

Spring 3-23-2010

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## Recommended Citation

Sanad, Ahmed; Fidler, Christine; and McBride, Neil, "CRITICAL SUCCESS FACTORS FOR CUSTOMER RELATIONSHIP MANAGEMENT IMPLEMENTATIONS" (2010). *UK Academy for Information Systems Conference Proceedings 2010*. 44.  
<http://aisel.aisnet.org/ukais2010/44>

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# CRITICAL SUCCESS FACTORS FOR CUSTOMER RELATIONSHIP MANAGEMENT IMPLEMENTATIONS

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## **Abstract**

*The growing forces of increasing global competition, continuing customer demands, and the significant revolution in Commercial Off The Shelf (COTS) solutions, especially Customer Relationship Management (CRM) applications, have together put pressure upon many organisations to implement CRM solutions and to switch their organisational processes from being product-centric to being customer-centric. A CRM initiative is not only technology; it is a business strategy supported by technology which automates and enhances the processes associated with managing customer relationships. By the end of 2010, it is predicted that companies will be spending almost \$11 billion yearly on CRM solutions. However, studies have found that 70% of CRM projects have failed. Understanding the factors that enable success of CRM is vital. There is very few existing specific research into Critical Success Factors (CSFs) of CRM implementations, and there is no comprehensive view that captures all the aspects for successful CRM implementation and their inter-relationships. Therefore, the aim of this paper is to explore the current literature base of CSFs for CRM implementations and proposes a taxonomy for them. Future research work will continue to investigate in depth these factors by exploring the complex system links between CSFs using systems thinking techniques such as causal maps to investigate the complex, systemic networks of CSFs in organisations which result in emergent effects which themselves influence the failure or success of a CRM.*

**Keywords:** CRM, Critical success factors, Successful CRM implementations

## Introduction

A successful CRM implementation helps organisations to obtain competitive advantages over others by improving customer satisfaction and loyalty, increasing revenue, and reducing operations costs (Nguyen et al., 2007). Gartner (2003, p. 3) defines CRM as “a business strategy, the outcomes of which optimise profitability, revenue and customer satisfaction by organising around customer segments, fostering customer-satisfying behaviours and implementing customer-centric processes. CRM technologies should enable greater customer insight, increased customer access, more effective customer interactions, and integration throughout all customer channels and back-office business functions”. From this definition and as confirmed by Seeman and O' Hara (2006), Chen and Popovich (2003), and Zablah *et al.* (2004), it can be seen that a CRM initiative is not only technology; it is a business strategy supported by technology which automates and enhances the processes associated with managing customer relationships. According to Foss (2008) worldwide revenues for CRM vendors reached \$ 8.4 billion in 2006 and is expected to grow to \$ 10.9 billion by the end of 2010, signifying the growth in demand for CRM solutions. Yet, studies have found that 70% of existing CRM projects have failed (Corner and Hinton, 2002; Adebajo, 2003; Chen and Popovich, 2003; Bull, 2003; Zablah *et al.*, 2004; Chan, 2005; Missi *et al.*, 2005; Al-Ajlan and Zairi , 2005; Heinrich, 2005; Gartner, 2006; Osarenkhoe and Bennani, 2007; Gefen and Ridings, 2007; Shum *et al.*, 2008), and a high number of CRM projects are expected to continue to fail in the marketplace (Gartner, 2006). Existing research indicates that there are many strategic and tactical Critical Success Factors (CSFs) for CRM implementation (Al-Ajlan and Zairi, 2005; Gartner, 2006; Bose, 2002; Forrester, 2007; Nguyen *et al.*, Foss *et al.*, 2008). Several researchers have discussed best practice for implementing CRM solutions, or have studied key components for successful CRM implementation. (Gartner, 2006; Bose, 2002; Forrester, 2007; Nguyen *et al.*, Foss *et al.*, 2008). Alternatively, other researchers have investigated CRM implementation risks (Corner and Hinton, 2002). However, there is very few existing specific research into Critical Success Factors (CSFs) of CRM implementations, and there is no comprehensive view that captures all the aspects for successful CRM implementation and their inter-relationships. Therefore, the aim of this paper is to represent the previous studies of CSFs in CRM implementations worldwide, identify any gaps that might exist and then propose a taxonomy of CSFs in CRM implementation.

