

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Basit, Abdul; Tahir, Asma; Khan, Mumtaz Muhammad; Latif, Muhammad Ijaz

# **Article**

Tacit knowledge augmented customer relationship management systems: An empirical investigation

Pakistan Journal of Commerce and Social Sciences (PJCSS)

# **Provided in Cooperation with:**

Johar Education Society, Pakistan (JESPK)

Suggested Citation: Basit, Abdul; Tahir, Asma; Khan, Mumtaz Muhammad; Latif, Muhammad Ijaz (2017): Tacit knowledge augmented customer relationship management systems: An empirical investigation, Pakistan Journal of Commerce and Social Sciences (PJCSS), ISSN 2309-8619, Johar Education Society, Pakistan (JESPK), Lahore, Vol. 11, Iss. 3, pp. 1005-1026

This Version is available at: https://hdl.handle.net/10419/188326

# Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.



https://creativecommons.org/licenses/by-nc/4.0/

#### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



# Tacit Knowledge Augmented Customer Relationship Management Systems: An Empirical Investigation

Abdul Basit National College of Business Administration & Economics, Lahore, Pakistan Email: abasit shahbaz@yahoo.com

Asma Tahir Department of Statistics, Forman Christian College University, Lahore, Pakistan Email: asmatahir@fccollege.edu.pk

> Mumtaz Muhammad Khan Riphah International University, Faisalabad, Pakistan Email: mumtazmkpk1@gmail.com

Muhammad Ijaz Latif The Islamia University of Bahawalpur, Pakistan Email: ijaz.latif@iub.edu.pk

#### **Abstract**

Tacit knowledge (TK) is a core value element important for obtaining a competitive edge for Customer Relationship Management (CRM). CRM is recognized of high value for integrating knowledge in marketing function. The focus on explicit knowledge so far has resulted in neglecting the importance of TK which is embedded in the minds of employees directly interacting with the customers. The Cross Functional Team (CFT) interaction is an important consideration for explicit and TK exploration and intrapolation. This paper aims to tap and process this TK both of customers and employees to incorporate it in strategic marketing decision making. This paper finally proposes a TK Augmented CRM Systems (TKACRMS) model that guides the integration of employees TK in CRM and validates the proposed model with the help of accidences' of Community of Practice (CoP). The study follows the post-positivist approach as philosophy and triangulation as methodology. An extensive review of literature has been conducted in the domain of marketing, relationship marketing, customer relationship management and knowledge management (particularly TK). After revisiting the definitions of TK and the phenomena associated with the dichotomy of TK, a TK augmented CRM model is developed and empirically tested. The CoP's support the basic hypothesis and agree that TK augmented CRM system is better than contemporary CRM's in developing company's marketing strategy. The main difficulty in Knowledge Management (KM) is the difficulty in diffusing and sharing of TK. CFT suggests the way TK can be diffused and shared across the departments within the organization. The involvement of human being is necessary to interpret the knowledge

and specially conceptualize the complexity associated with the TK. The study is subject to all usual research limitations that offer supplement to the future research opportunities.

The study provides the guidance to marketers, top management, decision makers and practitioners to enhance the effectiveness of Strategic Marketing Decision (SMD) making. Integrating TK in CRM system by first developing a model and then empirically testing it with a view to incorporate customers' TK through employees.

**Keywords:** customer relationship management, explicit knowledge, tacit knowledge, relationship marketing, pricing strategy, advertising effectiveness, product value, strategic marketing decision (SMD).

#### 1. Introduction

Customer Relationship Management (CRM) is a philosophy that can be translated into a business strategy to build a strong relationship with the customers for attaining their loyalty and ultimately the higher profitability. CRM systems are used in almost every sector and billions of dollars have been invested on their implementation but they could not meet the expectations. CRM failure rate has always been very high because it is conceptually misunderstood and misinterpreted, both by the management and Information Technology (IT) experts (Piskar and Faganel, 2009).

Customers are the most valuable asset for any new product development (Bretschneider and Zogaj, 2016); they are the very reason of existence for any organization. Now the customers are educated, having more alternatives and choices; demanding more customized offers and sometime even assume that, these offers will automatically be supplied. So, these customers' intangibles needs must be translated into their requirements (Thrassou and Vrontis, 2009).

The importance and the power of Customer Knowledge (CK) cannot be undermined; it is the CK which influences in establishing marketing philosophy and developing innovative product (Jiebing et al., 2013). Despite this fact, there is a little research on collaborative CK and its effect on marketing results (Fidel et al., 2015). However, integration of customers' TK is probed from a focus on new product development (Bretschneider and Zogaj, 2016). Employees hold the knowledge about customers and it is given a high value for integration in marketing function.

Employees are an important source of identifying the customers' behavior that shapes business strategy and helps marketing to be knowledge oriented. The employees directly dealing with the customers are rich source of knowledge about customers and products that convey what customers need and demand. Much of the knowledge that is gained by employees through experience is not recorded, shared and properly used (Kreiner, 2002). This CK through organization employees is critical in finding solution to the problems and challenges that organizations, specially marketing decision makers have to face (Fidel et al., 2015).

Ability to track the employees' TK about customers is the hallmark for success of any organization. TK is an important element and it needs continuous monitoring and explication for its incorporation into existing processes of organization. The research on CRM seems to ignore the issue of integrating TK with CRM. Present CRM systems are mainly based on explicit knowledge. Management makes decision on the basis of past information and ignore the TK (especially that of employees) which adversely affects the

strategic marketing decision making capabilities of the management. The study, therefore, is focused on development of a model to demonstrate integration of TK in CRM systems.

#### 2. Literature Review

In spite of complexities and differences of opinion in conceptualization of KM (especially that of TK) and CRM, their importance in literature is established beyond doubt. Acquiring CK helps in understanding the existing and potential customer's needs and wants that contribute to gain a competitive advantage (Fan and Ku, 2010), in the form of creative and innovative product (Jiebing et al., 2013

Most of the needs are intangibles (Thrassou and Vrontis, 2009) and customers may not be aware of them, therefore to get a real competitive advantage requires addressing the intangible needs. Likewise, 90% of the organizations' valuable knowledge is embedded in the form of TK (Wah, 1996b). In this context, it necessitates to mention a Kano-CKM model that addresses needs' intangibility and demonstrates their transformation into creative offering.

