

**Toward Restoring Violated Trust: Exploring the
Antecedents of Trust in Business-to-Business
Relationships**

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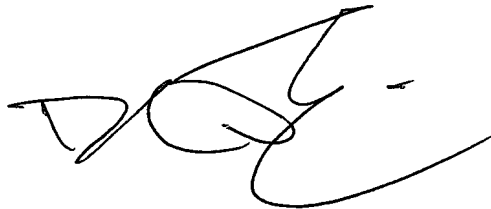
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Attestation of Authorship

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

A handwritten signature in black ink, appearing to be 'Drew Franklin', written over a horizontal line.

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Ethical Approval

Ethics approval from the Auckland University of Technology Ethics Committee (AUTEC) was granted on 14th October, 2013, as detailed in *Appendix One*, for a period of three years commencing 14th October, 2013. The AUTEC ethics application number is 13/280.

Abstract

Trust has been described as “perhaps the single most powerful relationship marketing tool available to a company” (Berry, 1995, p. 242). Trust enjoys wide acceptance among scholars as a key facilitator of inter-organisational relationship development; however, the construct begs deeper exploration within a framework of both existing and emerging dimensions of trust. Successful relationship development demands an understanding of what drives the propensity to trust between organisations.

Organisations that are oblivious to these evaluative criteria risk relationship decay with partner organisations.

The six most salient antecedents of trust within contemporary trust literature, explored both conceptually and empirically, have been identified as satisfaction, communication, competence, shared values, benevolence and integrity. Additionally, co-creation is investigated as an emergent antecedent of trust in business-to-business relationships. The relationship between these independent variables and trust are investigated by adopting multiple regression analysis. The moderating influence of business experience on the relationship between significant independent variables and trust is also explored. Findings from this study indicate that co-creation and integrity positively affect trust within a business-to-business environment. The results also reveal that business experience has a moderating effect on the relationship between co-creation and trust.

The longer-term, more involved nature of business-to-business relationships precludes flawless execution of all service encounters. Service failure is a common occurrence

within inter-organisational relationships and the trust enjoyed between partners can suffer as a consequence. An exploration of the antecedents of trust within business-to-business relationships serves as the first step toward developing sound trust recovery mechanisms in the event of a violation of trust.

Chapter One: Introduction

The primary goal of this study is to establish and operationalise the antecedents of trust within a business-to-business environment. A subsidiary goal is to explore the moderating influence of an individual's business experience on the significant antecedents of trust. Directors, managers or other decision makers within a business-to-business context were identified as suitable for investigation and the sample was drawn from a variety of industries within both Australia and New Zealand.

Although the benefits of trust are well-documented, creating and sustaining trust is often difficult (Kramer, 1999) and the paucity of research on inter-organisational trust is under-representative of its importance. This research seeks to distinguish itself from many existing studies that capture trust very broadly (Möllering, 2006) or are only interested in a particular, peripheral aspect of trust, by setting out to examine trust as a central concern from the outset (Lyon, Möllering, & Saunders, 2012).

Most prior research on the antecedents of trust within a business-to-business environment examine trust within either cognitive or affective dimensions, but rarely both. Additionally, within contemporary research, the exploration of individual, actor-level traits that may influence the development of inter-organisational trust, such as individual business experience, is markedly absent. In the present study, an attempt has been made to contribute to these areas of research by examining both cognitive and affective antecedents of trust within a business-to-business environment and by explicitly recognising the moderating influence of an individual's overall business experience on trust. This study also responds to the lack of empirical research

examining the effects of co-creation on trust. These findings serve to assist in the development of both general trust theory and, specifically, inter-organisational trust research.

A breadth of relationship marketing research has demonstrated that committed and loyal relationships are predicated on trust (Crosby et al., 1990; Morgan & Hunt, 1994; Parasuraman, Berry, & Zeithaml, 1991). The foundation and fostering of trust is even more imperative within service industries because of the intangibility of services and the relational nature of service interactions (Berry, 1995). Most services are difficult to evaluate prior to purchasing and experiencing them (Macintosh, 2009); indeed some services remain difficult to evaluate even after they have been performed (Berry, 2002). Meeting, or exceeding, the evaluative criteria of customers over time strengthens the reliability of the exchange partner and serves to cultivate trust (Ganesan, 1994; Hess & Story, 2005; Tax, Brown, & Chandrashekar, 1998). The promotion of trust-building exercises is particularly critical within service-based organisations as the exchange is largely based on intangible goods. The service relationship functions as a proxy for a physical product in which to invest a measure of evaluative stock, so a violation of trust within service delivery can result in the loss of a potentially long-term exchange relationship.

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 that perceived risk by a measure of reliability and honesty (Crosby et al., 1990; Morgan & Hunt, 1994). Customers who develop trust in suppliers based on different cognitive

and affective 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). The relative strength of both cognitive and affective antecedent dimensions of trust has not been appropriately addressed within contemporary relationship marketing literature. Therefore, a contribution of the present study is a deeper understanding of what drives the propensity to trust between organisations.

1.1 Motivation for Research

Most prior research has examined trust as a static construct; focusing on unidimensional measures of trust that serve to limit generalisability of the construct (Doney, Barry, & Abratt, 2007; Schweitzer, Hershey, & Bradlow, 2006). Only a few studies have considered how trust develops and little existing research has considered how trust might recover after it has been harmed (Schweitzer et al., 2006). The objective of this research is to empirically validate the underlying mechanisms by which organisations develop inter-organisational trust and whether actor-specific traits, such as length of business experience, influence the development of inter-organisational trust.

The downstream marketing benefits of a trusting business relationship are well established within existing marketing literature. A deeper understanding of the antecedent dimensions of inter-organisational trust is of considerable interest to both academics and practitioners, alike. Therefore, the present study attempts to develop a better understanding of the impact of co-creation, satisfaction, communication, competence, shared values, benevolence and integrity on trust.

1.2 Expected Research Contribution

A comprehensive review of the existing trust literature reveals a need for further exploration of both emergent and existing dimensions of trust within a business-to-business context. This study 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.

For academics, the findings of this research will serve to replicate past findings on the strength of antecedent dimensions of trust within spheres of both cognitive and affective trust in a business-to-business environment. This research also serves to address a current shortcoming of existing studies by empirically exploring the relationship of co-creation to trust (Devasirvatham, 2012).

The practical implications of this research are such that managers, through understanding how customers build trust within a business-to-business environment, are better equipped to influence and manage this process (Shainesh, 2012).

Additionally, by investigating the relationship between business experience and significant antecedent dimensions of trust, managers gain insight into how best to tailor relationship marketing programmes relative to an individual, actor-level, characteristic.

1.3 Organisation of the Thesis

This thesis consists of six chapters and is organised as follows: First, I review the relevant literature to develop the research model and propose hypotheses. Second, I discuss the methodology adopted, analysis conducted, and report the results. Finally,

I conclude by highlighting the implications for theory and practice, note the limitations of the study and suggest directions for future research.

Chapter Two: Literature Review

This chapter contains several sections that review different aspects of the relevant literature. First, an overview of the concept of trust within contemporary theoretical and empirical research is presented. Second, literature on business-to-business, or inter-organisational, trust is reviewed. Third, the relationship between service recovery and trust is discussed. Fourth, the literature on trust repair and recovery is presented. Fifth, the seven most salient antecedents of trust are discussed and, finally, existing research on individual, actor-level, moderators of trust is presented.

2.1 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). Early trust researchers have likened 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 a consensus on the definition of what trust means (McKnight et al., 1998). In fact, contemporary researchers remark that trust definitions have become “a confusing potpourri” (Shapiro, 1987, p. 625), a “conceptual confusion” (Lewis & Weigert, 1985, p. 975), and even a “conceptual morass” (Barber, 1983, p. 1; Carnevale, Pruitt, & Carrington, 1982, p. 473). Trust has even been described as an “elusive concept” (Gambetta, 1988, p. ix). There is profuse, multi-disciplinary acceptance, however, of the importance of trust as a social foundation of

interaction (Lewis & Weigert, 2012); in effect, the glue that holds a relationship together (Morton 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; Mollering, 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, McAllister, & Bies, 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 (Mayer et al., 1995; McAllister, 1995; Rousseau, Sitkin, Burt, & Camerer, 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 (Rippperger, 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 (Rippperger, 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 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 (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; Rousseau et al., 1998).

2.1.1 The Concept of Cognitive or Calculus-Based Trust

Cognitive trust represents the rational element of trust within a relationship and is rooted in the knowledge in the other party and its functional capabilities and has been described as a joint learning process (Castaldo, 2007; Sekhon et al., 2013). Typically, trust emerges 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). Cognitive trust 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), inter-organisational communication (de Ruyter, Moorman, & Lemmink, 2001; Doney et al., 2007; Saleh, Ali,

& Quazi, 2013) and integrity (Butler, 1991; Butler & Cantrell, 1984; Mayer et al., 1995; Pavlou, 2002).

2.1.2 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 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 intentions 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 or 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 affective trust is 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).

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 instills between parties serves to buoy the sense of security as care and concern are demonstrated by the other partner (Johnson-George & Swap, 1982). This functions as a projection of the image that the other party will not act opportunistically in their behaviour with the other party (Morrow Jr, Hansen, & Pearson, 2004) and will exercise benevolence toward the other party if presented with an opportunity to do so (Sirdeshmukh, Singh, & Sabol, 2002). This emotional attachment can aid the trustee in accepting vulnerability and risk (Weber, Malhotra, & Murnighan, 2005).

2.1.3 The Iterative Nature of Cognitive and Affective Trust

Both cognitive and affective trust develop 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. This experience and knowledge are also relative to the context within which they are encountered. Similarly, we seldom approach relationships with no information about the other party, rather we tend to approach relationships with a 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, Dickhaut, & McCabe, 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. Recent sales management literature finds support for the same proposition in the case of marketing and sales managers’ relationships (Massey & Dawes, 2007).

2.2 Trust within Business-to-Business Relationships

Relative to the abundance of trust literature, there is limited evidence to suggest trust has been explored within the context of more contemporary business-to-business, or interorganisational, dynamics. As an understanding of a trust choice, or behaviour, is strongly influenced by context, these trusting behaviours might look quite different depending on the context in which they occur (Dietz, Gillespie, & Chao, 2010; Dietz & Hartog, 2006; Lyon et al., 2012).

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 (Hrebiniak, 1974; Wong & Sohal, 2002). Undeniably, such commitment 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 (Dwyer, Schurr, & Oh, 1987; Gundlach, Achrol, & Mentzer, 1995; Morgan & Hunt, 1994).

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 2011, under half of the global population said they trust corporations (Gillespie & Dietz, 2009; Edelman, 2012).

Fostering trust within business-to-business 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).

The notion of trust as a critical success factor in service relationships was first introduced by Parasuraman, Zeithaml and Berry in 1985. The authors suggested that "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).

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, 2003), and a belief that the partner in a negotiation will not exploit or take advantage of the other's vulnerability (Dwyer et al., 1987). The willingness to rely on an exchange partner in

whom one has confidence is a central tenet of inter-organisational trust (Moorman et al., 1993).

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). Berry (1995) recognised that when consumers develop trust in their service providers, it serves to mitigate those feelings of vulnerability and lowers uncertainty.

2.2.1 Institutional Trust or Controls within Business-to-Business Relationships

Scholars suggest that the increased complexities of business-to-business 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) 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 Murnighan (2002) found that the use of binding contracts can 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.

2.2.2 Long Term Orientation within Business-to-Business Relationships

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). Scholars note that creating a loyal customer base in a business-to-business context is not only about maintaining customers, over time, but nurturing those relationships to encourage future purchase and level of advocacy (Ramaseshan, Rabbanee, & 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).

Therefore, the ultimate goal within business-to-business 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). Trust has been found to be one of the most important factors in maintaining a long-term relationship within a business-to-business context (Ryssel, Ritter, & Gemünden, 2004).

The competitive advantage that long-term relationships foster within business-to-business partnerships has been well established within practice (Reichheld, 1996). 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). 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 (Shankar Ganesan, 1994; Hess & Story, 2005; Tax et al., 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, 2003) 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).

2.3 Antecedent Dimensions of Trust within Business-to-Business

Relationships

Trust has been conceptualised, defined, modelled and operationalised in a wide variety of ways, and across many different disciplines. Trust has been viewed as an individual disposition (Rotter, 1967; Worchel, 1979), a psychological state (Lewicki et al., 1998; Rousseau et al., 1998) and a behaviour (Deutsch, 1962; Mayer et al., 1995). Within these conceptualisations, different disciplines have emphasised different components such as individual, organisational and economic aspects of trust.

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 et al., 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).

Antecedents of trust that have been discovered, some almost as a secondary concern whilst researching other dependent variables, 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, 2003; Zaheer et al., 1998).

2.3.1 Co-creation and Trust within Business-to-Business 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 dynamic between customer and supplier is in contrast to supplier-centered marketing (Grönroos, 2008; Ramirez, 1999) and has been described the “next frontier” in advantage seeking behaviours, especially in a business-to-business environment (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 emphasizes value creation

by customers engaging in the service process toward solving a particular problem, or proposition, using a firm's prescribed process (Payne, Storbacka, & Frow, 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). 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 suppliers 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 ongoing collaborations between customers and providers 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-creation marketing 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 (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). 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).

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). A higher-degree of customer co-creation has been suggested to generate higher levels of trust between the buyer and the 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. 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 concept of higher levels of co-creation leading to higher levels of trust has also been empirically studied, and supported, by Rajah (2012).

2.3.2 Satisfaction and Trust within Business-to-Business 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). 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). Ganesan (1994) confirmed the important role of relationship satisfaction when arguing that, in a continuing 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 & 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 to increase the intention to continue the relationship from that of a strictly transactional

level (Odekerken-Schröder, van Birgelen, Lemmink, de Ruyter, & Wetzels, 2000; Theron, Terblanche, & Boshoff, 2008).

Scholars have also likened trust to that of a long-term relationship-oriented consequence of service quality and that it is not likely to be affected by only one single incident (Odekerken-Schröder et al., 2000). Satisfaction with previous encounters and the enhanced, long-term relational confidence that ensues has also been established within a financial services context (Ganesan, 1994; Theron et al., 2011). Johnson and Grayson (2005) also found that the experience of satisfaction contributes to perceptions of trust.

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 tend to concur that satisfaction is necessary, but not sufficient for the formation of trust, and not all satisfied customers trust the brand (Moorman 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 business-to-business 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) have highlighted the need to reduce dependence on satisfaction measures alone, relative to measures of relationship quality.

2.3.3 Communication and Trust within Business-to-Business 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, 2004; de Ruyter et al., 2001; Geykens, Steenkamp, & Kumar, 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).

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 by a more strategic nature of communication than that of strict economic exchanges of information (Mittal, 1999). It has been positioned 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).

Anderson and Weitz (1992) suggest that the formal and informal sharing of information through frequent two-way interactions plays an important role in realizing 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).

2.3.4 Competence and Trust within Business-to-Business 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 partner possessed 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).

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 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 serve 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. The assessment, by buyers, 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 that “if customers perceive service quality favorably, 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 around 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 which 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. (2000) 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.

2.3.5 Shared Values and Trust within Business-to-Business 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 (Chatman, 1989; Meyer & Allen, 1984).

Organisational scholars have established that attitudes and behaviours within an organisation are formulated by similar values (Kelman, 1961) 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”. Some authors note that in terms of content, relationships may be governed by these shared norms, or values, pertaining to quality, profitability 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 (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 (Law, 2008).

Morgan and Hunt (1994) established that shared values contributed 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). This “overshadowing risk”, that is inherent in any business relationship, is what a higher level of trust serves to inoculate against.

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.

2.3.6 Benevolence and Trust within Business-to-Business Relationships

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). Benevolence within a service relationship has been alternately 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 and 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”. Borys and Jemison (1989) argue that the benevolence dimension of trust is at a higher level than that of other, more cognitive, dimensions as cooperative behaviour is not based on rational calculation, but on goodwill. 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,

Lisa, & E. 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).

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 lie (Hovland, Janis, & Kelley, 1953) and shares a consistent view with that of perceived benevolence contributing to an assessment of trustworthiness in a relationship insomuch that high benevolence would be inversely related to motivation to lie. Some early trust researchers have considered intentions or motives as important to 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, whilst Butler and Cantrell (1984) identified loyalty among their determinants of dyadic trust. Rosen and Jerdee (1977) considered the likelihood that a trustee would put organisational goals before individual goals in a relationship. 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).

Within a business-to-business relationship, benevolence can serve to reduce perceived relational risk. This relational risk, perceived by the buyer, would be characterised by the risk of opportunistic behaviour on the part of the supplier, whilst 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 business-to-business relationships due to the long-term orientation of typical inter-organisational relationships. In a business-to-business 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; 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 the development of trust (Smith & Donald, 1997).

