# Customer Knowledge Management Competencies Role in the CRM Implementation Project

**Abdelfatteh Triki and Fekhta Zouaoui**

Institut Supérieur de Gestion- Tunis

_____

## Abstract

The purpose of this research is to understand the way a CRM project implementation may contribute to the success of the project. The approach of Knowledge Management Strategic Alignment was used as a theoretical framework and a case study was realised for this end. The case study allowed exploring the role of customer knowledge competencies of the company in the CRM project implementation. Three types of customer knowledge competencies are required: customer knowledge acquisition skills, customer knowledge sharing skills and finally customer knowledge use skills.

**Keywords**: CRM, Knowledge Management Strategic Alignment, customer knowledge management competencies.

_____

## Introduction

Given the high rate of CRM project failure that was noticed in the management practice, many researchers tried to identify the key success factors of CRM implementation projects. 50% of managers complain about the failure of their project and an increase of 40 to 75 % in CRM projects is predicted*. The knowledge management capacity of the company (Croteau and Lee, 2003; Chen and Chen, 2004) as well as the strategic alignment (Chen and Chen, 2004) are considered as key success factors in the CRM literature. The central question of this research would be to understand the role that the company strategy of customer knowledge plays in the success of his CRM project. The objective of this paper is to show that the success of a CRM project depends on two elements: 1. The alignment between the Knowledge Management strategy of a company and the CRM strategy. 2. The customer knowledge management company competencies.

Following a review of the CRM and the customer knowledge management concepts, the knowledge management strategic alignment will be proposed. After presenting the methodology used in the case study, we will be discussing and analysing the results that were found.

## Theoretical Foundations

### Emergence Conditions and Definitions of CRM

Many factors explain the emergence of CRM that is considered as a company strategy oriented towards clients. In a context

characterized by commoditization of products, market saturation, increased customer demand and lower loyalty, we are in the context of relationship marketing where the customer conservation becomes a strategic marketing objective.

These changes found in the loyalty strategies were made easier by the development of communication and information technologies. The separation between the firm and the customer noticed in the product view during the 1980's was compensated thanks to the emergence of information systems.

Two stream of research form the theoretical foundation of a CRM concept (Agrebi, 2006); a strategic stream (relationship marketing) and a technological stream related to the information systems. In fact, Crosby and Johnson (2001) identify the customer relationship management as a business strategy that multiplies the use of technology and includes it in all its process to create retention and loyalty over time.

More generally, the focus of the CRM concept is to build a long term and value-added relationship for both business and customers. For this purpose, the company is brought to focus again its efforts and resources on its most profitable customers.

In this perspective, Brown (2001) define the CRM as " a strategy that a company follows to understand, anticipate and manage the current and potential needs of its customers. During this process that involves changes related to strategy, procedures, structures and techniques, a firm struggles to better organize itself around its customers' behavior. This requires the acquisition of knowledge about them and its application at all levels to obtain both profits and customer satisfaction".

This definition highlights the importance of knowledge management in a relational approach. Several studies (such as Zablah and al, 2004) discussed the knowledge

management contribution process in maintaining lasting and profitable relationships between the company and its customers, thus contributing to the success of the CRM implementation project.

In fact, Zablah and al (2004) define the CRM as "a continuous process that results in the use of the market data in order to create and maintain profitable relationships with the customer". These authors focus on the knowledge management process that would make the management of the business-client interaction easier.

In this context, the CRM is considered as skill set as far as the long-term profitable relationship with customers won't be possible unless the companies are able to change their attitude towards the customers individually**. According to Peppers and al (1999) "the CRM means to be able to change the attitude towards the client depending on what he tells us and what we know about him". Besides, the success of CRM relates to the possession of tangible and intangible resources so that the company is flexible to the customers' needs.

**Customer Knowledge Management**

In the light of the theoretical foundation, a new concept has emerged; it's customer knowledge management. This concept emphasizes the customer knowledge and not the company knowledge about the customer. This was traditionally collected through market research and is no more sufficient to establish innovative concepts within the company (Podslonko and al, 2007).

The focus of this strategic process lies in the active role that the customer plays in the knowledge management strategy of the firm to become real partners of the company in order to make the innovation process of its products and services better (Gibbert and al, 2002).