The main purpose of the model is to extract customer's TK for attractive quality creation in new product development projects (Chen and Su, 2006). This model is just focusing on acquiring "knowledge about customers, for customers and from customers" for making strategy to develop an innovative product. As customer related information is dispersed across the organization, no mechanism or system has been suggested to link up this information, such as CRM. It is evident that CRM has a positive effect on new product development (Ernst et al., 2011).

## 2.1 Need to make Intangibles Tangibles

The debate whether TK can be made explicit or not is quite an interesting and active one. TK is an active area of research, emphasizing upon the need to make intangibles tangibles. The need to define it could not find consensus among researchers. Still there is an agreement on the fact that TK is unspoken, hidden, unwritten, embedded in mind and obtained through direct interaction of individuals and peers in the organization (Mohajan, 2016). TK cannot be communicated (Von-Krogh and Roos, 1995). It cannot be made explicit (Sternberg et al., 2000). So in that context, TK does not involve in the generation of tangible products and processes (Howells, 1996). Nonaka and Takeuchi (1995) find it difficult to articulate but not impossible. They argue TK is difficult to make explicit. Similarly Foss and his colleagues argue that TK is hard to recognize and capture (Foss et al., 2006).

On the other hand, Polanyi (1966) claims all knowledge is TK rooted, so TK can be made explicit. However, there is an agreement in TK sharing among individuals and groups (Polanyi, 1966; Nonaka and Takeuchi, 1995). Most of the needs are intangibles (Thrassou and Vrontis, 2009) and customers may not be aware of them, therefore to get a real competitive advantage requires addressing the intangible needs.

Knowledge is a firm's key source (Scarso and Bolisani, 2010) and an important differentiator for competitive advantage (Mansana and Naik, 2016). Acquiring CK helps in understanding the existing and potential customer's needs and wants that contribute to gain a competitive advantage (Fan and Ku, 2010), in the form of creative and innovative product (Jiebing et al., 2013).

The debate is necessary to grasp the idea of TK and Explicit Knowledge (EK); moreover, it provides the insight why TK sharing is important for strategic marketing decisions. Knowledge has a number of dimensions, but research suggests the two basic dimensions of knowledge, namely:

- Explicit knowledge (can be expressed in words and numbers, easy to capture, easy to codify, documented and easily distributed and share).
- Tacit knowledge (embedded in the mind of people; hard to articulate, capture, codify and share because of personal nature of knowledge).

Nonaka and Takeuchi (1995) established a "Knowledge Conversion" model that deals with explicit and tacit knowledge. It interacts in the human beings and is presented in four steps; (i) Combination (explicit to explicit); (ii) Internalization (explicit to tacit); (iii) Socialization (tacit to tacit); and (iv) Externalization (tacit to explicit). Transformation of tacit into explicit is the dynamic side of knowledge creation and indispensible for creativity and competitive advantage.

Lawson and Lorenzi (1999), state that EK is a known and employed by everyone but TK separates the masters from the common. Knowledge is considered as an important resource of an organization and TK is an intangible resource (Ambrosini and Bowman, 2001). According to Alavi and Leidner (2001) knowledge may be tacit or explicit; it may embed in the mind of the individuals or groups; may reside in documents, processes, policies, or computer repositories. Minna and Aino (2005), remark that Customer Knowledge (CK) can be tacit (i.e. knowledge reside in the mind of employees and customers) or in explicit (structured information of customer in databases). Others define it, Knowledge has both implicit and explicit dimension (Mohamed et al., 2006; Klein, 2008). An astonishing fact is revealed by Hau and his colleague by collecting data from 2010 employees through multiple industries that organizational reward has a positive influence on employees' explicit knowledge sharing intentions and negative effect on their tacit knowledge sharing intentions (Hau et al., 2013).

EK and TK are two separate types of knowledge (Nonaka and Takeuchi, 1995). Similarly Cook and Brown (1999) and Mohajan (2016) agree with Nonaka and Takeuchi considering EK and TK are two distinct forms of knowledge. Conversely, Polanyi argues, as all knowledge is TK rooted so TK is not a separate category but a dimension and it should not be viewed as the types of knowledge (Polanyi, 1966). With support of that, Tsoukas and McAdam with his colleagues agree that EK and TK are not the types of knowledge but the dimensions (Tsoukas, 2003; McAdam et al., 2007). Polanyi considers TK as personal nature of knowledge associated with the individuals. Similarly, Von-Krogh and Roos (1995) argue that it is wholly a trait of individuals, whereas, Nonaka and Takeuchi (1995) consider it an attribute associated in both individual and group.

In spite of different opinion regarding the TK types or dimensions, there is a consensus that TK must be diffused and externalized for organization effective decision making (Mueller, 2015). Traditionally people used storytelling technique to diffuse and convey TK to others; usually happened in village communities where people sat around the fire and swapped stories (Denning, 2000; Bretschneider and Zogaj, 2016). Similarly TK of individuals was extracted through descriptions, metaphors, images and demonstration. There is a widespread agreement that TK can be acquired through individuals' direct experience and personal contact (Herbig et al., 2001). Cross Functional Team (CFT) in this regard is

suitable for TK creation and sharing because that is constituted with the experts across the departments. Expertise and experience are important sources of TK creation and sharing (Polanyi, 1966; Nonaka and Takeuchi, 1995). That TK sharing across the departments resolve the problem of "reinventing the wheel" which occurs when one staff leave the company (McAdam et al., 2007). Nonaka and Takeuchi (1995), further divided TK into two sub-categories:

- ➤ Technical Dimensions: know how (deal with human skills and expertise, such as workers possess knowledge but do not articulate)
- Cognitive Dimensions: ideas, values, beliefs and perceptions (refer to human mental model)

The research is concerned with the Employees' TK about customers, so cognitive dimension is being considered. Valuable information can be generated through the individual knowledge. Likewise, employees create knowledge based on their direct experiences and observations, which are stored in their memories as cognition, belief, and values (Selnes and Sallis, 2003). To explore the characteristics of such kind of knowledge, different KM Models have been developed, such as:

- ➤ Community Model (Kakabadse et al., 2001): aiming at creation and sharing of knowledge throughout the organization.
- Ontology Model: discuss the relationship between environment and knowledge.
- > Epistemology Model (Gebert et al., 2003): to explore the knowledge itself.

