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Implementation dynamics for CRM system development

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Implementation dynamics for CRM system development

Summary

This paper considers the implementation of CRM systems based on evidence from longitudinal case studies in medium-sized companies operating in the business-to-business sector. This research addresses systems implementation from two key perspectives. These are 1) the emergence of risks to implementations from an organizational context rather than a technological context and 2) the emergence of unwritten/unconscious strategies that contribute to the achievement of implementation success. An immersive case study approach is employed where video data is used to capture key phases of the implementation process. Analysis suggests that a set of four implicit contracts exist between the main actors, leading to a successful implementation, despite other failures. These 'contracts' are believed to make a positive contribution for CRM implementation practitioners by mitigating some of the ongoing organizational risks.

Keywords: CRM, system implementation, e-business, risk resolution.

Word Count: 2130

Introduction

Customer Relationship Management (CRM) systems have been seen to offer significant advantages to organisations seeking a more professional approach to the acquisition and retention of customers. CRM can be viewed as the strategic use of information, processes, technology and people to manage the customer's relationship with the firm, across the customer life cycle (Meadows & Dibb, 2012). This definition acknowledges that CRM adoption requires the cross-functional integration of processes, people, and marketing capabilities enabled by information systems (Coltman, 2007). However, there is substantial evidence to suggest that a high implementation failure rate reflects excessive reliance on technology alone to improve performance and that insufficient attention has been paid to organisational and behaviour-related issues. More broadly, it is claimed that CRM does not deliver on its promises (Garrido-Moreno and Padilla-Meléndez, 2011; Coltman, 2007; Karakostas et al., 2005).

The paper places CRM implementation as a subset of systems implementation but recognises a number of characteristics specific to the genre. These include the notion that CRM systems, unlike most other systems, have two distinct foci: firstly the relationships that are external to the organisation with existing and potential customers (the process of getting and maintaining customers) and secondly the manipulation of those relationships (internal to the organisation) for best commercial advantage (Gronroos and Powell 2000). Another characteristic of CRM systems is the notion of linked or dependent satisfaction where customer satisfaction is seen to be an unlikely achievement where there are users who are not content with their own relationship with the organisation.

Earlier work has confirmed the existence of a set of risks associated with CRM system implementation (Corner and Hinton 2002, Hewson and McAlpine, 1999) that appear to explain a significant degree of implementation failure. Based on an analysis of the general systems implementation literature (most notably Cavaye and Christiansen 1996, Hartwick and Barki 1994, Delone and McLean 1992), the research explores the dynamics of the relationships of the main actors in the implementation process as prime determinants of whether an implementation is successful.

Initial case studies investigated the operational risks to CRM implementations and developed a model to illustrate how the cognitive schemas and values of the actors in the implementation process may influence the emergence of risks to the implementation impacting subsequent business performance (summarised in figure 1).

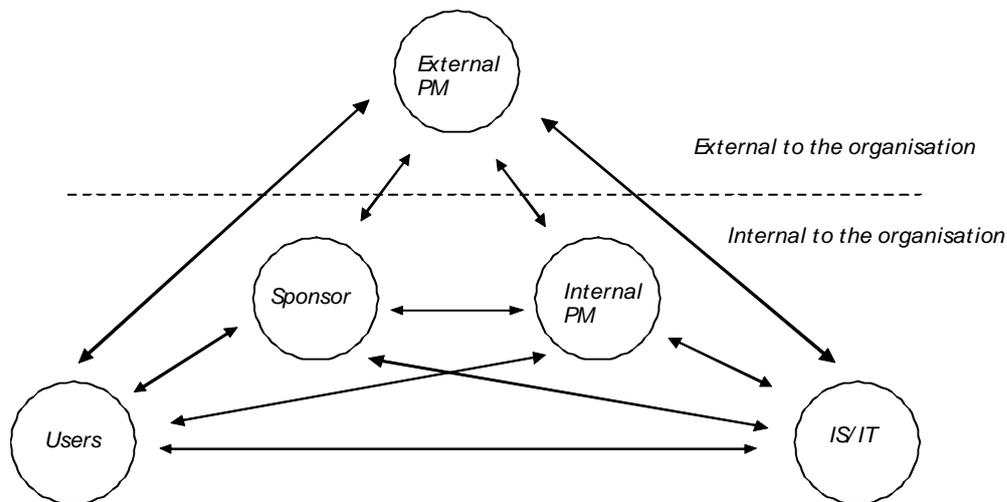


Figure 1: Model of the relationships between the main ‘actors’ in a CRM implementation.

