

The effect of Customer Relationship Management Dimensions on the Customer Satisfaction in Telecommunication Sectors in Sudan

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Abstracts: Customer relationship management (CRM) has a growing popularity and is becoming one of the hottest academic and practical issues in the business field. Due to the competitive environment, CRM is a crucial element for firm performance. However, there is limited research that reveals the relationship between CRM dimensions and customers' satisfaction. This study serves to clarify the relationship between CRM dimensions and customers' satisfaction, and use of this relationship to answer the following question "to what extent is the CRM dimensions (customer orientation, CRM organization, knowledge management and technology based CRM) could affect customers' satisfaction?" The data collection utilized quantitative methods. Questionnaires were distributed to 286 customers. Multiple regression analysis were used to analyze the data collected. The result of this research showed that the implementation of CRM dimensions is more likely to improve customers' satisfaction; three independent variables, namely knowledge management, CRM organization and customer orientation, were found to be significantly associated with the customers' satisfaction in telecommunications companies in Sudan, while technology base CRM found to not have a significant. In multiple regression analysis, H1: There is positive significant statistical relationship between Customer orientation and customers' satisfaction, H2: There is positive significant statistical relationship between CRM organization and customers' satisfaction and H3: There is positive significant statistical relationship between knowledge management and customers' satisfaction were accepted, while H4: There is positive significant statistical relationship between technology based CRM and customers' satisfaction was rejected. Customers' satisfaction will be affected by CRM dimensions. The findings of the study contribute enormously to the body of knowledge, as it provides a model to be used for explaining effect of the CRM four dimensions on customers' satisfaction.

Keywords: Customer orientation, CRM organization, knowledge management, technology-based CRM, Customers' satisfaction, Telecommunications sector in Sudan.

1. INTRODUCTION

In the current business environment, customers are considered to be the central element of all marketing activities, among which CRM is a priority for firms marketing strategies (Karakostas et al : 2005). Academics and practitioners proclaimed that customer relations is necessary for firms to survive and be successful in contemporary business environment (Heinrich, 2005). Business firms are spending billions of dollars each year on CRM systems or applications (Haghshenas et al : 2015). Nowadays CRM gained importance as a popular business tool for a number of CRM projects if implemented successfully.

Recently, Customers' needs, organizational strategies and competition lead to essential change and development in marketing. In the past the main focus was on mass marketing and mass production, however, today "customers' needs have changed rapidly and that led to change the processes of organizations" (Shafique et al : 2015, 28). The old concept of business that was product oriented model of "design-build-sell" was changed to new customer oriented model by "sell-build-redesign" (Rygielski et al : 2002). At the same time, the process of traditional mass marketing process was changed to a new one to one marketing concept. "In the old marketing concept the main focus was to reach more and more customers but to acquire new customers was more resource consuming as compared to retention of the current customers" (Shafique et al : 2015, 29). Organizations have to make decision about the right way to build long term relation with customer through different tools and techniques. Customer Relationship Management was a dual creation process in which information was captured, integrated, accessed then exchanged to create value for future customer from current customer (Boulding et al : 2005).

2. PROBLEM STATEMENT, QUESTION AND OBJECTIVE

Telecommunications companies in Sudan might not be perfect in applying CRM, or there is a doubt about the effectiveness of CRM and its contribution to long term success, because awareness of the companies has been increased in using the technology as a competitive advantage. However, they are still not aware enough about CRM and how to use this technology in the right way and how it might constitute a solution to organize their systems and sustain their relationships with their customers. The study intended to find answer to the question in relation with focus on Telecommunications Companies in Sudan which adopts the CRM system. Study question is "to what extent the CRM dimensions affect customer satisfaction?" the study aimed to investigate the relationship between the dimensions of CRM and customers' satisfaction.

3. LITERATURE REVIEW

Yim et al (2005) defined CRM dimensions as a collection of different activities (1) focusing on key customers, (2) organizing around CRM, (3) managing knowledge, and (4) incorporating CRM-based technology. 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. CRM is said to offer a long term changes and benefits to businesses that chose to adopt it (McNally, 2007). On the other hand, many scholars still debate over what should exactly constitute CRM; some say CRM are nothing more than mere software, while others say it is a modern means of satisfying customers' requirement at profit (Yueh et al : 2010).