Interestingly a number of CRM models were implemented and they resulted in failure (Table1).

Sr. Failure Rate % **Description** # Harvey (2001) cited Garner's report of CRM 1 65 implementation failure rate 2 Rowley (2002a) argues about CRM failure 80 According to Tafti, 2002 failure rates of CRM 3 70 projects Synder and Davidson (2003) suggest CRM 4 80 projects resulted in failure According to Reinartz et al., 2004 CRM failure 5 70 Kale (2004) believes CRM projects fail to meet 6 60 to 80 their objective range 7 Trembly (2007) estimates failure rate 70 8 Miri-Nargesi et al., (2011) found CRM failure rate More than 60 Khodakarami and Chan (2014) claimed the failure 9 More than 50 rate of CRM

**Table 1: CRM Failure Statistics** 

The purpose of highlighting CRM failure is to focus the inefficiency of CRM systems that must be rectified with taking corrective measures i.e. considering it as a management

approach with support of IT, and marketing make sure the involvement of human beings to interpret the knowledge and specially to conceptualize the complexity associated with the TK

Marketing department's prime responsibility is to explore and create the needs and wants of the customers and developing the strategies to address them efficiently. The researchers are focusing on knowledge based marketing initiatives and also focusing on analysis and interpretation about customer related data and information. There is a great need to bring about the change from explicit to tacit knowledge.

In this situation, a viable solution is to develop a model that incorporate employee's TK about customers into existing CRM systems for making better strategic marketing decisions by top management.

It is required "tacit know-how" to put "know-what" i.e. explicit knowledge, into action (Brown and Duguid, 1998). Existing empirical research in KM domain on exploiting TK using technology has been focused. There is a need to exploit TK with the human dimension. Similarly researchers have described the importance of TK sharing and developed model to integrate the knowledge in CRM, but no empirical research has been found to TK diffusion and incorporating it in CRM systems. Considering the definitions and categories of TK proposed by different authors and critical review of different models, we propose a model that incorporates TK into existing CRM systems.

#### TK Augmented CRM Systems (TKACRM SYSTEMS)

The foregoing discussion provides a base to the proposed research model. The model identifies several measurement variables including Explicit Knowledge, Tacit Knowledge and Cross Functional Team.

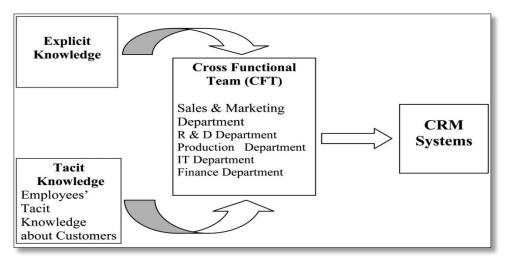


Figure 1: TK Augmented CRM Systems (TKACRM System)

Customer is boss and organizations need to place their customers top in priority while planning, formulating strategies and taking customer related decisions. The customers are considered as asset for the business and source of innovation and competitive advantage. Customer related information is dispersed across the organization. It is highly personal and subjective form of knowledge which is usually informal and cannot be found in manuals,

books, organization standard operating procedures, databases or files. Previous studies have focused on data and information (i.e. explicit knowledge) rather than underlying the TK created by the employees about the customers. A company's strategy can be adversely influenced by the customers related information collected through other sources, such as complaints, suggestions, data base (based on customers buying history) and market survey, because they are considered to be biased. But a company can rely on employees' knowledge because they are capable of interpreting the body language and facial expression of the clients based on the experience (Cegarra and Rodrigo, 2003). The knowledge captured by employees through experience must be disseminated throughout the organization, which is possible only with the Cross Functional Team (CFT).

The purpose of CFT is to identify, interpret and integrate the right type of knowledge in CRM systems. Organization must focus on developing a knowledge culture that encourages employees to share the knowledge (Rahimi, 2017). A business cannot benefit from fecundity of CRM unless it is successfully implemented i.e. real time interdepartmental sharing of correct knowledge (Liu, 2007). In global business perspective, the creation and transfer of marketing knowledge and collaboration among departments based on TK is crucial determinant of corporate competitive strategy (Kohlbacher et al., 2007).

This paper substantiates the view that CRM cannot be restricted merely with the new or innovative product development. It is more than that; it can be helpful for top management in making better strategic marketing decisions. Pricing, marketing communication capabilities and new product development mediate the effects of market orientation on performance (Murray et al., 2011). The argument is that organization can also beget some valuable information and knowledge from marketing orientation activities. If CRM systems are implemented in true spirit, they help in CK creation (Khodakarami and Chan, 2014).

Based on critical review of literature, it is concluded that CRM was considered mainly as Information Technology (IT) enabled strategy to provide customer related solutions (Cambra-Fierro et al., 2017). Whereas IT can only make sure the effectiveness of CRM process (Chong et al., 2015). But we articulate that CRM is a business philosophy, based on strategic process (Cristiane et al., 2016). That philosophy translates TK conception into workable strategy with the help of CFT. We have taken constructs of TK and CFT in the context of marketing knowledge.

### 2.2 Cross Functional Team

Employees' knowledge plays a pivotal role in implementation of a successful CRM systems (Cambra-Fierro, 2017). Sometimes employees are not aware of the knowledge they possess or how valuable it can be to the organization to make strategic decisions. This may be because of high abstraction, obliqueness, and difficulties of express or because of the personal nature of knowledge (Kogut and Zander, 1992). That individual knowledge (personal nature) may be strong, but that may not become entrenched in the combined knowledge pool (Natti and Ojasalo, 2008).

