

# CONCEPTUAL MODEL OF THE IMPACTS OF CRM DIMENSIONS OF CALL CENTER EMPLOYEES ON CALLER'S FIRST CALL RESOLUTION AND SATISFACTION

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## ABSTRACT

*This research aims at developing a conceptual framework and valid prepositions on the impacts of Customer Relationship Management (CRM) dimensions of call center employees on inbound caller's first call resolution and satisfaction. The researchers primarily use qualitative approach that involves detail literature reviews of academic literatures and industry reports on CRM and customer contact centers. The extant literatures suggest that there exist positive relationship between CRM dimensions, perceived service quality, inbound first call resolution and caller satisfaction. Given that this paper is based on qualitative approach, there is need to embark on empirical data gathering to validate the conceptual model presented. Evidence from existing literatures have established that for call centers to achieve operational efficiency in its perceived service quality, first call resolution and caller satisfaction, managements of contact centers need to integrate CRM dimensions into its operations' measurement practices. This research extensively review existing literatures on CRM dimensions and measurements, specifically how it impact the contact center industry. It primarily avails both the academic and contact center management the benefits that are inherent in measuring the impact of CRM dimensions on perceived service quality, inbound first call resolution and caller satisfaction. The research finally proposed a model for future empirical testing.*

**Keywords:** CRM; contact centers; call centers; perceived service quality; first call resolution; inbound; caller satisfaction.

## INTRODUCTION

The current global competitions threatened by the financial crisis has confirmed the need for both manufacturers and service marketers to monitor how their customers feel about their goods and services, and particularly when there is enormous evidence in support of relationship marketing as the alternative means of solving the global market fluctuations (Aihie, 2007; Gummesson, 2004; Berry, 1995 ). This concept of relationship interfaces is centered on where and how individuals and organizations exchange information whether internally as well as externally (Berry, 1983). It empirically means an organization's ability of getting in touch with both the internal and external customers in responsive and flexible manners.

Customer Relationship Management (CRM) as referred is a concept that derives its popularity since 1990s, specifically from two main underlying theories i.e. Relationship marketing theory and resource based theory. Several authors have opined that resource based theory categorizes resources as those elements that are controlled by an organization in order to formulate and implement necessary strategies that would assist in its operational efficiencies (Meso & Smith 2000; Grant, 1996; Mahoney & Pandian 1992; Barney, 1991; and Wernerfelt 1984). Relationship Marketing in customer contact center empirically aligned with the two schools of thought upon which Resource Based Theory is built, "Resource Based View (RBV)" and "Knowledge Based View (KBV)", which have both emphasized on the benefits inherent in organizations competitive advantages (Coltman, 2007, and Acedo et al, 2006). In view of this, this research argued that the available resources in an organization and the existing systems that support the current service delivery processes should also be considered as part of the important

structures in such organization. Meanwhile, for a better understanding of how CRM applications could yield a good service quality and customer satisfaction, there is the need to know more on the underlying resource-based tradeoffs that call center managers must make.

Although service quality has been researched as a key driver of performance in the call center industry (Cronin and Taylor, 1994; Parasuraman et al., 1988), but looking at it from the operational perspective, one will agreed to the sustaining structures or resource-based tradeoffs and decisions that call center managers must make in order to deliver an efficient service to the current and potential customers. In this study, we have presented our theoretical framework on resource-based arguments by introducing related concepts from resource-based theory, with more evidence from operational perspectives such as capacity management and demand management and how each have been effectively utilized to maximize labor and technology resources within the customer contact center industry. CRM is said to offer a long term changes and benefits to businesses that chose to adopt it. CRM has been argued to enable companies to successfully interact with their customers in a dynamic and profitable manner (Chen et al., 2010; Aihie and Bennani, 2007; Adam and Michael, 2005; Gummesson, 2004; Sin et al, 2005). However, many scholars still debate over what should exactly constitute CRM; some says CRM are nothing more than mere software, while others says it is a modern means of satisfying customers' requirement at profit (Soon 2007; Nguyen et al, 2007; and Eric et al, 2006). CRM was also defined by Nguyen et al (2007) as information system that allows organizations to track customers' interactions with their firms and allows employees to instantly pull up information about the customers such as past sales, service records, outstanding records and unresolved problem calls. While different researchers believed that there is no one correct definition of CRM, this research would like to define CRM as "Organization's ability to efficiently integrate people, process, and technology in maximizing positive relationships with both current and potential customers.

## **OVERVIEW OF THE CRM CONTACT CENTERS**

Relevant literatures on the contact center industry have argued in favor of CRM or Customer Relationship Management as a concept that the entrepreneurs should endeavor to implement because of its strength in ensuring good returns on relationship investments (Soon, 2007; Sin et al., 2005). In any CRM call centers, either inbound or outbound both the customers and the firms can effectively communicate via a multiple channels such as: call, faxes, live chat, and e-mails. This is because a contact center is generally a part of an organization's overall customer relationship management (Soon H, 2007).