However, the cases revealed an interesting paradox. Despite identifying a number of risks that should have led to implementation failure, these projects were considered successful by all parties. It was hypothesized that this ‘*success despite functional inadequacies*’ reveals evidence of shared motivation to make the project successful together with flexibility in the relationships between the main groups of actors. This paradox has driven the further case research and model development that follows.

Research Design and Method

As one of the authors was Director of CRM systems for a company that was a business partner for one of the main CRM system vendors in the mid-market sector, this study utilises a longitudinal case study approach (as outlined by Orlikowski and Baroudi, 1991). The position as an implementer of CRM systems had a significant advantage regarding access to data and the facility to gather data as part of the normal working day. Equally the involvement of the researcher as an actor in the implementation process precludes virtually all research designs other than action research (Chen & Hirschheim, 2004).

Case study data was gathered, primarily through the use of video recordings of meetings and training sessions throughout the duration of the system development project. Provided video recordings are carefully archived, and remain available for repeated inspection and interpretation. The accuracy of the raw data cannot be doubted provided the original linear recordings remain intact. The video recordings are used to study the behaviours of the actors and validate the relationship model and further explore these dynamic relationships. The interpretation of the raw data, however, particularly when assessing the values that may lie behind actions and statements must be largely subjective. However, relevant concepts from social psychology offer a framework for subsequent analysis.

The prime concept that has been adopted for this research is the notion of cognitive schemas – mental frameworks around a specific theme that help to organise social information. Baron and Byrne (2000) describe three main types of schema, personal schemas which relate other people as people types, role schemas which relate to specific social roles and how people act within those roles and event schemas which relate to what happens in given settings, such meetings.

Wyer and Srull (1994) present evidence that schemas influence social thought by exerting strong influence on the basic processes of attention – the information that gets noticed, encoding – storing the information in memory and retrieval – the recovery of information from memory for use in some manner. Information that is consistent with established schemas tends to be ‘registered’ and enters consciousness whereas that which is inconsistent tends to be ignored (Fiske, 1993) unless it is sufficiently extreme that it cannot fail to be noticed. For information retrieval, when schemas are activated when trying to recall some information, they determine what information is brought to mind, usually that which is part of or consistent with the schema. Schemas also tend to demonstrate significant resistance to change (Conway & Ross, 1984). Consequently, each of the actors in the CRM implementation relationship model can be expected to have personal, role and event schemas that will impact upon the implementation process. The schemas will include personal values and biases and the behaviour of the actors within the relationship is likely to be, at least in part, a reflection of those schemas.

Preliminary Findings

The data indicate that both personal and functional values have influence over the views and actions of the actors in the implementation. These influences, however, appear to do little to illuminate why some implementations are considered successful whereas others are not. After all, every implementation is subject to the influences of personal and functional values. An instinctive response is to question the nature of the influencing values with an expectation that more supportive and positive values result in greater success. The literature, however, suggests many other factors have considerable influence over implementation success. Swanson (1988), in particular, suggests nine elements need to be well managed for successful implementation. The nine factors described by Swanson are:

- User involvement
- Management commitment
- Value basis
- Mutual understanding
- Design quality
- Performance level
- Project management
- Resource adequacy
- Situational stability

A significant observation by Swanson is that during the course of an implementation the ideal relationships between the factors change and not all can be under the complete control of the responsible implementer. In the main case study there is evidence that at least two of these were poorly managed (Project management and financial resource allocation). Given Swanson’s findings it would be reasonable to expect that the case study implementation would not have been successful in at least some respects, yet it was successful. The system was implemented, staff were using it

well and after the initial implementation more users were introduced to it and trained on it. This presented a paradox where an implementation was successful despite inadequacies in the implementation process. The final research question was, therefore, ‘why was the implementation successful when important aspects of the management of the implementation were inadequate?’

A number of positive aspects were noted in the research analysis, including the willingness of the Financial Director to put aside consideration of integration costs in order to move the meeting on, the lack of apparent rejection during the end-user training and the statement of the regional Sales manager that the system offered the company their first opportunity to define a customer. At a simple level it appeared that the reason for success was that, collectively, the actors in the implementation process wanted the project to be successful, sufficiently to overcome the problems generated by the inadequacies.

