



# Analysis of Factors Affecting Implementation of Customer Relationship Management Systems

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## ABSTRACT

*Customer Relationship Management (CRM) has become a popular topic as organizations have attempted to redesign their business processes and systems to establish better relationships with their customers. However, a large number of these initiatives have failed to achieve the goals laid out at the beginning of the CRM projects. Why the majority of CRM projects fail to deliver expected results? What are the underlying factors contributing to success of CRM implementation?*

*This paper presents the framework for a research study to explore factors affecting CRM implementation success. This is a two-phase study that aims to: 1) identify a host of success factors as discussed in the literature, and 2) compare and test them against those experienced during an actual CRM implementation attempt in a major organization. The research framework enumerating success factors is presented in this paper.*

## INTRODUCTION

Customer Relationship Management (CRM) has become a popular initiative in both IT and general business circles, as hundreds of organizations have attempted to redesign their business processes and systems in an attempt to form better relationships with their customers. AMR Research predicts that the CRM market will continually grow to more than \$16.8 billion in revenue by 2003, and \$20 billion by 2004 – making it as large as the ERP market (Warner, 2000). The CRM segment is expected to grow at a compound annual growth rate of 29% through 2004 (Mills, 2001). In addition, the demand for CRM solutions among mid-market companies will result in an economic boost for implementation services in the second half of 2001, continuing through the year 2004. This uplift will be driven by a stronger focus on CRM business processes and front-to-back office integration (Mills, 2001).

CRM involves strategies, methods and technologies that are used to manage and enhance the relationship between an organization and its customers. CRM allows companies to utilize enormous amounts of information about their customers such as purchasing, payment and demographic data in order to derive and develop more profitable marketing strategies. Availability of this information plays a crucial role in creating a more customer friendly atmosphere, and in increasing customer loyalty as well as saving on the costs associated with acquiring new customers. Companies can, therefore, use CRM to target their marketing campaigns more efficiently, and to identify profitable customers versus those that are not profitable. Other stated benefits include increased efficiency through automation, faster response to customer inquiries, better understanding of customer needs, increased marketing opportunities, and identifying the most profitable customers. Furthermore, CRM facilitates obtaining accurate customer feedback that leads to new and improved products or services, and obtaining information that can be shared with business partners.

Many companies have altered their thinking to now view their customers as their most valuable asset. And the growing consulting services field in CRM boasts major players like Siebel Systems, Nortel Networks, PeopleSoft, Oracle, Accenture, Deloitte Consulting, KPMG Consulting, and Pricewaterhouse Coopers, among others. Successful implementation projects of CRM have resulted in revenue increase of up to 42%, reduction of marketing costs of as much as 35%; improvement in sell cycle length of 25%; and boosting customer satisfaction ratings of as much as 20% (Hewson Consulting Group, 2000). However, not all CRM implementation efforts have resulted in considerable success. In fact, a great number of projects have failed to deliver the intended results; the failure rate for CRM projects still hovers around 70% (Gerson, 2001; Patton, 2001).

CRM implementation entails a massive adjustment in the organization's market and customer orientation, and requires a realignment of corporate and IT strategies (Forsyth, 2001). A large number of these initiatives fail to achieve the lofty goals laid out at the beginning of the CRM projects (Gerson, 2001). This has led to a growing disillusionment with CRM and its potential. Rather than blame the technology for failing to live up to its promise, it is more often the case that the causes of failure can be traced back to the steps taken to plan, organize, and implement the project. *What then is causing 70% of CRM projects to fail? Are there proven steps that can be taken to improve the odds that the CRM project would succeed?* Despite their best intentions, the problem for most companies revolves around proper alignment of the business strategy, change management, and IT infrastructure (Pearlson, 2001). The following section presents a brief analysis of these areas in order to develop a research framework based on review of literature.

## REVIEW OF CRM IMPLEMENTATION LITERATURE

The prescriptive literature illustrates a host of factors that may be responsible for CRM implementation success; yet it is not known if all of the factors are equally critical. Frequently mentioned factors within the CRM community basically fall into 4 groups: strategic planning, change management, technology, and project management.