According to Kode et al (2001), the contact centers are said to possess the potential of becoming the hub of any successful customer relationship management strategies and the fulcrum for such organizations. It has been established that the contact centers can only continue to increase in its operational importance as more and more of the companies are focusing on CRM applications (Soon, 2007). However, with the contact centers becoming an important critical touch point for most of the modern organizations, some literatures have argued on the need to investigate and understand the impact of human and technology applications within the industry (Dean, 2009; 2007; Anand, 2008; Stephen and Michael, 2008; Florian et al., 2001; Feinberg et al., 2000). Notably it has been emphasized that the numerous CRM software have been assisting in integrating all the forms of customer contacts into a central database where organizations can retrieved, viewed and worked on it (Sin et al., 2005). CRM software applications are efficient in tracking customers' issues from the original point of contacts through to the resolution stage. It is no doubt that CRM contact centers are helping firms in realigning their entire activities around the current and potential customers (Aihie and Bennani, 2007). Thus making it an effective strategic business initiative with which firms can maintain long-term relationships with the customers (Adam and Michael, 2005). Below is figure 1 that practically shows the link between contact center activities and the alternative communication channels:

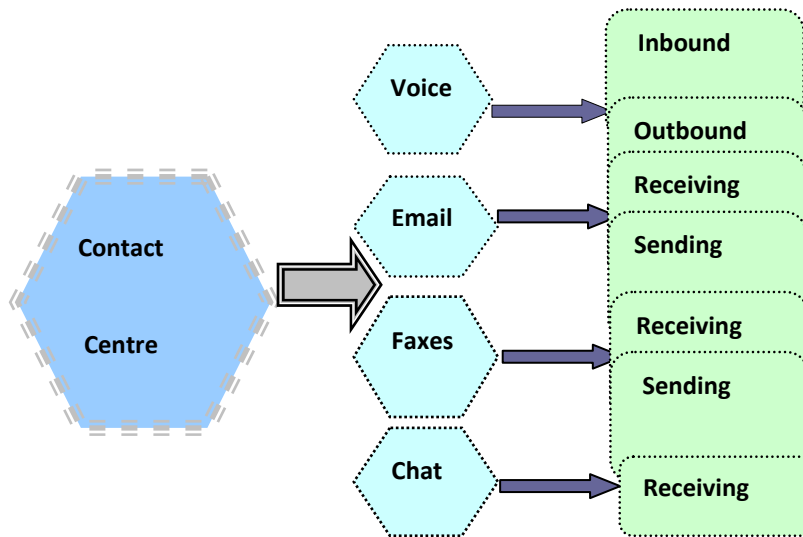


Figure 1: Contact centre and communication channels

### INBOUND CALL CENTERS

The inbound call center is a strategic business unit where the outside world initiates contact to the customer contact centre via voice, email, fax or chatting. Under this arrangement, customers would contact the inbound call centers for services such as airline tickets, getting technical assistance with their personal computer, or for any number of other reasons for which they might need to talk to a company representative. Increasingly, recent studies have proved that companies have started looking to inbound call centers for a proactive customer service that would assist in cross-selling and up-selling (McNally, 2007; Eric et al, 2006). This is because the inbound call centers are giving opportunities for answering any type of enquiries via voice call, email, fax and/or chatting with the company customer service representatives. Similarly are arguments in support of the benefits that are inherent in using the inbound call centers as strategic units for achieving first call resolution and caller satisfaction (Aihie and Az-Eddine, 2007; SQM, 2005; Feinberg et al., 2000).

### OUTBOUND CALL CENTERS

Any customer contact center that is responsible for initiating contact to the customers via voice call, email, chatting etc. is referred to an outbound contact center (Eric et al, 2006). Some of the primary roles of an outbound contact center are to prepare sales leads, plan for customer approach strategies, and sell the company's goods or services to both the current and potential customers. In the course of making an outbound call, the outbound customer contact centers are in a way generating customer data bank through sales leads of potential customers, which in return will assist in making sales and expanding the existing market segment of the company (Bhimrao and Janardan, 2008).

### THEORETICAL BACKGROUND AND CONCEPTUAL FRAMEWORK

Among the good motivating factors of CRM concept is the complex market competitions which have led many organizations into focusing on how best to maximize customer's interaction in order to improve service quality, customer satisfaction and cost of operation (McNally, 2007; Nguyen et al, 2007). The fact of this matter is that currently there are substantial evidences that the contact centers are now the preferred and most prevalent means through which many companies now acquires, retain and maintain long term relationship with both their current and

potential customers (Dean, 2009; Levin, 2007a; Timothy et al., 2006). Good examples are the Fortune 500 companies that are estimated to be operating on average 30 different call centers each (SQM, 2005). Thus, the call center industry is said to be vast and currently rapidly expanding in terms of both workforces and its economic scope. For example, industry reports have estimated that not less than 70% of all the customer business interactions are now occurring via call centers and that at least \$700 billion worth in goods and services were sold via the call centers and contact centers in 1997 (SQM, 2005). What is important is that recognized industry reports have established that these figures have since been expanding at 20% annually (Callcentre.net, 2008; SQM, 2005). It was equally established that over three percent of the United States' working population are currently employed in call centers/contact centers.

## **PRACTICAL ISSUES**

Despite sufficient literatures in support of the enormous opportunities that CRM avails companies through maximization of customer's information in making quick and intelligent business decisions that will resolve issues and provide efficient service to the respective customers (Soon, 2007; Rajshekhar et al., 2006; Adam and Michael, 2005). Yet, there are reliable evidences from prior marketing researches and industry reports that in reality contact centers are failing to realize their targeted actual potentials in helping organizations to achieving the goals of providing the desired levels of caller satisfactions at reduced cost of operations (Callcentre.net, 2008; SQM, 2005; Feinberg et al, 2002; Miciak and Desmarais 2001, Feinberg et al, 2000).