There are three types of customer knowledge: knowledge for customers

(delivered from the company towards the client such as information about the product), knowledge from the customers (their ideas and recommendations concerning the improvement of the product) and finally knowledge about customers (their expectation and needs) (Salomann and al, 2005).

The contribution of the customer knowledge management strategy of a company to its CRM approach is reduced to the fact that the long-term profitable relationship that firms wish to strengthen with clients can not exist unless these companies are adaptable to customer needs. This flexibility depends on tangible and intangible resources held by the company and allows it to adapt its attitude towards the customer individually. "The CRM means to be able and willing to change one's attitude towards a client according to what he says and what one knows about him" (Peppers and al, 1999).

Although the customer knowledge management contribution to the CRM success was widely discussed in literature, all the competencies that firms must have in terms of customer knowledge management and that determine the success of its CRM process have not been identified yet.

**Strategic Alignment of Knowledge Management**

The research interested in the customer knowledge management did not indicate the organizational mechanisms necessary for their integration into the global knowledge of the company (Garcia-Murillo and Annabi, 2002). The knowledge management strategic alignment model developed by Abou-Zeid (2008) suggests an integration approach of these two types of knowledge allowing identifying the company's competencies in acquiring, analysing and exchanging both organizational knowledge and customer knowledge.

The knowledge management strategic alignment is fundamentally based on the idea

that efficient use of a company knowledge is possible only if the knowledge management strategy and the firm strategy are aligned (Abou-Zeid, 2005). Efficient use refers to the gains collected by the company from its Knowledge Management investments. This model consists of four elements: the firm strategy, the organizational infrastructure, the knowledge management strategy and the knowledge management infrastructure. It emphasizes the importance of business skills either on the strategic level, its organizational infrastructure or on the knowledge management process level. These competencies have several dimensions such as technical dimension, organizational ones and finally human dimensions.

According to Abou-Zeid (2008), the necessary and required skills on the knowledge management level are:

• ability to facilitate the exchange and share of knowledge

• ability to develop human and cultural structure in order to promote this exchange

• A predisposition to use the available technologies to create, share and document knowledge

A knowledge management responsible has to combine several abilities: those of specialist in business strategy, an expert in technologies and even those of a professional in human resources (Malhotra, 1997)***

In this research, the objective is to identify specific skills as well as business skills in terms of customer knowledge management during a CRM approach.

**Research Methodology**

Within this research, a case study was conducted in order to understand the CRM process implementation and identify the business skills and mechanisms in terms of customer knowledge management during the CRM implementation project and the use of

this tool. The choice of the case method was motivated by the fact that the study of a CRM project success represents a contemporary phenomenon in a context of real life (Yin, 2003). Two different techniques have been used: the direct observation as well as interviews with call center managers and one of the supervisors.

**a)** Company presentation: It is a customer service unit of a Tunisian company dealing with the marketing of household products. This call center serves as a mediator between the technical, marketing and commercial service. It ensures two principal missions: the contact with the customer and the transmission of information flows between the client and the relevant departments. Several activities performed within call centers use CRM tools such as complaint management, the management of the activity "insurance" as well as the management of few marketing campaigns (customer registration, evaluation study of the activity "insurance")

**b)** Research Protocol: the interview guide**** consists of five themes, four of which correspond to the four components of strategic alignment model and a fifth that is interested in the CRM project evaluation.

Given the criticism targeted to the research based on case studies especially on the level of their reliability, Yin (2003) suggests to create a research protocol that allows reaching reliability: it means conducting the case study in a way that allows other researchers to repeat the same research protocol in order to reach the same results.

