Customer Relationship Management Model from Strategic Approach: A knowledge Management Perspective

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CUSTOMER RELATIONSHIP MANAGEMENT MODEL FROM STRATEGIC APPROACH: A KNOWLEDGE MANAGEMENT PERSPECTIVE

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Abstract
Purpose: To review the literature on Customer Relationship Management (CRM), identify the CRM models presented by different researchers. This paper considers CRM as a philosophy that can be translated into a strategy. An insight in the core components of CRM systems leading to inclusion of Tacit Knowledge (TK) can bring better understanding of marketing functioning. This understanding results in better decisions.

Design/methodology/approach: A review of more than 200 papers on CRM, marketing, relationship marketing and Knowledge Management (KM) directed the attention towards the CRM research models and revealed the proposal to integrate CRM with KM for transformation of CRM into a strategic approach.

Findings: A review of CRM models highlighted their Information Technology (IT) focus and directed the need for empirical validation, human involvement and specifically, that of knowledge with focus on TK.

Research limitations/implications: This study is conceptual, based on exploration of critical review of literature.

Practical implications: This exploratory study helps in understanding the primary and secondary components of CRM, integration of KM (specially TK) into CRM, its impact on successful CRM implementation, resultantly informed marketing decision making and improved organization performance.

Originality/value: This paper stands out to explore CRM as a basis for strategic decision making wherein knowledge especially TK is a strategic enabler in which human involvement can lead to successful CRM implementation and better organization performance.

Introduction
Knowledge era with a shift from supply driven to demand driven organization has led to a focus on customer. This focus is resulting in transformation of current world into a global village. Prior to transformation of organizations into customer-oriented approach, the focus was on short term benefits and relationships. This paradigm shift necessitates the importance of customers' expectations, needs, desires and wishes.

Ngai (2005) covering of 10 years publication from 1992 to 2002 published in 89 journals on Customer Relationship Management (CRM) domain is interesting and demanding furtherance thereafter. Following the laid down footsteps, this research views CRM from philosophical and process perspectives wherein the customers need and satisfaction are central focus for building a long term profitable relationship between the organization and customers (Table 1).

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Table 1: Philosophical and Process Perspectives of CRM

Sr.#	Philosophical Perspective	Author(s)	Process Perspective	Author(s)
1.	CRM is a strategy of identifying, attracting, acquiring, retaining, and cultivating profitable customer relationship over time.	Massey et al., 2001	CRM is a combination of business processes and technologies to inquire about company's customers.	Kim et al., 2003
2.	CRM is neither a concept nor a project but a business strategy to assist companies to understand the needs of a company's current and potential customers.	Lin and Su, 2003	The relationship activities and processes are to manage the customer relationship.	Heinrich, 2005
3.	The strategy used to learn about customers' needs and behaviors to build relationships with them.	Osarenkhoe and Bennani, 2007	CRM systems focus to optimize the customer value by focusing on marketing, processes and customer service.	Chang, 2007
4.	It can be defined as business strategies that enable a company to maximize its profit through understanding and satisfying the customer' needs.	Bull, 2003; Liu, 2007	Processes along with the people and technology are three main components of CRM.	Rababah et al., 2011
5.	CRM enhances the organization effectiveness if it is considered as a strategic approach.	Elmuti et al., 2009	It provides the structure how to develop and maintain a good relationship with customers.	Lambert, 2010; Wang and Feng, 2012
6.	An approach that enables organizations to identify, attract and increase retention of profitable customers.	Valmohammadi and Bladpass, 2014	A strategy consisting of four processes of attracting, acquiring, retaining and expanding the relationship with the customers.	Hadi, 2015
7.	CRM is considered to be an imperative strategy that not only improves a firm's innovation capability but also enhances its competitive advantage.	Valmohammadi, 2017		

In view of the above perspectives, the study approaches CRM from strategy development perspective. This approach in CRM has been adopted due to globalization, changing economic conditions, demanding customer behavior and most importantly knowledge-based organization. CRM cannot be viewed or understood without Relationship Marketing (RM).

The debate on RM started in 1950s and prior to that the focus was on massive production and selling, therefore it was called transaction marketing with a focus on short term benefits and relationships and with emphasis on services and relationships. Due to this short-term orientation; marketing had been seriously criticized (Dekimpe and Hanssens, 1999) and later on this provided foundation to RM. Sheth (2000) finds CRM roots in RM, and Ryals and Knox (2001) claim its foundation in RM and marketing.

Because of emerging digital economy, customers' expectations and experiences changed and throughout the 1990s, there was a need to shift from transaction marketing to RM (Light, 2003). Researchers are divided regarding the beginning of RM concept. Bagdoniene and Hopeniene, (2004) state that, Berry in 1953 first mentioned RM but Gronroos (1990) claims that it was first mentioned by Berry in 1983. Gronroos finding is also supported by others like Rosenberg and Czepiel, 1984; Gummesson, 1994; and Crosby et al., 1988. However, Berry is unanimously agreed to be the first to mention the term RM.

Relationship-oriented approaches have been increasingly advocated (Vargo and Lusch, 2004) and got acceptability in almost all the businesses. The RM concept was primarily applied in capital assets and services, consumer goods and brand management (Fournier, 1998). This wide acceptability enforced businesses to develop a proper system or mechanism to manage the customer relationships, because relationships are heart of any business. This RM has in it CRM.

There exists increasing interest in CRM (Day, 2003) and the popularity of CRM has grown over the ten years across all disciplines (Barua and Udo, 2010). CRM concepts application across all business sectors and well documentation in the literature have been established (Bull, 2003; Karakostas et al., 2005; DaSilva and Rahimi, 2007; Chang and Ku, 2009; Lambert, 2010; Murray et al., 2011; Wang and Feng, 2012; Khodakarami and Chan, 2014 and Valmohammadi, 2017). According to Iriana and Buttle (2007) literature on CRM has identified Analytical CRM, Operational CRM and Strategic CRM.

The Analytical and Operational CRMs are closely related to data-oriented approach, emphasizing on collecting and intelligent mining of customer data. Khodakarami and Chan (2014) introduced collaborative CRM along with analytical and operational CRMs. Payne and Frow (2005) stress, that CRM should be positioned in the strategic context of customer-centric approach. Likewise, Iriana and Buttle (2007) argue; strategic CRM is concerned with customer centric approach to do business. Still, seemingly an interesting aspect of CRM i.e. its relation to strategic approach could not find much attention.

One such strategic approach is customer centric, since customers are the most valuable asset for any product development (Bretschneider and Zogaj, 2016). This customer centric approach led the organization to secure the customers, that save organization resources. Knox (1998) argues securing existing customers is far more profitable than attracting new customers. Furthermore, acquiring of new customers is five times more expensive than retaining existing customers (Karakostas et al., 2005). Lowering the costs by keeping customers rather attracting and acquiring new customers is the aim of CRM. This is possible only if the organizations are able to track customers' behavior and needs, and manage this knowledge effectively (Khodakarami and Chan, 2014). The CRM without a knowledge-based approach is destined to work in isolation.

Customer Knowledge Management
Knowledge is a key source for any organization and an important differentiator for a competitive advantage (Mansana and Naik, 2016). However, Knowledge is a complex term and the literature has no consensus upon its exact definition (Firestone, 2008). Thus, many definitions of Knowledge Management (KM) have been developed and published. KM is an umbrella term (Bakshi, 2005). Defining KM largely depends upon the area of interest under study. This is not our focus to debate on the different KM definitions; however, the definitions from strategic and process point of view are reviewed.

O' Dell and his colleagues (1988) state that KM is a strategy to improve organizational performance of getting right knowledge from the right people at right time, facilitate people to share information and put information into action. Von Krogh (1998) points out that KM helps the organization to compete through identifying and exercising the shared knowledge in an organization. KM deals with diverse but interdependent processes of knowledge creation, storage, transfer, and application (Alavi and Leidner, 2001). In addition to this, Sapsed et al., (2002) stress the importance of team. They argue that group of individuals generate, share, and transmit knowledge and it is possible only in team working. Yang (2007) definition of KM suggests that it is a process of identifying and collecting information, enabling employees to retrieve organizational knowledge, exploiting and applying knowledge, storing and disseminating it throughout the organization. KM has a positive influence on CRM to enhance the service quality of the customers (Tseng, 2016).

