

The Impact of CRM on Competitive advantage: Sin, Tse & Yim Model

Case study: Telecom Operators in Algeria

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Abstract:

We aim through this study mainly to measure the impact of customer relationship management CRM : Sin, Tse, Yim Model on competitive advantage through its factors. We have followed descriptive, inductive and experimental approaches. Where we have developed a model that shows the relationship between the variables and its effects (CRM and competitive advantage). In this study, we depended on new trends toward the customer as Key Customer Focus, CRM Organization, CRM Technology, and Customer Knowledge Management. This study was conducted on a sample of 153 individuals from 33 telecom agencies or commercial spaces in Algeria (8 WTA, 11 OTA, 14 AT), where the main results of this study showed the existence of a (strong - positive) correlation and effectiveness of CRM and the competitive advantage.

Keywords: Key Customer Focus ; CRM Organization ; CRM Technology ; Customer Knowledge Management ; Competitive advantage.

Jel Classification Codes : M54; L41

ملخص:

نهدف من خلال هذه الدراسة بشكل أساسي إلى قياس تأثير إدارة علاقة الزبون حسب نموذج Sin, Tse, Yim على الميزة التنافسية من خلال عواملها. حيث اتبعنا المنهج الوصفي والاستقرائي والتجريبي. حيث قمنا بتطوير نموذج يوضح العلاقة بين المتغيرات وتأثيراتها (إدارة علاقة العملاء والميزة التنافسية). في هذه الدراسة، اعتمدنا على الاتجاهات الجديدة تجاه العميل مثل التركيز على الزبون المفتاحي، تكنولوجيا إدارة علاقة الزبون، تنظيم إدارة علاقة الزبون، إدارة معرفة الزبون. أجريت هذه الدراسة على عينة من 153 فرداً من 33 وكالة اتصالات أو فضاء تجاري في الجزائر، حيث أظهرت النتائج الرئيسية لهذه الدراسة وجود علاقة (قوية - إيجابية) بالإضافة إلى لتأثير إدارة علاقة العملاء على الميزة التنافسية.

الكلمات المفتاح : التركيز على الزبون المفتاحي؛ تنظيم إدارة علاقة الزبون؛ تكنولوجيا إدارة علاقة الزبون؛ إدارة معرفة الزبون؛ الميزة التنافسية.

I -Introduction :

The marketing process, through establishing relationships with relevant agents, has become the primary factor in success. The survival and continuation of the organizations, Considering that the development in the marketing concepts of relationships was based on the idea that loyal customers achieve high profitability.

The efficiency of the relationship marketing strategy requires, in addition to the structural organization, key accounts management and tools, databases, direct marketing, customer relationship management. The thinking of Relationship-oriented in dealing with customers must reflect the internal culture of the organization towards the customer in order to satisfy him and achieve his loyalty.

The customer became the leader of the situation in communication, who chooses the suits channel that allow to achieve the goals, This indicates that the organizations looking for enhance the relationship with their customers should integrate their communication channels and coordinate between them in a efficient manner that serves the customer in a personal and interactive way by achieving the highest levels of interaction, Developing goods and services that meet the needs of market niches, even with the individual customer; Interacting directly with customers, reducing complaints related to misunderstanding the communication messages, minimize contact times, In addition to the transfer of the benefit derived from the product as a physical form to a virtual form.

Today, competition has become the language of this age and the focus of everyone's attention, individuals, business organizations and countries alike. It is the factor, motive and engine that controls everyone's steps and motivates them to work for more giving, creation and creativity and achieving a degree of competitive advantage or superiority and differentiation over their competitors in order to achieve the highest levels of return or profitability.

The competitive environment affects the behavior of customers, by providing a variety of products that meet their taste and income. And it affects the business organization, when it tends to mobilize its financial, material, human and organizational resources, so it takes structural decisions; In order to establish an appropriate competitive position in the market, which qualifies it to outperform its sector competitors.

