

Customer perception of customer relationship management technologies



Received: 18/04/2024; Accepted: 13/04/2026

Soraya BOURROUBEY *

Faculty of Economics, Commerce and Management Sciences, University of Oran 2 Mohamed Ben Ahmed, Algeria

Abstract

The arrival of ICTs, with their rising performance and falling acquisition costs, has opened up a new field in the relationship between companies and their customers. This has created a new strategic approach and given rise to a new form of Customer Relationship Management (CRM). These technologies are primarily designed to maintain and manage customer relationships, adding real value to the business, and the ideal technology for this relationship is the call center. The purpose of this paper is to propose a conceptual model of CRM technologies for application in an empirical study. The aim is to determine how customers perceive the company/customer interface and to explain certain customer behaviors.

Keywords

Customer relationship management ;
Company ;
Call center ;
Customers ;
Information and communication technology.

الكلمات المفتاحية

إدارة العلاقة مع الزبائن ؛
إدارة العلاقة مع الزبائن ؛
مؤسسة ؛
زبائن ؛
تكنولوجيا الاعلام و
الاتصال.

تكنولوجيا إدارة العلاقة مع الزبائن

ملخص

مع وصول تكنولوجيا المعلومات والاتصالات، بتحسين أدائها وانخفاض تكاليف اقتنائها، فتح مجالاً جديداً في العلاقة بين المؤسسات والزبائن. وقد أدى ذلك إلى تبني نهج استراتيجي جديد وظهور شكل جديد من أشكال إدارة العلاقات مع الزبائن (CRM). تُستخدم هذه التكنولوجيات بشكل أساسي للحفاظ على العلاقات مع العملاء وإدارتها، مما يضفي قيمة حقيقية للشركة، والتكنولوجيا المثالية لهذه العلاقة هي مركز الاتصال. وبالتالي، يهدف هذا المقال إلى اقتراح نموذج مفهومي لتكنولوجيا إدارة العلاقات مع الزبائن لتطبيقه في دراسة تجريبية، بهدف تحديد كيفية إدراك الزبائن لمواجهة مؤسسة/زبون وشرح بعض سلوكيات الزبائن.

* Corresponding author. E-mail: soraya.bourroubey@univ-oran2.dz

Doi:

I- Introduction :

The reality of today's market and the rapid changes taking place in the business world and the technological environment have prompted companies to call on consulting, training and support services and to embark on a business intelligence approach, in particular through the use of Information and Communication Technologies (ICT).

Nowadays, the new market logics revolve around marketing as a mode of strategic conduct and technology as a fundamental element of marketing reflection, where the customer is the center of interest and the very heart of the organizational structure of the company.

At the same time, new customer profiles are emerging. They express behaviors and expectations that are completely different from those of the recent past. Globalization and current socio-economic conditions are forcing companies into a new competitive context in which the customer has taken over.

This customer is sophisticated, informed, able to compare, more demanding, more reactive, economical, ecologist, unpredictable, volatile and fond of new information and communication technologies (ICTs). The consumer has become a key player in this competitive frenzy. However, in order to cope with these changing behaviors, companies need to review their customer relations and master ICTs. The aim is to understand its customers and integrate them effectively into all its processes.

We can say that the arrival of ICTs, with their rising performance and falling acquisition costs, has opened up a new field in the relationship between companies and their customers. This has created a new strategic approach and given rise to a new form of Customer Relationship Management (CRM).

These technologies are primarily designed to maintain and manage customer relations, adding real value that will enable companies to differentiate themselves from their main competitors. As a result, we can say that from now on, the development and strengthening of CRM is inseparable from that of ICT.

I.1. Customer relationship management

In the current context, betting only on the offer products and/ or services is no longer relevant, it has become essential to value the offer in order to offer "a plus" to stand out from the competition. Success now depends on customer loyalty and relationship maintenance. However, to ensure its sustainability, each company will have to establish an effective customer policy. For this, there are basic techniques that are essential practices to design loyalty approaches and implement effective customer management policies. Among these techniques we cite that of the lifetime value of the customer (LTV. Customer Life Time Value).

The determination of the LTV using the decision-making and tools of customer relationship management (CRM) allows to refine the marketing partners by bringing the cost of recruitment and retention closer to the sales hopes. However, a customer's attachment to a product implies a very good quality of the product or that the offer is attractive compared to that of competitors. This attachment also involves various events that are important to the client, such as the intensity and duration of the relationship with the company, attention to its needs, the management and treatment of complaints and complaints, etc.

The objective of the CRM is to optimize contacts, coordinate processes, enhance knowledge and personalize the customer relationship. This, in order to create and maintain a mutually beneficial relationship between the company and its customers.

