Customer Relationship Management Success Model: A Conceptual Framework

Mohammed Alamgir
Graduate Research Student
Graduate School of Business, Curtin University
E-mail: alamgir92@gmail.com

Mohammed Quaddus
Professor of Graduate School of Business
Curtin University
E-mail: Mohammed.Quaddus@gsb.curtin.edu.au
ABSTRACT

Few researches have been conducted on customer relationship management (CRM) success but the antecedents are not clearly depicted. Besides, Literature on CRM in an integrated fashion is sparse, rather issues are presented in isolation mostly focusing on technology ignoring other organizational and extra-organizational issues like social capital and customer knowledge. Moreover, the mediating role of relationship maintenance and customer knowledge has been largely neglected in the literature. Therefore, the main purpose of this research is to investigate the antecedents of CRM success and also to examine the mediating role of customer knowledge and relationship maintenance on CRM success. The present study combines the Resource-based view and Knowledge based view in developing theoretically grounded comprehensive framework of CRM success.

Keywords: ICRM, relationship maintenance, customer knowledge, social capital, CRM success.

BACKGROUND OF THE STUDY

The management of customer relationships has become a top priority for many companies (Becker, Greve & Albers 2009). But the factors behind Customer Relationship Management (CRM) success and also what constitutes CRM is an issue of considerable debate (Krasnikov, Jayachandran & Kumar 2009; Eid 2007). Likewise, Roberts, Liu & Hazard (2005) argued that CRM success is not thoroughly defined and it is synonymous with positive return on CRM installation investment. Companies have invested billions of dollars in implementing CRM solutions (Ahearne, Hughes & Schillewaert 2007) but they failed to reap desired benefits (Ryals 2005; Foss, Stone & Ekinci 2008). Academics and practitioners have perceived CRM as a technological solution (Ryals and Payne 2001) rather a multidimensional issue where a more expansive and holistic approach is required (Becker et al. 2009; Chang, Park & Chaity 2010). Moreover, Coltman (2007) argued that CRM is poorly understood and also opined that a total CRM is yet to develop. Customer knowledge acquisition is highly required for the success of the organization but scholars have devoted little attention on it (García-Murillo and Annabi, 2002) and few studies have addressed the role of CRM in this regard (Xu and Walton 2005). Moreover, the focus on social dimensions is also missing from most of the CRM initiatives (Mitussis 2006). In addition, earlier researchers did not pay proper attention on the mediating role of customer knowledge and relationship maintenance on CRM success. In such a context the research endeavour is to investigate the following research questions.
RQ 1: What are the antecedents of CRM success?

RQ 2: How does the Customer Knowledge (CK) mediate the relation between social capital (SC) and CRM success?

RQ 3: How does the Customer Relationship maintenance mediate the relation between social capital (SC) and CRM success?

THEORETICAL FOUNDATION

Customer relationship management is established within a complex organizational system of interrelated and interdependent resources and knowledge (Coltman 2007). Thus this approach aligns with two schools of thought, Resource-based view (RBV) and knowledge-based view (KBV), which are used as the theoretical foundation of the research model.

Resource Based View (RBV)

The resource based view school of thought has spread throughout strategic management (Grant 1996; Wernerfelt 1984) and also the information systems (IS) literatures (Ray, Muhanna & Barney 2005; Rivard, Raymond & Verreault 2006). The RBV takes an ‘inside-out’, or firm-specific perspective on why organisations succeed or fail (Grant 1996). The RBV also considers organizations as collections of resources and seeks to identify how these resources drive competitive success (Wernerfelt 1984).

According to RBV perspective, firm is composed of bundle of tangible and intangible resources like physical existence, technology etc. of an organization as tangible resources and customer relationships as intangible market-based resource that may be relatively rare and difficult for rivals to replicate (Srivastava, Fahey & Christensen 2001). Similarly Coltman (2007) argued that the RBV provides a multidimensional perspective to CRM as it attempts to link superior firm performance with available resources and capabilities.

Resources can be of various kinds but is it possible to interpret ICRM components and outcome like customers and customer relationships as resources? Customers are not being owned or controlled but tied semi-permanently to the service firm. Scholars from the business to business marketing and service management and marketing area considered customers in general and customer relationships
in particular as resources, but not within the resources-based perspective though some earlier publications (Rouse and Daellenbach 1999) on the resource-based view of the strategic management were reluctant to consider those as important resources. Relationships, one of the most important issues of ICRM, in general are considered to be resources (Hall 1992) and thus customer relationships in service firms can also be considered important resources (Bharadwaj, Varadarajan & Fahy 1993).

Intense competition made firms transform their resources and capabilities from being product- or service-centred into customer-centred (Kim, Kim & Park 2010). Customers are valuable and rare resources for the firm where relationship with customers is difficult to imitate (Srivastava et al. 2001; Hogan and Armstrong 2001) and vast literatures on CRM are implicitly builds upon this assumption (Gouthier and Schmid 2003). They also opined that the higher the extent of customer integration, the higher the potential of the service customer to constitute a resource. Likewise, relationships enable firms to gain each other’s resources like knowledge and relational resources can be a source of long lasting advantages as they are difficult to develop and copy (Hunt 1997).

Bharadwaj (2000) argued that market leaders are characterized by the synergistic combination of IT resources with other organizational resources and capabilities where RBV advocates the importance of technical resources such as IT (Wernerfelt 1984). This is also being supported by the study of Ray et al. (2005) as they considered RBV as a fundamental framework for measuring IT performance. For successful CRM implementation resource immobility and bundling is required and it also helps to prevent one organization from replicating others CRM initiative (Kim et al. 2010).

Customer knowledge acquired by integrated CRM is a valuable and rare asset for businesses, which will allow them to respond quickly to customer needs and adapt to changing markets (Shi & Yip 2007). It can be noted that collecting information from and about customers through relationship and offering a superior value to those customers based on this knowledge will provide a non-imitable advantage (Garrido-Moreno and Melendez 2011) and thus knowledge can be treated as important resource for organization as per RBV of firm (Wernerfelt 1984).
The notion social capital has been defined as resources embedded in a social structure where the network of relationship is a valuable resource that a firm can access or mobilize by virtue of possessing a durable network of relationships (Yli-renko, Autio & Sapienza 2001). In this regard, the RBV argues that organizations characterized by high levels of social capital can be successful than competitors since relationship, trust and other components of social capital are valuable, and difficult to imitate (Nahapiet and Ghoshal 1998).

There is a body of literatures that consider the knowledge-based view (KBV) of the firm is a recent extension of the RBV of the firm (Grant 1996). However, the RBV emphasizes on existing knowledge whereas the KBV of the firm proposition states that the organization exists to create, transfer and transform knowledge into competitive advantage (Kogut and Zander 1996). Since, customer knowledge generation has been considered as an outcome of ICRM thus the knowledge based view has also been used as the other theoretical foundation of the research model.