## **THEORETICAL GAPS**

Sequel to the observed practical gaps within the contact center industry, academic literatures such as Dean (2008; 2004), McNally (2007), Roland and Werner (2005), Feinberg et al (2002; 2000) have all empirically argued in favor of the industry reports by SQM (2005) and Callcentre.net (2008; 2003) that criticized most of the organizations operating contact centers as too focusing on things that are easy to measure (e.g. service level, average talk time, average after call work time, average handling time, call per period, average abandonment rate, average speed of answer, average time in queue, percentage of calls blocked, adherence to schedule, employee turnover rate) instead of what is important to measure (e.g. perceived service quality, first call resolution, caller satisfaction, employee job satisfaction etc.) and for focusing on the quantity of calls instead of the quality of such calls (Bhimrao and Janardan., 2008; Soon, 2007; Roland and Werner., 2005; Dean, 2004; Feinberg et al., 2002).

Other empirical evidences from the extant literatures have indicated that for a service to be efficient, it should consist of CRM dimensions, first call resolution, perceived service quality and inbound caller satisfaction (Chen et al., 2010; Levin, 2007a&b; Dean, 2007; Roland and Werner, 2005; Sin et al., 2005; SQM, 2005; Callcentre.net, 2003; Feinberg et al., 2000). CRM dimensions (Customer Orientation, CRM Organization, Knowledge Management and Technology based CRM) as conceptualized, have been argued to be positively related to call center operational efficiencies such as perceived service quality, first call resolution and caller satisfaction as could be seen in figure 2 below (Sin et al., 2005; Yim et al., 2005).

The above issues have been identified as the primary cause of the current high attrition rates, customer dissatisfactions and subsequent high cost of operating contact centers (Dean, 2007; Lee et al., 2006; Wang, 2006; Roland and Werner, 2005). As suggested by Feinberg et al. (2000) that uncovering the significant variables that influences caller satisfactions are very crucial if researchers are to provide necessary guidance for the contact center managers. From the aforementioned practical issues and theoretical gaps, the objectives of this study is to conceptualize and propose a model that will explain the relationships that exist between CRM dimensions and its consequences on first call resolution, perceived service quality, and caller satisfaction and equally propose the mediating impact of perceived service quality and first call

resolution on caller satisfaction within the customer contact center industry. Below is figure 2 that aptly depict the impact of CRM dimensions on caller satisfaction within the contact center industry:

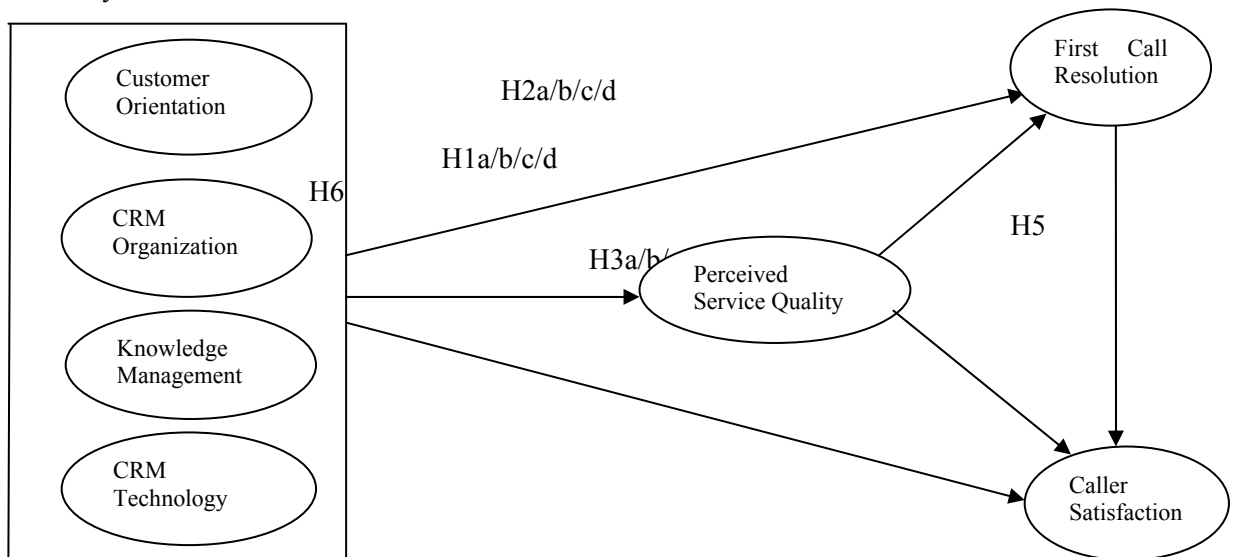


Figure 2: Conceptual Model of the Impacts of CRM Dimensions in Contact Centers

## CUSTOMER ORIENTATION

Most literatures have used terms such as marketing concepts; market orientation, customer orientation, market driven firms, or market focused organizations to describe the types of an organizational orientation where the customer needs serves as basis upon which organizations plans and designs its strategies (Chen et al., 2010; Dean, 2007; Brady et al., 2001; Lukas and Ferrell, 2000; Narver and Slater, 1990). Over the last twenty years these concepts have started to be very critical in the field of marketing management practices and theories, with apparent conclusions in support of the statement that any organization that adopts customer orientation approach are more likely to establish the required customer quality, increase customer satisfaction and achieved the desired organizational objectives more efficiently than its competitors (Chen et al., 2010; Roland and Werner, 2005; Narver and Slater, 1990).

