview is for academic use only and all reports or published findings will not, under any circumstance, contain names or identifying characteristics. All data will be stored on a password protected memory stick and consent forms will be stored in a password protected cabinet with the project supervisor after the project is completed. Data and consent forms will be deleted after a period of six years. Contact details of the researcher and supervisor are provided in case of any concerns or complaints that need to be lodged.

What are the costs of participating in this research?

There are no costs to you other than your time to participate in the study. The interview will take 45-60 minutes to complete.

What opportunity do I have to consider this invitation?

You can take your time to decide if you wish to participate in the research. However, it would be appreciated for you to respond within two weeks’ time from the date the follow-up email invitation is sent.

Will I receive feedback on the results of this research?

By completing a Consent Form or by responding to the invitation email, you may tick the box showing your interest in receiving feedback on the research’s results. A result synopsis will be emailed to you once the study is complete.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Roger Marshall, roger.marshall@aut.ac.nz, +64 9 921 9999 ext. 5478

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O’Connor, ethics@aut.ac.nz, +64 9 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Primary Researcher: Drew Franklin, drew.franklin@aut.ac.nz, +64 9 921 9999 ext. 7986

Project Supervisor Contact Details:

Project Supervisor: Roger Marshall, roger.marshall@aut.ac.nz, +64 9 921 9999 ext. 5478

Approved by the Auckland University of Technology Ethics Committee on 10th May, 017, AUTEC Reference number 17/108
Consent Form

Project title: Restoring Violated Trust: Developing Inter-Organisational Trust Recovery Mechanisms Following Service Failure

Project Supervisor: Professor Roger Marshall
Researcher: Drew Franklin

☐ I have read and understood the information provided about this research project in the Information Sheet dated 31 March, 2017.
☐ I have had an opportunity to ask questions and to have them answered.
☐ I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
☐ I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
☐ If I withdraw, I understand that all relevant information including tapes and transcripts, or parts thereof, will be destroyed.
☐ I agree to take part in this research.
☐ I wish to receive a copy of the report from the research (please tick one): Yes ☐ No ☐

Participant’s Signature: ..........................................................…………………………………………………………………………………

Participant’s Name: ..........................................................…………………………………………………………………………………

Participant’s Contact Details (if appropriate):

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Date: .........................................................................................................................................................................................

Approved by the Auckland University of Technology Ethics 10th May, 2017 AUTEC Reference 17/108

Note: The Participant should retain a copy of this form.
Appendix 2: Participant Matrix

Please find, overleaf, the participant matrix representative of the sample for the in-depth interviews (and cases) as referenced in Chapter Four and Chapter Five.

Please Note: All personally identifiable information has been omitted from the list, including role specificity in each respective organisation.
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<thead>
<tr>
<th>Participant</th>
<th>Industry or Sector</th>
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<tbody>
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<td>Fabric Care Industry Service and Supply</td>
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<td>Tertiary Education Infrastructure and Support</td>
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<td>Corporate Travel Services</td>
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<td>Corporate Travel Services and Procurement</td>
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<td>Data Collection and Analysis Services</td>
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<td>Electrical Supply and Installation Services</td>
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<td>Government Health Board Procurement Management</td>
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<td>Government Health Board Supply Management</td>
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<td>Airline Procurement and Management</td>
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<td>Airline Supply Chain Management</td>
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<td>Plumbing Supply and Installation Services</td>
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<td>Pharmaceutical Sourcing and Supply</td>
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<td>Pharmaceutical Sourcing and Supply</td>
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<td>20</td>
<td>Commercial Landscaping Service and Supply</td>
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<td>21</td>
<td>Corporate and Government Market Research</td>
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<td>22</td>
<td>Automotive Agency Supply and Servicing</td>
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<td>Consumer Goods Manufacturing and Support</td>
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<td>Retail Consumer Goods Procurement</td>
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<td>Commercial Software Agency</td>
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<td>Consumer Fitness Services</td>
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<td>Retail Homewares Manufacturing</td>
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<td>Commercial Telecommunications Services</td>
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<td>Participant</td>
<td>Industry or Sector</td>
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<td>Software Development and Supply</td>
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<td>Professional Auditing Services</td>
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<td>Retail Consumer Fashion and Furniture</td>
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<td>Infrastructure Sourcing and Supply</td>
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<td>36</td>
<td>Commercial Signage Design and Installation</td>
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<td>37</td>
<td>Medical Device Manufacturing</td>
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<td>38</td>
<td>Medical Device Manufacturing</td>
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<tr>
<td>39</td>
<td>Domestic and Commercial Construction</td>
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<tr>
<td>40</td>
<td>Consumer Personal Care Product Manufacturing</td>
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Appendix 3: Interview Guide and Indicative Questions

Please find, overleaf, the interview guide and indicative interview questions as referenced in Chapter Four.
Indicative Questions, Study One

The following questions are aiming to understand the complexities of trust-building, and trust-recovery, mechanisms within a business-to-business marketing context.

1. Tell me about your experience here at *(company name)* with one of your key, trusted suppliers.
   a. How did it begin? How did you decide to work with this supplier?
   b. What have they done, or continue to do, to build trust with you?
   c. How do you work through any issues or opportunities with your supplier? Is there a sense of shared risk and success/partnership/collaboration?
   d. How could these efforts, by your supplier, be improved?
   e. What is the most important characteristic/behaviour of the relationship that contributes to trust?
   f. How would the relationship with (supplier) differ from that of one of your other, newer suppliers (or a new supplier)?

2. Has there been a time when your supplier(s) has let you down?
   a. What did your supplier do to try and recover your trust?
   b. How did that affect your trust in them?
   c. Who (agent) tends to do the “fixing” when something goes wrong? (rep, manager, etc.). Does it make a difference to the recovery of trust?
   d. Do you trust them, now, after these efforts?

3. Can you reflect on how you take into consideration these recovery efforts relative to future decision-making or interaction with your supplier(s)?
   a. How does/did it affect future interactions with the supplier? Did it change your decision making?
   b. How did this recovery exercise affect your relationships/interactions with other suppliers within your industry?

4. What would you consider a minor/major trust violation? What sort of trust violation would end the relationship versus something you could live with?

If these areas have not been covered by the above open questions, then they will be covered next:

1. *(an extension of question two, above)* Do these efforts differ between suppliers you have dealt with for a longer/shorter period of time? Can you reflect on how this differs with suppliers you have enjoyed a longer/shorter relationship with?

2. *(an extension of question five, above)* Who is the agent, or representative, of the supplier firm who works with you to recover from this service failure? Can you reflect on how this influenced the recovery process?

3. *(an extension of questions one and two)* Can you reflect on the role of *(competence, satisfaction, benevolence, co-creation, integrity, communication, shared values)* in trust building/recovery?
Appendix 4: Interview Transcript Exemplars

Please find, overleaf, interview transcript exemplars from the in-depth interview participants, detailed below. These transcripts are representative of both large enterprise and small to medium enterprise and executive and operational level decision-makers. Additional transcripts, representative of other in-depth interviews, are available upon request.

Please Note: All personally and organisationally identifiable information and explicit language has been redacted from these transcripts.

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<thead>
<tr>
<th>Participant</th>
<th>Industry or Sector</th>
<th>Large Enterprise</th>
<th>Small to Medium Enterprise</th>
<th>Executive Level Decision-Maker</th>
<th>Operational Level Decision-Maker</th>
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Participant Thirteen

Interviewer
Thanks very much I appreciate your time today to chat a little bit about one or some of your most trusted relationships with suppliers over the years, your many years of experience. Perhaps I will start with a big question, considering one of your most trusted suppliers what do they do or have done in the past to build trust with you.

Response
I think it comes down to probably two or three key elements, one being the ability to share their learnings with us so we are an innovation based company and having suppliers really sharing innovation with us and without the fear of actually being stolen or anything like that is a huge step in the right direction so that is one aspect of it. We are quite comfortable when people start sharing ideas and sharing their own experiences on products and technology and really is a good sign for us, number one. I think the other part there are two other parts to it I would say the other being the ability to clear the right senders core structures so we work on products that take three years to get to market and we choose suppliers probably three years in advance of the launch so having a supplier actually giving us a price is not good enough because we don’t know what we are actually going to end up with. So we work on open book and having suppliers that actually committing to that open book methodology is also another step because they trust you to not use that information against them and in return what we provide them is assurances that this is not a margin cutting exercise as long as you get the returns from the business you need to stay in business and that is what you are do so as well. And the only difference being is it is risk versus return if you take X risk you get X return and so that is kind of the fundamental basis of getting an open book mechanism started. So there is a little bit of breaking ice initially but for all our trusted suppliers maybe 30% of them now have open book with us and that is actually a matter of trust and belief that we are not going to abuse it and use it in a different way. So those are two key aspects and probably the third aspect which is quite important is customer centred behaviour. And I think that comes down to when you need to ask special favours when you need to actually ask some aspects that are not documented or written how often do they say yes and how often do they say absolutely no we can’t do this unless you actually pay us this money. So that sort of happens during the business transactions over the years together so it is about those three elements put together in different forms and in different proportions that we see good suppliers do really well.

Interviewer
Fantastic tell me a little bit more about this open book?

Response
So basically it is very simple we publish all our financials in the market to see what is our costs, what our labour costs are, what our overheads are, what our SGNA is, what we deliver to our vendors is that if you want to partner with us and traditionally the procurement process is all about selecting up to five potential suppliers giving them an idea, get them to quote on a price, bringing that back along with the elements of capabilities, select a supplier and going forward with it. We have changed that methodology of approaching business what we have done is if you are participating with us open book i.e. you share your actual costs and the margin that you hope to make out of this particular venture with us what we do instead of wasting five people’s time and five people’s effort to generate that one idea we pick the person that is best for the idea we work on the principles that whatever is your cost plus your overheads plus your margin so that becomes a great driver for our innovation team because they don’t have to worry about that end cost, they are not going to worry about any issues they just worry about what they are putting in and then we manage all the rest for the vendor. So it takes trust to open your books and show financially this is what I would like to
make this is what the market is making and there are challenges. Some vendors would absolutely hate it because they think that that is actually just another cost cutting exercise and in companies I mean to be fair automotive has used that for cost cutting for generations since the 1970s but our point is that it is not about actually cost cutting it is about just making sure that you should remain competitive with your industry and in that way we are not wasting 6 people. So you work with us for the start, three years of hard work and you get product supplied for the next 10 years so that is actually a good symbiosis between us and our suppliers. So they know we are not now suddenly taking all their ideas and going to another vendor and say making it for cheaper and that is what we absolutely want to avoid. We don’t want to do that we actually want to partner rather than tender every year so we never tender our business other than obviously stationery and other bits and pieces that is not critical to us but we don’t tender any business in general around product design and product innovation.

Interviewer
I like that word you used symbiosis that suggests much more of a partnership or shared risk.

Response
We need them as much as they need us. If we don’t have good suppliers and good exposure on that we can’t be experts in everything so we are experts in numerification we are experts in manufacturing making devices. We still can’t make resins we can’t make tapes and glues all of these things that we need. We can’t make electronic components we still need good partners to do that for us. If you don’t rely on them and you don’t trust them then you actually end up making it up all yourself and you don’t end up becoming an expert in anything so it is quite important that we know our competitive advantage is designing med devices and our competitive advantage is around mounded components scientific moulding and that is where we are really good at.

Interviewer
So perhaps up front would you suggest the relationship or the trust is built more on their ability to manufacture what it is you need but it graduates to a much more relationally based...

Response
So abilities absolutely critical because we are looking to do the next best thing not always we are successful obviously, ability is absolutely critical. The next one is actually the financial risk of the business risk the supplier brings to us. Cause what we want to not end up is designing with no vision and no strategy of expanding the business. Cause unfortunately all they may be innovative and we will reward them for that innovation but they may not give us the risk profile they are looking for that is just fact it is nothing to do with the company or an entity. So what we end up doing is it is a combination of capability and ability strategy that they show us what they are going to do with their business, how they are going to invest how they are going to grow their business and the last one being commercially viable. So it is sort of a combination of all three but definitely starts with capability. If you don’t have capability the other two are useless basically. If you can’t deliver to our high quality standards then you might as well not worry about it.

Interviewer
You not even consider it.

Response
There is no point right we go around in circles and even if you are the cheapest and you have a really good strategy and vision and everything else you still may not deliver the quality for the products so we are not low cost manufactures, we can’t be being in New Zealand so ability is number one.
Interviewer
How important are those shared values you mentioned the division even extracurricular shared type
to building trust?

Response
At this stage it is starting to get a bit more valid than it was before so if you had asked me this
question five years ago it would be slightly different today with corporates social responsibility and
sustainability activity shared values are becoming more and more relevant. Cause we are in a world
where social media has become such a massive aspect to deal with for everyone including ourselves
as individuals and companies that we need to be able to do the right thing not for just the business
and the shareholders but also for the community in which we operate so having our suppliers
sharing that vision sharing that code of conduct that we have that we believe is good for our people
in our community is quite important. You can’t be dealing with a supplier who is polluting the
airwaves or polluting the waterways for making your product that would look absolutely bad on you
and it is actually the wrong thing to do as well. So we are more of a values based governance and
we try and actually reflect that back on to our suppliers when we can. Probably a few years ago
when we first started one of the biggest challenges we had is you can have everything as long as the
prize is amazing but that is not sustainable as well for the business so we need to be competitive yes
that is our job to ensure that the market remains competitive but not actually take out of you for
growing our revenue share. So you need to make enough margin to sustain a business and grow
your business because it is in our best interest as well. But where it comes down to some of us
would rather take the view that it is all about cost now and there is nothing else but we have always
maintained no it is not all about cost you might perceive it to be all about costs sometimes when we
ask for some rationalisation around what you were making was what we expect your industry to
make but that is just an outcome of bad costing from day one. It is not an outcome of where we are
driving. What we want is capability and risk first and then cost comes after it. So it is always safety,
quality, delivery and cost that is kind of the fundamental basis. But you can’t quality on all three and
try and sell something for $5000 when the market will only pay $1000 so it is just balancing those
things. It is always a balance that you have to draw but in terms of values we expect our values
around our code of conduct with our suppliers to reflect it but they are suppliers and so and so forth.
It has been a bit of a journey for us as well, we just got into it two years ago and the sustainability
aspects of it so we are still a long way away from where we want to be but yes we have kept it to a
point where there are not rules and regulations they are values based governance principles.

Interviewer
You mentioned code of conduct. How important is your suppliers’ integrity to building trust?

Response
Extremely important it is one of the most important aspects that we look for. Ethics and integrity
are absolutely key to actually being able to trust the person you are doing business with because
unfortunately if they are not there then that exposes you to huge levels of risk that you as a
company will not want to have and you shouldn’t even have that to be fair. Slave labour and things
like health and safety issues, in New Zealand most of our suppliers probably 99% of our suppliers are
pretty complaint with all the laws and regulations in New Zealand right or 99.99 there might be that
one odd supplier that is a bit off. Like you get everywhere but obviously if we know we will fix it.
but it is more than that we deal with global suppliers and to try and reflect the same values we have
with our global suppliers is really hard but it is not impossible so we have, excluding suppliers that
we think are not going to fit us in the future and try and actually build those relationships now rather
than suddenly throw a code of conduct on them and say now you need to abide by this, they will still
sign it for sure but whether they do it or not is a complete different question. So our point is about
getting some ownership around that so if we pass that on to our suppliers and our suppliers will pass it to their suppliers and hopefully there is a chain reaction on them on being fair and reasonable and ethical and moral in doing business.

Interviewer
You imagine some new initiatives or newish in the last couple of years is there anything that you can think of what your suppliers could do to improve the trust that you enjoy?

Response
So we are talking of local suppliers or?

Interviewer
Perhaps local suppliers would be easier.

Response
So local suppliers I think New Zealand is really an easy place to do business in terms of actually getting information that is not too hard not too difficult. Vendors generally have modernised systems that they can pull information out of, data sharing is easy so I think there is an element of that is actually quite easy to do business and easy to actually get information out of them so. Not particularly in the local system there is anything drastically different they need to do. It is sort of a bit of a long term goal it is not years not you have got to do all of these things so it is about changing thought and process. So if we were not asked by our customers about slavery and bribery and everything else these are the bigger corporates than us then we actually wouldn’t be thinking like that and I think investors weren’t asking those questions we wouldn’t be thinking about it so I think it is a bit of a trickledown effect. So we are not expecting our suppliers tomorrow to have a sustainability report being published every year or anything like that right. what we do expect them to do expect them to do is a few things around how they, what they can do better is how they can impact the community that they actually do business with them so we have lots of things we do with hospitals, with groups we actually try and get a lot more involvement so one thing we could do more is our suppliers could actually do a little more of community involvement that we don’t see that often for the moment. Some do some don’t, similar sized corporations like ourselves do, the smaller ones don’t necessarily do that so I think that is probably is something that they could bring in. Data integrity is pretty good and moral aspects a really good, no issues with corruption, no issues with integrity either but a little bit more involvement in community would actually help. There are some companies that actually say okay people from south Auckland they don’t know how to save let’s put them on a life skills course. There was a firm I just heard a logistics distribution firm that provided free breakfast for their people. There a few of those initiatives that I think if you do you can actually see some better engagement from people and you can actually see some better outcomes. So that is probably the only feedback that I have. Internationally there is a lot more you can do. We are dealing with a lot of suppliers and it is not our direct suppliers but our sub suppliers. There are huge aspects that we can improve on, those things like we first have to do the basic things right and then we can actually build some values around it. so we need to do some audits and we need to actually bring them on the journey rather than say it is a stick and we are going to beat you with it now. There has to be some consequences if you don’t do it but that is not the starting point. The starting point is being and making an impact and do the environmental and the community you operate within.

Interviewer
Has there been a time a particular supplier has let you down and how did it affect your trust in them?
Response
I think the key reason what is the root cause for letter us down. If the root cause is something that they couldn’t control then it does not do anything with the trust or the beliefs that we have in them. But if it is to do with directly with the vendor themselves and again when you are dealing with corporations not necessarily your person there controls the outcome. So you have got to take the person out of it you have got to trust the fact that that person there is doing everything they can but sometimes it is beyond their capability, beyond their pay grade to make those changes. So it is important where the blame lies. So if it is beyond their pay grade and there is nothing you can do then it is just a strategy the company has chosen and there is two things we can do. We can go along with them if it is not impacting our strategy or we can say nah that is fine we understand it is a change of tack for you we need to try and actually resolve who we actually partner with in the future projects. And it is quite a mature conversation rather than blaming the person who is actually giving you the message, so don’t shoot the messenger in other words right. With when we deal with owners and directors that is more like to actually have an impact for or against us so that is where we can convince them that this is where we want you to do and if there is any major misalignment we can bring that into alignment. But then a business decides to do something we are not going to stop them from doing it we are just going to say our case our point and if it is a decision that makes logical sense commercial sense gives them a viable future then that is fine, no issues with that. It is about communicating that and giving us enough time to react that is the only thing that we expect. We don’t expect them to change strategy just because we want it. So it all depends on the scenario and the circumstances there is no one answer to that saying how we can rebuild, you have got to take all the considerations and you also have to be in their shoes to understand okay these are the real concerns they have and they are genuine concerns and we need to figure out how we can, either we help them or we say no it is actually your battle to fight and if another customer walks away we can’t force them to come back but what we can do is give you some life line give you some more orders, just help them out but beyond that it is outside our direct control. It is all about finding the root cause rather than jumping to conclusions that is the key aspect.

Interviewer
Is there any one incidence that you can think of in recent time that has impacted you as a business with your suppliers?

Response
Yeah there are quite a few actually but one thing that comes to mine straight away is the electronics market has become quite volatile. Smart phones and recorders and automotive has all picked up, there is a massive shortage of components in the market across allocations and things so lead times have gone out. Other distributors who do an excellent job for us most of the time can’t do anything because the manufacturers is saying okay your order was due on end of August now it is end of September. And there is only so much buffer you can hold and there are only so many things you can do. The point is it is a global market and we have certain deals that we can’t do anything and there are certain deals that you can do stuff. And it is outside our direct control and even our distributors direct control, they spend billions of dollars with these guys they can actually because they have contracts with automotive companies that if you shut them down they actually charge you per hour rates as consequential losses so there is big drivers in how people do business. That for example is not our distributors fault at all it is something out in the market dynamics it is change of supply and demand and supply so you can’t pin blame on them that is just one example. Another example being one of our manufacturers did the RP move and basically it all went to custard they couldn’t get orders out of their plant for weeks and months now lead times keep going up now the account manager who we deal with he is an he is extremely apologetic about this but the reality is he can’t control the businesses decision to go for RP recommendation or now. It is about his pay grade much above his pay grade so went can’t hold him responsible for that
although he is apologetic and he says he is extremely sorry but well we had to make decisions we switched to another grade we did some work and now we have dual sourcing so that is kind of some areas we had to take responsibility for. Without blaming him cause it is way above his pay grade. He didn’t make the decision to implement it so again directly related to the vender but not actually related to the person who manages this.

Interviewer
There is many that is just the nature of supply isn’t it.

Response
There was another vender who actually unfortunately had 70% of the volume from us and 30% from the other markets and did run the shop properly didn’t run his factory properly started to incur losses on the other 30% and then unfortunately business is one entity it is not split into different entities so when you do anything on our basis it is all sustainable making a healthy margin and everything is good but when you add the 30% of business he does at a 50% loss it starts to bring him down as a company so unfortunately we had to say look we respect you decision but you have got to ring fence these losses because we can’t keep paying for your losses and your decision making and we had to move business away. That is an owner operated vendor and it was extremely difficult for the person and extremely difficult for us to have these conversations cause he was doing business with us for 14 years. It is not like he just started yesterday but fundamentally there was a flaw. If you end up cross subsidising businesses you will not be able to have one customer carry you for years together. So unfortunately it was a bit of a bitter divorce but the last day we went back and we shook hand and we said on another day and another time it will be a completely different scenario but no hard feelings but this is what we need to do to deal as car customers. And we informed them and we did everything and gave them a pay out as well for his efforts. So we tried to do the right thing for him and for us but having that relationship growing would have caused us more grief in the future so you have to cut ties as well sometimes, you have got to make hard decisions.

Interviewer
It sounds like you are very proactive in that respect to shepherd those relationships along the way have your suppliers been equally as active in trying to recover from those failures. Is there anything they have done to try to recover some of that trust that might have been lost?

Response
Yes and no on certain aspects. Yes if the person in the director in the company has vision and has motivation and hard work we will help them and recover the entire thing and we will partner with them right throughout. And we have seen a number of examples like we have tried even down to a point where there was actually a few days away from being bankrupt and we have helped them got the business back on track and now they are actually doing millions of dollars of business again. So there are vendors who come out of a dark whole but are able to sustain themselves in the future but with the right vision and the right attitude. The problem comes when you actually can’t reason with some, especially owner operators when you know they are going down a dark whole and you try and share that openly but unfortunately they just don’t see it, they see it as a vision and they are committed to and there are those examples that you say I have said my piece now over to you. as long as you understand this is the case and as long as the effects don’t come on us you can continue to do business but unfortunately if they go bankrupt effects are immediately felt no us because we have to call and find another source another vendor do the regulatory compliance aspects of it so we are quite difficult to change if you didn’t know you probably know now it is quite hard to change suppliers in this place and the reason is that we have to go through a lot of testing before we actually change vendors and so it is good because you don’t want bad products to get to your
customers and so it is a mixed bag. There are people who are in a bad situation come out to be really good vendors and people who are in a positive situation today making wrong decisions consistently and end up in a bad situation and the example of gave you is one of those. They were really profitable really good decided to invest into a business that had no legs and basically started to go into a deep hole with the debt. So you get a mixed bag actually.

Interviewer
How do those sorts of experiences affect your relationships with other suppliers or do they?

Response
In procurement you need to bucket relationships as in one bad experience doesn’t necessarily mean you have another bad experience but it what you learn out of those experiences so what we do we practice category management here and what we know is we know we have strategic vendors and we transactional vendors we have leverage vendors and we have no critical vendors. Strategic vendors we put a lot more effort in actually maintaining a relationship having a weekly call with them or a month call having a lot more touch points with them and not restricting it to only the procurement department. What we do is we get the R and D teams, we get the operational teams obviously the sales and marketing meet with us and we talk to finance. So what we do is we do a ladder network right across all our strategic suppliers because what we don’t want is in the event the relationship goes bad between one or the other departments you still have the other departments to leverage and come out of it. So we systematically build that ladder network because otherwise you have one person and one person, number one it is higher risk of, because what if I leave or someone in my team leaves then that doesn’t make sense right because you are putting all of that relationship at risk. So what we do discuss by doing that but you can only do so many of them and so we have got about maybe 10 strategic vendors that we deal with that probably reflect about 30-40% of our spend globally as well so quite a substantial amount of spend and the remaining non-critical vendors we basically don’t even review we just run out articles every second year and we just run them that is what it is. For the leverage vendors we actually work with them to meet market needs because we know we can move A to B and get a better price potentially but instead of doing that we are wasting engineering resource so why don’t we make A similarly competitive as B and you don’t have to do it so we work on a plan that is actually more cost driven because capability is not, there is similar capability existing everywhere so that is actually that drive around that quadrant. Then you have the bottle neck vendors what are quite important for your progress but potentially have capacity issues or very limited in their capability is quite critical for those ones again have probably one to two people managing them and overlapping and they are not as strategic as a strategic quadrant but they still need to be kept relatively happy because they are the ones you need to go to in the event that you need to probably make a tool or make a special mound or whatever, whatever your business needs are really. But an example of a transactional vendor would be something like a stationery supplier we don’t care if we run out of pens there are heaps of other pens. And a leverage vendor would potentially be a packaging supplier so there is A B C D they all can do the job which one do you pick. And what portion of business to do you give A B C and D so those are kind of transactional 12 month kind of decisions strategic ones are more like three years and the bottle neck are more like 1 – 3 years kind of window. So does that give you a? So it is all based on category management and if you do it correctly then you can actually you can do two aspects for strategic window. We actually genuinely go for a win-win situation for a leverage vendor we go for zero sum game that is your loss is my gain and my gain is your loss unfortunately that is what it is, so that is what it comes down to really.

Interviewer
Considering the suppliers you currently work with or have in the past what is the most important characteristic of the relationship toward building trust?
Response
I would probably put it down to their behaviour when under pressure. Everyone is really good when margins are massive and resources are not under pressure and everyone is in a nice mood and they genuinely want to help you out. It is when margins are competitive, resources under pressure, priorities are coming left right and centre how do you then make that happen? And it is those testing times that actually show you the right supplier and the wrong supplier so it is all under their behaviour and how they behave as an organisation with you not an individual but an organisation in times of pressure that is what defines a supplier for me.

Interviewer
And another big picture sort of question as we wrap up again a similar sort of vein. What would you consider a minor and major trust violation you know behaviour or an activity that would be something that you could live with as a minor and something that would end it for you as a major?

Response
I think do the minor first because that is easier. There are some minor violations every now and then with respect to information sharing not the best, they probably know something but they haven’t transferred that over to you. There is a little bit of should we say should be upset them so there is a little bit of a grey area in terms of do you really need to know if we can deal with it and you always say that is absolutely fine you thought you could deal with it, you couldn’t deal with it, no issues we will help you out now. We always tell our suppliers let us know as soon as you know because then we can help you to deal with it right? but still you have suppliers who will not actually communicate that evenly and that well and you have certain disconnects but it happens as long as they learn from that aspect it is fine and we will continue to do business. In terms of a major violation I think it has to do with, so we invest a lot of money in R & D as you know and probably 3M has the same fabric as well basically an R & D company and a major violation for us is actually the technology that we build that we built with you is openly shared with the competitor that would absolutely go down like a ton of bricks in our organisation and has no place at all. So very sensitive very protective about our IP and if we find that there is a violation of the IP that would actually be probably the end of the relationship so it is more in a [context] perspective really. In another organisation I used to work in an industrial electronics division in [division] and for them a major issue would be actually product performance problem. Cause they are not developing so much IP basically that is IP that is out there but it would be more in line with if we had quality issues major quality issues that costs us a lot of money then that would be a major problem. But that could be like a major trust problem that you have when you can’t trust any more. For us it is IP to start with and absolutely really close behind is quality. But even if you give me good quality product and you violated IP it is still a no brainer you will be gone basically or we would basically try and get some plans in place so that we can peacefully come off rather than actually have a major conflict.

Interviewer
That is fantastic [mask] I really appreciate your insights that is really helpful indeed.
Participant Twenty

Interviewer
Thanks again for your time. I will repeat my first question because I wasn’t sure if it made it to the recording. Tell me if you could please about your experience here at with one of your key trusted suppliers. How did it begin and how did you decide to work with them in the first place?

Response
I think for me I wasn’t really in at the ground level with the partners. They have been historical partners of our business for a long time simply because say a core function of my team is to install irrigation systems. So a key component of that system is pipe and so there are only two or three key manufacturers in New Zealand for that kind of thing. So there is an attentive audience in terms of you can go to one or two or three players and then it’s about the relationship you establish with them and obviously the volume you can put through their business and that is a function of what you do. So really that relationship was established.