## 2. Critical Success Factors history and definition

In the early 1960s, the idea of CSFs was discussed and applied by Daniel, although little attention was paid to the concept until a decade later, when the idea was developed by Rockart (1979) in identifying the critical information needs of top executives.

Definitions of CSFs have remained consistent, since Rockart (1979, p. 85) defined them as “the limited number of areas in which results, if they are satisfactory, will ensure successful competitive performance for the organisation”. CSFs are the limited key aspects which are very critical, and people need to give full attention in order to achieve success in their area (Ngai *et al.*, 2008). CSFs are intended performance consequences. The activities in which success must be apparent are likely to be distinctive to the situation, the culture and the activity

There are many ways to harvest CSFs; these include benchmark analysis, senior expert people, external consultants, best practice analysis, data of competitors, internal data of companies and marketing strategy (Tsao *et al.*, 2004). In all these cases, CSFs are drawn out of the opinion and mental models of stakeholders in the practice. Their derivation from interviews, expert analysis, focus groups, or hermeneutic analysis of documents is essentially an interpretive exercise, resulting in a social construct. Hence CSFs are *interpretive*. There will be differences across an organisation and between managers. Their focus will be on the personal constructs of managers and their worldviews. Additionally, CSFs are *dynamic*. They will change as people’s view change and the environment changes, and they are influenced by context. Hence any analysis of CSFs must allow for changes in relevance and importance. But most importantly to this study, CSFs are *interlinked*. They represent factors at nodes in a network of influences which need to be examined together in order to determine a best practices, identify research issues and reflect on strategy.

CSFs are hierarchical and can be identified at various levels in an organisation or a project. In a project, CSFs may apply to the overall strategy and the external influences at a higher level, as well as to individual and group activities in the detail of project implementation. The hierarchical structure of CSFs leaves them open to analysis using hierarchy theory and to the discussion of the meanings derived at higher levels and the detailed information attached to lower level CSFs.

CSFs may indicate a causal mechanism. This may involve a direct cause where a CSF results in a particular outcome, and indirect cause where a CSF is part of a chain of causality. Additionally, CSFs may be necessary initial conditions which while not directly involved in a causal link are necessary foundations for causality to be expressed. Williams and Ramprasad's (1996) taxonomy is itself driven by these characteristics. They suggest six divisions in the classification of CSFs:

- Standing - present over a long time
- Instigating - triggers off successful activity, localised in time.
- Direct - related to success
- Indirect- catalyses, moderates or mediates
- Enhancing - increase probability of success
- Inhibiting - decrease probability of success

However, such generalised taxonomies need to be complemented by domain-specific classifications.

In addition, an individual factor can be recognized as critical owing to its frequent connection to a successful outcome (Kim and Pan, 2006). Organisations should devote substantial attention to their CSFs, in order to aid success in their area (Cooper and Kleinschmidt, 1995; Ngai *et al.*, 2008). In terms of CRM implementation, CSFs can be viewed as those activities and practices that should be addressed in order to ensure successful implementation.

CSFs are well understood and liked by managers. Through questions, interviews and self-reflection, managers can derive CSFs. In workshops, the simple question, 'What keeps you awake a night about CRM implementation?', will elicit a range of ideas. It is this ease of understanding that make CSFs a good vehicle for communicating with managers and for understanding an implementation environment. CSFs are also well used in the trade literature which may indicate the top ten factors for implementation, or steps towards a successful CRM implementation, or what your manager should know about implementation. Underlying these are CSFs presented in a popularised form.