Strategic planning factors are business-focused, in that these factors have little to do with actually selecting and using implementation tools. Instead, this area mainly focuses on understanding of the business strategy and the organization's customer base. Change management factors are also business-focused, but are instead more relevant to the corporate culture. How will the shift from a product-focused culture to a customer-focused one affect the employees of the company? What measures will the organization take to ease the change? Technology factors deal strictly with the selection and use of CRM implementation tools. How was the selection done, and what was the result? Finally, project management factors will deal with the execution of the initiative. These factors deal with the make-up and direction of the team given the responsibility of bringing the initiative to life in the organization.

### Strategic Planning

Strategic planning concerns the initial phases of a CRM implementation, when the idea is first being investigated by an organization, and decisions about an appropriate CRM strategy are made. Several critical factors are involved in this stage of the initiative, as it is during

this phase that an organization begins to understand who their customers really are and how they can be best serviced.

Many business-strategic and customer related decisions are made at this stage that require specific actions in subsequent phases. Successful implementation of this stage requires a clear vision of the customer base and of customer requirements (Matviya and McCarren, 2001). Management must have a clear understanding of where the organization and its customer base will be in 5-10 years (Payne, 2000), and must understand the nature of business critical data (Moncla, 2001). Also, any organization engaging in CRM implementation must develop a precise measurement instrument of its business critical data such as the extent of customer loyalty and productivity gains (Overly, 2001).

Based on this understanding the business can establish a comprehensive list of CRM benefits to the organization, and how CRM-related technology could be used to achieve the business objectives (Payne, 2000). Only after they have addressed these issues, should the business begin defining how the CRM initiative must be implemented using a project methodology. Two factors involved in defining the initiative are: 1) clear definition of the CRM project initiative using best practices (Applied Technologies Group, 1998), and 2) determination of the IT option should come only after definition of the project initiative (Curry, 2001). Once the organization is able to understand its customer base it can begin rewarding and recognizing valuable customers, which will result in increased customer loyalty and significant cost savings. "If the organization can deliver a 360-degree view of the customer relationship throughout all customer touch points, the initiative can then begin to create a plan for CRM strategies" (Matviya and McCarren, 2001, p.64).

Along with understanding the current customer base, the business must have a vision of where the customer base, and thus the business, will be in the future. An organization should first examine its core business and consider how it will evolve in the future. It then needs to consider the form of CRM that is appropriate for their business now and in the future and what organizational resources does it have to support the business (Payne, 2000). Any CRM initiative that does not account for future development will at best only serve very short-term goals, which is the antithesis of the strategy to develop long-term relationships. Also, a clear definition of business critical data can significantly contribute to the success of CRM projects (Moncla, 2001; Nash, 2001). It is equally critical to identify precise measures for data evaluation, in order to gauge the level of success derived from the CRM implementation (Overly, 2001).

Comprehending the benefits that CRM can bring to the organization is realized through the information revealed in the analysis stage. *How should customers already deemed profitable be approached versus customers who are marginal? How should the company handle customers who incur a larger portion of the organizations fixed costs (e.g. customer service personnel and correspondence)? What contact strategies should be implemented? And how should analysis be organized to ensure a continued focus on customer performance and product performance?* In this connection, identifying opportunities for increased profitability through enhanced customer acquisition, improved customer retention and targeted cross-selling are focal points in strategic planning for CRM implementation. Appropriate customer management strategy must be determined first before developing the appropriate information technology platform (Payne, 2000).

### Change Management

Change management is the process of controlling and fostering the changes that the organization will be required to undergo as it moves from a product-focused culture to a customer-focused one. How the company accepts change, and how the project deals with it could potentially undermine any other efforts in a CRM initiative. Since change is so difficult to handle and accept in most organizational cultures, it is necessary for the initiative to assess the extent to which the involved individuals at different management levels accept change

well (Brendler, 2001). It is equally important to assess the level of political culture at the organization. One factor determining success in an initiative is the extent of political power play in decision-making process. Political disputes must be minimized during implementation in order to avoid needless changes and the risk of not having the necessary functionality.