But there are other people we create connections with from time to time and what we like to do is, the rare task of actually establishing sole agencies and yeah those are really generally about personal approaches by either the group manager or the managing director of the company to the supplier that we want to engage with because we see that their product group aligns themselves with us or we see an opportunity in our range to fill a gap and then we would make an approach and of course then the makeup of that, the whole way we go forward is based on that initial interaction with them and how they respond.

Interviewer
Perhaps with one of your key suppliers or a key supplier, what are some of the things that they do to build trust with you?

Response
One of the critical ones is doing what they say they are going to do when they do it so for us a lot of our projects are time critical, so we try and order in advance with what we know is a reasonable lead time and then they will make a delivery promise based on what they know they have available. And a lot of the ebb and flow of the day, the stress level or the peace and joy of the day comes about as to whether or not they meet their delivery promise, so that is one really key thing. Probably a close follower is the pricing is right. So a lot of the work we do is based on say a quotation type arrangement where we will approach the supplier, and this is a major because we will approach them via email or we can call our representative with them and we go these are the products we need, this is the volume, the lineal meters that we need, please quote us a price. And so one of the key components of trust in the relationship is that when they quote us we end up with an invoice whenever it arrives that is that price. There are checks and balances in place. Delivery promise, pricing and backup service when there is a problem really are probably the three big cornerstones of any relationship that we have with our customers because without the right price we can’t sell. Without the deliver promise we can’t please the customer and if there is a problem without the support backup, both us and the customer are in the cart so those tend to be the three cornerstones on which we deal.

It’s not a very complex equation here at because what we do is relatively straightforward. We help people irrigate their lawns and then we help them mow. And there is a few bits in-between. We service what we sell. So yeah it’s a pretty simple equation therefore how suppliers build trust with us is a relatively simple equation.
Interviewer
How important is the communication with your supplier to building trust?

Response
Oh it’s huge. It’s one of the cornerstones. In particular I was thinking about, when I knew you were coming I was thinking well what is it about my relationships with my suppliers that actually make the relationship work. For me and for a lot of I guess the other guys in the way I see them relate to suppliers as well is its sense of humour, being able to even start a conversation with a supplier in terms of how are they going, have they been on holiday recently, how was the holiday, sense of humour, personal contact with them. You don’t necessarily get to meet them fact to face but how you deal with folks on the phone is a really important starting point. Clarity of communication. And by clarity I mean not mono-dimensional, like a phone call generally used to be the holy grail of communication but I will also communicate with customers and supplier now via text, via SMS, via email. I might use all three given the circumstance of either something is important and urgent or just in terms of saying thanks, thanks for good service. So the clarity of the communication is not did I speak proper English, it’s about how many mechanisms can I employ with these people to be able to make a connection. That kicks in particularly with some of the international guys. We deal with Italy and speaking Italian is something the only way, you know, Google translate to Italian is the only way to get an immediate response. It went a long way recently in an email that hadn’t been responded to for two weeks. So clarity is using as many mediums as possible to break through in terms of you know having good manners with a conversation but also approaching people from more than just one angle. Communication is so important. You can’t afford to do it mono dimensionally. You have to be prepared ... like we talked about before, you have to be prepared to jump on a Skype meeting if required or jump on the conference call or use a new system to be able to communicate, and so having an openness to not being afraid of the technology is a pretty big thing in communication.

Interviewer
Do you feel like your most trusted suppliers or perhaps this one focal supplier, there is a sense of collaboration or partnership, the shared risk and success or does it tend to be more transactional?

Response
For us at \[\text{[Redacted]}\] it’s more transactional. With the customers that we have, we like to make it more personal, but because most of our suppliers are acutely aware of their competition in New Zealand, the are not lulled into a false sense of assuming that if they mess up on one thing that we will just tolerate it and we won’t go somewhere else. In effect, whilst we like to build relationships with our suppliers and make that work and get across our desires and wishes and expectations. We always try and have a personal element to it because we have other suppliers that work with us in a very transactional way and it tends to feel impersonal. Like, you are just the boy and please do this, no questions asked, whereas we know that any good business relationship is never like that. It’s transactional in a sense that we send orders and we hope, we expect a delivery promise to be made because we ourselves don’t offer excuses often to customers about a missed deadline or whatever. We just have to say sorry and fix it. And that is where we kind of break out of a transactional mode ourselves and get into something that is, sorry, I screwed up, can I fix it, give me the chance to fix it. And that is how a lot of our suppliers operate as well because New Zealand is too small in which to actually, say no, just forget about it, you know. I know you’ve got no one else to get source from, so you know if you don’t like it too bad. That is a short lived
arrangement in New Zealand because people just have the desire and the ability to find an alternative supply.

Interviewer
How important are those shared values when dealing with or even selecting a supplier? It may transcend simply the business metrics or the like when building trust.

Response
I think that obviously as many commonalities as possible would be ideal but I think there is always with any business there are hills to die on and ones that you think well that’s neither here nor there. And so as a company we certainly have those cornerstone values of the quality of service that you want to supply to your customers, but an ergo what level of service we expect from our suppliers, like a simple answering an email within a 24 hour period would be nice, you know. I guess we never expect perfection in terms of perfect alignment because I just think that that’s really hard to find nowadays, but there are core fundamentals that certainly a managing director wouldn’t want to see in a supplier partnership that anything outside of its expected criteria, which you could probably number in a hand, that the values of how they go about doing business with customers and where the customers and the supplier, if there were ... because of previous experience, he has a go-to list of values and attributes that he won’t step outside of.

Interviewer
That speaks to an integrity almost of himself as a managing director but again by extension the company. How important is integrity to building trust with a supplier?

Response
We have a very cute caricature on a list of company attributes that sits on the wall. I can show it to you, that basically is a picture of a bull with a little pile on the ground and it says we don’t customers. And so the reverse is true in the sense that most of the managers in the company have a pretty attuned indicator when they are dealing with suppliers or even when we deal with the parent company. If we feel there is a price increase, you know, an engine on a mower costs 20% more, the alarms go off all over the show because we know that you know a huge percentage of the world’s goods are made and sourced in China, if not the components, and so we know that there are things that don’t necessarily match up.

Interviewer
So looking for a measure of integrity by extension in those suppliers?

Response
Yeah and really it’s quite a fragile thing really because the majority of suppliers that are the bulk of what we sell are from outside New Zealand. You would appreciate unless you are able to travel a lot, meet and greet with people, socialise and dine with people. Like a lot of really good business relationships are actually, I guess I want to say forged, like hardened and made sure by one on one relationships. I don’t think you will ever escape that. You can deal with someone via telephone and email as much as you like. The relationship really doesn’t feel like it’s gone to the next level until you have met physically with people and had a chat over dinner or over a drink or whatever you know. And I just think that is the human experience. You can’t escape that. But certainly at a push, when we are first engaging with suppliers, the integrity of their communications, once again that clarity that comes into it,
the kind of language that they use. You can often tell where they are coming from, their previous kind of customer-supplier relationships, what kind of clauses and conditions they talk about in setting up a relationship with you. You can hear the echoes of what experience they have had in the past.

Interviewer
That segues nicely into my next question in fact. Has there been a time when this or one of your suppliers has let you down?

Response
Oh absolutely and it’s generally based around … we can sort out the pricing and the relationship side of it. A lot of it for us is about delivery promise, because you are really only as good as your last order and a big part of that satisfaction comes from we delivered what we said we would and we delivered it in a timeframe at the price that we said we would. Like I said before, it’s a simple equation. So a lot of the disappointments come from big customers and for us it’s $100,000 worth of pipe for a turning up on a job because you have got labour and machinery and equipment digging holes in the ground at quite a large expense and the timeliness of that arrival is critical to the momentum of the project. So yeah, we have definitely had disappointments, things that got on a truck in and were supposed to be delivered up north. It’s a four hour drive tops and it takes three days to get there. There are very passionate phone calls about that kind of stuff and it does happen. We expect it to happen.

Interviewer
How does it affect the trust you have in the supplier?

Response
There is a measure of expectation that because there are multiple hands in the pot as far as we are making the order, they are giving it to a delivery company, because a lot of New Zealand companies don’t necessarily have their own delivery network any longer. They use a freight company or their freight partner. And then that is the third party that comes into it. And then there might give it to a local or rural delivery guy. And then there is the fourth pair of hands in the equation. And then things can break down very easily because we don’t necessarily have communication directly with third and fourth parties. We have to go through number two for that. So yeah it can get complicated quite quickly.

Interviewer
What do they typically do in that situation to try and recover some of the trust you might have otherwise lost?

Response
Well a pretty sound explanation. Everybody that I have had interaction with, other than one particular customer, accepted a pretty logical explanation for their shortfall. Genuine mistakes get made by human beings every day and if you ignore that factor in any business, international, national, even global, well you are going to be disappointed real quickly. It’s going to be a really rough ride. So to some degree we expect … we have good faith that communications are clear and we gave all the right details for delivery, we expressed timeframe limitations if there were any, once again clarity of communications and if there is a genuine mistake, well then we are communicating with our customer about the genuine mistake as well. And if there is honest communication about even the problems, the no BS rule, I am sorry, the delivery guy was involved in an accident, he physically couldn’t get the
item to you but he transferred it to another truck, that’s what the delay was, really sorry about that. Most people accept a reasonable explanation. So it does boil back a lot to the communication connection that you have with people and if you are not kind of screaming and yelling down the phone every five minutes about every little thing that has gone wrong, then that invites honest communication as well. We are really sorry. We had this in the yard. It was on the system like this and I do this myself sometimes as a supplier. We go out and there is one in the system. It’s not on the shelf. I then have to say sorry, we screwed up, we made a mistake, it’s not real. And for us it’s about communication and the way we communicate and the honesty in which ... it’s pretty critical to the service aspect of our business because without it people will go elsewhere.

Interviewer
So you feel like in that particular example they sort of recovered the trust back to what you enjoyed.

Response
Certainly they will mention it next time, you know. It’s like the whole elephant’s memory sort of thing and of course any incident on a major scale does take some time to recover, but once again the way in which you communicate about that, so you have a little joke about it or whatever, it just depends on the relationship you have. A lot of our guys, they are reps, they deal with builders, they deal with guys that dig holes in the ground, they deal with a certain level of clientele. They don’t mind the odd joke or a bit of a dig or whatever about the last cock-up you made. You have a thick skin and you roll with the group of people that you are kind of surrounded by. Certainly you are aware of the desire for that mistake. If it’s anything on your part for it not to happen again and good suppliers have people in their organisations with that same ... I don’t know that it’s a moral compass as much as it is a work ethic, a responsibility to say you know to the guy who is paying my salary in the corner and I know what he would think about that because he has mentioned it before or I have an acute understanding that I don’t want to disappoint him and if I disappoint the customer then I know that that potentially comes into it, that if the customer has a disappointment and he hears of it then that is not necessarily the way that he wants his company to be run. So there is a real connection to the source and as in any organisation the leader sets the tone and sets the ethical and the moral compass of the company.

Employed internationally or local business owner, I don’t think it really matters, and that’s why you see some companies thrive, even under a professional manager who comes in, he’s got to clip his ticket for a period of time when he comes in. He still sets a tone. He still brings a flavour to the organisation.

There has certainly been even suppliers like that I am talking about with the majority of my comments, where our manager has sent a direct message to their manager when we got let down on $100,000 order. This can’t continue. We can go to the alternative supplier but we don’t necessarily want to deal with them because we like dealing with you. He’s a New Zealand business owner. They are a New Zealand business owner originally. We want to deal with you. We have dealt historically with and we don’t want to get all you know antsy about the relationship because we know that stuff happens on jobs, but we are not sensing any urgency from your company about dealing with this. There was a period of time where there were issues at multiple levels of the organisation. They lost key people in their sales team because they got tired of things that were going on. They lost key people in their manufacturing factory which lost skill. So there were quality issues, there were delivery issues, there was wrong pricing. It was almost the death knell.
Interviewer
How did that affect the trust you had in that supplier?

Response
Very, very challenging. Very, very challenging because you are imploring them to recognise the problem and fix it because there is nothing worse than someone walking around with a bleeding wound and I’m fine, no worries, it’s all good, you know, thanks for your business. But you know that that is a false economy, not wanting to recognise the problem. But fortunately our relationship with them has been restored by the fact that they recognised a problem, they were honest about it because they told us what was going on. They told my managers at the highest level, really sorry, it’s not an excuse but this is the explanation. We accepted the explanation. We attempted to add a little bit more buffer because urgency is like the death knell of accuracy. Just seems to be the way. So we try and back off on our urgency on some things and we give them three-four weeks lead time on big orders and we get the quote and then when we ask for the quote we say guys this is coming up soon, have you got enough, what’s your manufacturing like, have you broken anything, is the crew on board or is there a virus that has gone through the factory, you know, just that level of communication sometimes, this is really important, this is a million dollar golf course job, we need this pipe in stages, we are being totally upfront, can you do it. And so that relationship took a real hit in probably early to mid-2016 and now a year later that organisation has hired good replacements, they have invested in them and they have communicated about their investment with us through the representative that we have a really good relationship with. As an organisation they have responded to a brokenness in trust and they are an example for us of an organisation that ... do we trust all of our suppliers implicitly, well it’s only really as good as our last communication, either on a delivery time of a sales order or a problem that we have.

And similarly I have a supplier in America right now that I am trying to deal with and my little trust pool that builds up, somebody pulled the plug on it. It’s draining away very rapidly because they are, I don’t know the in-depth workings of what is going on right now but they are letting me down with one particular customer, [redacted] customer, and I am feeling the pain because my anxiety is growing because I am not fixing the problem and I am reliant on the supplier supporting me and they are taking their good old time about it.

Interviewer
How does the good and bad interactions, particularly the bad experiences perhaps, with some of these suppliers, how does it tend to affect your relationships with your other suppliers, if at all?

Response
We try not to go into a new relationship with someone by saying look the last guy sucked like this I hope you don’t because that is really kind of setting a precedent which is unpleasant in the relationship. Even that statement as a customer you would probably have to go back and work through that with them. Sorry about dumping that on you. And that is generally not something that as a company we do and certainly not something that we have ever done. We do approach things from a very long rope perspective, but once it’s at the end it’s really at the end and the relationship is over and it’s finished and we will exit with a pretty clear-cut line and a pretty definitive statement, sorry guys, we’ve tried to work through it, it’s not happening. And some suppliers have done that to us. I think what that does is institute a framework for conditions and policies going forward that we very politely discuss around the fringes of when we approach a new supplier. What’s your process for this
and then look at well what is your process for dealing with conflict between a marketing manager who thinks he knows better and you know us as the customer saying no that shouldn’t be the price. What is your framework for reconciliation with grievances? What is your quality assurance process? What is your mechanism for dealing with freight and a bill that is like that would cause God concern.

Interviewer
This is good. It lends itself to a bit more sensitivity in your dealings.

Response
Absolutely yeah. I think just because New Zealand is a very small marketplace and you can be known as a bad customer as much as you can be known as a bad supplier. And so therefore being diplomatic and reasonable about it as well because yeah I just think no one likes a show off and we never expect to be the be all and end all for our customers. We’ll do everything we can to try and help them but at the end of the day there is a line that has to get drawn as well between even supplier relationships or customer relationships that you know, no we can’t deliver everything to your door in the outback of Pukekohe, sorry. That is what freight companies are for.

Interviewer
How important is or are the extra relational measures going above and beyond what is strictly contracted in terms of building trust or a supplier building trust with you? How important are those things?

Response
I think that is a bit about the expectation and the relationship that you talk about upfront to begin with. I think any good supplier, and this is probably something that we don’t quite do as well as a company, is acknowledging the support that our suppliers have given us in thanking them at the end of each year for that support. I think one of the extras is really hire people in your organisation. In that moment with that manager that I am talking about, we actually had one of their regional New Zealand managers get on a plane and he came up to Auckland and he visited us and every other customer that had been upset and disappointed, because it wasn’t just us in the pot. There was a whole lot of other people they upset as well. They were in deep water with a whole bunch of people. But that manager got on a plane, put his best suit on, got on a plane, did the rental car thing, came here and officially apologised. Now for me that is above and beyond the call of the contract. It’s recognition for them at the highest level that they did that. So some of those things become more ... a lot of New Zealanders just get on with it right.

The fluff and the candy and some of the hoopla and stuff that you see in some international organisations is a little bit lost on Kiwis. We are pretty a spade is a spade, get on with it, do it, and if you get the chance to go on a golf tournament day with the guys and have a few drinks and share a few laughs, it would be some of those things that people enjoy. Being invited to a dinner evening or, you know, receiving, like for us, we would send an irrigation team Christmas card to our suppliers. Everybody on the team signs it and we thank the support people that we deal with regularly for their support. It very does much boil down to those extra relational things. I don’t think there is ever much in the contract. It’s the people whom recognise the relationship is important, that it’s two-way, it’s not just the supplier’s responsibility to thank everyone for their support. Yes, that is important but he customer acknowledging the support of the supplier goes a long way as well. It’s a two-way street.
We certainly take the opportunity when suppliers come down to New Zealand to train us or to show us new products or just have general catch-up meetings. We’ll go out to dinner and we’ll try and shout them dinner, generally is the US dollar or whatever is a bit better, but we will shout them dinner as a thank you for their support and things like that. If they need a ride to and from the airport, no, no troubles, we’ll help you out. If you want to see the sights on the weekend we’ll be hospitable and we will treat people like how we want to be treated in their part of the world. That stuff above and beyond the contract, but I think it does matter to a lot of people in terms of the ongoing relationship you have.

Interviewer
Absolutely. What would you consider, and this is collectively in your whole experience, even outside of Parkland, what would you consider a minor and a major trust violation? What sort of minor violation could you live with and what is a major that would just end it for you?

Response
I guess from a major perspective it depends on how major.

Interviewer
Perhaps something that you would have to say that’s it, we are going to have to call it.

Response
I don’t think from our perspective or from...

Interviewer
A supplier’s behaviour or characteristics or something like that, that you are dealing with.

Response
I guess if we established a relationship directly with a supplier to be the sole agent in New Zealand and we found them dealing with other people, which can happen quite a lot, then that is pretty much a major for us because that is a break of the agreement as well as an impingement upon trust. That sometimes, depending on the magnitude of it, that might be a one strike policy and you are out. Yeah, it depends on the severity. Like I say, in New Zealand we have a very narrow perspective I guess or perhaps it’s a broad perspective on well, okay we’ll let it go this time, can’t afford to cut my nose off despite the rest of my face, but jeez that’s severe, don’t let that happen again, if we catch you sorry, we give fair warning, we are going to have to end the relationship because we can’t do that. It just consumes massive resources and time and energy to fix that problem.

Interviewer
What about something you can live with?

Response
We can live with genuine mistakes. We can live with people honestly admitting they made a screw up and they apologise and therefore apologies run freely a lot of the time. Some people don’t want to hear apologies. They just want it to be right. But for me it goes a long way, for me if a supplier just says sorry, I screwed up, let me fix it and I go okay, that’s fine. I can live with an honest apology every day of the week because it’s just that is just human eh.

Interviewer
Absolutely. Thanks
Participant Twenty Two

Interviewer
Thanks very much. I appreciate you making the time to chat with me today about relationships here with one or some of your suppliers. Again it can be used very loosely the term suppliers. It could be agency, retail, it could be products or services components, whatever. Tell me about your experience with one of your key trusted suppliers, someone you would consider a trusted supplier and how it began, how did you decide with them in the first place?

Response
Just clarification, so in this business we buy our cars from so they’re effectively a supplier if you want a definition. We’re not owned by, we’re a private family business but we get our cars there and because we represent the brand we have a set of guidelines and responsibilities to live up to. So look at the supply chain that’s one important party. This business is really simple, we then wholesale that product to a dealer network and then we’ve got a group of people that help us achieve the performance required for the brand so some of the suppliers that we work with we don’t have a choice so we’ve got to get our cars from somewhere, so some of them we don’t have a choice. Everywhere else we do have a choice and the guiding principles that the business works on, this business works on because it’s got a deep seated set of values as a business is that there’s always a long term view taken on any supply selection. There is a service that they offer which is or something that they supply which is actually less than half of the consideration. The other consideration is the cultural fit and their ability to actually work as a partner so we have a very defined definition around our suppliers that it must be a strong profitable partnership for both parties. We don’t go and people down for the sake of it. everyone has got to make a dollar so if our partners are profitable then they’re going to invest more into us and vice versa. So there’s I guess a set of rules that help guide our thinking so we won’t always go with the cheapest but we won’t always pay over the odds and if we’re dealing with it doesn’t matter how good the offering is, it doesn’t matter, so the personal relationship and the sincerity of understanding what we’re trying to achieve is fundamental in selecting a supplier.

Interviewer
How would one of your suppliers go about finding out about your business and what it is that you…?

Response
New Zealand is a village and especially in the industry that we’re in, it’s quite a small industry however partnerships are built through a commonality of purpose and a commonality of values so you can come across someone or some business and if you see that that business shares the same values and beliefs it happens to offer a service or a product, then that’s how you form a relationship. Business like your relationship with your family or your kids or your parents, everything is about a relationship and the guiding principles of a relationship and expectations need to be laid out up front and that’s actually where the most robust relationships actually work is when there’s due respect and there’s a mechanism to give good solid feedback all the time and then over time that’s where in my view trust is built actually.

Interviewer
How important is that transparency to the relationship?

Response
It’s important to any relationship. In my view it’s no different personal or business. People in this business want to, they’re really clear around their purpose and they’re really clear about what
winning looks like and they want to make a difference and they want people that are one, supporting them to do that, two equally minded. So you’ve got to have this cultural alignment. If you don’t have that it doesn’t matter how good your plan is or your strategy or what you’re going to do, if you don’t have a cultural alignment it won’t work.

Interviewer
You talked a lot about shared values and how important that is to building a trusting relationship. How important to your relationship with your suppliers are activities or behaviours like going the extra mile, doing those extra things that aren’t necessarily contracted but...

Response
As soon as you’ve got a contract out it’s over. So if you have to engage, contract is hygiene and governance but if you’re using it to drive a relationship it’s very, then it’s on a very autocratic, technical basis and that’s fine and some businesses do that but in this business, the one I’m in, if you’ve got a contract out it’s all over. So if people understand that we’ve got to go the extra mile, that customer experience is at the heart of everything we do, we need our dealer network to be profitable and that our purpose is that our stakeholders are profitable then of course you’ve got to go the extra mile. If you aren’t clear around expectations people don’t get gold medals for going an extra mile if it doesn’t make any difference. They want to do it just to get recognition well find somewhere else where they can get a gold star. Go back to school and get your star chart out.

Interviewer
What are some of the things that if anything that you as a business feel is central to your values and integrity and the like that your suppliers could be doing better?

Response
So business performance is a consequence of human performance and when you enable your people to be the best that they can be every day that’s what delivers performance so there’s an expectation that those guiding principles exist with your suppliers and your partners so you can have a good product but it’s never going to work so what I look for in suppliers is a strong sense of leadership and belief in their business. People join companies and leave managers and you always see problems with a service that’s been provided or goods being provided, not because of the goods, but because of the people and it’s not the people’s issue it’s the leadership issue because businesses are a consequence of the leader. So I always look for the leadership and what are the guiding principles to enable their people to succeed. And you can tell. You go and talk to people at the coal face around what it they’re doing, what their sense of purpose is and how they know when they’ve won. If they can’t answer those questions it’s not their fault. It’s the management and the leadership’s fault so you’ve got to get a really tight alignment at a leadership level to make sure you’re both going to get performance.

Interviewer
Let me change tack a little bit. Has there been a time when a supplier has let you down and what did they do to try and recover the trust with you that you otherwise lost?

Response
Oh yeah we’ve had a pretty public situation recently where our supplier cheated emission tests and basically falsified the emission readings that cars delivered and said they were one thing when they were the other and cheated all the tests and then sold 10 million cars with all this clever software in it that tests and then got caught and then we as an independent importer bore the brunt of it in this country. So the betrayal of trust happened at both ends of the supply chain, from a factory point of view and from a customer point of view and one of the first things that the supplier did was
came here and gave me a newspaper ad and that newspaper ad said we’re sorry. We’ve broken your trust and we’re going to work hard to restore it and they wanted me to put it in the paper here. I didn’t swear to them but I felt like swearing to them and saying mate, I’m not apologising to the public. The people you need to apologise to is my team and to my dealers who have invested blood, sweat and tears into this business. I’m not going to apologise to the public. You can take your newspaper ad and take it back to . The guy was quite insulted but then reflective.

Then I said what you’ve got to do in a situation like this of rebuilding trust, you’ve got to start inside out. This is not a technical issue with the software. This is a relationship issue. There are people that have bought these cars and into this brand because they have belief in this brand and it’s special and the promise that the brand is going to fulfil, they like that story and want to be part of it. So we’ve got a relationship issue to fix to restore trust and the cultural code set of this country, there’s a set of guiding principles around how we act and behave as a nation and there are some things that are really important and if you list them all down you’ll see on that list that sport is our currency. We’ve got an affinity to the land. We’re independent and mate ship is important so what would a good mate do in this situation to restore trust. They wouldn’t put a ad in the paper mate. They’d actually sit down internally first and go I’m sorry I’ve let you guys down. I know that my actions over time will be my words. I’m not going to say what I’m going to do. I’m going to do it and I know I’ve got to have my crash helmet on for a period of time because tenure of my actions will restore trust over time. So I said to this guy before we do anything mate we’ve got to go inside out. My team and the five or six or seven hundred people that represent this business in this country, step one is restoring their faith in the business and the brand and how we’re going to do that is we’re going to communicate to them frequently and openly and honestly because that will equal authenticity. So because the mechanic in New Plymouth when his customer who he’s been looking after her car for 10 years and she’s on her third car and she comes in and goes you guys are cheats, how are we going to equip him to bests answer that to restore trust with her. It’s not going to be an ad in the paper. It’s going to be about that guy having confidence that the business stands behind him and he’s got a clear sense of purpose. So you’ve got to go inside out when you need to restore trust. That’s got to take time and there’s actions not words, just like any relationship. It’s like a mate cheating on you. A mate cheats on your missus or whatever it is and sends you an email, sorry about that mate, was five grand sweet, shall we go fishing next weekend, we’re sweet eh. What would he do? He’d front up in person. He wouldn’t use digital communication. He’d use analogue. He’d front up in person. He’d take the beating and he’d know that only after time would he earn the respect to rebuild trust. And it’s no different in business. I think one of the risks we have in business these days is the incessant reliance on digital forms of communication as opposed to analogue because the human animal has got a whole lot of senses and one of them is reading but when you’ve got a really, we could have done this interview, you could have sent me a whole lot of questions and I could have typed a response, sweet. But it’s not how the human animal works and it’s no different to rebuilding trust. It’s got to be done in person so through that process of rebuilding trust we’re completely analogue. Phone calls and visits. I had 700 phone calls with customers directly. I had customers in here non-stop who were upset and they would write these massive emails and I’d pick up the phone and ring them and say mate I’m really sorry that you feel that way, if you want to come and talk to me about it I can see you, what is it that you’re upset about, I’m sorry about that. All I gave them was time. I didn’t give them money. Didn’t give them some in the paper or whatever it was, I gave them time and again with rebuilding trust your personal and authentic commitment to them through time actually enables trust to be rebuilt.

Interviewer
That’s fascinating, as well it’s a very unique situation isn’t it that you went through and very explicit. There wouldn’t be in recent history anything quite like it.

Response
But it’s been the single best thing that’s ever happened to the business.

Interviewer
Tell me about that. What’s been the net result?

Response
Because it gave us a slap in the face to force us to actually focus on what’s important and everyone says oh your customers are important, but we were taking our customers seriously. They weren’t sitting at the table with us when we were making important decisions. We weren’t communicating to them with the respect that they deserved through actually giving up our time and the gift of time was so valuable so we put our customers front and centre and for example we had a new vehicle to launch, canned all the big media releases, canned all the big flash do and went to the customer and front physically every dealership round the network and fronted up to them and there’d be people that I was meeting in Tauranga who were in tears on the phone about you and cheats and all that sort of carry on and then they were buying a new car because they could see that the people gave a and it’s the people and product that actually make the brand. So we put customer front and centre but before we did that we put the team front and centre so they were the lifeblood and still are the lifeblood of the business and we gave them something to believe in and forced them to make a decision around do you want to be on this bus or not with it’s going to get tougher before it gets worse and you make a decision. If it’s too tough then cool, off with you but if you’re on here, here are the rules. You’re actually going to make a difference. So got the team engaged, made them really important, over-communicated, got the dealers to realise that they were the biggest catalyst to rebuilding trust through their relationship, helped them go back to analogue in terms of dealing with customers and getting that real simple form of communication that expresses the gift of time and so what happened is our top line sales plateaued, pulled all advertising, were fantastic when we said we can’t advertise mate, yeah sweet. Let’s pull it, pulled everything and staff satisfaction went like that, staff engagement went like that, customer satisfaction went like that. We won the Customer Satisfaction award in the middle of the crisis for our category. Dealer engagement went up, dealer profitability increased, customer loyalty increased and our sales plateaued but I guess our market share plateaued but the value of that share increased. And subsequently we returned to the core of our brand and what makes our brand special. So it’s been fantastic. It’s been hard work, but it’s been wonderful.