**Knowledge-Based View (KBV)**

The knowledge-based view depicts firms as repositories of knowledge and competencies (Kogut and Zander 1996; Spender 1996). The ultimate aim of this view is to enable firm to effectively apply existing knowledge to generate new knowledge and thus achieve superior performance from knowledge-based assets. This view also argued that the primary task of CRM is to provide data and information to create customer knowledge (Coltman 2007). This study is also in accordance with this notion where customer knowledge generation is the expected outcome of ICRM and also an important antecedent of CRM success. Firm’s advantage arises from their superior capability in creating and transferring knowledge (Ghoshal and Moran 1996). Knowledge acquisition unlocks new opportunities and enhances firms’ ability to exploit these opportunities through sales cost efficiency, maintaining relationship with customers and thus finally improve the efficiency of the firm’s operation (Yli-renko et al. 2001). The Knowledge-based view considers firm as an institution for the production of goods and services where the issues of creating, acquiring, storing and deploying knowledge are the central organizational activities (Grant 1996).
The role of knowledge in building advantage has been well documented in the literature on the knowledge based view of the firm (Kogut and Zander 1996). Knowledge, which is fundamental to knowledge-based view, is the primary source of value (Grant 1996). Knowledge based view of the firm emphasizes upon the acquisition and creation of organizational knowledge and customer knowledge (Nonaka 1994) which is in line with the expected outcome of ICRM.

The KBV also argues that products and services produced are the function of the firm’s know-how which is embedded in and carried through individual employees, component of ICRM (Hammami and Triki 2011). On the other hand, the quality of decisions depends on relevant knowledge acquired by the organization (Grant 1996).

The learning that emerges through customer knowledge enable a firm respond towards expressed and latent customer needs through better products and services (Slater and Narver 1995). Customer knowledge, expected outcome of ICRM, will improve firm’s ability to identify customer needs and as well as performance (Jayachandran, Sharma & Kaufman 2005).

Thus, it is observed that the components of the research model are well justified by the above theoretical foundations.

THE RESEARCH MODEL AND HYPOTHESES

This study suggests a research model (figure 1) by combining the resource based view and knowledge based view. The proposed research model will explore the antecedents of CRM success where special emphasize has been given to ICRM, Customer Knowledge, Relationship Maintenance and Social Capital since very few researches shed light on CRM success and involvement of all those factors together in this regard is rare. In the previous section theoretical issues have been discussed and the following section will present background literature specific to this research.

CRM Success
In achieving CRM success, evidence suggests that strategic, organizational and technological issues are all important (Roberts et al. 2005). A clear understanding of what factors lead to CRM success is
the significant starting point for effective CRM implementation and deployments (Roh, Ahn & Han 2005). The resource based view and knowledge based view focus on the firm’s tangible and intangible resources like technology, customer knowledge, relationship, social capital etc. and suggests that firm should continuously renew, reconfigure, and redeploy such resources to get success (Belkahla and Triki 2011). This research, based on the earlier research, considers ICRM, customer knowledge, relationship maintenance and social capital as important factors for CRM success. Similarly it is also important to determine what constitutes CRM success since earlier researches, though few, focused on different issues in isolation rather in collective as measures of CRM success. Based on the earlier researches, this study will consider efficiency (Krasnikov et al. 2009; Roh et al. 2005), customer satisfaction (Roh et al. 2005; Sin, Tse & Yim 2005; Jayachandran et al. 2005; Reimann, Schilke & Thomas 2010), customer loyalty (Eid 2007; Gustafsson, Johnson & Ross 2005), and profitability (Reimann, et al. 2010; Roh et al. 2005), as measures for CRM success (for details see table, 1). Some of the measurement constructs used are very close to the measures of business success, especially efficiency and profitability however, other constructs like satisfaction, loyalty and also efficiency are closely related to the measures of CRM success which eventually ensures business success.

**Integrated Customer Relationship Management (ICRM)**

From the previous literature (Chen and Popovich 2003; Sin et al. 2005; Eid, 2007; Becker et al. 2009) it is evident that CRM should be considered a multi-dimensional concept which has also been justified by the RBV as it opines that effective CRM implementation needs an integrative approach. In this research, based on preceding literature, four factors have been considered: customer orientation (Meyer and Kolbe 2005; Osarenkhoe and Bennani 2007), customer centric management system (Jayachandran et al. 2005; Chang et al. 2010), CRM people (Chen and Popovich 2003; Sin et al. 2005), and CRM technology (Chen and Popovich 2003, Xu and Walton 2005; Sin et al. 2005) which constitutes integrated Customer relationship Management (ICRM) (for details of the constructs see table 2). This is in line with the notion that successful CRM should focus on strategy, people,
technology and process (Bose and Sugumaran 2003; Chen and Popovich 2003) to achieve superior customer relating capability and maximize performance (Sin et al. 2005).

Customer orientation, explicitly placing the customers at the centre of all the firm’s activities, is a fundamental element organizational environment required for CRM in general and CRM success in particular (Bentum & Stone 2005). Likewise, customer orientation of service personnel is considered an important leverage for service firm’s success (Hennig-Thurau 2004). Customer-centric management system accelerates the use of CRM technology with the support of employees (Chang et al. 2010). IT can facilitate and enhance customer relationships focusing on customization through the deployment of sophisticated customer relationship management (CRM) systems (Dewhurst, Martinez & Dale 1999). Technological issues are also important and one of the drivers for CRM success (Roberts et al. 2005; Chen and Popovich 2003). In this regard it can be noted that, the RBV of the firm directs us towards the importance of IT (Barney 1991) and also has been considered as an important framework for measuring IT performance (Ray et al. 2005). Individual employees are the building blocks of customer relationships (McGoven and Panaro 2004; Chen and Popovich 2003). Accordingly Krauss (2002) mentioned that the hardest part of becoming CRM oriented is not the technology, it’s the people.

Customer Knowledge

Knowledge is the only meaningful economic resource (Drucker 1995), and gaining this knowledge is becoming an important differentiator for competitive advantage as it is dynamic and changes rapidly (Mithas, Krishnan & Fornell 2005).

