# Understanding post-adoptive adaptation process in organisational CRM implementations

Wallayaporn Techakriengkrai Faculty of Business and Law Auckland University of Technology Auckland, New Zealand Email: wtechakr@aut.ac.nz

Angsana A. Techatassanasoontorn Faculty of Business and Law Auckland University of Technology Auckland, New Zealand Email: <a href="mailto:angsana@aut.ac.nz">angsana@aut.ac.nz</a>

Felix B. Tan
Faculty of Business and Law
Auckland University of Technology
Auckland, New Zealand
Email: ftan@aut.ac.nz

#### **Abstract**

Past research on CRM largely focuses on organisational initial adoption decisions. However, there has been little research concerning the continued use of CRM and the associated change process in the post-adoption stage. This study attempts to fill this gap by examining post-adoptive adaptation process in organisational CRM implementations. The research questions are: (i) How do organisational changes unfold in the CRM implementation process? and (ii) How do individuals adapt to CRM applications at the post-adoptive stage? The study uses coping theory, institutional theory, and a socio-technical perspective as sensitising devices and the case study methodology to examine multi-level changes associated with CRM implementations in organisations. This research aims to develop a multi-level theory of post-adoptive adaptation process. The findings may assist organisations in providing appropriate resources and support successful post-adoption implementations of CRM.

#### Keywords

Adaptation, coping theory, CRM implementation, institutional theory, socio-technical

# INTRODUCTION

The adoption of customer relationship management (CRM) strategy involves a transformation from a product-centric to a customer-centric business environment, where all of an organisation's existing processes must be freshly examined from the perspective of the customers (Currie and Finnegan 2010). CRM is employed to increase the scale and scope of customer service (Kotorov 2002). CRM refers to marketing activities, tools and techniques delivered over the Internet using technologies such as web sites and e-mail, data warehousing and data mining with an aim to develop and improve long-term customer relationships (Kelly et al. 2003). Past research largely focuses on initial adoption decisions of CRM.

For instance, a study by Vella et al. (2012) examined the effect of behavioural inhibition systems and behavioural activation systems on users' intention to adopt CRM applications. However, there has been little research concerning the continuous use of CRM and the associated change process in the post-adoption stage. Approximately 70% of CRM projects have resulted in either losses or no bottom-line improvements in company performance, raising the importance of the need to understand events and other elements that affect successful organisational changes and use adaptation (Dimitriadis and Stevens 2008). This proposed study attempts to fill this gap by studying post-adoptive adaptation process in organisational CRM implementations.

Post-adoption outcomes of CRM applications are influenced by organisational and environmental contexts. Top management has power to choose applications and mandate their use in organisations. Enterprise information systems including CRM are usually mandated by top management (Brown and Starkey 2000; Chen and

Popovich 2003; Leonard-Barton 1988). Environmental contexts may include competitive pressure, customer pressure, industry pressure, and external support (Iacovou et al. 1995). The research questions guiding this study are: (i) How do organisational changes unfold in the CRM implementation process? and (ii) How do individuals adapt to CRM applications in the post-adoptive stage? In this study, coping theory, institutional theory and a socio-technical perspective are used to inform the empirical investigation of the multi-level change process in CRM implementations.

This research contributes to an understanding of post-adoption change process in information systems implementations in general and CRM implementations in particular. The results will be useful to reveal how users react and handle the introduction of new and complex information system applications in organisational contexts. The study will develop new knowledge based on how an emerging theory can inform ICT-enabled changes in organisations. Research findings may assist organisations in improving weaknesses and gaps in their CRM post-adoption as well as providing better support for employees during the change process.

# THEORETICAL BACKGROUND

#### **Customer Relationship Management (CRM)**

What is CRM?

CRM has its roots in relationship marketing which aims to build a long-term relationship with customers (Light 2003; Pulde 1999). The first CRM software was introduced in the late 1980s and early 1990s. Several definitions of CRM are used in the literature. For example, Armstrong and Kotler (2003) state that CRM is the process that builds and maintains profitable customer relationships. Swift (2001) considers CRM as an enterprise approach to understand customer behaviour and to improve customer acquisition, retention, and loyalty as well as to increase firm profitability. According to Payne (2002), Xu et al. (2002), Chen and Popovich (2003), Kincaid (2003) and Payne and Frow (2005), CRM implementations integrate people, process, and technology by using the information, leveraging the Internet and applications for understanding customers and maximise the relationships with customers and suppliers.

Other authors define CRM from an information system perspective. CRM systems can be viewed as information systems that focus on customers (Bull 2003). Davenport (2001) stated that CRM systems are tools, technologies and procedures to manage and improve the relationships with customers, prospects, and business partners in an organisation. Bibiano and Pastor (2006, p. 1) define a CRM system as "a sort of information system technology which is part of the more general category of enterprise systems that also includes enterprise resource planning and supply chain management systems." This study combines the definitions of CRM from Bibiano and Pastor (2006) and Davenport (2001) and refers to a CRM application as an enterprise system that integrates tools, technologies, and procedures for an organisation to maintain relationships with customers by delivering value and satisfaction to customers.