The various business organizations must rely on a real competitive advantage, which is created after deep awareness and thinking, in order for the business organization to ensure high competitiveness, and to ensure survival within the group of competitors and growth in the market, By making a great effort to achieve a competitive advantage, and it happens that what it has obtained expresses a temporary advantage - that is, exploited in the short term - that does not enable the desired growth and development. This requires accurate knowledge of the sources from which the competitive advantage is derived; In order to achieve permanent customer loyalty; achieving leadership in the field of activity.

From forgoing we present the main question of our study as follows:

Do telecom operators in Algeria adopt the CRM model, and to what extent, Can telecom operators improve the competitive advantage by applied the CRM model?

▪ Hypothesis:

We put the following hypothesis as a guide to answer our question, as follows:

Telecom operators in Algeria adopt the CRM as it represents a crucial factor to developing the competitive advantage for business organizations.

▪ The Objective:

The main objective of this study is to:

Knowing the CRM indicators within the Telecom Operators and its impact on achieving and developing a competitive advantage.

▪ Material and Methods:

We are going to follow three approaches for processing and analysis the data and reaching results, which are the descriptive, inductive and experimental approaches. We have developed a model that shows the relationship between the studied variables (CRM and competitive advantage). Dependence on the survey method by collecting and analyzing data by using a set of statistical indicators such as the Cronbach's Alpha test, Kolmogorov Smirnov for one sample test, descriptive statistics (mean, standard deviation,), Pearson correlation coefficient , one sample T test, multiple regression and paired T test for test the hypotheses.

▪ **Population and Sample:**

The study population consists of all the agencies and commercial spaces for the telecommunications sector in Algeria, containing more than 320. We conducted our study on a sample of 153 individuals from 33 telecommunications agencies or commercial spaces from the four states of Constantine, Mila, Oum El Bouaghi and Setif.

▪ **Study Sources:**

We relied in our study on research papers in particular. As well as the explanations provided by telecom operators in the form of an interview, however, the questionnaire occupied the first place as the main tool for data collection for the Empirical stage.

▪ **Previous Studies:**

Study of Santouridis and Tsachtani (2015): the resources of CRM organizational are the most important, when they have a positive impact on the operations of all customer life-cycle phases. also, human resources has proved to have a significant impact on the early (initiation, acquisition, regain) and middle (maintenance, retention) customer life-cycle stages, while their impact on the final stages (expansion, exit) is minimal. Lastly, technological resources were presented to have a small impact on the middle customer lifecycle phases.

Study of Bhat and Darzi (2015): The study examined hitherto undiscovered relationships between customer-centric customer relationship management dimensions tools in offering competitive advantage to a bank through analysis of meditational approach. Thus, it contributes to the information on the application of customer relationship management practices valuable for banking sector.

Study of Bin-Nashwan, and Hassan (2017): Diverse in the publication trend, customer relationship management industries, classification, and countries studied. The main dimensions that have been frequently utilize in main studies that relate the effect of customer relationship management on customer satisfaction & customer loyalty were service quality (SQ), and service access (SA), also handling complaints (HC). These dimensions are found to have impacts on customer satisfaction and customer loyalty. The study gains both academics and practitioners in the stream of adding to the real literature on customer relationship management and offering insights on what drives customer relationship management in real operations.

Study of Lena & Laura (2018): The objective of this research was to explain the effect of customer relationship management strategy on customer loyalty applied on beauty centers in Beirut, (Lebanon). The study used a quantitative approach when data was collected by a questionnaire, from a 103 customers as a sample, the factors of CRM include four variables, were measured in this research. The statistical analysis investigated that experience of customer, employee behavior, and proposition value has a positive effect on customer loyalty. This paper provides recommendations to achieve strategically developing relationship-oriented operational in Lebanese SMEs, especially in the beauty sector.

Study of Bhat and Darzi (2018): The paper reveals that customer relationship management capability (having three domains: personnel capability, service capability, and customer orientation) has a crucially positive effect on the service capability. This paper contributes to the theory by investigating customer relationship management capability variables and tries to define their effect on service capability in the banking sector, as customer relationship management is now becoming strategically critical in the banking industry.

Study of ALQERSHI et al (2020): This paper makes different contributions to the background literature; the first is the evidence provision concerning the main role of CRM and competitive advantage as study variable. The second contribution concerns to its pioneering status in investigating the direct relationship between CRM dimensions and the competitive advantage of SMEs in a Middle Eastern country.