Through CRM in general (Mithas et al. 2005; Xu and Walton 2005) and sales person in particular organization can capture some of what the customer knows (Yoon and Nilan 1999). Similarly, Homburg, Droll & Totzek (2008) argued that the generation of knowledge regarding customers’ needs is up to the frontline employee. In service relationship, through interaction, a sales person can gather knowledge (Gwinner, Bitner, Brown & Kumar 2005) about customer’s preferences, competing products and their appealing features, and sometimes industry trends. In a broader sense employees can come up with some more knowledge regarding selecting or refusing of products and services by a
consumer considering the issues of functionality, price, convenience, beliefs and conspicuous consumption (García-Murillo and Annabi 2002). Similarly, CRM technology enables the organization to communicate much better with their customers and to help customers manage their own needs and also facilitates information capturing from large numbers of customers (Jayachandran et al. 2005) which help the organization to build its customer knowledge base (see table 3). But there is limited knowledge about the effect of CRM applications on a firm's customer knowledge (Mithas et al. 2005). Likewise, Xu and Walton 2005 argued that very few studies have been established to address customer knowledge acquisition in the context of CRM implementation.

**Relationship Maintenance**

Earlier research on social and personal relationships shed light on the definition of relationship maintenance whereas CRM and Marketing literatures are silent rather focused on the dimensions of relationship maintenance. Conceptions of relationship maintenance differ however maintenance traditionally is thought to involve efforts to continue a relationship in its present state. Most of the scholars agree that maintenance occurs just after a relationship has finished beginning and just before it has started to end emphasising on stability (Montgomery 1993) and also considering as an interpersonal process (Baxter 1990). Stability of relationship also requires the intention to be in the relation that is continually changing, adapting to, accommodating or transforming the tensions of relational life.

Some authors argued relationship maintenance from customer’s economic perspective and emphasized switching cost and dependences as key drivers (Reinartz and Kumar 2004). Reinartz, Kraft & Hoyer (2004) opined that relationship maintenance has distinct dimensions like retention, up-selling/cross-selling (Becker et al. 2009), and referral management. Likewise, Aurier and N’Goala (2010) emphasised on customer retention as dimension of relationship maintenance. Based on the earlier research this study will consider customer retention, up selling/cross selling and customer referral as dimensions of customer relationship maintenance (see table 4).
CRM, in general, increases the length of beneficial customer-firm relationships (Reimann et al. 2010) and customer orientation, in particular, helps to build long-term relationships (Bentum & Stone 2005) by offering added value to the customers (Narver and Slater, 1990; Garrido-Moreno and Melendez 2011). Various researchers (Hogan and Armstrong 2001; Srivastava et al. 2001) illustrate customers and customer relationships from RBV perspective. CRM also includes the delivery of increasing levels of satisfaction by the maintenance and promotion of relationship (Lindgreen, Palmer, Vanhamme, & Wouters 2006). Likewise, Information plays a key role in building and maintaining customer relationships and the use of CRM technology is expected to boost the ability of an organization to facilitate firm-customer interaction and to sustain profitable customer relationships through smooth sharing and integration of information (Day 2003; Jayachandran et al. 2005).

The previous discussions lead to the following hypothesis:

**Hypothesis 1a: ICRM has significant role in customer knowledge generation**

**Hypothesis 1b: ICRM has positive influence on customer relationship maintenance**

**Social Capital**

Social capital is defined as ‘the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit’ (Nahapiet & Ghoshal 1998, p. 243.)

Social capital dimensions, considered for this study, include social interaction (Chiu, Hsu & Wang 2006; Yli-Renko et al. 2001), network ties (Yli-Renko et al. 2001), trust (Chiu et al. 2006) and rapport, with two sub dimensions: enjoyable interaction and personal connection (Gremler, Gwinner & Brown 2001).

Knowledge acquisition (Adler & Kwon 2002; Nahapiet & Ghoshal 1998), creation and transfer of knowledge (Kogut and Zander 1996) and access to new sources of knowledge (Adler & Kwon 2002; Nahapiet & Ghoshal 1998) have been identified as a direct benefit of social capital in general and relational dimension (Huysman and Wulf 2005) in particular. Similarly Doz (1996) argued that trust, as relational dimension, has important role within the firm as well as inter-personal knowledge
transfer and willingness to share knowledge (Powell, Koput & Smith-Doerr 1996). Intensive social interaction facilitates knowledge transfer (Zahra, Ireland & Hitt 2000), increase the depth, breadth and efficiency of mutual knowledge exchange (Lane and Lubatkin 1998) and also associated with greater knowledge acquisition (Yli-Renko et al. 2001).

Maintenance of relationship is said to be highly dependent on sales associates and relationship managers (Gummesson 2002) where trust plays an important role as antecedent of motivation to enhance the scope of the relationship (Selnes 1998). Likewise, trust is also a basis for stable (Garbarino and Johnson 1999) and successful relationship (Berry 1995; Morgan and Hunt 1994). Researchers also argued that personal connection, as an important aspect of relationship maintenance, increases customer’s intention to maintain the relationship (Gremler et al. 2001)

Hence, it is hypothesised that:

**Hypothesis 2a:** Social capital positively influence customer knowledge generation

**Hypothesis 2b:** Social capital positively influence customer relationship maintenance

**Hypothesis 2c:** Social capital has significant impact on CRM success.

**Factors behind CRM success**

The KBV argues that organization capabilities arise from the accumulation and conversion of knowledge assets into capabilities which require the involvement of human capital (individual employees) and social capital (Kim 2006). Firms are increasingly based on the creation and exploitation of knowledge and knowledge-intensive services since they add value to the firm’s process (Grant 1996; Nahapiet & Ghoshal 1998; Nonaka 1994). From a better understanding of the customer, the company will have greater understanding of the true needs and expectations of the customer (Gwinner et al. 2005). To create customer satisfaction frontline employees must generate knowledge about customer needs (Homburg et al. 2008). Moreover, meeting the customer’s needs by taking the time to listen to him/her and alter providing knowledge will foster the relationship between the customer and the firm. Since the company have a better understanding of the customers’
expectations and needs it will be able to improve customer service and thus achieve customer satisfaction and retention (Palmer, Lindgreen & Vanhamme 2005).

Better and durable relationships with the customer lead to customer satisfaction (Palmer et al. 2005), increased sales and the acquisition of new customers (Garcia-Murillo and Annabi 2002) and thus CRM success. The interaction between employee and customer helps the customer make an informed decision and foster customer satisfaction and loyalty (Garcia-Murillo and Annabi 2002). Similarly, customer referral value plays an important role in maximizing profitability (Kumar, Aksoy, Donkers, Venkatesan, Wisel & Tillmanns et al. 2010) to achieve CRM success.

Social capital can improve organization’s ability to improve performance (Kogut and Zander 1996) which is being supported by Gremler et al. (2001) as they found rapport significantly related to customers’ satisfaction and loyalty intentions. In this connection Jamal and Adelowore (2008) argued that personal interaction directly affects customer satisfaction.