3.1 Customer Orientation:

A customer-focused structure, culture, policy, and reward system should permeate any organization that strives to implement CRM successfully (Ryals and Knox : 2001). All interactions with key customers, who are often identified by "lifetime value computations," must fully reflect this company-wide CRM focus (Jain and Singh : 2002 and Schmid and Weber : 1998). The ultimate goal is to achieve deep customer relationships through which the seller organization becomes indispensable to its most profitable customers (Vandermerwe : 2004). Equipped with company-wide understanding and internal support for key customer relationships, the sales force generally is better enabled and motivated to cultivate long-term customer relationships by offering more personalized products and services (Armstrong and Kotler : 2003).

3.2 CRM Organization:

With a strong focus on key customers deeply embedded throughout its CRM system, the entire company should be organized around cultivating these valuable relationships. The organizational structure needs to be flexible and, if necessary, reconstructed to generate customer-centric values (Homburg et al : 2000) and improve coordination of customer-focused, cross-functional teams (Brown : 2000 ; Homburg et al : 2000 and Sheth : 2002). For CRM success, there also must be an organization wide commitment of resources. With concerted efforts by all organizational functions to continuously provide a stream of value-rich actions and customer outcomes (Ahmed and Rafiq : 2003), the company and its sales force are assured that they can satisfy customers' needs and enhance customer relationships.

3.3 Knowledge Management:

Strongly related to knowledge management, successful CRM is predicated on effectively transforming customer information to customer knowledge (Freeland : 2003 and Peppard : 2000). Specifically, to enhance customer profitability, information about customers should be gathered through interactions or touch points across all functions or areas of the firm (Brohman et al : 2003), so that a 360-degree customer view is established, maintained, and continually updated (Fox and Stead : 2001). Customer knowledge thereby generated needs to be shared and disseminated throughout the organization (Peppard : 2000; Ryals and Knox, 2001) "to address customers' current and anticipated needs. Salespeople are then equipped with a wealth of valuable customer knowledge to meticulously adjust marketing offers to fit the idiosyncratic needs of each customer" (Armstrong and Kotler: 2003, 514).

3.4 Technology Based CRM:

Many CRM-oriented activities, such as knowledge management, cannot be optimized without leveraging the latest technology. Indeed, most CRM applications take great advantage of technology innovations with their ability to collect and analyze data on customer patterns, develop prediction models, respond with timely and effective customized communications, and efficiently deliver personalized value offerings to individual customers (Peppard : 2000 and Vrechopoulos : 2004). With the development of sophisticated information management tools, such as database marketing, data warehousing, data mining, and push technology, companies are striving to seamlessly incorporate the latest technology into their CRM systems. In particular, salespeople frequently depend on continually updated software programs to better respond to their customers and build enduring customer relationships (Kotler, 2003). CRM technology helps companies and their sales people collect, analyze, and distribute information for enhanced prospecting, improved communication and sales presentations, and tailored product configurations. It also facilitates cross-referencing of customers within divisions of a company for greater sales opportunities (Widmier et al : 2002).

3.5 Customers' Satisfaction:

Satisfying products and services have the capacity to provide what is being sought to the point of being "enough". Two related words are satiation, which loosely means enough up to the point of excess, and satiety, which can mean a surfeit or too much of enough, as if to say that too much is necessarily undesirable. These terms illustrate the point that satisfaction implies a filling or fulfillment (Masroujeh : 2009). According to Kotler and Keller (2009) most companies pay more attention to their market share than to their customers' satisfaction, this is a mistake. Market share is a backward looking metric; customer satisfaction is a forward-looking metric. If customer satisfaction starts slipping, then market share erosion will soon follow. Kotler (2005) defined satisfaction as a person feeling of pleasure or disappointment resulting from comparing a product perceived performance or outcome in relation to his or her expectation.