Beyond this are the different ways by which different authors have explained the meaning of customer orientation, with specific reference to Kohli et al (1993) that argued that customer orientation serves as one of the behavioral components in a typical market orientation programs. Other components includes competitor orientation and inter-functional coordination, which were said to be interlocking in between two decision making procedures of long term customer focus and organization's profitability (Kohli et al, 1993). In addition to this are the arguments of some academics and marketing practitioners that there have been no established clear distinctions between market orientation and customer orientation (Jaworski and Kohli, 1990). The apparent conclusion is that both terms have been interchangeably used (Brady et al., 2001; Lukas and Ferrell, 2000; Kohli et al., 1993; Jaworski and Kohli, 1990; Narver and Slater, 1990). In this conceptual framework, customer orientation incorporates both commitment to customer's needs and customer feedback as supported by many extant literatures (Dean 2007, 2002).

At the other extreme end are some authors that argued that despite the importance of the concept of customer orientation, there still exist very little literatures that are dealing with process of developing such an orientation within the contact center industry (McNally, 2007; Dean, 2005; Roland and Werner, 2005), specifically whether through a general descriptions or via a case study approach (Sin et al., 2005; Yim et al., 2005). To Sin et al (2005), they argued that although it is observed that most empirical studies have been concentrating on the degree and measurements of the concepts, but the extant literatures have long neglected the variations in the

customer orientation dimensions or the features of the concepts as exhibited by each organizations (Chen et al., 2010; Sin et al., 2005). Therefore the general literatures on customer orientation could be argued as not been widely practiced specifically by the contact center professionals in the manner advocated by Sin et al (2005) and supported in other literatures such as Roland and Werner (2005) and Dean (2007) that have all suggested a positively relationship between customer orientation, perceived service quality, inbound first call resolution and caller satisfaction. The fact of this matter is that whether in the contact center or any other industry it is good to note that the need to provide valid measures for the customer orientation programs should be seen not only in symbolic terms, but the very light of what the implementer is actually seeking to achieve (Chen et al., 2010; Dean, 2007; Roland and Werner, 2005).

Given this evidence and many more empirical findings that have establish customer orientation as positively related to perceive service quality, inbound first call resolution and caller satisfaction (Dean, 2007; Roland and Werner; 2005; Yim et al., 2005; Feinberg et al., 2000), whereas probing and measuring the impact of this orientation have been suggested by researchers (McNally, 2007; Sin et al, 2005).

Therefore:

**H1a:** Customer Orientation of the inbound customer contact center is positively related to perceived service quality.

**H2a:** Customer Orientation of the inbound customer contact center is positively related to first call resolution.

**H3a:** Customer Orientation of the inbound customer contact center is positively related to caller Satisfaction.

## **CRM ORGANIZATION**

CRM organization has been argued as an essential means through which fundamental changes in terms of how firms organized and conduct its business processes around employees and customers can be actualized (Wang et al., 2006; Sin et al., 2005; Yim et al., 2005). Implementing firms are encouraged to pay necessary attentions to the inherent organizational challenges in the CRM initiatives (Chen et al., 2010; Rajshekhar et al., 2006; Adam and Michael, 2005). Both Wang et al (2006), Sin et al (2005) and Yim et al (2005) have all empirically tested and established that there exist a positive relationship between CRM organization and customer satisfaction, with serious emphasis on the positive roles of the employees. They argued further that the key considerations for any successful CRM to be implemented within the whole firm are organizational structures, the organization wide commitment of available resources, human resource management policies and employee job satisfaction that positively worked together to influence customer satisfaction (Wang et al., 2006; Sin et al., 2005., Yim et al., 2005). By organizational structure means that CRM applications requires that the entire strategic business units in such firms be design to jointly work together towards achieving a common goal in terms of building a strong long-term customer relationships (Sin et al., 2005; Yim et al., 2005). For better efficiency of such organizational structure, it was advised that firms should incorporate productive process teams, cross discipline segment groups and customer focused departments (Aihie and Bennani, 2007; Sin et al., 2005; Yim et al., 2005). All the aforementioned structural designs are said to require a strong inter-functional coordination between the different departments, a statement that further confirms the existence of a positive relationship between CRM organization, employee job satisfaction and performance, perceived service quality and first call resolution (McNally, 2007; Rajshekhar et al., 2006).

Due to the high cost involvement of CRM applications, Sin et al (2005) and Yim et al (2005) conceptualized and established the importance of organization's wide commitment of resources to the intended design of CRM structures as having a positive relationship with employee satisfaction, performance and customer satisfaction. Also very important in their findings are the argument in favor of CRM organization as the established link between the human resources and the marketing interface (Chen et al., 2010; McNally, 2007; Sin et al., 2005). Other

literatures such as Dean (2007) and Roland and Werner (2005) have empirically established that there exist a positive relationship between CRM dimensions (specifically customer orientation), employee job satisfaction, perceived service quality; first call resolution and customer satisfactions. Dean (2007), Roland and Werner (2005), Sin et al (2005) and Yim et al (2005) all empirically argued that this is a stage where firms need to logically instill in its customer service representatives the utmost importance of the CRM dimensions in order to positively influence employee job satisfaction, perceived service quality, first call resolution, customer satisfaction and organization overall performance. In their concluding remarks they emphasized on four significant firms' internal marketing processes, which includes employee empowerment, effective internal communications, standard reward systems, and employee involvement as efficient means of actualizing CRM organizations on employee job satisfaction and performance (Chen et al., 2010; Sin et al., 2005).