That demands such a platform to exploits the knowledge which is embedded in the "mind of the employees". CFT is the best platform for this purpose and is one of the important determinants for successful implementation of CRM system (Rahimi, 2017). Knowledge creation and sharing between different departments of the same firm have frequently been

researched. But how to convert TK into EK is the important task (Chen and Su, 2006). So there is a need to have a CFT that encompasses the experts of different departments because no single person can fully comprehend the entire package of marketing knowledge (Bjerre and Sharma, 2003).

TK is created, captured and transferred often through the socialization (Khodakarami and Chan, 2014). CFT is the best forum for discussing customer related issues that involves interpretation of information and knowledge acquired from employees about customers across the departments (Natti et al., 2006). CFT enhances the cooperation among different departments that eliminates the silo walls among different departments and develops the trust. Park and Lee (2014) claim that trust among the employees play a key role in knowledge sharing. That also helps in breaking down the hierarchies' enables organization to transfer knowledge (Nonaka, 1994). This breaking down of the hierarchies work as a panacea of knowledge sharing issues. Organizational collaboration increases as increases in interactions of CK with other components of a company's knowledge (Garcia-Murillo and Annabi, 2002).

This culture would encourage employees to share and disseminate the information throughout the organization, also serves as linking-pin in loose-coupled organization (Kerkhof et al., 2003). Campbell (2003) found that team had a remarkable role in building up CK. Organizations take strategic decisions on the basis of knowledge acquired through the transformation of collective experience and expertise (Peelen et al., 2009). Successful CRM implementation demands cross functional communication and involvement (Lambert, 2010).

The transformation of today's world into a global village has changed the organizational focus from supply driven to demand driven organizations. In this paradigm the customers' expectations are the most important consideration, forcing the businesses to perform according to customer's wishes. Before the transformation of customer oriented approach the focus was on short term benefits and relationships. While the important role of the attributes of a product/service is quite apparent in explaining in individuals' post-purchase behaviors, key questions still remain unaddressed. In particular, its relationships with value, satisfaction, and desire and the impact of such relationships on traveler loyalty have rarely been researched (Han et al., 2017).

To make a strategic decision or formulating customer driven strategy, this paper emphasizes the importance of knowledge of the behavior of the customers and the knowledge about the customer's desires. Thus, this is an active area of research on collaborative CK and its effect on marketing results. This CK through organization employees is critical in finding solution to the problems and challenges that organizations, specially marketing decision makers have to face (Fidel et al., 2015).

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). Therefore, a paradigm shift to think beyond the picture and considering the new horizons has become vital.

### 3. Methodology

The research goal of this study is to investigate how TK sharing affects the strategic marketing decision in an organization and it is closer to the pure cum applied research. In order to give proper meaning to research, researchers generally mix exploratory,

descriptive and hypothetical testing research design. In this context, Moore and his colleague (1969) state that purely mathematical examination cannot be exercised in mix research (i.e. descriptive and empirical). The study follows the post-positivist approach as a philosophy and triangulation as methodology (Lodhi, 2005). Since the purpose is to provide better knowledge and understanding in the specific area, so this study is going to follow the research method based on: (i) intensive critical review of literature for descriptive study, and (ii) empirical study to validate the acceptance of our proposed model.

#### 3.1 Descriptive

The focal point of descriptive research is to give an accurate description for something that is happening and unfolding the features that were suspected during the exploratory stage. This type of research is popular form of market research and extensively used when the research purpose is to explain, monitor and test hypotheses.

#### 3.2 Empirical Validation

The empirical part has been operationalized as shown in Figure 2 that reflects the testable relations among the variables. The empirical material includes 15 semi-structured interviews through which validity of model has been determined.

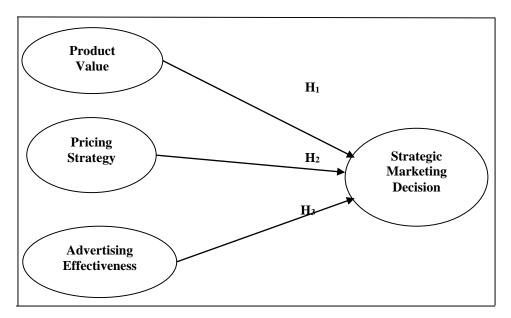


Figure 2: Strategic Marketing Decision Making Framework

#### 3.3 Research Hypotheses

An effective strategic marketing decision depends on employees' TK about customers and these variables (i.e. product, price and advertising) form a basis for employees' TK. Keeping the objectives, scope of study and model in view, the detailed research hypothesis are formulated and are explained in the following hypothesis:

➤ H<sub>1</sub>: The greater the product tacit knowledge sharing, the better will be the strategic marketing decision.

- ➤ H<sub>2</sub>: The greater the product-pricing tacit knowledge sharing, the better will be the strategic marketing decision.
- ➤ H<sub>3</sub>: The greater the advertising tacit knowledge sharing, the better will be the strategic marketing decision.

These constructs have been measured through 5 point Likert type measurement scale. Instrument of measurement has been developed in the manner detailed below.

#### 3.4 Instrument

A multi-item Likert scale (i.e. 1-5, where 1 is the least effective and 5 is the most effective) has been generated to measure the different components of TK sharing and its impact on Strategic Marketing Decision (SMD). Likert (1973) claims that Likert scale has got the ability to incorporate additional information to add richness to questionnaire with an acceptable level of reliability and validity, especially in social sciences.

After intensive review of literature, an initial questionnaire is designed. For getting precision, number of meetings were held with fellow researchers, scholars of other institutions and my supervisor.

After initial development of the questionnaire, it was launched for pilot testing in the front offices of the organizations dealing with the customers. Total of the four organizations were selected from telecommunication sector and five questionnaires were filled from each of the organization. SPSS (Statistical Package for Social Sciences) software had been used to calculate mean and standard deviation. Questionnaire was again revisited and improved on the basis of pilot study results.

The first section of the questionnaire is descriptive and carries respondent's personal information. The second section of the questionnaire consists of 15 questions; arranged into three groups. The first group comprises of 6 questions that deal with the product, the second group consists of 4 questions that deal with product-pricing and the last group consists of 5 questions that address advertising.

# 3.5 Questionnaire Reliability

The reliability of questionnaire was strengthened by discussing the contents with professionals, experts and statistician and pilot study was also conducted for reliability purpose.