3.6 Customer Satisfaction in Telecommunications Companies:

Leelakulthanit and Hongcharn (2011) studied the determinants of customer satisfaction by interviewing 400 mobile phone users in Thailand. Their investigation found that promotional value, quality of customer service at shops and corporate image have a great impact on determining customer satisfaction. In addition, Khan and Uddinl (2010) interviewed 60 university students in Bangladesh who were also mobile users, to identify the determinant factors in selecting mobile service providers. Results of that study showed two factors, brand image and perceived call rate, to have the most impact on the consumers' selection decision of a mobile service provider in Bangladesh. Bugel et al (2010) studied the commitment to companies, in The Netherlands, using the psychological investment model. The study examined the customer-company relationships in five sectors: the banking industry, health insurance, supermarkets, mobile telecom providers, and the automotive industry. The study hired 300 respondents for each sector. With consider to satisfaction, the result of the study suggests that satisfaction plays an important role in determining customer commitment for service providers and there is a positive correlation between improving customer satisfaction and achievement customer loyalty. Sadia et al (2011) examined customer loyalty in the telecommunication industry in Pakistan, using 146 cell phone users. The study out comes was customer's loyalty is shaped mainly by: trust, service quality, staff loyalty, and switching cost. The results of this study agree, partially, with a study by Boohene and Agyapong (2011) of 460 clients of Vodafone telecommunications company in Ghana. This study concluded that satisfaction not always lead to loyalty, while service quality was found to be strongly and positively correlated with loyalty. However, it can be observed from the findings of this study that customer satisfaction is already built into service quality. Customers perceive service quality positively if they are satisfied with the service provider and with the services offered to them. The importance of service quality in the

selection decision for a mobile provider was also considered by Rahman et al (2011) who conducted a study of 400 mobile telecom customers from major cities in Malaysia. This study concluded that network quality is one of the important factors in overall service quality. In addition to service quality, the study found that price plays an important role in the choice criteria for mobile telephone operators in Malaysia. The previous finding is not far from the result of a study conducted by Gupta and Sharma (2009) in India, They concluded that in order to retain customers and attract new customers, mobile service providers must provide service with reasonable quality without any hidden price, the two most important determinants of consumer satisfaction.

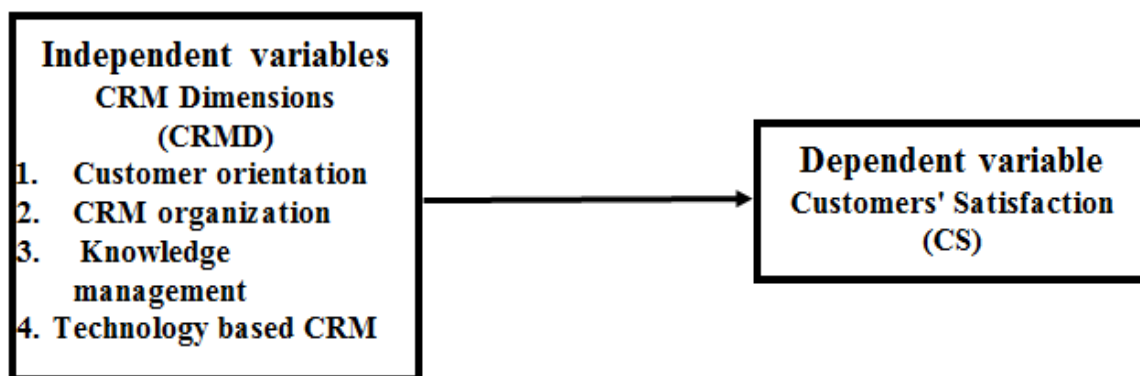
Belaji (2009) reported that perceived quality is an important predictor of customer satisfaction, which ultimately results in trust, price tolerance and customer loyalty. Oyeniya and Abiodun (2011) studied the influence of service quality on customer satisfaction by investigated 148 customers of major telecom companies in Nigeria. The result was the service quality has a positive impact on satisfaction and loyalty. Customer’s judge service quality in mobile telecom industry by the following: due to the fact that telecom firms do not provide tangible products, their service quality is usually assessed by measure of the service provider’s relationship with customers. Thus, telecom service management should pay attention to staff skill profession and offering fast and efficient services (Boohene and Agyapong : 2011). Numbers of studies found that satisfaction in telecom industry is determined by the following factors: voice call quality, wireless coverage, and the customer complaint process (Kim et al : 2004).