In view of this, this research Hypothesize that:

**H1b:** CRM Organization of the inbound customer contact is positively related to perceived service quality.

**H2b:** CRM Organization of the inbound customer contact is positively related to first call resolution.

**H3b:** CRM Organization of the inbound customer contact is positively related caller Satisfaction.

## KNOWLEDGE MANAGEMENT

Knowledge Management as information strategy have been defined in different ways by different authors, but essentially it is a means with which companies capture, organize, manipulate, and share implicit and explicit data with both internal and external users (David and Wendy, 2009; Eid, 2007; Sin et al, 2005) . Whereas evidences from several literatures have indicated that the success or failure of relationship marketing activities in a company heavily depends on the company's ability to collect and analysis valuable customer information that could be used for developing and establishing individual customers' highly personalized product/services (Chen et al., 2010; David and Wendy., 2009; Dean., 2007; Eid., 2007; ). Chen et al (2010) extensively argued that the current global marketing problems are as a result of information handling issues and problems. Authors such as Sin et al (2005) and David & Wendy (2009) are one of the few literatures that have strongly emphasized on the relationship between CRM and KM with specific point on customer Knowledge Management (KM) as having positive impact on employee job performance, perceived service quality and customer satisfaction

However, it is very important to clarify in this research that information should not in anyway be confused with knowledge. An organization is said to possess Knowledge only when the available information has been analyzed and effectively used to implement appropriate strategic decisions and actions (Eid, 2007). In support of the aforementioned facts on CRM and KM literatures, David and Wendy, (2009) has argued that the confusion between CRM and KM has led many companies to commit high investments on ICT projects and programs which have resulted in a marginal results. And to overcome the observed ICT productivity problems, managers needs to put in place ICT-generated customer information into their organizational decision making processes (Chen et al., 2010; Sin et al., 2005). According to Acedo et al (2006) and Meso and Smith (2000), these decision making processes involve three broad stages that run concurrently in the company: namely, Customer information acquisition, Customer information sharing and Customer information utilization. Therefore, collecting and creating insights, skills, and relationships are all termed "knowledge acquisition", and wherever these knowledge been disseminated and shared among the different strategic business unit in the company is termed "knowledge sharing" and lastly whenever there are integration of learning, customer's insights and experiential knowledge that are put together in support of effective decision making processes in the organization is called "knowledge utilization".

As previously discussed that Knowledge about key customers in a company is important for a successful CRM application (Chen et al., 2010; Rajshekhar et al., 2006), because it could be use as a master plan to developing a learning relationship between the employees and company's current and potential customers (Nguyen et al., 2007) and thereby availing each organization the opportunity to a successful establishment of a stronger competitive strength in the market through employee job satisfaction, perceived service quality, first call resolution and customer satisfaction (Roland and Werner, 2005; Dean, 2004; Feinberg et al., 2000). It is premised on these arguments that both Sin et al (2005) and Yim et al (2005) have conceptualized and empirically established a positive relationship between employee knowledge acquisition and usage, and customer satisfaction.

Finally it is arguable that marketing is now more concerned with better means of responding to customer demand, with the general believes that actions taken in a prompt manner not only enhance service quality, but also foster positive long-term relationships with both employees and the customers (Chen et al., 2010; Dean, 2007; Roland & Werner, 2005; Antonio et al., 2005; and Sin et al., 2005; Yim et al., 2005; Feinberg et al., 2000).

This leads to the following Hypothesis:

**H1c:** Knowledge management of the inbound customer contact center is positively related to perceived service quality.

**H2c:** Knowledge management of the inbound customer contact center is positively related to first call resolution.

**H3c:** Knowledge management of the inbound customer contact center is positively related to caller Satisfaction.

## TECHNOLOGY BASED CRM

There are sufficient literatures in support of accurate customer data as an essential element to any successful CRM performance (McNally, 2007; Sin, et al., 2005; Yim et al., 2005) and, considering the fact that technology is said to be playing an important role in any CRM projects through its capacity to add value to a company's intelligence performance (Chen et al., 2010; Kyootai and Kailas., 2007). The extant literatures have discussed the impact of Technology on CRM projects through its capability in collecting, storing, analyzing, and sharing both current and potential customers' information in ways that have greatly enhance employees' ability in responding to the needs and request of the individual customers and therefore leading to better ways of attracting and retaining customers (Chen et al., 2010; David and Wendy., 2009; Kyootai and Kailas., 2007; Nguyen et al, 2007; Sin, et al., 2005).

The unprecedented advances in Information Technologies has assisted in improving the promise on customer value analysis through mass customization via CRM integrated approaches, such as web enabled approach, automation of marketing and customer support processes, customer information systems, and contact centers (McNally, 2007; Dean, 2007; Wang et al., 2006; Yim et al., 2005). The advent of CRM has assisted the establishment of information intensive strategies which encompasses computer technologies in building and retaining long term relationships, by leveraging the existing technology and strategically linking technology deployment to alternative targeted strategic business units (Sin et al, 2005). It is worth mentioning here that the invention of technology in relationship management has to a great level assisted employees in all contact points to serve customers better, a strong indication that without technology, many customer centric programs would be impossible (David and Wendy., 2009; Kyootai and Kailas., 2007; and Sin et al., 2005).

Many of the existing literatures have argued in support of the positive impact that the initiation, development and implementations of CRM technology within an organization has on employee job satisfaction and performance, perceived service quality, first call resolution, caller satisfaction and maintaining long-term customer relationships (McNally, 2007; Wang et al., 2006; Sin et al., 2005; Ravipa and Mark, 2004; Fox and Stead, 2001; Berry, 1995). Notably, this



study identified that it is widely possible for researchers to determine if an organization has in place CRM technology or not, but measuring the effectiveness of its utilization in terms of user acceptance, and the desired operational performance have since been neglected and this has been confirmed as very vital to the implementing firm (Sin et al., 2005; Ravipa and Mark, 2004). The existing academic and practitioner literatures on CRM are mostly in the areas of customer database, contact centers, online chatting systems, e-mails, Internets and some organizational group support systems (McNally, 2007; Nguyen et al, 2007; Adam and Michael, 2005; James, 2004).