2.3.7 Integrity and Trust within Business-to-Business 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). Early trust researchers have illustrated why both the adherence to, and the acceptance of, a set of principles that the trustor finds acceptable are important. McFall (1987) suggests that following some set of principles defines personal integrity, however, if that set of principles are not deemed acceptable by the trustor, the trustee would not be considered to have integrity. Thus, 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 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 Degoe (1996) who include honesty, fairness and character within their conceptualisation of integrity. Within the psychology literature, Butler and Cantrell (1984) report that integrity is a significant determinant of subordinate trust in superiors.

Scholars have reported that integrity dimensions of trust are more affect-based in nature (Clark, Scholder Ellen, & Boles, 2010) as integrity is determined more by social interaction and citizenship behaviours. Research that considers breaches of these citizenship behaviours highlights the importance of integrity when examining trust violations among 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 (Mayer et al., 1995; Sirdeshmukh et al., 2002).

2.4 Moderators of Trust within Business-to-Business Relationships

Scholars propose that the conceptual challenge in exploring the role of trust in inter-organisational exchange is extending an inherently individual-level phenomenon to the organisational level of analysis (Zaheer et al., 1998). Developing an understanding of what drives the propensity to trust 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 inter-organisational relationships being characterised as an “amalgam of decisions made by individuals” (Lynch, 2004); it is individuals trusting, collectively, as an organisation rather than the 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).

Trust has been found to manifest at individual, group, organisational and societal levels and is an evidentiary phenomenon: that is, it changes with evidence in favour-of, or against, further trust (Lyon et al., 2012). Lewicki and Brinsfield (2012) suggest that a critical issue within trust research is how we measure the ways individuals update and recalibrate their trust judgements over time. This temporal dimension of trust development was proposed by both Lewicki and Bunker (1996) and Mayer et al. (1995) as graduating from that of a more calculus-based, or cognitive, trust to that of a more identification-based, or affective, trust between individuals as agents of an organisation, over time. Zaheer, McEvily and Perrone (1998, p. 141) argue that 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.” Whilst Zaheer et al. (1998) 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 as a proxy to interorganisational trust because other factors such as individual social and environmental context must be considered.

2.4.1 Individual Levels of Business Experience within Business-to-Business

Relationships

Sociology research suggests trust develops as the result of past interpersonal experiences and is viewed as the outcome of learning (Brunetto & Farr-Wharton, 2007). Similarly, Bower, Garber and Watson (1997) note that trust is dependent on history whilst Zucker (1986) proposes one such form of interorganisational trust is characteristic-based trust based on individual member's characteristics. These individuals, collectively, are responsible for processing diagnostic information from partner organisations and representing their organisation in the relationship (Janowicz-Panjaitan & Krishnan, 2009; Zaheer et al., 1998). It is these individuals that serve as the agents of an organisation and as the interface between organisations. It is through these individuals, or employees, that interorganisational relationships come into effect (Blois, 1999; Inkpen & Currall, 1997). These employees play a major role in shaping the service experience, as well as implicit relationship characteristics, as this interface between the service and provider is often inseparable (Berry, 1995; Wong & Sohal, 2002).

The distinction must be made, however, between organisational members who are more experienced in enacting interorganisational collaboration. These individuals possess a rich interactive history based on geographic, industry and economic

experiences (Schoorman et al., 2007). For organisations, this can positively or negatively effect their propensity to trust. A series of previous positive interactions within an industry will lend itself to a greater propensity to trust other members whilst, conversely, a series of previous negative interactions will lend itself to a lesser propensity to trust. Understanding the implicit nature of propensity to trust within organisational members is critical to understanding organisational trust, as the strategic actions of the organisation will be governed by these individuals (Cyert & March, 1963; Simon, 1950).

This predisposition to trust differs considerably between individuals and ample evidence exists in both experimental and field-based research in support of this notion (Gurtman, 1992; Sorrentino, Holmes, Hanna, & Sharp, 1995). Some scholars have proposed that propensity to trust, as a dispositional quality, is a subjective individual quality of actors (McKnight et al., 1998) and is determined by their developmental backgrounds and experiences (Mayer et al., 1995). Rotter (1971) proposed that people extrapolate from their early trust-related experiences to build up general beliefs about others. This diffuse expectancy for trust eventually assumes the form of a relatively stable personality characteristic (Rotter, 1971). Other researchers have likened this to “basic trust”, as it is independent of any other party or context, and a “trusting stance” (Harrison McKnight et al., 2002).

Research within the services domain has established that the nature of service relationships evolves during a specific service encounter (Price, Arnould, & Tierney, 1995) as well as over time (Crosby et al., 1990). Coulter and Coulter (2003) argue that the nature of service relationships should vary depending on the length of time that

customers have interacted with vendors within a particular service industry. This collective, interactive experience serves to buoy the diagnostic resource of a customer when assessing the performance of any particular organisation within an industry. Thus, knowledge and familiarity will increase over time as customers conduct business with multiple organisations and come to know what they can expect to receive. This knowledge and familiarity is independent of the length of time that the customer has been in a relationship with its current supplier (Coulter & Coulter, 2003). As knowledge is gained with repeated exposures to suppliers within a particular services industry, the initial uncertainty and inherent risk associated with any one service relationship may be reduced. Consequently, the “surrogate cues” or personality-related characteristics of an organisation become less important on which to base trust evaluations.

Some scholars have likened this diffuse nature of trust as forming part of the “relationship energy” (Huang & Wilkinson, 2013) that can be conserved and exported to other relationships (Havila & Wilkinson, 2002). Huang and Wilkinson (2013) propose that the collective outcomes and experience in a previous relationship form part of the initial conditions affecting trust in subsequent, new relationships.

2.5 Chapter Summary

The present chapter has provided a review of the relevant literature for the various constructs that form part of this study. Theories and constructs discussed in the present chapter will be used for proposing a model that explores, and explains, the antecedents of trust within a business-to-business environment. The model and the

hypothesised relationship between the various constructs are discussed in Chapter Three.

Chapter Three: Conceptual Framework and Hypotheses

Based on the literature presented in Chapter Two, this chapter presents the conceptual framework of the study. First, Chapter Three conceptualises the linkage between co-creation, satisfaction, communication, competence, shared values, benevolence and integrity and trust within a business-to-business environment. Second, the moderating relationship between business experience and trust is conceptualised.

3.1 Conceptual Framework and Theoretical Model

The purpose of this study is to explore the antecedents of trust within a business-to-business environment. Many researchers have focused, primarily, on the consequences and not the antecedents of trust within a business-to-business environment (Gulati & Sytch, 2008). An understanding of the antecedents of business-to-business trust will serve to encourage development of mechanisms toward trust recovery in the event of a violation of that trust.

Most prior research has examined trust as a static construct; focusing on unidimensional measures of trust that serve to limit generalisability of the construct (Doney et al., 2007; Schweitzer et al., 2006). Only a few studies have considered how trust develops and little existing research has considered how trust might recover after it has been harmed (Schweitzer et al., 2006). The object of this research is to empirically validate the underlying mechanisms by which organisations develop inter-organisational trust and whether actor-specific traits, such as length of business experience, influence the development of inter-organisational trust. This research also

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 as a central concern from the outset (Lyon et al., 2012).

The findings of this research will serve to replicate past findings on the strength of antecedent dimensions of trust within spheres of both cognitive and affective trust within a business-to-business environment. This research also serves to address a current shortcoming of research exploring, empirically, the relationship of co-creation to trust (Devasirvatham, 2012; Rajah et al., 2008).

Therefore, this study proposes the following as a platform for exploration of what factors drive the development of trust within a business-to-business environment:

- Objective One:** Provide a conceptual rationale for examining distinct antecedents of trust within a business-to-business environment.
- Objective Two:** Replicate prior findings on both cognitive and affective antecedents of trust within a business-to-business environment.
- Objective Three:** Investigate the relative importance of antecedents of business-to-business trust including: level of co-creation, level of satisfaction, level of communication, level of competence, level of shared values, level of benevolence and level of integrity.
- Objective Four:** Investigate the moderating influence of business tenure, or length of business experience, on the antecedents of trust within a business-to-business environment.

A comprehensive analysis of the marketing literature has identified the six most salient antecedents of trust within business-to-business relationships as satisfaction, communication, competence, shared values, benevolence and integrity. Additionally, conceptual marketing literature suggests co-creation as an antecedent of business-to-business trust. The conceptual framework for the present study is detailed in *Figure 3.1*. An exploration of contemporary marketing literature also suggests a moderating influence of individual business experience on the antecedents of trust. This relationship is also detailed in the conceptual framework, *Figure 3.1*.

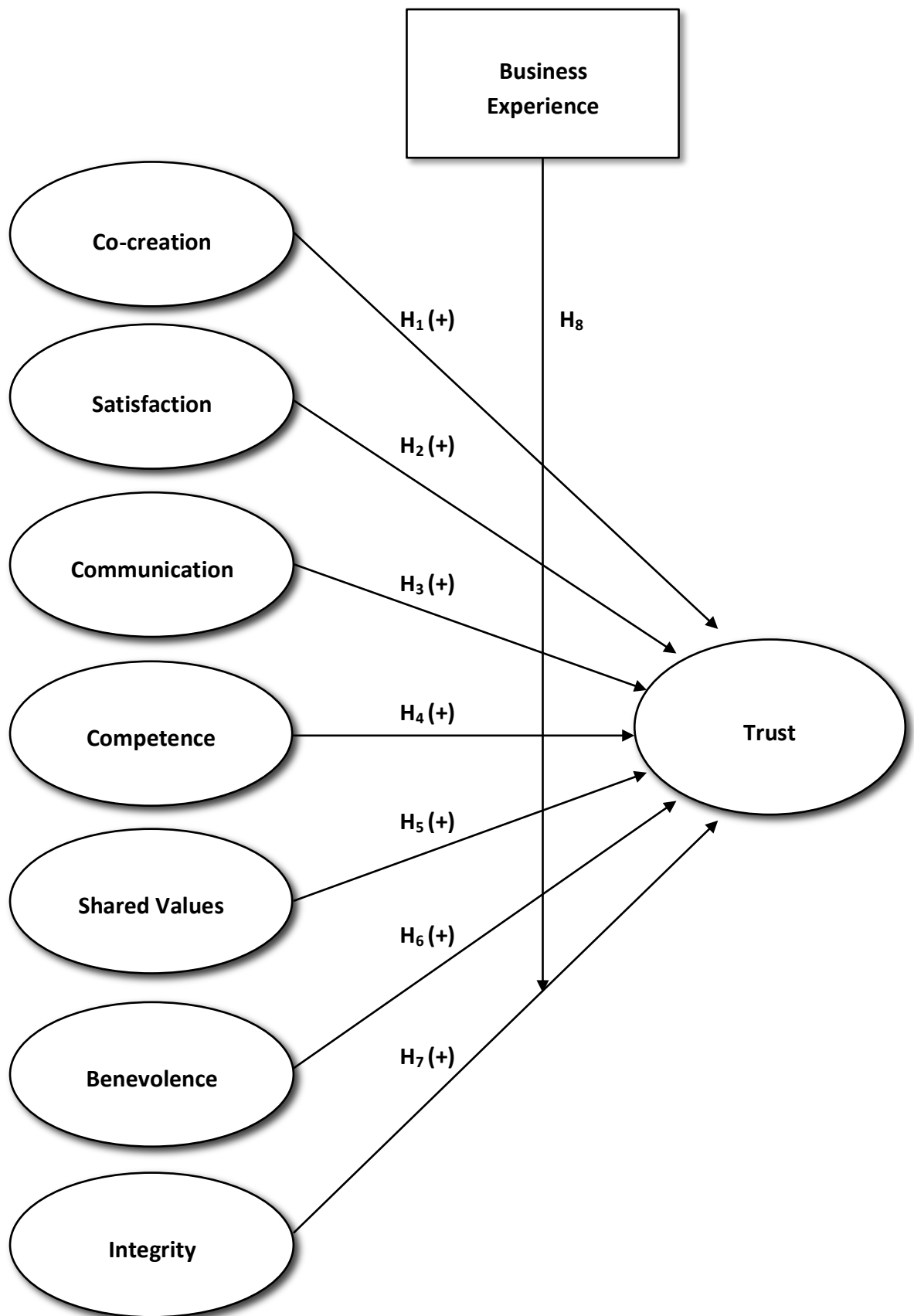


Figure 3.1: Research Study Conceptual Framework

3.2 Trust within Business-to-Business Relationships

This study adopts the research paradigm presented within contemporary trust research 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 construct definition of trust as posed by Garbarino and Johnson (1999), Mayer et al. (1995), Morgan and Hunt (1994) and Ranaweera and Prabhu (2003) as detailed below:

Construct Definition: Trust is conceptualised as existing when there is a willingness of a party to be vulnerable to the actions of another party. This is based on the expectation that the trustee will perform a

particular action important to the trustor, irrespective of the ability to monitor or control them (Garbarino & Johnson, 1999; Mayer et al., 1995; Morgan & Hunt, 1994; Ranaweera & Prabhu, 2003).

3.3 Co-creation as an Antecedent of Trust within Business-to-Business Relationships



Figure 3.2: Adopted Co-creation Construct Definitions

This study employs the construct definition of co-creation as proposed by Ballantyne and Varey (2008), Lundkvist and Yakhlef (2004), and Rajah (2012) as detailed, below, and depicted in *Figure 3.2*.

Construct Definition: Co-creation 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 the co-created solution is drawn from the perceptions of the buyer (Ballantyne & Varey, 2008; Devasirvatham, 2012; Lundkvist & Yakhlef, 2004).

Therefore, this study proposes the following:

Hypothesis One: There is a significant, positive relationship between co-creation and trust.

3.4 Satisfaction as an Antecedent of Trust within Business-to-Business Relationships

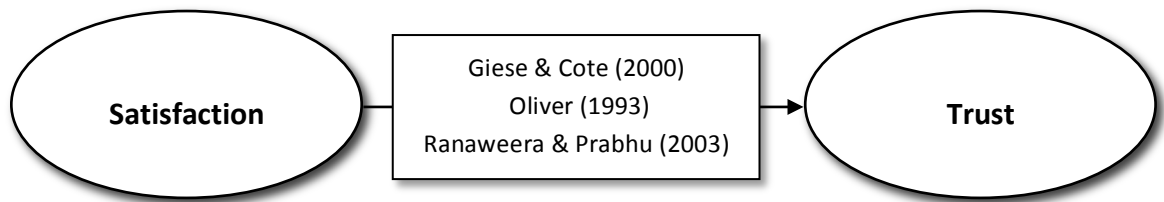


Figure 3.3: Adopted Satisfaction Construct Definitions

The definition of satisfaction, as proposed by Rajah (2012), Giese and Cote (2000), Oliver (1993) and Ranaweera and Prabhu (2003), is applied within this study. This definition details the global, cumulative effect of satisfaction as detailed, below, and depicted in *Figure 3.3*.

Construct Definition: Customer satisfaction is conceptualised as an overall post-purchase evaluation of the final customer solution (Giese & Cote, 2000; Oliver, 1993; Ranaweera & Prabhu, 2003).

Therefore, this study proposes the following:

Hypothesis Two: There is a significant, positive relationship between satisfaction and trust.

3.5 Communication as an Antecedent of Trust within Business-to-Business Relationships

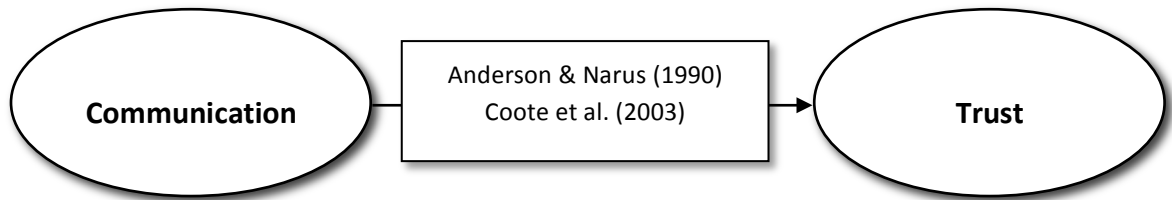


Figure 3.4: Adopted Communication Construct Definitions

Within this study, communication is defined as the social and institutional elements of communication within a business-to-business environment. This definition is proposed by Anderson and Narus (1990) and Coote et al. (2003) as detailed, below, and depicted in *Figure 3.4*.

Construct Definition: Communication is conceptualised as the formal as well as informal sharing of high quality, meaningful and timely information between firms (Anderson & Narus, 1990; Coote et al., 2003).

Therefore, this study proposes the following:

Hypothesis Three: There is a significant, positive relationship between communication and trust.

3.6 Competence as an Antecedent of Trust within Business-to-Business Relationships



Figure 3.5: Adopted Competence Construct Definitions

This study adopts the construct 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 as detailed, below, and depicted in *Figure 3.5*.

Construct Definition: Competence is conceptualised as the buyer's perception of the supplier's technological and commercial acumen. 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 (Crosby et al., 1990; Gummerus et al., 2004; Johnson & Grayson, 2005; Ndubisi & Wah, 2005).

Therefore, this study proposes the following:

Hypothesis Four: There is a significant, positive relationship between competence and trust.