The strong wish for success was evident in each of the four categories of actor seen in the research and manifested itself in what are described here as implicit contracts. Implicit contracts, in the context of the research, were unwritten and implicit in the sense that the actors were unlikely to be aware that they had formed them or that they were working to them. The strong wish for success appears to have manifested itself in a willingness to generate the contracts implicitly and be flexible in the operation of those contracts (see table 1).

Table 1: Overview of implicit contracts

Contract 1:	<p>External suppliers: We shall commit ourselves to providing a solution to your business needs provided you tell us what you need, pay us for what you ask us to do and listen to our advice.</p> <p>Management users: We shall use your system provided it does what we want, the end-users are prepared to use it and it does not cost more than we can afford.</p>
Contract 2:	<p>Management users: We shall provide you with a system that will make your work easier provided you use it properly.</p> <p>End-users: We shall use your system provided that it does what you say and does not make our work more difficult.</p>
Contract 3:	<p>External suppliers: We shall do the hard work with this system in terms of customisation and installation provided your infrastructure can handle it. We are prepared to train you in the relevant skills so that you can take over and run it provided you want to. Although not evident in the data this is a standard position.</p> <p>IS/IT: We shall support your activities provided the system does what it should.</p>
Contract 4:	<p>End-users: Our use of the system is conditional on you providing us with the technology that enables it to work, and fixing things when they go wrong.</p>

	IS/IT: We shall provide you with the technology and support so long as you learn to use it properly.
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One single actor in the implementation, the Operations Manager, stood out from the others by an unwillingness to contract for some aspects of the implementation. The reasons for this were not evident and any suggestions for the unwillingness would be speculative. The contrast between the behaviors of the Operations Manager and others contributed to the intuitive process of recognizing ‘willingness to contract’ as an observable trait amongst the group.

Analysis of the data was required in order to develop a model (figure 2) that reflected and described the dynamics of the flexible and implicit contracts that had been developed and were in operation. Within this model the management team was seen to consist of all senior management including the managing director. IS/IT is shown as a separate function because they were seen to have had a different relationship with the internal supplier from that of the management team and equally a subtly different relationship with the users of the system.

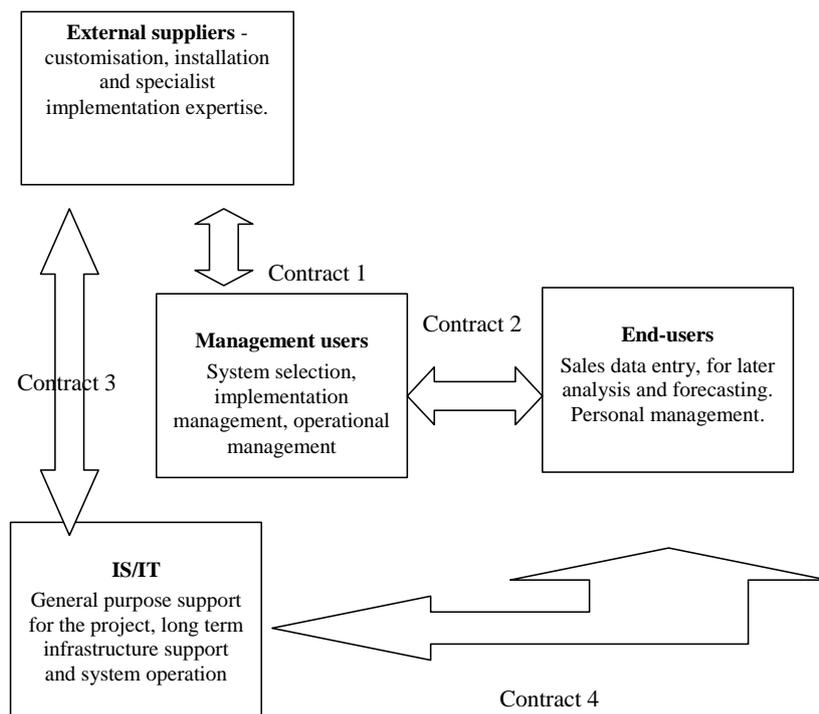


Figure 2: The inter-relationships of the actors framed by their implicit contracts

The researchers are aware that a postulation that the actors in a successful CRM implementation, and conceivably in other successful system implementations, operate implicit contracts is a challenge to mainstream IS literature which focuses on user acceptance as an indicator of success, for example, Ives et al (1983), Thong and Yap

(1996), Nah et al (2004). The research programme evaluated user acceptance as an element of the overall data analysis and found the concept useful but incomplete in its definition of users and too narrow a construct to cover the range of behaviours demonstrated in the data.