#### Overview of CRM research

Despite claims that CRM contributes positively to organisational performance (Krasnikov et al., 2009), some researchers caution that only 16.1% among more than 1,700 organisations worldwide report that CRM system usage can increase revenues in their organisations, while 83.9% underutilise CRM tools that they have in place (Dickie, 2009). In addition, there are various factors that influence the success of CRM including individuals' ability to use CRM systems, differences among beliefs and attitudes, IT and business culture gap, organisations' perceptions toward benefits and importance of CRM system, and CRM software utilisation (Limsarun & Pacapol, 2010).

Since this research aims to develop a multi-level theory of post-adoptive adaptation process of CRM implementation, the review of literature will focus on CRM research at both individual and organisational levels. Much of CRM research focuses on the implementation process and outcomes associated with organisations. Few studies examine CRM post-adoption at an individual level. In addition, most CRM studies focus on factors that shape initial adoption while a few studies look into post-adoption behaviours. For example, selected studies evaluate technological effects on post-adoption behaviours (Dong, 2010; Hsieh et al., 2011; Son & Han, 2011). Dong (2010) draws upon structuration theory of technology assimilation and the IT governance literature to develop a conceptual model. This study concludes that CRM use generates operational and strategic benefits that can improve firm performance. Hsieh et al. (2011) draw on sensemaking theory to develop a model to understand the antecedents, contingencies, and consequences of employees' extended use of CRM. They find that employees are influenced in post-adoptive sensemaking at two levels: technology and work system. Son and Han (2011) investigate how technology readiness affects continued use of new technology. Their finding shows

that each dimension of technology readiness shapes usage patterns in different ways. In particular, innovative functions have a significantly positive impact on consumer satisfaction and repurchase intention.

A few studies focus on post-adoption changes in organisations. Dong (2012) develops a conceptual model to examine the role of IT governance in the post-adoption stage of CRM use and organisation performance. He finds that CRM use generates operational and strategic benefits in business process that enable firms to improve their performance. It is also important to note that previous research does not pay much attention to the implications of CRM implementations on individuals and organisations simultaneously. Klein and Kozlowski (2000) suggest that there has been a lack of multi-level studies that can provide a rich understanding of phenomena that unfold across levels in an organisation. This research aims to address a gap in the current CRM literature by developing a deeper understanding of both individual adaptation and organisational changes in the post-adoptive adaptation process in CRM implementation.

#### **Theoretical Foundation**

We propose a theoretical foundation (Figure 1) that integrates theories of coping theory, a socio-technical perspective and institutional theory to inform our initial understanding of multi-level change process in organisational CRM implementation. Using coping theory as a theoretical lens allows researchers to study user behaviours that occur before, during, and after the implementation of a new technology (Beaudry and Pinsonneault 2005). Coping theory can be useful to deepen an understanding of how users respond to and cope with a CRM implementation in the post adoption stage.

A socio-technical perspective is used as a lens to examine organisational changes and individuals' behaviours toward new CRM implementations. In this study, a socio-technical perspective is useful to understand an emergent process of change and socio-technical components that affect organisational changes after new CRM implementations.

Institutional theory can be used as a theoretical lens to "develop a more structural and systemic understanding for how technologies [enterprise systems] are embedded in complex interdependent social, economic, and political networks, and how they are consequently shaped by such broader institutional influences" (Orlikowski and Barley 2001, p. 154). Institutional logics will be used to investigate the interaction between enterprise systems (CRM) and organisations' structures and processes as well as to identify and explain misalignment problems in CRM implementation (Svejvig 2009). See Figure 1 on how the three theories inform this research.

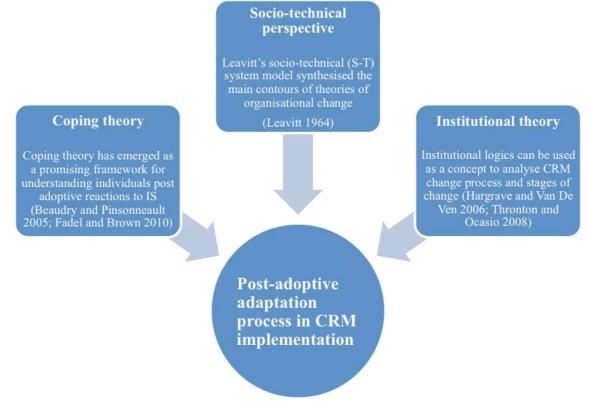


Figure 1: Theories as sensitising devices for this study

#### Coping theory

Lazarus and Folkman (1984, p. 141) define coping as "constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person." Coping theory provides a framework for understanding how individuals respond to disruptive events in their environments (Beaudry and Pinsonneault 2005; Lazarus and Folkman 1984). For example, individuals may confront an event that may disrupt their work routines such as a new IT implementation. The notions of coping and adaptation are interrelated. Lazarus (1993, p. 237) refers to adaptation as "the effectiveness of coping in improving the adaptation outcome". This definition infers that coping is a subset of adaptational activities that involve effort (Lazarus and Folkman 1984).