Social capital, like ICRM, also play significant role in customer knowledge acquisition which in turn facilitate CRM success in conjunction with ICRM. From the literature it is evident that the impact of social capital and customer knowledge on CRM success has been considered in isolation and thus it is important to investigate whether CRM success can be better achieved through social capital mediated by customer knowledge since no prior research has been found in this regard.

From the literature it is evident that relationship maintenance facilitated by ICRM and social capital has significant impact on CRM success. Literature also suggests that social capital itself also has positive impact on CRM success. To date, few studies have considered the possibility that important intervening variables like customer relationship maintenance may mediate the relationship between social capital and CRM success.

The previous discussions results in the following hypotheses:

**Hypothesis 3:** Customer knowledge acquired by ICRM and social capital has positive impact on CRM success.

**Hypothesis 4:** Relationship maintenance supported by ICRM and social capital has positive impact on CRM success
Hypothesis 5: Customer knowledge mediates the relations between social capital and CRM success

Hypothesis 6: Relationship maintenance mediates the effect of social capital on CRM success

FUTURE DIRECTIONS AND CONCLUSION

This article develops a research model for factors behind CRM success- an issue that has not been well explored in the literature. The research model was designed to explore the components of ICRM and its expected outcome and their role on CRM success in conjunction with social capital. Future research could test the entire research model. Parts of the model could also be considered and investigated in detail. Another interesting future study could be to look at the mediating and moderating effect of customer knowledge and customer relationship maintenance on the relation between ICRM and CRM success.

The model, including both of its main constructs and sub-factors can be taken as they are, or fine-tuned to carry out a comprehensive empirical study by the researchers of CRM arena. Organizations, especially service oriented and services focused, those are concerned for relationship based practices can use the constructs and factors of the study to identify their present status with respect to these constructs and factors. Our immediate plan is to test the proposed research model by surveying relationship managers of service sectors, especially banks.
REFERENCES


Hammami SM & Triki A (2011) Exploring the information technology contribution to service recovery performance through knowledge based resources, VINE 41(3): 296-09


Huysman M & Wulf V (2005) IT to support knowledge sharing in communities, towards a social capital analysis, *Journal of Information Technology* 00: 1-12.


Appendices:

**Figure 1: Proposed model for CRM Success**

![Diagram of CRM Success Model]

- **ICRM**
  - Customer Orientation
  - Customer Centric Management System
  - CRM Technology
  - CRM People

- **Social Capital**
  - Social Interaction
  - Trust
  - Rapport

- **Relationship Maintenance**
  - Customer Retention
  - Up-selling/Cross selling
  - Customer Referral

- **CRM Success**
  - Efficiency
  - Customer Satisfaction
  - Profitability
  - Loyalty
Table 1: CRM success measurement

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency</td>
<td>1. Use of CRM system to reduce time of CRM.</td>
<td>Roh et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>2. Use of CRM system to reduce cost of CRM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Use of CRM system to alleviate CRM job load.</td>
<td></td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>1. Knowledge based customer offerings</td>
<td>Sin et al. (2005);</td>
</tr>
<tr>
<td></td>
<td>2. Prompt service from employees</td>
<td>Roh et al. (2005);</td>
</tr>
<tr>
<td></td>
<td>implementing CRM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Delivering value to our customers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Decrease in customer complaints</td>
<td></td>
</tr>
<tr>
<td>Profitability</td>
<td>1. New customers are increasing after implementation of the CRM</td>
<td>Roh et al. (2005);</td>
</tr>
<tr>
<td></td>
<td>system.</td>
<td>Reimann et al. (2010)</td>
</tr>
<tr>
<td></td>
<td>2. Reselling/up-selling is increasing after implementation of the CRM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>system.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Overall profitability is increasing after implementation of the CRM</td>
<td></td>
</tr>
<tr>
<td>Loyalty</td>
<td>My organization customizes customer interactions to optimize value</td>
<td>Sin et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>and loyalty.</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Elements of ICRM and their measurement

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer orientation</td>
<td>1. Effort to find out what key customer needs.</td>
<td>Narver and Slater, (1990); Sin et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>2. Monitoring and assessing level of commitment in serving customer needs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Business strategies are driven by objective of increasing value for customers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Attention to after-sales service</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Offering personalized products and services for valued customers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Building and maintaining customer relationships as a major goal of the organization through top management leadership.</td>
<td></td>
</tr>
<tr>
<td>Customer centric management system</td>
<td>1. Focus on customer needs while designing business processes.</td>
<td>Jayachandran et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>2. Employees receive incentives based on customer satisfaction measures.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Business processes are designed to enhance the quality of customer interactions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Coordination of various functional areas and activities to enhance the quality of customer experience</td>
<td></td>
</tr>
<tr>
<td>CRM people</td>
<td>1. Our organization has the right technical staff to provide technical support for the utilization of CRM technology in building customer relationships.</td>
<td>Sin et al. (2005); Jayachandran et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>2. Encouraging employees to focus on customer relationships</td>
<td></td>
</tr>
<tr>
<td>CRM technology</td>
<td>1. Appropriate hardware and software to serve customers.</td>
<td>Chang et al. (2005); Sin et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>2. Use of IT to facilitates the management of customer relationships.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Integration of organization’s information systems across the different functional areas</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Comprehensive, centralized, and up-to-date database to</td>
<td></td>
</tr>
</tbody>
</table>
consolidate customer information.

### Table 3: Customer knowledge measurement

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Knowledge</td>
<td>1. Regular and interactive communication with customers.</td>
<td>Sin et al. (2005); Jayachandran et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>2. Collection of and update customer information on a regular basis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Use of customer information to identify appropriate channel of communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Understanding of customer needs and offer customization through knowledge learning.</td>
<td></td>
</tr>
</tbody>
</table>

### Table 4: Elements of relationship maintenance and their measurement

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer retention</td>
<td>1. Attempt to build long term relationship with valued customers</td>
<td>Reinartz et al. (2004); Jayachandran et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>2. Customer retention is top priority.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Appropriate response to groups of customers with different values.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Systematic attempt to manage the expectations of valued customers.</td>
<td></td>
</tr>
<tr>
<td>Up selling/ cross selling</td>
<td>1. Systematic approach to nurture relationships to facilitate cross-sell and/or up-sell.</td>
<td>Reinartz et al. (2004)</td>
</tr>
<tr>
<td></td>
<td>2. Individualized incentives for customers willing to strengthen business with provider.</td>
<td></td>
</tr>
<tr>
<td>Customer referral</td>
<td>1. Incentives to current customers for acquiring new customers.</td>
<td>Reinartz et al. (2004)</td>
</tr>
<tr>
<td></td>
<td>2. Efficient management of the customer referral process.</td>
<td></td>
</tr>
</tbody>
</table>
ABSTRACT

Few researches have been conducted on customer relationship management (CRM) success but the antecedents are not clearly depicted. Besides, Literatures on CRM in an integrated fashion is sparse, rather issues are presented in isolation. Earlier Literatures also ignore other important issues like social capital and customer knowledge and their impact on CRM. Moreover, the mediating role of relationship maintenance and customer knowledge has been largely neglected in the literature. Therefore, the main purpose of this research is to investigate the antecedents of CRM success and also to examine the mediating role of customer knowledge and relationship maintenance on CRM success. The present study combines the Resource-based view and Knowledge based view in developing theoretically grounded comprehensive framework of CRM success.