3.7 Shared Values as an Antecedent of Trust within Business-to-Business Relationships

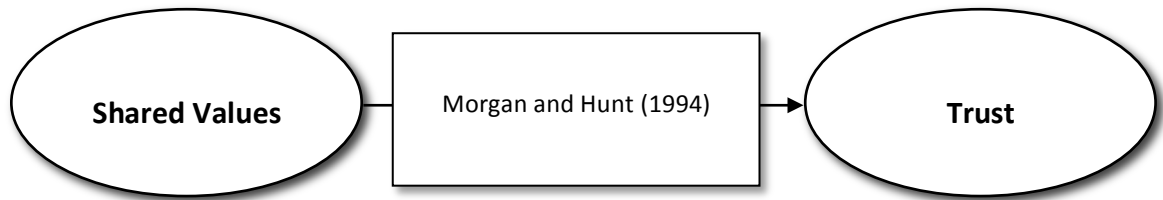


Figure 3.6: Adopted Shared Values Construct Definition

The construct definition of shared values, as proposed by Morgan and Hunt (1994) in their commitment-trust theory of relationship marketing, is adopted for this study. This definition is detailed, below, and depicted in *Figure 3.6*.

Construct Definition: Shared values is 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 (Morgan & Hunt, 1994).

Therefore, this study proposes the following:

Hypothesis Five: There is a significant, positive relationship between shared values and trust.

3.8 Benevolence as an Antecedent of Trust within Business-to-Business Relationships



Figure 3.7: Adopted Benevolence Construct Definitions

This study adopts the construct definition of benevolence as proposed by Casalo et al. (2010), Mayer et al. (1995), McKnight et al. (2002), Schoorman et al. (2007), and Siguaw et al. (1998) as detailed, below, and depicted in *Figure 3.7*.

Construct Definition: Conceptualised as the extent to which a trustee is believed to want to do good to the trustor, aside from profit motive (Casalo et al., 2010; Mayer et al., 1995; McKnight et al., 2002; Schoorman et al., 2007; Siguaw et al., 1998).

Therefore, this study proposes the following:

Hypothesis Six: There is a significant, positive relationship between benevolence and trust.

3.9 Integrity as an Antecedent of Trust within Business-to-Business

Relationships

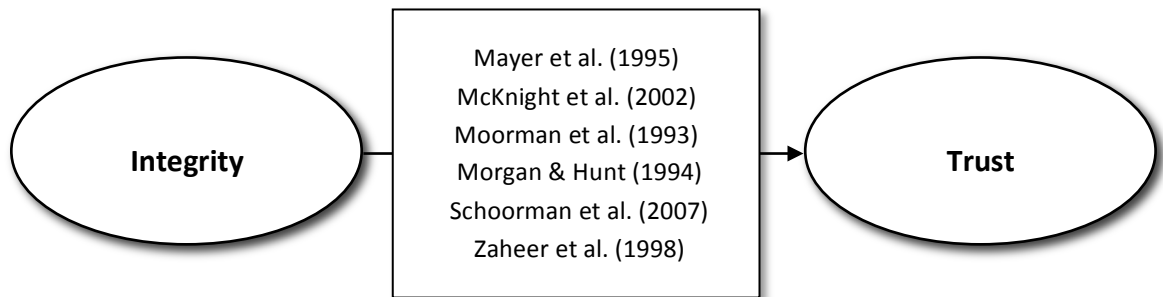


Figure 3.8: Adopted Integrity Construct Definitions

The well-established definition of integrity, as proposed by Mayer et al. (1995), McKnight et al. (2002), Moorman et al. (1993), Morgan and Hunt (1994), Schoorman et al. (2007) and Zaheer et al. (1998), is adopted for this study as detailed, below, and depicted in *Figure 3.8*.

Construct Definition: Conceptualised as the perception that the trustee adheres to a set of principles that the trustor finds acceptable. (Mayer et al., 1995; McKnight et al., 2002; Moorman et al., 1993; Morgan & Hunt, 1994; Schoorman et al., 2007; Zaheer et al., 1998).

Therefore, this study proposes the following:

Hypothesis Seven: There is a significant, positive relationship between integrity and trust.

3.10 Moderating Influence of Business Experience on Trust within Business-to-Business Relationships

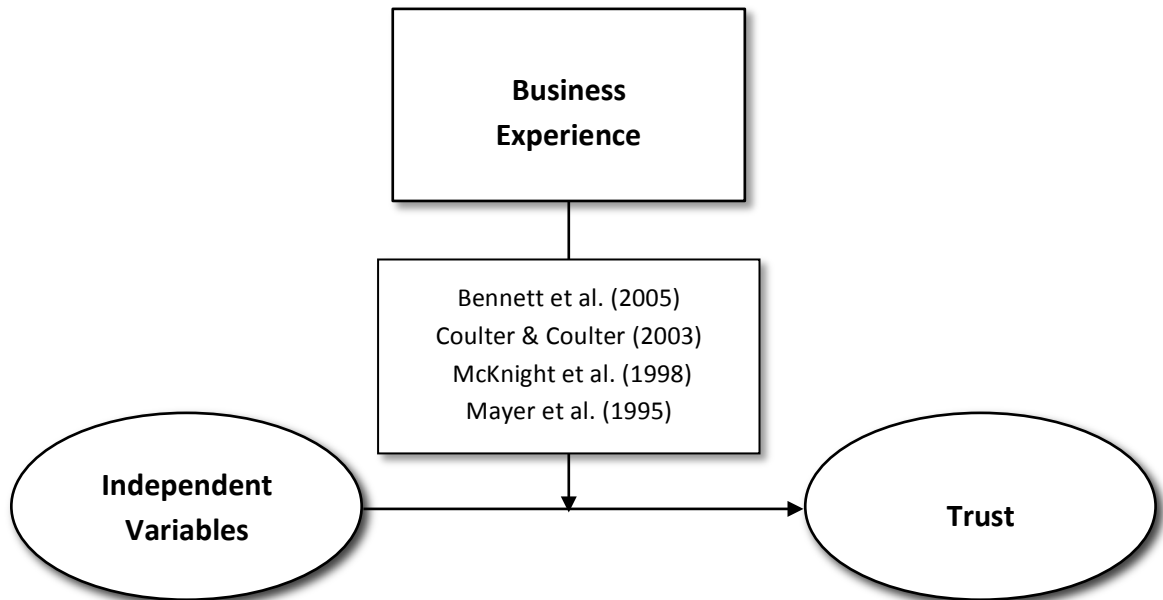


Figure 3.9: Adopted Business Experience Construct Definitions

Business experience is conceptualised by Bennett et al. (2005), Coulter and Coulter (2003), McKnight et al. (1998), and Mayer et al. (1995) and has been employed for this study as detailed, below, and depicted in *Figure 3.9*.

Construct Definition: Conceptualised as an individual, subjective and dispositional quality that is determined by the collective developmental experiences within a particular industry over time. Initial uncertainty and risk associated with subsequent service relationships are reduced as knowledge is gained through repeated exposures (Coulter & Coulter, 2003; Mayer et al., 1995; McKnight et al., 1998).

As the moderation analysis is contingent on the independent variables being significant, this hypothesis is entitled subsidiary hypothesis eight and proposes the following:

Subsidiary Hypothesis Eight: Business experience will moderate the influence of significant independent variables on trust.

3.11 Chapter Summary

A conceptual framework of the antecedents of trust in a business-to-business environment has been proposed in this chapter. A number of hypotheses have been outlined to conceptualise the role of each construct in the framework and to understand the relationship between them, summarised in *Table 3.1*. The proposed model and set of hypotheses will be empirically tested and analysed in the following chapter.

Main Hypotheses	Relationship
H ₁ : Co-creation → Trust	Significant, Positive
H ₂ : Satisfaction → Trust	Significant, Positive
H ₃ : Communication → Trust	Significant, Positive
H ₄ : Competence → Trust	Significant, Positive
H ₅ : Shared Values → Trust	Significant, Positive
H ₆ : Benevolence → Trust	Significant, Positive
H ₇ : Integrity → Trust	Significant, Positive
Subsidiary Hypothesis	
H ₈ : Business experience will moderate the influence of significant independent variables on trust	

Table 3.1: Summary of Proposed Hypotheses

Chapter Four: Method

Chapter Four provides an account of the methodology adopted in testing the proposed model of the antecedents of trust in a business-to-business environment, along with various hypotheses listed in Chapter Three. This chapter includes a brief discussion of the operationalisation of the constructs, the development of the survey instrument, its face validity, the data collection method, sampling and statistical analyses.

The methodology adopted for this research proposal is quantitative. The research is deductive in nature and seeks to test the relative strength of the seven most salient, within contemporary literature, antecedents of trust and the moderating influence of business experience on trust. A questionnaire has been developed, and utilised, to assess the strength and variance of the relationships between the antecedents of trust.

The theoretical framework within which this research has been developed is that of how much the established antecedents of trust, both cognitive and affective, influence an overall measure of trust. This research features exploratory, scale development work with the purpose of establishing and operationalising the antecedents of trust within a business-to-business environment. Multivariate analysis, including multiple regression analysis, will serve to establish the latent variables' comparative contribution to levels of trust and the extent to which the seven variables account for variations on the dependent variable, trust. The choice of multiple regression analysis is suitable within the scope of this research as it will allow the assessment of the relationship between one dependent variable, trust, and several independent variables, the proposed antecedents of trust.

Evaluating the results of the multiple regression analysis will provide a comprehensive picture of the linear relationships between trust and the proposed antecedents of trust in business-to-business relationships; in effect, whether the proposed antecedents are good measures of trust (Hair, Anderson, Tatham, & Black, 1998).

4.1 Measurement of the Variables

All of the measures used in this study are drawn from existing marketing literature and have been developed to suit the purpose at hand. These measures have been tested, and validated, by other researchers through previous empirical exploration. The measures in the present study use, exclusively, multi-item, seven-point Likert-type scales anchored at (1 = Strongly Disagree to 7 = Strongly Agree). The measures all feature syntax reflective of a buyer-supplier, or business-to-business, context so as to ensure a measure of validity within the present study. An overview of the literature adopted for the operationalisation and measurement of the variables used in the present study is featured in *Table 4.1*.

The construct measures feature explicit distinctions in their conceptualisation so as to avoid any multicollinearity. Of particular note is the explicit definition of the “communication” construct as inter-organisational communication as opposed to inter-personal communication. This explicit distinction is to avoid multicollinearity 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 multicollinearity 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.

Type	Variable	Reference	Number of Items	Cronbach's α Reported
Dependent	Trust	Moorman et al. (1992)	5	0.84
Independent	Co-creation	Rajah (2012)	5	0.91
Independent	Satisfaction	Theron et al. (2011)	5	0.93
Independent	Communication	Anderson & Narus (1990)	4	0.85
		Theron et al. (2011)	4	0.89
Independent	Competence	Cho (2006)	4	0.98
Independent	Shared Values	Theron et al. (2008)	4	0.93
Independent	Benevolence	Kumar et al. (1995a)	5	0.78
Independent	Integrity	Mayer et al. (1999)	6	0.96

Table 4.1: Operationalisation and Measurement of Variables

4.1.1 Trust, Dependent Variable

In this study, trust 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. In the present study, items for measuring trust between a buyer and supplier are drawn from Moorman et al. (1992) in their study exploring the role of trust between providers and users of market research both within a firm and external to the firm. The five-item scale that Moorman et al. (1992) propose features high reliability, with a reported Cronbach's alpha value of 0.84. Slight modifications are made to the syntax of the questions to suit the present study. These

changes are not materially different from that of the original scale items and are featured in *Table 4.2*.

Original Trust Scale Item	Modified Trust Scale Item	Reference
1. If I, or someone from my department, could not be reached by our researcher I would be willing to let my researcher make important research decisions without my involvement.	1. If I, or someone from my company , could not be reached by my supplier I would be willing to let my supplier make important decisions without my involvement.	Moorman et al. (1992)
2. If I, or someone from my department, were unable to monitor my researcher's activities, I would be willing to trust my researcher to get the job done right.	2. If I, or someone from my company , were unable to monitor my supplier's activities I would be willing to trust my supplier to get the job done right.	Moorman et al. (1992)
3. I trust my researcher to do things I can't do myself.	3. I trust my supplier to do things I can't do myself.	Moorman et al. (1992)
4. I trust my researcher to do things my department can't do itself.	4. I trust my supplier to do things my company can't do itself.	Moorman et al. (1992)
5. I generally do not trust my researcher (R).	5. I generally trust my supplier .	Moorman et al. (1992)

Table 4.2: Trust Scale Syntax Modifications

4.1.2 Co-Creation, Independent Variable

Co-creation has been conceptualised as as the active participation, interactions, dialogue and collaboration of the buyer and seller. In the present study, items for measuring buyers' co-creation with a supplier are drawn from Rajah (2012) in his study on the influence of co-creation on downstream marketing outcomes in both a

business-to-business and business to consumer environment. The five-item scale that Rajah (2012) proposes features high reliability, with a reported Crobach alpha value of 0.91. Slight modifications are made to the syntax of the questions to suit the present study. These changes are not materially different from that of the original scale items and are featured in *Table 4.3*.

Original Co-creation Scale Item	Modified Co-creation Scale Item	Reference
1. My final customer solution evolved as a result of the active participation of this computer company and me.	1. My final customer solution(s) evolve as a result of the active participation of my supplier and me.	Rajah (2012)
2. Overall, I would describe my final customer solution as a high level of customer co-creation.	2. Overall, I would describe my final customer solution as featuring a high level of customer co-creation.	Rajah (2012)
3. This computer company went out of its way to work with me.	3. My supplier goes out of their way to work with me.	Rajah (2012)
4. My final customer solution was arrived at through the joint efforts of this computer company and me.	4. My final customer solution was arrived at through the joint efforts of my supplier and me.	Rajah (2012)
5. I contributed actively to my final customer solution.	5. I contributed actively to my final customer solution with my supplier .	Rajah (2012)

Table 4.3: Co-creation Scale Syntax Modifications

4.1.3 Satisfaction, Independent Variable

Satisfaction has been conceptualised as a global, cumulative evaluation of overall satisfaction. In the present study, items for measuring buyers' satisfaction with a supplier are drawn from Theron et al. (2011) in their study exploring the influences of trust in business-to-business financial services. The five-item scale that Theron et al. (2011) propose features high reliability, with a reported Cronbach's alpha value of 0.93. Slight modifications are made to the syntax of the questions to suit the present study. These changes are, again, not materially different from that of the original scale items and are featured in *Table 4.4*.

Original Satisfaction Scale Item	Modified Satisfaction Scale Item	Reference
1. I am very satisfied with my financial services provider.	1. I am very satisfied with my supplier .	Theron et al. (2011)
2. If I had to do it all over again, I would choose my financial services provider again.	2. If I had to do it all over again, I would choose my supplier again.	Theron et al. (2011)
3. I am satisfied with my financial services provider's products and services.	3. I am satisfied with my supplier's products and services.	Theron et al. (2011)
4. My financial services provider's service meets my expectations.	4. My supplier's service meets my expectations.	Theron et al. (2011)
5. It is a pleasure to do business with my financial services provider.	5. It is a pleasure to do business with my supplier .	Theron et al. (2011)

Table 4.4: Satisfaction Scale Syntax Modifications

4.1.4 Communication, Independent Variable

Communication has been conceptualised as the formal, as well as informal, sharing of high quality, meaningful and timely information between firms. In the present study, items for measuring supplier's communication with a supplier are drawn from Anderson and Narus (1990) in their study exploring distributor and manufacturer working partnerships. Their four-item scale features high reliability, with a reported Cronbach's alpha value of 0.85. Items are also drawn from Theron et al. (2011), similarly to that of the construct of satisfaction, in their study exploring the influences of trust in business-to-business financial services. The four-item scale that Theron et al. (2011) propose features high reliability, with a reported Cronbach's alpha value of 0.89. Slight modifications to both sets of scale items are made to the syntax of the questions to suit the present study and are featured in *Table 4.5*.

Original Communication Scale Item	Modified Communication Scale Item	Reference
1. The supplier provides information that can be trusted.	1. My supplier provides information that can be trusted.	Anderson and Narus (1990)
2. The supplier provides information if delivery problems occur.	2. My supplier provides information if delivery problems occur.	Anderson and Narus (1990)
3. The supplier provides information if there are quality problems.	3. My supplier provides information if there are quality problems.	Anderson and Narus (1990)
4. The supplier fulfils promises.	4. My supplier fulfils promises.	Anderson and Narus (1990)
5. My financial services provider keeps me well informed.	5. My supplier keeps me well informed.	Theron et al. (2011)
6. My financial services provider provides frequent communication about issues that are important to me.	6. My supplier provides frequent communication about issues that are important to me.	Theron et al. (2011)
7. My financial services provider provides timely information.	7. My supplier provides timely information.	Theron et al. (2011)
8. My financial services provider provides accurate information.	8. My supplier provides accurate information.	Theron et al. (2011)

Table 4.5: Communication Scale Syntax Modifications

4.1.5 Competence, Independent Variable

Competence has been conceptualised as comprising of technical, functional and commercial ability of a supplier. In the present study, items for measuring supplier's competence with a supplier are drawn from Cho (2006) in his study exploring trust and behavioural intentions in the context of internet exchange relationships. The four-item scale that Cho (2006) proposes features high reliability, with a reported Cronbach's

alpha value of 0.98. Slight modifications are made to the syntax of the questions to suit the present study. *Table 4.6* shows these differences.