Interviewer
The slap in the face sounds like the perfect description for it. How did that affect, if at all, how you dealt with your other suppliers as a result?

Response
Found out who were the fair weather sailors, got a bit tough, fine get off the bus.

Interviewer
So you had suppliers jumping as well?

Response
There were a few really important key customers that really questioned their association with the brand so we had a time we had a partnership with the so went and fronted up to them with their Board and their CEO and said this is what’s happened. Yes it’s not our doing locally but we’ve got to take responsibility and look completely understand if that makes you nervous with the association. They said no you’ve done a huge amount of work for us, you’re a
strong partner, we’ll back you and what can we do to help. But if we hadn’t gone and had that
discussion then they could have gone how’s that xxx thing going, I don’t know haven’t heard
from them.

Interviewer
Yeah that’s right.

Response
Communication backing is the mother of all XXX when these things happen.

Interviewer
Yeah that’s right. I was trying to think of a quote while you were describing it. It’s something that
said, I’ll email it to you when I get back to the office because it sums up exactly what you
said, that basically rumour, in the absence of communication can spread quicker than anything.

Response
You’ve got to communicate. And the other thing is that culturally we have a real problem in this
country if you go and have a meal at a restaurant and it’s XXX and the waiter goes, how’s your meal,
fine thanks and then you just don’t go back. So I talk to the dealer network and go are you hearing
from customers, no, no we’re sweet, haven’t heard from them, everything is fine. No, no everything
isn’t fine. So get on the phone and ring your top 100 customers immediately and just say hey it’s
here, I’m just checking in. you would have seen what’s going on the news, we’re working on it.
We haven’t got a solution yet but I just wanted to check it and force them to make phone calls
because that’s what a good, if that restaurant owner realised that the meat he was serving was off,
option one is he goes, haven’t heard got away from it. Option two actually I’m going to ring
everyone that was there that night and I’m going to say look we had an issue with the quality of our
food. I just want to ring and apologise and if you want to come back I’ll look after you for another
meal, whatever it is. No-one does that. That rebuilds trust. The hit and hope oh it will be sweet we
haven’t heard, that’s where the disaster starts. No different to a personal relationship. You’ve just
got to front up and deal with it.

Interviewer
That’s right, you’re quite right, it’s not rocket science when you consider it’s very similar to the
interpersonal relationship.

Response
Deal with it, your actions do the talking.

Interviewer
What would you consider, and we’ve talked a great deal about this already, perhaps in a different
type of scenario, what would you consider a minor and a major trust violation? What could you live
with and what could you wear and what would sort of end it for you, if of course you had the ability
to, I know you’ve suggested some of your suppliers of course you can’t simply wave them off.

Response
I don’t know, I think to me major and minor, your interpretation of them defines whether you’ve got
a supplier arrangement or a partnership. So I don’t know whether the major and minor but it’s back
to that communication thing. the last thing you want to do is hear about an issue from someone
other than that person that supplies and from a supplier point of view it’s just like the restaurant
analogy. If you’re not proactive and you don’t do it quickly it’s always worse down the track. A major
would be thinking you can get away with something by not hearing from the partner and I don’t know whether you have a major or minor, I mean for me it’s always a good, and that’s why it was good to talk to you because it makes you reflect a bit around you’ll have situations where you know you should communicate and inform and you don’t prioritise it so maybe a minor is not prioritising a simple communication and then a major is just denial and the ability of dealing with problems. So for me a major is how problems are dealt with. If they’re not dealt with in an upfront manner with transparency, it doesn’t actually matter what the event was, it’s how it’s dealt with. In any relationship or business or personal, you’re going to have issues. The major is that if it’s not dealt with with respect of the partner and sometimes with respect of the partner in the partnership the best mechanism of showing real respect is to be very open and honest and sometimes that causes dramas, sometimes by saying actually does my arse look big in this, yeah it does.

Interviewer
Academics would call that pro social lying or the opposite.

Response
Put another dress on.

Interviewer
That was really interesting, I appreciate your time.
Participant Forty

Interviewer
Thanks so much for your time today. As I mentioned what I’m interested in is a current relationship
that you enjoy here at the soap company with a key trusted supplier, so someone you would
consider important or critical to your day to day operation so a key supplier. Tell me how did it
begin? How did you decide to work with this supplier in the first place?

Response
Well I suppose the one thing that runs this business is the supplier of the soap so they’ve been with
the business historically I suppose which is a lot of the case and you stick with them because they’re
there. They’re within the business anyway but then you determine whether you want to stay with them or not I suppose the criteria you look at is pricing is part of it. It’s always part of it, are they
competitive. The service is obviously if you say the quality of the goods that’s just a ticket to the
game so the goods have got to perform so you put that to one side, assume that the pricing are they
competitive, do they remain competitive and do they service the needs of this business and this
supplier services a lot bigger companies than us but whether it’s the individuals we deal with or
whatever are there, they don’t treat us any different to the way they treat Unilever. We might be
buying 4 or 500 tons a year, are probably buying 50,000 tons and we’re further away and all the
rest of it but they do, they’re a big company, they do treat us, they respond to the emails, they
give us not preferential terms but they know we’re going to pay so they will, you know we’re
supposed to pay FOB but literally the boat is just about turning into Auckland Harbour by the time
they send us a tele, we enjoy that and from a small business perspective cash flow is king, profit is
nice but cash is king so we enjoy that and so when we’re comparing them to other suppliers I look at
the pricing, there’s always a risk only having one supplier which is why you farm around so I am
looking for another supplier currently but they’re going to have to perform pretty well to be with
those guys because that’s how, historically that’s probably why they’ve maintained with this
business. They’ve ticked those boxes and when we have a problem, we do have problems, happens. It’s manufacturing. Some people don’t see that, but we do have problems and they do
react, even though we’re a long way away so that’s why we stay with them. There are other
suppliers that we duck and dive from don’t have stock or cut you off at the knees, the force majeure
for reasons that aren’t really force majeure.

Interviewer
So what are some of the things, you mentioned some already, their ability or confidence up front,
they’ve got to make a good product otherwise they’re sort of licensed to play. What else, what sort
of activity or behaviour would they sort of engage in with you I guess to build trust with you?

Response
Yeah I think the trust is, with this particular supplier because they supply a palm oil based thing,
there’s emotion attached to it. One of the things that we get lots of questions from customers
about, you know all these train spotters that read the instructions, go and Google things and they’ll
see a thousand articles positive, one is negative and that becomes they run away. So they’ll come
back to us, oh your supplier in 1988 was seen to be doing this on this patch of land in Indonesia and
you know. So we go back to them and say okay I don’t know, I’ll go and ask them the question and
more often than not they will have a response. They don’t run from it. It’s not, I’ve passed it on to
the public relations department and they’ll get back to you shortly but no, the person we deal with
will take it away and will come back with an answer and send you an article. Whether that satisfies
the person’s needs or not the answer, but they get an answer and we get an answer.

Interviewer
Don’t leave you hanging sort of thing.

Response
Yeah and you talk about trust and whether that answer is, whether what’s behind that is, they will give an answer, it just doesn’t guarantee this. So those sort of things help, the payment things do help. I suppose they show a level of trust of us which becomes mutual. In fact they trust that we will pay because the boat is going to get here, they’re not going to stop it. Each shipment is I don’t know, 60-70,000 US type thing so we’re talking reasonable dough so they trust that we will pay and that’s it and so it becomes a three legged stool, if you both trust each other it helps.

Interviewer
So how important are those, you mentioned there was a bit of emotion attached to some of it, of course the ingredients I suppose, and that they in fact do provide you an answer if your customers...

Response
Yeah I’ve got one at the moment. There was some in 2003 someone, one of my customer’s customers and this is how, it’s one of the beautiful things about living in New Zealand pay now is that the customer’s customer who buys probably two bars of soap to wash their dog is going to my customer complaining, my customer has taken it personally and they’ve come to us saying I’ve seen in Indonesia with your company there was some non-agreed GMO fertiliser used on the palm oil. And someone had found it, whether it was Greenpeace or someone, they’d put an article up green wash this healthy company and others wasn’t just ours, but ours was on the list, was mentioned and what have you got to say about it. You say okay I’ll go find out. Send me the article, I’ll go find out. Realise it’s from 2002 I think article was from.

Interviewer
That’s right it’s years ago and before even many of things were known sometimes weren’t they.

Response
That’s right. Did they know at the time it was a GMO modified ingredient that was in the fertiliser.

Interviewer
No they probably didn’t. So your suppliers how important are those sort of shared values I guess as an organisation when considering who to deal with?

Response
For those core products and knowing that it’s such a big part of our business critical and that’s what say the selection of a new supplier or back up supplier which we’re currently going through is yeah it’s critical. The smaller guys, the smaller suppliers and I lived in Australia for a while, a bigger market, a lot more competitors. I was a supplier there and you were turned and burnt all the time because they had options. The market place wasn’t as good as New Zealand. You burn those bridges.

Interviewer
Yeah it’s still a village isn’t it. Sort of as an extension of that how important is a supplier’s integrity in that respect, the building trust?

Response
Yeah and these days it’s, to lose that integrity with the way of social media or the way of communication is much easier than it ever was. Before it used to be you’d bump into someone, going back to the plastic stage, you’d bump into someone at shows. I got shafted by X that’s how you learn. Now all sorts of rubbish.
Interviewer
Everyone has got license to...

Response
Yeah which is dangerous.

Interviewer
I tend to agree. It’s anyone with a computer and a...

Response
That’s right and a very tiny bad experience, or they can make it up.

Interviewer
Yeah that’s right which is in the news lately, these sort of fake reviews for restaurants even and the like. They can be quite devastating to businesses.

Response
Particularly small businesses.

Interviewer
Absolutely.

Response
So the best way for those guys and we’re the same. Digressing a bit, but one of the positives of people do that fake, I always like to look at the positive and the negative. One of the positives of people doing that fake news what it does is it drives businesses I think to be more honest because if you are upfront honest and just straight back you’re fine because no matter how much investigation they do they can’t find you’re trying to cover anything up.

Interviewer
Yeah that’s right so you consider that transparency critical as well?

Response
Yeah certainly and that’s what saved that, we deal with and they are certainly they deal with us, whether the palm oil grower in this part is doing it right or not, you’ve got to trust them that they are doing the right thing because they can investigate it and that’s their trust that their systems are in place. You have to and they give you information. Then my customers have to trust when they ask a question I give them the information that I get, good, bad or indifferent because they can go find out in another way.

Interviewer
Do you find your supplier is or any other in fact in your experience have exercised this sort of open book policy before? Do you find that typical in this industry?

Response
I’m relatively new to this industry. If I go back to my plastics days it was difficult. A bit of skulduggery in that game. They would always, you can never get past that corporate front type set up where this industry, whether it’s driven because of the personal care, whether it’s because it’s tied to the cosmetics which has a lot of emotion attached to it. You know whereas places whereas here...
you’re talking about cosmetics which has a bit of a link. We’re not in it but cosmetics which has a little bit of a link to pharmaceutical type thing, ingredients and whatever so there’s a bit more...

Interviewer
Yeah I know what you mean. There’s more an intrinsic value to it. They’re putting it on their body so you feel a bit more...

Response
People do care more about it and so they will but they won’t if they’re not happy with the first answer they’ll keep digging, almost have to take the flannel you give them. This industry is a bit different.

Interviewer
Yeah it’s quite typical, you’re quite right, some of the more commoditised industries and then the more as you suggested industries with more emotional attachment they tend to be a bit different, but that’s fascinating. Is there anything you feel like your supplier could be doing any better?

Response
One thing, because they’re selling a commodity you never and this is in all industries that sell commodities that they are trying to get the best price they can. They know they’re up against commodity pricing so what they’ll never do when you ask when the prices change, what are the real drivers for the price change. That level of transparency you don’t get from any commodity. They will try and make, which is fair enough, they will try to make as much money as they can with their product at that given time on that date. Some days they will be making a fortune and other days they might be taking a bath. Palm oil products is it just supply and demand, is it economics 101, not as much on the market so they can charge more. You never get that. It would be nice to get to that level of transparency but then you’re starting to I suppose the volume we buy maybe they share that with the likes of the Lever Bros because if Lever’s pull their volume from them it would hurt significantly.

Interviewer
Of course. Tell me what do you think is the most important characteristic or behaviour of that relationship that contributes to trust building?

Response
I think it’s the fact that they trust us.

Interviewer
Reciprocity?

Response
Yeah I think that’s the key, if they were, if they started complaining and we pay but the payment is part of it, if they started mucking around and we ask quite cheeky things at times. Like to hold pricing for a while and that type of thing which they do and they don’t argue, we pay, yeah and we’ll say look the payment is due then but office lady is away or it’s a public holiday or whatever, is it okay next Tuesday. It’s never any of that, they just trust that we’ll pay and that’s one of the key things. Yeah if someone trusts you, you feel better about the whole deal whether it’s personal life or not.

Interviewer
Absolutely. You’re quite right they’re very similar, well I would suggest business relationships are the same as interpersonal relationships.
Response
And that’s where the big corporates kind of, they’ll bring in some procurement, you know we deal with a couple of those and it’s all about the numbers and facts and you say after the meeting, come over let’s go down the road and have a coffee, no can’t accept things from you.

Interviewer
That’s right, it’s another inducement.

Response
A cup of coffee is going to make a difference.

Interviewer
Alright I’ll buy you two. This was very similar and as an aside again in the industry I was with and this was the same. There were all these protocols.

Response
The yanks are the same, you’re not allowed to be in the same room as your competitors.

Interviewer
We’d go to local trade shows and my competitors were all around me. We’re not in these big cavernous sort of places like in America where you can be in a corner each but anyway that’s an aside. Tell me you mentioned you were looking for a new back up supplier at the moment and so upon finding one hopefully, would you suggest that relationship would differ from one of your more established suppliers so how would you approach that newer relationship based on some of what you enjoy now with a longer term?

Response
I suppose you’re not going to have that mutual trust for a while so I suppose you know there’s going to be a feeling out period. You’re going to have to play by the rules. If they say they want the payment then you’re going to have to do that, so you have to do your part. Then you’ll see whether they, I suppose their flexibility around it so there’s not a, I suppose there’s an internal checklist of how it works. The obvious stuff you test the material, does it work, have they got certification, they’ve got users, you can do that as a desktop type audit quite easily. Then it’s right I’ve ordered a container, does it leave on time, does it not then they start ticking those boxes, do they say what they’re going to do. They can show what you do. So it’s not rocket science in that respect. And there’s always that continual pricing dangling the carrot of how much business you do do so you always tease them, you say we buy 500 tons a year so they go we’d like that. Whether they get it or not. You’ve got to play that game because I’ve got to protect my customers in case the other guys fall over.

Interviewer
Absolutely.

Response
But I find again, if you’re up front with them and say we currently buy 500 tons, we’re looking for a second supplier, I might go to 80/20 because it’s no good, yeah some people may say look there’s 500 tons on offer, give us a price based on the 500 tons. You’re caught out very quickly that you’ve been lying. So straight away if your first engagement with them is then your trust has gone.

Interviewer
And then they’re very dubious.

Response
You say oh yeah, you’ve then got to make starting up some sort of a lie to cover up your initial lie. Life is too short for that. My memory is not good enough.

Interviewer
That’s right, that too.

Response
You’re better off saying look I’m looking for an alternative supplier, we currently buy this, I need to establish a supply chain with you 80/20 is probably where I’d like it to sit but obviously if these guys fall over you’ll be in the box seat.

Interviewer
It’s that transparency you were mentioning before and it’s being upfront so that’s exactly what...

Response
And if they’re not happy with that.

Interviewer
Buy somewhere else, that’s right.

Response
But they would never say no and then I suppose I have to be mindful of that when you’re doing the pricing. That if they come in at 50 bucks a ton more sort of accept it because you know that if you did go back to them and say right, these guys have fallen over, I now want to buy the 500 you can give them the squeeze and they’d match the price.

Interviewer
Absolutely. Let me change tack a little bit. Has there been a time when the supplier has let you down, you know and sort of what happened, and how did that affect your trust?

Response
I wasn’t here when this supplier didn’t let the plant down, they had some quality issues and they supplied some products which didn’t work, dirt in it and they, it forced this plant to buy up alternatives because they couldn’t supply. Obviously they did what they, from what I can see from correspondence they were reasonably open and honest about what had gone wrong. They had a problem at the plant, took it down for six weeks, brought it back up running again, had the same problem and so they from the correspondence I’ve seen they were pretty open and honest but it did affect this business and that’s why I suppose we’re looking for an alternative for a while, business didn’t have one. So again as long as they tell you what’s going on. It’s the guys who just, used to have a lot of plastics industry you get an email saying the plant’s gone down we won’t be supplying for three months, calling force majeure, we’ll let you know when you can buy again.

Interviewer
So conversely with the soap supplier apart of course being upfront and communicating did they do anything else to try and sort of recover your trust but then also help you out because of the fact that you were at a pinch?
Response
Yeah sorry I don’t have the details of that. I know that this plant ended up having to make its own particular product so whether they offered any assistance in that I don’t know. Or whether they went and tried to source it somewhere else a supply which is what some of the better guys in the plastics game would do. They’d say we can’t supply but there is an alternative that we can source in line with the pricing until such time as we’re back up and running rather than just putting their hand up and saying sorry we’re cutting you off.

Interviewer
You’re quite right that was sort of what I was getting at as well. That was again in my experience those have been some of the best suppliers. Hey look we know you’re in pinch and it’s on us, this is what’s happened and we’ve organised or it could just be simply late and I will freight it to you so that’s very helpful. Even though it was sort of before your tenure perhaps that you were party to the correspondence, did that tend to affect your future interactions with that supplier, like did it tend to, did it sully the relationship at all. Were you a little bit more dubious of them?

Response
I suppose it drove and I suppose they, the management at the time didn’t follow up with it, but it drove testing a lot of alternative products and I suppose that depends on how long that time goes on. Most people in manufacturing realise that happens. As long as you, you know I’ve got a machine down at the moment and you know it’s going to happen to them at some stage is how they react. Had it carried on and they established another supplier I suppose that supply chain may have been at risk but from what I saw they kept them informed. That’s probably all they could do. I suppose if they’re keeping you informed about what’s happening and the story doesn’t change. It goes from being we’ve run out of raw material to a machine has broken, if the story remains the same throughout, you’re going to have to protect your own business so I suppose eventually they may lose that but the fact that their story didn’t change I suppose that’s why the business side of it, once they were back up on stream they carried on the relationship. It cost this business at the time. Yeah they would have called it some sort of force majeure I imagine so you couldn’t claim on them.

Interviewer
Yeah that’s right, I’ve had a similar experience in the past too but it forced you to look elsewhere didn’t it as a backup or for a backup.

Response
Yeah I’ve done a swot of this place when I came in and that was one of the weakness that we were tied to one, all our eggs in one basket.

Interviewer
Absolutely it’s a big problem.

Response
It’s still there but what it does do, because they’re good suppliers and you’ve got that trust you do feel a little bit obliged to let them know you’re looking elsewhere because again you don’t want them to say, you don’t want them to come visit you. I thought we were supplying.

Interviewer
Yeah your samples up there and what not.

Response
Yeah so I’ve been upfront with them and said I need a backup supplier and preferably from a different part of the world in case Indonesia burnt down.

Interviewer
Which is not entirely unlikely. How did they react to that?

Response
Again the relationship I suppose that this business has got with them is that they accepted and good luck type of thing. I think as long as you don’t use it just as a stick to get the pricing down, you don’t combine in the same email saying talking about pricing and by the way I’m looking at going elsewhere. You do it separately.

Interviewer
That’s right. It’s not an inducement for a discount.

Response
Yeah that’s not uncommon.

Interviewer
One more question. What would you consider a minor and a major trust violation. So what sort of trust violation would you wear with some frustration versus something that would end your relationship?

Response
I suppose the minor ones are really probably around not honouring dates, saying they’re going to be then letting it out at the last minute, but doing that multiple times. You’d still probably see that as mild. As long as the reasons were okay. It’s when they continue, that same scenario can become a major when they continue to do it and they continue to give you different stories against that. I suppose it’s that constant, they look like they’re transparent but you know full well you catch them out lying blatantly lying and that’s hard. It goes from being a relationship to being a transactional relationship. You know the relationship is over when you start pulling out the terms and conditions and saying well what are the, the minute you do that, it’s over. Divorce papers are out. You’ve been to see the lawyer.

Interviewer
You’ve been served. I like that.

Response
Start going round the house what’s mine, what’s hers and you’re gone. Little ones can become, the same thing scan become majors if you catch them out blatantly lying. Sometimes that can be an individual covering their [censored], then it becomes is that individual, it becomes the business then you know it’s to the bone.

Interviewer
They’re characterised by that sort of behaviour.

Response
Yeah if they know full well that their people are just blame the shipping officer, then you say oh come on guys. In this industry they can’t, there’s that many people watching them.
Yeah that’s right lots. Let me ask you one more question, I did say one more. This is a sort of a tangent that’s surfaced. How important is it to you now in this sort of digital day and age to have face to face communication as well as good and email and phone conversation.

Response
Yeah personally I think it’s still important because the closer you see the whites of their eyes and you do get, I just came back from Europe. Part of my trip was looking at alternative suppliers and went all the way to Hamburg for a four hour meeting with someone but you get, we’ve been emailing for 12 months about pricing and all that. To make the final decision to go there, see them, wander about, see the offices you know it makes a big difference that final thing. You couldn’t even do it over Skype, you could be anywhere. Just to rock up is that person you’re talking to the only person that’s any good in the organisation. How you’re greeted when you walk in, all that makes that final decision to know whether that person has as you say whether they’re just the front man and the rest of the organisation is shit or is it through to the bone and the likelihood if they leave and the next person coming in is going to be at the same.

Interviewer
Yeah that’s right. You want to ensure it’s a culture rather than an individual.

Response
Yeah, if you’re going to buy nuts and bolts it’s not a problem but certainly if you get a big supply and in New Zealand you have to go to them, because they come here with all the brochures you like. So you’ve got to travel, you’ve got to go and see them for those big ticket items. I still think it’s a huge part of that final decision making.

Interviewer
I appreciate that, that’s very insightful.
Appendix 5: QCA Raw Data Table

Please find, overleaf, a copy of the raw data table as referenced in Chapter Five.
Appendix 6: QCA Outcome and Causal Conditions Judgement

Worksheets

Please find, overleaf, a copy of the outcome and causal conditions judgement worksheet as referenced in Chapter Five.
Trust Recovery Outcome

To what extent was trust recovered after the main trust violation scenario posed by this participant?

(1 = not at all recovered; 7 = completely recovered)

1  2  3  4  5  6  7
**Trust Recovery Attributions**

To what extent did attributions of **competence** contribute to trust recovery after the main trust violation scenario posed by this participant?

(1 = not at all important; 7 = extremely important)

1 2 3 4 5 6 7

To what extent did attributions of **communication** contribute to trust recovery after the main trust violation scenario posed by this participant?

(1 = not at all important; 7 = extremely important)

1 2 3 4 5 6 7

To what extent did attributions of **satisfaction** contribute to trust recovery after the main trust violation scenario posed by this participant?

(1 = not at all important; 7 = extremely important)

1 2 3 4 5 6 7

To what extent did attributions of **shared values** contribute to trust recovery after the main trust violation scenario posed by this participant?

(1 = not at all important; 7 = extremely important)

1 2 3 4 5 6 7

To what extent did attributions of **integrity** contribute to trust recovery after the main trust violation scenario posed by this participant?

(1 = not at all important; 7 = extremely important)

1 2 3 4 5 6 7
To what extent did attributions of **co-creation** contribute to trust recovery after the main trust violation scenario posed by this participant?

(1 = not at all important; 7 = extremely important)

1 2 3 4 5 6 7

To what extent did attributions of **benevolence** contribute to trust recovery after the main trust violation scenario posed by this participant?

(1 = not at all important; 7 = extremely important)

1 2 3 4 5 6 7

To what extent did attributions of **transparency** contribute to trust recovery after the main trust violation scenario posed by this participant?

(1 = not at all important; 7 = extremely important)

1 2 3 4 5 6 7
Appendix 7: QCA Trust Type and Severity Judgement Worksheets

Please find, overleaf, a copy of the type and severity of trust breach judgement worksheet as referenced in Chapter Five.
Type of Trust Breach

What type (**cognitive-dominant** or **affective-dominant**) of trust breach has occurred in this scenario?

☐ Cognitive-dominant

☐ Affective-dominant
**Severity of Trust Breach**

The trust breach in this scenario is extraordinarily severe

(1 = strongly disagree; 7 = strongly agree)

1 2 3 4 5 6 7

The critical incident in this scenario will severely affect trust in the business relationship

(1 = strongly disagree; 7 = strongly agree)

1 2 3 4 5 6 7

The trust breach in this scenario will serve to terminate the business relationship

(1 = strongly disagree; 7 = strongly agree)

1 2 3 4 5 6 7
Appendix 8: QCA Outcome and Causal Conditions Judgement

Results

Please find, overleaf, a copy of the outcome and causal condition judgement results as referenced in Chapter Five.
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<thead>
<tr>
<th>Participant</th>
<th>Trust Recovery Outcome</th>
<th>Trust Recovery Attributions</th>
</tr>
</thead>
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<td>([To what extent was trust recovered after the main trust violation scenario posed by this participant?](1 = not at all recovered; 7 = completely recovered))</td>
<td>([To what extent did attributions of “XX” contribute to trust recovery after the main trust violation scenario posed by this participant?] (1 = not at all contributing; 7 = very much contributing))</td>
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<td>Competence: 6.00 Communication: 6.33 Satisfaction: 5.00 Shared Values: 5.33 Integrity: 6.67 Co-Creation: 2.00 Benevolence: 5.67 Transparency: 6.33</td>
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<td>2</td>
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<td>3</td>
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Appendix 9: QCA Trust Severity Judgement Results

Please find, overleaf, a copy of the severity of trust breach judgement results as referenced in Chapter Five.
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<tr>
<th>Participant</th>
<th>Severity of Trust Breach</th>
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<td>The trust breach in this scenario is extraordinarily severe.</td>
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<tr>
<td></td>
<td>The critical incident in this scenario will severely affect trust in the business relationship.</td>
</tr>
<tr>
<td></td>
<td>The trust breach in this scenario will serve to terminate the business relationship.</td>
</tr>
<tr>
<td></td>
<td>Severity of trust breach scale mean score.</td>
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<tr>
<td></td>
<td>(1 = disagree; 7 = agree)</td>
</tr>
<tr>
<td></td>
<td>(1 = disagree; 7 = agree)</td>
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<td></td>
<td>(1 = disagree; 7 = agree)</td>
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| 1 | 5.60 | 5.80 | 3.20 | 4.87 |
| 2 | 5.00 | 4.40 | 2.00 | 3.00 |
| 3 | 6.20 | 6.00 | 4.00 | 5.67 |
| 4 | 3.00 | 4.00 | 2.00 | 1.67 |
| 5 | 2.00 | 3.00 | 2.00 | 2.33 |
| 6 | 2.00 | 3.00 | 2.00 | 2.00 |
| 7 | 6.00 | 6.00 | 3.00 | 5.00 |
| 8 | 7.00 | 7.00 | 7.00 | 7.00 |
| 9 | 7.00 | 7.00 | 7.00 | 7.00 |
| 10 | 6.00 | 6.00 | 6.00 | 6.00 |
| 11 | 6.00 | 6.00 | 6.00 | 6.00 |
| 12 | 4.00 | 4.00 | 4.00 | 4.00 |
| 13 | 3.00 | 3.00 | 3.00 | 3.00 |
| 14 | 4.00 | 4.00 | 4.00 | 4.00 |
| 15 | 3.00 | 3.00 | 3.00 | 3.00 |
| 16 | 2.00 | 2.00 | 2.00 | 2.00 |
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| 36 | 7.00 | 7.00 | 7.00 | 7.00 |
| 37 | 7.00 | 7.00 | 7.00 | 7.00 |
| 38 | 7.00 | 7.00 | 7.00 | 7.00 |
| 39 | 7.00 | 7.00 | 7.00 | 7.00 |
| 40 | 7.00 | 7.00 | 7.00 | 7.00 |
Appendix 10: QCA Trust Type Judgement Results

Please find, overleaf, a copy of the type of trust judgement results as referenced in Chapter Five.
<table>
<thead>
<tr>
<th>Participant</th>
<th>Trust Breach Type (What type (cognitive-dominant or affective-dominant) of trust breach has occurred in this scenario?)</th>
<th>Which specific trust breach dimension (for the critical incident) has been violated in this scenario?</th>
<th>Trust breach type coding</th>
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Appendix 11: QCA Pre-Simplification Dataset, First Truth Table

Analysis

Please find, overleaf, a copy of the pre-simplification dataset for the first truth table analysis (causal conditions with no contextual conditions), as referenced in Chapter Five.
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Appendix 12: QCA Pre-Simplification Dataset, Second Truth Table

Analysis

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Appendix 13: QCA Pre-Simplification Dataset, Third Truth Table

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Appendix 14: QCA Pre-Simplification Dataset, Fourth Truth Table

Analysis

Please find, overleaf, a copy of the pre-simplification dataset for the fourth truth table analysis (causal conditions with size of buying organisation contextual condition), as referenced in Chapter Five.
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Appendix 15: QCA Pre-Simplification Dataset, Fifth Truth Table

Analysis

Please find, overleaf, a copy of the pre-simplification dataset for the fifth truth table analysis (causal conditions with individual level of decision-making authority of the focal trustor contextual condition), as referenced in Chapter Five.
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Appendix 16: QCA Analysis Directional Expectations

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Appendix 17: QCA Simplified Dataset, First Truth Table Analysis

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Appendix 18: QCA Simplified Dataset, Second Truth Table Analysis

Please find, overleaf, a copy of the simplified dataset for the second truth table analysis (causal conditions with type of breach contextual condition), as referenced in Chapter Five.
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Appendix 19: QCA Simplified Dataset, Third Truth Table Analysis

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Appendix 20: QCA Simplified Dataset, Fourth Truth Table Analysis

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Appendix 21: QCA Simplified Dataset, Fifth Truth Table Analysis

Please find, overleaf, a copy of the simplified dataset for the fifth truth table analysis (causal conditions with individual level of decision-making authority of the focal trustor contextual condition), as referenced in Chapter Five.
<table>
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<th>comp_cc</th>
<th>comm_cc</th>
<th>satis_cc</th>
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<th>cocr_cc</th>
<th>benv_cc</th>
<th>trans_cc</th>
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<th>recovery_cc</th>
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<th>PRI consist</th>
<th>SYM consist</th>
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</tr>
</tbody>
</table>

Cases:
- comp_cc: 0.284753
- comm_cc: 0.350055
- satis_cc: 0.438202
- sval_cc: 0.471875
- integ_cc: 0.489493
- cocr_cc: 0.532407
- benv_cc: 0.635302
- trans_cc: 0.640546
- auth_cc: 0.732663
- number: 0.864056
- recovery_cc: 0.993852
- cases: 0.990664

Consistency:
- raw consist: 0.993852
- PRI consist: 0.990664
- SYM consist: 0.990664
Appendix 22: QCA Raw Truth Table Outputs, First Truth Table Analysis

Please find, overleaf, a copy of the truth table outputs (complex, intermediate and parsimonious solutions) for the first truth table analysis (causal conditions with no contextual conditions) in the presence and absence of trust recovery, respectively, as referenced in Chapter Five.