Although, some companies failed to retain their customers without satisfying them, but in some situations customer satisfaction may lead to customer retention. According to Almosawi (2012) in telecommunication industry, customer retention determines the success and survival of mobile service providers. This might be due to fierce competition, the high cost of attracting new customers, and the similarity of services offered by the operators. In this respect, Wong (2010) conducted a remarkable study using a usage and payment records of 1403 Canadian post-paid mobile customers over 3 to 7 years of study period. Wong found that greater loyalty, thus retention, is observed in customers with optimal rate plans than those with non-optimal ones. This indicates that in order to reduce churn rates (i.e. loss of customers), mobile service providers must seek effective customer retention strategies.

4. METHODOLOGY

4.1 Research Framework:

The proposed model of this study conceptualizes the relationship among CRM dimensions and customers’ satisfaction. Based on the review of the previous literature, the researcher constructed a model that illustrates the relationship between the variables in figure (1). The relationship is based on the effect of CRM on customers’ satisfaction; these two variables have been developed based on the relationship marketing theory and also based on previous studies (Sin et al : 2005). This proposed contains four dimensions of CRM which comprise customer orientation, CRM organization, knowledge management, and technology based CRM. This propose is constructing on prior researches (Abdullateef et al., 2010; Chang et al., 2010). Furthermore, Figure (1) demonstrates the model of this study. The study investigates the relationship between customer relationship management dimensions and customers’ satisfaction.



Source: Modeling Illustration based on reviewed literature

Figure 1 . A Model reflecting the relationship between the study variables

In this paper, the hypotheses were formulated to test if the dependent variable (CRMD) is significantly related to the independent variable (customers' satisfaction) for the telecommunications companies in Sudan. Based on the literature review and the information in the deductive method of data analysis, the following hypotheses were raised and tested using specific statistical tests. The hypotheses are described below.

H1: There is positive significant statistical relationship between Customer orientation and customers' satisfaction

H2: There is positive significant statistical relationship between CRM organization and customers' satisfaction

H3: There is positive significant statistical relationship between knowledge management and customers' satisfaction

H4: There is positive significant statistical relationship between technology based CRM and customers' satisfaction

4.2 Measurement of variables:

Based on previous literature, regarded CRM was operationalized utilizing the measuring of our factors in the previous research. The scales of customer orientation, knowledge management, CRM organization, and Technology-based CRM adopted from the study by (Abdullateef et al : 2010; Chang et al : 2010; Sin et al : 2005 and Wu and Li : 2011), and customers' satisfaction were operationalized using the measurement developed by items from (Wang et al : 2004; Hansemark and Albinsson: 2004; Masroujeh: 2009; Hoffman and Bateson : 2011 and Leelakutthanit and Hongcharn : 2011). The study was conducted through two parts; the first part relates to the CRM dimensions (independent variable) it contains the four dimensions which are: Customer orientation, CRM organization, knowledge management and Technology based CRM and the second part relates to the customers' satisfaction (dependent variable); it contains Quality of services, Customers complains, Price and Overall satisfaction. In order to measure all of these parts questionnaires were developed and five-point Likert scale was used to seek respondents' opinions through the scoring of items.

4.3 The types of Research Followed:

This paper is mainly descriptive and explanatory, yet as exploratory in pilot test; this means that we are going to answer a "what" question and also find out how causal relationship between variables in our conceptual framework will be established.

4.4 Sample and data collection:

Purposive and convenient sampling methods were conducted in this study, telecommunications companies in Sudan were used, CRM was new and adapts by the companies. As the customers' of the telecommunications companies were relatively big and dispersed across wide geographical regions (15 states), customers in Khartoum were selected purposively because it is a national capital of Sudan and majority of customers were lives in Khartoum (20 millions). As a form of non-probability sampling in order to obtain a gross estimate of the results without wasting time, effort, and expense. (20 millions), a sample of whom was selected conveniently. For a population that is large, (Cochran : 1963, 75) developed the equation to yield a representative sample for proportions.