KM can be referred as a business process, having the scope of market knowledge, competitor knowledge, product and service knowledge and customer knowledge (Plessis and Boon, 2004). KM supports a company to make strategic decisions and develop innovative products and services for business excellence (Chen and Su, 2006; Fan

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and Ku, 2010). The knowledge of behavior of the customers or the knowledge about the customers' wants is needed to make a strategic decision in order to gain competitive advantage (Jiebing et al., 2013).

Cegarra-Navarro and Sanchez-Polo (2008) have identified four types of knowledge; (i) customer knowledge (ii) individual knowledge (iii) collective knowledge and (iv) machine-readable forms (data and information store in IT systems). However, the scope of this study is customer related knowledge. And Customer Knowledge (CK) can be referred as translation and dissemination of customer related information and knowledge in the organization.

Rowley (2002a) refers CK as: knowledge about customers and knowledge possessed by the customers. While Garcia-Murillo and Annabi, 2002; Desouza and Awazu, 2004; and Su et al., 2006; segregate CK into three major categories. The first category is knowledge about customers: deals with knowledge about customers' background, expectations, preferences and motivation. The second category deals with knowledge for customers: fulfills the customers' knowledge requirements, includes the knowledge related to products, services, installation etc. And the third category deals with knowledge from customers: concerned with the knowledge that can be generated through customer interactions. It includes knowledge about customer's needs & wants and buying patterns.

KM and CK are similar in nature but different in scope in the sense that former deals with the exploitation of corporate knowledge and the latter is concerned with management and exploitation of CK (Jennifer, 2002). No one can deny the importance of customers in organization success or failure. That is why CKM is generally placed on top by firms for knowledge accessibility for both firms and customers (Fidel et al., 2015).

Contemporary CRM Models

Reviewing the preceding discussion, upon CRM, KM, CK and CKM, it is necessary to explore the literature and to present the efforts that have been made by different researchers in developing the CRM models. Only those models have been selected that are directly related to our study; and models merely based on technology have been excluded since the focus of our research is KM. Urbanskiene et al., (2008) evaluate 13 CRM models with their structures for the period 1994 to 2007. The following models with focus on CRM have been found to be directly relevant to the study in hand.

Table 2: CRM Models

Sr. #	Model	Author & Year
1	KM-Based CRM Analytics Systems	Bose and Sugumaran, 2003
2	The CRM Value Chain	Buttle, 2004
3	Payne's Model of CRM	Payne and Frow, 2005
4	Model of Creation of CRM Systems	Urbanskiene et al., 2008
5	CRM as a Strategic Approach	Elmuti et al., 2009
6	Mediating role of KM and Organizational Commitment in CRM Success	Garrido-Moreno et al., 2014
7	CRM, Innovation and Performance	Valmohammadi, 2017

1. KM-Based CRM Analytics Systems

Bose and Sugumaran (2003) presented a KM based CRM system as given in Figure 1. The study established that in customer centric business environment, KM based CRM system is much needed and is of utmost importance. The model concludes that KM-based CRM systems support organizations in their business decisions. The model is based on four major components:

  (i) **Internal and external data sources:** This indicates different types of data sources (both internal and external) required to manage the diverse types of information, such as organizational processes and customer related information to solve the problems or to make strategic decision.

  (ii) **Knowledge acquisition:** This part of the model pertains to identifying, acquiring, and storing relevant knowledge for managing customers.

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(iii) **Knowledge repositories:** The repositories form third part of the model to make continuously updated new information available.

(iv) **Utilization of knowledge:** The fourth component of the model demonstrates searching and retrieving relevant knowledge for stakeholders to solve the problem in hand.
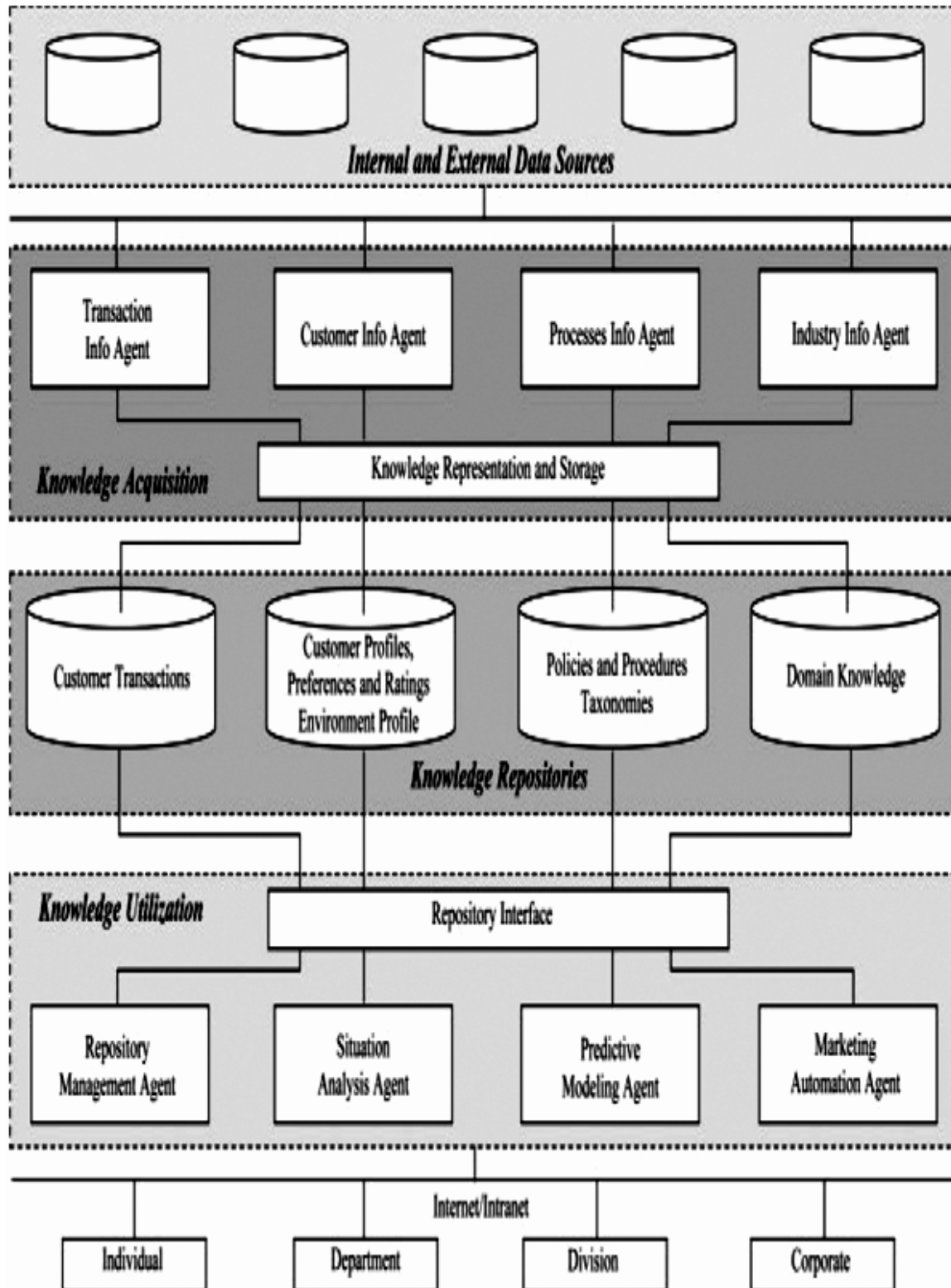
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Figure 1: KM-based CRM Analytics Systems (Bose and Sugumaran, 2003)

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Although the model is appropriate for storing massive information regarding customers and organization and at the same time provides the required information whenever it is needed to solve the problems or making business decisions. But it is not appropriate for strategic marketing decision making, because the decision is taken on the basis of analysis of data that restricts it to CRM analytics.

It is dominated by IT. Technological components have been used in codifying, storing, retrieving and disseminating the knowledge such as XML and intelligent agents (human replacement, which interprets the information). Furthermore, the researchers themselves admit that the model cannot capture all types of knowledge and knowledge repositories are not consistent with the business process, because repository cannot replace human beings.

2. The CRM Value Chain

The captioned model (Figure 2) is given by Buttle (2004) which is useful for developing and implementing the CRM strategies. The ultimate purpose of this model is to build a strong relationship with strategically profitable customers (but not a strong profitable relationship irrespective of any customers). The model encompasses five primary stages with four supporting conditions.