Original Competence Scale Item	Modified Competence Scale Item	Reference
1. The way they operate their business made me feel that they are experts in this business.	1. My supplier operates their business in an expert manner.	Cho (2006)
2. The way they operate their business made me feel that they know what they are doing.	2. My supplier knows what they are doing.	Cho (2006)
3. The way they operate their business made me feel that they are competent.	3. My supplier operates their business competently.	Cho (2006)
4. The way they operate their business made me feel that they are proficient.	4. My supplier is proficient in their business.	Cho (2006)

Table 4.6: Competence Scale Syntax Modifications

4.1.6 Shared Values, Independent Variable

Shared values is 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. In the present study, items for measuring shared values between a supplier and buyer are drawn from Theron et al. (2008) in their study exploring relationship commitment in business-to-business financial services. The four-item scale that Theron et al. (2008) propose features high reliability, with a reported Cronbach's alpha value of 0.93. Slight modifications are made to the syntax of the questions to suit the present study and are illustrated in *Table 4.7*.

Original Shared Values Scale Item	Modified Shared Values Scale Item	Reference
1. My financial services provider respects my business values.	1. My supplier respects my business values.	Theron et al. (2008)
2. My financial services provider and I share the same views about most business practices.	2. My supplier and I share the same views about most business practices.	Theron et al. (2008)
3. My financial services provider has business values and beliefs similar to mine.	3. My supplier has business values and beliefs similar to mine.	Theron et al. (2008)
4. My financial services provider and I have a mutual understanding of each other's business values.	4. My supplier and I have a mutual understanding of each other's business values.	Theron et al. (2008)

Table 4.7: Shared Values Scale Syntax Modifications

4.1.7 Benevolence, Independent Variable

Benevolence is conceptualised as the extent to which a trustee is believed to want to do good to the trustor, aside from profit motive. In the present study, items for measuring the benevolence of a supplier are drawn from Kumar et al. (1995a) in their study exploring the role of supplier fairness in developing long term relationships between large suppliers and small resellers. The five-item scale that Kumar et al. (1995a) propose features good reliability, with a reported Cronbach's alpha value of 0.78. Slight modifications are made to the syntax of the questions to suit the present study and are featured in *Table 4.8*.

Original Benevolence Scale Item	Modified Benevolence Scale Item	Reference
1. Though circumstances change, we believe that the supplier will be ready and willing to offer us assistance and support.	1. As circumstances change, I believe that my supplier will be ready and willing to offer me assistance and support.	Kumar et al. (1995a)
2. When making important decisions, the supplier is concerned about our welfare.	2. When making important decisions, my supplier is concerned about our welfare.	Kumar et al. (1995a)
3. When we share our problems with the supplier, we know that they will respond with understanding.	3. When I share my problems with my supplier , I know that they will respond with understanding.	Kumar et al. (1995a)
4. In the future, we can count on the supplier to consider how its decisions and actions will effect us.	4. In the future, I can count on my supplier to consider how its decisions and actions will effect us.	Kumar et al. (1995a)
5. When it comes to things that are important to us, we can depend on the supplier's support.	5. When it comes to things that are important to me, I can depend on my supplier's support.	Kumar et al. (1995a)

Table 4.8: Benevolence Scale Syntax Modifications

4.1.8 Integrity, Independent Variable

Integrity has been conceptualised as as the perception that the trustee adheres to a set of principles that the trustor finds acceptable. In the present study, items for measuring the integrity of a supplier are drawn from Mayer et al. (1999) in their study exploring trust between employees and top management. The six-item scale that Mayer et al. (1999) propose features high reliability, with a reported Cronbach's alpha

value of 0.96. Slight modifications to both sets of scale items are made to the syntax of the questions and are detailed in *Table 4.9*.

Original Integrity Scale Item	Modified Integrity Scale Item	Reference
1. Top management has a strong sense of justice.	1. My supplier has a strong sense of justice.	Mayer et al. (1999)
2. I never have to wonder whether top management will stick to its word.	2. I never have to worry whether my supplier will stick to their word.	Mayer et al. (1999)
3. Top management tries hard to be fair in dealings with others.	3. My supplier tries hard to be fair in dealings with me.	Mayer et al. (1999)
4. Top management's actions and behaviours are not very consistent (R).	4. The actions and behaviours of my supplier are very consistent.	Mayer et al. (1999)
5. I like top management's values.	5. I like my supplier's values.	Mayer et al. (1999)
6. Sound principles seem to guide top management's behaviour.	6. Sound principles seem to guide my supplier's behaviour.	Mayer et al. (1999)

Table 4.9: Integrity Scale Syntax Modifications

4.2 Development of the Survey Instrument

The survey instrument adopted for this research proposal is a self-completion questionnaire administered via a web-based survey instrument. The choice of a self-complete survey questionnaire further serves to minimise researcher bias and provides a means for survey respondents to answer survey questions in confidence (Alan Bryman & Bell, 2011). The questionnaire was designed based on the previously detailed measures and is presented in *Appendix Two*. In addition to responses to the scale items, respondents were also asked to provide basic demographic details such as

their gender, current or most recent work position, years of work experience and industry category.

Respondents were explicitly briefed in the form of a participation information sheet, presented in *Appendix Three*, that featured before commencement of the electronic survey. The participant information sheet details the nature of the study and that they are not obliged to take part in the research and, at any time, can decide to withdraw from the study. The participant information sheet, and subsequent survey questionnaire, includes the statement “completion of the following questionnaire will be taken as indicating your consent to participate”. As each respective survey response was anonymous and the researcher had no knowledge of the identity of each respective survey respondent, there was no requirement for an explicit consent form.

4.3 Face Validity of the Survey Instrument

Although all measures adopted in this study feature within contemporary marketing literature, a face validity test of the questionnaire was employed to refine the items to suit the specific, business-to-business, context of this study. Every item in the questionnaire was checked for syntax, comprehension and appropriate meaning by two independent experts. Modifications were made, accordingly, without affecting the intended meaning.

4.4 External Consultation Exercise

A consultative, reliability exercise seeking feedback from business managers with business-to-business experience was also undertaken prior to deploying the research instrument. This exercise was designed to explore, qualitatively, whether the

antecedents of business-to-business trust identified within contemporary trust literature, shared industry acceptance. The consultation exercise questionnaire, and correspondence, from three business managers with business-to-business experience is presented in *Appendix Four*. Respondent names, and all identifiable information, have been omitted from the correspondence. This consultation served to confirm industry acceptance of the antecedents of trust adopted for the present study as respondents did not highlight any additional, or more salient, determinants of business-to-business trust that warranted exploration. The consultation was valuable in adding a measure of external validity to the constructs in question.

4.5 Sample and Data Collection Method

The following section details the sample size requirements and respondent set characteristics as dictated by both theoretical integrity and statistical validity.

4.5.1 Sample Size Requirements

Tabachnick, Fidell and Osterling (2001) suggest that eight constructs, each with summated pre-validated scales, requires a respondent set of, at least, 80-120 respondents in order to conduct multiple regression. Authorities differ in what is considered the minimum number of respondents needed for a multiple regression analysis; this study adopts the suggestion of Foster (2006), Green (1991) and Tabachnick and Fidell (2001) to calculate minimum sample size requirements for multiple regression, using effect size and statistical power as a basis of sample size requirement. Cohen (1988) and Cohen et al. (2013) also suggest that as a measure of

eight constructs with high desired statistical power, a minimum sample size for multiple regression is 180 respondents.

As the present study also features exploratory factor analysis (EFA), the generally acceptable rule of a ratio of no lower than 5:1 (observations to variables to be analysed) is adopted (Field, 2009). Cattell (1977) also notes that the minimum absolute sample size for EFA should be no less than 250 observations. MacCallum et al. (1999) also propose that a sample within the range of 150-250 is acceptable with well-determined factors within EFA. A well-determined factor alludes to factors defined by multiple indicators, marker variables with high loadings and communalities in the range of 0.5. This study features pre-validated scales that are characterised as well-determined (Tabachnick et al., 2001), therefore, the present study will seek a minimum sample size of 250 respondents. A much larger sample size has not been posed as this study seeks to balance the criterion of practical significance with statistical significance. Additionally, a much larger sample size may serve to create an overly sensitive significance test (Hair et al., 1998).

4.5.2 Respondent Characteristics and Screening Protocol

The respondent set is business people with business-to-business experience sought from industry within Australia and New Zealand. This is representative of a judgement sample, or purposive sample, as the respondent set has been somewhat hand-picked to serve the research purpose (Hair et al., 1998; Tabachnick et al., 2001). This particular respondent set has been explicitly selected as it is believed that they are representative of the population of interest; namely, inter-organisational business people of whom rely on a measure of trust within business interactions. A purposive

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).

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 antecedents of trust within a business-to-business environment, it was considered necessary to seek the explicit representation of business people with business-to-business experience. Additionally, scholars have recognised a key issue in business-to-business research is identifying the decision makers to avoid respondents guessing because they do not know the answer (Wind & Webster Jr, 1972). Therefore, only directors, managers or other decision makers were identified as suitable for sampling. Finally, business-to-business research is not only concerned with large corporate organisations or manufacturers, it is concerned with all businesses, which take many forms. In Australia, small business represents 97% of all private-sector business and employs 49% of the private-sector workforce (Australian Bureau of Statistics, 2013). Similarly, in New Zealand, large enterprises make up less than 1% of all businesses in New Zealand whilst small business employs 60% of the private-sector workforce (Statistics New Zealand, 2013). Consequently, a target group of respondents representative of different company sizes was obtained so as to reflect the importance of both small business and large enterprise in Australia and New Zealand. New Zealand statistical reporting thresholds define a large organisation as having 100 or more employees (Statistics New Zealand, 2013) so the large organisation target group features within the top range of the

“small company” screening criteria, detailed in *Table 4.10*. The target group profiles and respective response rates are also detailed in *Table 4.10*.

Country	Company Size	Employees	Invites	Response Rate
Australia	Small	1-10	358	57.3%
		11-50		
		51-100		
		101-500		
	Large	501-1000	350	47.4%
		1001-5000		
		> 5000		
New Zealand	Small	1-10	276	33.0%
		11-50		
		51-100		
		101-500		
Total			984	46.4%

Table 4.10: Sampling Target Group Profiles by Company Size and Response Rates

A survey was carried out to collect the data for testing the model and hypotheses of this study. The survey instrument was designed using Qualtrics® online survey software and was distributed to a total of 984 directors, managers or other decision-makers within business-to-business industry via an online research panel service, Cint Access®, who feature an explicit profiling capacity for business-to-business decision makers from both Australia and New Zealand. A total of 455 responses were received for an overall response rate of 46.4% which is acceptable in business research due to

the difficulty in obtaining cooperation from businesses (Baldauf, Reisinger, & Moncrief, 1999; De Vaus, 2002).

4.5.3 Respondent Recruitment and Post Hoc Identification of Meaningless Data

The adoption, in recent years, of respondent-administered Internet surveys are a well-known, and well-accepted method of collecting data both efficiently and at minimal cost. Scholars note that response behaviour in web-based surveys is found to be similar to that of “pen and paper” mail surveys (Couper & Bosnjak, 2010; Groves et al., 2013) and is becoming increasingly more common in both scholarly and commercial survey research. Many contemporary survey method texts feature web-based survey methodology and note the advantages, and limitations, of the survey mode (Bethlehem & Biffignandi, 2011; Groves et al., 2013).

One of the primary cost-savers of Internet surveys is automated response encoding. This automatic interpretation and storage of responses within the dataset raises the issue of data quality as the respondent may not be earnestly completing the questionnaire, merely viewing the questionnaire or arbitrarily completing the questionnaire to receive an incentive (Leiner, 2013). Scholars note that the latter source of invalid data is not exclusive to Internet surveys, but data quality on the Internet is more likely to suffer (Leiner, 2013). One such reason Internet survey data is more susceptible to invalid data is that of an immaterial web page “giving respondents a sense of reduced accountability in comparison to a printed questionnaire” (Johnson, 2005, p. 108). Secondly, this automated encoding prohibits consideration of uncommon patterns, such as zig-zag patterns in matrix-style question batteries, as indications of invalid responses.

The Internet survey package adopted for the present study, Qualtrics[®], features additional metadata, or paradata, that can serve to provide several advantages over printed questionnaires (Kreuter, 2013) and can exert more situational control in an effort to mitigate the limitations of Internet survey instruments. This paradata includes survey completion time, respondent IP address, browser identification, information on their screen size and available plug-ins installed on their Internet browser. This detailed paradata has been noted by scholars as easily-collected and a commonly available means to gauge the quality of recorded responses (Olson & Parkhurst, 2013). This paradata has proven helpful to identify multiple submissions by the same respondent (Konstan, Simon Rosser, Ross, Stanton, & Edwards, 2005; Van Selm & Jankowski, 2006) and to supplement the screening for careless responses (Barge & Gehlbach, 2012; Meade & Craig, 2012).

The present study adopted data cleaning techniques that utilised survey completion time, respondent IP address and multiple submissions paradata from Qualtrics[®] online survey software. The respondent IP address was utilised to screen for respondents that did not reside in either Australia or New Zealand and the multiple submissions paradata was utilised to screen for, and prevent, multiple responses from the same respondent, otherwise called “ballot box stuffing” within Internet survey behaviour. More critically, however, was the utilisation of respondent survey completion time to screen for invalid data. The survey instrument was pre-tested to develop an average time to completion before deployment through the online research panel service, Cint Access[®], to determine a benchmark toward which to gauge panelist response times. The average time to completion of the survey instrument for the present study was 10

minutes. If respondents completed the 10-minute questionnaire in one minute, it is unlikely that they actually read the questions and provided appropriate answers. Common sense and scholars, alike, propose removing such suspicious cases from the data as these cases serve to reduce overall accuracy (Leiner, 2013; Wang & Strong, 1996) and may increase Type II errors (Meade & Craig, 2012). More critically, however, if such data is systematically different from valid data regarding response distributions (Van Vaerenbergh & Thomas, 2013), researchers risk drawing erroneous conclusions, or Type I errors, due to measurement artifacts and may make detrimental recommendations (Woods, 2006).

The systematic, tested assumptions that the post hoc identification of meaningless data is based-upon for this study is in an effort to present data that is unbiased and unmanipulated. If data cleaning is based on untested assumptions, removing data may render new biases (Harzing, Köster, & Zhao, 2012). Leiner (2013), in his study testing whether multiple post hoc indicators are applicable when identifying cases with low data quality, suggests that completion time scores best in the identification of meaningless data. The present study benefited from the availability of questionnaire completion time through the Qualtrics[®] Internet survey package and was adopted as a reliable indicator to identify cases of meaningless data. Leiner (2013, p. 24) notes that “such paradata is probably uncorrelated to most constructs regarding a study’s research question – if the field of research is not about age, reading or computer literacy”. Scholars note that removing cases based on completion time is unlikely to cause systematic bias, which is a common criticism of cleaning data based on atypical responses (Leiner, 2013). As such, individual responses to the questionnaire that

featured a completion time less than 10% of the average completion time (two minutes) were deemed an invalid response (Leiner, 2013).

A total of 455 responses were received, however, 187 of these responses had to be disregarded as they were characterised as an invalid response using the methods detailed above as well as those responses that featured missing data. As a result, a total of 268 completed questionnaires were found to be usable for the purpose of statistical analyses in the present study. Sample characteristics are presented in more depth in Chapter Five.

4.6 Statistical Analyses

A brief description of the proposed statistical analyses adopted for the testing of the survey instrument is detailed in the following sections.

4.6.1 Reliability Test

The test of reliability of a questionnaire concerns the extent to which the measuring procedure yields the same results on repeated trials. Although reliability is best assessed by the test-retest method, or taking the same measurement within the same subjects at two different times, this method is not always practically feasible.

Therefore the internal consistency method is more commonly employed and will feature within the present study as a test of reliability. The internal consistency method will serve to highlight high inter-item correlations, if present, that suggest all items are measuring the same entity, or construct. The internal consistency of the scales is generally tested by item-to-total correlation and coefficient alpha (Cronbach, 1951). Item-to-total correlations are the correlations between each item and the total

score of the scale. In a reliable scale, all items should correlate with the total. The value of the correlation also depends on the sample size. In bigger samples, smaller correlation coefficients are acceptable. In general, a value of item-to-total correlation of less than 0.3 suggests that the particular item in question does not correlate very well with the overall scale. The Cronbach's alpha coefficient is used to test the reliability of the various scales using a cut-off of 0.70 (Nunnally & Bernstein, 1978). A general guideline when employing Cronbach's alpha as a test of reliability is that if the Cronbach's alpha exceeds 0.70, it is an indication of the fact that the multiple items representing the construct demonstrate strong internal consistency (Tavakol & Dennick, 2011).