The impact of cognitive schemas and values on the actors' dynamic relationships has led to a reformulation of the model presented in figure 1. In figure 3 the central core dimension is still that of the actors' relationships. The lower level illustrates the emergent risks that are generated as a result of the implementation dynamic plus other externally generated risks, such as rapid change. The upper level illustrates the cognitive schemas of the actors in the relationship model.

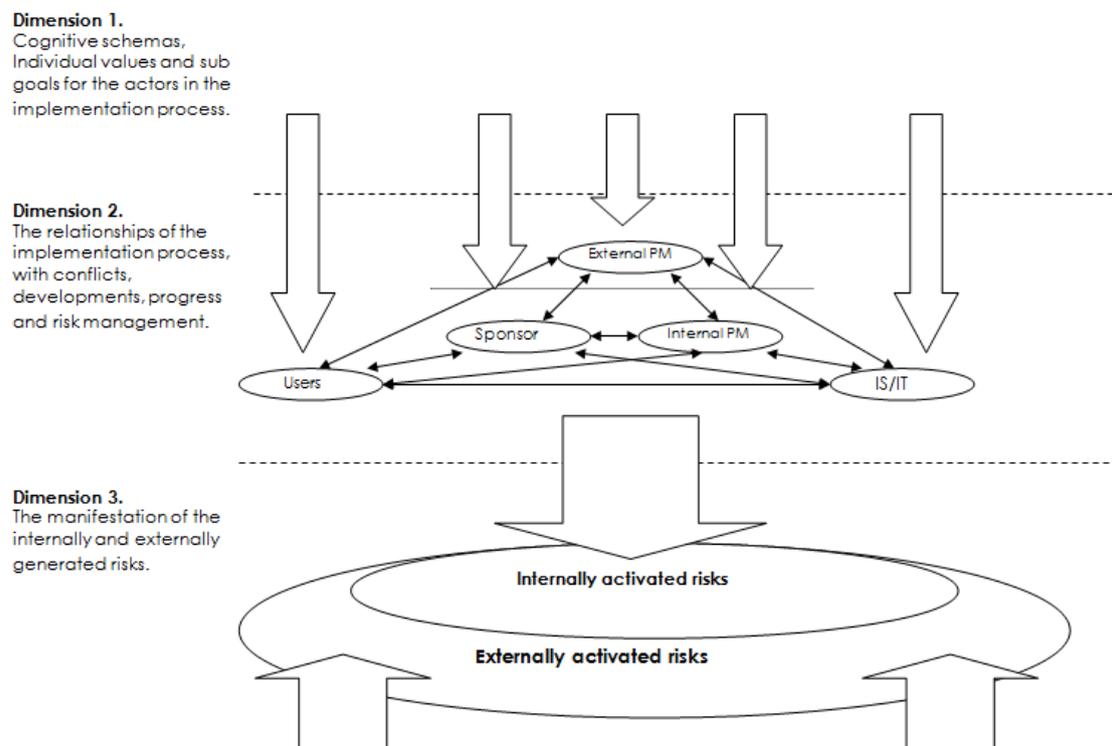


Figure 3: Model of the CRM implementation process in 3 dimensions

Future Research

The identification of the implicit contracts between the main actors is believed to make a positive contribution to CRM implementation and mitigate some of the organizational risks established in prior research. The work is seen to have practical application through the provision of insights for the development of management tools for encouraging *implicit actor-set consensus* and *flexible contracting*. Implicit actor-set consensus describes the condition of an implementation team, consisting of both internal and external actors, that is operating co-operatively towards achieving successful system implementation sufficiently to overcome hindrance. 'Implicit'