The primary stages ensure that a company analyzes the customer portfolio to identify the target customer and builds a customer database. That database makes information accessible for decisions and analysis of the customer behaviors and attitudes. It also builds a strong relationship network of suppliers, employees, customers which helps to understand the requirements of the chosen customers. That network brings value proposition to customers and company through continuously creating and delivering value. The network enhances the customer life time value by motivating customers to purchase repeatedly which results in retaining and acquiring profitable customers.

Pre-determined supporting conditions of primary stages include leadership and culture; data and information technology; organization design; people and processes all aligned together help CRM to function effectively. The bottom line is to increase the customer profitability.
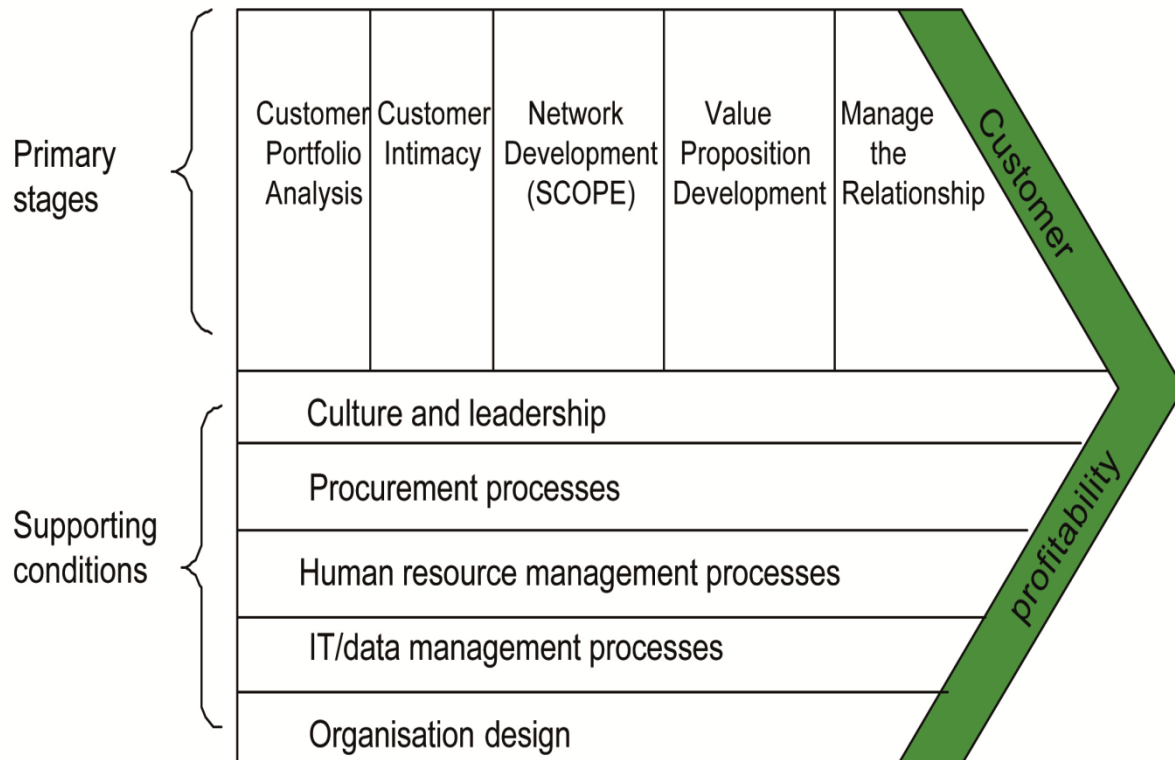
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Figure 2: The CRM Value Chain (Buttle, 2004)

It is a theoretical study in which Buttle (2004) took people, process and technology as supporting conditions to assist primary stages to get ultimate goal i.e. profitable customers. Though, the balance integration among people, processes and technology for successful CRM implementation, according to Urbanskiene et al., (2008), is there but the people are not involved in interpretation of information. Data mining technique has been used to analyze the customer portfolio and to develop strategies in order to build closed relationships. Furthermore, integration of knowledge particularly TK has not been incorporated.

3. Payne's Model of CRM

Payne and Frow (2005) identified five cross functional processes: (i) strategy development process, (ii) value creation process, (iii) multichannel integration process, (iv) performance assessment process and (v) the information management process (Figure 3). This is really a comprehensive and too generic model, encompasses almost all types of CRM. The first two processes deal strategic CRM, the multichannel integration process represents operational CRM, and information management process enlightens upon the scope of analytical CRM.
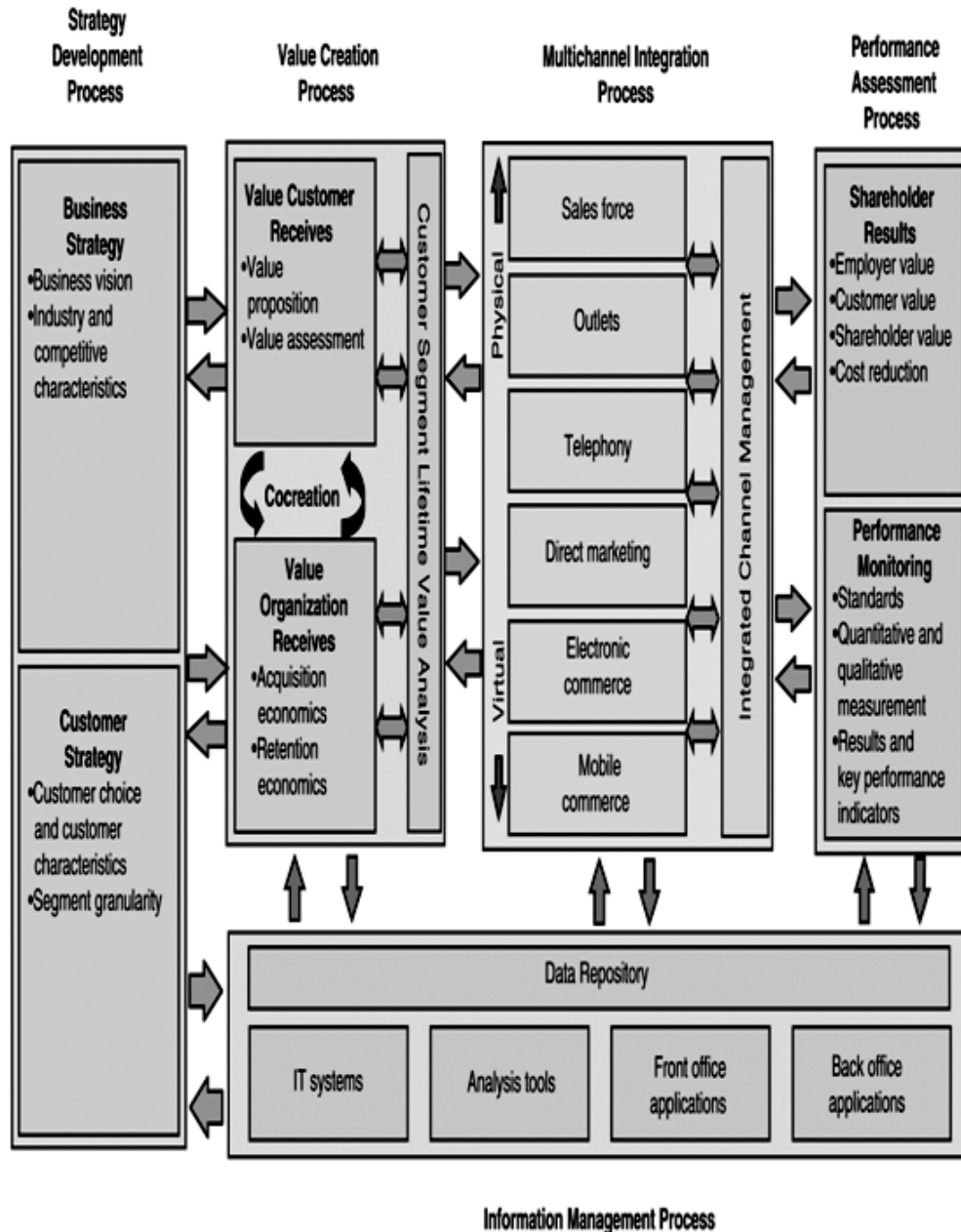
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Figure 3: Payne's Model of CRM (Payne and Frow, 2005)

Above mentioned theoretical model is complicated and difficult to understand and practise. However, the strategy development process and value creation process have been considered very important processes that support in strategy development and help in making strategic decisions. The customer knowledge is channelized and gathered through sales force (employees) of an organization, as indicated in this model, which is the most important contribution of the model. But it cannot get the desired result because the technology has been given the role of analyzing and interpreting the information.