Keywords: Integrated customer relationship management (ICRM), Relationship maintenance, Customer knowledge, Social capital, CRM success.

BACKGROUND OF THE STUDY

The management of customer relationship has become a top priority for many companies (Becker, Greve & Albers 2009). But the factors behind Customer Relationship Management (CRM) success and also what constitutes CRM is an issue of considerable debate (Krasnikov, Jayachandran & Kumar 2009; Eid 2007). Likewise, Roberts, Liu & Hazard (2005) argued that CRM success is not thoroughly defined and it is synonymous with positive return on CRM installation investment. Companies have invested billions of dollars in implementing CRM solutions (Ahearne, Hughes & Schillewaert 2007) but they failed to reap desired benefits (Ryals 2005; Foss, Stone & Ekinci 2008). Academics and practitioners have perceived CRM as a technological solution (Ryals and Payne 2001) rather a multidimensional issue where a more expansive and holistic approach is required (Becker et al. 2009; Chang, Park & Chaiy 2010). Moreover, Coltman (2007) argued that CRM is poorly understood and also opined that a total CRM is yet to develop. Customer knowledge acquisition is highly required for the success of the organization but scholars have devoted little attention on it (García-Murillo and Annabi, 2002) and few studies have addressed the role of CRM in this regard (Xu and Walton 2005). Moreover, the focus on social dimensions is also missing from most of the CRM initiatives (Mitussis 2006). In addition, earlier researchers pointed out the mediating role of customer knowledge and relationship maintenance on CRM success in a limited fashion. In such a context the research endeavour is to investigate the following research questions.
RQ 1: What are the antecedents of CRM success?

RQ 2: How does the Customer Knowledge (CK) mediate the relation between Social Capital (SC) and CRM success?

RQ 3: How does the Customer Relationship Maintenance mediate the relation between Social Capital (SC) and CRM success?

THEORETICAL FOUNDATION

Customer relationship management is established within a complex organizational system of interrelated and interdependent resources and knowledge (Coltman 2007). Thus this approach aligns with two schools of thought, Resource-based view (RBV) and knowledge-based view (KBV), which are used as the theoretical foundation of the research model.

Resource Based View (RBV)

The resource based view school of thought has spread throughout strategic management (Grant 1996; Wernerfelt 1984) and also the information systems (IS) literatures (Ray, Muhanna & Barney 2005; Rivard, Raymond & Verreault 2006). The RBV takes an ‘inside-out’, or firm-specific perspective on why organisations succeed or fail (Grant 1996). The RBV also considers organizations as collections of resources and seeks to identify how these resources drive competitive success (Wernerfelt 1984).

According to RBV perspective, firm is composed of bundle of tangible and intangible resources like physical existence, technology etc. of an organization as tangible resources and customer relationships as intangible market-based resource that may be relatively rare and difficult for rivals to replicate (Srivastava, Fahey & Christensen 2001). Similarly Coltman (2007) argued that the RBV provides a multidimensional perspective to CRM as it attempts to link superior firm performance with available resources and capabilities.

Resources can be of various kinds but is it possible to interpret ICRM components and outcome like customers and customer relationships as resources? Customers are not being owned or controlled but tied semi-permanently to the service firm. Scholars from the business to business marketing and service management and marketing area considered customers in general and customer relationships
in particular as resources, but not within the resources-based perspective though some earlier publications (Rouse and Daellenbach 1999) on the resource-based view of the strategic management were reluctant to consider those as important resources. Relationships, one of the most important issues of ICRM, in general are considered to be resources (Hall 1992) and thus customer relationships in service firms can also be considered important resources (Bharadwaj, Varadarajan & Fahy 1993).

Intense competition made firms transform their resources and capabilities from being product- or service-centred into customer-centred (Kim, Kim & Park 2010). Customers are valuable and rare resources for the firm where relationship with customers is difficult to imitate (Srivastava et al. 2001; Hogan and Armstrong 2001) and vast literatures on CRM are implicitly builds upon this assumption (Gouthier and Schmid 2003). They also opined that the higher the extent of customer integration, the higher the potential of the service customer to constitute a resource. Likewise, relationships enable firms to gain each other’s resources like knowledge and relational resources can be a source of long lasting advantages as they are difficult to develop and copy (Hunt 1997).

Bharadwaj (2000) argued that market leaders are characterized by the synergistic combination of IT resources with other organizational resources and capabilities where RBV advocates the importance of technical resources such as IT (Wernerfelt 1984). This is also being supported by the study of Ray et al. (2005) as they considered RBV as a fundamental framework for measuring IT performance. For successful CRM implementation resource immobility and bundling is required and it also helps to prevent one organization from replicating others CRM initiative (Kim et al. 2010).

Customer knowledge acquired by integrated CRM is a valuable and rare asset for businesses, which will allow them to respond quickly to customer needs and adapt to changing markets (Shi & Yip 2007). It can be noted that collecting information from and about customers through relationship and offering a superior value to those customers based on this knowledge will provide a non-imitable advantage (Garrido-Moreno and Melendez 2011) and thus knowledge can be treated as important resource for organization as per RBV of firm (Wernerfelt 1984).
The notion social capital has been defined as resources embedded in a social structure where the network of relationship is a valuable resource that a firm can access or mobilize by virtue of possessing a durable network of relationships (Yli-renko, Autio & Sapienza 2001). In this regard, the RBV argues that organizations characterized by high levels of social capital can be successful than competitors since relationship, trust and other components of social capital are valuable, and difficult to imitate (Nahapiet and Ghoshal 1998).

There is a body of literatures that consider the knowledge-based view (KBV) of the firm is a recent extension of the RBV of the firm (Grant 1996). However, the RBV emphasizes on existing knowledge whereas the KBV of the firm proposition states that the organization exists to create, transfer and transform knowledge into competitive advantage (Kogut and Zander 1996). Since, customer knowledge generation has been considered as an outcome of ICRM thus the knowledge based view has also been used as the other theoretical foundation of the research model.