## 3.6 Interview

After analyzing the result of pilot study, semi-structured interview was used as primary method to collect the data. Because of the personal nature of TK, valid information can only be possible with direct interaction and interview gives the platform of bi-directional communication. In support of this, Gummesson (1994) states that interaction especially with professionals plays a pivotal role in generating new ideas and information.

A total of 15 panel semi-structured interviews (consist of four members and one of them must be a marketing manager) were carried out with marketing managers and decision makers. On average an interview took approximately 1½ hours. 7 out of 15 interviews were conducted in beverages sector and 2 interviews were carried from each sector, namely; dairy product sector, departmental stores, shoes industry and telecommunication sector. The interviewer first explained what the study was all about, how the researcher considered KM, TK and CRM. After that the interviewees were encouraged to tell the story of

relationships and the view point about KM and TK. Then the interviewees were requested to give their ideas related to knowledge sharing and specially the issues facing in sharing of TK. The semi- structured interviews covered the practices prevailing for customer relationships and employees' TK about customers transferred in the organization. Interviewing people of top management adds the richness to the data.

Because the researcher was not allowed to record the interview, so researcher had to rely on taking notes but had the freedom to ask questions until it was clear.

#### 3.7 Measures

The constructs of the study were measured through a five-point Likert scale. Two-page questionnaires is developed and divided into two parts, where the first part consisted of general information. And the second part consisted of TK sharing, which was measured on the basis of three variables i.e. product, pricing and advertising; to measure the impact of TK sharing on strategic marketing decision making. Data was collected through Likert scale based on a scale of 1 to 5, with 5 as the most effective (strongly agree) and 1 as least effective (strongly disagree). SPSS and Statistica are used for data analysis.

#### 3.8 Population

Beverages, Food Products, Departmental Stores, Shoes Industry and Telecommunication Sectors constitute the population of the study. These sectors are chosen because they have to take unending marketing decisions to make customers happy. The statistical data of the population has been collected from secondary sources i.e. Lahore Chamber of Commerce and Industry (LCCI) and Lahore Stock Exchange (LSE). There are total 72 organizations, comprises of 5 sectors in the manner as given in Table 2.

Sr. No. Number of **Organizations Industrial Sectors** Beverages 32 2 18 Food Products 7 3 Departmental Stores 4 Shoes Industry 5 5 Telecommunication 10 **Total 72** 

**Table 2: Distribution of the Population** 

# 3.9 Sample

It is a cross functional study. Stratified random sampling technique has been used. The sample of 15 companies was drawn from the 72 companies in five industry sectors.

A stratified simple random sample with reasonable replacement has been drawn from all strata through a computerized random number generator. From the total population of 72 organizations comprises with 5 sectors, 7 organizations of beverages and 2 organizations of each remaining sectors are made part of the sample as shown in Table 3.

**Table 3: Sample Selected for the Study** 

Sr. No.	Industrial Sectors	Number of Organizations
1	Beverages	7
2	Food Products	2
3	Departmental Stores	2
4	Shoes Industry	2
5	Telecommunication	2
Total		15

#### 3.10 Data Collection

Data was collected through semi-structured interviews of 15 sampled organizations. Researcher personally visited each of the sampled organization to collect the data. Most of the times researcher had to visit 3 to 4 times to get appointments for conducting interview because of tough schedule of marketers and decision makers.

# 3.11 Descriptive Statistics

Descriptive statistics of variables such as analysis of qualification, designation and experience is fruitful in determining the general understanding of the study.

# 3.12 Gender Wise Qualification of Respondents

Female population is 13.3% to male population as shown in Table 4. It reflects that female has no interest in this job and/or more wise opinion is that marketing job does not suit the female. However, it would not affect the result of the study. More than 66% of the respondents hold master degree. 33.33% population is graduate while none of them is under graduate.

**Table 4: Gender Wise Qualification of Respondents** 

	Gender of Respondent					
Qualification	Male		Female		Total	
	No.	%	No.	%	No.	%
Post Graduate	8	53.34	2	13.33	10	66.67
Graduate	5	33.33	-	-	5	33.33
Under graduate	-	-	-	-	-	-
Total	13	86.67	2	13.33	15	100

# 3.13 Designation Wise Statistics of Respondents

Top management plays a critical role for success or failure of any organization because they take strategic decisions. The senior most like Chief Executive Officers (CEOs), Head/General Manager of Marketing, Marketing Managers and others were part of community of practice. We are able to tap the 2 CEOs, 5 Heads/General Managers of Marketing, 6 Sales and Marketing Managers, and 1 each of HR Managers and Trade Marketing Executives. Percent breakup of the distributions is 13.34%, 33.34%, 40%, 6.66%, and 6.66% respectively (Table 5).

**Table 5: Designation Wise Statistics of Respondents** 

Sr. No.	Designation	No.	Percentage
1	Chief Executive Officer	2	13.34
2	Head/General Manager Marketing	5	33.34
3	Sales and Marketing Manager	6	40
4	HR Manager	1	6.66
5	Trade Marketing Executive	1	6.66
	Total	15	100.00

### 3.14 Experience Wise Statistics of Respondents

It is evident that experience carries a great weight and plays a critical part for effective SMD. Table 6 presents experience wise respondents' statistics, where it is seen that data is collected from rich experienced people. Most of the respondents have more than 10 years' experience. Majority of the respondents are in the brackets of 15-20 i.e. 33.34%, while only 1 falls in the range of 35-40. Remaining 3 each fall in the range of 5-10; 10-15; and 20-25 with 20%.

**Table 6: Experience Wise Statistics of Respondents** 

Experience in Years	No. of Respondents	Percentage
05-10	3	20
10-15	3	20
15-20	5	33.34
20-25	3	20
25-30	-	-
30-35	-	-
35-40	1	6.66
Total	15	100

# 3.15 Applying t- Test

The purpose of our study is to investigate whether employee's TK can be integrated into CRM systems and this TK can improve the SMD making. To examine this, certain testable statements of selected variables were formulated to validate our model with the help of accidence of community of practice. We used t-test, which is the best method to conform

to the population mean with the hypothesis testing. The fact is that T-test is applied to obtain the reliable results for the average response of the respondents (Lodhi, 2005).