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where n_0 is the sample size, Z^2 is the abscissa of the normal curve that cuts off an area α at the tails ($1 - \alpha$ equals the desired confidence level, e.g., 95%), e is the desired level of precision, p is the estimated proportion of an attribute that is present in the population, and q is $1-p$. The value for Z is found in statistical tables which contain the area under the normal curve. Illustrate the above equation to calculate the sample size as follows:

$$n = (1.96)^2 * 0.5 * 0.5 / (.05)^2 = 385$$

385 sets of questionnaires were distributed to the sample selected out of Zain company customers in Khartoum State using the convenience method. However, only 286 (74%) sets of questionnaires were successfully collected and completely answered.

4.5 Data Analysis:

Before the main analysis, statistical tools and techniques were used with the help of SPSS software. These contain validity and reliability analyses in order to evaluate the goodness of measures, and regression analysis and to test the influence of customer relationship management dimensions on customers' satisfaction.

5. RESULTS AND IMPLICATIONS

5.1 Reliability:

Reliability testing was performed to ensure that all areas of the constructs domain of interest were covered and that the items truly measured what they were supposed to measure before proceeding to undertake exploratory factor analysis (Sekeran : 2003). Therefore, it was highly pertinent to gauge the extent of reliability of the dependent variables, independent variable, before proceeding to undertake exploratory factor analysis (EFA). The results of reliability testing are shown in Table (1) below. The Cronbach's Alpha " α " value is greater than 0.7. for all factors except 'Technology based CRM and Quality of services' which are close to 0.7, although, both are acceptable. A Cronbach's Alpha value of 0.7 or higher suggests good reliability and that the indicators of model variables validity are good (Hair et al : 2006).

Table (1) Reliability Measurement

Dimension s	Variables	No. of items	Cronbach's Alpha (α)
CRM Dimensions	Customer Orientations	4	0.70
	CRM Organization	4	0.77
	Knowledge Management	4	0.71
	Technology based CRM	3	0.68
Customers Satisfaction	Customers complains	4	0.73
	Prices of products and services	3	0.88
	Quality of services	3	0.69
	Overall Satisfaction	3	0.78

Source: Researcher's data collected through questionnaire

5.2 Validity of Study Data:

The validity of the measurement model was evaluated by checking content validity, convergent validity, and discriminant validity (Hair et al : 2006). Content validity was ensured by using measurement items validated by the research and pilot testing, which gives good confidence regarding the data survey. Confirmatory factor analysis was undertaken to check convergent validity and discriminant validity. Convergent validity was evaluated by examining composite reliability. For composite reliability, a threshold of 0.50 is considered to indicate the majority of the variance calculated for the construct, although values greater than .70 are considered more reliable. As shown in Table (2), all composite reliability values are 0.8.

Table (2) Composite Reliability

Dimension s	Variables	Composite Reliability
CRM Dimensions	Customer Orientations	0.84
	CRM Organization	0.88
	Knowledge Management	0.84
	Technology based CRM	0.82
Customers Satisfaction	Customers complains	0.85
	Prices of products and services	0.94
	Quality of services	0.80
	Overall Satisfaction	0.88