There are various definitions of adaptation in the literature. According to Tyre and Orlikowski (1994, p. 99), adaptation "refers to the adjustments and changes following the new IT implementation. Adaptation may concern the physical aspects of the technology as well as the procedures, beliefs, knowledge, or relationships of the users". Beaudry and Pinsonneault (2005, p. 496) define adaptation as "the cognitive and behavioural efforts exerted by users to manage specific consequences associated with a significant IT event that occurs in their work environment". This study defines adaptation as individuals' adjustments and behavioural changes associated with a new IS implementation that occurs in their work environment.

Viewing coping as a process, Lazarus and Folkman (1984, p. 142) state that "coping is ... a shifting process in which a person relies on one form of coping, such as defensive strategies, and other times on problem-solving strategies, as the status of the person-environment relationship changes". Individuals cope with disruptive events by following two stages: appraisal and coping effort. Primary and secondary appraisals are two forms of appraisal that occur within the coping process. The primary appraisal occurs when individuals evaluate the potential of an event and assesses its personal importance and relevance (Lazarus and Folkman 1984). Individuals may appraise an event to be a challenge or a threat (Lazarus and Folkman 1984). The secondary appraisal occurs when individuals assess the importance of an event, and determine the level of control they have over the situation as well as evaluate the coping resources available to them (Lazarus and Folkman 1984).

During the coping process, individuals perform different actions associated with coping efforts to deal with the situation (Beaudry and Pinsonneault 2005). Two coping dimensions are problem-focused coping and emotion-focused coping (Lazarus and Folkman 1984). Problem-focused coping aims to solve, reconceptualise, or minimise the effects of a stressful situation. On the other hand, emotion-focused coping changes one's perception of the situation in order to regulate emotional responses to the problem as well as reduce emotional distress (Lazarus and Folkman 1984).

In the IS context, some researchers extended coping theory and coping process to explain IS phenomena including technology acceptance, IS perceptions, and user adaptation to new IS implementations. Many studies focus on individual behaviours such as user resistance and IT threat avoidance. Coping theory can be useful to deepen an understanding of how users respond to and cope with a new IS implementation. Coping theory has emerged as a promising framework to explain individuals' post adoptive reactions to IS (Beaudry and Pinsonneault 2005; Fadel and Brown 2010). Beaudry and Pinsonneault (2005) developed the integrative model of coping model of user adaptation (CMUA) from coping theory to explain user adaptation through their responses to a new IS implementation.

Fadel and Brown (2010) integrated CMUA with theories of IS adoption by examining how adoption related IS perceptions influence individual-level post adoptive IS appraisal. In particular, they developed a theoretical model from the appraisal stage (primary appraisal and secondary appraisal) and transaction model of coping (Lazarus and Folkman 1984). In addition, they extended the work of Beaudry and Pinsonneault (2005) by adding a set of appraisal outcomes to understand various user reactions to an IS. Coping theory and its extensions (Beaudry and Pinsonneault 2005; Fadel and Brown, 2010) provide the foundation for this study to understand the process of how users cope with and adapt to CRM.

# Socio-technical perspective

The socio-technical approach is a promising perspective to study IT and social change in organisations (Kling and Lamb 1999). A socio-technical system consists of two sub-systems: the social system and the technical system. Generally, the social system consists of two components: actor and structure (Cummings 1978; Leavitt 1964). The technical system consists of task and technology (Kwon and Zmud 1987; Lyytinen and Newman 2008). Originally, Leavitt's socio-technical (S-T) system model synthesised the main contours of theories of organisational change "as a kind of sharp caricature of underlying beliefs and prejudices about important dimensions of organisations" (Leavitt 1964, p. 55). These include actors (e.g., project participants and stakeholders) and their characteristics and attributes; tasks which refer to what and how work is accomplished; structure which represents institutionalised rules and arrangements; and technology including hardware, software

and tools. Leavitt (1964) states that components of an organisation's system are interdependent; the change of one component affects other components and leads to organisational change.

In this study, the socio-technical system approach allows us to understand an emergent process of change in IS and scrutinise components that affects organisational changes after CRM implementations. IS research that applies a socio-technical approach largely studies information systems development and organisational change from IS implementation. For example, McLeod and Doolin (2012) drew on theories of situated action and socio-technical change to produce a narrative explanation of the emergent change process that occurs in the IS development project. They suggest that IS development is not a straightforward process, but emerges less than predictably over time through complex socio-technical interactions with unanticipated events and unintended consequences.