This protocol must contain the following elements: the central research question, one or more research propositions, the theoretical framework of the research, the data collection design (including the interview guide already made) and the case study report

**c)** Analysis and interpretation of results: the results of interviews prove that a company's CRM implementation project success comes from the knowledge management during the integration of the tool and its use. Yet this alignment was not enough, it had to coexist with organizational skills in terms of customer knowledge management

**Table 1: Elements of Strategic Alignment in the Case of Company X**

| CRM strategy of the firm | Stratégie de gestion des connaissances | Infrastructure et Processus Organisationnels | Infrastructure et Processus en matière de KM |
|---|---|---|---|
| -Adaptation to important sectoral changes especially on the level of competition intensification<br><br>-Market saturation (Household products) and the importance of customer relationship management<br><br>-Making the call center an important pillar in the CRM business process of the firm (especially on the level of customer satisfaction) | -Data acquisition from clients themselves, from retailers or even other partners | -A small management unit which operates as an outsourcing customer service<br><br>- Composition: six persons, a supervisor and a manager<br><br>-Shift from task specialization to customer personalization<br><br>- Structural independence with the subcontractor company | -Several interactions between the different knowledge management tools within a comapny (CRM, outlook mail, Oracle application…)<br><br>-Use of procedure manual for the newcomers training<br><br>-Absence of a KM responsible<br><br>-Data transmission between call center members in a formal or informal manner<br><br>-Exploration of CRM data in order to make a reporting<br><br>-Knowledge transfer through training sessions on products and work procedure<br><br>-Use of several terminologies to codify knowledge |

From this table, the choices of knowledge management strategy support business strategic decisions, that means; the competition intensification and the market saturation compelled the firm to establish knowledge generation process with multiple sources (customers, retailers, and other partners). Besides, the will to make a call center a pillar for a business CRM approach led it to employ several knowledge transfer processes either explicitly (through procedure manuals) or implicitly (in an informal manner). This transfer can also be done through training sessions for new recruits dealing with products, models as well as different working procedures relative to different activities of customer service.

Finally, this knowledge transfer that seeks to manage quickly and efficiently the customers' claims and thus ensures their satisfaction, is made easier by knowledge coding and the use of specific terminology.

Moreover, the working processes are supported by the company KM tools. One can notice the use of the CRM tool in the customer service, the use of outlook e-mail and other knowledge management tools related to other activities (quotation,

installation request...). All these tools aim at facilitating data share and exchange among the call center members on the one hand and between the after sale service staff and the call center staff on the other hand. The organizational processes adopted with the CRM tool are characterized by a shift from a task specialization towards a customization per customer: the operator must deal with the customer request from A to Z. This could be against the CRM approach that consists at centralizing all the customer information in one database, so that everyone can easily access it and thus handle quickly the customer request. This organizational processes change was introduced for more efficiency of the call center and in order to ensure the work performance of customer service. Before installing the CRM technology and even at the beginning of its use, the operators have been specialized by task, some of them deal with customer complaints and others with the insurance requests.

According to the case study results, the CRM strategy alignment with the firm knowledge management strategy is obvious. Its contribution to the project success would be completed by the identification of the principal knowledge management competencies. However, the CRM project success in the call center is claimed by its director, who states that "the project is successful since we have reached functional tool objectives"

## Competencies Identification in Terms of Customer Knowledge Management

During the CRM implementation, knowledge was collected within the company headquarters as well as the technical department. When using the software for a complaint management, the call center members must know personal details, data of the products (in terms of purchase date, reference model) as well as information concerning the nature of the complaint (type of failure, the breakdown date.....). The knowledge in this case is accessible according to the task work and transferable in the three company sites through Tunisia.

Customer knowledge acquisition competencies, which are accessible by the staff according to specific rights, embody the first dimension of customer knowledge management skills.

Tacit knowledge of a business staff was converted explicitly through different versions of the user guide. These manuals include procedures to be followed in the customer complaint management, facilitate data sharing among the call center members (especially new recruits). The value system introduced within the call center is based on data sharing between its members, teamwork and collaboration, "very visible concepts in the case of complaints from VIP or in some particular cases where the usual procedure that is followed can not be applied" says the call center supervisor. Abou-Zeid (2005) states that the necessary and required knowledge management competencies are: the ability to facilitate knowledge exchange and its sharing, the capacity to develop cultural and human structure to promote this exchange, the predisposition to use the available technologies to promote creativity, knowledge documentation and sharing.