4.6.2 Validity Test

The test of validity concerns whether the items measure the construct they are meant to measure. The content, or face validity, is assessed by a group of experts, who read or look at a measuring instrument and decide whether the instrument measures what it is expected to measure. Bryman (2003) suggests that every instrument must pass the face validity test either formally or informally. Although the measures adopted in the present study have been employed in previous research, an informal face validity test was carried-out as the business-to-business context of this study is different from other studies that have utilised the same scales. Further scale assessment was done using exploratory factor analysis (EFA) (Spector, 1991). The EFA assesses reliability and internal consistency of the multiple items adopted to test the variance on the dependent variable, trust. The multiple items will be combined, or summated into a single rating scale for each independent variable, or predictor (Desselle, 2005; Hair et

al., 1998; Spector, 1991). Due to a higher expected level of correlation between variables, promax rotation will be adopted (Finch, 2006; Tabachnick et al., 2001). A Cronbach's alpha score of 0.80 has been posed as acceptable for exploratory or scale development work and has been adopted in this study (Cohen, 1988; Hair et al., 1998; Spector, 1991; Tabachnick et al., 2001). The EFA was undertaken using SPSS version 20.

4.7 Chapter Summary

A description of the operationalisation and measurement of the various constructs used in the present study has been provided in this chapter. Face validity, external consultation, sample and data collection method, respondent characteristics and screening protocol and post hoc identification of meaningless data techniques have been described. Finally, this chapter has provided a brief outline of the various methodological and analytical processes involved in the development and testing of the survey instrument.

Chapter Five: Data Analyses and Results

The results of this study are presented in four parts. First, there is a discussion of the sample characteristics. This is followed by a discussion on measurement properties (reliability and validity assessments). The third section presents the results of the regression analyses. Finally, results of the moderation analysis exploring the influence of business experience on the relationship between the independent variables and trust are presented.

5.1 Sample Characteristics

As reported in the previous chapter, a total of 455 responses were received but only 268 were found to be usable for the purpose of statistical analyses. All of the respondents are business people with business-to-business experience within either Australia or New Zealand. More detailed sample characteristics are featured in the following sections.

5.1.1 Gender of Respondents

Gender	Frequency	Percent	Cumulative Percent
Male	148	55.2%	55.2%
Female	120	44.8%	100.0%
Total	268	100.0%	

Table 5.1: Gender of Respondents

5.1.2 Organisational Position of Respondents

Organisational Position	Frequency	Percent	Cumulative Percent
Front Line Position	76	28.4%	28.4%
Middle Mangement	110	41.0%	69.4%
Senior Management	82	30.6%	100.0%
Total	268	100.0%	

Table 5.2 Organisational Position of Respondents

5.1.3 Length of Work Experience of Respondents

Length of Work Experience	Frequency	Percent	Cumulative Percent
Less than 5 Years	17	6.3%	6.3%
5 – 10 Years	62	23.1%	29.5%
11 – 15 Years	40	14.9%	44.4%
16 – 20 Years	37	13.8%	58.2%
More than 20 Years	112	41.8%	100.0%
Total	268	100.0%	

Table 5.3 Length of Work Experience of Respondents

5.1.4 Organisation Industry Category of Respondents

Industry Category	Frequency	Percent	Cumulative Percent
Agriculture, Forestry & Fishing	8	3.0%	3.0%
Mining	3	1.1%	4.1%
Electricity, Gas, Water & Waste Services	6	2.2%	6.3%
Construction	24	9.0%	15.3%
Wholesale Trade	12	4.5%	19.8%
Retail Trade	18	6.7%	26.5%
Accommodation & Food Service	14	5.2%	31.7%
Transport, Postal & Warehousing	11	4.1%	35.8%
Information Media & Telecommunications	19	7.1%	42.9%
Financial & Insurance Services	17	6.3%	49.3%
Professional Scientific & Technical Services	35	13.1%	62.3%
Administrative & Support Services	8	3.0%	65.3%
Public Administration & Safety	8	3.0%	68.3%
Education & Training	20	7.5%	75.7%
Health Care & Social Assistance	18	6.7%	82.5%
Arts & Recreation Services	8	3.0%	85.4%
Other Services	39	14.6%	100.0%
Total	268	100.0%	

Table 5.4 Industry Category of Respondents

5.2 Reliability and Validity Assessment

Churchill (1979) recommends the use of Cronbach's alpha as a measure of internal consistency, followed by item-to-total correlation, to eliminate the items that perform poorly in capturing the construct. To support the reliability of measures for the 268 respondents in this study, the reliability of each scale was assessed via item-to-total correlation and Cronbach's alpha. The mean, standard deviation and item-to-total correlation were calculated for all the variables and the results are presented in each respective construct table in the following sections. Cronbach's alpha and item-to-total correlation values for all of the scales more than met the commonly accepted, minimum absolute value of 0.70 and 0.30, respectively, indicating good internal consistency (De Vaus, 2002; Field, 2009; Spector, 1991).

5.3 Exploratory Factor Analysis

To examine the validity of each measure, exploratory factor analysis (EFA) was employed using SPSS version 20. All items within each variable were factor analysed to test the convergent and discriminant validity of the measures. The items were subjected to principal component analysis with promax rotation. The factor loading represents the correlation between the items with the construct (Hair et al., 1998). An eigenvalue represents the amount of variance accounted for by a factor (Hair et al., 1998). In principal component analysis, only factors featuring an eigenvalue greater than 1.0 are considered significant (Hair et al., 1998). Exploratory factor analysis (EFA) serves to verify if there are any items that are cross loading and, hence, reduce scale validity. All items within each scale of the present study load to a single dimension, as

conceptualised, indicating the convergent and discriminant validity of each scale. The following sections list factor analysis details for each variable.

5.3.1 Scale Reliability and Validity

The following tables show that each variable loads to a single factor and that the items within the scales have an acceptable level of reliability identified by a Cronbach's alpha score greater than 0.70. Every item in each scale contributes to the overall explanatory value and features high item-to-total correlations.

Scale	Items	Mean	Standard Deviation	Variance Explained	Eigenvalue	Cronbach's Alpha
Trust	TRU1	3.82	1.833	73.60%	5.15	0.916
	TRU2	4.51	1.675			
	TRU3	4.74	1.607			
	TRU4	4.76	1.654			
	TRU5	5.25	1.388			

Table 5.5 Reliability Analysis Results for Trust Scale

Scale	Items	Mean	Standard Deviation	Variance Explained	Eigenvalue	Cronbach's Alpha
Co-creation	COCR1	4.73	1.539	75.17%	3.76	0.917
	COCR2	4.71	1.600			
	COCR3	4.66	1.600			
	COCR4	4.93	1.509			
	COCR5	4.88	1.490			

Table 5.6 Reliability Analysis Results for Co-creation Scale

Scale	Items	Mean	Standard Deviation	Variance Explained	Eigenvalue	Cronbach's Alpha
Satisfaction	SAT1	5.22	1.168	74.52%	3.73	0.905
	SAT2	4.97	1.532			
	SAT3	5.31	1.164			
	SAT4	5.36	1.202			
	SAT5	5.18	1.408			

Table 5.7 Reliability Analysis Results for Satisfaction Scale

Scale	Items	Mean	Standard Deviation	Variance Explained	Eigenvalue	Cronbach's Alpha
Communication	COM1	4.91	1.423	76.06%	6.08	0.955
	COM2	4.82	1.455			
	COM3	4.91	1.431			
	COM4	5.27	1.264			
	COM5	5.38	1.314			
	COM6	5.09	1.465			
	COM7	4.97	1.442			
	COM8	5.30	1.276			

Table 5.8 Reliability Analysis Results for Communication Scale

Scale	Items	Mean	Standard Deviation	Variance Explained	Eigenvalue	Cronbach's Alpha
Competence	COMP1	5.33	1.179	84.30%	3.37	0.937
	COMP2	5.52	1.191			
	COMP3	5.41	1.172			
	COMP4	5.45	1.112			

Table 5.9 Reliability Analysis Results for Competence Scale

Scale	Items	Mean	Standard Deviation	Variance Explained	Eigenvalue	Cronbach's Alpha
Shared Values	SVAL1	5.00	1.405	85.58%	3.34	0.934
	SVAL2	4.76	1.404			
	SVAL3	4.80	1.495			
	SVAL4	4.97	1.467			

Table 5.10 Reliability Analysis Results for Shared Values Scale

Scale	Items	Mean	Standard Deviation	Variance Explained	Eigenvalue	Cronbach's Alpha
Benevolence	BEN1	5.11	1.307	83.50%	4.16	0.950
	BEN2	4.62	1.508			
	BEN3	4.93	1.430			
	BEN4	4.78	1.521			
	BEN5	4.93	1.447			

Table 5.11 Reliability Analysis Results for Benevolence Scale

Scale	Items	Mean	Standard Deviation	Variance Explained	Eigenvalue	Cronbach's Alpha
Integrity	INT1	4.93	1.471	80.37%	4.82	0.951
	INT2	5.06	1.435			
	INT3	5.23	1.389			
	INT4	5.36	1.214			
	INT5	5.08	1.459			
	INT6	5.14	1.404			

Table 5.12 Reliability Analysis Results for Integrity Scale

5.4 Hypotheses Testing

The main effect hypotheses were tested using OLS hierarchical regression as detailed by Baron and Kenny (1986). Given the sensitivity of OLS estimation to multicollinearity, the potential for multicollinearity among the independent variables was assessed. Multicollinearity is problematic because it confounds the unique contribution of each independent variable on the dependent variable, making the interpretation of the results more difficult. Multicollinearity often inflates the standard error of the regression coefficients and causes instability in their values.

Therefore, before the multiple regression was undertaken, a bivariate correlation was carried-out to summate the scores for all items. Using the average scores for each item served to test, and inspect, for multicollinearity between variables before the multiple regression analysis was commenced (Field, 2009). The first step in assessing multicollinearity is to examine the pair-wise correlations between independent

variables. The presence of high correlations is the first indication of possible multicollinearity (Hair et al., 1998). The means, standard deviations and pair-wise correlations among the variables, using SPSS version 20, are detailed in the correlations matrix in *Appendix Five*. The correlations matrix does not list any multicollinearity, or predictors that correlate too highly with each other ($R > 0.9$) (Field, 2009; Hair et al., 1998; Tabachnick et al., 2001).

Within the multiple regression, the beta values identify the degree of variance of each of the independent variables to trust. The R^2 value identifies how much of the variability in the outcome is accounted for by the predictors, or independent variables. The adjusted R^2 value identifies how well the model generalises to the population at large. Evaluating the results of the multiple regression analysis provides a comprehensive picture of the linear relationships between trust and the proposed antecedents of trust in a business-to-business environment; in effect, whether the proposed antecedents are good measures of trust (Hair et al., 1998). Another test for multicollinearity is also suggested during the multiple regression, but as a bivariate correlation was carried-out earlier it is not expected to yield any multicollinearity responses as these have already, if present, been remedied. This practice, however, serves to present research method parsimony (Cooley & Lohnes, 1971; Hair et al., 1998; Tabachnick et al., 2001). The indices of tolerance level for the multicollinearity test should be > 0.1 and VIF should be < 10 (Bryman & Bell, 2011).

For the testing of the moderation hypotheses, Haye's process model for moderation analysis is adopted (Hayes, 2012; Preacher & Hayes, 2008). A moderation analysis extends the exploration of each of the individual predictors in the linear model to that

of the combined effect of two, or more, predictor variables on an outcome (Field, 2009). A moderation occurs when the relationship between two variables changes as a function of a third variable. Moderation is tested using a regression in which the outcome (trust) is predicted from a predictor (antecedent dimensions of trust), the moderator (business experience) and the interaction of these variables (Field, 2009). If the interaction is significant, then moderation is present and the analysis will be followed-up with a simple slopes analysis to examine the relationship between the predictor and outcome at low, mean and high levels of the moderator.

5.5 Main Effect Results

Table 5.14 presents the results of the regression analyses for the relationship between the independent variables and trust. The table presents the values of standardised coefficients and standard error along with significance levels of the coefficients. It was hypothesised that co-creation, satisfaction, communication, competence, shared values, benevolence and integrity would all have a positive, significant effect on trust.

The results reported in *Table 5.14* feature an $R^2 = 0.572$, a high measure of how much of the variability of trust is accounted for by the model. The adjusted R^2 , or effect size, reports on how well the model will generalise to the population at large rather than just the sample within the present study ($n = 268$). The results reported in *Table 5.15* feature an adjusted R^2 , or effect size, for the model of 0.560, meaning the independent variables explain 56% of the variance in trust; or trust can be predicted with 56% accuracy.

The ANOVA, detailed in *Table 5.13*, reports that the model is a significant fit of the data, overall, and that the model is significantly better at predicting the outcome than using the mean. The ANOVA reports an *F*-ratio that is highly significant ($p < 0.001$), suggesting that the model significantly improved the ability to predict trust.

Model		Sum of Squares	df	Mean Square	<i>F</i>	Sig.
1	Regression	306.054	7	43.722	49.541	0.000 ^b
	Residual	229.460	260	0.883		
	Total	535.514	267			

a. Dependent Variable: Trust

b. Predictors: (Constant), Integrity, Co-creation, Satisfaction, Competence, Benevolence, Shared Values, Communication

Table 5.13 Results of ANOVA^a

The results reported in *Table 5.14*, overleaf, suggest that the antecedent dimensions of co-creation ($\beta = 0.183$, $p < 0.01$) and integrity ($\beta = 0.474$, $p < 0.001$) are significantly, positively related to trust. In sum, within significant variables, integrity has the highest predictive power on trust ($\beta = 0.474$, $p < 0.001$), followed by co-creation ($\beta = 0.183$, $p < 0.01$).

Variables	Model 1		
	Standardised β	p-value	SE
Constant	0.379	0.240	0.321
Co-creation	0.183**	0.004	0.066
Satisfaction	-0.020	0.764	0.086
Communication	0.141	0.124	0.107
Competence	-0.139	0.079	0.105
Shared Values	0.110	0.229	0.097
Benevolence	0.055	0.549	0.098
Integrity	0.474***	$p < 0.001$	0.117
R^2		0.572	
Adjusted R^2		0.560	
F-ratio		49.541***	

Dependent Variable: Trust

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 5.14 Results of Regression Analysis

Both Hair (1998) and Field (2009) propose that the examination of correlation values, alone, does not ensure sufficient inspection for multicollinearity. Field (2009, p. 224) suggests that a scan of the correlation matrix is a good “ball park” method, but misses more subtle forms of multicollinearity. Therefore, an assessment of multicollinearity using the variance inflation factor (VIF) and tolerance statistics has been adopted for this study. VIF indicates the degree to which each independent variable is explained by other independent variables. As suggested by Myers (1990) and Hair (1998), an upper-limit value of 10 for VIF has been adopted to assess multicollinearity in the

present study. Tolerance statistics have been reviewed and assessed as acceptable if above a lower-limit of 0.1 (Field, 2009; Hair et al., 1998). Collinearity statistics in the present study, as detailed in *Table 5.15*, show no problem with collinearity between the independent variables (tolerance: > 0.1; VIF: < 10), thus multicollinearity is of no concern in this study. Additionally, a Durbin-Watson test, which tests for serial correlations between errors, was undertaken with a resulting value of 2.269. This value is within the range of 1 – 3 proposed by Durbin and Watson (1951) and Field (2009).

Variables	Tolerance	VIF
Co-creation	0.426	2.350
Satisfaction	0.360	2.779
Communication	0.198	5.049
Competence	0.264	3.783
Shared Values	0.200	4.998
Benevolence	0.198	5.043
Integrity	0.155	6.460

Dependent Variable: Trust

Table 5.15 Collinearity Statistics

5.5.1 Summary of Main Effect Hypotheses Results

A summary of the main effect hypotheses results is presented in *Table 5.16*.

Main Hypotheses	Results
H ₁ : Co-creation → Trust	Supported
H ₂ : Satisfaction → Trust	Not Supported
H ₃ : Communication → Trust	Not Supported
H ₄ : Competence → Trust	Not Supported
H ₅ : Shared Values → Trust	Not Supported
H ₆ : Benevolence → Trust	Not Supported
H ₇ : Integrity → Trust	Supported

Table 5.16: Summary Results of Main Effect Hypotheses Testing

5.6 Moderation Effect Results

The first step in the testing of moderation effect is to demonstrate that the independent variable (co-creation, satisfaction, communication, competence, shared values, benevolence and integrity) influences the dependent variable (trust) (Aiken & West, 1991; Baron & Kenny, 1986). The results of the regression analysis, as detailed in *Table 5.15*, report that co-creation and integrity have a significant effect on trust, whilst satisfaction, communication, competence, shared values, benevolence and integrity do not have a significant effect. Next, moderation effects were assessed. The Hayes method was adopted to examine the moderation effects hypothesised within the present study (Hayes, 2012; Preacher & Hayes, 2008).