From the viewpoint of IS and organisational change, the organisational environment includes a work system and building system. Analytically, the work system can be located before the building system, although a work system and a building system need to be viewed as coevolving in the change analysis (Lyytinen and Newman 2008). Their constant relationships can create multi-layered, staggered, and cascading changes across both systems (Lyytinen and Newman 2008). IS change re-configures a work system by embedding new information technology components into it (Lyytinen and Newman 2008). The work systems execute, coordinate, and manage information related work (Alter 2002; Bergman et al. 2002; Mumford 2003). Lyytinen and Newman (2008, p. 592) state that, "the building system commands a set of resources and enacts routines to carry out the change and address the issues of uncertainty, ambiguity, and complexity". A building system and work system are always embedded in a broader system, which is the organisational environment.

Leavitt's (1964) concept of socio-technical system offers a broad framework to understand changes in an organisation through a new IS implementation. The socio-technical model enables this study to understand multilevel changes and provide a theoretical reasoning to offer accurate process explanations of IS change outcomes.

#### **Institutional theory**

Institutional theory emphasises the importance of institutional environments in shaping organisational structure and actions (Scott and Christensen 1995; Scott 2001). Institutional theory posits that the social context in which organisations operate influences their actions (Meyer and Rowan 1977). Scott (2005) and Scott (2008) argue that institutional theory aims to explain the deeper and more resilient aspects of how institutions are created, maintained, changed and dissolved. The influence of institutions on social behaviour manifests in the processes by which structures such as rules, routines and norms guide social behaviour. In 1977, the new institutionalism was developed in organisational studies. Indeed, Powell and DiMaggio (1991, p. 8) state that "the new institutionalism in organisation theory and sociology comprises a rejection of rational-actor models, an interest in institutions as independent variables, a turn toward cognitive and cultural explanations, and an interest in properties of supra-individual units of analysis that cannot be reduced to aggregations or direct consequences of individuals' attributes or motives". New institutionalism (Greenwood et al. 2008; Powell and DiMaggio 1999) also explains the relationship between situated practices and organisational, cultural, and societal contexts (Berente and Yoo 2012; Orlikowski and Barley 2001).

Three institutional isomorphisms are coercive, mimetic, and normative (DiMaggio and Powell 1983). Coercive isomorphism occurs when organisations acquiesce to "the formal and external pressures exerted upon them by other organizations upon which they are dependent, and the cultural expectations in the society within which the organizations function" (DiMaggio and Powell 1983, p. 150). Mimetic isomorphism results from uncertainty that encourages imitation, when organisational technologies are poorly understood, or when goals are ambiguous, As a result, organisations may model themselves after other organisations (DiMaggio and Powell 1983). Is researchers have applied institutional theory to examine implications of the introduction of new management practices and technologies, as they are implemented and acted upon in organisations (Ansari et al. 2010; Orlikowski and Barley 2001; Westphal et al. 1997). Orlikowski and Barley (2001, p. 153) contend that "institutional analysis has been said to have the potential to help researchers understand how institutions influence the design, use, and consequences of technologies, either within or across organizations".

Previous studies emphasise the concept of institutional logics and its effects on individuals and organisations in broader contexts including markets, industries, and populations of organisational forms. Institutional logic is a concept that relates broader institutions associated with organisational and societal levels with individual practices (Berente and Yoo 2012; Friedland and Alford 1999). According to Thornton et al. (2012), the institutional logics perspective emphasises the process that institutions are enacted in practice through their logics and the relationship of these logics and individuals' identities. Institutional logics link institutions and actions and provide a bridge between a macro structure perspective (DiMaggio and Powell 1983; Meyer and Rowan 1977) and micro process approaches (Zucker 1991). In other words, institutional logics link organisations and

individuals. Actions, decisions, and outcomes are a result of interaction between an individual agency and an institutional structure (Svejvig 2009).

Some IS studies apply the notion of institutional logics to study organisational change associated with new information systems (Currie and Guah 2007; Gosain 2004; Lyytinen et al. 2009; Yoo et al. 2007). For example, Lyytinen et al. (2009) analyse enterprise resource planning implementation as an institutionalisation process. They developed a model that explains complex interactions among socio-technical elements, the work system, and organisational and environmental context. Their study focuses on micro-level processes (translation from the global logic of the ERP system to a local context) that seek to stabilise the ERP artefact. The result shows that the interaction of four socio-technical components and their variation can result in nonlinear changes in the implementation.

In this study, the new institutionalism and institutional logic can help us theorise post-adoptive change process of CRM implementation in organisations. Institutional theory can be used as a theoretical lens to "develop a more structural and systemic understanding for how technologies (enterprise systems) are embedded in complex interdependent social, economic, and political networks, and how they are consequently shaped by such broader institutional influences" (Orlikowski and Barley 2001, p. 154). In addition, Currie (2009) argues that institutional theory can provide conceptual tools and techniques for practitioners to understand the phenomenon of complex change management involving information systems. The wider social issues and institutional structures are important elements of complex change management involving an enterprise system. However, researchers also need to focus on technology, actors, and organisations which are vital parts of the practical implementation and system use (Svejvig 2009). Institutional logics will be helpful to develop an understanding of the interaction between CRM and organisational structures and processes (Svejvig 2009). In particular, institutional logics will be useful to identify and explain misalignment problems in CRM implementation. Furthermore, the institutional logics can be used as a concept to analyse CRM change process and stages of change (Hargrave and Van De Ven 2006; Thornton and Ocasio 2008).