Please Note: These are the raw truth table outputs generated by the fsQCA software (Ragin & Davey, 2014) and are not representative of the final, reported results in Chapter Five. The raw truth table outputs feature data prior to assessments of empirical consistency, empirical relevance, conceptual meaningfulness and logical incoherence as detailed further in Chapter Five.
****TRUTH TABLE ANALYSIS****

File: //mac/Home/Desktop/Constant Added QCA File - All Conditions Amended.csv
Model: recovery_cc = f(comp_cc, comm_cc, satis_cc, sval_cc, integ_cc, cocrr_cc, benv_cc, trans_cc)
Algorithm: Quine-McCluskey

--- COMPLEX SOLUTION ---

<table>
<thead>
<tr>
<th>term</th>
<th>raw coverage</th>
<th>unique coverage</th>
<th>consistency</th>
</tr>
</thead>
<tbody>
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<td>comp_cc<em>comm_cc</em>satis_cc<em>sval_cc</em>~sval_cc<em>integ_cc</em>cocr_cc<em>~benv_cc</em>~trans_cc</td>
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<td>0.0592852</td>
<td>1</td>
</tr>
<tr>
<td>comp_cc<em>comm_cc</em>satis_cc<em>sval_cc</em>~sval_cc<em>~cocr_cc</em>~benv_cc*~trans_cc</td>
<td>0.180533</td>
<td>0.0591606</td>
<td>0.967301</td>
</tr>
<tr>
<td>comp_cc<em>temm_cc</em>satis_cc<em>~sval_cc</em>~integ_cc<em>cocr_cc</em>~benv_cc*~trans_cc</td>
<td>0.158301</td>
<td>0.00124514</td>
<td>0.945685</td>
</tr>
<tr>
<td>comp_cc<em>temm_cc</em>satis_cc<em>~sval_cc</em>~cocr_cc<em>~benv_cc</em>~trans_cc</td>
<td>0.125856</td>
<td>0.0941849</td>
<td>0.975857</td>
</tr>
<tr>
<td>comp_cc<em>~comm_cc</em>satis_cc<em>sval_cc</em>~sval_cc<em>integ_cc</em>cocr_cc<em>~benv_cc</em>~trans_cc</td>
<td>0.125856</td>
<td>0.0941849</td>
<td>0.975857</td>
</tr>
<tr>
<td>comp_cc<em>~comm_cc</em>satis_cc<em>sval_cc</em>~sval_cc<em>~cocr_cc</em>~benv_cc*~trans_cc</td>
<td>0.125856</td>
<td>0.0941849</td>
<td>0.975857</td>
</tr>
<tr>
<td>comp_cc<em>~comm_cc</em>satis_cc<em>sval_cc</em>~sval_cc<em>~integ_cc</em>cocr_cc<em>~benv_cc</em>~trans_cc</td>
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</tr>
<tr>
<td>comp_cc<em>~comm_cc</em>satis_cc<em>sval_cc</em>~sval_cc<em>~cocr_cc</em>~benv_cc*~trans_cc</td>
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<td>0.0941849</td>
<td>0.975857</td>
</tr>
<tr>
<td>comp_cc<em>~comm_cc</em>satis_cc<em>sval_cc</em>~sval_cc<em>integ_cc</em>cocr_cc<em>~benv_cc</em>~trans_cc</td>
<td>0.125856</td>
<td>0.0941849</td>
<td>0.975857</td>
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<tr>
<td>comp_cc<em>~comm_cc</em>satis_cc<em>sval_cc</em>~sval_cc<em>~cocr_cc</em>~benv_cc*~trans_cc</td>
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<td>0.0941849</td>
<td>0.975857</td>
</tr>
<tr>
<td>comp_cc<em>~comm_cc</em>satis_cc<em>sval_cc</em>~sval_cc<em>integ_cc</em>cocr_cc<em>~benv_cc</em>~trans_cc</td>
<td>0.125856</td>
<td>0.0941849</td>
<td>0.975857</td>
</tr>
<tr>
<td>comp_cc<em>~comm_cc</em>satis_cc<em>sval_cc</em>~sval_cc<em>~cocr_cc</em>~benv_cc*~trans_cc</td>
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<td>0.0941849</td>
<td>0.975857</td>
</tr>
<tr>
<td>comp_cc<em>satis_cc</em>sval_cc<em>integ_cc</em>cocr_cc<em>~benv_cc</em>~trans_cc</td>
<td>0.125856</td>
<td>0.0941849</td>
<td>0.975857</td>
</tr>
<tr>
<td>comp_cc<em>~comm_cc</em>satis_cc<em>~sval_cc</em>integ_cc<em>cocr_cc</em>~benv_cc*~trans_cc</td>
<td>0.0617138</td>
<td>0.0312616</td>
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</table>

Cases with greater than 0.5 membership in term `comp_cc*satis_cc*sval_cc*integ_cc*benv_cc*trans_cc`: 1 (0.501, 0.951), 14 (0.501, 0.951), 21 (0.501, 0.501), 27 (0.501, 0.501), 38 (0.501, 0.951)

Cases with greater than 0.5 membership in term `comp_cc*comm_cc*satis_cc*sval_cc*~sval_cc*~cocr_cc*~benv_cc*~trans_cc`: 5 (0.501, 0.951), 6 (0.501, 0.501)

Cases with greater than 0.5 membership in term `comp_cc*satis_cc*sval_cc*~sval_cc*integ_cc*cocr_cc*~benv_cc*trans_cc`: 11 (0.501, 0.501), 15 (0.501, 0.881)

Cases with greater than 0.5 membership in term `comp_cc*satis_cc*sval_cc*~sval_cc*~cocr_cc*~benv_cc*trans_cc`: 8 (0.949, 0.951), 16 (0.501, 0.501)

Cases with greater than 0.5 membership in term `comp_cc*satis_cc*sval_cc*~sval_cc*~cocr_cc*~benv_cc*trans_cc`: 2 (0.951, 1), 13 (0.501, 0.951), 15 (0.501, 0.881)

Cases with greater than 0.5 membership in term `comp_cc*satis_cc*sval_cc*~sval_cc*~cocr_cc*~benv_cc*trans_cc`: 3 (0.0219205, 1), 1 (0.501, 0.951), 14 (0.501, 0.951)

Cases with greater than 0.5 membership in term `comp_cc*satis_cc*sval_cc*~sval_cc*~cocr_cc*~benv_cc*trans_cc`: 4 (0.501, 1)
********************
*TRUTH TABLE ANALYSIS*
********************

File: //mac/Home/Desktop/Constant Added QCA File - All Conditions Amended.csv
Model: recovery_cc = f(comp_cc, comm_cc, satis_cc, sval_cc, integ_cc, coccr_cc, benv_cc, trans_cc)
Algorithm: Quine-McCluskey

--- INTERMEDIATE SOLUTION ---
frequency cutoff: 1
consistency cutoff: 0.88159
Assumptions:
  * comp_cc (present)
  * comm_cc (present)
  * satis_cc (present)
  * sval_cc (present)
  * integ_cc (present)
  * coccr_cc (present)
  * benv_cc (present)
  * trans_cc (present)

<table>
<thead>
<tr>
<th>Term</th>
<th>Raw Coverage</th>
<th>Unique Coverage</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>comp_cc<em>comm_cc</em>satis_cc*~cocr_cc</td>
<td>0.312804</td>
<td>0.0488231</td>
<td>0.98048</td>
</tr>
<tr>
<td>comp_cc<em>comm_cc</em>satis_cc*~integ_cc</td>
<td>0.311184</td>
<td>0.0562959</td>
<td>0.914699</td>
</tr>
<tr>
<td>comp_cc<em>comm_cc</em>satis_cc*~sval_cc</td>
<td>0.409204</td>
<td>0.0482003</td>
<td>0.933246</td>
</tr>
<tr>
<td>comp_cc<em>satis_cc</em>integ_cc<em>benv_cc</em>~trans_cc</td>
<td>0.124611</td>
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<td>0.975622</td>
</tr>
<tr>
<td>comp_cc<em>satis_cc</em>~sval_cc<em>integ_cc</em>benv_cc</td>
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<tr>
<td>comp_cc<em>satis_cc</em>sval_cc<em>integ_cc</em>cocr_cc*~trans_cc</td>
<td>0.153388</td>
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<td>0.980167</td>
</tr>
<tr>
<td>comp_cc<em>satis_cc</em>sval_cc<em>integ_cc</em>benv_cc*trans_cc</td>
<td>0.206065</td>
<td>0.0591606</td>
<td>1</td>
</tr>
</tbody>
</table>

Solution coverage: 0.72288
Solution consistency: 0.961086

Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*~cocr_cc: 14 (0.949, 0.951),
  3 (0.821, 0.991), 1 (0.821, 0.951), 5 (0.501, 0.951),
  6 (0.501, 0.501)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*~integ_cc: 4 (0.951, 1),
  11 (0.821, 0.501), 6 (0.501, 0.501), 15 (0.501, 0.881)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*~sval_cc: 2 (0.951, 1),
  11 (0.821, 0.501), 13 (0.821, 0.951), 1 (0.669, 0.951),
  14 (0.669, 0.951), 5 (0.501, 0.951), 6 (0.501, 0.501),
  15 (0.501, 0.881), 21 (0.501, 0.501)
Cases with greater than 0.5 membership in term comp_cc*satis_cc*integ_cc*benv_cc*~trans_cc: 18 (0.501, 0.951)
Cases with greater than 0.5 membership in term comp_cc*satis_cc*sval_cc*integ_cc*cocr_cc*~trans_cc: 8 (0.949, 0.951),
  14 (0.501, 0.951), 18 (0.501, 0.951), 21 (0.501, 0.501)
Cases with greater than 0.5 membership in term comp_cc*satis_cc*sval_cc*integ_cc*benv_cc*trans_cc: 1 (0.501, 0.951),
  14 (0.501, 0.951), 21 (0.501, 0.501), 27 (0.501, 0.501),
  38 (0.501, 0.951)
*TRUTH TABLE ANALYSIS*

File: //mac/Home/Desktop/Constant Added QCA File - All Conditions Amended.csv
Model: recovery_cc = f(comp_cc, comm_cc, satis_cc, sval_cc, integ_cc, cocr_cc, benv_cc, trans_cc)
Algorithm: Quine-McCluskey

--- PARSIMONIOUS SOLUTION ---
frequency cutoff: 1
consistency cutoff: 0.88159

<table>
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<th>Term</th>
<th>Raw Coverage</th>
<th>Unique Coverage</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
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<td>-sval_cc*benv_cc</td>
<td>0.246295</td>
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<tr>
<td>comp_cc<em>comm_cc</em>-cocr_cc</td>
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<tr>
<td>comp_cc<em>comm_cc</em>satis_cc*-integ_cc</td>
<td>0.311104</td>
<td>0.0282725</td>
<td>0.914699</td>
</tr>
<tr>
<td>comp_cc<em>comm_cc</em>satis_cc*-sval_cc</td>
<td>0.409204</td>
<td>0.0482002</td>
<td>0.933248</td>
</tr>
<tr>
<td>comp_cc<em>integ_cc</em>-trans_cc</td>
<td>0.308195</td>
<td>0.0310126</td>
<td>0.970963</td>
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<tr>
<td>comp_cc<em>satis_cc</em>-cocr_cc*-trans_cc</td>
<td>0.248163</td>
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<td>0.964191</td>
</tr>
</tbody>
</table>

solution coverage: 0.773073
solution consistency: 0.931003

Cases with greater than 0.5 membership in term -sval_cc*benv_cc: 1 (0.501, 0.951), 14 (0.501, 0.951), 18 (0.501, 0.951), 21 (0.501, 0.501), 27 (0.501, 0.501), 38 (0.501, 0.951)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*-cocr_cc: 3 (0.951, 0.991), 1 (0.951, 0.951), 6 (0.951, 0.501), 14 (0.949, 0.951), 5 (0.501, 0.951)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*-integ_cc: 4 (0.951, 1), 11 (0.821, 0.501), 6 (0.501, 0.501), 15 (0.501, 0.881)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*-sval_cc: 2 (0.951, 1), 11 (0.821, 0.501), 13 (0.821, 0.951), 1 (0.669, 0.951), 14 (0.669, 0.951), 5 (0.501, 0.951), 6 (0.501, 0.501), 15 (0.501, 0.881), 21 (0.501, 0.501)
Cases with greater than 0.5 membership in term comp_cc*integ_cc*-trans_cc: 5 (0.951, 0.951), 8 (0.949, 0.951), 16 (0.501, 0.501), 18 (0.501, 0.951)
Cases with greater than 0.5 membership in term comp_cc*satis_cc*cocr_cc*-trans_cc: 8 (0.949, 0.951), 16 (0.501, 0.501), 11 (0.501, 0.501)
**TRUTH TABLE ANALYSIS**

**File**: \mac\Home\Desktop\Constant Added QCA File - All Conditions Amended.csv

**Model**: recovery\_cc = f(comp\_cc, comm\_cc, satis\_cc, sval\_cc, integ\_cc, cocr\_cc, benv\_cc, trans\_cc)

**Algorithm**: Quine-McCluskey

--- COMPLEX SOLUTION ---

frequency cutoff: 1
consistency cutoff: 0.868543

<table>
<thead>
<tr>
<th>Term</th>
<th>Raw Coverage</th>
<th>Unique Coverage</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>~comp_cc*comm_cc*satis_cc*sval_cc*integ_cc*cocr_cc*benv_cc</td>
<td>0.304653</td>
<td>0.26748</td>
<td>1</td>
</tr>
<tr>
<td>comp_cc*comm_cc*satis_cc*sval_cc*integ_cc*cocr_cc*benv_cc*trans_cc</td>
<td>0.0859159</td>
<td>0.0187955</td>
<td>0.980925</td>
</tr>
<tr>
<td>~comp_cc*comm_cc*satis_cc*sval_cc*integ_cc*cocr_cc*benv_cc * trans_cc</td>
<td>0.159302</td>
<td>0.0187995</td>
<td>0.909394</td>
</tr>
<tr>
<td>comp_cc*comm_cc*satis_cc*sval_cc*integ_cc*cocr_cc*benv_cc</td>
<td>0.176009</td>
<td>0.0187955</td>
<td>0.907407</td>
</tr>
<tr>
<td>~comp_cc*satis_cc*sval_cc*integ_cc*cocr_cc*benv_cc*trans_cc</td>
<td>0.0610225</td>
<td>0</td>
<td>0.972056</td>
</tr>
<tr>
<td>comp_cc*satis_cc*sval_cc*integ_cc*cocr_cc*benv_cc*trans_cc</td>
<td>0.1124043</td>
<td>0.0376745</td>
<td>0.950088</td>
</tr>
<tr>
<td>comp_cc*satis_cc*sval_cc*integ_cc*cocr_cc*benv_cc</td>
<td>0.104252</td>
<td>0.0187955</td>
<td>0.994422</td>
</tr>
<tr>
<td>~comp_cc*comm_cc*satis_cc*sval_cc*integ_cc*cocr_cc*benv_cc*trans_cc</td>
<td>0.0545643</td>
<td>0</td>
<td>0.997483</td>
</tr>
<tr>
<td>comp_cc*comm_cc*satis_cc*sval_cc*integ_cc*cocr_cc*benv_cc*trans_cc</td>
<td>0.1162019</td>
<td>0.0374238</td>
<td>0.903896</td>
</tr>
<tr>
<td>comp_cc*comm_cc*satis_cc*sval_cc*integ_cc*cocr_cc*benv_cc*trans_cc</td>
<td>0.0461532</td>
<td>0.0187955</td>
<td>0.9946</td>
</tr>
</tbody>
</table>

Solution coverage: 0.798513
Solution consistency: 0.952376

Cases with greater than 0.5 membership in term ~comp\_cc\*comm\_cc\*satis\_cc\*sval\_cc\*integ\_cc\*cocr\_cc\*benv\_cc: 34 (0.999, 0.999), 30 (0.999, 0.999), 33 (0.999, 0.999), 39 (0.999, 0.999), 22 (0.501, 0.949)

Cases with greater than 0.5 membership in term ~comp\_cc\*comm\_cc\*satis\_cc\*sval\_cc\*integ\_cc\*cocr\_cc\*benv\_cc\*trans\_cc: 9 (0.949, 0.999), 11 (0.501, 0.949)

Cases with greater than 0.5 membership in term ~comp\_cc\*comm\_cc\*satis\_cc\*sval\_cc\*integ\_cc\*cocr\_cc\*benv\_cc\*trans\_cc: 35 (0.949, 0.949), 28 (0.501, 0.999), 25 (0.501, 0.949)

Cases with greater than 0.5 membership in term ~comp\_cc\*comm\_cc\*satis\_cc\*sval\_cc\*integ\_cc\*cocr\_cc\*benv\_cc\*trans\_cc: 35 (0.949, 0.949), 28 (0.501, 0.999), 25 (0.501, 0.949)

Cases with greater than 0.5 membership in term ~comp\_cc\*comm\_cc\*satis\_cc\*sval\_cc\*integ\_cc\*cocr\_cc\*benv\_cc\*trans\_cc: 20 (0.951, 0.949), 12 (0.501, 0.499), 19 (0.501, 0.499)

Cases with greater than 0.5 membership in term ~comp\_cc\*comm\_cc\*satis\_cc\*sval\_cc\*integ\_cc\*cocr\_cc\*benv\_cc\*trans\_cc: 12 (0.501, 0.499), 20 (0.501, 0.499), 19 (0.501, 0.499)

Cases with greater than 0.5 membership in term ~comp\_cc\*comm\_cc\*satis\_cc\*sval\_cc\*integ\_cc\*cocr\_cc\*benv\_cc\*trans\_cc: 12 (0.501, 0.499), 20 (0.501, 0.499), 19 (0.501, 0.499)

Cases with greater than 0.5 membership in term ~comp\_cc\*comm\_cc\*satis\_cc\*sval\_cc\*integ\_cc\*cocr\_cc\*benv\_cc\*trans\_cc: 12 (0.501, 0.499), 20 (0.501, 0.499), 19 (0.501, 0.499)

Cases with greater than 0.5 membership in term ~comp\_cc\*comm\_cc\*satis\_cc\*sval\_cc\*integ\_cc\*cocr\_cc\*benv\_cc\*trans\_cc: 12 (0.501, 0.499), 20 (0.501, 0.499), 19 (0.501, 0.499)

Cases with greater than 0.5 membership in term ~comp\_cc\*comm\_cc\*satis\_cc\*sval\_cc\*integ\_cc\*cocr\_cc\*benv\_cc\*trans\_cc: 12 (0.501, 0.499), 20 (0.501, 0.499), 19 (0.501, 0.499)

Cases with greater than 0.5 membership in term ~comp\_cc\*comm\_cc\*satis\_cc\*sval\_cc\*integ\_cc\*cocr\_cc\*benv\_cc\*trans\_cc: 12 (0.501, 0.499), 20 (0.501, 0.499), 19 (0.501, 0.499)

Cases with greater than 0.5 membership in term ~comp\_cc\*comm\_cc\*satis\_cc\*sval\_cc\*integ\_cc\*cocr\_cc\*benv\_cc\*trans\_cc: 12 (0.501, 0.499), 20 (0.501, 0.499), 19 (0.501, 0.499)

Cases with greater than 0.5 membership in term ~comp\_cc\*comm\_cc\*satis\_cc\*sval\_cc\*integ\_cc\*cocr\_cc\*benv\_cc\*trans\_cc: 12 (0.501, 0.499), 20 (0.501, 0.499), 19 (0.501, 0.499)

Cases with greater than 0.5 membership in term ~comp\_cc\*comm\_cc\*satis\_cc\*sval\_cc\*integ\_cc\*cocr\_cc\*benv\_cc\*trans\_cc: 12 (0.501, 0.499), 20 (0.501, 0.499), 19 (0.501, 0.499)
File: //mac/Home/Desktop/Constant Added QCA File - All Conditions Amended.csv
Model: recovery\_cc = f(comp\_cc, comm\_cc, sat\_cc, sval\_cc, integ\_cc, cocr\_cc, benv\_cc, trans\_cc)
Algorithm: Quine-McCluskey
--- INTERMEDIATE SOLUTION ---
frequency cutoff: 1
consistency cutoff: 0.868543
Assumptions:
- comp\_cc (absent)
- comm\_cc (absent)
- sat\_cc (absent)
- sval\_cc (absent)
- integ\_cc (absent)
- cocr\_cc (absent)
- benv\_cc (absent)
- trans\_cc (absent)

\[ \text{solution coverage: 0.914042} \]
\[ \text{solution consistency: 0.843249} \]

<table>
<thead>
<tr>
<th>raw coverage</th>
<th>unique coverage</th>
<th>consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.600284</td>
<td>0.0933089</td>
<td>0.949838</td>
</tr>
<tr>
<td>0.119266</td>
<td>0.0070169</td>
<td>0.931707</td>
</tr>
<tr>
<td>0.0754741</td>
<td>0.00175422</td>
<td>0.920049</td>
</tr>
<tr>
<td>0.129772</td>
<td>0.0187119</td>
<td>0.863295</td>
</tr>
<tr>
<td>0.101746</td>
<td>0</td>
<td>0.64</td>
</tr>
<tr>
<td>0.178264</td>
<td>0.0750147</td>
<td>0.850199</td>
</tr>
<tr>
<td>0.307994</td>
<td>0</td>
<td>0.940201</td>
</tr>
<tr>
<td>0.160555</td>
<td>0.05059565</td>
<td>0.905894</td>
</tr>
<tr>
<td>0.235068</td>
<td>0.0375909</td>
<td>0.929019</td>
</tr>
</tbody>
</table>

Cases with greater than 0.5 membership in term -satis\_cc*~sval\_cc*~benv\_cc: 34 (0.999, 0.999), 30 (0.999, 0.999), 32 (0.999, 0.999), 33 (0.999, 0.999), 39 (0.999, 0.999), 40 (0.999, 0.999), 9 (0.949, 0.999), 22 (0.949, 0.949), 31 (0.949, 0.499), 22 (0.949, 0.949), 31 (0.949, 0.499)

Cases with greater than 0.5 membership in term -comp\_cc*~sval\_cc*~benv\_cc: 34 (0.999, 0.999), 30 (0.999, 0.999), 32 (0.999, 0.999), 33 (0.999, 0.999), 27 (0.869, 0.499), 28 (0.501, 0.499),

Cases with greater than 0.5 membership in term -comp\_cc*~sval\_cc*~satis\_cc: 34 (0.999, 0.999), 30 (0.999, 0.999), 32 (0.999, 0.999), 33 (0.999, 0.999), 27 (0.869, 0.499), 28 (0.501, 0.499),

Cases with greater than 0.5 membership in term -comp\_cc*~sval\_cc*~integ\_cc: 20 (0.949, 0.999), 22 (0.501, 0.499), 27 (0.501, 0.499), 20 (0.501, 0.499), 19 (0.501, 0.499), 21 (0.501, 0.499),

Cases with greater than 0.5 membership in term -comp\_cc*~sval\_cc*~trans\_cc: 20 (0.949, 0.999), 17 (0.501, 0.499), 19 (0.501, 0.499), 21 (0.501, 0.499), 12 (0.951, 0.999), 17 (0.501, 0.499), 19 (0.501, 0.499), 21 (0.501, 0.499), 20 (0.501, 0.499), 19 (0.501, 0.499), 21 (0.501, 0.499), 12 (0.951, 0.999), 17 (0.951, 0.499), 19 (0.501, 0.499), 21 (0.501, 0.499), 20 (0.501, 0.499), 19 (0.501, 0.499), 21 (0.501, 0.499), 12 (0.951, 0.999), 24 (0.501, 0.499),

Cases with greater than 0.5 membership in term -comp\_cc*~sval\_cc*~trans\_cc: 37 (0.999, 0.949),

Cases with greater than 0.5 membership in term -comp\_cc*~sval\_cc*~trans\_cc: 37 (0.999, 0.949),

Cases with greater than 0.5 membership in term -comp\_cc*~sval\_cc*~trans\_cc: 37 (0.999, 0.949),

Cases with greater than 0.5 membership in term -comp\_cc*~sval\_cc*~trans\_cc: 37 (0.999, 0.949),

Cases with greater than 0.5 membership in term -comp\_cc*~sval\_cc*~trans\_cc: 37 (0.999, 0.949),

Cases with greater than 0.5 membership in term -comp\_cc*~sval\_cc*~trans\_cc: 37 (0.999, 0.949),

Cases with greater than 0.5 membership in term -comp\_cc*~sval\_cc*~trans\_cc: 37 (0.999, 0.949),

Cases with greater than 0.5 membership in term -comp\_cc*~sval\_cc*~trans\_cc: 37 (0.999, 0.949),

Cases with greater than 0.5 membership in term -comp\_cc*~sval\_cc*~trans\_cc: 37 (0.999, 0.949),
File: //mac/Home/Desktop/Constant Added QCA File - All Conditions Amended.csv
Model: recovery_cc = f(comp_cc, comm_cc, satis_cc, sval_cc, integ_cc, cocr_cc, benv_cc, trans_cc)
Algorithm: Quine-McCluskey

--- FARSIMONIOUS SOLUTION ---
frequency cutoff: 1
consistency cutoff: 0.868543

<table>
<thead>
<tr>
<th>Term</th>
<th>Raw coverage</th>
<th>Unique coverage</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>~satis_cc</td>
<td>0.694654</td>
<td>0.305346</td>
<td>0.922454</td>
</tr>
<tr>
<td>comp_cc<em>integ_cc</em>cocr_cc*benv_cc</td>
<td>0.110146</td>
<td>0.84</td>
<td></td>
</tr>
<tr>
<td>sval_cc<em>integ_cc</em>cocr_cc*trans_cc</td>
<td>0.176560</td>
<td>0.850199</td>
<td></td>
</tr>
<tr>
<td>~comm_cc*sval_cc</td>
<td>0.986161</td>
<td>0.00175422</td>
<td>0.601461</td>
</tr>
<tr>
<td>~comm_cc*cocr_cc</td>
<td>0.979868</td>
<td>0.805924</td>
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<tr>
<td><del>comp_cc*comm_cc</del>cocr_cc</td>
<td>0.131359</td>
<td>0.853629</td>
<td></td>
</tr>
<tr>
<td>~comp_cc<em>comm_cc</em>integ_cc</td>
<td>0.280177</td>
<td>0.933562</td>
<td></td>
</tr>
<tr>
<td>~comp_cc<em>integ_cc</em>benv_cc</td>
<td>0.09815389</td>
<td>0.625</td>
<td></td>
</tr>
<tr>
<td>~comp_cc<em>integ_cc</em>cocr_cc</td>
<td>0.148567</td>
<td>0.790039</td>
<td></td>
</tr>
<tr>
<td>~integ_cc<em>cocr_cc</em>~trans_cc</td>
<td>0.160555</td>
<td>0.874034</td>
<td></td>
</tr>
<tr>
<td>~sval_cc<em>cocr_cc</em>~trans_cc</td>
<td>0.1644773</td>
<td>0.886119</td>
<td></td>
</tr>
<tr>
<td>~comp_cc<em>~integ_cc</em>cocr_cc</td>
<td>0.263721</td>
<td>0.92213</td>
<td></td>
</tr>
<tr>
<td>~comp_cc<em>~integ_cc</em>trans_cc</td>
<td>0.253863</td>
<td>0.926304</td>
<td></td>
</tr>
<tr>
<td>solution coverage: 0.939521</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>solution consistency: 0.809778</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cases with greater than 0.5 membership in term ~satis_cc: 22 (0.999, 0.999),
34 (0.999, 0.999), 30 (0.999, 0.999), 31 (0.999, 0.999), 10 (0.999, 0.999), 33 (0.999, 0.999), 40 (0.999, 0.999),
26 (0.949, 0.999)

Cases with greater than 0.5 membership in term comp_cc*integ_cc*cocr_cc*benv_cc: 12 (0.951, 0.499),
20 (0.501, 0.499), 19 (0.501, 0.499), 21 (0.501, 0.499)

Cases with greater than 0.5 membership in term sval_cc*integ_cc*cocr_cc*trans_cc: 20 (0.951, 0.499),
17 (0.951, 0.499), 12 (0.501, 0.499), 24 (0.501, 0.499)

Cases with greater than 0.5 membership in term ~comm_cc*sval_cc: 16 (0.951, 0.499),
31 (0.951, 0.499)

Cases with greater than 0.5 membership in term ~comm_cc*cocr_cc: 16 (0.951, 0.499)

Cases with greater than 0.5 membership in term ~comp_cc*comm_cc~cocr_cc: 25 (0.949, 0.499),
27 (0.949, 0.499), 28 (0.501, 0.499)

Cases with greater than 0.5 membership in term ~comp_cc*comp_cc*~integ_cc: 37 (0.999, 0.499),
23 (0.949, 0.499), 35 (0.949, 0.499), 40 (0.501, 0.499)

Cases with greater than 0.5 membership in term ~integ_cc*cocr_cc*~trans_cc: 9 (0.949, 0.999),
35 (0.949, 0.949), 11 (0.501, 0.499)

Cases with greater than 0.5 membership in term sval_cc*cocr_cc*~trans_cc: 9 (0.999, 0.999),
35 (0.951, 0.949), 11 (0.501, 0.499)

Cases with greater than 0.5 membership in term ~comp_cc*~integ_cc*~trans_cc: 9 (0.999, 0.999),
35 (0.951, 0.949), 11 (0.501, 0.499)

Cases with greater than 0.5 membership in term ~comp_cc*~integ_cc*cocr_cc: 37 (0.999, 0.949),
23 (0.949, 0.949), 39 (0.951, 0.949), 40 (0.501, 0.499)
Appendix 23: QCA Raw Truth Table Outputs, Second Truth Table Analysis

Please find, overleaf, a copy of the truth table outputs (complex, intermediate and parsimonious solutions) for the second truth table analysis (causal conditions with type of breach contextual condition) in the presence and absence of trust recovery, respectively, as referenced in Chapter Five.