However, CSFs operate within the context of goals and performance. CSFs can only be derived as activities that must be undertaken well in the context of that goal. A lack of clarity concerning the goal will result in divergent CSFs. Hence any study of CSFs must interpret the goals of the CRM implementation. Indeed it may be in conflicts in goals and intentions for the CRM that the variation in CSFs and the consequent failure of the system emerges.

The fact that CSFs are generated by individuals at different levels, who subscribe to their own goals may add additional complexity. The goals of senior management for CRM implementation may differ wildly from those of junior implementers, even giving rise to clashes and conflicts.

Another point to note is that CSFs tend to suggest Key Performance Indicators. The outcome of the identification of a CSF will be some measureables which will enable success to be defined and achieved. Therefore any study of CSFs in CRM implementation will have to encompass the identification of performance indicators and the links between performance indicators.

The study of CSFs in CRM implementation must start with a review of existing CRMs in the research literature. That is the focus of this paper. A coarse mechanism is used to identify criticality in order to work towards an initial classification of CSFs in a taxonomy. That taxonomy is essentially hierarchical in nature, addressing CRM strategy, tactics and operations.

### **3. Previous Studies of CRM Implementation**

This section discusses the CSFs that have been identified to affect CRM project implementation based on a comprehensive analysis of CRM literature review. As a result of an in-depth review of the academic and practitioner literature regarding CRM implementation, only 13 relevant studies have been found out of 459 CRM published articles as shown in Table 1.1. Three of them are studies that were undertaken by practitioners (Siebel, 2001; Forrester, 2005; Gartner, 2006) whereas the remaining ten were performed by academics. However, some CSFs have been extracted indirectly from many of the 459 articles that have been written on the CRM topic. It emerged from this review that there is little existing research specifically on CSFs of CRM implementations, and that there is no comprehensive view that captures all the aspects for successful CRM implementation and their inter-relationships. The above-mentioned thirteen specific CSF studies will now be reviewed in more detail.

Siebel (2001) conducted a survey of 2500 companies worldwide, which have implemented their product (Siebel), to assess the CSFs in adopting CRM Systems. They specified ten

factors as critical: establish measurable business goals; align business and IT operations; get executive support up front; let business goals drive functionality; minimize customization by leveraging out-of-the-box functionality; use trained, experienced consultants; actively involve end users in solution design; invest in training to empower end users; use a phased rollout schedule; and measure, monitor, and track.

In another study performed by Chen and Popovich (2003), and based on secondary data, the authors depict a CRM implementation model that aligns people, process and technology together as the main CSFs for CRM implementations. In addition, they identify top management commitment, organisational culture, and integration with backend systems, such as ERP, as CSFs for CRM implementations.

Ocker and Mudambi (2003) proposed a model with three classes of influences (intellectual, technological, social), with different factors in each. Intellectual influences comprises three main factors: strategy, structure and planning; technological influences consists of culture, stakeholder interactions and domain knowledge; social influences include CRM application, IT capability and knowledge management.

Alt and Puschmann (2004) performed a qualitative study of six case studies. The cases were short listed based on the results of a quantitative questionnaire sent to 55 organisations. Three CSFs for CRM implementation emerged from the data collected; these were stepwise implementation; change management and top management support.

Al-Ajlan and Zairi (2005) conducted a study of CSFs for CRM implementation and proposed a framework based on secondary data and research studies. They determined three main categories of influences (dominant, strategic and technical), with different factors in each. Dominant influences have big impact on CRM implementation. This category comprised five main factors: developing a customer-centric strategy, executive sponsorship, organisational change, business justification, and project planning and management. Strategic influences consisted of: project vision, segmentation and targeting, holistic approach, business process, resources and budget, understanding customer needs and resistance to change; whereas technical influences included software selection, client consultation, data and integration.