Contribution and added value:

Previous studies enabled us to understand the topic and build a model that illustrates the relationship between the dimensions of CRM and competitive advantage, and an attempt to apply them in telecoms sector in Algeria, because of its specificity in its application to marketing through previous experiences in this market. The added value of this paper is to rely on an empirical model that enables us to employ and understand the variables carried out by telecom

operators, away from the philosophical aspect that the Algerian market has not advanced in its various sectors and activities.

I. Literature review:

1.1.background literature:

RM First and foremost the idea is to create customer loyalty that a stable, mutually profitable and enhanced life-term relationship (Ravald & Grönroos, The value concept and relationship marketing, 1996, p. 19). The main component of modern marketing is to establish relationship organization-customers about quality, service, and personalization the values (Rahman & Masoom , 2012, p. 97).

1.2.RM emergence and concept:

Firstly, the relationship marketing concept is developed by Berry in 1983. Relation- based marketing emerged in services marketing and industrial marketing courses (Mohammad Taleghani et al, 2011, p. 156) (Grönroos & Christian, 1994, p. 9). the phenomenon is expressed from this concept is supported by trends in modern transactions, Base of this trend of marketing that had a solid relationship with behavior of consumer and has been innovated of core of researches about moderate relationships between purchaser and seller and relatively big business in this model. Instead of hostile attitude bargaining category, seller and purchaser agree log ether for attainment to their objectives and commit together in a guided framework and from their relationships (Afshin & al, 2012, p. 1843). Relationship Marketing referred to strengthening and maintaining of trust as essential to the life-time relationship success. It so points to the promises keeping and the commitment assurance from the parties as essential for a relationship to succeed (James , 1994, p. 562). No personalized relationship with the production and product marketing that supposed to exist, than in many cases about professional sales representatives. Obviously, this latter marketing view doesn't fit the industrial marketing reality and the services marketing so well (Grönroos C. , 1994, p. 9). More recent attempts to explain the term tend to incorporate such operational approaches within the RM identify rubric what they consider to be 4 tangible manifestations of Relationship Marketing in B to C markets: 1) Locking in customers; 2) Customer retention; 3) Database marketing ; 4) Close personal relationships (O'Malley & Tynan, 2000, p. 801) . All relationships depend on the emotional links development between the components. The key factors of RM are: empathy, bonding, trust, reciprocity and tangibility (Shaker & Alsadi, 2010, p. 547)

1.3.RM importance and successful business practices:

There is growing interest recently within the relationship marketing topic. The robust competition characterizing today's business environment has resulted to the building of stronger organization -customer relationships, noted that the development described by this idea is powerfully supported by on-going trends in modern business (Nelson , 2007, p. 98). This paradigm shift is explicit to be Relationship marketing. there have been reasons on why the necessity for paradigm shift arose: 1) To recognize importance of client retention; 2) To extend the businesses; 3) to stay pace with progressing market economy 4) To develop nature of marketing mix, 5) To fulfil the necessity for establishing closer customer Relationship (Rahman & Masoom , 2012, p. 98) .Relationships between customers and business organizations are systematically inspired as successful business practices worldwide. The reference to marketing has rarely been established formally within the development of marketing theory (Oliver & al, 2000, p. 1111).

1.4.RM Objectives and strategies:

The main goal of relationship marketing is oriented to building closer buyer seller relationships as a strategy to overcome problems like getting global competitive advantage, adapting rapidly with to reducing time-to-market and changing of technologies and launch new products (karadeniz, 2010, p. 17). It is necessary, therefore, to empirically test the actual effect of the basis of relationship marketing for customer loyalty. Like understanding will helping in top management of organization-customer relationship and in achieving top level of customer's loyalty (Nelson , 2007, p. 98). Relationship marketing is toward to to the life time. The objective is to deliver life time value to customers, and the measure the success is life time customer satisfaction. » Therefor relationship marketing is about retaining the customers by developing the communications, collection the customer data and improving the quality of customer service, In other meaning, the main goal is to enhance customer loyalty (Mohammad Taleghani et al, 2011, p. 157) .