**Table 7: Descriptive Statistics for t-Test** 

One-Sample Statistics						
N Mean Std. Deviation Std. Error Mea						
Q <sub>10</sub>	15	4.400	.257	.066		
Q <sub>11</sub>	15	4.267	.383	.099		
Q <sub>12</sub>	15	4.293	.291	.075		

**Table 8: One Sample t-Test Results** 

	Test Value = 3						
	T DF Sig. (2-Tailed)		Mean	95% Confidence Interval of the Difference			
			(2-1 alled)	Difference	Lower	Upper	
$Q_{10}$	21.074	14	.000	1.400	1.257	1.542	
Q <sub>11</sub>	12.794	14	.000	1.267	1.054	1.479	
Q <sub>12</sub>	17.186	14	.000	1.293	1.131	1.454	

Aforementioned Table 7 provides some descriptive statistics for T-Test, where first column presents hypotheses number, second column shows valid sample responses i.e. N for each hypotheses and next columns bear Mean, Standard Deviation and Standard Error Mean respectively. It is seen that means of all hypotheses exceeds 4. Hence it is evident that average members of community of practice agree to the hypothesized statements.

Our first hypothesis is "greater the product TK sharing better will be the SMD making", Table 8 shows that impact of product TK is significant on SMD making, therefore null hypothesis is rejected and alternative hypothesis is accepted. Similarly, second hypothesis is "greater the product-pricing TK sharing better will be the SMD making", Table 8 proves that impact of pricing TK is significant on SMD making, thus null hypothesis is rejected and alternative hypothesis is accepted. Likewise "greater the product advertising TK sharing better will be the SMD making", Table 8 verifies that impact of advertising TK is significant on SMD making as a result null hypothesis is rejected and alternative hypothesis is accepted.

The average difference between each data value and the hypothesized test value is 0 which is less than 0.05. The results of test of hypotheses clearly indicate that all hypotheses stand proved. We summarize the results in Table 9.

Table 9: Hypotheses Acceptance/Rejection

Sr. No.	Hypotheses	Hypotheses	Inference
1	$H_1$	Greater the product tacit knowledge sharing better will be the strategic marketing decision	Accepted
2	$\mathrm{H}_2$	Greater the product pricing knowledge sharing better will be the strategic marketing decision	Accepted
3	H <sub>3</sub>	Greater the product advertising knowledge sharing better will be the strategic marketing decision	Accepted

#### 4. Conclusion

CRM is proposed to transform the way work is done, shifting from data or information approach involving in extraction of customers' prospective buying patterns to knowledge approach involving employees' TK about customers. The conclusion drawn from this study is that CRM should be considered as a philosophy that must be translated into strategy that obliges the TK. Living in the era of knowledge economy and challenging economic conditions where today's knowledge is a failure in solving tomorrow's problems. The survival and success of CRM requires TK which people need to manage to meet the challenges of updating the CRM with the TK created and acquired from the employees. This study provides an empirical support to the links between the TK and SMD.

Organization must understand the role of management as a strategic enabler (driver) and TK as a tool to boost the strategic direction of the whole organization. This empirical investigation gives avenue for increasing the probability of success of CRM systems and persuades the importance and critical role of TK that result in break through opportunity.

Beyond strategic intent and organizational structure, a firm must establish a set of processes that encourage utilization of TK for CRM. One way is to create the ideology in a firm to seek out creation with employees' TK about customers and the other way is to manage that TK in order to maximize potential profits and minimize risks. That CK through employees is often tacit and sometimes even impossible to codify and utilize, because of high abstraction and implicitness. Thus, there exist a need that firm should capture, codify and utilize it by developing everyday work practices, based on the idea of socialization, formal and informal meetings and communication in an organization.

CFT steer the experts of different departments, to combine different types of expertise in order to offer an innovative or the best value-added offer. Moreover, it involves in interpretation of information and knowledge acquiring from employees. This encourages employees to exploit their CK, which is often in tacit nature; and share and disseminate it throughout the organization. Besides this, it enhances the cooperation among different departments, torn down the boundaries and ties the fragmented departments together. One key point of noting is that it specially helps in institutionalizing the knowledge within the organization, resulting in expanding the organization's knowledge powerhouse.

The "Play to win" strategy is important as it allows TK about customer to create the firm's future core competency. On the other hand the "Play not to lose" strategy helps the company to use this hard-won TK to maintain its current competitive advantage. TK can be used by following both these strategies, which need to be made part of organization processes for developing organization not only as sustainable one but also for ensuring the growth process and innovation.

The study further explored that the successful CRM implementation is considered risky due to the associated costs and the uncertainty of result. While only exploratory, our findings suggest that CRM failure rates have always been very high. This failure and risk can be properly covered with the help of TK about customers. There are many reasons of CRM failure. But behind every CRM failure, there are three main reasons; (i) overlooking importance of TK (ii) absence of human involvement and (iii) taking it in IT perspective not in management perspective.

The study answers three important questions raised in the proposed model. These questions are: (i) TK is a type or dimension and is it associated with the individuals or groups? (ii) Can it be articulated or not (whether it can be made Explicit)? (iii) And how it can be articulated? This study determines that TK is a dimension and it is associated with groups and individuals. The study also finds out that TK can not only be articulated but also made part of the integral system of customer relationship marketing. It further lays down a procedure for articulation of TK and thus, is helpful in developing a proper system necessary for SMD.

The study provides the guidance to marketers, top management and decision makers, and practitioners to enhance the effectiveness of SMD making.

#### 5. Novelty of the Study

Very little research has been conducted on CRM in the context of KM domain and especially no research is found in TK. This study is unique in offering empirical evidence to the role of employees in TK sharing. This study is unique in many perspectives:

Integrating TK in CRM systems is the first effort in CRM domain. It is ever first empirically tested CRM model that incorporates customers' TK through employees. Its successful implementation will eliminate the need to conduct regular marketing survey, ensuing in saving organizational resources and time.

Finding of the study highlights the importance of the role of TK in CRM systems to help management in taking strategic decisions in the form of breakthrough opportunity.

