

## Developing a Measurement Model for Evaluating CRM Effectiveness (In service-based industries)

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**Abstract:** In today's competitive business environment, the success of firm increasingly depends on the ability to operate customer relationship management (CRM) that empowers the development and implementation of more efficient and effective customer-focused strategies. Based on this belief, many companies have planed enormous investment in CRM technology as a means to fulfill CRM effectively and efficiently. The main aim of this study was to providing a measurement model of assessing CRM effectiveness as a variable which not paid enough attention in previous researches. Therefore, by reviewing previous literature we have developed a comprehensive model which is more appropriate for service-based industries.

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### 1. Introduction

The fast movement from a product-oriented business strategy to a customer focused relationship strategy has been known as a major change agent in companies in prior literature (Barnes, 2001; Goodhue, Wixom, & Watson, 2002; Hopkins, 2000; Knox, Maklan, Payne, Peppard, & Ryals, 2003; Ryals, Knox, & Maklan, 2001; Alshawi, Missi and Irani, 2009).

Customer relationship management (CRM) processes are becoming largely applied within marketing and sales business units of major corporate (Johnson, Clark, Barczak, 2012).

In today's competitive business environment, the success of firm increasingly depends on the ability to operate customer relationship management (CRM) that empowers the development and implementation of more efficient and effective customer-focused strategies. Based on this belief, many companies have planed enormous investment in CRM technology as a means to fulfill CRM efficiently (Wu and Li, 2011).

CRM literature accentuates those companies find it more profitable to keep existing customers, by developing long-term relationships that support their needs, than absorbing/getting/finding new customers (Xu, Walton; 2005; Garrido-Moreno and Padilla-Meléndez, 2011).

The main aim of this study is to develop a comprehensive model to measure CRM effectiveness in service-based industry. To gain this goal by reviewing related literatures we propose an integrated model of measuring effectiveness of implementing CRM.

### 2. Literature review

#### 2.1. CRM

Over the past decades, CRM has known to be a vital tool in increasing a firm's profitability by enabling it to recognize the best customers and satisfy their needs, in order to make them remain loyal to the firm's products or services (Thomas and Sullivan, 2005; Nguyen and Mutum, 2012).

CRM comes from the concept of customer orientation and has gradually been used to the service industry to increase the relationship between enterprises and their customers.

CRM exposes the relationship between an enterprise and the customer, and the key is the "relationship." In other words, an enterprise can positively simulate customer behavior through effective communication and understanding. CRM can enhance an organization's capability in absorbing customers, keeping customers and increasing the value of customers. So, the main objective of CRM is to seize suitable opportunities, and through suitable channels, provide suitable products and services to the suitable customers. These measures make it possible to enhance interactive opportunities (Swift, 2001; Wu and Li, 2011).

CRM makes enhanced opportunities to use data and information to meet customers' needs and create value with them. This requires a cross-functional integration of processes, people, operations, and marketing tools which should be supported by information, technology, and applications (Payne and Frow, 2005; Dimitriadis, Stevens, 2008).

Some believe that CRM is a strategy that uses software and related technology to provide automated management and revise operational processes

associated with sales, marketing, and customer service (Bhatia, 1999; Wu and Chen, 2012). Jain et al. (2007) suggested that CRM focuses on customers and produces unique value by customizing to meet customer needs, reinforce enterprise commitment, and enhance customer satisfaction and loyalty. CRM results in an understanding of consumer behavior that is based on multiple aspects, and offer enterprises to differentiate and customize their products (Tiwana, 2001; Ozgener and Iraz, 2006; Wu and Chen, 2012).

The final aim of implementing CRM is to progress business performance, and therefore, businesses need an objective performance scale to give an ability to achieve a detailed evaluation (Wu and Lu, 2012).