RM is based on changes in organizational shape. The RM concept is recognition a new form of organization that needs a new form of management (Gummeson, 1994, p. 10). Increasing number of organization and strong competition in the production by the switch from transactional marketing to relationship marketing approach which is depending on life time relationships with customers and other stakeholders. The affecting Factors on the importance of relationship marketing divided into three crucial categories: Change in Customers, Change in Competition, and Change in the Environment (Gilaninia & al, 2011, p. 789). A successful relationship between supplier and customer is often as a collaborative relationship by a top level of commitment, trust, communication, shared values, adaptation, power positive bases, relationship bonds, dependence and cooperation. (Jonsson & Gustavsson, 2008, p. 282). RM strategy, thereby, suggests that a service provider have to know the requirements and characteristics of the customer individually and then have to provide accordingly the services (Masoom & Rahman, 2012, p. 97).

1.5.CRM: nature and basic concepts:

In the academic society, the word “relationship marketing” and Customer Relationship Management are usually used interchangeably. However, Customer Relationship Management is usually used in the technology solutions context and has described as “information-enabled relationship marketing” (Payne & Frow, 2005, p. 167). Customer Relationship Management is a major factors: people, Technology, Process, business culture and relationship. The contribution to each factors differ according to the CRM implementation level. (Almotairi, 2009, p. 2). There are successive stages in the CRM. The first is the customer’s recognition and their identification must be in more detail. Then the organizations need to analyze them depending on customers' needs and participation values. In the third one must interact with the target customers and trying to find ways for improvement productivity and effectiveness of interaction. Finally the organizations need to order many aspects of products or services which the offer to customers. This means that treating customer differently. Beyond the stages and activities are presented on the definitions basis (Alipour & Mohammadi, 2011, p. 30)

In the modern competitive feature, in which competition is strengthening, the strengthen Customer Relationship Management is considered as a main source of competitive advantage (Thakur & Workman, 2016, p. 496) (Santouridis & Veraki, 2017, p. 1123). Therefore organizations significantly have to invested in the CRM implementation over the last few years (Badgett, Ballou, S, & LaValle, 2004, p. 4) (Chang, Park, & Chaivy, 2010, p. 853). Depending on Payne and Frow (2005), Customer Relationship Management is a marketing approach that seeks to develop, create, and enhance relationships with targeted customers to maximize the value for customer and corporate profitability. The academic and business recognize the difficulties of adjust the implementing of CRM (Boulding, Staelin, Ehret, & Johnston, 2005, p. 156) (Bohling, Bowman, LaValle, & Mittal, 2006, p. 186). Several scholars such (Keramati, Mehrabi, & Mojir, 2010, p. 1172) have tried to identify the interventions required areas for a successful Customer Relationship Management. This is in the same with recent Customer Relationship Management literature that emphasizes the importance of an integrated view of Customer Relationship Management projects (Pozza, Goetz , & Sah, 2018, p. 394).

1.6.Competitive Advantage Concept:

In the eyes of its consumers, a organization is competitive if it can provide better values than its competitors. (Alipour & Mohammadi, 2011, p. 30). Durability, damage, and value are the three most important characteristics of a competitive advantage. It focuses more on a competitive advantage's concept, shape, position, impact, reason, and duration. (Alipour & Mohammadi, 2011, p. 30). Personnel are influenced by the competitive nature of the organization, and they want to work alone. As a result, it appears that establishing incentive policies for human resources will enable employees to share knowledge within the organization (Tabrizi, 2013, p. 538). This belief may have originated from findings that higher levels of intense competition may have facilitated globalization's rise. (Soliman, 2013, p. 130)

1.7.Competitive Advantage Importance, Resources And Sustainability:

Competitiveness was an important issue for decision-makers at different levels (country, industry and organization) in various regions of the world during the era of growing globalization. In the global economy, the prerequisite for competitiveness means obtaining a good position in the international market. (Singha, Chen, Giudicec, & El-Kassar, 2019, p. 204). Individuals holding knowledge represent a tool for generating innovations. According personal creativity, their knowledge, skills and abilities it is possible to generate new innovative ideas that will help organizations to achieve a competitive advantage. (Hana, 2013, p. 82). The theory assumes that resources are diverse from one organization to another and that they are imperfectly transferable. The resource-based view of the business implies that it is the resources and capabilities within the

business that are a source of competitive advantage. (Muhammad, 2018, p. 3). It demonstrates that a organization can only gain its competitive advantage if it has access to resources of specific value that are not effortlessly imitated by any competitor. Applying the above-mentioned resources as a strategic choice could result in a competitive advantage as an achievement (Sambasiv, 2013, p. 13). Organizations have found that sustainable competitive advantage is based on the management of intellectual assets. Increased organizational learning provides an appropriate competitive position as a strategic direction for survival and competitive advantage (Moghadam, Zabihi, Kargaran, & Hakimzadeh, 2013, p. 14).

1.8.Competitive Advantage & Relationship Effect:

Organizations must seek out collaborations with other organizations to make relational networks for mobilizing external capital in order to improve their own core competencies. Developing relational networks in the international market to acquire resources and gain access to markets is a key issue for internationalization operations. (Wong, 2011, p. 43). Other resources or capabilities developed within the organization always play an important role in creating a competitive advantage. The relational view refers only to inter- organization relationships; it does not involve social partnerships between business and nonprofit or civil society organizations, which could also create strategic benefits for businesses. In summary, the relational view describes competitive advantage in a resource-based, relationship-oriented and inter- organization approach (Wu, 2013, p. 22).

In addition, a customer's view of an organization is formed by their interactions across multiple-channels, rather than through a single transaction or moment in time. Increased customer retention, loyalty, activism, and customer lifetime value can all contribute to a competitive advantage if the customer experience is positive and effortless (Nash, Armstrong , & Robertson, 2013, p. 37).

Relationship marketing has the potential to establish strong partnerships with customers as well as other businesses and organizations, resulting in a strategic advantage. Business partnerships, on the other hand, generate long-term benefits precisely because they are difficult to handle. (Masoom & Rahman, 2012, p. 98).

II. Methods And Materials:

The approach used in this study is basically a descriptive inductive and experimental approaches .We design an appropriate questionnaire on the basis of a five-point Likert scale. The population of this study includes all telecoms agencies and commercial spaces of Algerian telecom sector .We took a multi-stage random sample and the sample size was calculated according to the specified population size 320 i.e. 10%. We took 153 individual from 33 telecommunications agencies or commercial space .The variables of this study were identified as follows: Independent variable: CRM, dependent variable: competitive advantage We proposed a model that shows the relationship between the study variables as shown in the following figure: In order to test the hypothesis we use one sample T-test, multiple regression t and paired T test.

2.1.The Proposed Model:

The model is represented in the following figure where its shows the variables and the correlation between them. The variables of this study defined as follow: Dependent variable: the competitive Advantage, Independent variable: customer relationship management (key customer focus, CKM, CRM technology, CRM organization). In order analyze the data we're going to use one sample T test, the multiple regression and paired T test models for test the hypotheses.

The figure 1 shows the variable and the effect of CRM through its dimension on competitive advantage. The following steps we'll try during them to describe test the hypothesis and analyze the results and conclusion finally.

2.2.Reliability:

The Reliability of the tool is intended to give this tool (questionnaire) the same result if it was redistributed more than once under the same conditions and in different context, or in other words, the Reliability of the tool means Reliability in its results and not to change it significantly if it is redistributed among the sample members several times during certain periods of time, the researcher test the reliability of the questionnaire by using the Cronbach alpha method, as follows:

2.2.1. Cronbach's Alpha Coefficient:

The researcher used the Cronbach alpha to measure the reliability of the questionnaire, and the results were as shown in the table below.

It is clear from the results shown in the table 1 that the value of the Cronbach Alpha coefficient is high for each component of the questionnaire. Also, the value of the alpha coefficient for all components of the questionnaire was 0,832 and 0.829 Consecutively for CRM and competitive advantage, which means that the reliability coefficient is high. Thus, the researcher has emphasized of the validity and reliability of the questionnaire, which makes him confident of its validity and reliability to achieve the results, analyze the data and test the hypotheses.