This research provides the evidence on the role of CFT that offers a forum to professionals for interaction and communication. CFT involves in interpretation of information and knowledge acquiring from employees, this would encourage employees to share and disseminate the information throughout the organization and enhance the cooperation among different departments. That breaks down the hierarchies and works as linking-pin to inherently loosely-coupled organizations.

Explore how to create and effective use of knowledge can be helpful for top management in making SMD to develop successful innovative products and services to sustain a competitive advantage.

#### 6. Practical Implications

This distinctive study embraces numerous implications for businesses. This study has contributed by increasing the organizations' knowledge and helps them to be the learning organizations. Specific knowledge about customers that originate with a series of interactions of customers with the employees can be collected. This will help in getting insight about the behavior of the customers, resulting continues learning of the organization and help in translating customers' intangibles needs into their requirements. This may assist organization in achieving high growth and execute customer driven strategies.

Developing a strong and well-integrated relationship with the customers and employees can enable organization to reap its rewards. Organizations also must understand that it requires commitment, dedication and trust among the employees in order to get a significant competitive advantage. This will result in strategic compatibility and the sharing of their personal experiences and knowledge that can exploit the core competencies, lead to the innovation.

Individualism and strong collegial groups make knowledge codification difficult. So organization makes sure that knowledge is possessed by the organization not by the individuals. As the nature of TK, it is not owned or operated by one department, which makes difficult the diffusion of a common culture of innovativeness. Moreover, customer related information maneuver in different departments and often dispersed across the organization. That culture may not place the emphasis on innovation.

To accomplish the aforementioned task, the firms will need to establish an efficient mechanism for effective TK sharing. In other words, firms create common understanding and ongoing dialogues, and make coherent culture in the organization through a CFT. The people working alone may not share knowledge in tacit form but in explicit form. CFT is a forum for discussing the customer related issues and fosters knowledge sharing among the team mates. This platform will provide information across the organizations; shatter the silo walls among the different departments within the organization. This knowledge can be used for creating a culture that focuses on delivering sustainable solutions to the problems in the marketplace.

One of the major lessons learnt is that the CRM systems alone cannot hold the TK without the backup of CFT. Now companies can capture customers' TK through employees, analyze it in CFT and incorporate it in CRM systems. They can use this knowledge or information for innovation and strategic plans.

The study proves if CRM systems through TK augmentation work as expected, an organization can have a strong profitable relationship with the customers, provide better customer service, simplify the marketing and sales processes, discover new customers, reduce the risk and uncertainty. The most important is, it will cultivate the innovative culture that lead to achieve distinctive strategic competence and global advantage.

## 7. Limitations of Research

There are research limitations in this study that offers supplement to explore new horizons. There are limitations of collecting self-reported data and interview responses from marketing managers and decision makers which may include innate biases among individuals. In addition to these, the sample size of this study is small across a limited range

of selected sectors. Therefore, the result of this model need to be further validated on a wider data set in a variety of industry setting.

The validity of the study can also be criticized on the grounds of TK augmentation in CRM systems, which is used in research for the first time. Furthermore, application of CRM strategy in non-business sectors such as government and non-for-profit institutions had not been explored.

#### 8. Further Research Avenue

The concept of CRM in KM perspective, particularly in TK at an early stage of maturity, there is considerable scope for further research. We highlight different areas of research opportunity in this emerging domain, where the further research is needed, in particular:

There is a need in the marketing discipline to further elaborate the link of KM and CRM, especially TK. And an additional direction may be needed to scrutinize the entire package of customer knowledge. Another interesting issue to study would be the role of IT in CRM domain that is much debating. So, the further research is required to explore the impact of IT on CRM success.

Future research may expand the population size. A more comprehensive study across a wide range of industry would provide a good insight of successful CRM implementation. Because of TK specificity, different companies, according to their specific circumstances, will have different TK sharing and CRM issues they need to address. Therefore, there is an opportunity to validate this research in other organizations.

The role of culture, top management commitment, and trust among employees can also be added to enhance the effectiveness of CRM systems. Identifying the role and nature of barriers preventing effective use of employees' TK would be interesting to see. It is noteworthy to analyze the role of employees' behavior that plays an important role in satisfying the customers. Besides this, employees training in customer service and TK capturing and sharing can also be studied.

# REFERENCES

Alavi, M. and Leidner, D. E. (2001). Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*, 25(1), 107-136.

Ambrosini, V. and Bowman, C. (2001). Tacit knowledge: some suggestions for operationalization. *Journal of Management Studies*, 38(6), 811-829.

Bjerre, M. and Sharma, D.D. (2003). Is Marketing Knowledge International? A case of key accounts in Learning in the Internationalization Process of Firms. *Blomstermo and Sharma eds.* 123-141 Edward.

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.

Cambell, A. J. (2003). Creating customer knowledge competence: managing customer relationship management programs strategically. *Industrial Marketing Management*, 32(5), 375-383.

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.

Cegarra, J. G. and Rodrigo, B. (2003). Relational learning process as a bridge between human and customer capital. *Journal of Universal Computer Science*, 9(12), 1469-1486.

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

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.

Cook, S. and Brown, S. J. (1999). Bridging epistemologies: the generative dance between organizational knowledge and organizational knowing. *Organization Science*, *10*(4), 381-400.

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.

Denning, S. (2000). *The Springboard: How Storytelling Ignites Action in knowledge-Era Organizations*. KMCI Press. Paperback.

Ernst, H., Hoyer, W.D., Krafft, M. and Krieger, K. (2011). Customer relationship management and company performance-the mediating role of new product performance. *Journal of the Academy of Marketing Science*, *39*(2), 290-306.

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.

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.

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

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

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.

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

Han, H., Meng, B. and Kim, W. (2017). Bike-traveling as a growing phenomenon: Role of attributes, value, satisfaction, desire, and gender in developing loyalty. *Elsevier Tourism Management*, 59(1), 91-103.

Harvey, D. (2001). *Tougher Times Ahead. Conspectus*-The IT Report for Directors and Decision Makers, October, 38-39.