Please Note: These are the raw truth table outputs generated by the fsQCA software (Ragin & Davey, 2014) and are not representative of the final, reported results in Chapter Five. The raw truth table outputs feature data prior to assessments of empirical consistency, empirical relevance, conceptual meaningfulness and logical incoherence as detailed further in Chapter Five.
File: //mac/Home/Desktop/Constant Added QCA File - All Conditions Amended.csv
Model: recovery_cc = f(comp_cc, comm_cc, sati_cc, sval_cc, integ_cc, cocr_cc, benv_cc, trans_cc, type_cc)
Algorithm: Quine-McCluskey

--- COMPLEX SOLUTION ---
frequency cutoff: 1
consistency cutoff: 0.923773

comm_cc*sati_cc*sval_cc*integ_cc*benv_cc*trans_cc*~type_cc
comp_cc*comm_cc*sati_cc*~sval_cc*~integ_cc*~benv_cc*~trans_cc*~type_cc
comp_cc*comm_cc*sati_cc*~sval_cc*cocr_cc*~benv_cc*trans_cc*~type_cc
comp_cc*~comm_cc*sati_cc*~sval_cc*integ_cc*cocr_cc*benv_cc*~trans_cc*~type_cc
comp_cc*~comm_cc*sati_cc*sval_cc*integ_cc*cocr_cc*benv_cc*trans_cc*type_cc
comp_cc*~comm_cc*sati_cc*sval_cc*~integ_cc*cocr_cc*benv_cc*trans_cc*type_cc
comp_cc*~comm_cc*sati_cc*~sval_cc*integ_cc*cocrr_cc*benv_cc*~trans_cc*~type_cc
comp_cc*~comm_cc*sati_cc*~sval_cc*~integ_cc*cotrr_cc*benv_cc*trans_cc*~type_cc

solution coverage: 0.606614
solution consistency: 0.957817

Cases with greater than 0.5 membership in term comm_cc*sati_cc*sval_cc*integ_cc*benv_cc*trans_cc*~type_cc: 1 (0.501, 0.951), 14 (0.501, 0.951), 21 (0.501, 0.501), 27 (0.501, 0.501), 38 (0.501, 0.951)
Cases with greater than 0.5 membership in term comp_cc*comp_cc*sati_cc*sval_cc*integ_cc*benv_cc*trans_cc*~type_cc: 11 (0.821, 0.501), 6 (0.501, 0.501)
Cases with greater than 0.5 membership in term comp_cc*comp_cc*sati_cc*sval_cc*ocor_cc*benv_cc*trans_cc*~type_cc: 2 (0.951, 1), 13 (0.501, 0.951), 15 (0.501, 0.881)
Cases with greater than 0.5 membership in term comp_cc*comp_cc*sati_cc*~sval_cc*integ_cc*cocrr_cc*benv_cc*~trans_cc*~type_cc: 19 (0.501, 0.501), 21 (0.501, 0.501)
Cases with greater than 0.5 membership in term comp_cc*~comm_cc*sati_cc*sval_cc*integ_cc*cocrr_cc*~benv_cc*trans_cc*~type_cc: 5 (0.501, 0.951)
Cases with greater than 0.5 membership in term comp_cc*~comm_cc*sati_cc*sval_cc*~integ_cc*cocrr_cc*benv_cc*trans_cc*~type_cc: 8 (0.949, 0.951)
Cases with greater than 0.5 membership in term comp_cc*~comm_cc*sati_cc*sval_cc*~integ_cc*cocrr_cc*benv_cc*trans_cc*~type_cc: 16 (0.501, 0.501)
Cases with greater than 0.5 membership in term comp_cc*comp_cc*sati_cc*sval_cc*~integ_cc*cocrr_cc*benv_cc*trans_cc*~type_cc: 3 (0.531, 0.991)
Cases with greater than 0.5 membership in term comp_cc*comp_cc*sati_cc*sval_cc*~integ_cc*cocrr_cc*benv_cc*trans_cc*~type_cc: 4 (0.501, 1)
File: //mac/Home/Desktop/Constant Added QCA File - All Conditions Amended.csv
Model: recovery_cc = f(comp_cc, comm_cc, satis_cc, sval_cc, integ_cc, cocr_cc, benv_cc, trans_cc, type_cc)
Algorithm: Quine-McCluskey

--- INTERMEDIATE SOLUTION ---
frequency cutoff: 1
consistency cutoff: 0.923773
Assumptions:
- comp_cc (present)
- comm_cc (present)
- satis_cc (present)
- sval_cc (present)
- integ_cc (present)
- cocr_cc (present)
- benv_cc (present)
- trans_cc (present)

<table>
<thead>
<tr>
<th>Term</th>
<th>raw coverage</th>
<th>unique coverage</th>
<th>consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>comp_cc<em>comm_cc</em>satis_cc<em>~integ_cc</em>~type_cc</td>
<td>0.240192</td>
<td>0.053619</td>
<td>0.909026</td>
</tr>
<tr>
<td>comp_cc<em>comm_cc</em>satis_cc<em>~sval_cc</em>integ_cc</td>
<td>0.271204</td>
<td>0.020169</td>
<td>0.966704</td>
</tr>
<tr>
<td>comp_cc<em>satis_cc</em>integ_cc<em>benv_cc</em>~type_cc</td>
<td>0.171503</td>
<td>0.030576</td>
<td>0.996743</td>
</tr>
<tr>
<td>comp_cc<em>satis_cc</em>~sval_cc<em>integ_cc</em>~type_cc</td>
<td>0.198406</td>
<td>0.059160</td>
<td>0.996743</td>
</tr>
<tr>
<td>comp_cc<em>satis_cc</em>integ_cc<em>cocr_cc</em>~type_cc</td>
<td>0.094596</td>
<td>0.021920</td>
<td>0.962611</td>
</tr>
<tr>
<td>comp_cc<em>satis_cc</em>~sval_cc<em>integ_cc</em>cocr_cc*~type_cc</td>
<td>0.073047</td>
<td>0.030576</td>
<td>0.959117</td>
</tr>
<tr>
<td>comp_cc<em>comm_cc</em>satis_cc<em>~integ_cc</em>cocr_cc<em>benv_cc</em>trans_cc</td>
<td>0.061713</td>
<td>0.030701</td>
<td>1</td>
</tr>
<tr>
<td>comp_cc<em>comm_cc</em>satis_cc<em>cocr_cc</em>~type_cc</td>
<td>0.150579</td>
<td>0</td>
<td>0.97343</td>
</tr>
<tr>
<td>comp_cc<em>comm_cc</em>satis_cc<em>cocr_cc</em>~trans_cc</td>
<td>0.151762</td>
<td>0</td>
<td>0.942746</td>
</tr>
</tbody>
</table>

solution coverage: 0.644601
solution consistency: 0.956566

Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*~integ_cc*~type_cc: 11 (0.821, 0.501), 6 (0.501, 0.501), 15 (0.501, 0.881)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*~sval_cc*integ_cc: 13 (0.821, 0.951), 1 (0.501, 0.951), 2 (0.501, 1), 5 (0.501, 0.951), 14 (0.501, 0.951), 21 (0.501, 0.501)
Cases with greater than 0.5 membership in term comp_cc*satis_cc*integ_cc*benv_cc*~type_cc: 1 (0.501, 0.951), 14 (0.501, 0.951), 18 (0.501, 0.951), 19 (0.501, 0.501), 21 (0.501, 0.501)
Cases with greater than 0.5 membership in term comm_cc*satis_cc*integ_cc*benv_cc*trans_cc*~type_cc: 1 (0.501, 0.951), 14 (0.501, 0.951), 19 (0.501, 0.501), 21 (0.501, 0.501)
Cases with greater than 0.5 membership in term comp_cc*satis_cc*~sval_cc*integ_cc*cocr_cc*~trans_cc*type_cc: 3 (0.821, 0.991), 5 (0.501, 0.951)
Cases with greater than 0.5 membership in term comp_cc*satis_cc*~sval_cc*integ_cc*cocr_cc*~trans_cc*type_cc: 16 (0.501, 0.501)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*~sval_cc*integ_cc*cocr_cc*benv_cc*trans_cc: 4 (0.501, 1)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*cocr_cc*~trans_cc*~type_cc: 8 (0.949, 0.951), 11 (0.501, 0.501)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*~integ_cc*cocr_cc*~trans_cc: 8 (0.949, 0.951)
**TRUTH TABLE ANALYSIS**

File: //mac/Home/Desktop/Constant Added QCA File - All Conditions Amended.csv
Model: recovery_cc = f(comp_cc, comm_cc, satis_cc, sval_cc, integ_cc, cocr_cc, benv_cc, trans_cc, type_cc)
Algorithm: Quine-McCluskey

--- PARSIMONIOUS SOLUTION ---
frequency cutoff: 1
consistency cutoff: 0.923773

<table>
<thead>
<tr>
<th>Term</th>
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<th>Unique Coverage</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>benv_cc*~type_cc</td>
<td>0.231785</td>
<td>0.087869</td>
<td>0.997588</td>
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<tr>
<td>comp_cc<em>comm_cc</em>~cocr_cc</td>
<td>0.328995</td>
<td>0.0650144</td>
<td>0.905709</td>
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<tr>
<td>comp_cc<em>comm_cc</em>satis_cc*~integ_cc</td>
<td>0.311184</td>
<td>0.0282724</td>
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<td>comp_cc<em>comm_cc</em>satis_cc*~sval_cc</td>
<td>0.409204</td>
<td>0.0482003</td>
<td>0.933248</td>
</tr>
<tr>
<td>comp_cc<em>integ_cc</em>~trans_cc</td>
<td>0.308195</td>
<td>0.0310126</td>
<td>0.970963</td>
</tr>
<tr>
<td>comp_cc<em>satis_cc</em>cocr_cc*~trans_cc</td>
<td>0.248163</td>
<td>0.0</td>
<td>0.964191</td>
</tr>
</tbody>
</table>

Solution coverage: 0.798792
Solution consistency: 0.933076

Cases with greater than 0.5 membership in term benv_cc*~type_cc: 1 (0.501, 0.951),
14 (0.501, 0.951), 18 (0.501, 0.951), 19 (0.501, 0.501),
21 (0.501, 0.501), 27 (0.501, 0.501), 38 (0.501, 0.951)

Cases with greater than 0.5 membership in term comp_cc*comm_cc*~cocr_cc:
1 (0.951, 0.951), 3 (0.951, 0.951), 6 (0.951, 0.501), 14 (0.945, 0.951),
5 (0.501, 0.951)

Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*~integ_cc:
4 (0.951, 1), 11 (0.821, 0.501), 6 (0.501, 0.501), 15 (0.501, 0.881)

Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*~sval_cc:
2 (0.951, 1), 11 (0.821, 0.501), 13 (0.821, 0.951), 1 (0.669, 0.951),
14 (0.669, 0.951), 5 (0.501, 0.501), 6 (0.501, 0.501),
15 (0.501, 0.881), 21 (0.501, 0.501)

Cases with greater than 0.5 membership in term comp_cc*integ_cc*~trans_cc:
5 (0.951, 0.951), 8 (0.949, 0.951), 16 (0.501, 0.501), 18 (0.501, 0.951)

Cases with greater than 0.5 membership in term comp_cc*satis_cc*cocr_cc*~trans_cc:
8 (0.949, 0.951), 11 (0.501, 0.501), 16 (0.501, 0.501)
**TRUTH TABLE ANALYSIS**

--- COMPLEX SOLUTION ---

<table>
<thead>
<tr>
<th>Term</th>
<th>Coverage</th>
<th>Unique Coverage</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td><del>comp_cc<em>~comm_cc</em>satis_cc</del>sval_cc<em>~integ_cc</em>cocr_cc<em>~benv_cc</em>trans_cc*~type_cc</td>
<td>0.211219</td>
<td>0.0205079</td>
<td>1</td>
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<tr>
<td><del>comp_cc<em>~comm_cc</em>satis_cc</del>sval_cc<em>~integ_cc</em>cocr_cc<em>~benv_cc</em>trans_cc*~type_cc</td>
<td>0.293769</td>
<td>0.0832045</td>
<td>0.875817</td>
</tr>
<tr>
<td>comp_cc<em><del>satis_cc</del>sval_cc</em>~integ_cc<em>cocr_cc</em>~benv_cc<em>trans_cc</em>~type_cc</td>
<td>0.111937</td>
<td>0.018879</td>
<td>0.947932</td>
</tr>
<tr>
<td>comp_cc<em><del>satis_cc</del>sval_cc</em>~integ_cc<em>cocr_cc</em>~benv_cc<em>trans_cc</em>~type_cc</td>
<td>0.097778</td>
<td>0.0802355</td>
<td>1</td>
</tr>
<tr>
<td>comp_cc<em><del>satis_cc</del>sval_cc</em>~integ_cc<em>cocr_cc</em>~benv_cc<em>trans_cc</em>~type_cc</td>
<td>0.0426865</td>
<td>0.0187954</td>
<td>0.950698</td>
</tr>
<tr>
<td>comp_cc<em><del>satis_cc</del>sval_cc</em>~integ_cc<em>cocr_cc</em>~benv_cc<em>trans_cc</em>~type_cc</td>
<td>0.0577646</td>
<td>0.0375073</td>
<td>0.999278</td>
</tr>
<tr>
<td>comp_cc<em><del>satis_cc</del>sval_cc</em>~integ_cc<em>cocr_cc</em>~benv_cc<em>trans_cc</em>~type_cc</td>
<td>0.03379</td>
<td>0.0187954</td>
<td>0.98779</td>
</tr>
<tr>
<td>comp_cc<em><del>satis_cc</del>sval_cc</em>~integ_cc<em>cocr_cc</em>~benv_cc<em>trans_cc</em>~type_cc</td>
<td>0.0514995</td>
<td>0.0375073</td>
<td>0.999278</td>
</tr>
<tr>
<td>comp_cc<em><del>satis_cc</del>sval_cc</em>~integ_cc<em>cocr_cc</em>~benv_cc<em>trans_cc</em>~type_cc</td>
<td>0.0314928</td>
<td>0.0187954</td>
<td>0.994723</td>
</tr>
<tr>
<td>comp_cc<em><del>satis_cc</del>sval_cc</em>~integ_cc<em>cocr_cc</em>~benv_cc<em>trans_cc</em>~type_cc</td>
<td>0.0616072</td>
<td>0.0376744</td>
<td>0.993266</td>
</tr>
</tbody>
</table>

Solution coverage: 0.666736
Solution consistency: 0.965057

Cases with greater than 0.5 membership in term ~comp_cc*~comm_cc*satis_cc~sval_cc*~integ_cc*cocr_cc*~benv_cc*~trans_cc*~type_cc: 30 (0.99, 0.999), 32 (0.99, 0.999), 33 (0.99, 0.999), 39 (0.99, 0.999)

Cases with greater than 0.5 membership in term ~comp_cc*~comm_cc*satis_cc~sval_cc*~integ_cc*cocr_cc*~benv_cc*~trans_cc: 30 (0.999, 0.999), 32 (0.999, 0.999), 33 (0.999, 0.999), 34 (0.999, 0.999), 35 (0.999, 0.999), 36 (0.999, 0.999), 37 (0.999, 0.999), 38 (0.999, 0.999), 39 (0.999, 0.999), 40 (0.999, 0.999)

Cases with greater than 0.5 membership in term comp_cc*~satis_cc~sval_cc*~integ_cc*cocr_cc*~benv_cc*~trans_cc*~type_cc: 10 (0.501, 0.949), 26 (0.501, 0.949), 35 (0.949, 0.949)

Cases with greater than 0.5 membership in term comp_cc*~satis_cc~sval_cc*~integ_cc*cocr_cc*~benv_cc*~trans_cc: 11 (0.501, 0.949), 25 (0.501, 0.949), 28 (0.501, 0.949), 29 (0.501, 0.949), 30 (0.501, 0.949), 31 (0.501, 0.949), 32 (0.501, 0.949), 33 (0.501, 0.949), 34 (0.501, 0.949), 35 (0.501, 0.949), 36 (0.501, 0.949), 37 (0.501, 0.949), 38 (0.501, 0.949), 39 (0.501, 0.949), 40 (0.501, 0.949)

Cases with greater than 0.5 membership in term comp_cc*~satis_cc~sval_cc*~integ_cc*cocr_cc*~benv_cc*~trans_cc: 9 (0.949, 0.949), 16 (0.501, 0.949), 17 (0.501, 0.949)
**TRUTH TABLE ANALYSIS**

File: //mac/Home/Desktop/Constant Added QCA File - All Conditions Amended.csv
Model: \( \neg \text{recovery}_{cc} = f(\text{comp}_{cc}, \text{comm}_{cc}, \text{satis}_{cc}, \text{sval}_{cc}, \text{integ}_{cc}, \text{cocr}_{cc}, \text{benv}_{cc}, \text{trans}_{cc}, \text{type}_{cc}) \)
Algorithm: Quine-McCluskey

--- INTERMEDIATE SOLUTION ---

**frequency cutoff**: 1
**consistency cutoff**: 0.851505

**Assumptions**:
- \( \neg \text{comp}_{cc} \) (absent)
- \( \neg \text{comm}_{cc} \) (absent)
- \( \neg \text{satis}_{cc} \) (absent)
- \( \neg \text{sval}_{cc} \) (absent)
- \( \neg \text{integ}_{cc} \) (absent)
- \( \neg \text{cocr}_{cc} \) (absent)
- \( \neg \text{benv}_{cc} \) (absent)
- \( \neg \text{trans}_{cc} \) (absent)

<table>
<thead>
<tr>
<th>Term</th>
<th>Raw Coverage</th>
<th>Unique Coverage</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \neg \text{satis}<em>{cc} \land \neg \text{sval}</em>{cc} \land \neg \text{type}<em>{cc} \land \neg \text{benv}</em>{cc} )</td>
<td>0.419347</td>
<td>0.111352</td>
<td>0.939196</td>
</tr>
<tr>
<td>( \text{sval}<em>{cc} \land \neg \text{benv}</em>{cc} \land \text{trans}_{cc} )</td>
<td>0.123924</td>
<td>0.036386</td>
<td>0.733861</td>
</tr>
<tr>
<td>( \neg \text{satis}<em>{cc} \land \neg \text{sval}</em>{cc} \land \text{trans}_{cc} )</td>
<td>0.384513</td>
<td>0.039094</td>
<td>0.999023</td>
</tr>
<tr>
<td>( \neg \text{comp}<em>{cc} \land \neg \text{sval}</em>{cc} \land \text{integ}<em>{cc} \land \text{benv}</em>{cc} )</td>
<td>0.227466</td>
<td>0.117701</td>
<td>0.999228</td>
</tr>
<tr>
<td>( \neg \text{comp}<em>{cc} \land \neg \text{cocr}</em>{cc} \land \text{benv}<em>{cc} \land \text{trans}</em>{cc} )</td>
<td>0.073089</td>
<td>0.018795</td>
<td>0.635648</td>
</tr>
<tr>
<td>( \neg \text{comp}<em>{cc} \land \text{sval}</em>{cc} \land \text{cocr}<em>{cc} \land \text{benv}</em>{cc} \land \text{trans}_{cc} )</td>
<td>0.059078</td>
<td>0.037507</td>
<td>0.927327</td>
</tr>
<tr>
<td>( \text{sval}<em>{cc} \land \text{integ}</em>{cc} \land \text{cocr}<em>{cc} \land \text{benv}</em>{cc} \land \text{trans}_{cc} )</td>
<td>0.073089</td>
<td>0.013365</td>
<td>0.969846</td>
</tr>
<tr>
<td>( \text{comp}<em>{cc} \land \text{comm}</em>{cc} \land \text{sval}<em>{cc} \land \text{cocr}</em>{cc} \land \text{benv}<em>{cc} \land \text{trans}</em>{cc} )</td>
<td>0.091011</td>
<td>0.007016</td>
<td>0.999541</td>
</tr>
<tr>
<td>( \text{comp}<em>{cc} \land \text{comm}</em>{cc} \land \text{sval}<em>{cc} \land \text{integ}</em>{cc} \land \text{cocr}<em>{cc} \land \text{benv}</em>{cc} \land \text{trans}_{cc} )</td>
<td>0.074089</td>
<td>0.007016</td>
<td>1</td>
</tr>
</tbody>
</table>

**solution coverage**: 0.81923
**solution consistency**: 0.890534

Cases with greater than 0.5 membership in term \( \neg \text{satis}_{cc} \land \neg \text{sval}_{cc} \land \neg \text{benv}_{cc} \land \text{type}_{cc} \): 30 (0.99, 0.999),
32 (0.99, 0.999), 33 (0.99, 0.999), 39 (0.99, 0.999),
40 (0.99, 0.999), 26 (0.949, 0.999), 10 (0.669, 0.949)
Cases with greater than 0.5 membership in term \( \text{sval}_{cc} \land \neg \text{benv}_{cc} \land \text{trans}_{cc} \) : 17 (0.951, 0.949)
Cases with greater than 0.5 membership in term \( \neg \text{satis}_{cc} \land \neg \text{sval}_{cc} \land \text{integ}_{cc} \land \text{benv}_{cc} \land \text{trans}_{cc} \) : 30 (0.999, 0.999),
32 (0.999, 0.999), 33 (0.999, 0.999), 34 (0.999, 0.999),
9 (0.949, 0.999), 22 (0.949, 0.949)
Cases with greater than 0.5 membership in term \( \neg \text{comp}_{cc} \land \text{sval}_{cc} \land \text{integ}_{cc} \land \text{benv}_{cc} \land \text{trans}_{cc} \) : 34 (0.99, 0.999),
37 (0.99, 0.949), 22 (0.949, 0.949), 23 (0.949, 0.949),
35 (0.949, 0.949)
Cases with greater than 0.5 membership in term \( \neg \text{comp}_{cc} \land \text{cocr}_{cc} \land \text{benv}_{cc} \land \text{trans}_{cc} \land \text{type}_{cc} \) : 16 (0.949, 0.949)
Cases with greater than 0.5 membership in term \( \neg \text{comp}_{cc} \land \text{sval}_{cc} \land \text{integ}_{cc} \land \text{cocr}_{cc} \land \text{benv}_{cc} \land \text{trans}_{cc} \land \text{type}_{cc} \) : 25 (0.501, 0.949)
Cases with greater than 0.5 membership in term \( \text{comp}_{cc} \land \text{comm}_{cc} \land \text{sval}_{cc} \land \text{cocr}_{cc} \land \text{benv}_{cc} \land \text{trans}_{cc} \land \text{type}_{cc} \) : 28 (0.949, 0.999)
Cases with greater than 0.5 membership in term \( \text{comp}_{cc} \land \text{comm}_{cc} \land \text{sval}_{cc} \land \text{integ}_{cc} \land \text{cocr}_{cc} \land \text{benv}_{cc} \land \text{trans}_{cc} \land \text{type}_{cc} \) : 11 (0.501, 0.949)
Cases with greater than 0.5 membership in term \( \text{comp}_{cc} \land \text{comm}_{cc} \land \text{sval}_{cc} \land \text{cocr}_{cc} \land \text{benv}_{cc} \land \text{trans}_{cc} \land \text{type}_{cc} \) : 25 (0.669, 0.949)

No cases with greater than 0.5 membership in term \( \neg \text{comp}_{cc} \land \text{comm}_{cc} \land \text{sval}_{cc} \land \text{integ}_{cc} \land \text{cocr}_{cc} \land \text{benv}_{cc} \land \text{trans}_{cc} \land \text{type}_{cc} \)
TRUTH TABLE ANALYSIS

File: //mac/Home/Desktop/Constant Added QCA File - All Conditions Amended . csv
Model: \(-\text{recovery}_{cc} = f(\text{comp}_{cc}, \text{comm}_{cc}, \text{satis}_{cc}, \text{sval}_{cc}, \text{integ}_{cc}, \text{cocr}_{cc}, \text{benv}_{cc}, \text{trans}_{cc}, \text{type}_{cc})\)
Algorithm: Quine-McCluskey

--- PARSIMONIOUS SOLUTION ---
frequency cutoff: 1
consistency cutoff: 0.851505

<table>
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<th>Term</th>
<th>Raw Coverage</th>
<th>Unique Coverage</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
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<td>sval_{cc} * -benv_{cc} * trans_{cc}</td>
<td>0.128811</td>
<td>0.0187955</td>
<td>0.715878</td>
</tr>
<tr>
<td>cocr_{cc} * -benv_{cc} * type_{cc}</td>
<td>0.199064</td>
<td>0.0116949</td>
<td>0.948941</td>
</tr>
<tr>
<td>-satis_{cc} * -benv_{cc}</td>
<td>0.673795</td>
<td>0.0116949</td>
<td>0.948941</td>
</tr>
<tr>
<td>-satis_{cc} * sval_{cc}</td>
<td>0.600284</td>
<td>0.0116949</td>
<td>0.948941</td>
</tr>
<tr>
<td>-integ_{cc} * cocr_{cc} * trans_{cc}</td>
<td>0.160555</td>
<td>0.164773</td>
<td>0.886119</td>
</tr>
<tr>
<td>-comp_{cc} * -benv_{cc} * type_{cc}</td>
<td>0.303066</td>
<td>0.00375687</td>
<td>0.976976</td>
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<tr>
<td>-comp_{cc} * sval_{cc} * type_{cc}</td>
<td>0.265475</td>
<td>0.0187119</td>
<td>0.97248</td>
</tr>
<tr>
<td>-comp_{cc} * comm_{cc} * cocr_{cc} * -benv_{cc}</td>
<td>0.131359</td>
<td>0.0187119</td>
<td>0.97248</td>
</tr>
<tr>
<td>-comp_{cc} * integ_{cc} * cocr_{cc} * -benv_{cc}</td>
<td>0.148567</td>
<td>0.0187119</td>
<td>0.97248</td>
</tr>
</tbody>
</table>

solution coverage: 0.864255
solution consistency: 0.85589

Cases with greater than 0.5 membership in term sval_{cc} * -benv_{cc} * trans_{cc}: 17 (0.951, 0.949)
Cases with greater than 0.5 membership in term cocr_{cc} * -benv_{cc} * type_{cc}: 9 (0.999, 0.999), 37 (0.951, 0.949), 23 (0.951, 0.949), 35 (0.951, 0.949), 16 (0.949, 0.499)
Cases with greater than 0.5 membership in term -satis_{cc} * -benv_{cc}: 10 (0.999, 0.949), 22 (0.999, 0.949), 30 (0.999, 0.949), 32 (0.999, 0.949), 33 (0.999, 0.949), 34 (0.999, 0.949), 39 (0.999, 0.949), 40 (0.999, 0.949), 9 (0.949, 0.999), 26 (0.949, 0.999)
Cases with greater than 0.5 membership in term -satis_{cc} * sval_{cc}: 30 (0.999, 0.999), 32 (0.999, 0.999), 33 (0.999, 0.999), 34 (0.999, 0.999), 39 (0.999, 0.999), 40 (0.999, 0.999), 9 (0.949, 0.999), 26 (0.949, 0.999), 22 (0.949, 0.949), 26 (0.949, 0.999), 35 (0.951, 0.949), 16 (0.949, 0.499)

Cases with greater than 0.5 membership in term -integ_{cc} * cocr_{cc} * trans_{cc}: 9 (0.949, 0.949), 35 (0.949, 0.949), 11 (0.501, 0.499)
Cases with greater than 0.5 membership in term -sval_{cc} * cocr_{cc} * trans_{cc}: 9 (0.999, 0.999), 35 (0.951, 0.499), 11 (0.501, 0.499)
Cases with greater than 0.5 membership in term -satis_{cc} * cocr_{cc} * -benv_{cc}: 34 (0.999, 0.949), 37 (0.999, 0.949), 22 (0.949, 0.949), 23 (0.949, 0.949), 28 (0.949, 0.949)
Cases with greater than 0.5 membership in term -cocr_{cc} * -benv_{cc}: 34 (0.999, 0.949), 37 (0.999, 0.949), 22 (0.949, 0.949), 23 (0.949, 0.949), 28 (0.949, 0.949)
Cases with greater than 0.5 membership in term -comp_{cc} * cocr_{cc} * -benv_{cc}: 25 (0.949, 0.949), 28 (0.501, 0.501)
Cases with greater than 0.5 membership in term -comp_{cc} * integ_{cc} * cocr_{cc} * -benv_{cc}: 28 (0.949, 0.949), 25 (0.501, 0.499)
Appendix 24: QCA Raw Truth Table Outputs, Third Truth Table Analysis

Please find, overleaf, a copy of the truth table outputs (complex, intermediate and parsimonious solutions) for the third truth table analysis (causal conditions with severity of breach contextual condition) in the presence and absence of trust recovery, respectively, as referenced in Chapter Five.