**Knowledge-Based View (KBV)**

The knowledge-based view depicts firms as repositories of knowledge and competencies (Kogut and Zander 1996; Spender 1996). The ultimate aim of this view is to enable firm to effectively apply existing knowledge to generate new knowledge and thus achieve superior performance from knowledge-based assets. This view also argued that the primary task of CRM is to provide data and information to create customer knowledge (Coltman 2007). This study is also in accordance with this notion where customer knowledge generation is the expected outcome of ICRM and also an important antecedent of CRM success. Firm’s advantage arises from their superior capability in creating and transferring knowledge (Ghoshal and Moran 1996). Knowledge acquisition unlocks new opportunities and enhances firms’ ability to exploit these opportunities through sales cost efficiency, maintaining relationship with customers and thus finally improve the efficiency of the firm’s operation (Yli-renko et al. 2001). The Knowledge-based view considers firm as an institution for the production of goods and services where the issues of creating, acquiring, storing and deploying knowledge are the central organizational activities (Grant 1996).
The role of knowledge in building advantage has been well documented in the literature on the knowledge based view of the firm (Kogut and Zander 1996). Knowledge, which is fundamental to knowledge-based view, is the primary source of value (Grant 1996). Knowledge based view of the firm emphasizes upon the acquisition and creation of organizational knowledge and customer knowledge (Nonaka 1994) which is in line with the expected outcome of ICRM.

The KBV also argues that products and services produced are the function of the firm’s know-how which is embedded in and carried through individual employees, component of ICRM (Hammami and Triki 2011). On the other hand, the quality of decisions depends on relevant knowledge acquired by the organization (Grant 1996). The learning that emerges through customer knowledge enable a firm respond towards expressed and latent customer needs through better products and services (Slater and Narver 1995). Customer knowledge, expected outcome of ICRM, will improve firm’s ability to identify customer needs and as well as performance (Jayachandran, Sharma & Kaufman 2005).

Thus, it is observed that the components of the research model are well justified by the above theoretical foundations.

THE RESEARCH MODEL AND HYPOTHESES

This study suggests a research model by combining the resource based view and knowledge based view. Figure 1 shows the research model. This model explores the antecedents of CRM success where special emphasize has been given to ICRM (Integrated Customer Relationship Management), Customer Knowledge, Relationship Maintenance and Social Capital. It is noted that very few researches shed light on CRM success and the involvement of these factors together is rare. In the previous section theoretical issues have been discussed and the following section presents the background literature specific to this research model as shown in Figure 1.

CRM Success

In achieving CRM success, evidence suggests that strategic, organizational and technological issues are all important (Roberts et al. 2005). A clear understanding of what factors lead to CRM success is the significant starting point for effective CRM implementation and deployments (Roh, Ahn & Han
The resource-based view and knowledge-based view focus on the firm’s tangible and intangible resources like technology, customer knowledge, relationship, social capital etc. and suggests that the firm should continuously renew, reconfigure, and redeploy such resources to get success (Belkahla and Triki 2011). This research, based on the earlier research, considers ICRM, customer knowledge, relationship maintenance and social capital as important factors for CRM success. Similarly, it is also important to determine what constitutes CRM success since earlier researches, though few, focused on different issues in isolation rather than in collective as measures of CRM success. Based on the earlier researches, this study will consider efficiency (Krasnikov et al. 2009; Roh et al. 2005), customer satisfaction (Roh et al. 2005; Sin, Tse & Yim 2005; Jayachandran et al. 2005; Reimann, Schilde & Thomas 2010), customer loyalty (Eid 2007; Gustafsson, Johnson & Ross 2005), and profitability (Reimann, et al. 2010; Roh et al. 2005), as measures for CRM success. Table 1 shows the measures of CRM success. Corresponding items/variables are also shown along with references. Some of the measurement constructs are very close to the measures of business success, especially efficiency and profitability however, other constructs like satisfaction, loyalty and also efficiency are closely related to the measures of CRM success which eventually ensures business success.

**Integrated Customer Relationship Management (ICRM)**

From the previous literature (Chen and Popovich 2003; Sin et al. 2005; Eid, 2007; Becker et al. 2009) it is evident that CRM should be considered a multi-dimensional concept which has also been justified by the Resource Based View (RBV) as it opines that effective CRM implementation needs an integrative approach. In this research, based on preceding literature, four factors have been considered: customer orientation (Meyer and Kolbe 2005; Osarenkho and Bennani 2007), customer centric management system (Jayachandran et al. 2005; Chang et al. 2010), CRM people (Chen and Popovich 2003; Sin et al. 2005), and CRM technology (Chen and Popovich 2003, Xu and Walton 2005; Sin et al. 2005) which constitutes Integrated Customer Relationship Management (ICRM). Table 2 shows these elements of ICRM. Corresponding items/variables are also shown along with the references. This is in line with the notion that successful CRM should focus on strategy, people,
technology and process (Bose and Sugumaran 2003; Chen and Popovich 2003) to achieve superior customer relating capability and maximize performance (Sin et al. 2005).

Customer orientation, explicitly placing the customers at the centre of all the firm’s activities, is a fundamental element organizational environment required for CRM in general and CRM success in particular (Bentum & Stone 2005). Likewise, customer orientation of service personnel is considered an important leverage for service firm’s success (Hennig-Thurau 2004). Customer-centric management system accelerates the use of CRM technology with the support of employees (Chang et al. 2010). IT can facilitate and enhance customer relationships focusing on customization through the deployment of sophisticated customer relationship management (CRM) systems (Dewhurst, Martinez & Dale 1999). Technological issues are also important and one of the drivers for CRM success (Roberts et al. 2005; Chen and Popovich 2003). In this regard it can be noted that, the RBV of the firm directs us towards the importance of IT (Barney 1991) and also has been considered as an important framework for measuring IT performance (Ray et al. 2005). Individual employees are the building blocks of customer relationships (McGoven and Panaro 2004; Chen and Popovich 2003). Accordingly Krauss (2002) mentioned that the hardest part of becoming CRM oriented is not the technology, it’s the people.

**Customer Knowledge**

Knowledge is the only meaningful economic resource (Drucker 1995), and gaining this knowledge is becoming an important differentiator for competitive advantage as it is dynamic and changes rapidly (Mithas, Krishnan & Fornell 2005).