Forrester (2005) conducted in-depth personal interviews by telephone with executives at 22 leading organisations. Respondent executives were the senior people responsible for CRM initiatives in their respective organisations and who had close knowledge of the successes, challenges, and deployment approaches of these programmes. They identified five main groups of influences (strategy and governance, objectives and processes, customer data management, user adoption and technology) with different factors in each. Strategy influences consisted of strong sponsorship, business-led CRM, governance structure. Objective and process influences comprised: define objectives and processes, and follow a realistic pace for rollout. User adoption influences consisted of: striving for high user involvement and placing high priority on software usability. Technology influences included: simplifying the CRM platform and managing the vendor relationship actively.

Gartner (2006) identified eight factors for the success of a CRM project. These factors are:

1. Confirm that the organisation is ready for CRM;
2. Align CRM objectives with corporate objectives;
3. Calibrate the goals and metrics, establish benchmarks, and measure baselines;
4. Prepare stakeholders early and often about the need for CRM;
5. Prioritize the CRM project portfolio;
7. Build a solid CRM business case and;
8. Select the right integrator.

A qualitative, single case study strategy was conducted by Blery and Michalakopoulos (2006), with the main aim to analyse CRM implementation. They specified the following fourteen CSFs:

1. Vision or strategic direction for the project;
2. Business process change;
3. The integration of CRM systems;
4. The selection of a suitable CRM package;
5. Customer information quality;
6. Organisation culture;
7. Project management;
8. Project time line;
9. Budget control;
10. Good collaboration with the consultants and between the project team;

11. Access to best business practices;
12. Vendors experts and;
13. The capabilities of the consultant.

Kim and Pan (2006) applied a qualitative, case study strategy to examine the implementation process of CRM systems. They classified the CSFs into four main categories: organisational commitment (e.g. management support and user participation), business process change, technology and project management (e.g. requirements management and project team skills).

Shum *et al.* (2008) looked at CRM from an employee's perspective by using a qualitative, case study strategy. They indicate that there are six issues in CRM implementation: the role of employee commitment, organisational culture, technology, training, leadership and communication.

Action research was conducted by Mendoza *et al.* (2007). They classified emergent CSFs into three main categories: processes (e.g. customer information management and inter-departmental integration), people (e.g. senior management commitment and creation of a multidisciplinary team) and technology (e.g. information systems integration and support for operational management).

King and Burgess (2008) investigated the CSFs of CRM implementation through the use of a secondary data. They proposed the following nine CSFs of CRM implementation:

1. Communication of CRM strategy;
2. Knowledge management capabilities;
3. Willingness to share data;
4. Willingness to change processes;
5. Technological readiness;
6. Top management support;
7. Culture change capability;
8. Process change capability and;
9. Systems integration capability

Various CSFs for successful CRM implementation were identified by Foss *et al.* (2008) by using a qualitative questionnaire. Three CSFs for CRM implementation emerged from the

data collected; these were phased approach, business process change to fit the solution, and time frame.

#### **4. Analysis Literature of the Previous Studies**

The success factors proposed in the existing literature are fragmented and diverse, depending on the researchers' background and interests. In addition, little attempt has been made by CRM researchers to identify a comprehensive picture of all the CSFs of CRM implementation; rather, they have often concentrated on only a specific aspect of the implementation or on a specific type of CSF. None of the researchers include the customer side as part of the research of CSFs for CRM implementation. Therefore, there is no research that provides a comprehensive, holistic view of the CSFs. The analysis of the 13 articles reveals that 30 different CSFs are significant for CRM implementation. Table 1.2 reveals the level of criticality of CSFs in CRM implementation. The ranking of these factors is extracted from the analysis of these articles and based on the number of times the authors mention the factors as shown in Table 1.1. It is clear from the ranking in Table 1.2 that top management commitment and support is the most cited CSF, followed by organisational culture. In contrast, 11 of the CSFs, including budget control, access to best business practices and vendors experts, come at the end of the ranking with same level of criticality.