In order to test for moderation effect between the independent variables of co-creation and integrity on trust, the variable of business experience required recoding

and re-grouping into new dichotomous scale variables. The new categorical scale variable was coded into “low experience” and “high experience” and featured individuals that reported their business experience as “less than 20 years” and “more than 20 years,” respectively. The next step in recoding the variables is to recode the categorical variables so that they have meaningful zero points within the two levels. Scholars recommend using an alternative to “1” and “2” as coding levels as this has an effect on the constant and graphs so “low experience” and “high experience” were recoded as “-0.5” and “0.5”, respectively (Aiken & West, 1991). Weighted effect coding was not required as the two levels are relatively equal in their frequency ($n = 119$, low experience; $n = 149$, high experience) (Aiken & West, 1991; Hayes, 2008, 2009). This creates a two-group categorical independent variable where -0.5 represents low experience and +0.5 represents high experience individuals.

5.6.1 Moderating Effect of Business Experience on the Relationship between Co-creation and Trust

The effects of business experience on the relationship between co-creation and trust were examined. Co-creation positively effects trust ($\beta = 0.193, p < 0.01$). By adopting Hayes moderation Model One and performing bootstrapping (10,000 samples), the results will indicate if moderation is present (Hayes, 2008). Moderation is present, as revealed by a significant interaction effect ($\beta = -0.200$, 95% CI [LLCI = -0.3732, ULCI = -0.0287], $t = -1.93, p \leq 0.05$), indicating that the relationship between co-creation and trust is moderated by business experience. The results of the moderation analysis are detailed in *Table 5.17*. Interpretation of the moderation effect can be undertaken by examining the simple slopes analysis, as detailed overleaf:

1. When experience is low, there is a significant, positive relationship between co-creation and trust, ($\beta = 0.773$, 95% CI [LLCI = 0.6059, ULCI = 0.9408], $t = 9.09$, $p < 0.001$).
2. When experience is high, there is a significant, positive relationship between co-creation and trust ($\beta = 0.572$, 95% CI [LLCI = 0.4534, ULCI = 0.6914], $t = 9.47$, $p < 0.001$).

The simple slopes analysis reveals that within “low experience” individuals, the effect of low levels of co-creation on trust is a reduction in trust (trust = 3.541), whilst within “high experience” individuals, the effect of low levels of co-creation on trust is an increase in trust (trust = 3.819). Conversely, within “low experience” individuals, the effect of high levels of co-creation on trust is an increase in trust (trust = 5.673), whilst within “high experience” individuals, the effect of high levels of co-creation on trust is a decrease in trust (trust = 5.396). The interaction effect is depicted, graphically, in *Figure 5.1*.

Variables	β	SE	t	p -value
Constant	1.4150 [0.9047, 1.9252]	0.2591	5.4605	$p < 0.001$
Business Experience	0.9537 [-0.0668, 1.9741]	0.5182	1.8402	0.0669
Co-creation	0.6729 [0.5701, 0.7756]	0.0522	12.8970	$p < 0.001$
Business Experience x Co-creation	-0.2009 [-0.4064, -0.0045]	0.1043	-1.9257	$p \leq 0.05$

$R^2 = 0.40$

Table 5.17: Moderation Analysis Results – Co-creation and Business Experience

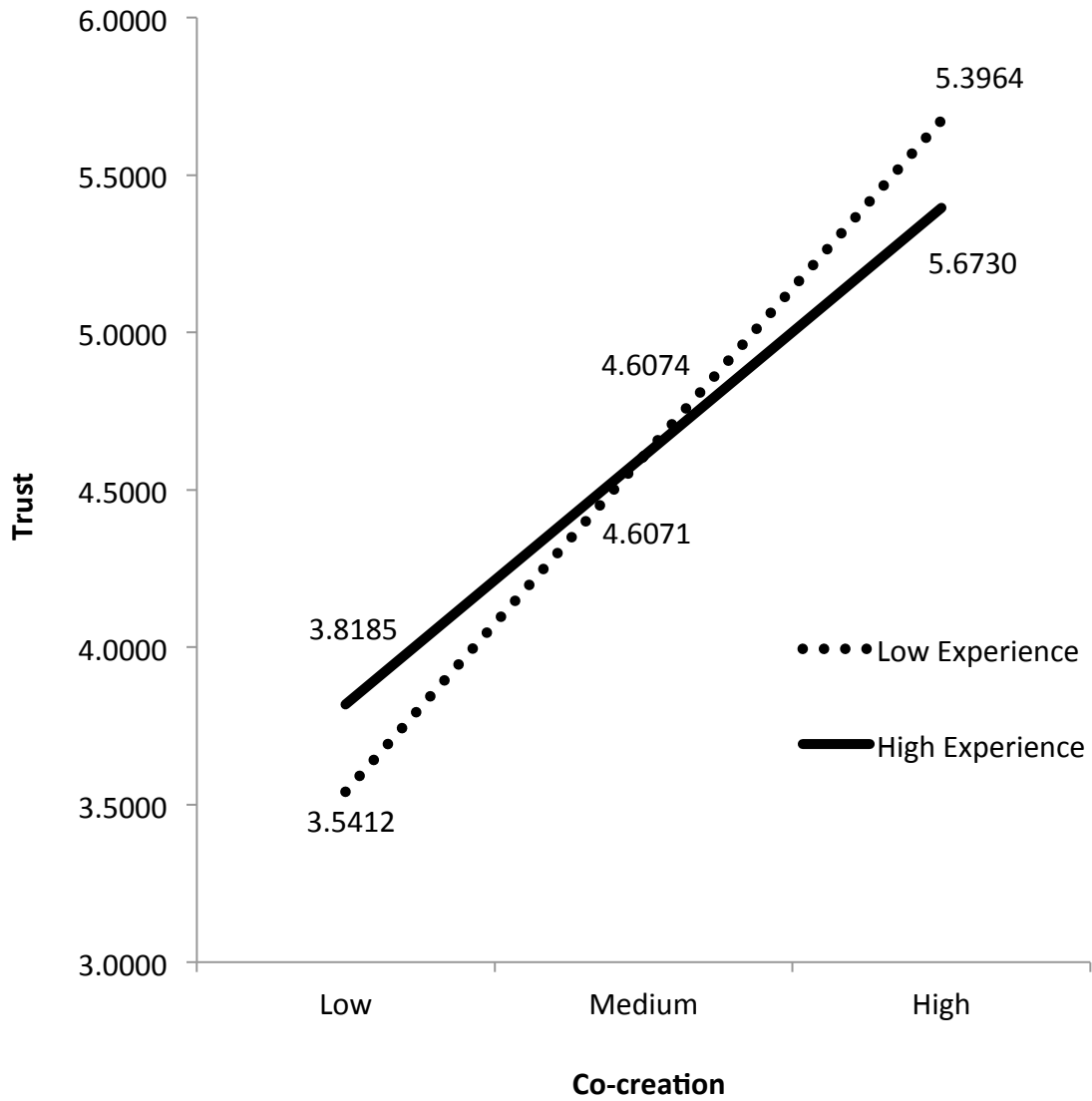


Figure 5.1: The Effect of Business Experience on the Relationship between Co-creation and Trust

5.6.2 Moderating Effect of Business Experience on the Relationship between Integrity and Trust

The effects of business experience on the relationship between integrity and trust are next examined. Integrity positively effects trust ($\beta = 0.536, p < 0.001$). By adopting Hayes moderation Model One and performing bootstrapping (10,000 samples), the results will indicate if moderation is present (Hayes, 2008). No moderation is present

as revealed by a non-significant interaction effect ($\beta = -0.140$, 95% CI [LLCI = -0.3355, ULCI = -0.0556], $t = -1.41$, $p = 0.160$), indicating that the relationship between integrity and trust is not moderated by business experience. The results of the moderation analysis are detailed in *Table 5.18*.

Variables	β	SE	t	p -value
Constant	4.6200 [4.5034, 4.7367]	0.0592	78.0080	$p < 0.001$
Business Experience	-0.1989 [-0.4337, 0.0358]	0.1192	-1.6690	0.0963
Integrity	0.8372 [0.7422, 0.9323]	0.0483	17.3386	$p < 0.001$
Business Experience x Integrity	-0.1400 [-0.3355, 0.0556]	0.0993	-1.4092	0.1600

$R^2 = 0.54$

Table 5.18: Moderation Analysis Results – Integrity and Business Experience

5.6.3 Summary of Subsidiary Hypotheses Results

A summary of the subsidiary hypotheses results is presented in *Table 5.19*.

Subsidiary Hypotheses	Results
H _{8a} : The relationship between co-creation and trust is moderated by business experience	Supported
H _{8b} : The relationship between integrity and trust is moderated by business experience	Not Supported

Table 5.19: Summary Results of Moderation Effect Hypotheses Testing

5.6 Chapter Summary

This chapter provided details of the data analyses procedure and the results of data analyses leading to hypothesis testing. Results of the hypotheses testing are detailed in *Table 5.20* and depicted in *Figure 5.2*. The results indicate a very high level of support for some hypotheses with respect to core theory. Chapter Six discusses the interpretation of these results, their implications and conclusions drawn.

Main and Subsidiary Hypotheses	Results
H ₁ : Co-creation → Trust	Supported
H ₂ : Satisfaction → Trust	Not Supported
H ₃ : Communication → Trust	Not Supported
H ₄ : Competence → Trust	Not Supported
H ₅ : Shared Values → Trust	Not Supported
H ₆ : Benevolence → Trust	Not Supported
H ₇ : Integrity → Trust	Supported
H _{8a} : The relationship between co-creation and trust is moderated by business experience	Supported
H _{8b} : The relationship between integrity and trust is moderated by business experience	Not Supported

Table 5.20: Summary Results of All Hypotheses Testing

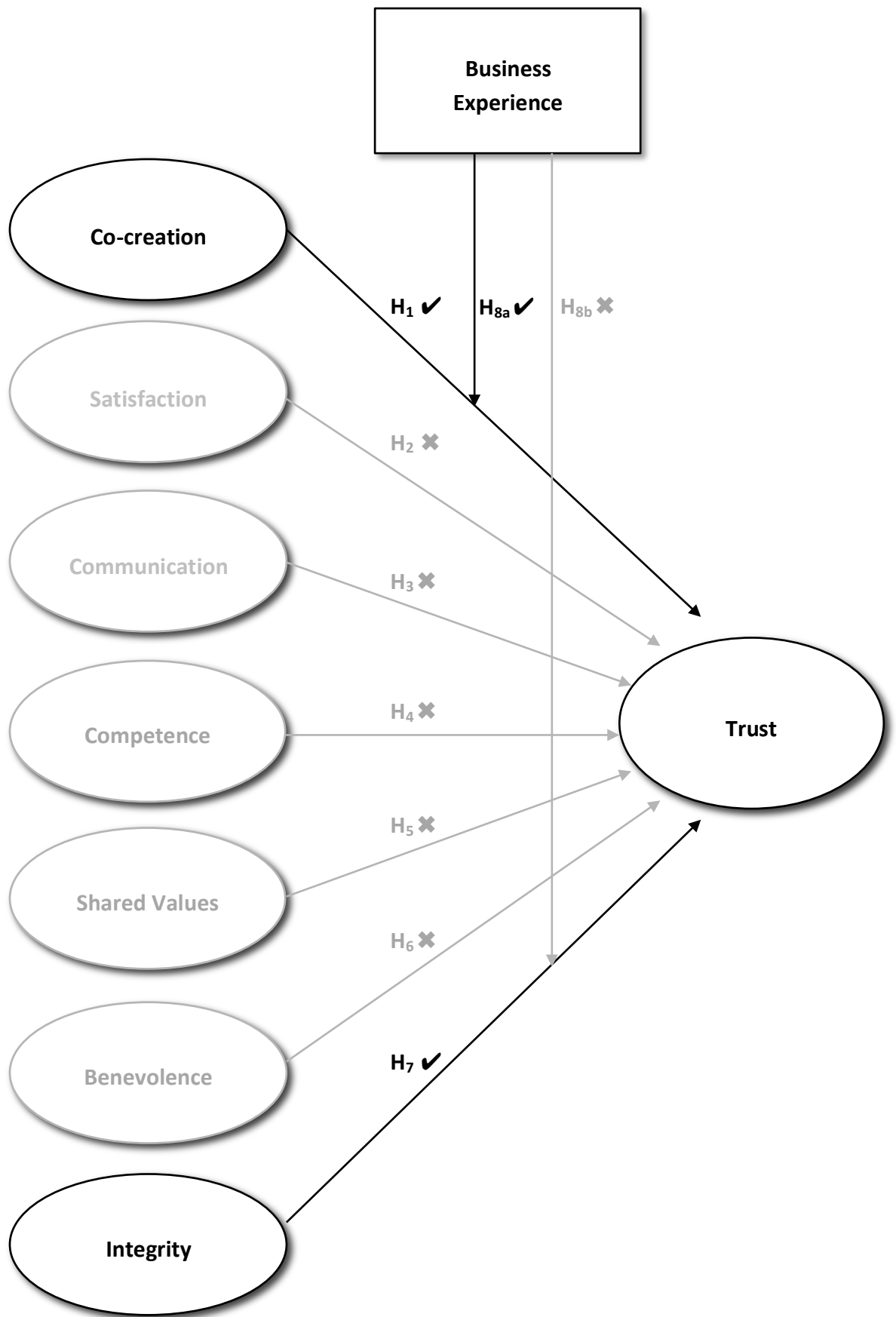


Figure 5.2: Summary Results of All Hypotheses Testing

Chapter Six: Summary and Conclusions

A conceptual framework was developed based on an extensive review of the literature and is presented in Chapter Three, *Figure 3.1*. The framework was operationalised by adopting existing scales of established reliability and validity with modifications to suit the business-to-business context of this study. Having established the theoretical framework, empirical data were collected for hypothesis testing. Chapter Five presents a detailed analysis of the data collected, along with the results. The following section presents the major findings of this study. This is followed by a discussion of implications, limitations and directions for future research.

6.1 Major Research Findings

By rendering empirical support to the proposed conceptual model, this study provides new insights into the role of previously reported antecedent dimensions of trust within a business-to-business environment. As hypothesised, this study demonstrates that both co-creation and integrity influence the development of trust between organisations. Whilst co-creation and integrity were found to exert a positive, significant influence on trust, it was shown that satisfaction, communication, competence, shared values and benevolence do not affect trust in a business-to-business environment. Whilst the results of bivariate data analysis in the present study suggest that there is a relationship between all antecedent dimensions and trust, the overwhelming strength of the relationship between co-creation and integrity on trust serves to subsume these relationships.

6.1.1 Co-creation and Trust

Results of the present study confirm a positive, significant link between co-creation and trust. This finding supports the results of Rajah (2012) who also found a positive link between co-creation and trust. The results of the present study suggest that co-creation is a more significant determinant of trust than the dimensions of satisfaction, communication, competence, shared values and benevolence. These findings also support the contention that the co-creation construct offers additional explanatory power when considering models of relationship marketing involving dimensions such as trust (Randall, Gravier, & Prybutok, 2011)

A central tenet of co-creation is that of the collaborative, active involvement of both buyer and supplier's resources toward a mutually value-creating solution (Vargo & Lusch, 2004). The iterative nature of the co-creation process suggests that buyer and seller develop a deeper understanding, over time, of the knowledge, skills and capabilities of each other over the course of the relationship. The results of the present study suggest this co-creation process also builds trust. The collaborative context of a co-creation exchange also demands both parties accept a measure of vulnerability and take a "leap of faith" as they depend on the other party to act benevolently (Moorman et al., 1993); in effect, providing the means for trusting beliefs, or predispositions, to be activated.

One explanation for the strength of the relationship between co-creation and trust may be due to the iterative nature of the co-creation process between organisations. Organisations that initiate, or join, co-creation exercises with partner organisations provide the means for diagnosing trust based on the multifaceted dimensions of co-

creation. These dimensions include a diagnosis of co-creation outcomes such as satisfaction, which has been widely reported to lead to trust (Garbarino & Mark, 1999; Ranaweera & Prabhu, 2003). The satisfaction enjoyed between co-creating partner organisations may differ, conceptually, from that of more discrete, transactional exchanges. As both organisations have been exposed to a measure of vulnerability by extending their time, energy and other operant resources within the relational, co-creation exchange, the environment serves to foster the development of trust. This vulnerability is a focal element within which scholars note trust is most effectively developed (Doney & Cannon, 1997).

Trust between a buyer and seller reflects the reliability and ability of the seller to meet their obligations in the marketing exchange (Dwyer & Tanner, 2006; Morgan & Hunt, 1994). Rajah (2012), suggests that buyer-seller co-creation generates highly satisfactory solutions which enable buyers to make an assessment of the trustworthiness of the seller based on these reliability and ability dimensions. Thus, the perceived value from the buyer solution based on these evaluative criteria provides the means to assess trust in the seller (Johnson & Grayson, 2005; Miyamoto & Rexha, 2004). Therefore, the results of the present study lend credence to the notion that higher levels of buyer-seller co-creation, and subsequently positive outcomes, results in a higher level of trust enjoyed between organisations.