In spite of the recent emerge of CRM, which stands in the nineties, since then it has become a critical tool for business management (Ngai, 2005; Garrido-Moreno and Padilla-Meléndez, 2011). Similarly, research on CRM has increased widely over the past few years (Romano & Fjermestad, 2003; Garrido-Moreno and Padilla-Meléndez, 2011). but there are still research needs in different areas: search for a definition or a generally accepted conceptual framework, analysis of its key dimensions, examine of CRM impact on business results, challenges to its successful implementation, development of valid and trustful scales to study the degree of implementation and success and intensive empirical studies on the subject (Colgate & Danaher, 2000; Parvatiyar & Sheth, 2001; Sin, Tse, & Yim, 2005; Garrido-Moreno and Padilla-Meléndez, 2011).

To fill this gap we aim to provide an integrated measurement in order to assess effectiveness of implementing CRM.

## 2.2. CRM definition

Recently, by fast growing the scope of relationship marketing and naming it in a comprehensive management and social context, Gummesson (2002b) defines it as “marketing based on relationships, networks and interaction, recognizing that marketing is embedded in the total management of the networks of the selling organization, the market and society. It is directed to long term win-win relationships with individual customers, and value is jointly created between the parties involved.”

Recently, Kotler and Armstrong (2004) define CRM as “the overall process of building and maintaining profitable customer relationships by delivering superior customer value and satisfaction.” (Sin, Tse and Yim, 2005)

In this line of thought, Boulding et al. (2005, p. 156) proposed a broad definition of CRM as the output of the continuing evolution and integration of

marketing notions and newly accessible data, technologies, and organizational forms: “Not only does CRM build relationships and use systems to gather and analyze data, but it also includes the integration of all these activities across the firm, relating these activities to both firm and customer value, develop this integration along the value chain, and developing the ability of integrating these activities across the network of firms that cooperate to create customer value, while creating shareholder value for the firm”.

These definitions determine the large spectrum of company’s functions, processes, operations that are involved in and affected by the design and the implementation of CRM (Dimitriadis, Stevens, 2008).

Most researchers use a comprehensive definition of CRM, as follows:

“CRM is a business strategy that has a goal to make and develop value-creating relationships with customers based on knowledge by Using IT as an enabler, CRM requires a redesign of the organization and its key processes to relate them to the customer, so that by customizing its products and services, the firm will enabled to optimally satisfy customer needs and by that plan and create long-term, bilateral beneficial, loyalty relationships”(Garrido-Moreno and Padilla-Meléndez, 2011).

Some consider CRM as the central business strategy that integrates internal processes and functions and external networks to generate and transfer value to targeted customers and, finally, improve profits (Buttle, 2004; Wu and Lu, 2012).

In this study, we define CRM as “a comprehensive strategy and process that gives an organization the opportunity to identify, absorb, retain, and nurture profitable customers by establishing and maintaining long-term relationships with them”( Sin, Tse and Yim, 2005).

## 2.3. CRM effectiveness

Some believe that CRM effectiveness varies depending on the relationship marketing strategy and exchange situation (Palmatier et al., 2006).

Some other state that assessing and measuring customer relationship management and linking it with business performance variables will provide a complete picture of CRME. Despite its practical relevance, only few studies have investigated and measured CRME. Few studies that have put forwarded the measures of CRM effectiveness (CRME) have been from the supplier perspective (Chen et al., 2009).

## 2.4. CRM Measurements

In response to the operational problem of CRM, in that no systematic attempt has been offered to identify the behavioral criteria upon which CRM can

be considered to perform, two main studies were done with the purpose of recognizing key behavioral components that supports successful CRM implementation. These two studies were done by Yim et al. (2004) and Sin et al. (2005), respectively. Both studies benefited from, and were subsequently built on, the idea suggested by Crosby and Johnson (2001), Fox and Stead (2001), Ryals and Knox (2001), and elaborated upon by Day (2003) as well as Kotler and Armstrong (2004), in that successful CRM implementation needs four key areas: strategy, people, technology, and processes, and that only when all these four works in assort can a superior customer-relating capability integrate (Yim et al., 2004; Sin et al., 2005).

However, a real successful CRM should integrate information technology (such as basic installation, applicable system, etc.), information resource (such as customer data base, interview record of salesman, suitable interaction with customer, and so on), as well as organizational resource (for example, customer-oriented business culture, etc.); all these can actually apply the best effectiveness (Pushkala, Michael Wittmann, & Rauseo, 2006).