# RESEARCH METHODOLOGY

This research adopts the qualitative interpretive case study method to examine multi-level change associated with CRM implementations in organisations. Interpretive case study research aims to understand the nature of phenomena from the point of view of participants and to elicit meanings from behaviour in the social context (Cavaye 1996). Interpretive research does not develop a priori constructs, but allows constructs to emerge in the field (Cavaye 1996). This research aims to inductively develop a rich and substantive theory to understand user adaptation and organisational change from the data.

The case study method is appropriate to investigate a contemporary phenomenon in the real life context when the events and context are not clear (Yin 2009). In other words, the case study method is used to offer a rich explanation of a social phenomenon. The case study approach enables researchers to answer "how?" and "why?" questions (1989). Case study allows us to discover an event, an activity, a process from participants.

This study employs the embedded multiple-case design that involves multiple cases and multi-level analysis (Yin 2009). A multiple-case design is more appropriate than a single-case design because a single case approach is suitable for testing the boundaries of well-formed theory or examining an extreme or a unique case. On the other hand, a multiple case design enables researchers to analyse data across cases to verify that findings are not merely the result of idiosyncrasies of one particular research setting (Miles and Huberman 1994). Multi-level analysis involves macro-level and micro-level analyses. While macro-level analyses focus on organisational level, micro-level analyses focus on individual level (Markus and Robey 1988).

In this study, three cases from different industries are selected to increase the possibility to find different adaptation processes and contextual differences that may influence those processes. Organisations from different industries allow us to extend the findings to understand situations in a broad range of organisations, and to increase richness in adaptation process of organisational CRM use (Harris and Sutton 1986). According to Lyytinen and Rose (2003), companies of different sizes and in different industries can help minimise potential bias in the study and maximise the variation in firm characteristics in the sample. Finally, different industries may provide different results of users' adaptation process in different socio-technical environments. Semi-structured interviews will be conducted. Participants will be selected based on their knowledge and expertise in the CRM applications.

# Method of Sampling and the Selected Case

Theoretical sampling strategy is adopted to select case studies (Patton 1990). Cases are not randomly selected. There are four criteria for choosing participating organisations. Firstly, organisations should implement customer relationship management (CRM) applications within the past 3 years although some may implement them more

recently. In addition, we will make efforts to include organisations that have successful and unsuccessful implementation outcomes. Secondly, organisations should be medium and large sized business because CRM applications are normally used in medium and large sized organisations such as banking, telecommunication, insurance, and automobile industries (Srivihok and Batanov 2005). For banking industry, small banks do not currently implement e-CRM (Sivaraks et al. 2011).

In term of scales of implementation, CRM implementations usually implement selected modules including direct sales lead and information management systems, sales force automation (SFA) systems, call centre and customer service systems, among others (Mirani et al. 2001). Thirdly, the selected organisations should complete the implementation of all modules or at least cover main modules such as customer service systems and CRM marketing. Organisations that participate in the study should have at least one common module such as a CRM marketing module for me to identify similarities and differences in individual adaptation and organisational change. Lastly, the selected organisations must currently use CRM applications.

#### **Method of Data Analysis**

Thematic analysis will be used to analyse data (Braun and Clarke 2006; Putnam 1983; Walsham 2006). The six phases of thematic analysis by Braun and Clarke (2006) will be used as a guideline for data analysis. These phases are: (i) familiarising with data, (ii) generating initial codes, (iii) searching for themes, (iv) reviewing themes, (v) defining and naming themes, and (vi) producing the report. Generally, data analysis is an iterative process that can move back and forth as needed throughout the data analysis process (Braun and Clarke 2006).

Within-case and cross-case analysis will be conducted to develop an in-depth understanding of individuals' adaptation in specific organisations and compare with other organisations to identify similarities and differences. According to Eisenhardt (1989), within-case analysis allows researchers to understand rich contexts and unique patterns in each case. Cross-case analysis enables researchers to enhance the probability of capturing novel findings among the data (Eisenhardt 1989). Multilevel analysis that involves an individual level and an organisational level is used in this study.

#### CONCLUSION AND CURRENT RESEARCH STATUS

In this research-in-progress paper, we have presented a preliminary theory-driven model that integrates three theories of coping theory, socio-technical perspective, and institutional theory to inform our empirical enquiry on post-adoptive adaptation process in the context of CRM implementations. The findings expect to contribute to both theory and practice. For a theoretical contribution, this research expects to develop new knowledge based on how an emerging theory can help us better understand complex changes in organisations. For a practical contribution, this study helps us understand how users react and handle the introduction of new and complex CRM applications in organisational contexts. The findings can enable organisations to provide better support for employees during the change process.