Through CRM in general (Mithas et al. 2005; Xu and Walton 2005) and sales person in particular organization can capture some of what the customer knows (Yoon and Nilan 1999). Similarly, Homburg, Droll & Totzek (2008) argued that the generation of knowledge regarding customers’ needs is up to the frontline employee. In service relationship, through interaction, a sales person can gather knowledge (Gwinner, Bitner, Brown & Kumar 2005) about customer’s preferences, competing products and their appealing features, and sometimes industry trends. In a broader sense employees can come up with some more knowledge regarding selecting or refusing of products and services by a
consumer considering the issues of functionality, price, convenience, beliefs and conspicuous consumption (García-Murillo and Annabi 2002). Similarly, CRM technology enables the organization to communicate much better with their customers and to help customers manage their own needs and also facilitates information capturing from large numbers of customers (Jayachandran et al. 2005) which help the organization to build its customer knowledge base. Table 3 shows the items/variables for customer knowledge measurement along with the references. But there is limited knowledge about the effect of CRM applications on a firm's customer knowledge (Mithas et al. 2005). Likewise, Xu and Walton 2005 argued that very few studies have been established to address customer knowledge acquisition in the context of CRM implementation.

**Relationship Maintenance**

Earlier research on social and personal relationships shed light on the definition of relationship maintenance whereas CRM and Marketing literatures are silent rather focused on the dimensions of relationship maintenance. Conceptions of relationship maintenance differ however maintenance traditionally is thought to involve efforts to continue a relationship in its present state. Most of the scholars agree that maintenance occurs just after a relationship has finished beginning and just before it has started to end emphasising on stability (Montgomery 1993) and also considering as an interpersonal process (Baxter 1990). Stability of relationship also requires the intention to be in the relation that is continually changing, adapting to, accommodating or transforming the tensions of relational life.

Some authors argued relationship maintenance from customer’s economic perspective and emphasized switching cost and dependences as key drivers (Reinartz and Kumar 2004). Reinartz, Kraft & Hoyer (2004) opined that relationship maintenance has distinct dimensions like retention, up-selling/cross-selling (Becker et al. 2009), and referral management. Likewise, Aurier and N’Goala (2010) emphasised on customer retention as dimension of relationship maintenance. Based on the earlier research this study will consider customer retention, up selling/cross selling and customer
referral as dimensions of customer relationship maintenance. Table 4 shows the elements of customer relationship maintenance. Corresponding items/variables are also shown along with the references.

CRM, in general, increases the length of beneficial customer-firm relationships (Reimann et al. 2010) and customer orientation, in particular, helps to build long-term relationships (Bentum & Stone 2005) by offering added value to the customers (Narver and Slater, 1990; Garrido-Moreno and Melendez 2011). Various researchers (Hogan and Armstrong 2001; Srivastava et al. 2001) illustrate customers and customer relationships from RBV perspective. CRM also includes the delivery of increasing levels of satisfaction by the maintenance and promotion of relationship (Lindgreen, Palmer, Vanhamme, & Wouters 2006). Likewise, Information plays a key role in building and maintaining customer relationships and the use of CRM technology is expected to boost the ability of an organization to facilitate firm-customer interaction and to sustain profitable customer relationships through smooth sharing and integration of information (Day 2003; Jayachandran et al. 2005).

The previous discussions lead to the following hypothesis:

**Hypothesis 1a:** ICRM has significant role in customer knowledge generation

**Hypothesis 1b:** ICRM has positive influence on customer relationship maintenance

**Social Capital**

Social capital is defined as ‘the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit’ (Nahapiet & Ghoshal 1998, p. 243.)

Social capital dimensions, considered for this study, include social interaction (Chiu, Hsu & Wang 2006; Yli-Renko et al. 2001), network ties (Yli-Renko et al. 2001), trust (Chiu et al. 2006) and rapport, with two sub dimensions: enjoyable interaction and personal connection (Gremler, Gwinner & Brown 2001).

Knowledge acquisition (Adler & Kwon 2002; Nahapiet & Ghoshal 1998), creation and transfer of knowledge (Kogut and Zander 1996) and access to new sources of knowledge (Adler & Kwon 2002;
Nahapiet & Ghoshal (1998) have been identified as a direct benefit of social capital in general and relational dimension (Huysman and Wulf 2005) in particular. Similarly, Doz (1996) argued that trust, as relational dimension, has an important role within the firm as well as inter-personal knowledge transfer and willingness to share knowledge (Powell, Koput & Smith-Doerr 1996). Intensive social interaction facilitates knowledge transfer (Zahra, Ireland & Hitt 2000), increase the depth, breadth and efficiency of mutual knowledge exchange (Lane and Lubatkin 1998) and also associated with greater knowledge acquisition (Yli-Renko et al. 2001).

Maintenance of relationship is said to be highly dependent on sales associates and relationship managers (Gummesson 2002) where trust plays an important role as antecedent of motivation to enhance the scope of the relationship (Selnes 1998). Likewise, trust is also a basis for stable (Garbarino and Johnson 1999) and successful relationship (Berry 1995; Morgan and Hunt 1994). Researchers also argued that personal connection, as an important aspect of relationship maintenance, increases customer’s intention to maintain the relationship (Gremler et al. 2001).

Hence, it is hypothesised that:

**Hypothesis 2a:** Social capital positively influence customer knowledge generation

**Hypothesis 2b:** Social capital positively influence customer relationship maintenance

**Hypothesis 2c:** Social capital has significant impact on CRM success.

**Factors behind CRM success**

The KBV argues that organization capabilities arise from the accumulation and conversion of knowledge assets into capabilities which require the involvement of human capital (individual employees) and social capital (Kim 2006). Firms are increasingly based on the creation and exploitation of knowledge and knowledge-intensive services since they add value to the firm’s process (Grant 1996; Nahapiet & Ghoshal 1998; Nonaka 1994). From a better understanding of the customer, the company will have greater understanding of the true needs and expectations of the customer (Gwinner et al. 2005). To create customer satisfaction frontline employees must generate knowledge about customer needs (Homburg et al. 2008). Moreover, meeting the customer’s needs by
taking the time to listen to him/her and alter providing knowledge will foster the relationship between the customer and the firm. Since the company have a better understanding of the customers’ expectations and needs it will be able to improve customer service and thus achieve customer satisfaction and retention (Palmer, Lindgreen & Vanhamme 2005).

Better and durable relationships with the customer lead to customer satisfaction (Palmer et al. 2005), increased sales and the acquisition of new customers (Garcia- Murillo and Annabi 2002) and thus CRM success. The interaction between employee and customer helps the customer make an informed decision and foster customer satisfaction and loyalty (Garcia- Murillo and Annabi 2002). Similarly, customer referral value plays an important role in maximizing profitability (Kumar, Aksoy, Donkers, Venkatesan, Wisel & Tillmanns et al. 2010) to achieve CRM success.

Social capital can improve organization’s ability to improve performance (Kogut and Zander 1996) which is being supported by Gremler et al. (2001) as they found rapport significantly related to customers’ satisfaction and loyalty intentions. In this connection Jamal and Adelowore (2008) argued that personal interaction directly affects customer satisfaction.