Source: Researcher's data collected through questionnaire

5.3 Multiple Regression Analysis:

Table (3) shows the results of multiple regression analysis between customer orientations, CRM organization, knowledge management, technology CRM and customers’ satisfaction. Three independent variables, namely knowledge management, CRM organization and customer orientation, were found to be significantly associated with the customers’ satisfaction in telecommunications companies in Sudan. As can be seen from Table (3), the customers’ satisfaction depends only on knowledge management, CRM organization and customer orientation. As observed from Table (3), the most important variable was CRM organization, which had the highest Beta value of 0.335 and highest t-value of 5.716. This result shows a positive relationship between CRM (CRM organization) and customers’ satisfaction in telecommunications companies in Sudan. The result demonstrated the strongest correlation between these variables. Therefore, hypothesis 2 was substantiated. This finding is supported by (Sin et al : 2005; Yim et al : 2005 and Akrouh et al : 2011) these studies indicates the important of integrating the organization resources in order to implement CRM perfectly and as a result, to improve the positive affect of CRM organization on customer satisfaction. The second most important variable was knowledge management, which had the highest Beta value of 0.163 and highest t-value of 2.224. This result shows that CRMD effects customers’ satisfaction in telecommunications companies in Sudan. The result demonstrated the strongest correlation between these variables. Therefore, hypothesis 3 was substantiated. This finding supported by (Abdulateef et al : 2010; Akrouh et al : 2011; Sin et al : 2005; Yim et al : 2005 and Sigala : 2005) these previous studies declared that managing knowledge effectively lead the organization to build a strong relationship with customers to enhance customer satisfaction. The third important variable was customer orientation, which had Beta value of 0.222 and t-value of 2.223. This result shows that customers’ satisfaction have an effect on customer orientation in telecommunications companies in Sudan. The result demonstrated the strongest correlation between these variables. Therefore, hypothesis 1 was substantiated. This finding supported by (Ko et al : 2008 and Elkordi : 2014), One of the important purposes of customer-oriented behaviours is to increase long-term satisfaction and to create customer loyalty. Studies have demonstrated that stronger customer-oriented behaviours in organizations have a positive impact on the customers’ satisfaction. In short, the customer-orientation strategy is one of the organization’s resources and a very important dimension of CRM. Therefore, organizations must have a customer-centric culture to implement CRM successfully and consequently create a competitive advantage. In this analysis of the relationship between customers’ satisfaction and CRMD H1, H2 and H3 were supported while H4 was rejected. Based on these result it can be concluded that CRMD have an effect on customers’ satisfaction. Jayachandran et al (2005) found that customer centric culture influences performance indirectly through CRM.

Table 3: The Results of Regression Model Analysis between Independent Variables and Dependent Variables.

Variables	B	Std. Error	Beta	T	Sig.
(Constant)	1.806	.170		10.627	.000
customer orientations	-.090	.046	.222	2.223	.043**
CRM org	.335	.050	.335	5.718	.000**
knowledge mgt	.119	.053	.163	2.224	.027**
technology CRM	-.026	.049	-.040	-.538	.591

Source: Researcher’s data collected through questionnaire

5.4 Non-Significant Factors:

In the regression analysis only one of the four variables were found to not have a significant; technology base CRM. Technology base CRM failed because of the defect and problem in the following: First. use of technology on CRM projects through its capability in collection, 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 (Yueh et al : 2010; Nguyen et al :

2007 and Sin, et al : 2005). Second: 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; Wang et al : 2006 and Yim et al : 2005). Third: 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 (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 perceived service quality, resolution, customer satisfaction and maintaining long-term customer relationships (McNally : 2007; Wang et al : 2006; Sin et al : 2005; Fox and Stead : 2001).

5.5 Hypotheses Results summary:

The purpose of this study is to investigate the relationship between CRM dimensions (customer orientations, CRM organization, knowledge management, technology CRM) and customers' satisfaction.

H1: There is positive significant statistical relationship between Customer orientation and customers' satisfaction

The results of the correlations, shown in Table (3), demonstrated that there is positive significant statistical relationship between customer orientation and customers' satisfaction in telecommunication companies in Sudan, the Beta value for this variable was 0.222, t value was 2.223 and the sig was 0.043 which is < 0.05 level for the craft category.

H2: The results of the correlations, shown in Table (3), demonstrated that there is positive significant statistical relationship between CRM organization and customers' satisfaction in telecommunication companies in Sudan, the Beta value for this variable was 0.335, t value was 5.718 and the sig was 0.000 which is < 0.05 level for the craft category.

H3: There is positive significant statistical relationship between knowledge management and customers' satisfaction

The results of the correlations, shown in Table (3), demonstrated that there is positive significant statistical relationship between knowledge management and customers' satisfaction in telecommunication companies in Sudan, the Beta value for this variable was .163, t value was 2.224 and the sig was .027 which is $< .05$ level for the craft category.