Transferable knowledge during the CRM project of the call center is the knowledge about the CRM approach, technical and computer related knowledge as well as organizational knowledge (human resources structure and management). The explicit knowledge transfer was performed through CRM project team meetings with the company staff (for the after sale service for instance it concerns people dealing with products fixing). Moreover, the data were coded in order to facilitate its use. Different terminologies are used in the CRM tool such as for the status of the customer record ("pend": under repair", "close: closed form", etc...) or even the intervention type (repair, installation, etc...). Fields were added such as "notes" where the operator takes notes and specific remarks about the intervention (generally communicated by the customers). The implemented CRM tool allows indexing client files in order to describe the file status,

thus identifying the task to be performed by the operator according to this file status (for example: when a file is on "close" mode, the operator must perform "a happy call" to evaluate customer satisfaction). Finally, several technological tools have been used equally to the CRM in order to ensure the data exchange between the technical department and customer service (outlook, oracle application, etc…)

Consequently, skills in terms of data sharing are the second dimension of customer knowledge management competencies.

The tacit knowledge of this call center was converted into an explicit form during the CRM implementation through seven different using guide versions including modifications and addition of several functions such as: SMS management aiming at informing the customer that his product is fixed, ensuring file management, installation management, technicians' schedule management and finally management of repair history. These new services have been developed using old knowledge, thus leading to the emergence of new knowledge in the form of new fields that are integrated in the CRM tool (adding notes fields, identifying geographic areas by code). According to Akhavan, Ashar and Heidari (2008), these processes correspond to the knowledge use process that deals with looking for knowledge adapted to solve a problem. These skills may lead to the extraction of a new knowledge that must be recorded for a future use.

The managers' capacity to analyse information recorded in the database (by creating a reporting on the number of repair, the types of failure, the types of fixed products…….) represents another firm capacity of using this acquired knowledge efficiently in order to improve its products and services and maintain long-term relationships with customers.

Thus, the company's skills in terms of using knowledge form the third dimension of customer knowledge management competencies.

**The Three Types of Knowledge**

During the CRM implementation, knowledge oriented towards the customer, what Salomann and al (2005) call "Knowledge for the customer" is what is most important. Thus, this firm should acquire product list, models, references, types of spare parts as well as work procedures.

In case of using CRM to manage a customer claim for instance, the kind of information that the company should know about its customers are clients' personal information, data related to the product in terms of the purchase date, the reference and information concerning the type of failure. This is what Salomann and al (2005) call "Knowledge about customers". During the use of the CRM tool, this knowledge is acquired by customers themselves. (See Table 2)

**Table 2: Types of Knowledge and Customer Knowledge Management Competencies in a CRM Project**

|  | Types of Knowledge | Types of competencies |
|---|---|---|
| **CRM implementation** | Knowledge for the customer | Competencies of acquiring, sharing and using customer knowledge |
| **CRM use** | Knowledge about the customer | Competencies of acquiring, sharing and using customer knowledge |

## Conclusion

The knowledge management approach adopted by this company is an approach based on promoting knowledge sharing between users. Work procedures written in the use guide of the CRM technology facilitates data transfer between the different users. In the case of tacit knowledge, it is about sharing experiences (informal and semi-formal learning). If it is about a new case, the data transfer is often done informally (it is also the case of VIP customers). In the case of explicit knowledge, data transfer is performed through formal learning such as the professional training (Abou-Zeid, 2008). New recruits follow a training about work procedures and the use of CRM tool.

According to the literature and the case study results, the three acquired customer knowledge competencies and which can be identified as dimensions of customer knowledge management are: competencies of acquiring, sharing and using customer knowledge. Nevertheless, this research presents certain limits: we have kept in mind only the theoretical frame of knowledge management strategic alignment to assess the CRM implementation project, while other theoretical fields could have been used such as the change management, the impact of relationships between the tool developers and users. Only one case study isn't enough to understand the customer knowledge management contribution to the CRM success. Several future ways of research might be dealt with: testing the construct pertinence of "customer knowledge management competencies", validate the model on the level of other companies in different sectors.

## Acknowledgment

## References

Abou-Zeid, E. (2008). "Developing Business Aligned Knowledge Management Strategy," in "KM: Concepts, Methodologies, Tools and applications," *Information Science Reference*, Hershey, New York.

Abou-Zeid, E. (2005). 'Alignment of Business and Knowledge Management Strategies,' M Khosrow-Pour (Ed). Encyclopedia of Information Science and Technology, Vol 1, 98-103, Hershey, PA: *Idea Publishing Group*.