Hau, Y.S., Kim, B., Lee, H. and Kim, Y-G. (2013). The effects of individual motivations and social capital on employees' tacit and explicit knowledge sharing intentions. *International Journal of Information Management*, *33*(2), 356-366.

Herbig, B., Bussing, A. and Ewert, T. (2001). The role of tacit knowledge in the work context of nursing. *Journal of Advanced Nursing*, 34(5), 687-695.

Howells, J. (1996). Tacit knowledge, innovation, and technology transfer. *Technology Analysis and Strategic Management*, 8(2), 91-106.

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.

Kakabadse, N. K., Kouzmin, A. and Kakabadse A. (2001). From tacit knowledge to knowledge: leveraging invisible assets. *Knowledge and Process Management*, 8(3), 137-154.

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

Kerkhof, C., Van-den E. and Bogenrieder, I. (2003). Knowledge management in the professional organization: a model with the application of cmg software testing. *Knowledge and Process Management*, 10(2), 77-84.

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

Klein, J.H. (2008). Some directions for research in knowledge sharing. *Knowledge Management Research and Practice*, 6(1), 41-46.

Kogut, B. and Zander, U. (1992). Knowledge of the firm, combinative capabilities and the replication of technology. *Organization Studies*, *3*(3), 383-397.

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.

Kreiner, K. (2002). Tacit knowledge management: the role of artefacts. *Journal of Knowledge Management*, 6(2), 112-123.

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

Lawson, C. and Lorenzi, E. (1999). Collective learning, tacit knowledge and regional innovative capacity. *Regional Studies*, *33*(4), 305-317.

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

Lodhi, S.A. (2005). Culture Based Knowledge Sharing Model. A PhD. Dissertation [unpublished], submitted to the National College of Business Administration & Economics, Lahore. 5-8.

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.

McAdam, R., Mason, B. and McCrory, J. (2007). Exploring the dichotomies within the tacit knowledge literature: towards a process of tacit knowing in organizations. *Journal of Knowledge Management*, 11(2), 43-59.

Minna, R. and Aino, H. (2005). Customer Knowledge Management Competence: Towards a Theoretical Framework. *Proceedings of the 38th Hawaii International Conference on System Sciences*. IEEE 0-7695-2268-8/05, [Online] Available at: www.hiess.hawaii.edu/home.htm (November 30<sup>th</sup>, 2016).

Miri-Nargesi, S. S., Keramati, A., Haleh, H. and Ansarinejad, A. (2011). Assessing Organizational Readiness to Implement Customer Relationship Management Using Fuzzy Analytical Network Process: A Case Study. *International Journal of Academic Research*, *3*(3), 409-418.

Mohajan, H.M. (2016). Sharing of tacit knowledge in organizations: A Review. *American Journal of Computer Science and Engineering*, 3(2), 6-19.

Mohamed, M., Stankosky, M. and Murrey, A. (2006). Knowledge management and information technology: can they work in perfect harmony? *Journal of Knowledge Management*, 10(3), 103-116.

Moore, J. R. and Baker, N. R. (1969). An analytical approach to scoring model design: application to research and development. *IEEE Transaction on Engineering Management*, 16(3), 90-98

Mueller, J. (2015). Formal and informal practices of knowledge sharing between project teams and enacted cultural characteristics. *Project Management Journal*, 46(1), 53-68.

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.

Natti, S. and Ojasalo, J. (2008). What prevents effective utilization of customer knowledge in professional B-to-B service? An Empirical Study. *The Service Industrial Journal*, 28(9), 1199-1213.

Natti, S., Halinen, A. and Hanttu, N. (2006). Customer knowledge transfer and key account management in professional service organizations. *International Journal of Service Industry Management*, 17(4), 304-319.

Nonaka I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1), 14-37.

Nonaka, I. and Takeuchi, H. (1995). The Knowledge-Creating Company. *Oxford, Oxford University Press*.

Park J. G. and Lee, J. (2014). Knowledge sharing in information systems development projects: Explicating the role of dependence and trust. *International Journal of Project Management*, 32(1), 153-165.

Peelen, E., Monfort, K.V., Beltman, R. and Klerkx, A. (2009). An empirical study into the foundations of CRM success. *Journal of Strategic Marketing*, 17(6), 453-471.

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

Polanyi, M. (1966). The Tacit Dimension. Routledge and Kegan Paul, London.

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

Reinartz, W., Krafft, M. and Hoyer, W.D. (2004). The Customer relationship management process: its measurement and impact on performance. *Journal of Marketing Research*, 41(3), 293-305.

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

Scarso, E. and Bolisani, E. (2010). Knowledge-based strategies for knowledge intensive business services: a multiple case-study of computer service companies. *Electronic Journal of Knowledge Management*, 8(1), 151-160.

Selnes, F. and Sallis, J. (2003). Promoting relationship learning. *Journal of Marketing*, 67(3), 80-95.

Sternberg, R.J., Forsythe, G.B., Hedlund, J., Horvath, J.A., Wagner, R.K., Williams, W.M., Snook, S.A. and Grigorenko, E.L. (2000). *Practical Intelligence in Everyday Life. Cambridge University Press, New York: NY*.

Synder, M. and Davidson, I. (2003). In Trouble? Conspectus-The IT Report for Directors and Decision Makers, 30-32.

Tafti, M. H. A. (2002). Cited in Finnegan, D. and Willcocks, L. (2006). Knowledge sharing issues in the introduction of a new technology. *Journal of Enterprise Information Management*, 19(6), 568-590.

Thrassou, A. and Vrontis, D. (2009). A new consumer relationship model: The marketing communications application. *Journal of Promotion Management*, 15(4), 499-521.

Trembly (2007) cited in 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.

Tsoukas, H. (2003). Exploring the dichotomies within the tacit knowledge literature: towards a process of tacit knowing in organizations. *Journal of Knowledge Management*, 11(2), 43-59.

Von-Krogh, G. and Roos, J. (1995). Organizational Epistemology. Macmillan, London.

Wah, (1996b); cited in McAdam, R., Mason, B. and McCrory, J., (2007). Exploiting the dichotomies within the tacit knowledge literature: towards a process of tacit knowing in organizations. *Journal of Knowledge Management*, 11(2), 43-59.