According to various currents of thought, the definition of the notion of CRM can take either an organizational or technological connotation. However, all of the considerations point to a common approach for the RCMP. It is a strategy by which the company aims to understand, anticipate and manage the needs of its current and potential customers (Brown, 2006). It is a strategy that aims to improve customer retention rates by making a customer's loyalty more advantageous than infidelity (Lefebvre, 2005). Whereas for (Pepper, 1995) it consists in setting up an organization and means (IT, but not only...) to best capitalize information on its customers/prospects and reuse this information in a proactive approach including the acquisition of new customers. Whereas for (Fernandez, 2001) the concept of CRM is defined as the technological integration of cross-functional processes related to sales, marketing, and customer services, with a view to automating and improving customer relationship management. This concept encompasses the main technological tools and methods facilitating market prospecting and analysis of customers in order to better serve them and retain the most profitable.

We can therefore remember that, the RCMP is the ability to build a profitable long-term relationship with its best clients. This, by capitalizing on all points of contact. It is a process that implements software tools, methods, strategy, behaviors and organizational culture in order to more effectively manage the customer relationship.

It combines technologies and business strategies to offer customers products/services according to their expectations. It includes a set of tools and techniques to manage customer contacts, before, during and after the sale of a product or service. Thus, the process begins at the stage of prospecting new customers and continues in a continuous search for loyalty of customers with high potential.

CRM technologies are mainly intended to capture, process and analyze customer information, thus opening up a new field in the relationship between the company and its customers. They have created a new strategic approach by creating a new mode of CRM and the ideal technology for this relationship is the call centre.

Technologies, on the other hand, facilitate interactions between the company and the customer. The goal is to satisfy the customer whatever the means of communication used to interact with him. They are therefore both a source of information and a means of communication. However, the achievement of the objectives of a GRC approach is made possible through ICT.

However, the introduction of ICT completely changes the way staff operate. They have allowed the creation of new professions and new technological tools. As a result, they have multiplied the channels of contact with the customer and thus multiplied the duration of physical or virtual contact.

The call center is the first place of communication with customers and prospects. As such, it is the obligatory passage and the strategic place where the first lasting impressions and the purchase intentions of the customer are forged. All the more so because it represents the company itself in the eyes of customers.

Indeed, this activity is at the heart of customer service. It allows to remotely manage and deal with the expectations of customers and give them access, over very wide time slots, to the company's products/ services.

At present, the need for companies to react to a highly competitive market and to retain their increasingly volatile customers; leads them to consider the use of a call center to manage customer relations.

I. 2. . Context and Issues

Companies increasingly use ICT mainly in the fields of telecommunications, security, education, national and international trade, ...etc.

ICTs are beginning to be democratized very rapidly, particularly in recent years. Their appearance illustrates the new lifestyle of the consumer, henceforth the concept is imposed under the impetus of the companies of the "e-economy", actors of the distance communication, telecommunications operators, etc. etc.

That said, the ideal technology for this relationship is the call center. Who represents, a relational organization using the phone to create a link between certain employees and customers of companies (Alard & Dirringer 2000). (Caiazzo, 2000), evokes the multimedia communication center at a distance, between a company and its customers, which gives the customer the satisfaction of having benefited from a personalized relationship. This definition is more complete because it refers to the multichannel dimension of the communication used by the service provider (landline, fax, mobile phone, Internet, etc.). Renamed "contact center" and not a call center that refers only to the phone as a means of contact.

Moreover, the competitive advantage of companies lies in their ability to understand and manage the supplier/customer interface. However, in order to understand the role of the call center in the service relationship, it is necessary to analyze how it supports this relational dimension of the supplier/customer interface.

Indeed, call centers are defined as remote multimedia communication centers (Caiazzo, 2000), and call more ICTs for their operation.

Companies are now faced with consumers who are increasingly expressing the need for information and advice, while demanding personalized solutions and seeking an instant response. Thus, the call center can be considered the appropriate solution that integrates all these dimensions of the service relationship.

II– Methods and Materials:

The marketing literature provides us with a range of concepts that fully model the customer relationship and customer relationship management technologies. However, in our research we use some conceptual models that we consider useful and fundamental for the development of our hypotheses.

The first concept that challenges us is that of the service offer. In the field of services, the interaction between the customer and the company is an integral part of the offer. The latter consists of basic and peripheral services (Eiglier and Langeard, 1987; Dumoulin and Flipo, 1991; Langlois and Tocquer, 1992; Lovelock and Lapert, 1999). The basic service is intended to satisfy the main needs of customers while peripheral services represent its added value. It should be noted that the offer of a call center is a strategic choice for these companies with a view to establishing and improving customer relations; at this stage, peripheral services play a decisive role.

Peripheral services can be broken down into two categories. First, the "facilitator" services necessary for the realization of the basic service. Customers becoming accustomed to the offer of these services, end up considering them as due. They become less and less profitable but remain necessary since they are expected by customers. Second, "differentiating" or "supporting" services provide competitive advantages and directly create added value for customers (Lovelock and Lapert, 1999). In the perspective that interests us, that is to say the call center service, the enrichment of the offer of companies concerns differentiating services. From our analysis, it appears that the offer of a call center service is mainly based on a customer logic (what interest does the customer have to be able to benefit from this service) that on a productivity logic (which services make it possible to better exploit the activity?). Moreover, (Lovelock & Lapert, 1999) consider the facilitating services to be "prerequisites" to the establishment of a service relationship between the provider and the client. Thus, we can argue that : The call center

is a source of competitive advantages and directly creates added value for customers.