Given the existing theoretical evidences that established CRM as a special application in Relationship Marketing, Sin et al (2005) proposed, tested and empirically established a positive linkage between Technology based CRM and organization performance (Sin et al, 2005).

**H1d:** Technology based CRM of the inbound customer contact center is positively related to perceived service quality.

**H2d:** Technology based CRM of the inbound customer contact center is positively related to first call resolution.

**H3d:** Technology based CRM of the inbound customer contact center is positively related to caller Satisfaction.

## **PERCEIVED SERVICE QUALITY**

A lot of empirical studies have shown compelling evidence that there is a direct relationship between service quality and customer satisfaction and loyalty (Dean, 2007; Teas, 1993a&b; Zeithaml et al., 1993; 1985). According to Dean (2007), Perceived service quality is customers' assessments of the overall superiority of the services provided by the firm, with specific reference to the service interactions and outcomes. In the synthesis of other previous work, Dean (2007) quoted Brady and Cronin (2001b) as establishing three dimensions of overall service quality, which are interactions, outcomes, and environmental quality. Given the telephony nature of this research, we are excluding the physical environment. The extant literatures have established managers and agents' relationship as interaction quality, while the outcome dimension was related to caller's first call resolution.

Customer perceived service quality is a broader marketing concept because it includes consideration of various service attributes, ranging from any of the below as stated by Mohr (1997).

- (1) Future expectations;
- (2) Value: quality/price;
- (3) Excitement, surprise, and delight;
- (4) Fast response;
- (5) Delivery of solutions; and
- (6) Consistency: defect and error-free (Mohr, 1997).

Following the arguments in support of the above evidences, this research propose that the contact center customers can evaluate (be satisfied/ dissatisfied) with contact center service delivery only after they could interpret (perceive) the services. This is because this proposition is applicable to the transaction specific as well as the global perspectives, a strong reason upon which Dean (2007) empirically tested the mediating impact of perceived service quality between customer orientation and customer loyalty. More specifically to the customer contact centers, this research propose that the customers may perceive contact center service quality immediately after the service delivery as well as in a later time and compare their initial perceptions with their individual predictive expectations. Consequently the perceived service quality, customers' expectations, and the disconfirmation would then result in caller's first call resolution and satisfactions/dissatisfactions. Similarly Dean (2007) empirically shown that perceived service quality of the contact centers positively mediates the link between the customer orientation and caller satisfactions. Part of the recommendations that was given by Dean is that caller satisfaction ought to be separately measured from the service quality

performance so that the organization could be availed with the opportunity of better understanding customers' perceptions of its technology implementations and service quality performance (Dean, 2007; 2004).

Based on the above and many other supporting arguments in the extant literatures, this research hypothesizes that:

**H4:** Perceived service quality of the inbound customer contact center is positively related to first call resolution.

**H5:** Perceived service quality of the inbound customer contact center is positively related to caller satisfaction.

## **FIRST CALL RESOLUTION**

Sequel to the series of literatures that have argued against the efficiency of the current quantitative measures in determining contact centers operational performances (Levin 2007a&b; Eric et al., 2006; Kode et al., 2001), academic scholars such as Feinberg et al (2002; 2000) has made a case for first call resolution (FCR). FCR has been defined as the percentage of the calls that does not requires any further contacts or callbacks to address the same customer's reason for previously calling. Also in support of FCR arguments are that it ought to be defined from the customer perspectives, which any attempt by firms to calculate such will amount to an incorrect estimates (Stephen and Michael, 2008; Timothy et al, 2006). Their primary view is that there is need for a greater effort to evaluate whatever that will satisfy the customers' needs.

Some literatures have equally criticized the industry standard that target 80 per cent of incoming calls to be answered within 20 seconds, as being very hollow in terms of achieving best call qualities that will meet the customer's expectations (Dean, 2009; 2007, Eid, 2007; Roland and Werner, 2005). Their arguments are premised on the fact in measuring how well of a call, as against the existing industry structures that involves measuring fastness of a call. Levin (2007a&b) equally support that FCR is by far the contact center variable that is having the biggest of impact on inbound caller satisfaction. Integrating his analysis from the findings of Service Quality Measurement consulting group (SQM), Levin (2007a) empirically argued that the inbound caller satisfaction will drop at an average of 15% for all the callback that a customer makes to any contact center. In that same SQM's finding, it was estimated that for every 1% improvement that any contact center achieves in FCR, they will get a 1% improvement in their caller satisfaction (Levin, 2007a). Also relevant in the findings to establish the importance of FCR is a study of 150 contact centers by SQM, where they have found that the world class contact center with a high customer satisfaction ratings have an average FCR of about 86% (Stephen and Michael, 2007). SQM findings also indicated that the contact centers with lower customer satisfaction index are always within the lowest range of FCR (Stephen and Michael, 2007).

In Levin (2007b), he empirically establish that any contact center that achieved an increased customer satisfaction will likely experience a lower cost of operation, reduction in repeat callers, reduction in risk of existing customers defecting to the competitors, and finally achieving a higher employee job satisfactions. The premise of this argument is that if contact centers are facing increased repeat calls from a group of frustrated customers, that it will definitely strains the customer service representatives and invariably leading to a lower employee morale, poor customer service outputs and subsequently leading to higher customer service representative turnovers.

