

"The effect of Customer Relationship Management Dimensions on the Organizational Performance in Telecommunication Sectors in Sudan"

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Abstract

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 organizational performance. This study serves to clarify the relationship between CRM dimensions and organizational performance, 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 organizational performance?” The data collection utilized quantitative methods. Questionnaires were distributed to 286 customers. ANOVA, 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 organizational performance. In multiple regression analysis, H2: There is positive significant statistical relationship between CRM organization and organizational performance and H3: There is positive significant statistical relationship between knowledge management and organizational performance were accepted, while H1: There is positive significant statistical relationship between Customer orientation and organizational performance and H4: There is positive significant statistical relationship between technology based CRM and organizational performance were rejected. Organizational performance 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 the effect of the CRM four dimensions on organizational performance.

Keywords: Customer orientation, CRM organization, knowledge management, technology-based CRM, Organizational Performance.

1. INTRODUCTION

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. 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).

1.2 Problem Statement

Companies those think that the customer relationship management was only sale force or technological driven software leads fail to implement customer relationship management, Because they were not fully understand customer relationship management (Shafique et al., 2015), as a result of the limited studies at the field. In this study, researcher recognized this as “a knowledge gap”; not in the basic knowledge of CRM, but in the methods by which can evaluate and implement CRM. Telecommunications companies in Sudan may not be perfect in appliance of 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 the CRM and how to use this technology in the right way and how this technology will be a solution to organize their systems and sustain their relationships with their customers. This study aims to investigate the “Impact of CRM dimensions on organizational performance.

1.3 Research Objectives

The main objective of the study is to investigate the relationship between CRM dimensions, organizational performance in telecommunication companies in Sudan. Specifically, the study aims to: investigate the relationship between the dimensions of CRM (customer orientation, CRM organization, knowledge management and technology based CRM) and organizational Performance.

1.4 Significance of the Study

The significance of this study it is expected to provide an insight into the research process in this new area of technological development in Sudan. Even though a lot of studies have been conducted in this area, but their limitation is obvious: they did not investigate the relationship between CRM dimensions, organizational performance and customer satisfaction. This paper is unique in analyzing the relationship and fills the gap in the literature by focusing on the study of the factors of CRM dimensions that influence the organizational performance in telecommunication companies in Sudan, and how are these companies can benefit from this study to face critical organizational issues of adaptation, survival, and competence in the face of an increasingly changing environment.

2. 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).

2.1 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).

2.2 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.

2.3 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).

2.4 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).

2.5 Organizational Performance

Organizational performance is one of the major elements of discussion in managerial researches and with no doubt, one of the key points for success evaluation in the business companies. Generally the organizational performance is the factor which helps the company to evaluate the level of their intended achievements. Among the concrete factors of profitability in the organizational performance asset, stockholders share, investment profitability and the profit of each unit of stock can be mentioned. Subjective factors mostly include norms which are determined based on the judgment of groups in the organization. (Haghshenas and Ahmadi, 2015). Measurement of organizational performance is complex and complicated (Venkatraman, 1989), thus it can be assessed through all the efforts which are put together to achieve the business goals (Akal, 1992).

One of the most important performance measurements is Key Performance Indicators (KPIs), which evaluate the success of an organization or of a particular activity in which it engages, according to Richard et al (2009) the purpose of dealing with Key Performance Indicators to highlight a change in the traditional philosophy of performance measurements was necessary due to the lack of correlation between long-established drivers for Network Management indicators and the current Telecommunications Industry's aggressive 'business focus'. The selection of indicators therefore depends on the types of problems being addressed. In the telecommunications sector, the problems to be addressed may include: (a) large unsatisfied demand for service and non-availability of next generation telecommunications services required by business and commerce; (b) poor quality of service; (c) poor financial performance and lack of financial resources and (d) lack of qualified manpower. Performance indicators should be used to monitor progress in first addressing and then resolving the various problems affecting the performance (Richard et al : 2009). According to Goni (2011) the performance of an organization, particularly those that provide utility services to consumers in most instances is narrowly measured using quantitative indicators such as the total market share of the firm and a qualitative measure of its ability to provide satisfactory services to consumer or client. Performance assessment criteria of this nature obviously, is silent on the various factors that actually work together to influence good performance or otherwise of the firm. Accessibility, Retainability and Integrity are indicators the qualitative measurements of KPIs; "Accessibility performance can be expressed by means of the following KPI: Call Block Probability (CBP): this metrics represents the probability that the network blocked. Whatever the problem causes the blocking event. Such KPI is interesting for the conversational and streaming classes while is usually not important for the others since the relevant connections are typically always on. The present metric can usually be evaluated at both media-gate way and control level. CBP can be easily mapped into the Grade of Service (GoS) except for the fact that the GoS is referred to single trunks while the CBP refers to a path. Retainability performance generally depends on transmission tolerances and on system performance in terms of reliability of propagation medium. Integrity performance is an indication of the degree to which a service is provided without excessive impairments, once detained. Actually, temporary inabilities could influence the service, avoiding reaching QoS agreement. Conversational and streaming services put limits on the maximum packet delay per connection in order to guarantee real time communications. In case of data traffic, an emerging application in Internet Protocol (IP), networks is multimedia data streaming, mainly due to the expansion of voice over IP, video conference and audio-video broad cast services. In these scenarios, since no reliable transport protocol is used, data packet loss ratio has to be considered. Instead, the overall time spent for transmitting a certain amount of data is no longer important being the application time sensitive. Furthermore data packet transfer delay variation has to be considered" (Randaccio, 2007).