The second model useful to our analysis is that of servuction. Definitions of "service" are numerous and fragmented. (Dumoulin and Flipo, 1991; Langlois and Tocquer, 1992; Eiglier and Langeard, 1987 and 1994; Grönroos, 1990 and 1999; Lovelock and Lapert, 1999). Services are generally described as intangible services for which there is simultaneous production, distribution and consumption. These services are personalized, provided at the request of the client who participates more or less actively. What the customer perceives in the consumption of a service is its process of realization; this system which leads to the realization of the services is designated "servuction" by (Eiglier & Langeard, 1987).

In addition, the service meeting is defined as the time of interaction during which customers and staff co-product the service. We will see later the limits of this notion. However, several marketing research projects have tried to understand the characteristics of these interpersonal interactions between customers and service providers (Bitner & al, 1990). However, the introduction of ICT in servuction raises the question of the roles played by the staff in contact and by the clients (Curran et al 2005). Indeed, the degree of control of the relationship by the client is closely related to its role in the servuction. The introduction of technology in the service meeting increases its participation (Sabadie and Vernet, 2003). As a result, the client tends to seek high degrees of autonomy and control (Martin Gutiérrez et al, 2004).

The servuction model therefore highlights the modes of relationship and participation of each client in the realization of the service rendered to him and a dimension related to inter-contact that is, the possible effects of a client's action on the quality of service rendered to others. This leads us to argue that: The role of tele-advisors is decisive in the service offer of the call center. From the model of service offering combined with that of servuction, we can highlight another model, the service relationship.

Indeed, an essential model for our analysis is the service relationship. The competitive advantage of service companies lies in their ability to understand and manage the provider/customer interface (Langlois and Tocquer, 1992). The main work in the field of services has been the interaction between "people in contact/customer". (Surprenant & Solomon, 1987) analyse this interaction by developing the notion of "service meeting". However, this concept has limitations because it is mainly concerned with the face-to-face dyadic interaction between staff and customers, without taking into account other forms of interaction in the field of services (the service meeting by telephone or with a machine).

(Eiglier & Langeard, 1994) define the service relationship as a mode of interaction between the company and its customers. It represents what determines the implementation of the service. By taking up the work of (Llosa, 1996), the definition of the service relationship merges with that of "service experience". (Rémy, 2000) develops in this regard, that the notion of service experience means all the contacts between the customers and the service company to achieve a precise result. This notion is interesting because, it takes into account the service as it is experienced by the customer but, it does not consider the relationships between service experiences (Rémy, 2000). In other words, the overall relationship a client has with the company would have no influence on the satisfaction of each of their experiences. The main limitations of this work lead us, like (Rémy, 2000), to orient our choice towards the notion of service relationship.

(Rémy, 2000) shares with (Gadrey, 1994) the idea that the service relationship integrates, on the one hand, the possible modalities of operational interaction and, on the other, the social relations that are built up between service providers and clients during the conduct and settlement of the services. Operational interactions correspond to the technical means (information, time, knowledge, etc.) necessary for the co-production of the service and refer to the customer's participation. As for social relations, they are built during interaction and can take the form of «reciprocal links of control and regulation, contractual links, but also links of trust and fidelity» (Gadrey, 1994). The concept of

service relationship highlights the widening of the interactions to be taken into account within the framework of the service provider/customer interface. Thus, operational interactions can aim, for example, to inform and advise customers on the company's offers and/or to personalize the relationship.

The will to intervene on social relations emerges in particular by the implementation of loyalty programs. In this sense, call centers integrate all these dimensions of the service relationship. We can say then that: Call centers allow companies to retain their customers and build strong and lasting relationships with them. From this concept of service relationship flows that of the integration of technologies into services.

The integration of technologies in services is most often aimed at strengthening the service relationship and at increasing the productivity of the company at the same time. We find these same advantages in the technologies used by call centers (Prabhaker et al, 1997). They increase the availability of the service that becomes accessible from any place, without hourly constraint and sometimes even for free (Anton, 2000). Therefore, the effect of "offshoring", as stated in particular by (Lovelock & Lapert, 1999), transforms the spatial representation of the operator/client couple. Moreover, it allows the reproduction of a traditional act of consumption of the service under different conditions.