**Please Note:** These are the raw truth table outputs generated by the fsQCA software (Ragin & Davey, 2014) and are not representative of the final, reported results in Chapter Five. The raw truth table outputs feature data prior to assessments of empirical consistency, empirical relevance, conceptual meaningfulness and logical incoherence as detailed further in Chapter Five.
File: //mac/Home/Desktop/Constant Added QCA File - All Conditions Amended.csv
Model: recovery_cc = f(comp_cc, comm_cc, satis_cc, sval_cc, integ_cc, cocr_cc, benv_cc, trans_cc, severity_cc)
Algorithm: Quine-McCluskey

--- COMPLEX SOLUTION ---
frequency cutoff: 1
consistency cutoff: 0.894283

<table>
<thead>
<tr>
<th>Term</th>
<th>Coverage</th>
<th>Unique Coverage</th>
<th>Consistency</th>
</tr>
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<tbody>
<tr>
<td>comp_cc<em>comm_cc</em>satis_cc<em>~sval_cc</em>~integ_cc<em>~cocr_cc</em>~benv_cc<em>~trans_cc</em>~severity_cc</td>
<td>0.205692</td>
<td>0.0591606</td>
<td>1</td>
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<tr>
<td>comp_cc<em>comm_cc</em>satis_cc<em>~sval_cc</em>~integ_cc<em>~benv_cc</em>trans_cc*~severity_cc</td>
<td>0.132893</td>
<td>0.0616515</td>
<td>0.852918</td>
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<td>comp_cc<em>comm_cc</em>satis_cc<em>~sval_cc</em>~integ_cc<em>cocr_cc</em>trans_cc*~severity_cc</td>
<td>0.131461</td>
<td>0.0561714</td>
<td>0.977767</td>
</tr>
<tr>
<td>comp_cc<em>~comm_cc</em>satis_cc<em>~sval_cc</em>integ_cc<em>cocr_cc</em>benv_cc<em>~trans_cc</em>severity_cc</td>
<td>0.135571</td>
<td>0.0211732</td>
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<td>0.0516253</td>
<td>0.0280234</td>
<td>0.894283</td>
</tr>
<tr>
<td>comp_cc<em>~comm_cc</em>satis_cc<em>sval_cc</em>~integ_cc<em>cocr_cc</em>benv_cc<em>trans_cc</em>severity_cc</td>
<td>0.0562336</td>
<td>0.0280234</td>
<td>0.847534</td>
</tr>
<tr>
<td>comp_cc<em>comm_cc</em>satis_cc<em>~sval_cc</em>~integ_cc<em>cocr_cc</em>benv_cc<em>~trans_cc</em>~severity_cc</td>
<td>0.0512941</td>
<td>0.0560468</td>
<td>1</td>
</tr>
<tr>
<td>comp_cc<em>~comm_cc</em>satis_cc<em>~sval_cc</em>~integ_cc<em>cocr_cc</em>benv_cc<em>~trans_cc</em>~severity_cc</td>
<td>0.0548013</td>
<td>0.0267779</td>
<td>0.948276</td>
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<tr>
<td>comp_cc<em>~comm_cc</em>satis_cc<em>~sval_cc</em>~integ_cc<em>cocr_cc</em>benv_cc<em>trans_cc</em>~severity_cc</td>
<td>0.0613401</td>
<td>0.0311372</td>
<td>1</td>
</tr>
<tr>
<td>comp_cc<em>~comm_cc</em>satis_cc<em>~sval_cc</em>~integ_cc<em>cocr_cc</em>benv_cc<em>trans_cc</em>~severity_cc</td>
<td>0.0498194</td>
<td>0.0301408</td>
<td>1</td>
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</tbody>
</table>

Cases with greater than 0.5 membership in term comm_cc*satis_cc*sval_cc*~integ_cc*benv_cc*trans_cc*~severity_cc: 1 (0.501,0.951), 14 (0.501,0.951), 21 (0.501,0.501), 27 (0.501,0.501), 39 (0.501,0.951)
Cases with greater than 0.5 membership in term comp_cc*~comm_cc*satis_cc*~sval_cc*~integ_cc*cocr_cc*benv_cc*~trans_cc*~severity_cc: 11 (0.821,0.501), 6 (0.501,0.501)
Cases with greater than 0.5 membership in term comp_cc*~comm_cc*satis_cc*sval_cc*~integ_cc*cocr_cc*benv_cc*~trans_cc*~severity_cc: 13 (0.501,0.951), 1 (0.501,0.951), 21 (0.501,0.501)
Cases with greater than 0.5 membership in term comp_cc*~comm_cc*satis_cc*~sval_cc*~integ_cc*cocr_cc*benv_cc*trans_cc*~severity_cc: 3 (0.809,0.991), 1 (0.501,0.951), 14 (0.501,0.951)
Cases with greater than 0.5 membership in term comp_cc*~comm_cc*satis_cc*~sval_cc*~integ_cc*cocr_cc*benv_cc*~trans_cc*severity_cc: 8 (0.949,0.951)
Cases with greater than 0.5 membership in term comp_cc*~comm_cc*satis_cc*~sval_cc*~integ_cc*cocr_cc*benv_cc*~trans_cc*~severity_cc: 18 (0.501,0.951)
Cases with greater than 0.5 membership in term comp_cc*~comm_cc*satis_cc*~sval_cc*~integ_cc*cocr_cc*benv_cc*~trans_cc*severity_cc: 5 (0.501,0.951)
Cases with greater than 0.5 membership in term comp_cc*~comm_cc*satis_cc*~sval_cc*~integ_cc*cocr_cc*benv_cc*~trans_cc*~severity_cc: 16 (0.501,0.501)
Cases with greater than 0.5 membership in term comp_cc*~comm_cc*satis_cc*~sval_cc*~integ_cc*cocr_cc*benv_cc*~trans_cc*severity_cc: 15 (0.501,0.951)
Cases with greater than 0.5 membership in term comp_cc*~comm_cc*satis_cc*~sval_cc*~integ_cc*cocr_cc*benv_cc*~trans_cc*~severity_cc: 4 (0.501,1)
Cases with greater than 0.5 membership in term comp_cc*~comm_cc*satis_cc*~sval_cc*~integ_cc*cocr_cc*benv_cc*~trans_cc*~severity_cc: 12 (0.501,0.501)
***************
TRUTH TABLE ANALYSIS
***************

File: //mac/Home/Desktop/Constant Added QCA File - All Conditions Amended.csv
Model: recovery_cc = f(comp_cc, comm_cc, satis_cc, sval_cc, integ_cc, cocr_cc, benv_cc, trans_cc, severity_cc)
Algorithm: Quine-McCluskey

--- INTERMEDIATE SOLUTION ---
frequency cutoff: 1
consistency cutoff: 0.894283
Assumptions:
comp_cc (present)
comm_cc (present)
satis_cc (present)
sval_cc (present)
integ_cc (present)
cocr_cc (present)
benv_cc (present)
trans_cc (present)

<table>
<thead>
<tr>
<th>raw coverage</th>
<th>unique coverage</th>
<th>consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.310686</td>
<td>0.0280234</td>
<td>0.931305</td>
</tr>
<tr>
<td>0.11563</td>
<td>0</td>
<td>0.922574</td>
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<td>0.113399</td>
<td>0.0280234</td>
<td>0.973262</td>
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<td>0.205692</td>
<td>0.0591606</td>
<td>0.967105</td>
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<tr>
<td>0.277936</td>
<td>0</td>
<td>0.92428</td>
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<td>0.380558</td>
<td>0.0498476</td>
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<tr>
<td>0.214908</td>
<td>0</td>
<td>0.958077</td>
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<td>0.271024</td>
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<td>0.965704</td>
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<td>0.141549</td>
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<td>0.941549</td>
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<td>0.139681</td>
<td>0.000747263</td>
<td>0.976194</td>
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<td>0.161602</td>
<td>0</td>
<td>0.981839</td>
</tr>
<tr>
<td>0.085936</td>
<td>0</td>
<td>0.968035</td>
</tr>
</tbody>
</table>

solution coverage: 0.596095
solution consistency: 0.955976

Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*~integ_cc*~severity_cc:
4 (0.951, 1), 11 (0.821, 0.951), 6 (0.501, 0.951)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*integ_cc*severity_cc:
5 (0.501, 0.951), 12 (0.501, 0.501)
Cases with greater than 0.5 membership in term comp_cc*satis_cc*integ_cc*benv_cc*severity_cc:
12 (0.501, 0.501), 18 (0.501, 0.951)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*~sval_cc*~severity_cc:
2 (0.951, 1), 11 (0.821, 0.951), 13 (0.821, 0.951)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*integ_cc*~trans_cc:
8 (0.949, 0.951), 11 (0.821, 0.501)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*~cocr_cc*benv_cc*~severity_cc:
3 (0.809, 0.991), 1 (0.501, 0.951)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*integ_cc*~cocr_cc*benv_cc:
3 (0.821, 0.991), 1 (0.501, 0.951)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*~integ_cc*cocr_cc*trans_cc:
4 (0.801, 1), 15 (0.501, 0.951)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*cocr_cc*trans_cc*severity_cc:
12 (0.501, 0.501), 15 (0.501, 0.881)
**TRUTH TABLE ANALYSIS**

File: //mac/Home/Desktop/Constant Added QCA File - All Conditions Amended.csv
Model: recovery_cc = f(comp_cc, comm_cc, sati_cc, sval_cc, integ_cc, cocr_cc, benv_cc, trans_cc, severity_cc)
Algorithm: Quine-McCluskey

--- PARSIMONIOUS SOLUTION ---

<table>
<thead>
<tr>
<th>raw coverage</th>
<th>unique coverage</th>
<th>consistency</th>
</tr>
</thead>
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<tr>
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<td>0.328995</td>
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<td>0.247851</td>
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<td>0.409204</td>
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</tr>
<tr>
<td>0.308195</td>
<td>0.0029917</td>
<td>0.970963</td>
</tr>
<tr>
<td>0.308195</td>
<td>0.0029917</td>
<td>0.970963</td>
</tr>
<tr>
<td>0.248163</td>
<td>0.0029917</td>
<td>0.970963</td>
</tr>
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</table>

Solution coverage: 0.77519
Solution consistency: 0.93117

Cases with greater than 0.5 membership in term ~sval_cc*benv_cc:
- 1 (0.501, 0.951), 14 (0.501, 0.951), 18 (0.501, 0.951), 21 (0.501, 0.501), 27 (0.501, 0.501), 38 (0.501, 0.951)

Cases with greater than 0.5 membership in term comp_cc*cornm_cc*~cocr_cc:
- 1 (0.951, 0.951), 3 (0.951, 0.991), 6 (0.951, 0.501), 14 (0.949, 0.951), 5 (0.501, 0.951)

Cases with greater than 0.5 membership in term comp_cc*sati_cc*severity_cc:
- 5 (0.951, 0.951), 12 (0.501, 0.501), 15 (0.501, 0.881), 16 (0.501, 0.501), 18 (0.501, 0.951)

Cases with greater than 0.5 membership in term comp_cc*cornm_cc*satis_cc*~integ_cc:
- 4 (0.951, 1), 11 (0.821, 0.501), 6 (0.501, 0.951)

Cases with greater than 0.5 membership in term comp_cc*cornm_cc*satis_cc*~sval_cc:
- 2 (0.951, 1), 11 (0.821, 0.951), 13 (0.821, 0.951), 1 (0.669, 0.951), 5 (0.501, 0.951), 6 (0.501, 0.501), 15 (0.501, 0.881), 21 (0.501, 0.501)

Cases with greater than 0.5 membership in term comp_cc*cornm_cc*satis_cc*~trans_cc:
- 8 (0.949, 0.951), 16 (0.501, 0.501), 18 (0.501, 0.951)

Cases with greater than 0.5 membership in term comp_cc*sati_cc*cocr_cc*~trans_cc:
- 8 (0.949, 0.951), 11 (0.821, 0.501), 5 (0.501, 0.951), 6 (0.501, 0.501)

Cases with greater than 0.5 membership in term comp_cc*sati_cc*cocr_cc*~trans_cc:
- 8 (0.949, 0.951), 11 (0.501, 0.501), 16 (0.501, 0.501)
**TRUTH TABLE ANALYSIS**

---

**Model:** recovery_co - f(comp_co, comp_co, satis_co, sval_co, integ_co, benv_co, trans_co, severity_co)

**Algorithm:** Quine-McCluskey

---

**COMPLEX SOLUTION**

**Frequency cutoff:** 1

**Consistency cutoff:** 0.856278

---

<table>
<thead>
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<th>consistency</th>
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<tr>
<td>&lt;comp_co•&lt;satis_co•&lt;&lt;sval_co•&lt;integ_co•&lt;cocr_co•&lt;benv_co•&lt;trans_co•&lt;severity_co&gt;</td>
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<td>0.955637</td>
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<td>0.99349</td>
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**Solution coverage:** 0.752402

**Solution consistency:** 0.956595

---

Cases with greater than 0.5 membership in term <comp_co•<comp_co•<satis_co•<sval_co•<integ_co•<cocr_co•<benv_co•<trans_co•<severity_co>: 32
(0.999, 0.999), 30 (0.999, 0.999), 29 (0.994, 0.999)

Cases with greater than 0.5 membership in term <comp_co•<satis_co•<sval_co•<integ_co•<cocr_co•<benv_co•<trans_co•<severity_co>: 33
(0.999, 0.999), 39 (0.951, 0.999), 34 (0.501, 0.999)

Cases with greater than 0.5 membership in term <comp_co•<satis_co•<sval_co•<integ_co•<cocr_co•<benv_co•<trans_co•<severity_co>: 35
(0.949, 0.949), 11 (0.501, 0.999)

Cases with greater than 0.5 membership in term <comp_co•<comp_co•<satis_co•<sval_co•<integ_co•<cocr_co•<benv_co•<trans_co•<severity_co>: 23
(0.501, 0.999), 40 (0.501, 0.999)

Cases with greater than 0.5 membership in term <comp_co•<comp_co•<satis_co•<sval_co•<integ_co•<cocr_co•<benv_co•<trans_co•<severity_co>: 25
(0.501, 0.999), 27 (0.501, 0.999)

Cases with greater than 0.5 membership in term <comp_co•<satis_co•<sval_co•<integ_co•<cocr_co•<benv_co•<trans_co•<severity_co>: 10 (0.501, 0.999),
26 (0.501, 0.999)

Cases with greater than 0.5 membership in term <comp_co•<satis_co•<sval_co•<integ_co•<cocr_co•<benv_co•<trans_co•<severity_co>: 17 (0.501, 0.999),
19 (0.501, 0.999)

Cases with greater than 0.5 membership in term <comp_co•<comp_co•<satis_co•<sval_co•<integ_co•<cocr_co•<benv_co•<trans_co•<severity_co>: 20 (0.501, 0.999),
19 (0.501, 0.999), 21 (0.501, 0.999)

Cases with greater than 0.5 membership in term <comp_co•<comp_co•<satis_co•<sval_co•<integ_co•<cocr_co•<benv_co•<trans_co•<severity_co>: 20 (0.951, 0.999),
28 (0.501, 0.999), 19 (0.501, 0.999)

Cases with greater than 0.5 membership in term <comp_co•<comp_co•<satis_co•<sval_co•<integ_co•<cocr_co•<benv_co•<trans_co•<severity_co>: 31
(0.501, 0.499)

Cases with greater than 0.5 membership in term <comp_co•<comp_co•<satis_co•<sval_co•<integ_co•<cocr_co•<benv_co•<trans_co•<severity_co>: 28
(0.501, 0.499)

Cases with greater than 0.5 membership in term <comp_co•<comp_co•<satis_co•<sval_co•<integ_co•<cocr_co•<benv_co•<trans_co•<severity_co>: 20
(0.501, 0.499)

Cases with greater than 0.5 membership in term <comp_co•<comp_co•<satis_co•<sval_co•<integ_co•<cocr_co•<benv_co•<trans_co•<severity_co>: 9
(0.949, 0.999)

Cases with greater than 0.5 membership in term <comp_co•<comp_co•<satis_co•<sval_co•<integ_co•<cocr_co•<benv_co•<trans_co•<severity_co>: 16
(0.501, 0.499)
TRUTH TABLE ANALYSIS

File: C:/Users/dfrankli/Downloads/Constant Added QCA File - All Conditions Amended.csv
Model: \(-\text{recovery}_{cc} = f(\text{comp}_{cc}, \text{comm}_{cc}, \text{satis}_{cc}, \text{sval}_{cc}, \text{integ}_{cc}, \text{cocr}_{cc}, \text{benv}_{cc}, \text{trans}_{cc}, \text{severity}_{cc})\)
Algorithm: Quine-McCluskey

--- INTERMEDIATE SOLUTION ---

<table>
<thead>
<tr>
<th>Assumptions</th>
<th>raw coverage</th>
<th>unique coverage</th>
<th>consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\neg\text{comp}_{cc}) (absent)</td>
<td>0.229513</td>
<td>0.00710052</td>
<td>0.96319</td>
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<tr>
<td>(\neg\text{comm}_{cc}) (absent)</td>
<td>0.325379</td>
<td>0.133573</td>
<td>0.926783</td>
</tr>
<tr>
<td>(\neg\text{satis}_{cc}) (absent)</td>
<td>0.101856</td>
<td>0.0</td>
<td>0.84</td>
</tr>
<tr>
<td>(\neg\text{sval}_{cc}) (absent)</td>
<td>0.178264</td>
<td>0.0766019</td>
<td>0.850199</td>
</tr>
<tr>
<td>(\neg\text{integ}_{cc}) (absent)</td>
<td>0.3674715</td>
<td>0.053379</td>
<td>0.949958</td>
</tr>
<tr>
<td>(\neg\text{cocr}_{cc}) (absent)</td>
<td>0.369643</td>
<td>0.0548662</td>
<td>0.955838</td>
</tr>
<tr>
<td>(\neg\text{benv}_{cc}) (absent)</td>
<td>0.058615</td>
<td>0.0187119</td>
<td>0.955742</td>
</tr>
<tr>
<td>(\neg\text{trans}_{cc}) (absent)</td>
<td>0.177011</td>
<td>0.0187555</td>
<td>0.900361</td>
</tr>
</tbody>
</table>

solution coverage: 0.875365
solution consistency: 0.876537

Cases with greater than 0.5 membership in term \(-\text{comp}_{cc}\cdot\neg\text{sval}_{cc}\cdot\neg\text{cocr}_{cc}\cdot\neg\text{severity}_{cc}\): 32 (0.999, 0.999), 30 (0.999, 0.999), 29 (0.994, 0.999), 25 (0.669, 0.949), 27 (0.669, 0.499)
Cases with greater than 0.5 membership in term \(-\text{satis}_{cc}\cdot\neg\text{sval}_{cc}\cdot\text{benv}_{cc}\cdot\text{severity}_{cc}\): 33 (0.999, 0.999), 39 (0.951, 0.999), 22 (0.949, 0.949), 26 (0.949, 0.999), 34 (0.501, 0.999), 10 (0.501, 0.949)
Cases with greater than 0.5 membership in term \(\text{comp}_{cc}\cdot\text{integ}_{cc}\cdot\text{cocr}_{cc}\cdot\text{benv}_{cc}\): 12 (0.951, 0.499), 20 (0.501, 0.499), 19 (0.501, 0.499), 21 (0.501, 0.499)
Cases with greater than 0.5 membership in term \(\neg\text{sval}_{cc}\cdot\neg\text{integ}_{cc}\cdot\neg\text{cocr}_{cc}\cdot\neg\text{trans}_{cc}\cdot\neg\text{severity}_{cc}\): 35 (0.949, 0.499), 11 (0.501, 0.499)
Cases with greater than 0.5 membership in term \(-\text{comp}_{cc}\cdot\text{comm}_{cc}\cdot\text{satis}_{cc}\cdot\text{cocr}_{cc}\cdot\text{trans}_{cc}\cdot\text{severity}_{cc}\): 32 (0.999, 0.999), 30 (0.989, 0.999), 31 (0.949, 0.499)
Cases with greater than 0.5 membership in term \(\text{sval}_{cc}\cdot\neg\text{integ}_{cc}\cdot\neg\text{cocr}_{cc}\cdot\neg\text{trans}_{cc}\cdot\neg\text{severity}_{cc}\): 35 (0.949, 0.949), 30 (0.989, 0.999), 31 (0.949, 0.999)
Cases with greater than 0.5 membership in term \(\text{sval}_{cc}\cdot\text{integ}_{cc}\cdot\text{cocr}_{cc}\cdot\text{benv}_{cc}\cdot\text{trans}_{cc}\cdot\text{severity}_{cc}\): 35 (0.949, 0.949), 11 (0.501, 0.499)
**PARSIMONIOUS SOLUTION**

<table>
<thead>
<tr>
<th>raw coverage</th>
<th>unique coverage</th>
<th>consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.462827</td>
<td>0.0847856</td>
<td>0.881544</td>
</tr>
<tr>
<td>0.101746</td>
<td>0.0</td>
<td>0.84</td>
</tr>
<tr>
<td>0.178264</td>
<td>0.0487011</td>
<td>0.850199</td>
</tr>
<tr>
<td>0.684654</td>
<td>0.093643</td>
<td>0.922454</td>
</tr>
<tr>
<td>0.160555</td>
<td>0.0</td>
<td>0.874034</td>
</tr>
<tr>
<td>0.164773</td>
<td>0.0</td>
<td>0.886119</td>
</tr>
<tr>
<td>0.121335</td>
<td>0.0</td>
<td>0.997254</td>
</tr>
<tr>
<td>0.116448</td>
<td>0.0</td>
<td>0.995714</td>
</tr>
<tr>
<td>0.218236</td>
<td>0.0</td>
<td>0.840628</td>
</tr>
<tr>
<td>0.218236</td>
<td>0.0</td>
<td>0.855435</td>
</tr>
</tbody>
</table>

Cases with greater than 0.5 membership in term ~comp cc*~cocr cc: 34 (0.999, 0.999), 30 (0.999, 0.999), 29 (0.999, 0.999), 28 (0.949, 0.999), 25 (0.949, 0.949), 27 (0.949, 0.499), 26 (0.949, 0.499)

Cases with greater than 0.5 membership in term comp cc*~integ cc*cocr cc*benv cc: 12 (0.951, 0.499), 20 (0.501, 0.499), 19 (0.501, 0.499), 21 (0.501, 0.499)

Cases with greater than 0.5 membership in term sval cc*~integ cc*cocr cc*trans cc: 20 (0.951, 0.999), 17 (0.951, 0.499), 19 (0.501, 0.499), 12 (0.501, 0.499), 24 (0.501, 0.499)

Cases with greater than 0.5 membership in term ~satis cc: 22 (0.999, 0.949), 34 (0.999, 0.999), 30 (0.999, 0.999), 39 (0.999, 0.999), 28 (0.949, 0.999), 25 (0.949, 0.949), 31 (0.949, 0.499), 26 (0.949, 0.499)

Cases with greater than 0.5 membership in term ~integ cc*cocr cc*~trans cc: 9 (0.949, 0.999), 35 (0.949, 0.949), 11 (0.501, 0.499)

Cases with greater than 0.5 membership in term ~sval cc*cocr cc*~trans cc: 35 (0.949, 0.949), 23 (0.859, 0.949), 10 (0.649, 0.999), 11 (0.501, 0.499)

Cases with greater than 0.5 membership in term ~satis cc*~integ cc*cocr cc*~trans cc: 35 (0.949, 0.949), 23 (0.859, 0.949), 10 (0.649, 0.999), 11 (0.501, 0.499)
Appendix 25: QCA Raw Truth Table Outputs, Fourth Truth Table Analysis

Please find, overleaf, a copy of the truth table outputs (complex, intermediate and parsimonious solutions) for the fourth truth table analysis (causal conditions with size of buying organisation contextual condition) in the presence and absence of trust recovery, respectively, as referenced in Chapter Five.