2.6 Measuring organizational Performance

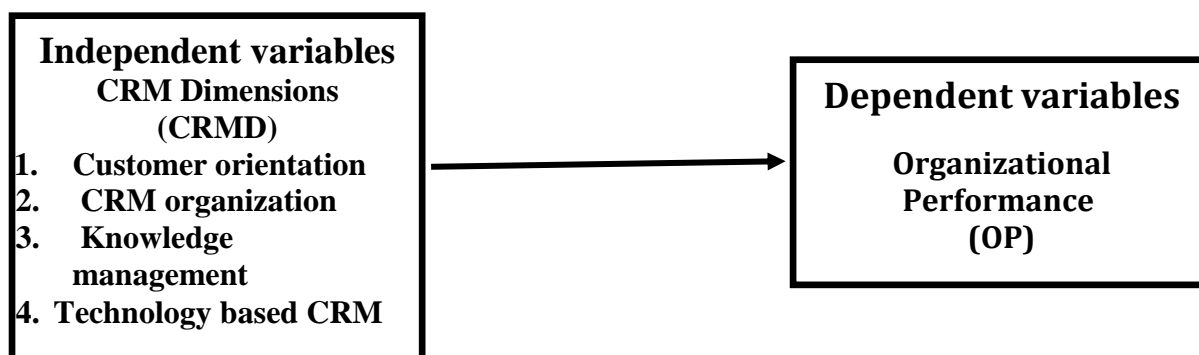
Performance is a multi-dimensional construct that cannot be adequately reflected in a single performance item (Mohammed et al., 2013). Studies on firms' performance have adopted various approaches to conceptualize and measure performance. This argument suggests that a compound measure of performance would reflect more exactly a firm's development, as opposed to a single qualitative or accounting-related performance measure. This study used the Key Performance Indicator (KPI) to measure organizational performance (Telecommunications Company) through customers; measures are concerned with what really matters to the customers (Mohammed et al., 2013). Wu and Hung (2007) found that financial figures alone cannot provide a full understanding of CRM's effect and findings; so, the total performance perspective should be employed in the assessment of CRM findings. Therefore, it is critical using KPI to evaluate the impact of CRM on organizational performance. To assess organizational performance financial and non-financial indicators were used in this study.

3. Methodology

3.1 Study Framework

The proposed model of this study conceptualizes the relationship among CRM dimensions and organizational performance. 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 the organizational performance; 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 proposes 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 organizational performance.

Figure1 . A Model reflecting the relationship between the study variables



Source: Modeling Illustration

In this paper, the hypotheses were formulated to test if the dependent variable (CRMD) is significantly related to the independent variable (organizational performance) for telecommunications companies 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 organizational performance.

H2: There is positive significant statistical relationship between CRM organization and organizational performance.

H3: There is positive significant statistical relationship between knowledge management and organizational performance.

H4: There is positive significant statistical relationship between technology based CRM and organizational performance.

3.2 Measurement of variables

Based on previous literature, regarded customer relationship management 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 organizational performs were operationalized using the measurement developed by items from (Randaccio, 2007). 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 organizational performance (dependent variable); it contains Accessibility, Retainability and Integrity. 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.

3.3 The Type of Research Followed

This study 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.

3.4 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) developed the equation to yield a representative sample for proportions.

where n° 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:

$$n = (1.96)^2 * 0.5 * 0.5 / (.05)^2 = 385 \quad (1)$$

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

3.5 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, regression analysis and ANOVA to test the influence of customer relationship management dimensions on organizational performance.