ICTs improve the service provided to the customer and must be properly exploited in order to generate a competitive advantage (Domegan, 1996). Indeed, the common use of the mobile phone by customers makes the call center very widely accessible. The latter, manages several applications successively presented. Customers can contact a "remote customer service" for information, complaint processing, etc. etc. Immediate transmission of relevant information becomes possible through the development of accurate scripts available on a tele-advisor screen. However, the interpretation of the script, the type of relationship with the client and the priorities chosen in the action largely depend on each tele-advisor's definition of "good business behaviour" (Buscatto, 2002). In the same vein, (Colgate, 1998) argues that ICT holds promise for a strengthening of the relationship and is suspected of leading to major improvements in the effectiveness of marketing operations and customer relations in general (Nelson, 1999).

(Lang & Colgate, 2003) declare that, ICT can improve the customer relationship, convey more relevant information and reduce the information asymmetry between the two parties. However, the reduction of information asymmetry, favours the reduction of the perception of uncertainty in the relationship which in turn allows the establishment of trust (Morgan & Hunt, 1994), so we can say that : Call center technologies enable companies to strengthen and improve the relationship with their customers.

The models mentioned above namely, the service offer combined with that of the servuction as well as, the model of the integration of technologies in the services, lead us to ask another key model for our analysis that, the intellectual participation of the client.

The use of ICT in the relationship is a measure capable of contributing to the strengthening of the relationship and consequently improving the level of client engagement (Morgan & Hunt, 1994). These technological investments can be interpreted by customers as a desire of the company to value the relationship, therefore, encourage them to engage. However, call centers are services that support two types of customer participation: "cooperation" and "intellectual participation" (Eiglier & Langeard, 1987; Munos, 1997). In the case of cooperation, the client is simply asked to express what he wants and to answer any questions that may be asked. However, by consuming a service, the client internalizes its mode of use which is designated by intellectual participation.

The latter, trains the customer in a process of learning the production operations of the s In the case of a call center, access to this service requires customers to assimilate certain procedures essential to the consumption of the service. Nevertheless, this requires during a transitional period to "over-assist" customers. The training of the latter becomes paradoxically necessary as technological integration intensifies and their autonomy increases. Managing the active participation of the client implies, therefore, to develop its intellectual participation in this way : The integration of ICT in the relationship promotes the engagement of the client. From the model of the intellectual participation of the client, follow two important models, that of the perceived quality and that of the notion of satisfaction.

The perceived quality of a service consists of three parts: technical quality, functional quality and company image; five key elements participate: professionalism and know-how of the organization, reliability and fidelity of services, staff behaviour and attitudes, accessibility and flexibility, reputation and credibility of the service provider (Grönroos, 1984). As for (Parasuraman & al 1985), they identify five elements of perceived quality: material aspects, reliability, customer awareness, staff empathy, the trust that the service inspires. For (Oliver, 1997), perceived quality is an overall evaluative judgment of a product or service on its relative superiority or, more accurately, an assessment of product or service excellence."

Clearly, there is a strong link between the concept of satisfaction and perceived quality. However, we note several differences between these two concepts. First of all, perceived quality is necessarily the result of attributes or dimensions relative to quality, while satisfaction can also result from attributes or dimensions related to quality or not. Then, perceived quality is judged against a standard of excellence, which is not necessarily the case for satisfaction. The latter, can also be based on other types of standards related or not to the quality.

As a result, a customer can be satisfied with a lower quality service if they meet or exceed their expectations (or other standard). Moreover, satisfaction is considered as a dual response (affective and cognitive) whereas, the judgment of quality is simply cognitive. Research by (Oliver, 1994) reveals, for example, that variables related to positive and negative emotional reactions do not explain quality judgment. In addition, this type of judgment does not necessarily require experience with the product/service, contrary to the judgment of satisfaction.

Finally, satisfaction describes the psychological state of an individual (it is specific to an individual: "The customer is or is not satisfied") while, the quality is specific to the product/ service or at least the perception that the

consumer has (Service is or is not perceived to be of good quality) (Oliver, 1993; Oliver, 1997; Rust and Oliver 1994; Taylor and Baker, 1994). Consequently, the perceived quality model allows us to argue that: The perceived quality of the call center service offer depends on several elements : the professionalism of the tele-advisors, the reliability and fidelity of their assistance and advice, their behavior and attitudes, quick access and availability of tele-advisors.

Satisfaction is a key concept, which links marketing to quality management. Consumer satisfaction is often confused, in literature and in professional circles, with the concept of perceived quality.

Indeed, if call center are today widely considered as one of the pivots of customer relationship management (Cañazzo, 2000; Wallace et al, 2000; Acey, 2002), we can regret, like (Bennington & al, 2000) the lack of research on customer satisfaction with this mode of service production. Nevertheless, to repeat the work of (N'Goala, 1998), relational satisfaction represents a lasting emotional state and derives from a cumulative overall experience. If it is positive, the company's service offer would enhance the overall image of the company, but if it is negative, it could harm the overall image of the company, Therefore: The image of the company guarantees the satisfaction of customers of the services offered.