Agrebi, M. (2006). "Les Apports, Obstacles et Facteurs clés de Succès d'une e-relation : Le Point de Vue des Fournisseurs de Solutions eCRM," *Communications 5ème journée nantaise de recherche en e-marketing*.

Akhavan, P. & Heidari, S. (2008). "CKM: Where Knowledge and the Customer Meet," *KM Review*, Vol. 11, Issue 3, July-August, p 24-29.

Almotairi, M. (2008). "CRM Success Factor Taxonomy," *European and Mediterranean Conference on Information Systems* 2008 (EMCIS2008). May 25-26, Dubai.

Bennani, A. (2004). 'La Réalité de l'alignement Stratégique et la Formulation Stratégique dans l'entreprise

Pharmaceutique Française, Allemande, Anglaise et Espagnole,' *Actes de l'Association Information Management*.

Benavent, C. (2003). 'CRM, Apprentissage et Contrôle Organisationnel,' Téléchargé du Site: www.christophe.benavent.free.fr

Benavent, C. & Waarden, L.-M. (2001). 'Programmes de Fidélisation : Stratégies et Pratiques,' Les Cahiers de la Recherche CLAREE (*Centre Lillois d'Analyse et de Recherche sur l'Evolution des Entreprises*, IAE Lilles, 33 pages.

Brown, S. (2001). 'CRM: la Gestion de la Relation Client,' *Editions Village Mondial*, 358 pages.

Chen, Q. & Chen, H. M. (2004). "Exploring the Success Factors of eCRM Strategies in Practice," *Journal of Database Marketing & Customer Strategy Management*; 11, 4, pg. 333-343.

Crosby, L. A. & Johnson,S. L. (2001). "Technology: Friend or Foe to Customer Relationships," *Marketing Management*, 10, 4, 10-11

Croteau, A.-M. & Li, P. (2003). "Critical Success factors of CRM technological Initiatives," *Canadian Journal of Administrative Sciences*, 20, 1, 21-34.

Dignan, L. (2002). "Is CRM all it's Cracked up to be," *CNET News.com* (April 3). http://news.com.com/2100-1017-874356.html (l'accès au site a eu lieu le 28 /07/2002).

Fimbel, E. (2007). Alignement Stratégique Synchroniser les Systèmes d'information avec les Trajectoires et Manoeuvres des Entreprises, *Editions Pearson -Village Mondial*

Garcia-Murillo, M. & Annabi, H. (2002). "Customer Knowledge Management," *Journal of the Operational Research Society*, 53, 875-884.

Gibbert, M. & Leibold, M. & Probst, G. (2002). "Five Styles of Customer Knowledge Management and How Smart Companies Put them into Actions ," *European Management Journal* Vol. 20, No. 5, pp. 459–469.

Henderson, J. C. & Venkatraman, N. (1993). "Strategic Alignment: leveraging Information Technology for Transforming Organizations," *IBM Systems Journal*, 32, 1, 4-16.

King S. F. & Burgess T. F. (2008). "Understanding Success and Failure in Customer Relationship Management," *Industrial Marketing Management*, 37, 421–431.

Podsolonko, E., Curbatov, O., Gay, M., Pavlidis, P. Louyot, M.-C. & Bonnemaizon, A. (2007). "La Compétence du Client au Cœur du Customer Empowerment et de la Relation Client," téléchargé du site http://www.nbuv.gov.ua/portal/natural/uzt nu/zapiski/2007/economics/uch_20_1e/pod solonko_34.pdf

Salomann, H., Dous, M., Kolbe, L. & Brenner, W. (2005). "Knowledge Management Capabilities in CRM: Making Knowledge For, From and About Customers Work," Proceedings of the Eleventh Americas Conference on *Information Systems*, pp. 167-178, Omaha, NE, USA.

Yin, K. Robert (2003). 'Case study Research: Design and Methods,' Third edition, *Sage publication*.

Zablah, A. R., Bellenger, D. N. & Johnston, W. J. (2004). 'An Evaluation of Divergent perspectives on CRM: Towards a Common Understanding of an Emerging Phenomenon,' *Industrial Marketing Management*, 15 pages.