4. Results and Implications

The survey revealed the following demographic information about the respondents: There were more male (60.8%) than female (39.2 %). The ages of respondents are distributed across the following four bands: less than 30 years (43.4%), 30–40 years (32.9%) and 41-50 years (16.8%) and above 51 years (7.0%). The findings of this survey questionnaire in regards of Marital status found that most customers were Married (48.3%), while (45.1%) Single, (4.5%) Divorced, and (2.1%) are Widowed as opposed to non-Sudanese (24.6%). According to the Income per month is distributed across three bands less than SDG1500 (39.2%), SDG1500-2000 (25.9%) and more than 2000 (35.0%). In respect of the level of education most of the respondents had Bachelor degrees (62.9%); whereas others had Master's degrees (11.5%), Diplomas (18.9%), PhDs (2.8%) and secondary (3.8%). The duration as costumer of ZAIN is distributed across three bands less than 5 Years (31.5%), 5–10 Years (35.7%), and 11 years and more (32.9%). As regards of Occupation, the majority of them were Employee (58.4%), followed by Student (23.8%), Self-employed (15.0%), Retired (1.7%), Professional (3.0%), and (7.0%) are not working. According to the type of service used most of these customers are Pre paid (75.2%), and (24.8%) are post-paid (Table 1).

Table 1: Demographic information for the 286 respondents

Category	Response	N	%
Gender	Female	112	39.2
	Male	174	60.8
Total		286	100.0
Age group	< 30 years	124	43.4
	30-40 years	94	32.9
	41-50 years	48	16.8
	51 years and above	20	7.0
Total		286	100.0

Educational level	Intermediate diploma	54	18.9
	Bachelor	180	62.9
	M. Sc.	33	11.5
	Ph. D.	8	2.8
	Secondary	11	3.8
Total		286	100.0
Marital status	Single	129	45.1
	Married	138	48.3
	Divorced	13	4.5
	Widowed	6	2.1
Total		286	100.0
Duration as costumer of ZAIN	< 5 years	90	31.5
	5-10 years	102	35.7
	11 years and more	94	32.9
Total		286	100.0
Type service used	Pre paid	215	75.2
	Post paid	71	24.8
Total		286	100.0
Income per month (SDG)	< 1500 SDG	112	39.2
	1500 - 2000 SDG	74	25.9
	> 2000 SDG	100	35.0
Total		286	100.0
Occupation	Student	68	23.7
	Employee	167	58.3
	Retired	5	1.7
	Self employed, free business	43	15.0

	Professional	1	0.3
	Not working	2	0.7
Total		286	100.0

Source: Researcher's data collected through questionnaire

4.1 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 (Sekaran, 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 (2) below. The Cronbach's Alpha " α " value is greater than 0.7 for all factors except 'Technology based CRM' which is close to 0.7, although, is 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(2) 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
Organizational Performance	Accessibility, Retainability and Integrity	8	0.71

Source: Researcher's data collected through questionnaire

4.2 Data Suitability

In general, the measure of sampling adequacy indicates whether or not the variables are able to be grouped into a smaller set of underlying factors, which should be greater than 0.5 for a satisfactory factor analysis to proceed. The results of this test (Table 5.5) show that the KMO measured between 0.670 and 0.820. A KMO, value of 0.5–0.6 indicates mediocre partial correlations, 0.6–0.7 indicates moderate partial correlations, 0.7–0.8 indicates good partial correlations, and > 0.08 indicates excellent partial correlations or strong partial correlations are exhibited in the data for this study. This suggests that the data are suitable for EFA (Kaiser, 1974).

4.2.1 Bartlett's Test of Sphericity: Bartlett's Test of Sphericity, the significance value is $p < 0.05$ (Bartlett, 1937). In the case of this study, all the Bartlett's Test of Sphericity values were significant, that is $p < 0.05$, further confirming that these data are suitable for Factor Analysis (Table 3).

4.2.2 The Kaiser-Meyer-Olkin measure KMO: In general, the measure of sampling adequacy indicates whether or not the variables are able to be grouped into a smaller set of underlying factors, which should be greater than 0.5 for a satisfactory factor analysis to proceed. The results of this test show that the KMO measured between 0.68 and 0.82. A KMO, value of 0.5–0.6 indicates mediocre partial correlations, 0.6–0.7 indicates moderate partial correlations, 0.7–0.8 indicates good partial correlations, and > 0.08 indicates excellent partial correlations or strong partial correlations are exhibited in the data for this study. This suggests that the data are suitable for EFA (Kaiser, 1974). Bartlett's Test of Sphericity, the significance value is $p < 0.05$ (Bartlett, 1937). In the case of this study, all the Bartlett's Test of Sphericity values were significant, that is $p < 0.05$, further confirming that these data are suitable for Factor Analysis (Table 3).