The data collection is currently in progress. We are in the process of inviting organisations to participate in the study. Three organisations from different industries will be selected based on the four criteria outlined in the research methodology section above.

# **REFERENCES**

- Alter, S. 2002. "The Work System Method for Understanding Information Systems and Information Systems Research," *Communications of the Association for Information Systems* (9:1), p 6.
- Ansari, S.M., Fiss, P.C., and Zajac, E.J. 2010. "Made to Fit: How Practices Vary as They Diffuse," *Academy of Management review* (35:1), pp 67-92.
- Armstrong, G., and Kotler, P. 2003. Marketing: An Introduction. Upper Saddle River, NJ: Prentice-Hall.
- Beaudry, A., and Pinsonneault, A. 2005. "Understanding User Responses to Information Technology: A Coping Model of User Adaptation," *MIS Quarterly* (29:3), pp 493-524.
- Berente, N., and Yoo, Y. 2012. "Institutional Contradictions and Loose Coupling: Post implementation of NASA's Enterprise Information System," *Information systems research* (23:2), pp 376-396.
- Bergman, M., King, J.L., and Lyytinen, K. 2002. "Large Scale Requirements Analysis as Heterogeneous Engineering," *Scandinavian journal of information systems* (14), pp 37-56.
- Bibiano, L.H., and Pastor Collado, J.A. 2006. "Towards a Definition of a CRM System Life-cycle," *Proceedings of the European and Mediterranean Conference on Information Systems* (EMCIS), pp 1-8.

- Braun, V., and Clarke, V. 2006. "Using Thematic Analysis in Psychology," *Qualitative Research in Psychology* (3:2), pp 77-101.
- Brown, A.D., and Starkey, K. 2000. "Organizational Identity and Learning: A Psychodynamic Perspective," *Academy of Management Review* (25:1), pp 102-120.
- Bull, C. 2003. "Strategic Issues in Customer Relationship Management (CRM) Implementation," *Business Process Management Journal* (9:5), pp 592-602.
- Cavaye, A.L. 1996. "Case study research: A Multi-faceted Research Approach for IS," *Information Systems Journal* (6:3), pp 227-242.
- Chen, J.I., and Popovich, K. 2003. "Understanding Customer Relationship Management (CRM): People, Process and Technology," *Business Process Management Journal* (9:5), pp 672-688.
- Cummings, T.G. 1978. "Self-regulating Work Groups: A Socio-technical Synthesis," *Academy of Management review* (3:3), pp 625-634.
- Currie, W.L., and Finnegan, D.J. 2010. "A Multi-layered Approach to CRM Implementation: An Integration Perspective," *European Management Journal* (28:2), pp 153-167.
- Currie, W.L., and Guah, M.W. 2007. "Conflicting Institutional Logics: A National Programme for IT in the Organisational Field of Healthcare," *Journal of Information Technology* (22:3), pp 235-247.
- Davenport, T. 2001. "The New, New IT Strategy First there was reengineering. Then ERP, KM and CRM. Is estrategy the next killer app?," *CIO* (14:14), pp 58-63.
- Dickie, J. 2009. "Era Sales Needs 2009-Era CRM," Customer Relationship Management (13:3), p 8.
- DiMaggio, P.J., and Powell, W.W. 1983. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields," *American Sociological Review*, pp 147-160.
- Dimitriadis, S., and Stevens, E. 2008. "Integrated Customer Relationship Management for Service Activities: An Internal/External Gap Model," *Managing Service Quality* (18:5), pp 496-511.
- Dong, S. 2010. "IT Governance in Post-Adoption Stages of CRM Diffusion: An Institutional Perspective," *Management of e-Commerce and e-Government (ICMeCG)*, 2010 Fourth International Conference on IEEE, pp 287-292.
- Dong, S. 2012. "Decision Execution Mechanisms of IT Governance: The CRM Case," *International Journal of Information Management* (32:2), pp 147-157.
- Eisenhardt, K.M. 1989. "Building Theories from Case Study Research," *Academy of Management review* (14:4), pp 532-550.
- Fadel, K.J., and Brown, S.A. 2010. "Information Systems Appraisal and Coping: The Role of User Perceptions," *Communications of the Association for Information Systems* (26:1), p 6.
- Friedland, R., and Alford, R.R. 1999. "Institutions and Opportunities: Constructing and Deconstructing Regimes and States," *Subversive Institutions: The Design and the Destruction of Socialism and the State*, p 127.
- Gosain, S. 2004. "Enterprise Information Systems as Objects and Carriers of Institutional Forces: The New Iron Cage?," *Journal of the Association for Information Systems* (5:4), pp 151-182.
- Greenwood, R., Oliver, C., Suddaby, R., and Sahlin-Andersson, K. 2008. *The Sage handbook of organizational institutionalism.* London: Sage.
- Hargrave, T.J., and Van de Ven, A.H. 2006. "A Collective Action Model of Institutional Innovation," *Academy of Management review* (31:4), pp 864-888.
- Harris, S.G., and Sutton, R.I. 1986. "Functions of Parting Ceremonies in Dying Organizations," *Academy of Management Journal* (29:1), pp 5-30.
- Hsieh, J.P.A., Rai, A., and Xu, S.X. 2011. "Extracting Business Value from IT: A Sensemaking Perspective of Post-adoptive Use," *Management Science* (57:11), pp 2018-2039.
- Iacovou, C.L., Benbasat, I., and Dexter, A.S. 1995. "Electronic Data Interchange and Small Organizations: Adoption and Impact of Technology," *MIS Quarterly* (19:4), pp 465-485.
- Kelley, L.L., Gilbert, D., and Mannicom, R. 2003. "How e-CRM Can Enhance Customer Loyalty," *Marketing Intelligence and Planning* (21:4), pp 239-248.