Whilst the prevailing, theoretical perspective of co-creation is framed within a relational context (Vargo & Lusch, 2004), more contemporary research suggests that co-creation may also arise in a discrete transactional context (Grönroos, 2011). Other studies on transactional and relational marketing also suggest that these marketing

typologies are not mutually exclusive, rather, they co-exist side by side (Sharma & Pillai, 2003; Styles & Ambler, 2003). Whilst the evaluative criteria of marketing outcomes may differ between relational and transactional oriented customers (Garbarino & Johnson, 1999), one such speculative interpretation of the effects of co-creation on trust is that as relationships graduate to that of more relational co-creation, affective, or identification-based, trust is built. Conversely, more transactional co-creation may foster more cognitive, or calculus-based, trust. However, the research reported here was not designed to test this aspect of co-creation and trust so the interpretation is speculative, but warrants future exploration.

6.1.2 Integrity and Trust

The link between integrity and trust is also found to be positive and significant. An important result of this study is confirmation of the high explanatory power of the integrity dimension on trust. The results of this study suggest that integrity is the most significant determinant of trust within the antecedent dimensions of this study. This finding supports the results of an abundance of studies within the sociology, psychology and marketing fields of research which also found a positive link between integrity and trust (Doney & Cannon, 1997).

Within this study, integrity is conceptualised as the perception that the trustee adheres to a set of principles that the trustor finds acceptable (Mayer et al., 1995). The integrity construct within the present study was explicitly conceptualised as the adherence-to and the acceptability-of these principles. Adhering to a set of principles suggests a type of personal integrity, however, if those principles are not deemed acceptable by the trustor, the trustee would not be considered to have integrity within

the scope of the present study (McFall, 1987). McFall (1987) likens this to a type of moral integrity that begets a consistency of past actions, credible feedback about the trustee from other parties and the extent to which there is congruence between a party's actions and words or their fulfilment of promises. Schlenker et al. (1973, p. 420) suggest that "a promiser who did not back up his [sic] words with corresponding deeds soon would be distrusted." Within the present study, the integrity dimension of trust is posed as affective in nature and more largely determined by these social interactions and citizenship behaviours.

Organisations that demonstrate high integrity are likely to be trusted because they represent a less risky, uncertain and vulnerable relationship (Doney & Cannon, 1997). It is this key, mitigating influence on uncertainty and vulnerability that serves to distinguish integrity from that of other more static dimensions of trust. Integrity suggests an unwillingness to sacrifice ethical standards to achieve organisational objectives and is deeply-seated in assessments of honesty credibility and justice that are developed, and diagnosed, over time (Moorman et al., 1993). The recursive nature of integrity diagnoses by partner organisations suggests that an organisation requires many successive executions of high integrity activity in order to build, and maintain, trust. Consequently, the illumination of integrity as a highly significant determinant of trust within the present study suggests that organisations must adhere to these principles consistently in order to develop trust. However, scholars note that integrity development within an organisation is not a short-term exercise, rather, a long-term, perpetual practice (Poppo & Schepker, 2010).

Within the present study, the conceptualisation of integrity includes a reputation for honesty and truthfulness (Butler & Cantrell, 1984). Consequently, deception and dishonesty are necessarily incongruous with trust. Prior research suggests that deception is theoretically, philosophically and empirically at odds with trust. Scholars note that lying triggers negative emotional reactions (Planalp & Honeycutt, 1985) and negative impressions of liars (Knapp & Vangelisti, 1992), weakens trust and the quality of interpersonal relationships (Ford, King, & Hollender, 1988; Lewis & Saarni, 1993) and undermines trust repair (Schweitzer et al., 2006). The positive, significant relationship between integrity and trust within this study confirms that organisations that are economical with the truth, are not characterised by good-faith efforts to behave in accordance with implicit or explicit commitments or are blatantly dishonest and deceitful will suffer a loss of trust (Cummings & Bromiley, 1996; Poppo, Zhou, & Ryu, 2008; Zaheer, Lofstrom, & George, 2001).

An integrity violation suggests that one party intentionally violated an agreed-upon practice or principle (Kim et al., 2004). These violations have been posed tend to “spill over” into other facets of the relationship between firms (Poppo & Schepker, 2010). This “spill over” effect serves to introduce a measure of distrust into the relationship as previous studies have shown that individuals weigh negative information about integrity more heavily than positive information (Snyder & Stukas Jr, 1999). Scholars note that a single integrity violation suggests that an organisation has the capacity to commit further transgression (Kim et al., 2006; Kim et al., 2004). The fact that one deceitful act was committed suggests that an organisation is willing to act in the same way, again, in order to further their organisational goals; in effect, “if they did it once,

they'll do it again." This places an onus on organisations to sufficiently protect their integrity if they wish to build trust with their customers. Within the present study, the high explanatory power of the integrity dimension on trust suggests that efforts to increase integrity will also increase trust in the event of a trust violation. However, the research reported here was not designed to test this aspect of integrity and trust so the interpretation is speculative, but warrants future exploration.

6.1.3 Moderating Role of Business Experience

The moderating role of business experience on the relationship between co-creation and trust was found to be positive and significant. The findings of this study suggest that as business experience increases, the effect of co-creation on trust decreases. Conversely, at low levels of business experience, the effect of co-creation on trust increases. Whilst co-creation was found to be a positive, significant determinant of trust within both high and low experience individuals, the role of business experience moderating this influence is of both practical and academic significance. The results of this study are also significant in that business experience is conceptualised as an overall, collective measure of business experience, not business experience with one particular supplier.

The notion that business experience will effect the manner in which trust is established and diagnosed is supported within the current services literature. This study conceptualises business experience as knowledge or familiarity with a particular service industry similar to that of the definition posed by Coulter and Coulter (2003, p. 32) as "the degree to which the customer understands the nature of the service industry in question". Murray (1991) and Bennett et al. (2005) suggest that it would

be expected that as a business customer becomes familiar with a business service and the service providers, that the information gained would form the basis of future decisions. The personal source of information that this experience cultivates, over time, can serve to mitigate risk and uncertainty within a business environment. Therefore, the collective experience, and evaluation, of business interactions in highly experienced individuals buoys this personal source of information with pre-evaluative cues for subsequent interactions. Given a lack of previous experience, East (1997) suggests that a business-to-business customer purchasing a professional service for the first time is more likely to think calculatively about the process than rely on more habitual purchasing cues. This calculative activity includes a more explicit information search and evaluative process. A higher level of experience has been posed to lead to greater confidence in an individual's evaluations about the value of a product or service and reduces the need for further information search and evaluation (Bennett et al., 2005).

The results of this study lend credence to the notion that low experienced individuals, within a high co-creation relationship, will enjoy higher levels of inter-organisational trust. Because the need for trust arises in risky, uncertain or vulnerable situations, of which lack of knowledge or familiarity within an industry is a primary driver, high co-creation can serve to mitigate this risk. A high co-creation relationship features active collaboration between buyer and supplier, high inter-organisational communication and a deep understanding of the knowledge, skills and capabilities of each other over the course of the relationship. The repeated exposures inherent of a high co-creation relationship serve to encourage the development of knowledge, the reduction of initial

uncertainty (and inherent risk) and increased understanding. Coulter and Coulter (2003) suggest that with increased understanding comes confidence, which in turn may lead to a feeling of trust in the service provider. These results suggest that low experienced individuals rely more heavily on co-creation as a determinant of trust than that of high experienced individuals. In sum, this study proposes when experience is low, co-creation is an important cue upon which inferences of trust are made.

When business experience is high, there is also a significant, positive relationship between co-creation and trust. This result suggests that co-creation is still important as a significant determinant of trust within highly experienced individuals, however, the effect of high co-creation on trust is lower than that of low experienced individuals. Conversely, the effect of low co-creation on trust is higher than that of low experienced individuals. These results suggest that highly experienced individuals invest less of a diagnostic measure of trust in the level of co-creation enjoyed within a relationship. These highly experienced individuals enjoy high business and industry knowledge and are more familiar with the standards and practices inherent within a particular industry. Scholars note that as knowledge is gained and a customer becomes more familiar with the standards and practices inherent within a particular industry that they become better able to assess the quality of a particular service offering (Coulter & Coulter, 2003). As industry knowledge and familiarity is gained and business experience increases over time, the risk and uncertainty associated with not knowing what to expect within an industry may be reduced. The results of this study demonstrate that an increase in business experience suggests an individual may no

longer draw as heavily on co-creation as a surrogate cue on which to base trust evaluations.

6.2 Implications

Findings from the present study have important implications for both academics and business practitioners. Social and scholarly commentators, alike, lament over the current state of trust in our postmodern society. Marketing Science Institute members, comprising of both academics and business practitioners, note the corrosive effects on the business landscape of recent actions that betray trust by, among others, financial and government institutions, politicians, and custodians of personal data generated by search and social media (Marketing Science Institute, 2013). As such, the Marketing Science Institute, in their 2013 research priorities, call for stronger theory on the process of trust building and exploration of how trusting judgements are formed (Marketing Science Institute, 2013). They further pose that corporate decision makers want more empirical research into the process of building and rebuilding trust. This study responds to the call for more empirical exploration of trust by investigating the antecedents of trust in a business-to-business environment.

For academics, the findings of the present study highlights the importance of co-creation as an antecedent of trust. Recent literature has reiterated the need for more empirical exploration on the outcomes of co-creation (Hoyer, Chandy, Dorotic, Krafft, & Singh, 2010), yet there are only a limited number of empirical articles on co-creation and its outcomes. The conceptual literature suggests that high levels of co-creation can generate trust and alignment within a buyer-seller relational context, however, there is little empirical work examining these associations. The findings of this study

are significant in that this study has responded to the call for more empirical investigation of the relationship between co-creation and its outcomes. This study also serves to graduate empirical measures of relationship quality beyond, strictly, satisfaction to other variables that strengthen relationships such as trust. This study also serves to confirm the explanatory power of integrity within models of trust development or repair.

For business practitioners, the findings of the present study highlight the importance of co-creation as a means to elicit trust in a business-to-business relationship. The downstream business and relational consequences of a trusting relationship are well reported in the literature (Dwyer et al., 1987; Gundlach et al., 1995; Morgan & Hunt, 1994) and include points of competitive advantage such as raising the barriers to entry by competitive firms and raising the barriers to exit by partnering firms due to the time, energy and social investment in the co-creation process. Initiating, and engaging-in, the co-creation of value serves to increase measures of trust in a relationship. Thus, relationship managers, or inter-organisational actors such as sales representatives, can build trust in the relationship by encouraging or developing the co-creation process. Additionally, the co-creation process contributes more significantly to trust than that of more cognitive, or calculus-based, outcomes such as satisfaction, competence and communication. This study also highlights the importance of integrity on trust in a relationship. Business practitioners must be acutely aware of, and adhere to, principles that are acceptable to their customers or they risk sacrificing a measure of trust in their relationship.

The study also investigated the effect of business experience on the relationship between co-creation and trust. The findings of this study provide an evaluative criteria for relationship managers, or sales representatives, on the level of co-creation that is most effective when seeking to develop trust in a relationship. Higher levels of trust will be generated with customers who have low business experience when the level of co-creation is high. These findings may be used to tailor co-creation based relationship strategies for customers that feature as lower, or higher, experience. These co-creation strategies may differ for incumbent customers versus new customers within an industry.

6.3 Limitations and Directions for Future Research

Despite the findings and implications that emerge from this study, it is important to recognise it's limitations and directions for future research. This research was performed by collecting data from Australian and New Zealand firms only. Because of this regional focal area, there are restrictions in generalising the findings. Although it is possible to generalise the findings to other geographical contexts due to a relative consistency in business-to-business relationships outside of the Australian and New Zealand area, relationship management is almost certainly exercised within a culture-specific framework so cautious application is recommended. A notable direction for future research would be to replicate the study within another geographical setting. Additionally, because culture influences how managers and decision makers behave, a cross-national study would allow for studying the impact of culture within a broader conceptualisation of trust antecedents.

Another limitation concerns the static nature of the study. Ample evidence exists suggesting that trust is a function of time and that trust increases as the relationship matures. In this study, the temporal dimension of trust was not incorporated into the research design. The use of a longitudinal research design offers a direction for future research as it will allow for the exploration of trust dynamics, over time.

This study investigates the antecedents of trust in a business-to-business environment. This is by design, as the nuances of the business-to-business domain are such that it demands explicit investigation. Future studies, however, could examine these antecedents of trust within different domains such as social marketing, political marketing or business to consumer marketing.

The current study also investigates the antecedents of trust from the perspective of the customer. This was quite deliberate, but nevertheless does represent a limitation of the study. Similarly, the focus of the study is on intentions expressed by important and current customers. Therefore, a future study may seek to investigate the antecedents of trust from the seller's perspective and from buyer's who have departed from the relationship so that actual behaviour can be considered.

The model presented in this study specifically incorporates the moderating role of business experience on trust. Future research may look at other moderators or mediators such as aversion to risk, business industry, length of relationship with a specific supplier, rapport with individual representatives of a firm or the differences between small and large businesses.

The most profound extension of this study is how best to mobilise this understanding of the antecedents of trust within a business-to-business environment toward the restoration of violated trust. This was a central concern of the study from the outset, the results of which provide the framework and insight to develop trust recovery mechanisms.

6.4 Conclusions

This study proposes a model that serves to identify the antecedents of trust in a business-to-business environment. The literature operationalises the antecedents of trust within seven major constructs – co-creation, satisfaction, communication, competence, shared values, benevolence and integrity. Within the literature, the construct of co-creation is underexplored empirically, however, has been presented conceptually as an antecedent of trust. Many researchers focus on cognitive or affective antecedents of trust, but rarely both. This study integrated both cognitive and affective antecedent dimensions of trust in an effort to provide a comprehensive picture of the linear relationship between trust and the proposed antecedents of trust; in effect, whether the proposed antecedents are good measures of trust. It was hypothesised that the seven antecedent dimensions of trust positively impact trust. Further, an individual's overall business experience was hypothesised to have a moderating effect on the relationship between the significant antecedent dimensions and trust.

The results supported the positive link between co-creation and integrity and trust. Additionally, when business experience was introduced, an interaction effect was

revealed between co-creation and trust, however, no interaction effect was revealed between integrity and trust.

Together, these results point to the importance of co-creation and integrity as determinants of trust within a business-to-business environment. Further, business experience is posed as an important indicator of the predictive effectiveness of co-creation when seeking to develop trust in a relationship. This research extends trust development studies into the business-to-business domain and responds to the call to explore, empirically, the effects of co-creation on downstream marketing outcomes such as trust. This research also serves to highlight the influence of business experience on dimensions of trust within business-to-business relationships. Within an increasingly complex, competitive and uncertain business landscape, this study is expected to provide useful insight for both future researchers and relationship marketers. Identifying, and developing, the most critical dimensions of trust within a business-to-business environment affords managers the ability to reduce uncertainty and foster a more trusting and mutually beneficial partnership.

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Appendices

Appendix One – Ethics Approval Letter



14 October 2013

Roger Marshall
Faculty of Business and Law

Dear Roger

Re Ethics Application: **13/280 Toward Restoring violated trust: Exploring the antecedents of trust in business to business relationships.**

Thank you for providing evidence as requested, which satisfies the points raised by the AUT University Ethics Committee (AUTE C).

Your ethics application has been approved for three years until 14 October 2016.

As part of the ethics approval process, you are required to submit the following to AUTE C:

- A brief annual progress report using form EA2, which is available online through <http://www.aut.ac.nz/researchethics>. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 14 October 2016;
- A brief report on the status of the project using form EA3, which is available online through <http://www.aut.ac.nz/researchethics>. This report is to be submitted either when the approval expires on 14 October 2016 or on completion of the project.

It is a condition of approval that AUTE C is notified of any adverse events or if the research does not commence. AUTE C approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTE C grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to obtain this. If your research is undertaken within a jurisdiction outside New Zealand, you will need to make the arrangements necessary to meet the legal and ethical requirements that apply there.

To enable us to provide you with efficient service, please use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

All the very best with your research,

A handwritten signature in black ink, appearing to read 'K O'Connor', written in a cursive style.

Kate O'Connor
Executive Secretary
Auckland University of Technology Ethics Committee

Cc: Drew Franklin didginout@gmail.com

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Survey Questionnaire



Research Title: Toward Restoring Violated Trust: Exploring the
Antecedents of Trust in Business-to-Business
Environments

Introduction

Thank you for completing this questionnaire. You have been chosen to participate in this questionnaire because we believe you may be involved in a business environment dealing with suppliers. In completing the following questionnaire, please reflect on a key current supplier you have a business relationship with.

Imagine that you are a representative of the buying company. You are currently evaluating the relationship you have with a key supplier. Please consider this same supplier within all sections of the questionnaire.

The business relationship that you currently have with your supplier can be in the form of purchasing products or service-related offerings for your company.

Please complete all question items in the following questionnaire. The questionnaire will take approximately 10 minutes to complete.