Please Note: These are the raw truth table outputs generated by the fsQCA software (Ragin & Davey, 2014) and are not representative of the final, reported results in Chapter Five. The raw truth table outputs feature data prior to assessments of empirical consistency, empirical relevance, conceptual meaningfulness and logical incoherence as detailed further in Chapter Five.
**TRUTH TABLE ANALYSIS**

File: //mac/Home/Desktop/Constant Added QCA File - All Conditions Amended.csv

Model: \(\text{recovery}_{cc} = f(\text{comp}_{cc}, \text{comm}_{cc}, \text{satis}_{cc}, \text{sval}_{cc}, \text{integ}_{cc}, \text{cocr}_{cc}, \text{benv}_{cc}, \text{trans}_{cc}, \text{size}_{cc})\)

Algorithm: Quine-McCluskey

--- COMPLEX SOLUTION ---

frequency cutoff: 1
consistency cutoff: 0.924658

<table>
<thead>
<tr>
<th>Case Description</th>
<th>Raw Coverage</th>
<th>Unique Coverage</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\text{comp}<em>{cc}\cdot\text{comm}</em>{cc}\cdot\text{satis}<em>{cc}\cdot\text{sval}</em>{cc}\cdot\text{integ}<em>{cc}\cdot\text{benv}</em>{cc}\cdot\text{trans}<em>{cc}\cdot\text{size}</em>{cc})</td>
<td>0.0856271</td>
<td>0.0623980</td>
<td>0.780806</td>
</tr>
<tr>
<td>(\text{comp}<em>{cc}\cdot\text{satis}</em>{cc}\cdot\text{sval}<em>{cc}\cdot\text{integ}</em>{cc}\cdot\text{cocr}<em>{cc}\cdot\text{benv}</em>{cc}\cdot\text{trans}<em>{cc}\cdot\text{size}</em>{cc})</td>
<td>0.0759123</td>
<td>0.0260235</td>
<td>1</td>
</tr>
<tr>
<td>(\text{comp}<em>{cc}\cdot\text{comm}</em>{cc}\cdot\text{satis}<em>{cc}\cdot\text{integ}</em>{cc}\cdot\text{benv}<em>{cc}\cdot\text{trans}</em>{cc}\cdot\text{size}_{cc})</td>
<td>0.0777183</td>
<td>0.0281481</td>
<td>1</td>
</tr>
<tr>
<td>(\text{comp}<em>{cc}\cdot\text{comm}</em>{cc}\cdot\text{satis}<em>{cc}\cdot\text{integ}</em>{cc}\cdot\text{cocr}<em>{cc}\cdot\text{benv}</em>{cc}\cdot\text{trans}<em>{cc}\cdot\text{size}</em>{cc})</td>
<td>0.146095</td>
<td>0.0899663</td>
<td>0.979132</td>
</tr>
<tr>
<td>(\text{comp}<em>{cc}\cdot\text{comm}</em>{cc}\cdot\text{satis}<em>{cc}\cdot\text{integ}</em>{cc}\cdot\text{benv}<em>{cc}\cdot\text{trans}</em>{cc}\cdot\text{size}_{cc})</td>
<td>0.0961515</td>
<td>0.0500684</td>
<td>1</td>
</tr>
<tr>
<td>(\text{comp}<em>{cc}\cdot\text{comm}</em>{cc}\cdot\text{satis}<em>{cc}\cdot\text{integ}</em>{cc}\cdot\text{benv}<em>{cc}\cdot\text{trans}</em>{cc}\cdot\text{size}_{cc})</td>
<td>0.10761</td>
<td>0.0591606</td>
<td>1</td>
</tr>
<tr>
<td>(\text{comp}<em>{cc}\cdot\text{comm}</em>{cc}\cdot\text{satis}<em>{cc}\cdot\text{integ}</em>{cc}\cdot\text{cocr}<em>{cc}\cdot\text{benv}</em>{cc}\cdot\text{trans}<em>{cc}\cdot\text{size}</em>{cc})</td>
<td>0.0800847</td>
<td>0.0312617</td>
<td>1</td>
</tr>
<tr>
<td>(\text{comp}<em>{cc}\cdot\text{comm}</em>{cc}\cdot\text{satis}<em>{cc}\cdot\text{integ}</em>{cc}\cdot\text{cocr}<em>{cc}\cdot\text{benv}</em>{cc}\cdot\text{trans}<em>{cc}\cdot\text{size}</em>{cc})</td>
<td>0.0541163</td>
<td>0.0200234</td>
<td>0.94593</td>
</tr>
<tr>
<td>(\text{comp}<em>{cc}\cdot\text{comm}</em>{cc}\cdot\text{satis}<em>{cc}\cdot\text{integ}</em>{cc}\cdot\text{benv}<em>{cc}\cdot\text{trans}</em>{cc}\cdot\text{size}_{cc})</td>
<td>0.0392959</td>
<td>0.0305766</td>
<td>0.94515</td>
</tr>
<tr>
<td>(\text{comp}<em>{cc}\cdot\text{comm}</em>{cc}\cdot\text{satis}<em>{cc}\cdot\text{integ}</em>{cc}\cdot\text{cocr}<em>{cc}\cdot\text{benv}</em>{cc}\cdot\text{trans}<em>{cc}\cdot\text{size}</em>{cc})</td>
<td>0.105555</td>
<td>0.0305766</td>
<td>0.967466</td>
</tr>
<tr>
<td>(\text{comp}<em>{cc}\cdot\text{comm}</em>{cc}\cdot\text{satis}<em>{cc}\cdot\text{integ}</em>{cc}\cdot\text{cocr}<em>{cc}\cdot\text{benv}</em>{cc}\cdot\text{trans}<em>{cc}\cdot\text{size}</em>{cc})</td>
<td>0.079462</td>
<td>0.0560468</td>
<td>0.992996</td>
</tr>
</tbody>
</table>

solution coverage: 0.65525
solution consistency: 0.960826

Cases with greater than 0.5 membership in term \(\text{comp}_{cc}\cdot\text{comm}_{cc}\cdot\text{satis}_{cc}\cdot\text{sval}_{cc}\cdot\text{integ}_{cc}\cdot\text{benv}_{cc}\cdot\text{trans}_{cc}\cdot\text{size}_{cc}\): 11 (0.501, 0.951), 6 (0.501, 0.501)
Cases with greater than 0.5 membership in term \(\text{comp}_{cc}\cdot\text{satis}_{cc}\cdot\text{sval}_{cc}\cdot\text{integ}_{cc}\cdot\text{cocr}_{cc}\cdot\text{benv}_{cc}\cdot\text{trans}_{cc}\cdot\text{size}_{cc}\): 1 (0.501, 0.951), 27 (0.501, 0.501)
Cases with greater than 0.5 membership in term \(\text{comp}_{cc}\cdot\text{comm}_{cc}\cdot\text{satis}_{cc}\cdot\text{sval}_{cc}\cdot\text{integ}_{cc}\cdot\text{benv}_{cc}\cdot\text{trans}_{cc}\cdot\text{size}_{cc}\): 1 (0.501, 0.951), 21 (0.501, 0.501)
Cases with greater than 0.5 membership in term \(\text{comp}_{cc}\cdot\text{comm}_{cc}\cdot\text{satis}_{cc}\cdot\text{sval}_{cc}\cdot\text{integ}_{cc}\cdot\text{cocr}_{cc}\cdot\text{benv}_{cc}\cdot\text{trans}_{cc}\cdot\text{size}_{cc}\): 2 (0.951, 1), 13 (0.501, 0.951), 15 (0.501, 0.951)
Cases with greater than 0.5 membership in term \(\text{comp}_{cc}\cdot\text{comm}_{cc}\cdot\text{satis}_{cc}\cdot\text{sval}_{cc}\cdot\text{integ}_{cc}\cdot\text{cocr}_{cc}\cdot\text{benv}_{cc}\cdot\text{trans}_{cc}\cdot\text{size}_{cc}\): 3 (0.821, 0.991), 14 (0.501, 0.951)
Cases with greater than 0.5 membership in term \(\text{comp}_{cc}\cdot\text{comm}_{cc}\cdot\text{satis}_{cc}\cdot\text{integ}_{cc}\cdot\text{cocr}_{cc}\cdot\text{benv}_{cc}\cdot\text{trans}_{cc}\cdot\text{size}_{cc}\): 24 (0.501, 0.501), 38 (0.501, 0.951)
Cases with greater than 0.5 membership in term \(\text{comp}_{cc}\cdot\text{comm}_{cc}\cdot\text{satis}_{cc}\cdot\text{sval}_{cc}\cdot\text{integ}_{cc}\cdot\text{cocr}_{cc}\cdot\text{benv}_{cc}\cdot\text{trans}_{cc}\cdot\text{size}_{cc}\): 4 (0.501, 1), 19 (0.501, 0.501)
Cases with greater than 0.5 membership in term \(\text{comp}_{cc}\cdot\text{comm}_{cc}\cdot\text{satis}_{cc}\cdot\text{sval}_{cc}\cdot\text{integ}_{cc}\cdot\text{cocr}_{cc}\cdot\text{benv}_{cc}\cdot\text{trans}_{cc}\cdot\text{size}_{cc}\): 18 (0.501, 0.951)
Cases with greater than 0.5 membership in term \(\text{comp}_{cc}\cdot\text{comm}_{cc}\cdot\text{satis}_{cc}\cdot\text{sval}_{cc}\cdot\text{integ}_{cc}\cdot\text{cocr}_{cc}\cdot\text{benv}_{cc}\cdot\text{trans}_{cc}\cdot\text{size}_{cc}\): 16 (0.501, 0.501)
Cases with greater than 0.5 membership in term \(\text{comp}_{cc}\cdot\text{comm}_{cc}\cdot\text{satis}_{cc}\cdot\text{sval}_{cc}\cdot\text{integ}_{cc}\cdot\text{cocr}_{cc}\cdot\text{benv}_{cc}\cdot\text{trans}_{cc}\cdot\text{size}_{cc}\): 5 (0.501, 0.951)
Cases with greater than 0.5 membership in term \(\text{comp}_{cc}\cdot\text{comm}_{cc}\cdot\text{satis}_{cc}\cdot\text{sval}_{cc}\cdot\text{integ}_{cc}\cdot\text{cocr}_{cc}\cdot\text{benv}_{cc}\cdot\text{trans}_{cc}\cdot\text{size}_{cc}\): 8 (0.949, 0.951)
**TRUTH TABLE ANALYSIS**

*File: //mac/Home/Desktop/Constant Added QCA File - All Conditions Amended.csv*

*Model:* recovery_CC = f (comp_CC, comm_CC, sati_CC, sval_CC, integ_CC, cocr_CC, benz_CC, trans_CC, size_CC)

*Algorithm: Quine-McCluskey*

--- INTERMEDIATE SOLUTION ---

**Frequency cutoff:** 1  
**Consistency cutoff:** 0.924658

**Assumptions:**
- comp_CC (present)  
- comm_CC (present)  
- sati_CC (present)  
- sval_CC (present)  
- integ_CC (present)  
- cocr_CC (present)  
- benz_CC (present)  
- trans_CC (present)  
- size_CC (present)

**Algorithm:** Quine-McCluskey

--- SOLUTION ---

<table>
<thead>
<tr>
<th>Term</th>
<th>Raw Coverage</th>
<th>Unique Coverage</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>comp_CC<em>comm_CC</em>sati_CC<em>integ_CC</em>size_CC</td>
<td>0.143729</td>
<td>1</td>
<td>0.856718</td>
</tr>
<tr>
<td>comp_CC<em>comm_CC</em>sati_CC<em>integ_CC</em>~size_CC</td>
<td>0.305953</td>
<td>0.022451</td>
<td>0.970295</td>
</tr>
<tr>
<td>comp_CC<em>sati_CC</em>integ_CC<em>~cocr_CC</em>benz_CC*~size_CC</td>
<td>0.082430</td>
<td>0</td>
<td>0.940689</td>
</tr>
<tr>
<td>comp_CC<em>sati_CC</em>~integ_CC<em>~cocr_CC</em>benz_CC*size_CC</td>
<td>0.112805</td>
<td>0</td>
<td>0.973046</td>
</tr>
<tr>
<td>comp_CC<em>sati_CC</em>~integ_CC<em>~cocr_CC</em>benz_CC*~size_CC</td>
<td>0.092897</td>
<td>0.022451</td>
<td>0.963794</td>
</tr>
<tr>
<td>comp_CC<em>~integ_CC</em>~cocr_CC<em>benz_CC</em>~size_CC</td>
<td>0.075574</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>comp_CC<em>~integ_CC</em>~cocr_CC<em>benz_CC</em>~size_CC</td>
<td>0.108108</td>
<td>0</td>
<td>1.0</td>
</tr>
<tr>
<td>comp_CC<em>~integ_CC</em>~cocr_CC<em>benz_CC</em>~size_CC</td>
<td>0.117387</td>
<td>0</td>
<td>0.829301</td>
</tr>
<tr>
<td>comp_CC<em>~integ_CC</em>~cocr_CC<em>benz_CC</em>~size_CC</td>
<td>0.156933</td>
<td>0.0104621</td>
<td>0.866575</td>
</tr>
<tr>
<td>comp_CC<em>~integ_CC</em>~cocr_CC<em>benz_CC</em>~size_CC</td>
<td>0.092160</td>
<td>0</td>
<td>0.981399</td>
</tr>
<tr>
<td>comp_CC<em>~integ_CC</em>~cocr_CC<em>benz_CC</em>~size_CC</td>
<td>0.056922</td>
<td>0</td>
<td>0.955009</td>
</tr>
<tr>
<td>comp_CC<em>~integ_CC</em>~cocr_CC<em>benz_CC</em>~size_CC</td>
<td>0.106302</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>comp_CC<em>~integ_CC</em>~cocr_CC<em>benz_CC</em>~size_CC</td>
<td>0.089737</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>solution coverage: 0.712788</td>
<td></td>
<td></td>
<td>0.96061</td>
</tr>
</tbody>
</table>

**Cases with greater than 0.5 membership in term**

- **comp_CC*comm_CC*sati_CC*integ_CC*size_CC:** 11 (0.621, 0.501), 6 (0.501, 0.501)
- **comp_CC*comm_CC*sati_CC*integ_CC*~size_CC:** 8 (0.951, 0.951), 3 (0.821, 0.951), 13 (0.621, 0.951), 2 (0.501, 1), 5 (0.501, 0.951), 14 (0.501, 0.951), 19 (0.501, 0.501), 18 (0.501, 0.951), 10 (0.501, 0.501)
- **comp_CC*sati_CC*~integ_CC*~cocr_CC*benz_CC*size_CC:** 1 (0.501, 0.951), 18 (0.501, 0.951), 21 (0.501, 0.501)
- **comp_CC*sati_CC*~integ_CC*~cocr_CC*benz_CC*~size_CC:** 1 (0.621, 0.951), 13 (0.621, 0.951), 2 (0.501, 1), 5 (0.501, 1), 10 (0.501, 0.501), 14 (0.501, 0.951), 19 (0.501, 0.951), 21 (0.501, 0.501)
- **comp_CC*sati_CC*~integ_CC*~cocr_CC*trans_CC*~size_CC:** 16 (0.951, 0.951), 5 (0.501, 0.501), 15 (0.501, 0.881), 14 (0.501, 0.951), 21 (0.501, 0.501)
- **comp_CC*sati_CC*~integ_CC*~cocr_CC*trans_CC:** 4 (0.501, 1), 18 (0.501, 0.881), 13 (0.501, 0.951), 2 (0.501, 1), 5 (0.501, 0.951), 14 (0.501, 0.951), 19 (0.501, 0.951), 21 (0.501, 0.501), 22 (0.501, 0.501)
- **comp_CC*sati_CC*~integ_CC*~cocr_CC*trans_CC*size_CC:** 2 (0.951, 1), 15 (0.501, 0.951), 13 (0.501, 0.951), 15 (0.501, 0.881), 19 (0.501, 0.951), 21 (0.501, 0.501), 22 (0.501, 0.501)
- **comp_CC*sati_CC*~integ_CC*~cocr_CC*~size_CC:** 1 (0.501, 0.951), 18 (0.501, 0.951), 21 (0.501, 0.951), 22 (0.501, 0.951)
- **comp_CC*sati_CC*~integ_CC*~cocr_CC*~size_CC:** 1 (0.501, 0.951), 18 (0.501, 0.951), 21 (0.501, 0.951), 22 (0.501, 0.951)
- **comp_CC*sati_CC*~integ_CC*~cocr_CC*~size_CC:** 1 (0.501, 0.951), 18 (0.501, 0.951), 21 (0.501, 0.951), 22 (0.501, 0.951)
**TRUTH TABLE ANALYSIS**

Algorithm: Quine-McCluskey

--- PARSIMONIOUS SOLUTION ---

<table>
<thead>
<tr>
<th>s.a.</th>
<th>unique</th>
<th>consistency</th>
<th>coverage</th>
<th>coverage</th>
<th>consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>-s.a.</td>
<td>0.924650</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cases with greater than 0.5 membership in term -s.a. = 1:

1. (0.951, 0.951)
2. (0.501, 0.501)
3. (0.821, 0.951)
4. (0.501, 0.951)
5. (0.669, 0.951)
6. (0.951, 0.951)
7. (0.501, 0.951)
8. (0.951, 0.951)

Cases with greater than 0.5 membership in term s.a. = 1:

1. (0.951, 0.951)
2. (0.501, 0.501)
3. (0.821, 0.951)
4. (0.501, 0.951)
5. (0.669, 0.951)
6. (0.951, 0.951)
7. (0.501, 0.951)
8. (0.951, 0.951)

Cases with greater than 0.5 membership in term s.a. = 0:

1. (0.951, 0.951)
2. (0.501, 0.501)
3. (0.821, 0.951)
4. (0.501, 0.951)
5. (0.669, 0.951)
6. (0.951, 0.951)
7. (0.501, 0.951)
8. (0.951, 0.951)

Cases with greater than 0.5 membership in term -s.a. = 0:

1. (0.951, 0.951)
2. (0.501, 0.501)
3. (0.821, 0.951)
4. (0.501, 0.951)
5. (0.669, 0.951)
6. (0.951, 0.951)
7. (0.501, 0.951)
8. (0.951, 0.951)
Truth Table Analysis

File: //mac/Home/Desktop/Constant Added QCA File - All Conditions Amended.csv
Model: \( -\text{recovery}_{cc} = f(\text{comp}_{cc}, \text{comm}_{cc}, \text{satis}_{cc}, \text{sval}_{cc}, \text{integ}_{cc}, \text{cocr}_{cc}, \text{benv}_{cc}, \text{trans}_{cc}, \text{size}_{cc}) \)
Algorithm: Quine-McCluskey

--- COMPLEX SOLUTION ---
frequency cutoff: 1
consistency cutoff: 0.808371

<table>
<thead>
<tr>
<th>coverage</th>
<th>unique coverage</th>
<th>consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.211219</td>
<td>0.0205079</td>
<td>1</td>
</tr>
<tr>
<td>0.283769</td>
<td>0.0832846</td>
<td>1</td>
</tr>
<tr>
<td>0.0560219</td>
<td>0.0416006</td>
<td>0.810335</td>
</tr>
<tr>
<td>0.10893</td>
<td>0.0802356</td>
<td>0.822825</td>
</tr>
<tr>
<td>0.0633615</td>
<td>0.0376744</td>
<td>0.914958</td>
</tr>
<tr>
<td>0.0367137</td>
<td>0.0187954</td>
<td>0.951515</td>
</tr>
<tr>
<td>0.0782307</td>
<td>0.018879</td>
<td>0.993571</td>
</tr>
<tr>
<td>0.0563683</td>
<td>0.0356576</td>
<td>0.99345</td>
</tr>
<tr>
<td>0.0332888</td>
<td>0.0188789</td>
<td>0.997497</td>
</tr>
<tr>
<td>0.0563863</td>
<td>0.0356576</td>
<td>0.997497</td>
</tr>
<tr>
<td>0.0327876</td>
<td>0.0187954</td>
<td>0.997497</td>
</tr>
<tr>
<td>0.0332888</td>
<td>0.0188789</td>
<td>0.997497</td>
</tr>
<tr>
<td>0.0563863</td>
<td>0.0356576</td>
<td>0.997497</td>
</tr>
</tbody>
</table>

Cases with greater than 0.5 membership in term \(-\text{comp}_{cc} \cdot \text{comm}_{cc} \cdot \text{satis}_{cc} \cdot \text{sval}_{cc} \cdot \text{integ}_{cc} \cdot \text{cocr}_{cc} \cdot \text{benv}_{cc} \cdot \text{size}_{cc}\): 32 (0.99, 0.999),
33 (0.99, 0.999), 34 (0.99, 0.999), 39 (0.99, 0.999), 30 (0.999, 0.999),
33 (0.999, 0.999), 34 (0.999, 0.999), 22 (0.949, 0.949).
Cases with greater than 0.5 membership in term \(-\text{comp}_{cc} \cdot \text{comm}_{cc} \cdot \text{satis}_{cc} \cdot \text{sval}_{cc} \cdot \text{integ}_{cc} \cdot \text{cocr}_{cc} \cdot \text{benv}_{cc} \cdot \text{trans}_{cc}\): 30 (0.999, 0.999),
32 (0.999, 0.999), 33 (0.999, 0.999), 34 (0.999, 0.999), 22 (0.949, 0.949).
Cases with greater than 0.5 membership in term \(-\text{comp}_{cc} \cdot \text{comm}_{cc} \cdot \text{satis}_{cc} \cdot \text{sval}_{cc} \cdot \text{integ}_{cc} \cdot \text{cocr}_{cc} \cdot \text{benv}_{cc} \cdot \text{trans}_{cc} \cdot \text{size}_{cc}\): 28 (0.501, 0.999),
29 (0.501, 0.949), 37 (0.501, 0.949), 6 (0.501, 0.499).
Cases with greater than 0.5 membership in term \(-\text{comp}_{cc} \cdot \text{comm}_{cc} \cdot \text{satis}_{cc} \cdot \text{sval}_{cc} \cdot \text{integ}_{cc} \cdot \text{cocr}_{cc} \cdot \text{benv}_{cc} \cdot \text{trans}_{cc} \cdot \text{size}_{cc}\): 35 (0.949, 0.949),
33 (0.949, 0.949), 37 (0.501, 0.949).
Cases with greater than 0.5 membership in term \(-\text{comp}_{cc} \cdot \text{comm}_{cc} \cdot \text{satis}_{cc} \cdot \text{sval}_{cc} \cdot \text{integ}_{cc} \cdot \text{cocr}_{cc} \cdot \text{benv}_{cc} \cdot \text{trans}_{cc} \cdot \text{size}_{cc}\): 25 (0.501, 0.949),
26 (0.501, 0.949).
Cases with greater than 0.5 membership in term \(-\text{comp}_{cc} \cdot \text{comm}_{cc} \cdot \text{satis}_{cc} \cdot \text{sval}_{cc} \cdot \text{integ}_{cc} \cdot \text{cocr}_{cc} \cdot \text{benv}_{cc} \cdot \text{trans}_{cc} \cdot \text{size}_{cc}\): 28 (0.501, 0.999),
29 (0.501, 0.949), 37 (0.501, 0.949).
Cases with greater than 0.5 membership in term \(-\text{comp}_{cc} \cdot \text{comm}_{cc} \cdot \text{satis}_{cc} \cdot \text{sval}_{cc} \cdot \text{integ}_{cc} \cdot \text{cocr}_{cc} \cdot \text{benv}_{cc} \cdot \text{trans}_{cc} \cdot \text{size}_{cc}\): 36 (0.501, 0.949),
39 (0.501, 0.949).
Cases with greater than 0.5 membership in term \(-\text{comp}_{cc} \cdot \text{comm}_{cc} \cdot \text{satis}_{cc} \cdot \text{sval}_{cc} \cdot \text{integ}_{cc} \cdot \text{cocr}_{cc} \cdot \text{benv}_{cc} \cdot \text{trans}_{cc} \cdot \text{size}_{cc}\): 25 (0.501, 0.949),
26 (0.501, 0.949).
Cases with greater than 0.5 membership in term \(-\text{comp}_{cc} \cdot \text{comm}_{cc} \cdot \text{satis}_{cc} \cdot \text{sval}_{cc} \cdot \text{integ}_{cc} \cdot \text{cocr}_{cc} \cdot \text{benv}_{cc} \cdot \text{trans}_{cc} \cdot \text{size}_{cc}\): 17 (0.501, 0.949),
18 (0.501, 0.949).
FILE: //mac/Home/Desktop/Constant Added QCA File - All Conditions Amended.csv

Model: ~recovery cc = f(comp cc, comm cc, satis cc, sval cc, integ cc, cocr cc, benv cc, trans cc, size cc)

Algorithm: Quine-McCluskey

--- INTERMEDIATE SOLUTION ---
frequency cutoff: 1
consistency cutoff: 0.808371
Assumptions:
~comp cc (absent)
~comm cc (absent)
~satis cc (absent)
~sval cc (absent)
~integ cc (absent)
~cocr cc (absent)
~benv cc (absent)
~trans cc (absent)

<table>
<thead>
<tr>
<th>Term</th>
<th>Raw Coverage</th>
<th>Unique Coverage</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>comp cc<em>~benv cc</em>~size cc</td>
<td>0.1243</td>
<td>0.0377162</td>
<td>0.619613</td>
</tr>
<tr>
<td>~satis cc<em>~sval cc</em>~integ cc*~benv cc</td>
<td>0.548116</td>
<td>0.207167</td>
<td>0.961956</td>
</tr>
<tr>
<td>comm cc<em>~sval cc</em>~benv cc*~size cc</td>
<td>0.181814</td>
<td>0.0187954</td>
<td>0.756123</td>
</tr>
<tr>
<td>~satis cc<em>~sval cc</em>~integ cc*~benv cc</td>
<td>0.265726</td>
<td>0.0258958</td>
<td>0.910027</td>
</tr>
<tr>
<td>~comp cc<em>comp cc</em>~sval cc<em>~cocr cc</em>~benv cc</td>
<td>0.119664</td>
<td>0.00710046</td>
<td>0.986231</td>
</tr>
<tr>
<td>~comp cc<em>~satis cc</em>~sval cc<em>~integ cc</em>~benv cc</td>
<td>0.261382</td>
<td>0.0768107</td>
<td>0.935706</td>
</tr>
</tbody>
</table>

solution coverage: 0.780929
solution consistency: 0.680605

Cases with greater than 0.5 membership in term comp cc*~benv cc*~size cc: 6 (0.951, 0.499), 11 (0.951, 0.499), 16 (0.501, 0.499), 17 (0.501, 0.949)

Cases with greater than 0.5 membership in term ~satis cc*~sval cc*~integ cc*~benv cc: 30 (0.999, 0.999), 32 (0.999, 0.999), 33 (0.999, 0.999), 34 (0.999, 0.999), 39 (0.999, 0.999), 40 (0.999, 0.999)

Cases with greater than 0.5 membership in term comm cc*~sval cc*~benv cc*~size cc: 6 (0.99, 0.499), 11 (0.951, 0.499), 16 (0.501, 0.499), 28 (0.501, 0.999)

Cases with greater than 0.5 membership in term ~satis cc*~sval cc*~benv cc*~size cc: 30 (0.999, 0.999), 9 (0.949, 0.999), 22 (0.949, 0.999), 35 (0.949, 0.999)

Cases with greater than 0.5 membership in term ~comp cc*comp cc*~sval cc*~cocr cc*~benv cc: 25 (0.669, 0.949), 28 (0.501, 0.999)

Cases with greater than 0.5 membership in term ~comp cc*~satis cc*~sval cc*~integ cc*~benv cc: 37 (0.999, 0.949), 23 (0.949, 0.949), 38 (0.949, 0.949), 40 (0.501, 0.999)
*TRUTH TABLE ANALYSIS*

File: //mac/Home/Desktop/Constant Added QCA File - All Conditions Amended.csv
Model: -recovery_cc = f(comp_cc, comm_cc, satis_cc, sval_cc, integ_cc, cocr_cc, benv_cc, trans_cc, size_cc)
Algorithm: Quine-McCluskey

--- PARSIMONIOUS SOLUTION ---
frequency cutoff: 1
consistency cutoff: 0.808371

<table>
<thead>
<tr>
<th>term</th>
<th>raw coverage</th>
<th>unique coverage</th>
<th>consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>comp_cc<em>~benv_cc</em>~size_cc</td>
<td>0.1243</td>
<td>0.0268567</td>
<td>0.619613</td>
</tr>
<tr>
<td>~comp_cc<em>comm_cc</em>~benv_cc</td>
<td>0.39508</td>
<td>0.141216</td>
<td>0.902576</td>
</tr>
<tr>
<td>~satis_cc*benv_cc</td>
<td>0.673795</td>
<td>0.0304903</td>
<td>0.948941</td>
</tr>
<tr>
<td>~satis_cc*sval_cc</td>
<td>0.600284</td>
<td>0.0</td>
<td>0.946087</td>
</tr>
</tbody>
</table>

solution coverage: 0.84191
solution consistency: 0.863107

Cases with greater than 0.5 membership in term comp_cc*~benv_cc*~size_cc: 6 (0.951, 0.499), 11 (0.951, 0.499), 16 (0.501, 0.499), 17 (0.501, 0.949)
Cases with greater than 0.5 membership in term ~comp_cc*comm_cc*~benv_cc: 36 (0.999, 0.949), 37 (0.999, 0.949), 35 (0.951, 0.949), 23 (0.949, 0.949), 25 (0.949, 0.949), 26 (0.949, 0.999), 28 (0.501, 0.999), 40 (0.501, 0.999)
Cases with greater than 0.5 membership in term ~satis_cc*benv_cc: 10 (0.999, 0.949), 22 (0.999, 0.949), 30 (0.999, 0.999), 32 (0.999, 0.999), 33 (0.999, 0.999), 34 (0.999, 0.999), 40 (0.999, 0.999), 9 (0.949, 0.999)
Cases with greater than 0.5 membership in term ~satis_cc*sval_cc: 30 (0.999, 0.999), 32 (0.999, 0.999), 33 (0.999, 0.999), 34 (0.999, 0.999), 39 (0.999, 0.999), 40 (0.999, 0.999), 9 (0.949, 0.999), 22 (0.949, 0.949), 26 (0.949, 0.999), 10 (0.669, 0.949)
Appendix 26: QCA Raw Truth Table Outputs, Fifth Truth Table

Analysis

Please find, overleaf, a copy of the truth table outputs (complex, intermediate and parsimonious solutions) for the fifth truth table analysis (causal conditions with individual level of decision-making authority of the focal trustor contextual condition) in the presence and absence of trust recovery, respectively, as referenced in Chapter Five.