Some authors have depicts the benefits that are inherent in the real time customers surveys as an effective means of capturing the required information that firms need in combating the cause of the customers repeat calls (Feinberg et al., 2002). Further explanation was given in support of an open ended type of survey where opportunity can be given to the callers to provide detail descriptions of the actual problem they are facing. This is because those literatures believed that

the proposed qualitative information will add the needed explanations to the available dramatic quantitative information about customer problems (Levin, 2007a&b; Feinberg et al., 2000). As revealed that many contact centers have been employing different technology and manual applications to assist them in answering their FCR rate question, but none of this technology have been established to have the capacity in accurately answer the question in a better way than the customers themselves (Stephen and Michael, 2007). That firm's process of reviewing their phone records and trying to run software applications are nothing rather than beating around the bush (Stephen and Michael, 2007).

Finally, since First Call Resolution has been established as a popular KPI, it is arguable to ensure that its application is properly benchmarked within the contact center industry (Stephen and Michael, 2007; Levin, 2007a&b; Feinberg et al., 2002; 2000).

Conclusively, this research proposed that:

**H6:** First Call Resolution of the inbound customer contact center is positively related to Caller Satisfaction.

## CALLER SATISFACTION

Several researchers such as Anand (2008), Kyootai and Kailas (2007), Wen (2007), Taylor and Baker (1994), and Zeithaml and Parasuraman, (1993) have all conceptualized customer satisfaction as the individual customer's feeling of the pleasure or disappointment they got after comparing a product's perceived outcome or performance in relation to the customers' expectations. Empirically, the existing scholarly literatures have established two general conceptualizations of customer satisfaction, namely, the transaction specific satisfactions and the cumulative satisfactions (Taylor and Baker 1994; Zeithaml and Parasuraman, 1993). The transaction specific satisfactions has been defined as the customer's evaluations of his or her experiences and subsequent reactions to a specific service encounter (Wen, 2007; Cronin and Taylor, 1992), while cumulative satisfactions is said to refers to actual customer's overall evaluations of the consumptions experiences he or she has gotten (Taylor and Baker 1994).

Caller Satisfaction is a component of overall Customer satisfaction which could be describe as the psychological concept that captures the feelings of well-being and pleasure that results from customers' ability to obtain what they hopes for and expects in calling the customer service department of their marketers/service providers (Feinberg et al., 2002; 2000). Literatures on the determinants of callers satisfaction is still at the infant stage if compared to the determinants of customer satisfaction. This is because caller satisfaction is limited in scope, specifically to the inbound call centers and contact center industry (SQM, 2005; Feinberg et al., 2000). Customer satisfaction on the other side is wider and different approaches to its studies have being in existence for decades. In trying to determine the criteria for measuring call center customer satisfaction performance, SQM (2007; 2005) classified call center performance into 3 categories: The low performing call centers that falls within top box caller satisfactions rating of 54% and below; the average performing call centers falls within top box caller satisfactions rating of 55% to 69%; and the high performing call centers within top box caller satisfactions rating of 70% and above (SQM, 2005).

The specific interest in studying Caller satisfaction, first call resolution and perceived service quality as the antecedents of implementing customer relationship management in this study has been stimulated by the general recognitions that caller satisfaction cannot on its own produce the desired customer lifetime values (Levin 2007a&b; McNally, 2007; Eric et al., 2006; Feinberg et al 2002; 2000; Kode et al., 2001). And given the overwhelming arguments under this same concept that asserts it is more expensive to winning the new customers than to keeping the existing ones (Taylor and Baker, 1994). This is because there are available empirical data that support the arguments that the customer replacement costs such as advertising, promotions and sales are higher for new customers than for the existing ones and that it takes more time for the new customers to become profitable as against the old customers (Abraham and Taylor, 1999).

## KEY REQUIREMENTS FOR CRM SUCCESS IN CONTACT CENTER

The success of CRM initiative primarily requires the integration of every unit of the business that touches Customer, specifically People, Process and Technology. Each of these components presents its own challenges, but a company's ability to successfully integrate all the three will determine CRM success or failure (David and Wendy, 2009; Soon 2007; Sin et al., 2005; Yim et al., 2005).

### People

The People component is the most important and difficult part of the contact centre business given users sensitivity to organizational changes (David and Wendy, 2009; Sin et al., 2005). Peoples' importance in the company is irreplaceable as every organization need the right person in the right place to run the business successfully. Different authors have argued on the importance of People in the contact centre, and the need to carry them along in the formulation of the change so that they don't become adverse to such changes (David and Wendy, 2009; McNally, 2007). Very important among the people are the Agent, because they serve as the touch point between an organization and the customers (David and Wendy, 2009).

### Process

The process being one of the key requirements of CRM initiative within contact centre is the most delicate because of its importance in maintaining the business goal (Roland and Werner, 2005). Any mistake in the automation of the CRM initiative process could lead to loss of customers and people turnover (McNally, 2007). There are several elements that comprise of contact centre processes, among which includes:

- a) Policies and procedures
- b) Recruiting and training
- c) Agent performance management
- d) Change management
- e) Compliance etc (David and Wendy, 2009)

### Technology

The Technology component is the most challenging given the continuous expansion of the market. Technology inputs which are the foundation upon which contact centers are built assist both the employees and customers in processing transactions and obtaining information more quickly and accurately (Chen et al., 2010; David and Wendy, 2009). Attached below is figure 3 that depicts the elements under each of the requirements for a successful CRM implementation.