Table 3: KMO and Bartlett's Test

Dimension s	Variables	KMO	Bartlett's Test of Sphericity
CRM Dimensions	Customer Orientations	0.740	0.000
	CRM Organization	0.670	0.000
	Knowledge Management	0.820	0.000
	Technology based CRM	0.720	0.000
Customers Satisfaction	Customers complains	0.730	0.000
	Prices of products and services	0.710	0.000
	Quality of services	0.680	0.000
	Overall Satisfaction	0.720	0.000
Company Performance	Accessibility, Retainability and Integrity	0.790	0.000

Source: Researcher's data collected through questionnaire

4.3 Regression Analysis

Table (4) shows the results of multiple regression analysis between customer orientations, CRM organization, knowledge management, technology CRM and organizational performance. Table (4) shows the adjusted squared multiple correlation coefficient (adjusted R^2) clearly explains 30.1% of the variance associated with the organizational performance and the F statistic is also significant ($F = 115.228$), which confirms that not all the variables make a significant contribution to fit into regression model. As observed from table (4) two independent variables, namely knowledge management and CRM organization, were found to be significantly associated with the organizational performance; the most important variable was knowledge management, which had the highest Beta value of 0.302 and highest t-value of 4.136. This result shows a positive relationship between CRM (knowledge management) and organizational performance. The result demonstrated the strongest correlation between these variables. Therefore, hypothesis 3 was substantiated. This finding is supported by (Freeland : 2003; Yueh, et al : 2010; Mohammed and Rashid : 2013; Abdullateef et al : 2010 and Elkordy : 2014) these studies indicates that Knowledge management have a positive influence on performance, because successful CRM is predicated on effectively transforming of customer information to customer knowledge and enhance customer profitability.

The second most important variable associated with the perceived use of CRM was CRM organization. The Beta value for this variable was .221 with t value of 3.799. This result shows a positive relationship between CRM (CRM organization) and organizational performance. Therefore, hypothesis 2 was substantiated. This finding is supported by (Homburg at al., 2000; Brown : 2000 and Elkordy, 2014) all of these studies shows that CRM organization positively influences performance by focusing on the flexibility of the organizational structure to generate customer centric values, the company and its sales force are assured that they can satisfy customers' needs and enhance customer relationships. Accordingly, excellent CRM organization may lead to upgrade the organizational performance.

Table (4) The Results of Regression Model Analysis between Independent Variables and Dependent Variables.

Variables	B	Std. Error	Beta	T	Sig.
(Constant)	1.910	.178		10.718	.000
customer orientations	-.051	.048	-.072	-1.045	.297
CRM org	.221	.065	.221	3.799	.000**
knowledge mgt	.220	.053	.302	4.136	.000**
technology CRM	.034	.050	.052	.682	.496

Source: Researcher's data collected through questionnaire

Referring to Table (5), the p-value is less than 0.001; therefore usage depends on at least one of the predictors. The R-squared value is 0.301, which means 30.1% of the variation in organizational performance can be explain by all 4 predictors.

Table (5) ANOVA table 1

ANOVA table 1Model	Sum of Squares	DF	Mean Square	F	Sig.
Regression	13.546	4	3.387	115.228	.000 ^a
Residual	84.751	281	.301		
Total	98.297	285			

$R^2 = 0.301, F=115.228$

Source: Researcher's data collected through questionnaire

4.4 Non-Significant Factors

This section explains those factors which were included in the analysis, but which were found to have a non-significant relationship within the study. In this study two out of four variables that were found not significant; customer orientation and technology base CRM. In the relationship between Customer Orientation and organizational performance the p-value = 0.297 > than 0.05, the Beta value for this variable was -0.72 with t-value of -1.045. This result confirms that there is no relationship between customer orientation and organizational performance. Therefore, hypothesis 1 was rejected. The researcher didn't find any supported previous study for this finding because the empirical relationship between customer orientation and financial performance in this study is unclear. In the relationship between technology base CRM and organizational performance the p-value = 0.496 > than 0.05, the Beta value for this variable was 0.052 with t-value of 0.682. This result confirms that there is no relationship between technology base CRM and organizational performance. Therefore, hypothesis 4 was rejected. This result was similar to the argument that was made by numerous researchers (Payne and Frow, 2005 and Abdul alem et al., 2013), in these studies technology-based CRM failed to show a significant relationship with the organizational performance. Because, organizations cannot implement CRM successfully and consequently improve their performance if they deal with CRM merely as a technology solution for managing customer information, since CRM is a strategic approach to improving performance. Reinartz et al (2004) argued that CRM does not solely engage the adoption of the sophisticated CRM technology and software. CRM implementation is more complex and involves other elements. In other words, relying only on CRM technology is not the best way to improve learning and growth performance in the telecommunications sector. Therefore, company must integrate CRM technology with other dimensions of CRM (customer orientation, CRM organization and knowledge management) to enhance learning and growth performance.