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4.   Model of Creation of CRM Systems

This research-based model (Figure 4) has been developed by Urbanskiene et al., (2008). The main purpose of this model is to guide the successful CRM implementation and the focus is to measure the effectiveness and profitability of enterprise and customers. The process starts with screening the environment. The strategy has been developed and formulated based on the audit of the current situation. The CRM strategy is the basis for the creation and implementation of CRM system. In this model customers' element is primary and the most important part; and communication channel, information sources and database are secondary but playing a vital role in analysis of information and formation of customers' data base.
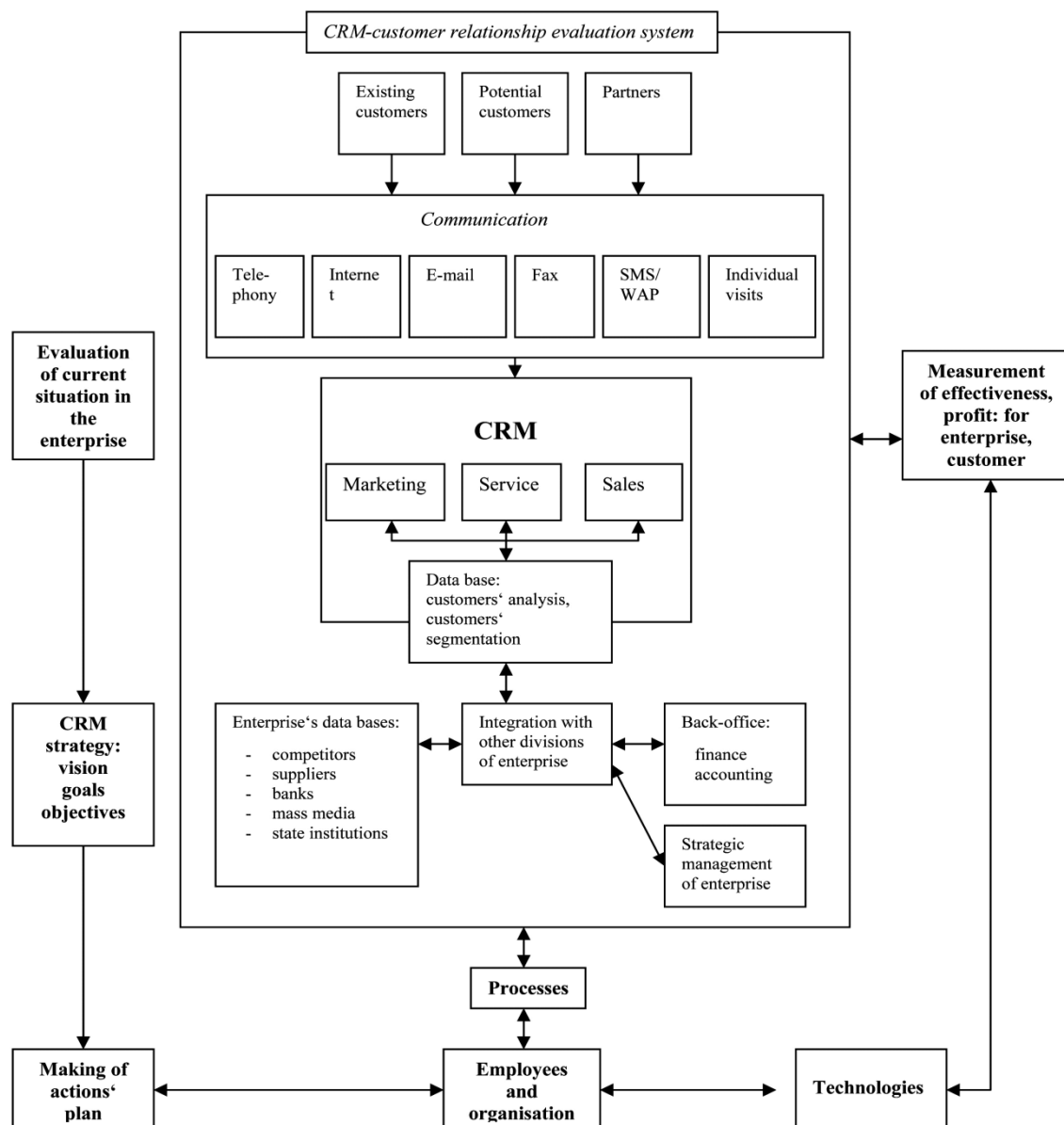

Figure 4: Model of Creation of CRM Systems (Urbanskiene et al., 2008)

The model is too generic in nature to practise. The system, conceived in the model, integrates customers, employees, organization, processes and technology. It summarizes the research elements for successful CRM

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implementation. The most important is the involvement of employees in analyzing the situation, formulating the strategy and taking actions to improve the relationship with customers. The model is lacking in integrating knowledge because a database is being used for incorporating the information in system.

5.   CRM as a Strategic Approach

The below mentioned model is empirically tested research model developed by Elmuti et al., (2009). The main purpose of this model is to uncover the links among variables and their influence on organizational effectiveness and customer responsiveness that facilitates to get a competitive advantage. The model (Figure 5) identifies five measurement variables: integration factors, strategic planning, technical factors, business process re-engineering and human resource management. Each variable has certain impact on other variable. The research model considers these variables as important determinants for organization readiness to implement CRM strategy.
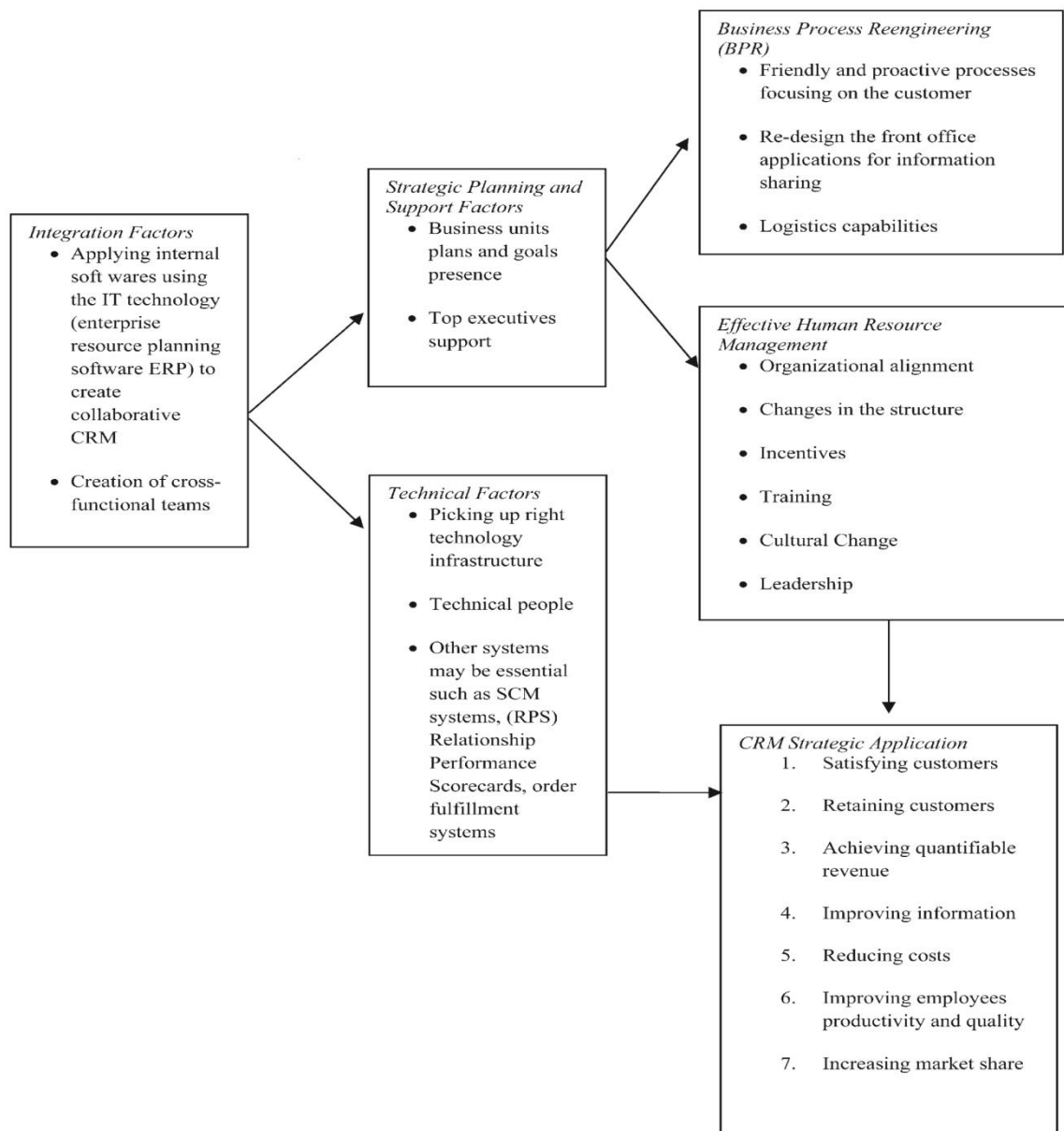