		Research Studies
		CSFs
Siebel (2001)		1.CRM strategy and vision
Chen and Popovich (2003)		2.Developing customer-centric strategy
Ocker and Mudambi (2003)	√	3.Top management commitment and support
Alt and Puschmann (2004)		4.Building a business case
Al-Ailan and Zairi (2005)	√	5.Providing necessary resources and budget
Forrester (2005)	√	6.Organisational culture change
Gartner (2006)		7.Systems integrator selection and managing
Bley and Michalakopoulos (2006)	√	8.Solution/vendor selection
Kim and Pan (2006)	√	9.Project time line
Shum et al. (2008)	√	10. Data cleansing and completed
Mendoza et al. (2007)	√	11. Project management
King and Burgess (2008)	√	12. External consultants
Foss et al. (2008)	√	13. Vendors experts
		14. Phased approach versus 'Big Bang'
		15. Business process requirements
		16. Project business-driven
		17. Setup measurable goals and metrics
		18. Change management
		19. User awareness and training
		20. Understands customer requirements
		21. Understand customer profiles
		22. Collaboration among employees and across project stakeholders
		23. Early end user involvement in the project
		24. Align business and IT operations
		25. Integration with backend systems such as ERP
		26. Segmentation and targeting
		27. Align CRM objectives with corporate objectives
		28. Align stakeholders early and often about the need for CRM
		29. Budget control
		30. Access to best business practices

**Table 1.1 Summary of CSFs of CRM implementation in the literature review**

<b>%</b>	<b>CSFs</b>	<b>No</b>
0.69	Top management commitment and support	1.
0.46	Organisational culture change	2.
0.38	Change management	3.
0.38	User awareness and training	4.
0.38	Collaboration among employees and across project stakeholders	5.
0.31	CRM strategy and vision	6.
0.23	Systems integrator selection and managing	7.
0.23	Project time line	8.
0.23	Phased approach versus 'Big Bang'	9.
0.23	Setup measurable goals and metrics	10.
0.23	Early end user involvement in the project	11.
0.23	Integration with backend systems such as ERP	12.
0.15	Building a business case	13.
0.15	Solution/vendor selection	14.
0.15	Project management	15.
0.15	External consultants	16.
0.15	Business process requirements	17.
0.15	Understand customer profiles	18.
0.15	Align business and IT operations	19.
0.08	Developing customer-centric strategy	20.
0.08	Providing necessary resources and budget	21.
0.08	Data cleansing and completed	22.
0.08	Vendors experts	23.
0.08	Project business-driven	24.
0.08	Understands customer requirements	25.
0.08	Segmentation and targeting	26.
0.08	Align CRM objectives with corporate objectives	27.
0.08	Align stakeholders early and often about the need for CRM	28.
0.08	Budget control	29.
0.08	Access to best business practices	30.

**Table 1.2 Level of criticality for all CSFs in CRM implementation**

## **5. Proposed Taxonomy of CSFs in CRM Implementation**

The following analyses the CRM implementation process by reviewing the relevant literature on critical factors that are said to contribute to the success of CRM efforts. The factors listed in Table 1.3 are extracted from the aforementioned thirteen articles and the empirical research on CRM implementation worldwide. They have each been classified into one of three subgroups which represent the three principal dimensions of CRM implementation, as discusses in the introduction of this paper.