Please Note: These are the raw truth table outputs generated by the fsQCA software (Ragin & Davey, 2014) and are not representative of the final, reported results in Chapter Five. The raw truth table outputs feature data prior to assessments of empirical consistency, empirical relevance, conceptual meaningfulness and logical incoherence as detailed further in Chapter Five.
**TRUTH TABLE ANALYSIS**

File: C:/Users/dfrankli/Downloads/Constant Added QCA File - All Conditions Amended.csv

Model: recovery \text{cc} = f(\text{comp \_ cc}, \text{comm \_ cc}, \text{satis \_ cc}, \text{sval \_ cc}, \text{integ \_ cc}, \text{cocr \_ cc}, \text{benv \_ cc}, \text{trans \_ cc}, \text{auth \_ cc})

Algorithm: Quine-McCluskey

--- COMPLEX SOLUTION ---

<table>
<thead>
<tr>
<th>raw coverage</th>
<th>unique coverage</th>
<th>consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.140242</td>
<td>0.0281479</td>
<td>0.975314</td>
</tr>
<tr>
<td>0.113651</td>
<td>0.00124574</td>
<td>0.825419</td>
</tr>
<tr>
<td>0.116017</td>
<td>0.0841948</td>
<td>0.973863</td>
</tr>
<tr>
<td>0.145971</td>
<td>0.117855</td>
<td>0.996175</td>
</tr>
<tr>
<td>0.130215</td>
<td>0.0280235</td>
<td>1</td>
</tr>
<tr>
<td>0.124175</td>
<td>0.0219205</td>
<td>1</td>
</tr>
<tr>
<td>0.13445</td>
<td>0.0280235</td>
<td>1</td>
</tr>
<tr>
<td>0.0541163</td>
<td>0.0280234</td>
<td>0.945593</td>
</tr>
<tr>
<td>0.0513763</td>
<td>0.0305767</td>
<td>1</td>
</tr>
<tr>
<td>0.0493835</td>
<td>0.0313171</td>
<td>1</td>
</tr>
<tr>
<td>0.0466434</td>
<td>0.0280234</td>
<td>1</td>
</tr>
</tbody>
</table>

solution coverage: 0.624673

solution consistency: 0.95917

Cases with greater than 0.5 membership in term $\text{comp \_ cc} \cdot \text{comm \_ cc} \cdot \text{satis \_ cc} \cdot \text{sval \_ cc} \cdot \text{cocr \_ cc} \cdot \text{benv \_ cc} \cdot \text{trans \_ cc} \cdot \text{auth \_ cc}$: 5 (0.501, 0.951), 6 (0.501, 0.501)

Cases with greater than 0.5 membership in term $\text{comp \_ cc} \cdot \text{comm \_ cc} \cdot \text{satis \_ cc} \cdot \text{sval \_ cc} \cdot \text{cocr \_ cc} \cdot \text{benv \_ cc} \cdot \text{trans \_ cc} \cdot \text{auth \_ cc}$: 11 (0.821, 0.501), 6 (0.501, 0.501)

Cases with greater than 0.5 membership in term $\text{satis \_ cc} \cdot \text{sval \_ cc} \cdot \text{integ \_ cc} \cdot \text{cocr \_ cc} \cdot \text{benv \_ cc} \cdot \text{trans \_ cc} \cdot \text{auth \_ cc}$: 8 (0.949, 0.951), 16 (0.501, 0.501)

Cases with greater than 0.5 membership in term $\text{comp \_ cc} \cdot \text{comm \_ cc} \cdot \text{satis \_ cc} \cdot \text{cval \_ cc} \cdot \text{cocr \_ cc} \cdot \text{benv \_ cc} \cdot \text{trans \_ cc} \cdot \text{auth \_ cc}$: 2 (0.951, 1), 13 (0.501, 0.951), 15 (0.501, 0.881)

Cases with greater than 0.5 membership in term $\text{comp \_ cc} \cdot \text{satis \_ cc} \cdot \text{sval \_ cc} \cdot \text{integ \_ cc} \cdot \text{cocr \_ cc} \cdot \text{benv \_ cc} \cdot \text{trans \_ cc} \cdot \text{auth \_ cc}$: 1 (0.501, 0.951), 14 (0.501, 0.951), 27 (0.501, 0.501)

Cases with greater than 0.5 membership in term $\text{comp \_ cc} \cdot \text{satis \_ cc} \cdot \text{sval \_ cc} \cdot \text{integ \_ cc} \cdot \text{cocr \_ cc} \cdot \text{benv \_ cc} \cdot \text{trans \_ cc} \cdot \text{auth \_ cc}$: 3 (0.921, 0.951), 1 (0.501, 0.951), 14 (0.501, 0.951)

Cases with greater than 0.5 membership in term $\text{comp \_ cc} \cdot \text{satis \_ cc} \cdot \text{cval \_ cc} \cdot \text{integ \_ cc} \cdot \text{cocr \_ cc} \cdot \text{benv \_ cc} \cdot \text{trans \_ cc} \cdot \text{auth \_ cc}$: 24 (0.501, 0.501)
***************
*TRUTH TABLE ANALYSIS*
***************

File: C:/Users/dfrankl/Downloads/Constant Added QCA File - All Conditions Amended.csv
Model: recovery_cc = f(comp_cc, comm_cc, satis_cc, sval_cc, integ_cc, cocr_cc, benv_cc, trans_cc, auth_cc)
Algorithm: Quine-McCluskey

--- INTERMEDIATE SOLUTION ---
frequency cutoff: 1
consistency cutoff: 0.921335
Assumptions:
comp_cc (present)
comm_cc (present)
satis_cc (present)
sval_cc (present)
integ_cc (present)
cocr_cc (present)
benv_cc (present)
trans_cc (present)

<table>
<thead>
<tr>
<th>Rule</th>
<th>raw coverage</th>
<th>unique coverage</th>
<th>consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>comp_cc<em>comm_cc</em>satis_cc*:cocr_cc*:auth_cc</td>
<td>0.270083</td>
<td>0.0269025</td>
<td>0.986578</td>
</tr>
<tr>
<td>comp_cc<em>comm_cc</em>satis_cc*:integ_cc*:auth_cc</td>
<td>0.232906</td>
<td>0.0561714</td>
<td>0.906447</td>
</tr>
<tr>
<td>comp_cc<em>comm_cc</em>satis_cc*:sval_cc*auth_cc</td>
<td>0.254702</td>
<td>0</td>
<td>0.913354</td>
</tr>
<tr>
<td>comp_cc<em>satis_cc</em>:integ_cc*:cocr_cc*:benv_cc*:auth_cc</td>
<td>0.0546415</td>
<td>0.0280235</td>
<td>0.946063</td>
</tr>
<tr>
<td>comp_cc<em>comm_cc</em>satis_cc*:sval_cc*:cocr_cc*:trans_cc*auth_cc</td>
<td>0.18975</td>
<td>0.117325</td>
<td>0.983855</td>
</tr>
<tr>
<td>comp_cc<em>satis_cc</em>:sval_cc*:cocr_cc*:trans_cc*:auth_cc</td>
<td>0.14404</td>
<td>0.112218</td>
<td>0.97894</td>
</tr>
<tr>
<td>comp_cc<em>satis_cc</em>:integ_cc*:benv_cc*:trans_cc*auth_cc</td>
<td>0.152198</td>
<td>0.0280235</td>
<td>1</td>
</tr>
<tr>
<td>~comp_cc<em>comm_cc</em>satis_cc*:integ_cc*:cocr_cc*:benv_cc*:trans_cc*:auth_cc</td>
<td>0.0795865</td>
<td>0.0105867</td>
<td>0.74044</td>
</tr>
<tr>
<td>~comp_cc<em>comm_cc</em>satis_cc*:sval_cc*:integ_cc*:cocr_cc*:benv_cc*:trans_cc</td>
<td>0.107112</td>
<td>0.0280235</td>
<td>0.793358</td>
</tr>
</tbody>
</table>

solution coverage: 0.759123

Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*:cocr_cc*:auth_cc: 14 (0.949, 0.951),
3 (0.821, 0.951), 1 (0.821, 0.951), 5 (0.501, 0.951),
6 (0.501, 0.501)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*:integ_cc*:auth_cc: 4 (0.951, 1),
11 (0.821, 0.501), 6 (0.501, 0.501)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*:sval_cc*auth_cc: 11 (0.821, 0.501),
1 (0.669, 0.951), 14 (0.669, 0.951), 5 (0.501, 0.951),
6 (0.501, 0.501), 21 (0.501, 0.501)
Cases with greater than 0.5 membership in term comp_cc*satis_cc*:integ_cc*:cocr_cc*:benv_cc*:auth_cc: 18 (0.501, 0.951)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*:sval_cc*:cocr_cc*:trans_cc*:auth_cc: 2 (0.951, 1),
13 (0.501, 0.951), 15 (0.501, 0.951), 21 (0.501, 0.501)
Cases with greater than 0.5 membership in term comp_cc*satis_cc*:sval_cc*:integ_cc*:cocr_cc*:trans_cc*:auth_cc: 8 (0.949, 0.951),
16 (0.501, 0.501)
Cases with greater than 0.5 membership in term comp_cc*satis_cc*:integ_cc*:cocr_cc*:benv_cc*:trans_cc*:auth_cc: 3 (0.821, 0.991),
1 (0.501, 0.951), 14 (0.501, 0.951), 27 (0.501, 0.501)
Cases with greater than 0.5 membership in term ~comp_cc*comm_cc*satis_cc*:integ_cc*:cocr_cc*:benv_cc*:trans_cc*:auth_cc: 38 (0.501, 0.951)
Cases with greater than 0.5 membership in term ~comp_cc*comm_cc*satis_cc*:sval_cc*:integ_cc*:cocr_cc*:benv_cc*:trans_cc: 24 (0.501, 0.501)
File: C:/Users/dfrankli/Downloads/Constant Added QCA File - All Conditions Amended.csv
Model: recovery_cc = f(comp_cc, comm_cc, satis_cc, sval_cc, integ_cc, coar_cc, benv_cc, trans_cc, auth_cc)
Algorithm: Quine-McCluskey

--- PARSIMONIOUS SOLUTION ---
frequency cutoff: 1
consistency cutoff: 0.921335

<table>
<thead>
<tr>
<th></th>
<th>raw consistency</th>
<th>unique consistency</th>
<th>coverage</th>
<th>coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>satis_cc<em>~cocr_cc</em>benv_cc</td>
<td>0.207934</td>
<td>0.000124633</td>
<td>0.95246</td>
<td></td>
</tr>
<tr>
<td>~comp_cc<em>satis_cc</em>benv_cc</td>
<td>0.219828</td>
<td>0.0561714</td>
<td>0.81187</td>
<td></td>
</tr>
<tr>
<td>comm_cc<em>~cocr_cc</em>auth_cc</td>
<td>0.320961</td>
<td>0.0486363</td>
<td>0.775504</td>
<td></td>
</tr>
<tr>
<td>~sval_cc<em>integ_cc</em>cocr_cc*~auth_cc</td>
<td>0.142546</td>
<td>0.0135758</td>
<td>0.954545</td>
<td></td>
</tr>
<tr>
<td>comp_cc<em>comm_cc</em>satis_cc*~integ_cc</td>
<td>0.311184</td>
<td>0.028148</td>
<td>0.914699</td>
<td></td>
</tr>
<tr>
<td>comp_cc<em>comm_cc</em>satis_cc*~sval_cc</td>
<td>0.409204</td>
<td>0.0480759</td>
<td>0.933248</td>
<td></td>
</tr>
<tr>
<td>comp_cc<em>satis_cc</em>cocr_cc*~trans_cc</td>
<td>0.248163</td>
<td>0.112094</td>
<td>0.964191</td>
<td></td>
</tr>
</tbody>
</table>

solution coverage: 0.818595
solution consistency: 0.83112

Cases with greater than 0.5 membership in term satis_cc*~cocr_cc*benv_cc: 3 (0.821, 0.991), 1 (0.501, 0.951), 14 (0.501, 0.951), 18 (0.501, 0.951), 27 (0.501, 0.501)
Cases with greater than 0.5 membership in term ~comp_cc*satis_cc*benv_cc: 24 (0.821, 0.501), 27 (0.501, 0.501), 38 (0.501, 0.951)
Cases with greater than 0.5 membership in term comm_cc*~cocr_cc*~auth_cc: 6 (0.99, 0.501), 3 (0.981, 0.951), 1 (0.951, 0.951), 14 (0.949, 0.951), 27 (0.949, 0.501), 5 (0.501, 0.951)
Cases with greater than 0.5 membership in term ~sval_cc*integ_cc*cocr_cc*~auth_cc: 38 (0.669, 0.951), 2 (0.501, 1), 13 (0.501, 0.951)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*~integ_cc: 4 (0.951, 1), 11 (0.821, 0.501), 6 (0.501, 0.501), 15 (0.501, 0.881)
Cases with greater than 0.5 membership in term comp_cc*comm_cc*satis_cc*~sval_cc: 2 (0.951, 1), 11 (0.821, 0.501), 13 (0.821, 0.951), 1 (0.669, 0.951), 14 (0.669, 0.951), 5 (0.501, 0.951), 6 (0.501, 0.501), 15 (0.501, 0.881), 21 (0.501, 0.501)
Cases with greater than 0.5 membership in term comp_cc*satis_cc*cocr_cc*~trans_cc: 8 (0.949, 0.951), 16 (0.501, 0.501), 11 (0.501, 0.501)
### TRUTH TABLE ANALYSIS

File: C:/Users/dfrankl/Downloads/Constant Added Q&A File - All Conditions Amended.csv
Model: `recovery_co = f(comp_co, comm_co, satia_cc, sval_co, integ_co, core_co, benv_co, trans_co, auth_co)`
Algorithm: Quine-McCluskey

--- COMPLEX SOLUTION ---

<table>
<thead>
<tr>
<th>raw coverage</th>
<th>unique coverage</th>
<th>consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.209769</td>
<td>0.0424399</td>
<td>1</td>
</tr>
<tr>
<td>0.256612</td>
<td>0.0192937</td>
<td>1</td>
</tr>
<tr>
<td>0.251181</td>
<td>0.0206979</td>
<td>1</td>
</tr>
<tr>
<td>0.0559486</td>
<td>0.0375009</td>
<td>0.99254</td>
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<tr>
<td>0.10093</td>
<td>0.0847682</td>
<td>0.872825</td>
</tr>
<tr>
<td>0.102419</td>
<td>0.1019797</td>
<td>1</td>
</tr>
<tr>
<td>0.0070944</td>
<td>0.0375009</td>
<td>0.96167</td>
</tr>
<tr>
<td>0.078595</td>
<td>0.35061-05-1</td>
<td></td>
</tr>
<tr>
<td>0.0589998</td>
<td>0.0375009</td>
<td>0.99254</td>
</tr>
<tr>
<td>0.033247</td>
<td>0.0127555</td>
<td>0.953931</td>
</tr>
<tr>
<td>0.0364375</td>
<td>0.017555</td>
<td>0.95317</td>
</tr>
<tr>
<td>0.0344553</td>
<td>0.017555</td>
<td>0.95314</td>
</tr>
<tr>
<td>0.0283493</td>
<td>0.0187719</td>
<td>0.941504</td>
</tr>
<tr>
<td>0.0700661</td>
<td>0.0564886</td>
<td>0.955265</td>
</tr>
<tr>
<td>0.0332355</td>
<td>0.0187719</td>
<td>0.95506</td>
</tr>
<tr>
<td>0.030741</td>
<td>0.0187719</td>
<td>0.95525</td>
</tr>
<tr>
<td>0.0311855</td>
<td>0.0127555</td>
<td>0.99254</td>
</tr>
</tbody>
</table>

solution coverage: 0.769522
solution consistency: 0.975739

Cases with greater than 0.5 membership in term `comp_co•comm_co•sativa_co•sval_co•integ_co•core_co•benv_co•trans_co•auth_co`: 34 (0.999, 0.999), 30 (0.999, 0.999), 32 (0.999, 0.999), 33 (0.999, 0.999), 22 (0.949, 0.949).

Cases with greater than 0.5 membership in term `comp_co•comm_co•sativa_co•sval_co•integ_co•core_co•benv_co•trans_co•auth_co`: 34 (0.999, 0.999), 30 (0.999, 0.999), 32 (0.999, 0.999), 33 (0.999, 0.999), 22 (0.949, 0.949).

Cases with greater than 0.5 membership in term `comp_co•comm_co•sativa_co•sval_co•integ_co•core_co•benv_co•trans_co•auth_co`: 34 (0.999, 0.999), 30 (0.999, 0.999), 32 (0.999, 0.999), 33 (0.999, 0.999), 22 (0.949, 0.949).

Cases with greater than 0.5 membership in term `comp_co•comm_co•sativa_co•sval_co•integ_co•core_co•benv_co•trans_co•auth_co`: 28 (0.500, 0.500), 25 (0.500, 0.499), 23 (0.500, 0.499), 37 (0.500, 0.949).

Cases with greater than 0.5 membership in term `comp_co•comm_co•sativa_co•sval_co•integ_co•core_co•benv_co•trans_co•auth_co`: 26 (0.500, 0.999), 20 (0.500, 0.999), 19 (0.500, 0.499).

Cases with greater than 0.5 membership in term `comp_co•comm_co•sativa_co•sval_co•integ_co•core_co•benv_co•trans_co•auth_co`: 10 (0.500, 0.999), 21 (0.500, 0.999), 26 (0.500, 0.999).

Cases with greater than 0.5 membership in term `comp_co•comm_co•sativa_co•sval_co•integ_co•core_co•benv_co•trans_co•auth_co`: 26 (0.500, 0.999), 36 (0.500, 0.999).

Cases with greater than 0.5 membership in term `comp_co•comm_co•sativa_co•sval_co•integ_co•core_co•benv_co•trans_co•auth_co`: 9 (0.949, 0.999), 16 (0.500, 0.499).

Cases with greater than 0.5 membership in term `comp_co•comm_co•sativa_co•sval_co•integ_co•core_co•benv_co•trans_co•auth_co`: 11 (0.500, 0.499), 20 (0.500, 0.500), 15 (0.500, 0.499).

Cases with greater than 0.5 membership in term `comp_co•comm_co•sativa_co•sval_co•integ_co•core_co•benv_co•trans_co•auth_co`: 17 (0.500, 0.499), 21 (0.500, 0.499), 24 (0.500, 0.499).
**TRUTH TABLE ANALYSIS**

File: C:/Users/dfrankIi/Downloads/Constant Added OCA File - All Conditions Amended.csv
Model: -recovery_cc = (comp_cc, conm_cc, satis_cc, sval_cc, integ_cc, cocr_cc, benv_cc, trans_cc, such_cc)

--- INTERMEDIATE SOLUTION ---
frequency cutoff: 1
consistency cutoff: 0.804527

Assumptions:
- comp_cc (absent)
- conm_cc (absent)
- satis_cc (absent)
- sval_cc (absent)
- integ_cc (absent)
- cocr_cc (absent)
- benv_cc (absent)
- trans_cc (absent)
- such_cc

<table>
<thead>
<tr>
<th>Membership</th>
<th>Coverage</th>
<th>Unique Coverage</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.487219</td>
<td>0.0375609</td>
<td>0.926462</td>
<td></td>
</tr>
<tr>
<td>0.238451</td>
<td>0.0304065</td>
<td>0.974868</td>
<td></td>
</tr>
<tr>
<td>0.189165</td>
<td>0.025896</td>
<td>0.954801</td>
<td></td>
</tr>
<tr>
<td>0.432336</td>
<td>0.028864</td>
<td>0.945136</td>
<td></td>
</tr>
<tr>
<td>0.876412</td>
<td>0.149777</td>
<td>0.99993</td>
<td></td>
</tr>
<tr>
<td>0.071498</td>
<td>0.070704</td>
<td>0.977379</td>
<td></td>
</tr>
<tr>
<td>0.483256</td>
<td>0.257694</td>
<td>0.945316</td>
<td></td>
</tr>
<tr>
<td>0.384512</td>
<td>0.384512</td>
<td>0.945316</td>
<td></td>
</tr>
<tr>
<td>0.0594462</td>
<td>0.0187119</td>
<td>0.798776</td>
<td></td>
</tr>
</tbody>
</table>

Cases with greater than 0.5 membership in term -comp_cc•auth_cc:
- 31 (0.99, 0.999), 34 (0.99, 0.999), 32 (0.99, 0.999), 33 (0.99, 0.999), 36 (0.99, 0.999), 29 (0.979, 0.949), 22 (0.949, 0.949), 24 (0.949, 0.499), 26 (0.949, 0.999), 27 (0.949, 0.499)

Cases with greater than 0.5 membership in term -sval_cc•cocr_cc•auth_cc:
- 40 (0.951, 0.949), 21 (0.949, 0.499), 36 (0.949, 0.949), 10 (0.669, 0.949), 11 (0.501, 0.499), 11 (0.501, 0.499), 26 (0.501, 0.999), 29 (0.949, 0.949), 35 (0.949, 0.499)

Cases with greater than 0.5 membership in term -comq_cc•integ_cc•benv_cc•auth_cc:
- 34 (0.999, 0.999), 37 (0.999, 0.949), 30 (0.999, 0.999), 32 (0.999, 0.999), 33 (0.999, 0.999), 39 (0.999, 0.999), 40 (0.999, 0.999), 22 (0.949, 0.949), 23 (0.949, 0.499).

Cases with greater than 0.5 membership in term -comp_cc•sval_cc•cocr_cc•benv_cc•auth_cc:
- 34 (0.999, 0.999), 37 (0.999, 0.949), 30 (0.999, 0.999), 32 (0.999, 0.999), 33 (0.999, 0.999), 39 (0.999, 0.999), 40 (0.999, 0.999), 22 (0.949, 0.949), 23 (0.949, 0.499), 35 (0.949, 0.499), 29 (0.949, 0.949).

Cases with greater than 0.5 membership in term -sval_cc•integ_cc•cocr_cc•auth_cc:
- 34 (0.999, 0.999), 26 (0.999, 0.999), 33 (0.999, 0.999), 30 (0.999, 0.999), 13 (0.501, 0.499), 20 (0.501, 0.949), 14 (0.501, 0.499).

Cases with greater than 0.5 membership in term -comp_cc•sval_cc•auth_cc:
- 34 (0.999, 0.999), 37 (0.999, 0.949), 30 (0.999, 0.999), 32 (0.999, 0.999), 33 (0.999, 0.999), 39 (0.999, 0.999), 40 (0.999, 0.999), 22 (0.949, 0.949), 23 (0.949, 0.499).

Cases with greater than 0.5 membership in term -comp_cc•sval_cc•cocr_cc•benv_cc•auth_cc:
- 34 (0.999, 0.999), 37 (0.999, 0.949), 30 (0.999, 0.999), 32 (0.999, 0.999), 33 (0.999, 0.999), 39 (0.999, 0.999), 40 (0.999, 0.999), 22 (0.949, 0.949), 23 (0.949, 0.499), 35 (0.949, 0.499), 29 (0.949, 0.949).

Cases with greater than 0.5 membership in term -comp_cc•sval_cc•auth_cc:
- 20 (0.951, 0.549), 19 (0.951, 0.499), 12 (0.951, 0.499), 18 (0.951, 0.499), 16 (0.951, 0.499), 14 (0.501, 0.499), 26 (0.501, 0.999), 29 (0.949, 0.949), 35 (0.949, 0.499).
**TRUTH TABLE ANALYSIS**

---

**Model:** recovery_cc = f(comp_cc, comm_cc, satia_cc, sval_cc, integ_cc, cocr_cc, bcnv_cc, crancc, auch_cc)

**Algorithm:** Quine-McCluskey

--- FARMINIOUS SOLUTION ---

**frequency cutoff:** 1
**consistency cutoff:** 0.804527

<table>
<thead>
<tr>
<th>Term</th>
<th>Raw Coverage</th>
<th>Unique Coverage</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>comp_cc-benv_cc</td>
<td>0.766143</td>
<td>0.885473</td>
<td>0.922129</td>
</tr>
<tr>
<td>comp_cc-auth_cc</td>
<td>0.687219</td>
<td>0.826462</td>
<td></td>
</tr>
<tr>
<td>satia_cc</td>
<td>0.686454</td>
<td>0.812594</td>
<td>0.922454</td>
</tr>
<tr>
<td>comp_cc-sval_cc</td>
<td>0.963161</td>
<td>0.365676-05</td>
<td>0.601461</td>
</tr>
<tr>
<td>comp_cc-cocr_cc</td>
<td>0.097366</td>
<td>0.809524</td>
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</tr>
<tr>
<td>comm_cc</td>
<td>0.081539</td>
<td>0.822838</td>
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</tr>
<tr>
<td>sval_cc</td>
<td>0.160555</td>
<td>0.874034</td>
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</tr>
<tr>
<td>cocr_cc</td>
<td>0.164773</td>
<td>0.886119</td>
<td></td>
</tr>
<tr>
<td>bcnv_cc</td>
<td>0.238661</td>
<td>0.974898</td>
<td></td>
</tr>
<tr>
<td>crancc</td>
<td>0.156165</td>
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</tr>
<tr>
<td>auch_cc</td>
<td>0.156503</td>
<td>0.984757</td>
<td></td>
</tr>
</tbody>
</table>

**Solution coverage:** 0.977111
**Solution consistency:** 0.781154

---

**Cases with greater than 0.5 membership in term -comp_cc-benv_cc:**
34 (0.999,0.999), 35 (0.999,0.999), 37 (0.999,0.999), 30 (0.999,0.999), 32 (0.999,0.999), 33 (0.999,0.999), 36 (0.999,0.999), 39 (0.999,0.999), 29 (0.999,0.949), 22 (0.999,0.949), 23 (0.999,0.949), 28 (0.999,0.949), 25 (0.999,0.949)

**Cases with greater than 0.5 membership in term -comp_cc-auth_cc:**
31 (0.999,0.999), 34 (0.999,0.999), 35 (0.999,0.999), 36 (0.999,0.999), 39 (0.999,0.999), 29 (0.999,0.949), 22 (0.999,0.949), 23 (0.999,0.949), 28 (0.999,0.949), 25 (0.999,0.949)

**Cases with greater than 0.5 membership in term -sativa_cc:**
22 (0.999,0.999), 31 (0.999,0.999), 10 (0.999,0.949), 30 (0.999,0.999), 32 (0.999,0.999), 33 (0.999,0.999), 39 (0.999,0.999), 40 (0.999,0.999), 9 (0.999,0.999), 31 (0.999,0.999), 26 (0.999,0.999)

**Cases with greater than 0.5 membership in term sval_cc:**
16 (0.951,0.999), 31 (0.951,0.999)

**Cases with greater than 0.5 membership in term ccrcc:**
16 (0.951,0.999)

**Cases with greater than 0.5 membership in term integ_cc-cocr_cc:**
16 (0.949,0.949)

**Cases with greater than 0.5 membership in term ccrcc:**
9 (0.949,0.999), 35 (0.949,0.949), 11 (0.501,0.499)

**Cases with greater than 0.5 membership in term -sval_cc-cocr_cc:**
9 (0.949,0.999), 35 (0.949,0.949), 11 (0.501,0.499)

**Cases with greater than 0.5 membership in term ccrcc:**
10 (0.999,0.999), 17 (0.999,0.999), 36 (0.951,0.999), 40 (0.951,0.999), 11 (0.501,0.499)

**Cases with greater than 0.5 membership in term -sval_cc-cocr_cc:**
10 (0.999,0.999), 17 (0.999,0.999), 36 (0.951,0.999), 40 (0.951,0.999), 11 (0.501,0.499)

**Cases with greater than 0.5 membership in term ccrcc:**
26 (0.951,0.999), 36 (0.951,0.999), 31 (0.951,0.999)

**Cases with greater than 0.5 membership in term sval_cc-cocr_cc:**
26 (0.951,0.999), 36 (0.951,0.999), 31 (0.951,0.999)

**Cases with greater than 0.5 membership in term ccrcc:**
12 (0.951,0.999), 20 (0.951,0.999), 19 (0.501,0.499), 21 (0.501,0.499)

**Cases with greater than 0.5 membership in term sval_cc-cocr_cc:**
20 (0.951,0.999), 19 (0.501,0.499), 21 (0.501,0.499), 24 (0.501,0.499)