**Appendix A: The Interview Guide**

Theme 1: Presentation of the company, of its products and its general strategy as well as its CRM strategy

1) What are the strategic choices of the company?

2) What are the skills held by the company to be distinguished from the competition?

3) Governance: What are the alliances, the partnerships and the choices in outsourcing performed by the company?

4) Describe the customer relationship management process of the company (Steps and objectives)

Theme 2: ICT strategy of the company (the information technologies in general and the CRM tools in particular)

1) Does the ICT department have a strategic impact within the company?

2) Which style does team management of ICT projects have?

3) What is the integration and complementarity of ICT investments?

Theme 3: ICT infrastructure and processes of the company

1) Describe the data system architecture of the company (applications and technological tools)

2) What are the work processes related to the information system?

3) What are the skills and capacities in terms of ICT? (choices related to staff training and knowledge development of ICT staff)

Theme 4: Organizational infrastructure of the company:

1) Describe the company's organizational structure?

2) Describe the work processes within the company (those related to the product development, the customer service, the marketing, the sales,...)

Theme 5: The evaluation criteria of the CRM project

1) How do you evaluate the success of your CRM project?

2) How has the solution been used? (Frequency and type of use, user profile, the objectives of the use, the type of reporting...)

3) What are the evaluation criteria used to claim that your CRM project is successful)

4) Do you think that after X years of the CRM implementation project, the expected objectives were reached?

**Appendix B: Extract of an interview analysis:**

| Theme/Sub Theme | Interview | Remarks |
|---|---|---|
| **CRM strategy of the comapny**<br><br>*Strengthen the CRM state of mind in the company (+)*<br><br>*Direct relationship between the firm and customers (+)*<br><br><br>*The firm relationships with retailers and partners (+)* | « The idea of implementing the CRM in the company came after a trip outside the country. It is also related to the CRM state of mind in all our companies. It is our firm itself that was mostly interested in adopting this process, since it has a direct link with the customer's activities (delivery, after sale service,… Since our business calls for direct contact with customers, we can even say that its will is based on this direct contact »<br><br>« There are privileges granted to important retailers facilitating a delivery for a retailer having a quick sale for instance: he places the order with the commercial and we can make the delivery with our trucks » | *Language :*<br><br>Using the past tense to describe a past situation<br><br>*Terminology :*<br>*Use both terms « our company and we » to talk about business thus reflecting a sense of belonging especially that the speaker is part of the family business owner.* |
| **Knowledge management strategy**<br>*Technical knowledge from external consultation(+)*<br>*Knowledge combining an adapted price between the software and the consulting services (+)*<br><br><br>*A change in the management has led to a change in the tool use (0*<br><br>*Accessibility to knowledge by all the staff is difficult during the CRM implementation project(-)*<br><br><br><br>**Kowledge Management infrastructure and process :**<br>*Absence of a knowledge management responsible (during the project and currently in the firm (-)*<br><br>**CRM project evaluation :** | « The choice of the CRM software lasted six months, several suppliers have ben consulted such as Siebel, PeopleSoft in France, but the choice has been focused on Oracle CRM because they have suggested a good financial offer (including the package and the consulting service).<br><br><br>« After the suitability study, the CRM implementation has not occured due to a change of management policy in the call center».<br><br>« It was hard to make the staff understand the reason why the insurance cases would be treated now by the call center. People were wondering if it was because they didn't make a good job. People didn't also understand why procedures have changed… There has been a lack of organization and communication from our part on this level.»<br><br>« The project team was composed of computer scientists and trades. For instance to integrate the work procedures related to after sale service in the CRM tool, trades belong to the technical company department. The CRM team was headed by a computer scientist »<br><br>« CRM was not integrated just to earn money, the objective was to make a balance between money and the brand notoriety. »<br><br>« There has been much progress in the CRM : philosophy and interest in CRM are created however the level of contact personalization has not been reached yet (to be "friends" with the customer) »<br>« The CRM satisfies the customer but it has nothing to do with the service quality » | *Language :*<br><br>Using the past tense to describe a past situation<br><br>*Terminology :*<br><br>*Use of the passive form to describe a brief event (change) that occurred in the company.* |