indicates that the condition has not been formalized but is implied from the behaviours exhibited. Flexible contracting refers to an absence of rigidity and stubbornness on behalf of the actors when establishing the contracts and when changing the contracts as the implementation progresses. It recognizes the implicit nature of contracts as those that have been detected as unwritten, and probably unconscious, understandings between the actors drawing on their cognitive schemas. Elements of flexible contracting are explored with this objective in mind. The results encourage the adoption of the actor-set consensus and flexible implicit contracting model as a basis for developing tools to assist in the implementation of CRM systems. The development of tools for this purpose, however, may need further research. A significant characteristic of the behaviours observed was the implicit nature of both the consensus and the contracts. The development of management tools to assist implementation that formalize a process of achieving consensus or formally negotiating contracts changes the nature of the construct from implicit to explicit. Research will be required to discover if explicit actor-set consensus and flexible explicit contracts are productive but the practitioner is presented with the opportunity to include these constructs as elements of an implementation programme. It is believed that consideration of actor-set consensus and flexible contracting offers implementation practitioners the opportunity to influence the establishment of productive implementation environments.

It is worth reflecting briefly on the use of video recording as a means of data gathering. The greatest advantage of video recording is that behaviour, verbal and nonverbal data are recorded in context. Recorded behaviour requires interpretation but the raw data remains as raw data that may be reviewed and interpreted by others. An observer may only analyse an event from one set of observations with whatever cognitive schema is in place filtering the behaviours that are observed. However, a video recording may be revisited and analysed ad infinitum by one or many people. The volume of data provided by video recordings is large and multi-level. This means that video can take advantage of seeing and understanding the process of change.

References

- Baron, R. A. and D. Byrne (2000). *Social Psychology*, Needham Heights, Massachusetts, Allyn & Bacon
- Cavaye, A. and J. Christiansen (1996). Understanding IS implementation by estimating the power of sub units. *European Journal of Information Systems* Vol. 5, No.4, pp222-232
- Chen, W. and R. Hirschheim (2004). A paradigmatic and methodological examination of information systems research from 1991 to 2001. *Information Systems Journal* 14: 197-235
- Coltman, T. (2007), Why build a customer relationship management capability? *Journal of Strategic Information Systems*, 16(3): 301–320.
- Conway, M. and M. Ross (1984). Getting what you want by revising what you had, *Journal of Personality and Social Psychology* 47: 738-748

British Academy of Management Conference (BAM2015), Portsmouth, 8-10 Sept 15

Corner, I. and M. Hinton, (2002). Customer relationship management systems: implementation risks and relationship dynamics. *Qualitative Marketing Research: An International Journal* Vol. 5, No.4, pp239-251

Delone, W. and E. McLean, (1992). Information systems success: the quest for the independent variable. *Information Systems Research* Vol. 3, No. 1, pp60-95

Fiske, S. T. (1993). Social cognition and social perception. In L. W. Porter and M. R. Rosenweig (eds) *Annual Review of Psychology*. Vol.4, Palo Alto, CA: Annual Reviews Inc.

Garrido-Moreno, A., & Padilla-Meléndez, A. (2011), Analyzing the impact of knowledge management on CRM success: The mediating effects of organizational factors, *International Journal of Information Management* 31: 437– 444.

Hartwick, J. and H. Barki, (1994). Explaining the role of user participation in information system use, *Management Science* Vol. 40 No. 4, pp440-465

Hewson, W. and G. McAlpine, (1999). *The CRM Systems Handbook*. Reepham, Hewson Consulting Group

Ives, B., M Olson, and J Baroudi (1983). "The measurement of user information satisfaction." *Communications of the ACM* Vol. 26, no10, pp785-793

Karakostas, B., et al. (2005) The state of CRM adoption by the financial services in the UK: An empirical investigation, *Information & Management*, 42, 853–863.

Meadows, M., & Dibb, S. (2012). Progress in customer relationship management adoption: a cross-sector study. *Journal of Strategic Marketing*, 20(4), 323–344

Nah, F. F.-H., X. Tan, and S Teh (2004). "An Empirical Investigation on End-Users' Acceptance of Enterprise Systems." *Information Resources Management Journal* 17(3): 32-53

Orlikowski, W. J. and J. J. Baroudi (1991). "Studying Information Technology in Organizations: Research Approaches and Assumptions." *Information Systems Research* 2(1): 1-28

Swanson, E. (1988). *Information System Implementation: Bridging the Gap Between Design and Utilization*. Homewood IL, Irwin.

Thong, J. and C. Yap (1996). "Information systems effectiveness: a user satisfaction approach." *Information Processing and Management* Vol. 32 No.5, pp 610-611

Wyer, R. S. and T. K. Srull (1994). *Handbook of Social Cognition*. Hillsdale NJ, Erlbaum