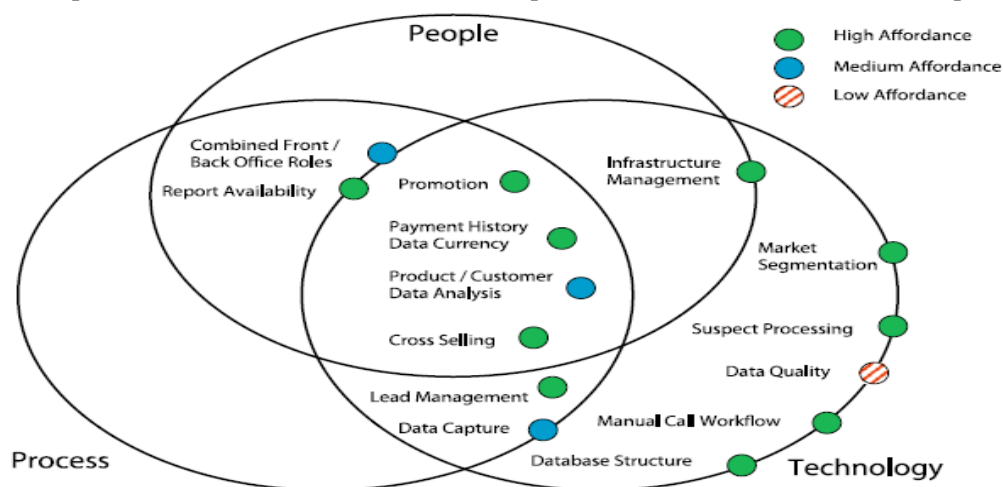


Figure 3: Key requirements for CRM success in Contact Centers  
Source: Adapted from David and Wendy (2009).

## **ADVANTAGES AND PROBLEMS THAT IS ASSOCIATED WITH CRM IMPLEMENTATION**

Considering both theoretical and practical arguments in favor CRM as an important aspect of the existing marketing theories (David and Wendy, 2009; Sin et al., 2005), with evidences of benefits accruing from investing in CRM (Eid, 2007), combined with CRM's availability in today's market (Sin et al, 2005), notably CRM still continues to face different issues right from the conceptual stage to the implementation and post implementation stage (David and Wendy, 2009; Nguyen et al, 2007, Sin et al, 2005). A large percentage of CRM authors and some commercial research scholars have published relevant literatures on the general implementations of CRM applications and technologies, with more specific focus on the impact of lack of commercial benefits that ought to be gained from substantive CRM investments (David and Wendy, 2009). Part of the recommendations is that to achieve successful CRM technology implementations and adoptions, each firm needs to be visible, concentrate and establish a long term senior management commitment with significant organizational change that is in accordance with the intended CRM system, if they expect to reap the full benefits (Sin et al., 2005).

However it is argued by some scholars that the underlying expectation of any CRM technology to be implemented is to achieve customer loyalty and improve the corporate profitability, but contrary to this expectations, David and Wendy (2009) in their findings quote a case study where well over "55% of all the existing CRM projects don't produce the expected results" (David and Wendy, 2009). Also in another survey of 1,500 companies conducted by The Data Warehousing Institute, the results shows that 91% of the companies have implement CRM solution, whereas the results indicates that 41% of these companies with CRM projects have start to experience series of implementation problems (The Data Warehousing Institute, [www.dw-institute.com](http://www.dw-institute.com)).

We will like to emphasize that given the extant literature reviews, CRM "successes" are not clearly defined both in IT or marketing literatures. But as noted, this could partly be attributed to the difficulties that are inherent in the lack of globally accepted definition of CRM.

## **CONCLUSION, LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH**

A critical analyzes of the aforementioned have shown that despite the increasing acknowledgements of the positive impacts of CRM, it is disappointing that very little studies still focus on measuring the impacts of CRM dimensions on customer contact center performances (Chen et al., 2010; McNally, 2007; Soon, 2007; Bang, 2006; Yim et al., 2005). In support of the above emphasis are ample of evidences provided by several sources on severe employee job dissatisfactions and customer dissatisfactions with contact centre systems and services across the globe (Callcentre.net, 2008; 2003; SQM, 2007; Feinberg et al., 2002; 2000; Miciak and Desmarais 2001), and that the major problems are stemming from factors such as lack of established customer orientation, CRM organization, knowledge management, and technology based CRM (Chen et al., 2010; McNally, 2007; SQM, 2007; Wang et al., 2006; Bang, 2006; Sin et al., 2005; Yim et al., 2005).

A major contribution by this study is that only few studies have investigated the impact of one or two out of the four (4) dimensions of CRM on caller satisfaction, but importantly it is this current study that first proposed a complete framework that captures the impact of CRM dimensions on caller satisfaction within the contact center industry. The findings in this study indicate that there is strong reason to modifying the existing CRM implementations and organization's performance measurements within the contact center industry. More importantly in areas such as measuring perceived service quality, first call resolution, customer satisfactions and dissatisfactions.

Beyond these findings is a main limitation in the qualitative approach that was applied in this research, constraining it from the ability to generalize its findings and recommendations to all industries and countries. Importantly, suggestions from this research are not quantitatively backed by empirical data and appropriate statistical analysis that could validate the proposed theoretical linkages that exist between CRM dimensions, perceived service quality, first call resolution and caller satisfaction, thereby further limiting its diagnostic power of predictions. To rectify these limitations, this study suggests there is need for future study to embark on empirical data gathering to validate the proposed model. However, as could be noted that this research has conducted a detailed literature review to establish the positive relationships that exist between CRM dimensions perceived service quality, first call resolution and caller satisfaction, it is important for future researchers to conceptualize and if possible determine other constructs for measuring caller satisfaction within the contact centers, specifically the inbound call centers.

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