Description	Factors	Dimensions
<p>Clear strategy and simple vision for building customer-centric environment will help for smooth CRM implementation. In addition, top management commitment ensures that CRM efforts will be implemented in the most effective manner. Continuous top management support and commitment together with provision of necessary resources and budget positively influence the CRM project implementation. Furthermore, building a business case will help to allocate the right budget and resources.</p> <p>Culture plays a major role in successful CRM implementation for both employees and customers.</p>	<ol style="list-style-type: none"> <li>1. CRM strategy and vision</li> <li>2. Developing customer-centric strategy</li> <li>3. Top management commitment</li> <li>4. Building a business case</li> <li>5. Providing necessary resources and budget</li> <li>6. Organisational culture change</li> </ol>	Strategic CRM factors
<p>Selecting the right solution and integrator will help to overcome the implementation challenges and minimize the needs for product customisations. Moreover, meeting the time line for integration with other applications is very critical issue. Data cleansing is crucial because garbage-in means garbage-out. In addition, in order to get full benefits out of CRM such as Customer targeting and segmentation, business needs to have clean data. Project management skills and experience will help to meet project time line. Moreover, having expertise from vendor and external consultants to audit and monitor the progress of the project is critical for successful implementation. Implementing the project in phases will minimize the risk and give more time for user acceptance and awareness. Furthermore, it will help to get buy-in from the business in early time of the project.</p>	<ol style="list-style-type: none"> <li>1. Systems integration selection</li> <li>2. Solution/integrator selection</li> <li>3. Project time line</li> <li>4. Data cleansing and completed</li> <li>5. Project management</li> <li>6. External consultants</li> <li>7. Vendors experts</li> <li>8. Phased approach versus 'Big Bang'</li> <li>9. Minimize customization by leveraging out-of-the-box functionality</li> <li>10. early end user involvement</li> </ol>	Tactical success factors
<p>There should be a specified CRM process to acquire, retain and satisfy the organisations' customers and help the organisation to be more customer-centric. Having the project driven by business is essential to align their vision with project vision and get early buy-in from their employee. Moreover, the setup of measurable metrics and goals is important to measure the success at the end. Process change and some time change among the people by removing or adding new role and responsibilities to fit the solution are important. User awareness and training is one of CSFs that help to have smooth deployment and reduce the resistance. Understanding customer requirements will maximize the benefit from a CRM solution. Furthermore, CRM champions and leaders is one of the important factors to overcome internal obstacles and politics and lead the required changes. Finally, Collaboration among employees and across project stakeholders is essential for successful CRM implementation.</p>	<ol style="list-style-type: none"> <li>1. Business process</li> <li>2. Project business-driven</li> <li>3. Project vision should be aligned with business vision</li> <li>4. Setup measurable goals and metrics</li> <li>5. Process and people change</li> <li>6. User awareness and training</li> <li>7. Understands customer requirements</li> <li>8. Understand customer profiles</li> <li>9. CRM champions and leaders</li> <li>10. Collaboration among employees and across project stakeholders</li> </ol>	Process and people factors

**Table 1.3 Taxonomy of CSFs in CRM Implementation**

## **6. Conclusion**

In this study we have identified CSFs from the existing literature sources, grouped them and established some order of importance which chimes with literature and practice. However, a characteristic of these CSFs, drawn from of wide literature, is that most of them are obvious and well-known; and many are applicable to any information system or process implementation. We expect that future interviews with CRM implementation managers and staff would show a knowledge of most the CSFs described here.

While knowledge does not guarantee practice, the presentation of CSFs to implementers is unlikely to produce improved success for CRM implementation. If, as we suspect, most CSFs are known and yet failures of CRM implementation are common, if not in the majority, the cause of failure must lie elsewhere than the recognition and adherence to CSFs.

We would suggest two areas for investigation. Firstly, interpretations of what is meant by a CSF will differ from CRM implementation participant to participant. Managers may prioritise different CSFs, measure them differently and monitor them differently.

Secondly the effect of CSFs does not arise from their individual and isolated application; rather they work in large networks of cause and effect. These complex networks of CSFs will involve actors inside and outside the organisation; they will involve interactions at different levels; they will involve many different parts of the organisation. And they will operate in a dynamic manner in which both CSFs and their interactions evolve over time. Hence the failures of CRM implementation and the effects of CSFs are systemic and must be investigated in a system-based manner. We would suggest exploring the complex links between CSFs using systems thinking techniques such as causal maps, to investigate the complex, systemic networks of CSFs in organisations which result in emergent effects which themselves influence the failure or success of a CRM. Negative feedback loops of causation amongst CSFs may be acting to damage positive advantages of identifying and acting on CSFs.

Equally, positive feedback loops may be amplifying deleterious effects and leading to failure.

It is in this investigation of system effects that we suggest the direction to improving CRM implementation will lie.

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