From the combination of the two previous models namely, the perceived quality model and the satisfaction model, results four predominant approaches that try to explain the behavior of customers in particular, their perception of the adoption of information and communication technologies:

The first line of research is that of the adoption of new technologies (Rogers, 1995), in which adoption is facilitated by certain perceived attributes of technological innovation such as observability or the degree of compatibility of innovation. Other studies, analysing consumer attitudes, have shown that individuals have a more or less favourable attitude towards technology (Parasuraman, 2000). This author proposes to segment customers according to their predisposition to adopt new technologies through the concept of "consumer propensity" to adopt and use new technology to achieve a professional or private goal. We formulate our first hypothesis:

Hypothesis 1: Customers adopt call center technology to easily contact the company, using increasingly innovative technologies, from landline to mobile to smartphone.

The second approach is the TAM (Technology Acceptance Model) model. The acceptance by the customer of the use of the technologies in the provision of the service depends on the benefits it receives. According to the theory of acceptance (Davis 1989; Davis et al, 1989), the adoption of a technology is linked to two variables: perceived ease of use and perceived utility. Ease of use is defined as the degree of belief by the individual that using a system does not require effort. While, perceived utility is defined as the degree of belief by the individual that the use of a particular system improves the performance of the task to be performed. Thus, beliefs and attitudes combine to determine behavioral intentions that, in turn, will induce voluntary behaviors of customers. Hence the following hypothesis:

Hypothesis 2: Customers perceive call center services as useful because they allow them to contact their service company without moving, simply by dialing the call center number this, with less effort.

The third approach is represented by the authors (Dabholkar & al, 1996; Dabholkar & Bagozzi, 2002). Their models expose the direct or indirect determinants of the attitude towards the automaton: the attributes of the automaton, situational factors such as expectation and individual variables specific to the consumer (the need for human interaction, the search for novelty, etc.). This allows us to advance our third hypothesis :

Hypothesis 3: Customers prefer to contact the call center to avoid certain constraints: endless queues, unnecessary travel, being supported quickly and enjoying considerable time and money savings.

Finally, the User Acceptance of Information Technology (UTAUT) model developed by (Venkatesh & al, 2003). This model incorporates the history of intent: expected performance, expected effort, social influence, and enabling conditions. Similarly, the research work of (Curran & Meuter, 2005) focuses on the influence of perceived ease of use, perceived utility and the need for human interaction. This allows us to make our last hypothesis :

Hypothesis 4: The nature and performance of the call center communication technique pushes customers to accept its use. And so, given the ease of use and perceived usefulness of the call center, customers express the need to be assisted.

Models of opportunistic behavior and transaction cost theory (TCT) are commonly used in marketing, but they remain interesting to cite. (Williamson, 1985) defines opportunism as the wily pursuit of self-interest. Opportunistic behavior therefore presents itself as an attempt for an individual or an organization to achieve personal gains based on a lack of honesty or loyalty in carrying out transactions with other people. It is at the heart of the transaction cost theory (TCT) formalized by (Williamson, 1975) and completed by itself in (1994) by evoking a new form of organization, that of the hybrid form.

The transaction is presented by (Williamson, 1975-1994) as the unit of analysis of his theory and defined as an economic exchange, the transfer of goods or services between two activities. The cost of this transaction is described by (Allix-Desfautaux & Joffre, 1997) as the face-to-face price between two economic agents, individual or collective. It is a source of behavioral uncertainties in economic transactions. This analysis of transaction costs makes it possible to choose between market, hierarchy and hybrid form. TCT considers the undertaking's activity as an aggregate of contracts that represent costs to the undertaking.

Williamson placed opportunistic behavior at the center of his research. For him, hierarchy not only saves the cost of face-to-face, but also avoids the manifestations of such behaviors. Although these theories have proven their contribution in the field of marketing, they will not be of great use to us for our research study in relation to the perception of customers of the operator/customer interface and to explain certain customer behaviors.

The notion of "personalization" is present in the field of our analysis. Personalization, particularly in the field of dyadic relationship marketing (Gruen & al, 2000), refers to the preferential treatment of the client and the notion of

individualization (Salerno, 2001). For (Gilmore & Pine, 1997), personalization is synonymous with tailor-made marketing where the company adapts its offerings to the needs of customers. However, the use of information and communication technologies (Moati, 2001) is changing the offer of companies towards the proposal of services that integrate technologies into the service relationship such as call center technologies. In this sense, the call center allows to establish a personalized relationship with the customer.

Another model related to the subject of our research, refers to the notion of "expectation". In their operation, call centers use call distribution software that reduces interactions due to the concomitance of customers; in particular the notion of waiting, often discussed in the service sector (Eiglier & Langeard, 1987; Kartz & al, 1991; Durrande-Moreau, 1997; Lovelock & Lapert, 1999), is managed by call centers in order to limit the interaction effects between customers.

Distribution software supports a large volume of calls and calibrates the waiting time. Calls are directed to available call centers or a voice server, which provides information to the client without human intervention. As a result, call center technologies can improve service quality by limiting the interaction effects between customers.