H4: There is positive significant statistical relationship between technology based CRM and customers' satisfaction

The results of the correlations, shown in Table (3), demonstrated that there is positive significant statistical relationship between technology based CRM and customers' satisfaction in telecommunication companies in Sudan, at Beta = -0.040, t value = -0.538 and Sig= 0.591 which is < 0.05 level for the craft category.

6. CONCLUSIONS

The paper was conducted by using quantitative approaches. Adoption of CRM enhance companies to move towards customer centricity. However, in order to have a highly effective CRM system, a company must be equipped with all four key success dimensions; customer orientation, CRM organization, knowledge management and technology base CRM. The implementation of effective CRM can result in efficiency and improvement, increase income and lead to better productivity. This study provided an illustrative model to show the relationship between CRM dimensions, and customers' satisfaction, It explained the effect of CRM four dimensions on customers' satisfaction, It can be revealed that the concept of CRM has neither been fully verified, nor empirically assessed to determine the strength of the relationship between dimensions of CRM and the telecommunications customers' satisfactions. Moreover, this paper attempted to extend the body of knowledge by explaining the theoretical possibilities of the relationship between CRM dimensions and customers' satisfaction. It is worth mentioning that this study also raised the awareness among managers to pay more attention to CRM dimensions, assisted them in improving customers' satisfaction and competitiveness.

In addition, the study also added a further dimension to the literature in the knowledge base field. Moreover, the information on CRM gained from this study will help companies establish an effective knowledge base policy and will also have wider implications for staff, companies, and society.

Despite results of this study cannot be generalized, it might provide some support to telecommunications managers to facilitate their CRM implementation process in order to improve and enhance their organizational performance. The study provided important insights to enable the environment required for the successful implementation of CRM in

telecommunications companies Sudan. Furthermore, the findings are of particular importance to managers who are responsible for developing and implementing strategies. The findings might help corporations as well to understand the effectiveness of relational exchange from the firm's perspective, and develop appropriate relationship marketing strategies accordingly. The instrument used in this study is available for management to measure their relationship CRM activities and customers' satisfaction. Customers are playing the most important role in company's success. This statement is the heart of marketing thinking and drives study into relationship marketing. In telecommunications companies in Sudan the marketing concept didn't always dominate organizational thinking. Indeed many firms emphasis on organizational efficiency and the use of relationship marketing strategies to persuade. CRM provides us with a short cut to formalize our relationship with the customers we serve rather than standing above these markets

7. LIMITATIONS AND RECOMMENDATIONS

7.1 Limitations:

1. The main limitation of this study was the constraints of accessing resources, and the consuming time.
2. The study was restricted to only one company that use CRM system and with a small size of sample who used the service. Therefore, the results of the study may not be generalized to all other telecommunications companies.
3. The study's findings only reflect the situation regarding CRM at a particular moment in time.
4. Since the study is exploratory and sampling used is non probability, then the results reached cannot be generalized as well.

7.2 Recommendations:

Based on the conclusions reached, the following recommendations are set:

1. The approach used in this study could be extended to other companies and countries as an area of further research.
2. The updated information should include customer address, payment record from each subscription, their names, cell phone numbers, Emails and if possible dates of their special occasions. Such information will help the company to establish a proper contact with the customers at the proper time.
3. After the adoption of CRM concept, criteria of success measurements should be clearly illustrated in order to evaluate the performance, drive and monitor the success and set the proper plans for future development.
4. Future study should examine other factors that may affect the relationship between CRM dimensions and customers' satisfaction, such as external environmental factors.
5. This study's findings only reflect the situation regarding CRM at a particular moment in time. Future studies may be conducted using the longitudinal approach to investigate the short- and long-term effects of CRM on service operations.
6. Implementing a CRM is only part of the needed change. To embrace the new ways of interacting with customers, firms need to align various organizational aspects with their CRM systems, such as business processes, strategies, top management support, and employee training.

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