One of the important measurements is CMAT assessment. CMAT™ is a proprietary assessment tool for understanding how well an organization manages its customers. It is carried out by trained assessors who are experienced CRM practitioners within QCi Assessment Ltd, a specialist CRM consultancy, or one of its partner organizations.

The model is based on the following elements:

1. Analysis and planning
2. The proposition
3. People and organization
4. Information technology
5. Process management
6. Customer management activity
7. Measuring the effect
8. The customer experience.

Payne (2005) considered four main categories of CRM metrics are especially important for assessing—customer metrics, operational (employee and process) metrics, strategic metrics and output and comparative metrics. These key metrics represent the ‘vital statistics’ of healthy CRM, signaling the strength or weakness of the underlying CRM processes.

By considering such measurements tools and by using experts' experience, we concluded that there is a gap in theory and functional studies in the field of CRM measurements and especially assessing CRM effectiveness. In the following we propose a new comprehensive, integrated measurement model.

### 3. Proposal measurement model of CRM effectiveness

This model of assessing effectiveness of implementing CRM has four aspects as following:

#### Financial aspect, Emotional aspect, Theoretical aspect, Structural aspect

Each of these aspects has two or three elements, which should be measured by some questions. Designing and conducting such questions should be based on the nature of industry and the company implementing CRM. The important point of this model is its elements which categorized carefully and in the most accessible manner. In the following each of these aspects will be described. Figure 1 shows this model.

#### 3.1. Financial aspect

This aspect includes three elements of "investment, applying consultant, and purchasing appropriate CRM software". These elements describe in the following:

Success of implementing CRM needs including enough investment during its project. The main result of lacking enough investment on CRM projects is the vague return on investment of such projects. Some believe that well-based CRM initiatives are worth the often considerable investment they entail. Gaining adequate funding for CRM requirements is an important issue for organizations, particularly as many of the projects expanded dramatically in cost and sometimes in scope. Some organizations had overcome the problem of funding by adopting what was referred to as a ‘quick wins’ approach. Payne (2005) believes that by structuring their CRM implementation projects to deliver quick wins and visible benefits at incremental stages, such as improvements in customer service or higher response rates to campaigns, they were able to demonstrate immediate progress and returns. This helped to improve internal buy-in and motivate other parts of the business to extend the CRM systems within their own areas. (payne, 2005).

Another investment should include applying good consultant. Lack of skills in building and using the new IT-based CRM system are a major barrier to the implementation of CRM. The organization for which he works was unable to recruit enough technically skilled people for a large-scale CRM implementation project.

Another financial issue refers to purchasing and implementing appropriate CRM software consists on company's needs. Usually inadequate investment leads to not buying significant software.