III- Results and discussion :

From the conceptual framework of our research study, we scored the validated models in order to select those that will be used to develop a model specific to the context of our research study.

On the following table we have ranked the models according to their degree of importance and their direct contribution to our research study. The models selected are those that scored above 15 (>15).

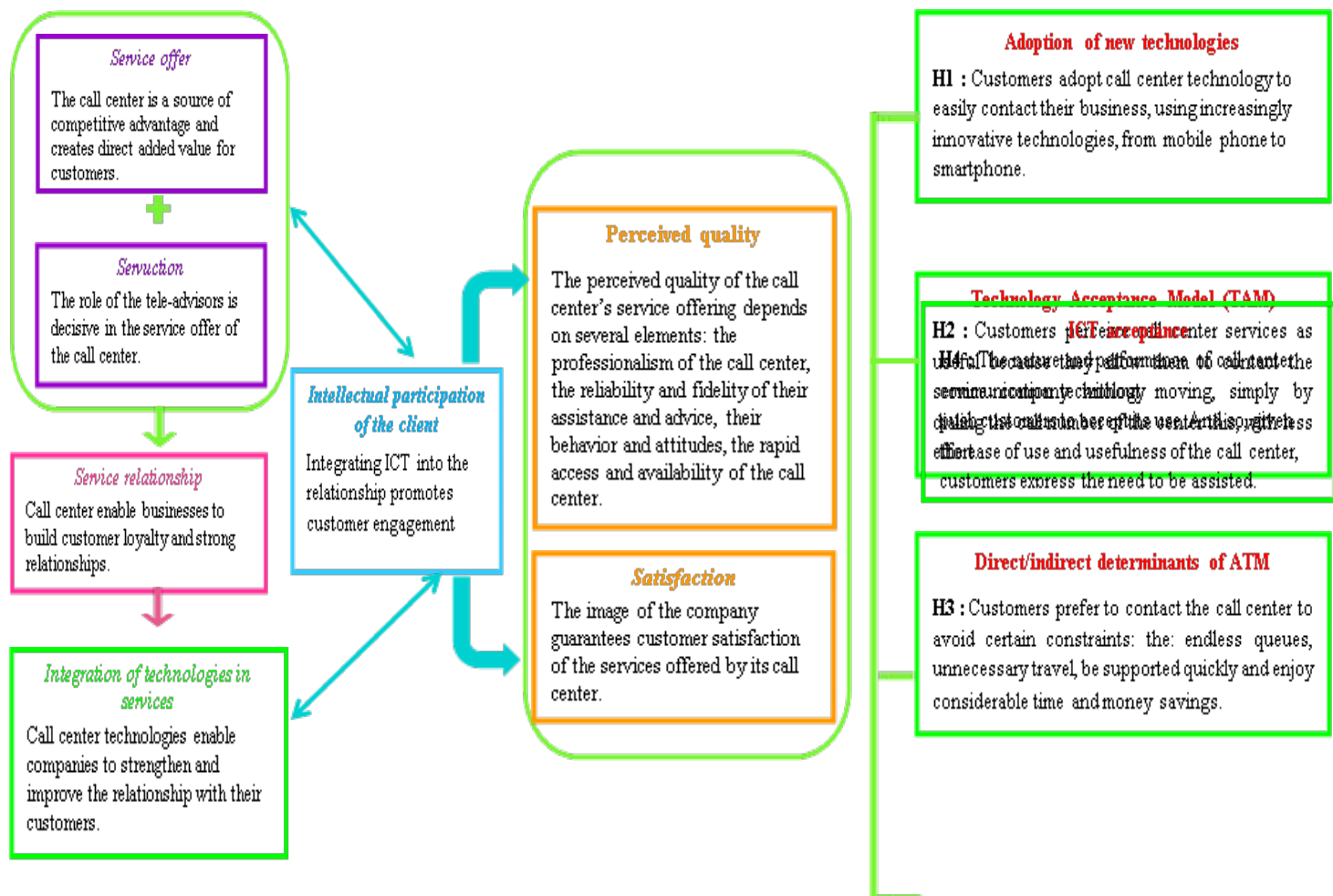
We would like to point out that the models with a score of 15 (=15) were also selected, because they were essential for the construction of our conceptual model. These models are marked with the symbol (*) on the table below. Just after, we propose a model specific to the context of our research study.