Confidentiality and Anonymity

All information you provide will be strictly anonymous. Your responses will be presented only in aggregate and no individual results will be highlighted. Results will not be released

to any third-party. The demographic information that I ask you to provide, at the end of the questionnaire, will be used for comparative purposes only. If at any time you wish to withdraw from the survey you will not be disadvantaged in any way.

Consent

Your consent to participate in this research will be indicated by commencing the following, electronic questionnaire.

Researcher Contact Details

Drew Franklin, drew.franklin@aut.ac.nz, +64 9 921 9999 ext. 7986

Project Supervisor Contact Details

Professor Roger Marshall, roger.marshall@aut.ac.nz, +64 9 921 9999 ext. 5478

This survey features nine sections. The first eight sections feature a scale response from one to seven (1=strongly disagree to 7=strongly agree). The final, ninth section features a demographic response.

Section One

When answering the following questions, please consider the relationship you currently have with a key supplier.

Imagine that you are a representative of the buying company. You are currently evaluating the relationship you have with your supplier. Please consider this same supplier within all sections of the questionnaire.

In this section we are interested in the concept of customer satisfaction.

Please indicate the extent, to which you agree or disagree with the following statements by indicating your response using the scale (1 = strongly disagree; 7 = strongly agree), below:

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

1. My final customer solution(s) evolve as a result of the active participation of my supplier and me _____
2. Overall, I would describe my final customer solution as featuring a high level of customer co-creation _____
3. My supplier goes out of their way to work with me _____
4. My final customer solution was arrived at through the joint efforts of my supplier and me _____
5. I contributed actively to my final customer solution with my supplier _____

Section Two

Please indicate the extent, to which you agree or disagree with the following statements by writing an appropriate number in the space following each statement using the scale, below:

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

1. I am satisfied with my supplier _____
2. If I had to do it all over again I would choose my supplier again _____
3. I am satisfied with my supplier's products and services _____
4. My supplier's product or service meets my expectations _____
5. It is a pleasure to do business with my supplier _____

Section Three

Please indicate the extent, to which you agree or disagree with the following statements by writing an appropriate number in the space following each statement using the scale, below:

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

1. My supplier keeps me well-informed _____
2. My supplier provides frequent communication about issues that are important to me _____
3. My supplier provides timely information _____
4. My supplier provides accurate information _____
5. My supplier provides information that can be trusted _____
6. My supplier provides information if delivery problems occur _____
7. My supplier provides information if there are quality problems _____
8. My supplier fulfils their promises _____

Section Four

Please indicate the extent, to which you agree or disagree with the following statements by writing an appropriate number in the space following each statement using the scale, below:

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

1. My supplier operates their business in an expert manner _____
2. My supplier knows what they are doing _____
3. My supplier operates their business competently _____
4. My supplier is proficient in their business _____

Section Five

Please indicate the extent, to which you agree or disagree with the following statements by writing an appropriate number in the space following each statement using the scale, below:

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

1. My supplier respects my business values _____
2. My supplier and I share the same views about most business practices _____
3. My supplier has business values and beliefs similar to mine _____
4. My supplier and I have a mutual understanding of each other's business values

Section Six

Please indicate the extent, to which you agree or disagree with the following statements by writing an appropriate number in the space following each statement using the scale, below:

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

1. As circumstances change, I believe that my supplier will be ready and willing to offer me assistance and support _____
2. When making important decisions, my supplier is concerned about our welfare _____
3. When I share my problems with my supplier, I know that they will respond with understanding _____
4. In the future, I can count on my supplier to consider how its decisions and actions will affect us _____
5. When it comes to things that are important to me, I can depend on my supplier's support _____

Section Seven

Please indicate the extent, to which you agree or disagree with the following statements by writing an appropriate number in the space following each statement using the scale, below:

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

1. My supplier has a strong sense of justice _____
2. I never have to worry about whether my supplier will stick to their word _____
3. My supplier tries hard to be fair in dealings with me _____
4. The actions and behaviours of my supplier are very consistent _____

5. I like my supplier's values _____

6. Sound principles seem to guide my supplier's behaviour _____

Section Eight

Please indicate the extent, to which you agree or disagree with the following statements by writing an appropriate number in the space following each statement using the scale, below:

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

1. If I, or someone from my company, could not be reached by my supplier I would be willing to let my supplier make important decisions without my involvement _____
2. If I, or someone from my company, were unable to monitor my supplier's activities I would be willing to trust my supplier to do a good job _____
3. I trust my supplier to do things I can't do myself _____
4. I trust my supplier to do things my company can't do itself _____
5. I generally trust my supplier _____

Section Nine

Please respond to the following demographic questions, below. Tick the relevant box or category that fits best.

1. Are you

Male ☐

Female ☐

2. Which of the following categories best indicates your current work position or most recent work position in your company or organisation?

Front line position ☐

Middle management ☐

Senior management ☐

3. How many years of work experience to you have in total?

Less than five years ☐

5-10 years ☐

11-15 years ☐

16-20 years ☐

More than 20 years ☐

4. Please tick the industry category of the company or organisation with which you are employed, below:

Agriculture, Forestry & Fishing ☐

Information Media & Telecommunications ☐

Mining ☐

Financial and Insurance Services ☐

Electricity, Gas, Water & Waste Services ☐

Professional, Scientific & Technical Services ☐

Construction ☐

Administrative and Support Services ☐

Wholesale Trade ☐

Public Administration & Safety ☐

Retail Trade ☐

Education & Training ☐

Accommodation & Food Service ☐

Health Care & Social Assistance ☐

Transport, Postal & Warehousing ☐

Arts & Recreation Services ☐

Other Services ☐

Participant Information Sheet



Date Information Sheet Produced:

14th October 2013

Project Title

Toward Restoring Violated Trust: Exploring the Antecedents of Trust in Business-to-Business Relationships

An Invitation

My name is Drew Franklin and I am a Master of Business student at Auckland University of Technology, Auckland, New Zealand. As part of my Master of Business qualification requirements, my research is on the antecedents, or determinants, of trust within business-to-business relationships. I invite you to participate in the following survey to help develop an understanding of this topic.

Participation in this research is entirely voluntary and you may withdraw at any time prior to the completion of data collection without discounting any of your rights as a survey respondent. All information collected as part of this research process will be anonymous and no personally identifiable information will be requested of you.

What is the purpose of this research?

The purpose(s) of this research is to develop a deeper understanding of the antecedents, or determinants, of trust within a business-to-business environment.

How was I identified and why am I being invited to participate in this research?

You have been invited to participate in this research as you have been identified as a businessperson within a business-to-business environment. You have also been chosen as you hold a management or decision-making position within your organisation.

What will happen in this research?

You will be asked to complete the following, electronic questionnaire relative to your feeling(s) toward, and relationship(s) experience, with a business-to-business supplier. You will be asked a series of questions, of which your responses will be entered on a scale one to seven. You will not be asked to provide any personally identifiable information. All responses will be anonymous and will be used for the sole purpose of the research, detailed above.

What are the discomforts and risks?

No discomfort or risk are envisaged, however, if at any time you experience any discomfort whilst completing the survey questionnaire, please feel free to return to the survey questionnaire at another time or withdraw from the survey questionnaire completely. Withdrawal from the survey questionnaire before completion will not serve to discount any of your rights as a survey respondent.

What are the benefits?

The benefits of this research will include, as previously noted, the completion of my Master of Business qualification at Auckland University of Technology as well as any additional research outputs such as research papers, journal articles, books, conference papers and other academic publications or presentations.

This research will also serve to enrich the academic debate on the antecedents, or determinants, of trust within a business-to-business environment. Trust enjoys uniform acceptance, both academically and anecdotally, as a key determinant of a successful, long-term relationships within business-to-business partnerships. A deeper

understanding of what drives the propensity to trust will also serve to develop more practical understanding of how best to engender trust within business-to-business relationships.

How will my privacy be protected?

As the survey questionnaire features anonymous responses, your privacy will be protected to the utmost degree. No personally identifiable information will be sought, or secured, within this research project. All data will be reported aggregately, rather than individually. All data will be secured, in a locked-cupboard, with the project supervisor. Any information that may serve to identify participants will not be provided to third parties.

What are the costs of participating in this research?

There are no costs involved to you, other than the time needed to complete the questionnaire. The completion of the questionnaire, and the reading of any preceding research information, should take no longer than 15 minutes. I very much appreciate your input, and time, within the questionnaire.

What opportunity do I have to consider this invitation?

You will have the opportunity to consider this invitation, at any time, for the duration of the data collection period of approximately one month.

How do I agree to participate in this research?

Your consent to participate in this research will be indicated by clicking the following, electronic questionnaire commencement link. As this research features entirely anonymous survey responses, with no personally identifiable information, there is no need for an explicit consent form.

Will I receive feedback on the results of this research?

If you wish to receive feedback on the results of this research, I would be happy to oblige and invite you to record your email address on a separate response page that

will appear at the conclusion of your survey questionnaire input. This response page is not linked to your survey questionnaire input and provides no means for the researcher to identify your responses relative to your email address or identity, therein. Results will be in the form of an executive summary, in PDF format, hosted on the Dropbox file hosting website.

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, Professor 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 AUTEK, Kate O'Connor, *ethics@aut.ac.nz*, +64 9 921 9999 ext 6038.

Whom do I contact for further information about this research?

Researcher Contact Details:

Drew Franklin, drew.franklin@aut.ac.nz, +64 9 921 9999 ext 7986.

Project Supervisor Contact Details:

Professor Roger Marshall, roger.marshall@aut.ac.nz, +64 9 921 9999 ext 5478.

Appendix Four – External Consultation Exercise Transcripts

RE: Determinants of Trust within Business to Business Relationships

19/09/13 1:59 PM

RE: Determinants of Trust within Business to Business Relationships

Sent: 11 September 2013 3:17 PM

To: Drew Franklin

Hi Drew,
Answers below.

Cheers

[REDACTED]

From: Drew Franklin [mailto:drew.franklin@aut.ac.nz]

Sent: Wednesday, 11 September 2013 10:31 a.m.

To: [REDACTED]

Subject: Determinants of Trust within Business to Business Relationships

Good morning,

As previously mentioned, I wish to commence my research into the determinants of trust within business to business relationships and the relative strengths of each respective determinant.

As part of my research preparation I have undertaken a comprehensive literature review, as well as metered approach to said literature from my own business experience, and have identified the most salient determinants, or antecedents, of trust within business to business relationships that I wish to research more thoroughly.

As part of my research development, I wish to engage with a few business to business managers, and practitioners, in a very brief period of consultation in order to confirm whether, or not, the identified antecedents of business to business trust share industry acceptance.

I would very much appreciate your feedback on the following two questions:

1. Do the following antecedents, or determinants, of business to business trust reflect your experience, in practice, as relevant? (please answer **yes** or **no** for each point, below)

- Level of co-creation, 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 **yes**
- Level of satisfaction, defined as an overall evaluation based on the total purchase and consumption experience with a good or service over time **yes**
- Level of communication, defined as as the formal as well as informal sharing of high quality, meaningful and timely information between firms **yes**
- Level of competence, defined as as the buyer's perception of the supplier's technological and commercial competence **yes**

https://outlook.aut.ac.nz/owa/?ae=Item&t=IPM.Note&id=RgAAAC...15qyU%2bAAAw6Y3DAAAJ&a=Print&pspid=_1379555905870_373207202

Page 1 of 2

- Level of shared values, 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 **yes**
- Level of benevolence, defined as 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 **no**
- Level of integrity, defined as serving to promise fulfilment of role obligations and demonstrates steadfastness and sincerity in its word **yes**

2. Are there any antecedents, or determinants, of business to business trust that you feel are missing from the list, above? (**yes, and what are the antecedents you feel are missing or no**)

Many thanks for time and input, it is very much appreciated.

Please let me know if you have any questions regarding the above.

Best regards,

Drew Franklin

RE: Determinants of Trust within Business to Business Relationships

Sent: 11 September 2013 10:20 AM
To: Drew Franklin

Hi Drew,

Answers in red below.

Cheers,

From: Drew Franklin [mailto:drew.franklin@aut.ac.nz]
Sent: 11 September 2013 10:09 a.m.
To: [REDACTED]
Subject: Determinants of Trust within Business to Business Relationships

Good morning,

As previously mentioned, I wish to commence my research into the determinants of trust within business to business relationships and the relative strengths of each respective determinant.

As part of my research preparation I have undertaken a comprehensive literature review, as well as metered approach to said literature from my own business experience, and have identified the most salient determinants, or antecedents, of trust within business to business relationships that I wish to research more thoroughly.

As part of my research development, I wish to engage with a few business to business managers, and practitioners, in a very brief period of consultation in order to confirm whether, or not, the identified antecedents of business to business trust share industry acceptance.

I would very much appreciate your feedback on the following two questions:

1. Do the following antecedents, or determinants, of business to business trust reflect your experience, in practice, as relevant? (please answer **yes** or **no** for each point, below)

- Level of co-creation, 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 (**yes/no**) Yes
- Level of satisfaction, defined as an overall evaluation based on the total purchase and consumption experience with a good or service over time (**yes/no**) Yes
- Level of communication, defined as the formal as well as informal sharing of high quality, meaningful and timely information between firms (**yes/no**) Yes
- Level of competence, defined as the buyer's perception of the supplier's technological and commercial competence (**yes/no**) Yes
- Level of shared values, 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 (**yes/no**) No
- Level of benevolence, defined as 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 (**yes/no**) Yes
- Level of integrity, defined as serving to promise fulfilment of role obligations and demonstrates steadfastness and sincerity in its word (**yes/no**) Yes

2. Are there any antecedents, or determinants, of business to business trust that you feel are missing from the list, above? (**yes/no**) Yes

Many thanks for time and input, it is very much appreciated.

Please let me know if you have any questions regarding the above.

Best regards,

Drew Franklin

Disclaimer: This communication and any attachments are confidential. If you have received it in error please notify us immediately and note

RE: Determinants of Trust within Business to Business Relationships

Sent: 12 September 2013 10:21 AM

To: Drew Franklin

From: Drew Franklin [mailto:drew.franklin@aut.ac.nz]

Sent: Wednesday, September 11, 2013 10:10 AM

Subject: Determinants of Trust within Business to Business Relationships

Good morning,

As previously mentioned, I wish to commence my research into the determinants of trust within business to business relationships and the relative strengths of each respective determinant.

As part of my research preparation I have undertaken a comprehensive literature review, as well as metered approach to said literature from my own business experience, and have identified the most salient determinants, or antecedents, of trust within business to business relationships that I wish to research more thoroughly.

As part of my research development, I wish to engage with a few business to business managers, and practitioners, in a very brief period of consultation in order to confirm whether, or not, the identified antecedents of business to business trust share industry acceptance.

I would very much appreciate your feedback on the following two questions:

1. Do the following antecedents, or determinants, of business to business trust reflect your experience, in practice, as relevant? (please answer **yes** or **no** for each point, below)

- Level of co-creation, 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 (**yes/no**) yes
- Level of satisfaction, defined as an overall evaluation based on the total purchase and consumption experience with a good or service over time (**yes/no**) yes
- Level of communication, defined as as the formal as well as informal sharing of high quality, meaningful and timely information between firms (**yes/no**) yes
- Level of competence, defined as as the buyer's perception of the supplier's technological and commercial competence (**yes/no**) yes
- Level of shared values, 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 (**yes/no**) yes
- Level of benevolence, defined as 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 (**yes/no**) yes
- Level of integrity, defined as serving to promise fulfilment of role obligations and demonstrates steadfastness and sincerity in its word (**yes/no**) yes

2. Are there any antecedents, or determinants, of business to business trust that you feel are missing from the list, above? (**yes/no**) yes –a trust that there is the financial ability to carry through the obligations being agreed to – that is there has to be a trust the firm can afford to back up the commitments being made – eg warranties.

Many thanks for time and input, it is very much appreciated.

Please let me know if you have any questions regarding the above.

Best regards,

Drew Franklin

Appendix Five – Means, Standard Deviations and Correlations

Means, Standard Deviations and Correlations

Variable	Mean	Standard Deviation	SATIS	COCR	COMM	BENEV	COMP	SHVAL	INTEG	TRUST
SATIS	5.2082	1.11002	1							
COCR	4.7444	1.37833	0.550**	1						
COMM	5.0821	1.20704	0.778**	0.609**	1					
BENEV	4.8746	1.31899	0.704**	0.709**	0.812**	1				
COMP	5.4282	1.06823	0.712**	0.550**	0.807**	0.724**	1			
SHVAL	4.8862	1.31920	0.690**	0.733**	0.766**	0.836**	0.741**	1		
INTEG	5.1325	1.25237	0.708**	0.681**	0.836**	0.851**	0.819**	0.850**	1	
TRUST	4.6179	1.41622	0.541**	0.623**	0.649**	0.678**	0.570**	0.684**	0.727**	1

*** Correlation is significant at the $p < 0.01$ level*

SATIS = Satisfaction, COCR = Co-creation, COMM = Communication, BENEV = Benevolence, COMP = Competence, SHVAL = Shared Values, INTEG = Integrity.