- Kincaid, J.W. 2003. Customer Relationship Management: Getting It Right!, NJ: Prentice Hall Professional.
- Klein, K.J., and Kozlowski, S.W. 2000. *Multilevel Theory, Research, and Methods in Organizations: Foundations, Extensions, and New Directions*. CA: Jossey-Bass.
- Kling, R., and Lamb, R. 1999. "IT and Organizational Change in Digital Economies: A Socio-technical Approach," *ACM SIGCAS Computers and Society* (29:3), pp 17-25.
- Kotorov, P.R. 2002. "Ubiquitous Organization: Organizational Design for e-CRM," *Business Process Management Journal* (8:3), pp 218-232.
- Krasnikov, A., Jayachandran, S., and Kumar, V. 2009. "The Impact of Customer Relationship Management Implementation on Cost and Profit Efficiencies: Evidence from the US Commercial Banking Industry," *Journal of marketing* (73:6), pp 61-76.
- Kwon, T.H., and Zmud, R.W. 1987. "Unifying the Fragmented Models of Information Systems Implementation," *Critical Issues in Information Systems Research*. John Wiley & Sons, Inc., 1987, pp 227-251.
- Lazarus, R.S., and Folkman, S. 1984. *Stress, Appraisal, and Coping*. New York: Springer Publishing Company LLC.
- Lazarus, R. S. 1993. "Coping Theory and Research: Past, Present, and Future," *Fifty years of the research and theory of RS Lazarus: An analysis of historical and perennial issues*, pp 366-388.
- Leavitt, H.J. 1964. "Applied Organization Change in Industry: Structural, Technical and Human Approaches," *New Perspectives in Organizational Research* (55), p 71.
- Leonard-Barton, D. 1988. "Implementation as Mutual Adaptation of Technology and Organization," *Research Policy* (17:5), pp 251-267.
- Light, B. 2003. "CRM Packaged Software: A Study of Organisational Experiences," *Business Process Management Journal* (9:5), pp 603-616.
- Limsarun, T., and Pacapol, A. 2010. "The Customer Relationship Management practice of Information and Communication Technology Public Listed Companies in Thailand," *Journal of Alternative Perspective of Social Sciences* (2), pp 54-83.
- Lyytinen, K., and Newman, M. 2008. "Explaining Information Systems Change: A Punctuated Socio-technical Change Model," *European Journal of Information Systems* (17:6), pp 589-613.
- Lyytinen, K., Newman, M., and Al-Muharfi, A.R.A. 2009. "Institutionalizing Enterprise Resource Planning in the Saudi Steel Industry: A Punctuated Socio-technical Analysis," *Journal of Information Technology* (24:4), pp 286-304.
- Lyytinen, K., and Rose, G.M. 2003. "The Disruptive Nature of Information Technology Innovations: The Case of Internet Computing in Systems Development Organizations," *MIS Quarterly* (27:4), pp 557-596.
- Markus, M.L., and Robey, D. 1988. "Information Technology and Organizational Change: Causal Structure in Theory and Research," *Management Science* (34:5), pp 583-598.
- McLeod, L., and Doolin, B. 2012. "Information Systems Development As Situated Socio-technical Change: A Process Approach," *European Journal of Information Systems* (21:2), pp 176-191.
- Miles, M.B., and Huberman, A.M. 1994. Qualitative Data Analysis: An Expanded Sourcebook. LA: Sage.
- Mirani, R., Moore, D., and Weber, J.A. 2001. "Emerging Technologies for Enhancing Supplier-reseller Partnerships," *Industrial Marketing Management* (30:2), pp 101-114.
- Mumford, E. 2003. Redesigning human systems. Hershey, PA: Idea Group Inc.
- Meyer, J.W., and Rowan, B. 1977. "Institutionalized Organizations: Formal Structure as Myth and Ceremony," *American journal of sociology* (83:2), p 340.
- Orlikowski, W.J., and Barley, S.R. 2001. "Technology and institutions: What can Research on Information Technology and Research on Organizations Learn from Each Other?," MIS Quarterly (25:2), pp 145-165.
- Patton, M.Q. 1990. Qualitative Evaluation and Research Methods. CA: SAGE Publications, Inc.
- Payne, A. 2002. "The Value Creation Process in Customer Relationship Management," *Insight Interactive*, pp 1-17.