Table 1. Exploitation of value

	Degrees of importance for analysis on a scale of 10	Direct contribution to research study on a scale of 10	Score	Selected model Score > 15	Hypothesis rank
1- Offer of service	10	5	15	*	/
2- Servuction	10	5	15	*	/
3- Service relationship	10	5	15	*	/
4- Intellectual participation of the client	10	5	15	*	/
5- Personalization	10	2	12	✗	/
6- The notion of expectation	10	2	12	✗	/
7- Models of opportunistic behaviour and transaction cost theory (TCT)	05	01	06	✗	/
8- Integration of technologies in services	10	10	15	✓	/
9- Perceived quality	10	10	20	✓	1
10- The satisfaction	10	10	20	✓	2

11- Adoption of new technologies	10	10	20	✓	3
12- Technology Acceptance Model (TAM)	10	10	20	✓	4
13- Direct and indirect determinants of automation	10	10	20	✓	5
14- The acceptance of ICTs	10	10	20	✓	6

Fig.1 : Conceptual model



IV- Conclusion:

Most of the world's experts in the field of ICT, highlight the key role of ICT in business development. Now, their sustainability on the market is conditioned by the good mastery of these technologies. Indeed, essential for the optimization of the supply chain in the broad sense, from customer prospecting to delivery and the evolution towards e-business, ... etc.

Similarly, customer relationship management remains the appropriate solution in the face of different market characteristics and emerging economic challenges. Together, ICTs give substance to the promises of relationship marketing. They provide companies with the necessary tools to better know their customers and strengthen the relationship with them.

The call center (contact center) remains the excellent technology of customer relationship and becomes the privileged instrument to realize a personalized and lasting relationship with the customer. Indeed, it allows to orchestrate all the elements of the customer strategy since, the customer database necessary for this "one to one" relationship until the presentation of the offer adapted to its needs. This additional quality of service allows the company to continuously improve its customer knowledge, refine its strategy and increase its commercial efficiency.

Thus, the conceptual model of customer relationship management technologies proposed in this research work makes it possible to determine the perception of customers of the business/customer interface and to explain certain customer behaviors.

We leave this study open for possible applications of the model in different practical contexts.

Finally, it is true that ICTs have proven the value of their implementation in serving the customer. However, the human factor remains decisive in all approaches and remains the unavoidable element that will make the success or failure of the RCMP's approaches. Indeed, the RCMP's technologies remain only a means. They will in no way compensate for organizational deficiencies or human reticence.

Referrals and References:

- Acey, J. (2002). Is your call center predictive. *Management Services*(2), 5.
- Alard, P., & Dirringer, D. (2000). *La stratégie de relation client*. Paris: Dunod.
- Allix-Desfautaux, E., & Joffre, P. (1997). Coûts de transaction. *Encyclopédie de gestion*, 750-775.
- Anton, J. (2000). The past, present and future of customer access centers. *International Journal of Service Industry Management*(2), 7.
- Bennington, L., Cummane, J., & Conn, P. (2000). Customer satisfaction and call center: an Australian study . *International Journal of Service Industry Management* (2), 8.
- Bitner, M., Booms, B., & Tetreault, M. (1990). The service encounter: diagnostic favourable and unfavourable incidents. *Journal of Marketing Research*(1), 71-84.
- Buscato, M. (2002). Les centres d'appels, usines moderne ? Les rationalisations paradoxales de la relation téléphonique . *Sociologie du travail*(44), 199-117.
- Caiazza , B. (2000). *Les centres d'appels : les nouveaux outils de la relation client*. Paris: Dunod.
- Colgate, M. (1998). Creating sustainable competitive advantage through marketing system technology: a triangulation method within the banking industry. *The International Journal of Bank Marketing* (2), 80-91.
- Curran, J., & Meuter, M. (2005). Self-service technology adoption: comparing three technologies. *Journal of Services Marketing*(2), 103-113.
- Curran, J; Meuter, M. (2005). Self-service technology adoption: comparing three technologies. *Journal of Services Marketing*(2), 103-113.
- Dabholkar, P., & Bagozzi, R. (2002). An attitudinal model of technology-based selfservice: Moderating effects of consumer traits and situational factors. *Journal of the Academy of Marketing Science*(30), 318-341.
- Dabholkar, PA; Thorpe, DI; Rentz, J. (1996). A measure of service quality for retail stores: scale development and validation. *Journal of Academy of Marketing Science*(1), 3-16.
- Davis, F. (1989). Perceived usefulness, perceived ease of use, and user acceptance of Information technology. *MIS Quarterly*, 319-340.