Figure 5: CRM as a Strategic Approach (Elmuti et al., 2009)

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Keeping in view the last four theoretically developed models, it emanates a plausible impact. This empirical model is based on survey of 500 organizations throughout the United States. There were 160 out of 500 questionnaires usable for this study. The result revealed that 94% of the respondents view CRM as a strategic enabler and the role of IT as a tool to enhance the strategic direction efficiently. The study also found that increase in the integration of activities such as functional areas, information sharing, cooperation and collaboration throughout the organization contributes to the CRM success. However, this model lacks in dealing with knowledge. But it provides a good insight which allows companies to improve the quality and productivity with reducing cost due to improved communication among employees and customers.

6.   Mediating Role of KM and OC in CRM Success

CRM technology infrastructure is considered as a basic resource wherein both KM and Organizational Commitment (OC) are playing the role of mediators (complementary resources) in CRM success (Figure 6). CRM technology infrastructure comprises on the IT solutions that provides the information readily available across the organization resultantly helps in seeking in-depth customer information, facilitate employees job performance, reduces role ambiguity, eliminating the non-productive information, increase in market share, sales and organization performance.
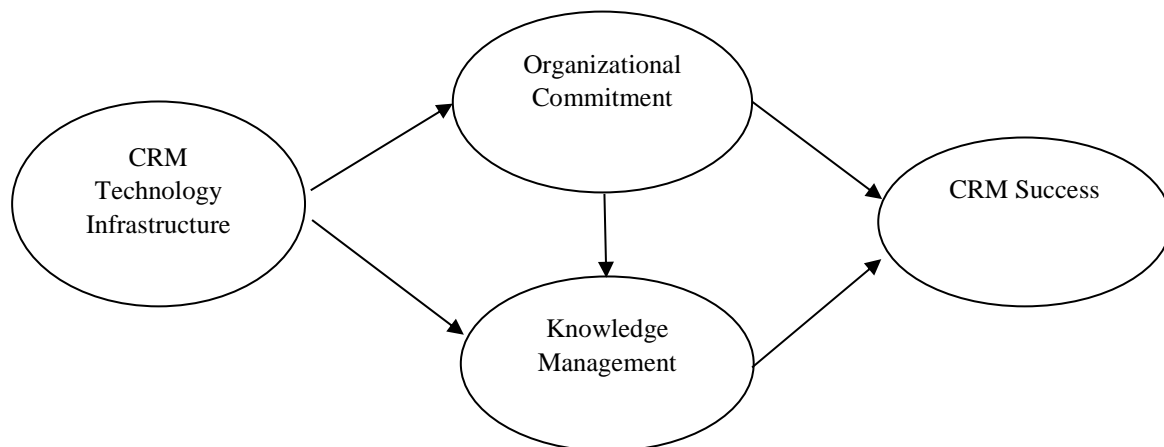

Figure 6: Mediating Role of KM and OC in CRM Success (Garrido-Moreno et al., 2014)

Garrido-Moreno and his colleagues have found CRM technology infrastructure as an enabler having the indirect impact on CRM success. Human factor is crucial to the success of CRM strategy which has been addressed but overwhelming role of technology is evident in this model. In contrast, (Basit et al., 2017) claim that the role of management as a strategic enabler and Tacit Knowlede (TK) as a tool for successful implementation of CRM and strategic direction of the whole organization is important for KM.

7.   CRM, Innovation and Performance

Given model (Figure 7) has investigated the relationship among CRM practices, innovation capability and organizational performance of Iranian manufacturing firms. Result revealed a significant and positive relationship of CRM practices on innovation capability and organization performance. Innovation capabilities also have a significant and positive impact on organization performance.
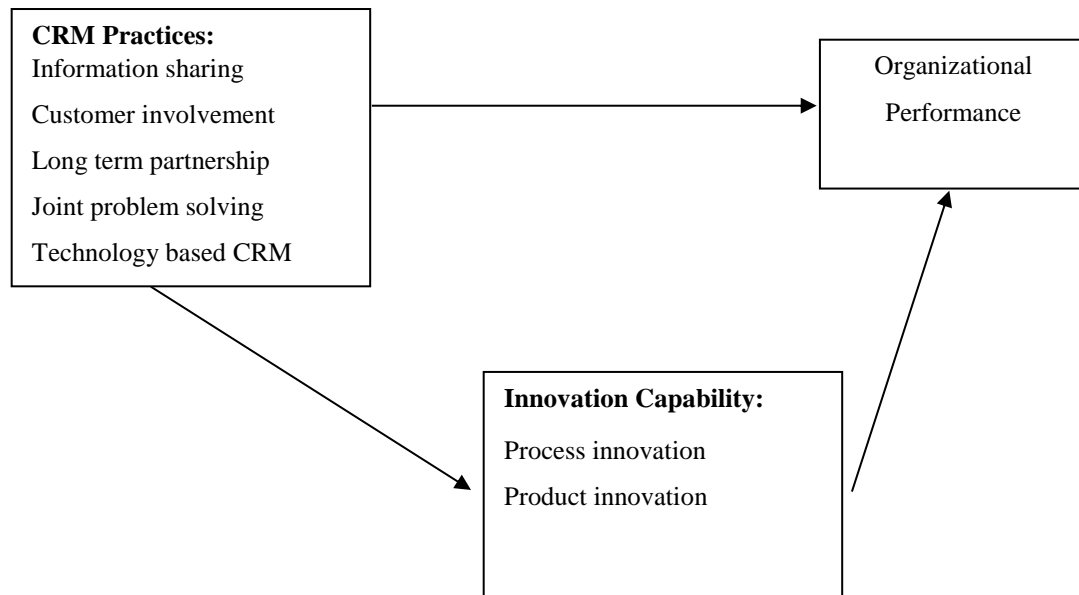
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Figure 7: CRM, Innovation and Performance (Valmohammadi, 2017)

Structure equation modeling test is used to validate the data collected from 211 firms. Finding of this research has revealed CRM as a strategy to improve innovation capability and enhance firm's competitive advantage. No mechanism has been suggested in this model to process the information other than IT. Foss and his colleagues argue that IT enabled business strategy has not been considered truly positive (Foss et al., 2006) and any competitive advantage that brings by IT is easily be imitable (Davenport and Prusak, 1998).

8.   A brief Analysis of Contemporary CRM Models

Viewing CRM models at a higher abstract level a conceptual model can be drawn as given in Figure 8, wherein CRM systems take input in the form of data and information (i.e. explicit knowledge), process it and produce the required outcomes.
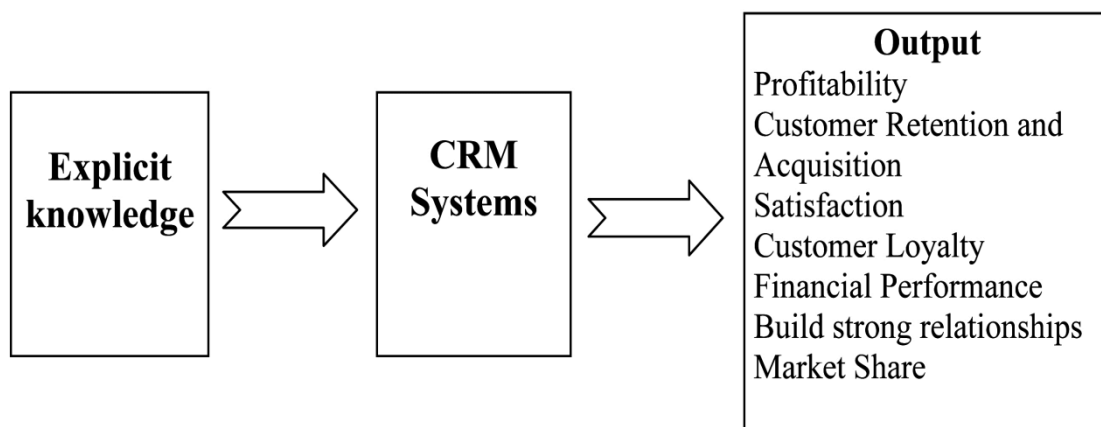

Figure 8: An Archetypal Contemporary CRM Model

CRM is extensively misunderstood by marketing management and seriously misrepresented by Information Technology (IT). Understanding CRM requires bringing out some of the existing misconceptions about itself and the causes of high CRM failure. Companies are being sold back office solutions (i.e. predictions based on past

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purchasing behavior and patterns of customers) and front-office solutions (i.e. Inter-active Voice Response i.e. IVR). But, fundamental benefits that CRM systems are supposed to provide are missing out of strategic decision making.