4.5 Hytheses Results summary

The purpose of this paper is to investigate the effect of CRM dimensions (customer orientations, CRM organization, knowledge management, technology CRM) on the organizational performance

H1: There is positive significant statistical relationship between Customer orientation and organizational performance
 Customer orientation had no statistically significant effect on organizational performance, at Beta = - 0.072, t value = -1.045 and Sig= 0.297 which is > .05 level for the craft category, as shown in (Table 4). Accordantly, these results show that customer orientation had no significant relationship with the organizational performance.

H2: There is positive significant statistical relationship between CRM organization and organizational performance
 The results of the correlations, shown in (Table 4), demonstrated the strongest correlation between CRM organization and organizational performance, the Beta = 0.221, t value = 3.799 and Sig= 0.000 which is >0.05 level for the craft category, these results show a positive relationship between CRM organization and organizational performance.

H3: There is positive significant statistical relationship between knowledge management and organizational performance. The results of the correlations, shown in (Table 4), demonstrated the strongest correlation between knowledge management and organizational performance, the Beta value for this variable was 0.302, t value was 4.136 and the sig was 0.000 which is <0.05 level for the craft category. These results show a positive relationship between knowledge management and organizational performance.

H4: There is positive significant statistical relationship between technology based CRM and organizational performance

Technology based CRM had no statistically significant effect on organizational performance, at Beta = 0.052, t value = 0.682 and Sig= 0.496 which is >0.05 level for the craft category, as shown in (Table 4). Accordingly, these results show that technology based CRM had no significant relationship with the organizational performance.

5. Conclusions

The study was conducted by using quantitative approaches. Adoption of CRM enhances 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 organizational performance. It explained the effect of CRM four dimensions on organizational performance. 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 sector performance. Moreover, this study attempted to extend the body of knowledge by explaining the theoretical possibilities of the relationship between CRM dimensions and organizational performance. It is worth mentioning that this study also raised the awareness among managers to pay more attention to CRM dimensions, assisted them in improving organizational performance 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 research 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 research study provided important insights to enable the environment required for the successful implementation of telecommunications companies. 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 research is available for management to measure their relationship CRM activities and organizational performance. Customers are playing the most important role in company's success. This statement is the heart of marketing thinking and drives research into relationship marketing. 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

6. Limitations and Recommendations

6.1 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.

6.2 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 research should examine other factors that may affect the relationship between CRM dimensions and organizational performance, 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
7. management support, and employee training

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المستخلص

إدارة علاقة العملاء أصبحت من أهم المواضيع المتداولة في المجال الأكاديمي والعملي، نتيجة لزيادة حدة البيئة التنافسية أصبحت إدارة علاقات العملاء من العناصر الهامة المؤثرة في أداء المنظمة وبالرغم من ذلك نجد أن هنالك ندرة في البحوث التي تدرس العلاقة بين أبعاد إدارة علاقات العملاء و أداء المنظمة و هذه الدراسة تفسر العلاقة بين المتغيرات عن طريق اللإجابة على السؤال الآتي: - إلى أي مدى تؤثر إدارة علاقات العملاء على أداء المنظمة؟ تم توزيع 682 استبيان استخدم الباحث المنهج الكمي والنوعي لتحصيل البيانات قيد الدراسة، وزعت على عملاء وتم تطبيق الاحصاء الوصفية المناسب لتحليل البيانات المحصلة و عكست نتائج تحليل البيانات أن تطبيق إدارة علاقات العملاء له دور فعال في تطوير أداء المنظمة. في تحليل الانحدار ، رفضت H4,H1 بينما قبلت H3,H2. تساهم النتائج بشكل فعال في الإطار المعرفي لأنها تقدم نموذج من الممكن تطبيقه لشرح أثر رضا العميل في العلاقة بين إدارة علاقات العملاء وأداء المنظمة.

الكلمات المفتاحية: توجه العملاء ، إدارة علاقات العملاء ، إدارة المعرفة ، إدارة علاقات العملاء القائمة على التكنولوجيا ، الأداء التنظيمي.