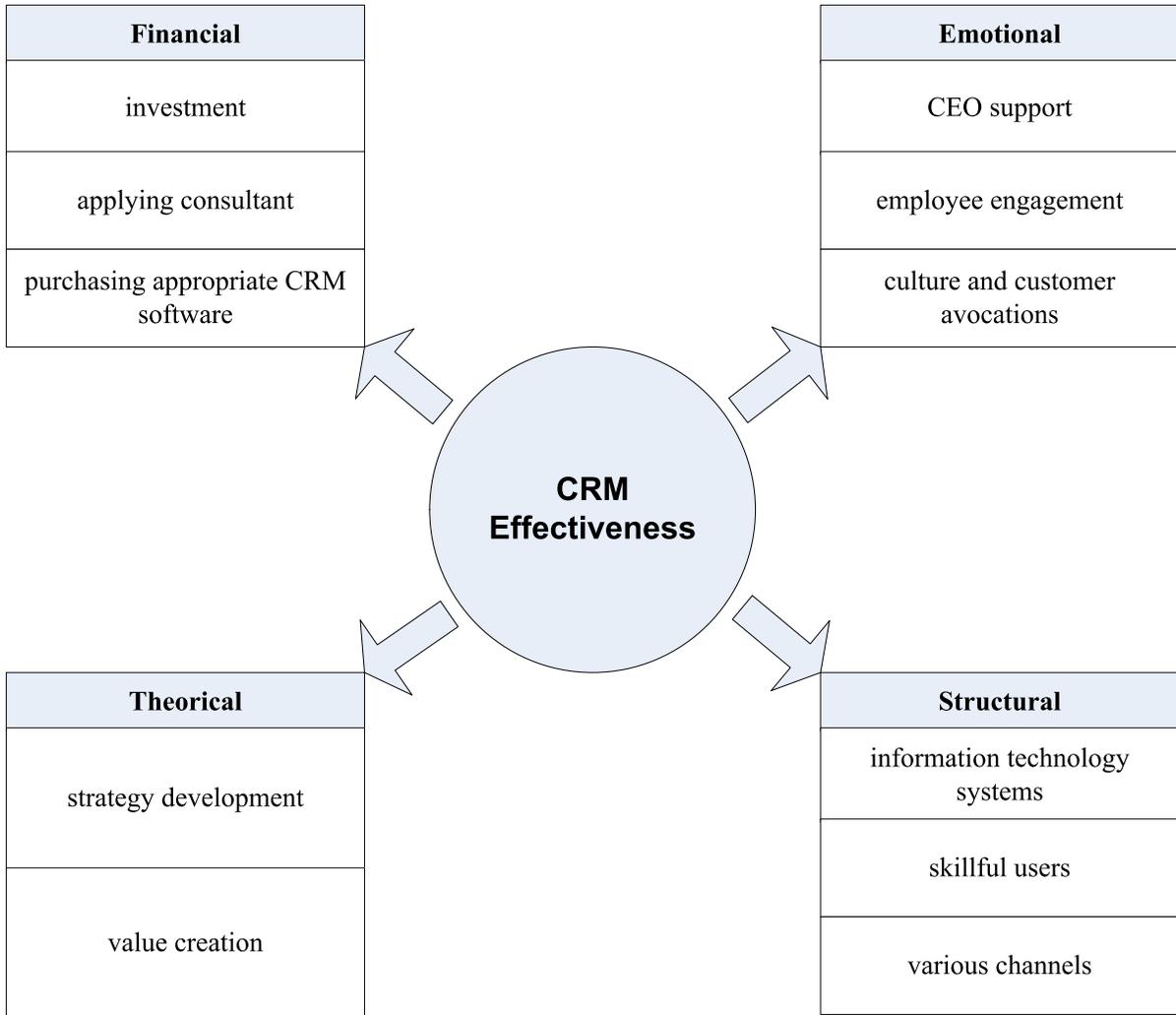


Figure 1 measurement model of CRM effectiveness

**3.2. Emotional aspect**

Emotional aspect refers to emotional issues of company. It includes these elements: "CEO support, employee engagement, culture and customer avocations". These elements describe in the following:

A lack of top management involvement and leadership of CRM activities is a further barrier to CRM success. Enlightened CEOs should view themselves as ‘chief customer officer’ also. Their role is to ensure a high level executive, ideally at Board level, acts as a sponsor and champion for the company’s CRM activities and that the importance of transforming the company’s relationships with customers through CRM is understood and shared by the Board and senior management. The CEO and senior management should endorse and support any CRM project through their buy-in and active involvement.

In the other way, an organization cannot develop and operate appropriately customer focused systems

and processes without properly motivated and engaged employees. Increasingly, organizations are recognizing the significant value their employees contribute to the business, which extends well beyond the basic fulfillment of core duties. Employees are instrumental in implementing customer service policy, improving process efficiencies and nurturing consumer confidence and custom.

Another important element is culture. Building a customer-oriented culture is vital. Those businesses that are highly successful tend to have a strong culture.

‘Advocates’, who provide powerful word-of-mouth endorsement for a company, can play essential role in effectiveness of CRM. A number of researchers have argued that word-of-mouth is the most effective source of information for consumers. While commercial sources normally inform the buyer, personal sources legitimize or evaluate products for them.