There is a common misconception that CRM is standalone software with many technological components but perceiving the CRM in "mainly a technological terms" is a basic mistake (Osarenkhoe and Bennani, 2007). Most of the CRM systems have failed because of high degree of dependence of CRM systems on technology for their successful implementation (Frantz and McDougall, 2004). High CRM failure rate owe a great deal to dominating role of IT in CRM and overlooking the TK, which otherwise is very useful in predictions of human behavior and successful CRM implementation.

Knowledge Enabled Strategic CRM Systems

After critical review of literature and studying CRM models, their components and limitations, a knowledge-enabled strategic CRM model has been conceived and presented (Figure 9) which provides the framework and present an outline for successful implementation of CRM systems. Research evidently supports the role of Explicit Knowledge (EK) in the form of data and information but the due role of TK is not properly acknowledged. EK with implicit built in TK is also being considered as the most important determinant of successful CRM implementation. This paper, therefore, urges to view CRM strategically with an emphasis to structurally build the TK into the processes (Figure 9).
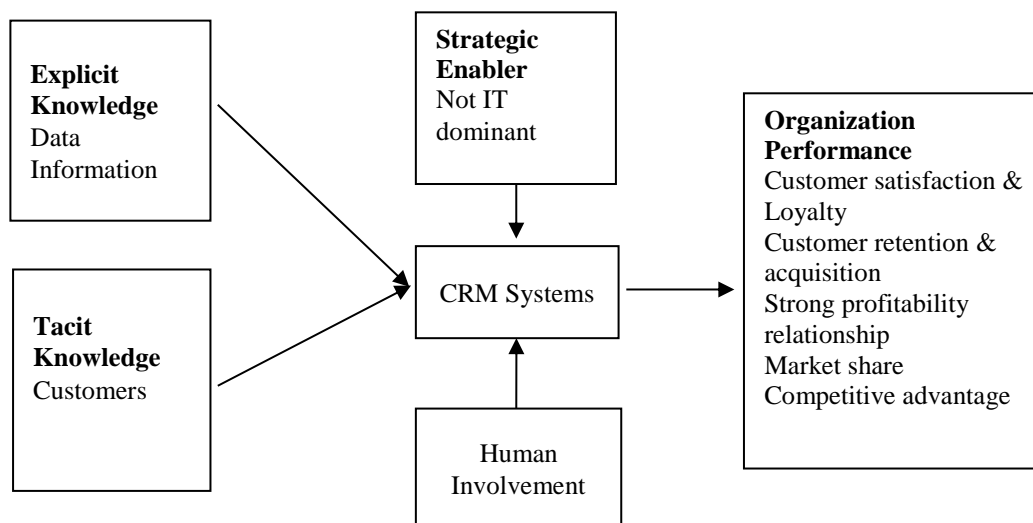

Figure 9: Knowledge-Enabled Strategic CRM Model

CRM and KM are management disciplines apparently with different slants and roots, but actually interrelated and integrated. They are necessary for a customer-oriented organization. Bose and Sugumaran (2003) stress that there is a need to integrate CRM with KM, to create Knowledge-enabled CRM processes. For more than ten years researches and scholars have been trying to understand the concept and nature of marketing knowledge (Kohlbacher, 2008) but have not come to a common ground (Kohlbacher et al., 2007). In marketing domain, KM and CRM are not clearly described (Fidel et al., 2015).

In spite of this, a great synergy can be achieved by integrating them both with the help of Customer Knowledge (CK). As CK is an important asset for a business and a strategic source of competitiveness for any organization (Fidel et al., 2015), therefore crucial aspect is to collect and manage it. Because of unpredictable human behavior, CK management is possible only when it is continuously reviewed and updated.

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To overcome this shortcoming Customer Knowledge Management (CKM) facilitates as an integrated management approach (Gibbert et al., 2002; Desouza and Awazu, 2004). CKM model has drawn attention through the convergence of both KM and CRM i.e. people-oriented approach and data-oriented approach respectively (Garcia-Murillo and Annabi, 2002; Gebert et al., 2003).

CRM and KM both are important management approaches with different disciplinary roots; wherein the former deals the relationship approaches and models; and the latter concerns with the cognition and mental models. CRM concerns both customers and employees but the perspective is outside the organization, whereas, KM concerns employees only and perspective is inside organization. For interaction, CRM addresses the loyal and profitable customers to make a profitable relationship with the right communication tool; on the other hand, KM emphasizes on organizational communication and addresses the key issues such as knowledge creation, sharing, using and exploiting.

CK is considered as a sub part of KM and CKM is either a CRM or KM. It is more appropriate to see CKM as management area in between CRM and KM, having marketing knowledge competence. In addition to this, Liew (2008); and Toriani and Angeloni (2011) have also put effort to integrate CRM and KM.

Zaltman (2003) concludes that CRM has been widely accepted across the disciplines, but remains focused on collecting and managing data and information instead of knowledge especially TK. Marketing approaches have exceedingly focused on explicit knowledge and overlook the importance of TK (Gibbert et al., 2002; Kohlbacher, 2008). It is a knowledge economy where today's knowledge will not solve tomorrow's problems (Hultman et al., 2009). Now the need is to develop a method or a system of surfacing the TK. It is necessary to store and maintain it in accordance with the requirements of not only sustainability of the organization but also for its continuous growth and competitive edge (Murray et al., 2011).

Speaking about CRM is not the same as speaking about technology (Aizcorbe and Anahuac, 2007). Kumar and Reinartz (2006) argue that CRM is not just an exercise for IT rather IT just supports the CRM. Technology can only facilitate in gathering and interpreting the data and information and is not able to convert information into knowledge. The central role of IT is to enhance the strategic direction; it is not the main strategic enabler (Elmuti et al., 2009) but a predictor to for an effective CRM process (Chong et. al., 2015)

Most of the IT experts consider technology to be a better alternative than face to face. But technology cannot hold all the answers and knowledge. Knowledge is a human attribute and it is the human that converts information into knowledge. Likewise, IT enabled business strategy has not been considered truly positive (Foss et al., 2006). On the contrary, human knowledge is a breakthrough opportunity (very hard to copy), and conversely any competitive advantage that brings by IT is easily be imitable (Davenport and Prusak, 1998). The involvement of human being is necessary to interpret and conceptualize the complexity associated with the TK.

Conclusion

CRM is a philosophy that can be translated into a business strategy to attract, retain and build a strong profitable relationship with the customers (opposing the definition of relationship with the profitable customers) (Basit et al., 2017). Diversity of CRM models and their structures reveal that each model has valuable contribution in research. Keeping in mind the different CRM models and the discussion mentioned it is concluded that different authors distinguish similar CRM models in the form of process, procedure, formation and stages. Most of the authors start CRM process with planning and strategy (in broader term defines the vision, mission, goals and objectives) but for executing the process they jump to IT.

Knowledge has not been considered in a true spirit in almost every model and particularly TK has not been considered altogether. Dominating role of IT and undermined management practice, lack of empirical research and lack of human involvement are evident there in almost all the models. That is why, most of the firms are unable in launching a successful CRM program because CRM is viewed as technology initiative (Kale, 2004) and practiced as a technical rather than as a marketing concern (Jain, 2005). Piskar and his colleagues disclose that CRM failure rates have always been very high (Piskar and Faganel, 2009). Basit and his colleagues provide some

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statistics which shows high CRM failure rate because of (i) undermining the importance of TK (ii) lack of human involvement and (iii) taking it in IT perspective not in management perspective. He further argued the risk associated with this can be properly covered with the help of TK about customers.