Furthermore, a strong executive leadership is a requisite condition for control of these change factors, and for the CRM initiative to be prioritized within the company. Making leadership a priority in the initiative and prioritizing it throughout the company can have profound impact on the success of the project. To achieve this it is crucial for the top management to get involved in the CRM project right from its inception (Book, 2000). It is also crucial to utilize a proper change management methodology that is suitable for the company in planning and implementing the CRM project (Brendler, 2001). Similarly, a suitable training plan must be established from the outset (Book, 2000; Thompson, 2000). A proper restructuring of employee compensation (i.e., linking incentives and compensation adjustments to customer indicators such as retention and satisfaction) in order to reinforce CRM priorities is an essential part of change management (Thompson, 2000). Another positive approach is to treat the employees as customers as well, in effect factoring in employees as part of the CRM implementation. For example, in the Sears and Roebuck CRM project the employees were included as one of the stakeholders. This has resulted in a link between employee satisfaction and customer satisfaction at the retailer company (Payne, 2000).

### Technology

If all the correct strategic and management decisions are made, the initiative can still fail due to incorrect tools and architecture. In order for an appropriate technical architecture to be in place, a sufficient data warehouse solution must be in place. The data warehouse solution must link all major functional units and provide consistent data.

In order to ensure a fit between technology and requirements, a thorough vendor interview, sound tool selection process, and complete analysis of IT are essential steps in CRM implementation. Furthermore, "any IT solution must be compatible with the size (i.e., in terms of operational volume) of the company" (Chang, 2001, p. 22). The system-related factors such as ease of use, response time, as well as consistency with the business strategy are also imperative to the success of CRM implementation (Dubois, 2001). Also, "the selection process should maximize availability, scalability, manageability and security of the system" (Matviya and McCarren, 2001, p. 64).

A thorough analysis of data warehouse must be done to ensure that the system fulfills business expectations in the areas of "performance indicators, measurements, actions being taken or process being implemented, and anticipated impact on exiting process" (Moncla, 2001, p.61). To assure quality of data warehouse, selection of proper IT architecture and software for integrating data from multiple platforms is also critical to success of CRM implementation (Nash, 2001). The use of proper e-business analytic solutions that include OLAP tools so that the organization can develop a "360 degree enterprise-wide view of your operations" is another critical factor (Tucker, 2001, p.44). A single clean source of customer information is essential to the success of a CRM initiative as is a software solution that can both prepare information as well as match and link records. The software should provide quick response and seamless connectivity across the enterprise. Similarly, the use of component-based technology in a transactional environment that provides flexibility, performance, and ease of use is crucial (Dubois, 2001).

### Project Management

Several factors related to project management could affect the outcome of CRM implementation. Allocation of adequate resources for planning and implementation of the CRM project as well as selection of a proper pilot program are among critical factors (Hewson

Group, 2000). It is important to choose a pilot program that represents a global deployment of the initiative to give the project a good test. A good pilot group allows the project to “focus on the implementation as a whole, as well as on ...main areas that we believe are fundamental to our success” (Overly, 2001, p.15). Another important factor is to ensure that the project team is formed with an appropriate make-up of business experts and IT professionals (Applied Technologies Group, 1998). The project team must develop a plan that is based on a sound IT project management, yet also closely follows the steps of a marketing project methodology. Likewise, the Project Team must demonstrate a sound understanding of the necessary CRM data and process as well as a commitment to data quality. Since data is originating from many different sources, a dedication to a flow of clear and consistent data will clearly impact the success of the project (Nash, 2001).

There must be a clear vision of a customer centric business by the entire organization, and especially the project team. This is best accomplished by ensuring that the project team is made up of a balance of business users, IT professionals, executive management, as well as consultants when appropriate. A cross-functional steering committee must also be put in place. “The process of finding, growing and keeping customers is not the exclusive responsibility of the sales force.

Designing and constructing systems to support the company’s marketing, selling and service processes must involve representatives from every department that will use or support the systems” (Book, 2000, p.28).

Finally to complete the project successfully, the team must have a sound methodology on how the system will be designed. Although some methodologies may have successfully been used for ERP, distribution, or finance systems projects, their use is unproven for CRM projects, which have different risks and challenges. Choosing a proper design methodology is a challenge in CRM project management since marketing often doesn’t have well-established processes. However, a CRM project should closely resemble a marketing project rather than strictly follow an IT methodology (Payne, 2000). Table 1 presents a summary of the literature review discussed in this section.