### 3.3. Theoretical aspect

Another aspect of CRM effectiveness is theory which includes strategy development and value creation. These elements describe in the following:

Business strategy formulation is undertaking a review of the industry and competitive environment including an assessment of both existing and potential competition. Managers responsible for business strategy need to understand both the nature of their industry structure now and how it is likely to alter in the future. A number of frameworks and conceptual models are especially helpful in both developing business strategy and assessing if it has been formulated with sufficient clarity and detail in the context of the competition. Three of the more important frameworks for assessing the industry and competitive environment in order to develop an improved business strategy, include: the industry analysis model, the generic strategies framework, the market leaders framework. Some companies should rethink their strategy and are developing more intimate direct relationships with the consumer.

Identification of the economic value of customer segments to the enterprise is critical. This is where there is a high degree of interactivity between the strategy development process and the value creation process. The strategy development process leads to an initial view being taken on the economic desirability of different segments. The value creation process refines this view by identifying segment variables such as expected acquisition costs, profit per customer, retention rates and customer acquisition targets. These variables can then be used to identify economic value of different segments including estimates of annual contribution and profitability and lifetime value expressed in terms of net present value. Creating customer value is increasingly seen as a key source of competitive advantage. The value creation process consists of three key elements: determining what value the company can provide its customers with (the 'value customer receives'); determining the value the organization receives from its customers (the 'value organization receives'); and, by successfully managing this value exchange, maximizing the lifetime value of desirable customer segments.

### 3.4. Structural aspect

Structures and infrastructures of implementing CRM can lead to its success or failure. This important aspect includes: "information technology systems, skillful users, and various channels". These elements describe in the following:

The design of the technological components of CRM should therefore be driven not by IT interests,

but by the organization's strategy for using customer information to improve its competitiveness.

With this in mind, an information management infrastructure that will support and deliver the chosen CRM strategy should be developed. For most companies, this will involve the incorporation of specific technologies. As depicted in the CRM strategy framework at the start of this chapter, the main technological components of the information management process comprise the data repository, analytical tools, IT systems, front-office applications and back-office applications. These five components contribute to building better customer relationships by making the organization 'market intelligent', 'service competent' and 'strategy confident'.

Intensifying commercial and competitive pressures, exacerbated by the availability of promising new technologies, has led many companies to consider Business Process Outsourcing (BPO) and/or use of a Business Service Provider (BSP) and/or an Application Service Provider (ASP). Lack of skills in building and using the new IT-based CRM system are a major barrier to the implementation of CRM. One CRM manager referred to a 'chronic technological skill shortage'. The organization for which he works was unable to recruit enough technically skilled people for a large-scale CRM implementation project. Other executives also highlighted the need for skills in operating the new system and several said that they relied on vendor training to meet this need, which was not always available quickly and was not of a uniform standard. Analytical skills in asking the right questions of the CRM system, was identified as being of special importance in making the most of the CRM investment.

Multi-channel integration involves all the contacts and interfaces between the customer and the organization supplying them. Offering Channels involves making decisions about the most appropriate combination of channel participants and channel options through which to interact with customer base, how to ensure the customer experiences is highly positive within those channels and, where the customer interacts with more than one channel, how to obtain and present a 'single unified view of the customer'.

There are now a large number of channels through which customers and suppliers may interact in a variety of communications, sales and service situations. Integrating these channel participants and channel options is the key to success. Further, customers acquired in different channels may be different or may behave differently.

## 4. Conclusion

It is obvious that the process of assessing effectiveness of CRM implementation is vital to identify its critical role in progressing CRM strategy to achieve strategic marketing objectives and finally success of the company and its profitability. By reviewing all related literature we found that there are few tools which can measure CRM success and none of them assess CRM effectiveness. In order to fill this gap we presented a measurement model for evaluating CRM effectiveness.

Future studies can implement this model in order to identify the variables of success of CRM and also CRM effectiveness in action. We attempt to offer a wide view of all related important variables of measuring CRM effectiveness but Future studies can offer more related variable to complete this model by modifying and integrate it with the other CRM success variables.

This research has some limitations which should be considered when interpreting the results. In fact, defining the CRM effectiveness variables must be customized by the manner of each industry and firm conditions. We cannot define such variables and sometimes we should alter these variables in order to match with these conditions of the firm. Therefore in this study we suggest the general CRM effectiveness variables and the firms should customize these variables for themselves.

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