Almost every CRM model is based on explicit knowledge (data and information) and overlooks the importance of TK which is sin qua non to gain organization performance. Based on literature, Cambra-Fierro and his colleague (2017) have concluded that previously CRM was considered as mainly an IT enabled strategy to provide customer related solutions, though IT can only make sure the smooth process of CRM (Chong et. al., 2015). In addition to this, Cristiane with his colleagues supports the basic idea of CRM as a business philosophy, based on strategic approach (et. al., 2016) wherein human involvement plays a pivotal role in processing of information and interpretation of knowledge.

Novelty of the Study
The paper in hand reveals some of the misconceptions and misunderstandings that make CRM very fragile which leads to high failure rate and if consider with right wisdom can bring improvement in organization performance.

Limitation and Directions for Future Research
This paper is subject to usual limitations that suggests new direction for further research. Present study is based on in depth critical review of literature, thus future research should investigate the connection between different factors. Human involvement and role of IT may further be elaborated in the context of KM and CRM. Trust and culture of knowledge sharing can also be further investigated as employees hold knowledge having fear to lose their powers, status and authority that prevent them to share knowledge. In today's knowledge era, companies are compelled to address knowledge acquisition, knowledge sharing and disseminating it across the departments.

Practical Implications
Previously KM research was largely considered on defining the knowledge, KM and types of knowledge which is shifted towards solving business problems and its integration in CRM system in this paper. Organizations invest in costly CRM systems but could not reap the potential benefits which raise the questions on credibility of managers. Findings are particular interest to managers.

References
[1] Aizcorbe, A.C. and Anahuac, U. (2007). CRM as an Innovative Element of Direct Marketing and its Impact on Market Performance. *International Business and Economics Research Journal,* 6(5), 7-18.
[2] Alavi, M. and Leidner, D.E. (2001). Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*, *25*(1), 107-136.
[3] Bagdoniene, L. and Hopeniene, R. (2004). *Services Marketing and Management*. Kaunas Technology, 468.
[4] Bakshi, R.H.K. (2005). Key Issues in Knowledge Management: Introductory Analysis. *Pakistan Journal of Social Sciences,* 3(5), 715-723.
[5] Barua, M.E. and Udo, G.J. (2010). Development and Diffusion of Customer Relationship Management across Disciplines: Fad of Fashion? *Issues in Information Systems,* 11(1), 1-8.
[6] Basit, A., Tahir A., Khan, M.M. and Latif, M.I. (2017). Tacit Knowledge Augmented Customer Relationship Management Systems: An Empirical Investigation. *Pak J Commer Soc Sci*. 11(3), 1005-1026.
[7] Bose, R. and Sugumaran, V. (2003). Application of Knowledge Management Technology in Customer Relationship Management. *Knowledge and Process Management,* 10(1), 3-17.
[8] Bretschneider, U. and Zogaj, S. (2016). Exploring strategies for capturing customer's tacit knowledge in customer integration methods. *International Journal of Knowledge Management*, *12*(2), 1-19.
[9] Bull, C. (2003). Strategic Issues in Customer Relationship Management Implementation: Effectiveness Issues and Insights. *Journal of Service Research*, 9(2), 184-194.
[10] Buttle, F. (2004). *Customer Relationship Management: Concepts and Tools.* Oxford: Elsevier

INTERNATIONAL JOURNAL OF RESEARCH SCIENCE & MANAGEMENT

Buttlerworth-Heinemann.

[11] Cambra-Fierro, J.J., Centeno, E., Olavarria, A. and Vazquez-Carrasco, R. (2017). Success factors in a CRM strategy: technology is not all. *Journal of Strategic Marketing, 25*(4), 316-333.

[12] Cegarra-Navarro, J.G. and Sánchez-Polo, M.T. (2008). Defining the Knowledge that an Organization Requires to Create Customer Capital from a Customer Perspective. *The Service Industries Journal*, 28(8), 1125-1140.

[13] Chang, H.H. (2007). Critical Factors and Benefits in the Implementation of Customer Relationship Management. *Total Quality Management and Business Excellence,* 18(5), 483-508.

[14] Chang, H.H. and Ku, P.W. (2009). Implementation of Relationship Quality for CRM Performance: Acquisition of BPR and Organizational Learning. *Total Quality Management & Business Excellence,* 20(3), 327-348.

[15] Chen, Y.H. and Su, C.T. (2006). A Kano-CKM model for customer knowledge discovery. *Total Quality Management*, 17(5), 589-608.

[16] Chong, C.W., Hasanian, G. and Gan, G.C. (2015). Application of knowledge management factors on customer relationship management process. *Library Review*, *64*(8/9), 583-596.

[17] Cristiane, D.P., Picoto, W.N., Dhillon, G. and Caldeira, M. (2016). "Value-focused objectives for CRM system adoption". *Industrial Management & Data Systems*, *116*(3), 526-545.

[18] Crosby, I.M., Gandolfi. F. and Moor, R.M. (1988). Control of protein synthesis during early cleavage of sheep embryos. *J. Reprod. Fert*, 82(1), 769-775.

[19] DaSilva, R.V. and Rahimi, I.D. (2007). A Critical Success Factor Model for CRM Implementation. *International Journal of Electronic Customer Relationship Management,* 1(1), 3-15.

[20] Davenport, T.H. and Prusak, L. (1998). Working Knowledge: Managing What Your Organization Knows. *Harvard Business School Press, Boston.*

[21] Day, G.S. (2003). Creating a Superior Customer-Relating Capability. *MIT Sloan Management Review*, 44(3), 77-82.

[22] Dekimpe, M.G. and Hanssens, D.M. (1999). Sustained Spending and Persistent Response: A New Look at Long-Term Marketing Profitability. *Journal of Marketing Research*, 36, 397-412.

[23] Desouza, K.C. and Awazu, Y. (2004). Gaining a Competitive Edge from Your Customers: Exploring Three Dimensions of Customer Knowledge. *KM Review*, 7(3), 12-15.

[24] Elmuti, D., Jia, H. and Gray, D. (2009). Customer Relationship Management Strategic Application and Organizational Effectiveness: An Empirical Investigation. *Journal of Strategic Marketing,* 17(1), 75-96.

[25] Fan, Y.W. and Ku, E. (2010). Customer focus, service process fit and customer relationship management profitability: the effect of knowledge sharing. *The Service Industrial Journal, 30*(2), 203-223.

[26] Fidel, P., Schlesinger, W. and Cervera, A. (2015). Collaborating to innovate: Effects on customer knowledge management and performance. *Journal of Business Research*, *68*(1), 1426-1438.

[27] Firestone, J.M. (2008). On Doing Knowledge Management. *Knowledge Management Research & Practice,* 6(1), 13-22.

[28] Foss, T., Schum, G. and Rothenberg, S. (2006). Tacit knowledge transfer and the knowledge disconnect. *Journal of Knowledge Management*, *10*(1), 6-18.

[29] Fournier, S. (1998). Consumer and their Brands: Developing Theory in Consumer research. *Journal of Consumer Research,* 24(3), 343-373.

[30] Frantz, B. and McDougall, G. (2004). Assessing the Potential of Customer Relationship Management. *Services Marketing Quarterly*, 26(1), 1-18.

[31] Garcia-Murillo, M. and Annabi, H. (2002). Customer knowledge management. *The Journal of the Operational Research Society*, *53*(8), 875- 884.

[32] Garrido-Moreno, A., Lockett, N. and Garcia-Morales, V. (2014). Paving the way for CRM success: The mediating role of knowledge management and organizational commitment. *Information & Management,* 51(1), 1031-1042

[33] Gebert, H., Geib, M., Kolbe, L. and Brenner, W. (2003). Knowledge-enabled CRM: integrating CRM and knowledge management concepts. *Journal of Knowledge Management*, 7(5), 107-123.

[34] Gibbert, M., Leibold, M. and Probst, G. (2002). Five Styles of Customer Knowledge Management,

INTERNATIONAL JOURNAL OF RESEARCH SCIENCE & MANAGEMENT

and How Smart Companies Use Them to Create Value. *European Management Journal*, 20(5), 459-469.

[35] Gronroos, C. (1990). Relationship Approach to Marketing in Service Context: The Marketing and Organizational Behavior Interface. *Journal of Business Research,* 20, 3-11

[36] Gummesson, E. (1994). Making relationship marketing operational. *International Journal of Service Industry Management*, 5(5), 5-20.

[37] Hadi, W. (2015). The Relationship between CRM Strategies Stage on Competitive Advantage: An Analytical Perspective. *International Journal of Business and Management*, 10(8), 245-251.