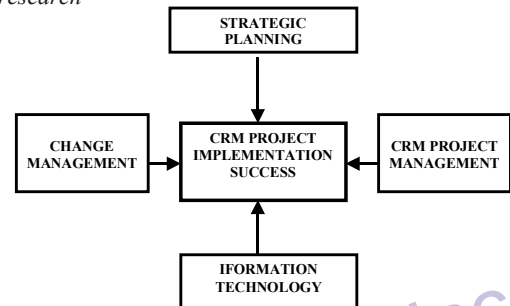
### A FRAMEWORK FOR RESEARCH

The previous section presented literature review identifying several factors that are believed to have impact on CRM implementation success. These factors are classified into four distinct categories: strategic planning, change management, technology, and project management. Figure 1 exhibits these categories as related to CRM implementation.

Table 1: Summary of literature pertaining factors affecting CRM implementation

Strategic Planning	Change Management	Technology	Project Management
It is necessary for the business to have a clear understanding of the make-up, wants and needs of its customer base (Matviya and McCarren, 2001)	Investigate if the company accepts change well (Brendler, 2001, p.13),	The organization must conduct a thorough vendor and tool interview and selection process (Chang, 2001, p.22).	Adequate funding must be allocated for project planning and implementation (Hewson Consulting Group, 2000, p.23)
The business must have a vision of where it and its customer base will be in 5-10 years (Payne, 2000)	Management must confront change (Brendler, 2001, p.13).	IT alternatives must be discussed and weighed (Chang, 2001, p.22),	An appropriate pilot program must be chosen (Overly, 2001, p.15).
The business must know & understand its most business critical data (Moncla, 2001, p.61)	Project decisions must be made with relatively little political input (Applied Technologies Group, 2000, p.23).	The CRM solution must be compatible with the size (i.e. in terms of operational volume) of the company (Chang, 2001, p.22).	The Project team has an appropriate make-up of business experts and IT professionals (Applied Technologies Group, 1998, p.22).
The business must have determined precise measures of the business critical data for gauging success (e.g. productivity gains, customer loyalty levels) (Overly, 2001, p.16).	Strong Executive leadership must be evident on the project, (Book, 2000, p.28)	The system must be easy to use, have a high level of responsiveness (Dubois, 2001, p.58)	The Project Team must demonstrate a sound understanding of the necessary CRM data and process (Nash, 2001, p.43).
The business comprehends the benefits CRM can bring to the organization (Payne, 2000)	CRM initiative must be prioritized within the company (Book, 2000, p.28).	The most appropriate tool of all reviewed must selected (Sims, 2000).	The Project Team must demonstrate a commitment to data quality. (Nash, 2001, p.43)
The business understands how CRM related technology could be used to achieve the business's ends (Payne, 2000).	Change Management methodology suitable for the company is planned and implemented (Brendler, 2001, p.13)	The selection process should maximize availability, scalability, manageability and security of the system (Matviya and McCarren, 2001, p. 64).	A suitable methodology for implementing CRM must be implemented (Applied Technology Group, 1998, p.21)
The business has defined the project initiative using best practices (Applied Technologies Group, 1998, p.20)	A suitable training program is planned for the organization (Book, 2000, p.28).		A plan that contains aspects of an IT project, yet also closely follows the steps of a Marketing Project methodology (Hewson Consulting Group, 2000, p.23).
The business has defined define the project initiative before reviewing IT options (Curry, 2001, p.19).	The company makes changes in the method of determining compensation for its employees (Thompson, 2000, Insert p. 10).		

Figure 1: A framework for CRM implementation research



To what extent each of the factors identified above is responsible for success or failure of a CRM implementation project? To test significance of these factors, they will be surveyed against the actual experience of a CRM implementation project in a large organization involved in direct marketing of published materials. A survey questionnaire is to be developed to measure the significance of each factor, tested for the validity of questions, and distributed to approximately 120 individuals involved in the project. The research results based on the analysis of data gathered will be reported and the implications in terms of CRM implementation guidelines will be discussed in a subsequent paper.

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