- Payne, A., and Frow, P. 2005. "A Strategic Framework for Customer Relationship Management," *Journal of Marketing* (69:4), pp 167-176.
- Powell, W.W., and DiMaggio, P. 1991. *The New Institutionalism in Organizational Analysis*. Chicago: University of Chicago Press.
- Pulde, M.F. 1999. "Physician-centered Management Guidelines," Physician Executive (25:1), p 40.
- Putnam, L.L. 1983. "The Interpretive Perspective: An Alternative to Functionalism," *Communication and organizations: An interpretive approach*, pp 31-54.
- Scott, W.R., and Christensen, S. 1995. *The Institutional Construction of Organizations: International and Longitudinal Studies*. CA: Sage Thousand Oaks.
- Scott, W.R. 2001. Institutions and organizations. Thousand Oaks, CA: Sage.
- Scott, W.R. 2005. "Institutional Theory: Contributing to a Theoretical Research Program," *Great Minds in Management: The Process of Theory Development*, pp 460-484.
- Scott, W.R. 2008. Institutions and Organizations. Ideas and Interests. Los Angeles, CA: Sage Publications.
- Sivaraks, P., Krairit, D., and Tang, J. 2011. "Effects of e-CRM on Customer-bank Relationship Quality and Outcomes: The Case of Thailand," *The Journal of High Technology Management Research* (22:2), pp 141-157.
- Son, M., and Han, K. 2011. "Beyond the Technology Adoption: Technology Readiness Effects on Post-adoption Behavior," *Journal of Business Research* (64:11), pp 1178-1182.
- Srivihok, A., and Batanov, D. 2005. "Analysis of the Readiness of Thai SME for Applying CRM," *Paper Presented at the Proceedings of the Fourth International Conference on eBusiness*, November, pp 19-20.
- Svejvig, P. 2009. "Literature Review of Enterprise Systems Research Using Institutional Theory: Towards a Conceptual Model," *Qorking Paper* (1).
- Swift, R. 2001. "CRM: Customer Relationship Management," Elsevier, Brazil: Prentice Hall Professional.
- Thornton, P.H., and Ocasio, W. 2008. *Institutional logics. The Sage Handbook of Organizational Institutionalism.* Thousand Oaks, CA: Sage Publications.
- Thornton, P.H., Ocasio, W., and Lounsbury, M. 2012. *The Institutional Logics Perspective: A New Approach to Culture, Structure, and Process.* NY: Oxford University Press Inc.
- Tyre, M.J., and Orlikowski, W.J. 1994. "Windows of Opportunity: Temporal Patterns of Technological Adaptation in Organizations," *Organization Science* (5:1), pp 98-118.
- Vella, J., Caruana, A., and Pitt, F. 2012. "The Effect of Behavioural Activation and Inhibition on CRM Adoption," *International Journal of Bank Marketing* (30:1), pp 43-59.
- Walsham, G. 2006. "Doing Interpretive Research," European Journal of Information Systems (15:3), pp 320-330.
- Westphal, J.D., Gulati, R., and Shortell, S.M. 1997. "Customization or Conformity? An Institutional and Network Perspective on the Content and Consequences of TQM Adoption," *Administrative Science Quarterly* (42:2), pp 366-394.
- Xu, Y., Yen, D.C., Lin, B., and Chou, D.C. 2002. "Adopting Customer Relationship Management Technology," *Industrial Management and Data Systems* (102:8), pp 442-452.
- Yin, R.K. 1989. "Research Design Issues in Using the Case Study Method to Study Management Information Systems," *The Information Systems Research Challenge: Qualitative Research Methods* (1), pp 1-6.
- Yin, R.K. 2009. Case Study Research: Design and Methods (4th ed.). Thousand Oaks, CA: Sage Publications.
- Yoo, Y., Lyytinen, K., and Berente, N. 2007. "An Institutional Analysis of Pluralistic Responses to Enterprise System Implementations,". *ICIS* 2007 Proceedings (96).
- Zucker, L. 1991. "The Role of Institutionalization in Cultural Persistence," InW. W. Powell and PJ DiMaggio (Eds.), *The new institutionalism in organizational analysis*. Chicago: University of Chicago Press. pp 83-107.

Post-adoptive adaptation of CRM implementation Techakriengkrai et al.

# **COPYRIGHT**

Wallayaporn Techakriengkrai, Angsana A. Techatassanasoontorn and Felix B. Tan © 2014. The authors assign to ACIS and educational and non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to ACIS to publish this document in full in the Conference Papers and Proceedings. Those documents may be published on the World Wide Web, CD-ROM, in printed form, and on mirror sites on the World Wide Web. Any other usage is prohibited without the express permission of the authors.