[38] Heinrich, B. (2005). Transforming strategic goals of CRM into process goals and activities. *Business Process Management Journal,* 11(6), 709-723.

[39] Hultman, M., Robson, M.J. and Katsikeas, C.S. (2009). Export product strategy fit and performance: an empirical investigation. *Journal of International Marketing,* 17(4), 1-23.

[40] Iriana, R. and Buttle, F. (2007). Strategic, Operational, and Analytical Customer Relationship Management. *Journal of Relationship Marketing*, 5(4), 23-42.

[41] Jain, S.C. (2005). CRM Shifts the Paradigm. *Journal of Strategic Marketing,* 13, 275-291.

[42] Jennifer, R. (2002). Eight Questions for Customer Knowledge Management in E-business. *Journal of Knowledge Management,* 6(5), 500-511.

[43] Jiebing, W., Bin, G. and Yongjiang, S. (2013). Customer knowledge management and IT- enabled business model innovation: A conceptual framework and a case study from China. *European Management Journal*, *31*(4), 359-372.

[44] Kale, S.H. (2004). CRM Failure and the Seven Deadly Sins. *Marketing Management*, *13*(3), 42-46.

[45] Karakostas, B., Kardaras, D. and Papathanassiou, E. (2005). The State of CRM Adoption by the Financial Services in the UK: An Empirical Investigation. *Information and Management Journal,* 42(6), 853-863.

[46] Khodakarami, F. and Chan, Y.E. (2014). Exploring the role of Customer Relationship Management (CRM) systems in customer knowledge creation. *Information & Management*, *51*(1), 27-42

[47] Kim, J., Suh, E. and Hwang, H. (2003). A Model for Evaluating the Effectiveness of CRM using the Balanced Scorecard. *Journal of Interactive Marketing*, 17(2), 5-19.

[48] Knox, S. (1998). Loyalty-Based Segmentation and the Customer Development Process. *European Management Journal,* 16(6), 729-737.

[49] Kohlbacher, F., Holden, N.J., Glisby, M. and Numic, A. (2007), cited in Kohlbacher, F. (2008). Knowledge-base marketing: Building and Sustainable Competitive Advantage through Knowledge Co-Creation. *International journal Management and Decision Making*, *9*(6), 617-645.

[50] Kohlbacher, F. (2008). Knowledge-Base Marketing: Building and Sustainable Competitive Advantage through Knowledge Co-Creation. *International journal Management and Decision Making,* 9(6), 617-645.

[51] Kumar, V. and Reinartz, W.J. (2006). *Customer Relationship Management: A Database Approach.* New York: John Wiley.

[52] Lambert, D.M. (2010). Customer relationship management as a business process. *Journal of Business and Industrial Marketing*, *25*(1), 4-17.

[53] Liew, C.A. (2008). Strategic Integration of Knowledge Management and Customer Relationship Management. *Journal of Knowledge Management,* 12, 131-146.

[54] Light, B. (2003). CRM Packaged Software: A Study of Organizational Experiences. *Business Process Management Journal,* 9(5), 603-616.

[55] Lin, Y.W. and Su, H.Y. (2003). Strategic Analysis of Customer Relationship Management: A Field Study on Hotel Enterprises. *Total Quality Management & Business Excellence,* 14(6), 715-731.

[56] Liu, H-L. (2007). Development of a framework for customer relationship management in the banking industry. *International Journal of Management*, *24*(1), 15-32.

[57] Mansana, B.R. and Naik, K.C.N. (2016). Customer perception on CRM practices in select shopping malls of Bangalore. *Imperial Journal of Interdisciplinary Research, 2*(8), 1417- 1422.

[58] Massey, A.P., Montoya-Weiss, M. and Holcom, K. (2001). Reengineering the Customer Relationships: Leveraging Knowledge Assets at IBM. *Decision Support Systems*, 32(2), 155-170.

INTERNATIONAL JOURNAL OF RESEARCH SCIENCE & MANAGEMENT

[59] Murray, J.Y., Gao, G.Y. and Kotabe, M. (2011). Market orientation and performance of export ventures: The process through marketing capabilities and competitive advantages. *Journal of the Academy of Marketing Science*, *39*(2), 252-269.

[60] Ngai, E.W.T. (2005). Customer Relationship Management Research (1992-2002). *Marketing Intelligence and Planning,* 23(6), 582-605.

[61] O' Dell et al. (1988), cited in Haslinda and Sarinah, (2009). A Review of Knowledge Management Models. *The Journal of International Social Research,* 2(9), 187-198.

[62] Osarenkhoe, A. and Bennani, A. (2007). An Exploratory Study of Implementation of Customer Relationship Management Strategy. *Business Process Management Journal,* 13(1), 139-164.

[63] Payne, A. and Frow, P. (2005). A Strategic Framework for Customer Relationship Management. *Journal of Marketing,* 69, 167-176.

[64] Piskar, F. and Faganel, A. (2009). A successful CRM Implementation Project in a Service Company: Case Study. *Journal of Organization*, *42*(5), 199-208.

[65] Plessis, M.D. and Boon, J. (2004). Knowledge Management in e-Business and Customer Relationship Management: South African case study findings. *International Journal of Knowledge Management,* 24, 73-86.

[66] Rababah, K., Mohd, H. and Ibrahim, H. (2011). Customer Relationship Management (CRM) Processes from Theory to Practice: The Pre-implementation Plan of CRM System. *International Journal of e-Education, e-Business, e-Management and e-Learning*, 1(1), 22-

[67] Rahimi, R. (2017). Organizational culture and customer relationship management: a simple linear regression analysis. *Journal of Hospitality Marketing & Management*, *26*(4), 443- 449.

[68] Rosenberg, L., Czepiel, J.A. (1984). Marketing Approach to Customer Retention. *Journal of Consumer Marketing*, 1(2), 45-51.

[69] Rowley, J. (2002a). Eight questions for customer knowledge management in E-business. *Journal of Knowledge Management*, *6*(5), 500-511.

[70] Ryals, L. and Knox, S. (2001). Cross-functional Issues in the Implementation of Relationship Marketing through Customer Relationship Management. *European Management Journal,* 19(5), 534-542.

[71] Sapsed, J., Bessant, J., Partington, D., Tranfield, D. and Young, M. (2002). Team Working and Knowledge Management: A Review of Covering Themes. *International Journal of Management Reviews*, 4(1), 71-85.

[72] Sheth, J.N. (2002). The future of relationship marketing. *Journal of Services Marketing*, 16(7), 590-592.

[73] Su, C.T., Chen, Y.H. and Sha, D. (2006). Linking Innovative Product Development with Customer Knowledge: A Data-Mining Approach. *Technovation,* 26, 784-795.

[74] Toriani, S. and Angeloni, M.T. (2011). CRM as a Support for Knowledge Management and Customer Relationship. *Journal of Information Systems and Technology Management,* 8, 87-108.

[75] Tseng, S-M. (2016). "Knowledge management capability, customer relationship management, and service quality". *Journal of Enterprise Information Management*, 29(2), 202-221.

[76] Urbanskiene, R., Zostautiene, D. and Chreptaviciene, V. (2008). The Model of Creation of Customer Relationship Management (CRM) Systems. *Engineering Economics,* 3(58), 20-32.

[77] Valmohammadi, C. Beladpas, M. (2014), "Customer relationship management and service quality: a survey within the banking sector", *Industrial and Commercial Training,* 46(2), 77-83.

[78] Valmohammadi, C. (2017). "Customer relationship management, innovation and performance". *International Journal of Innovation Science,* 9(4), 374-395.

[79] Vargo S.L. and Lusch, R.R. (2004). "Evolving to a New Dominant Logic for Marketing". *Journal of Marketing,* 68(1), 1-17.

[80] Von-Krogh, G. (1998). Care in Knowledge Creation. *California Management Review,* 40(3), 133-153.

[81] Wang, Y. and Feng, H. (2012). Customer relationship management capabilities: measurement, antecedents and consequences, *Management Decision*, 50(1), 115-129.

[82] Yang, J. T. (2007). Knowledge Sharing: Investigating Appropriate Leadership Roles and Collaborative Culture. *Tourism Management,* 28, 530-543.

INTERNATIONAL JOURNAL OF RESEARCH SCIENCE & MANAGEMENT

[83] Zaltman, G. (2003). How Customers Think: Essential Insights into the Mind of the Market. *Harvard Business School Press: Boston.*