- Davis, F.; Bagozzi, R.; Warshaw, P. (1989). User Acceptance of Computer Technology: A Comparison of two Theoretical Models. *Management Science*(8), 982-1003.
- Domegan, C. (1996). The Adoption of Information Technology in Customer Service. *European Journal of Marketing* (6), 52-69.
- Dumoulin, C., & Flipo, J. (1991). *Entreprises de services. 7 facteurs clés de réussite*. Paris: Édition d'Organisation.
- Durrande-Moreau, A. (1997). L'attente d'un service. Quelles recommandations ? *Décisions Marketing*(11), 69-79.
- Eiglier, P., & Langlard, E. (1994, Mai-Aout). Relation de service et marketing. *Décisions Marketing*(2), 13-21.
- Eiglier, P.; Langlard, E. (1987). *Servuction. Le marketing des services*. Paris: Ediscience International.
- Gadrey, J. (1994). Les relations de service dans le secteur marchand, Relation de service, Marchés de services . (CNRS, Éd.) *CNRS*, 23-41.
- Gilmore, J., & Pine, B. (1999). The experience economy. *Business School Press, Boston* , 256.
- Gronroos, C. (1984). A Service Quality Model and Its Marketing Implications. *European Journal of Marketing*(18), 36-44.
- Grönroos, C. (1990, 1999). *Service Marketing and Management*. New York: Lexington Books.
- Gruen, T., O'Summers, J., & Acito, F. (2000). Relationship marketing activities, commitment and membership behaviours in professional associations. *Journal of Marketing*(64), 34-49.
- Kartz, K., Larson, B., & Winter, R. (1991). Prescription for the Waiting-in-Line Blues: Entertain, Enlighten, and Engage. *Sloan Management Review*, 44-53.
- Lang, B., & Colgate, M. (2003). Relationship quality, online banking and the information technology gap. *International Journal of Bank Marketing*(1), 29-37.
- Langlois, M., & Tocquer, G. (1992). *Marketing des services. Le défi relationnel*. Québec: Gaëtan Morin éditeur.
- Llosa, S. (1996). Quatre modes de contribution des éléments d'une expérience de service à la satisfaction. *Working Paper*(477).
- Lovelock, C., & Lapert, D. (1999). *Marketing des services : stratégie, outils, management*. Paris: Editions Publi Union.
- Moati, P. (2001). *L'avenir de la grande distribution*. Paris: Editions Odile Jacob.
- Morgan, R., & Hunt, S. (1994). The Commitment-Trust Theory of Relationship Marketing. *Journal of Marketing*(3), 20-39.
- Munos, A. (1997, Janvier/Avril). Servuction, modes opératoires, coopération et technologies. *Décisions Marketing*(10), 57-65.
- Nelson, N. (1999). Bank Marketing and IT: A historical analysis of the post-1970 period n°, pp. . *The International Journal of Bank Marketing*(6), 176-265.
- N'Goala, G. (1998). Epistémologie et théorie du marketing relationnel. *14ème Congrès International de l'Association Française du Marketing*, (pp. 1-47). Bordeaux.
- Oliver, R. (1997). *Satisfaction: On a behavioral perspective of the consumer*. New York: Mc Graw Hill.
- Oliver, RL. (1993). Cognitive, affective, and attribute bases of the satisfaction response. *Journal of Consumer Research*(20), 418-430.
- Oliver, RL; Rust, RT. (1994). Service Quality: New Directions in Theory and Practice. *Sage Publications*, 68-241.
- Parasuraman, A. (2000). Technology readiness index (TRI): A multiple-item scale to measure readiness to embrace new technologies. *Journal of Service Research*(4), 307-320.
- Parasuraman, A., Zeithaml, V., & Berry, L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*(4), 41-50.
- Prabhaker, P., Sheehan, M., & Coppett, J. (1997). The power of technology in business selling: call centers. *Journal of Business and Industrial Marketing*(4), 222-235.
- Rémy, E. (2000). Le lien social dans les échanges marchands de service : Concept de services de lien et habillage social. *Thèse de Doctorat en Sciences de Gestion*. Rouen: Université de Rouen.
- Rogers, E. (1995). *Diffusion of Innovations*. New York: The Free Press.
- Sabadie, W., & Vernet, E. (2003). La servuction "on-line" : Points communs et spécificités par rapport à la servuction traditionnelle. *2ème journée Nantaises sur le e-marketing*. Nante: Working Paper.

- Salerno, A. (2001). Une étude empirique des relations entre personnalisation, proximité dyadique et identité de clientèle . *Recherche et Applications en Marketing*(16), 25-46.
- San Martín, S., Gutiérrez Cillán, J., & Camarero, C. (2004, Juin). Trust as the Key to Relational Commitment. *Journal of Relationship Marketing*, 3. doi:10.1300/J366v03n01_04
- Surprenant, C., & Solomon, M. (1987). Predictability and personalization in the service encounter. *Journal of Marketing*(51), 86-96.
- Taylor, S., & Baker, T. (1994). An Assessment of the Relationship between Service Quality and Customer Satisfaction in Formation of Consumers' Purchase Intentions. *Journal of Retailing*(70), 163-178.
- Venkatesh, V., Michael, G., Gordon, B., & Fred, D. ((2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*(3).
- Wallace, C., Eagleson, G., & Waldersee, R. (2000). The sacrificial HR strategy in call centers . *International Journal of Service Industry Management* (11), 2-8.
- Williamson. (1975). *Markets and Hierarchies: Analysis and Antitrust Implications*. New York: NY: Free Press.
- Williamson, O. (1985). *The economic institutions of capitalism*. New York: NY Free Press.
- Williamson. (1994). Research Needs and Opportunities in Transaction Cost Economics. *International Journal of the Economics of Business*, 1(1), 45-46.