Social capital, like ICRM, also play significant role in customer knowledge acquisition which in turn facilitate CRM success in conjunction with ICRM. From the literature it is evident that the impact of social capital and customer knowledge on CRM success has been considered in isolation and thus it is important to investigate whether CRM success can be better achieved through social capital mediated by customer knowledge since no prior research has been found in this regard.

From the literature it is evident that relationship maintenance facilitated by ICRM and social capital has significant impact on CRM success. Literature also suggests that social capital itself also has positive impact on CRM success. To date, few studies have considered the possibility that important intervening variables like customer relationship maintenance may mediate the relationship between social capital and CRM success.
The previous discussions results in the following hypotheses:

**Hypothesis 3:** Customer knowledge acquired by ICRM and social capital has positive impact on CRM success.

**Hypothesis 4:** Relationship maintenance supported by ICRM and social capital has positive impact on CRM success

**Hypothesis 5:** Customer knowledge mediates the relations between social capital and CRM success

**Hypothesis 6:** Relationship maintenance mediates the effect of social capital on CRM success

**FUTURE DIRECTIONS AND CONCLUSION**

This article develops a research model for factors behind Customer Relationship Management (CRM) success- an issue which is of considerable debate in the literature (Krasnikov et al. 2009; Eid 2007). The research model was designed to explore the components of ICRM and its expected outcome and their role on CRM success in conjunction with social capital. This adds to the knowledge of constituents of CRM success. Future research could test the entire research model. Parts of the model could also be considered and investigated in detail. Another interesting future study could be to look at the mediating and moderating effect of customer knowledge and customer relationship maintenance on the relation between ICRM and CRM success.

The model, including both of its main constructs and sub-factors can be taken as they are, or fine-tuned to carry out a comprehensive empirical study by the researchers of CRM arena. Organizations, especially service oriented and services focused, those are concerned for relationship based practices can use the constructs and factors of the study to identify their present status with respect to these constructs and factors. Our immediate plan is to test the proposed research model by surveying relationship managers of service sectors, especially banks.
REFERENCES


Eid R (2007) Towards a successful CRM implementation in banks: An integrated model, Service...


Hammami SM & Triki A (2011) Exploring the information technology contribution to service recovery performance through knowledge based resources, VINE 41(3): 296-09


Huysman M & Wulf V (2005) IT to support knowledge sharing in communities, towards a social capital analysis, Journal of Information Technology 00: 1-12.


Appendices:

**Figure 1: Proposed model for CRM Success**
Table 1: CRM success measurement

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency</td>
<td>1. Use of CRM system to reduce time of CRM.</td>
<td>Roh et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>2. Use of CRM system to reduce cost of CRM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Use of CRM system to alleviate CRM job load.</td>
<td></td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>1. Knowledge based customer offerings</td>
<td>Sin et al. (2005); Roh et al. (2005); Reimann et al. (2010)</td>
</tr>
<tr>
<td></td>
<td>2. Prompt service from employees</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Enhancement of friendly interaction with customers after</td>
<td></td>
</tr>
<tr>
<td></td>
<td>implementing CRM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Delivering value to our customers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Decrease in customer complaints</td>
<td></td>
</tr>
<tr>
<td>Profitability</td>
<td>1. New customers are increasing after implementation of the CRM</td>
<td>Roh et al. (2005); Reimann et al. (2010)</td>
</tr>
<tr>
<td></td>
<td>system.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Reselling/up-selling is increasing after implementation of the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CRM system.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Overall profitability is increasing after implementation of the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CRM system.</td>
<td></td>
</tr>
<tr>
<td>Loyalty</td>
<td>My organization customizes customer interactions to optimize value</td>
<td>Sin et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>and loyalty.</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Elements of ICRM and their measurement

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer orientation</td>
<td>1. Effort to find out what key customer needs.</td>
<td>Narver and Slater, (1990); Sin et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>2. Monitoring and assessing level of commitment in serving customer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>needs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Business strategies are driven by objective of increasing value</td>
<td></td>
</tr>
<tr>
<td></td>
<td>for customers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Attention to after-sales service</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Offering personalized products and services for valued customers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Building and maintaining customer relationships as a major goal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of the organization through top management leadership.</td>
<td></td>
</tr>
<tr>
<td>Customer centric management system</td>
<td>1. Focus on customer needs while designing business processes.</td>
<td>Jayachandran et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>2. Employees receive incentives based on customer satisfaction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>measures.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Business processes are designed to enhance the quality of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>customer interactions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Coordination of various functional areas and activities to enhance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the quality of customer experience</td>
<td></td>
</tr>
<tr>
<td>CRM people</td>
<td>1. Our organization has the right technical staff to provide technical</td>
<td>Sin et al. (2005); Jayachandran et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>support for the utilization of CRM technology in building customer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>relationships.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Encouraging employees to focus on customer relationships</td>
<td></td>
</tr>
<tr>
<td>CRM technology</td>
<td>1. Appropriate hardware and software to serve customers.</td>
<td>Chang et al. (2005); Sin et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>2. Use of IT to facilitates the management of customer relationships.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Integration of organization’s information systems across the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>different functional areas</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Comprehensive, centralized, and up-to-date database to consolidate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>customer information.</td>
<td></td>
</tr>
</tbody>
</table>
### Table 3: Customer knowledge measurement

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Knowledge</td>
<td>1. Regular and interactive communication with customers.</td>
<td>Sin et al. (2005); Jayachandran et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>2. Collection of and update customer information on a regular basis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Use of customer information to identify appropriate channel of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Understanding of customer needs and offer customization through</td>
<td></td>
</tr>
<tr>
<td></td>
<td>knowledge learning.</td>
<td></td>
</tr>
</tbody>
</table>

### Table 4: Elements of relationship maintenance and their measurement

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer retention</td>
<td>1. Attempt to build long term relationship with valued customers</td>
<td>Reinartz et al. (2004); Jayachandran et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>2. Customer retention is top priority.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Appropriate response to groups of customers with different values.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Systematic attempt to manage the expectations of valued customers.</td>
<td></td>
</tr>
<tr>
<td>Up selling/ cross selling</td>
<td>1. Systematic approach to nurture relationships to facilitate cross-</td>
<td>Reinartz et al. (2004)</td>
</tr>
<tr>
<td></td>
<td>sell and/or up-sell.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Individualized incentives for customers willing to strengthen</td>
<td></td>
</tr>
<tr>
<td></td>
<td>business with provider.</td>
<td></td>
</tr>
<tr>
<td>Customer referral</td>
<td>1. Incentives to current customers for acquiring new customers.</td>
<td>Reinartz et al. (2004)</td>
</tr>
<tr>
<td></td>
<td>2. Efficient management of the customer referral process.</td>
<td></td>
</tr>
</tbody>
</table>