2.2.2. Guttman Split-Half Coefficient :

The researcher used the Guttman Split-Half Coefficient to measure the reliability of the questionnaire as a second indicator, and the results were as shown in the table 2:

It is clear from the results of table 2 that the value of Guttman Split-Half is good for all questionnaire parts. Also, the value of the Guttman Split-Half coefficient for all survey parts was 0,822 and 0.828 Consecutively for CRM and competitive advantage, which means that the reliability coefficient is high. Thus, the researcher have confirmed the validity and reliability of the questionnaire, which makes them confident of its validity to analyze the results, answer the questions and test its hypotheses.

2.3.Structural Validity:

Structural Validity is one of the tool's validity measures, which measures the extent to which the goals are achieved by the research tool. It shows the extent to which each questionnaire part is related to the overall indicators score.

The table 3 shows the correlation coefficient between the CRM and competitive advantage and their dimensions.

It can be seen through the indicators in the table 3 that the correlation coefficients indicated are significant at $\alpha = 0.01$ levels and this is valid to measure.

After testing the validity and reliability, as well as describing the variables, in this part we try to test the hypotheses through a set of tests to reach the empirical answer to the problematic, after determining the appropriate tests according to the hypotheses as follows:

2.4.Parametric Tests Hypotheses:

We tested the hypotheses based on the Parametric Tests because the data are available of Parametric Tests hypotheses, which are:

- The variables nature is quantitative, for that the researcher purpose the evaluation method, not the Ordinal which is qualitative on Likert scale.
- The sample type is random: We relied on a multi-stage random sample that the population is quite homogeneous from managerial point of view. This facilitated the task and shortened the time of work.
- Observations follow the normal distribution, at least at 0.05 error level, and this is what the One-Sample Kolmogorov-Smirnov Test proves, according to the following hypotheses:

III -Results and discussion :

3.1.Hypothesis 1: Normality Distribution Test

- **H₀: Observations follow the normal distribution of all components of CRM or competitive advantage.**

We try to test the distribution of both CRM and competitive advantage dimensions if it follows the normal distribution by using the One-Sample Kolmogorov-Smirnov test.

The table 4 shows the results of the One-Sample Kolmogorov-Smirnov test as the level of significance (Sig) for the components of the CRM dimensions and competitive advantage is greater than α (0.05) for all the dimensions, that meaning the distribution is not significant, this proves the H₀, so the CRM dimensions and competitive advantage observations follow the normal distribution.

3.2.Hypothesis 2:

The following is the indicators of CRM and CA and try to evaluate them with a proposed mean of 3.5 and a confidence level of 95%.

Hb0: Telecom operators in Algeria don't have indicators about CRM and competitive advantage.

Through the indicators that shown in table 5 express the availability of both CRM and competitive advantage that telecom customers have, we find that all indicators are significant (Sig less than α), except to key customer focus that the operators were not able to understand the customer needs and activate his opinions and involve them into organization technological or marketing innovations, which indicates that telecom customers have a CRM and competitive advantage that enables them to control the work process, improve the outputs with all the indicators such meet the customer need and wants with efficient manner and personalize the product , services and solutions with target customers and maximize the offer values for its partners with proposed mean of 3.5 and a confidence level of 95%.

3.3.Hypothesis 3:

For testing the hypothesis of the relationship between CRM and competitive advantage, we are going to use Pearson correlation coefficient to fit it with the variables nature.

Hc0: There is no significant 'strong positive' correlation between CRM and competitive advantage.

It is evident from the results of Table 6 that the correlation between the four dimensions of CRM (customer focus, customer knowledge management, technology adopted in CRM, organizational procedures for CRM) and improvement the competitive advantage is significant because the values of (Sig is less than α), which indicates On the presence of a strong positive significant correlation at the α level between the dimensions of CRM and improving the competitive advantage.

3.4.Hypothesis 4:

H0: It is not possible for telecom operators in Algeria to improve the competitive advantage by relying on CRM.

In order to test the above hypothesis we use the multiple regression model, competitive advantage as a dependent variable and CRM dimensions (Key Customer Focus, CRM Organization, CRM Technology, and Customer Knowledge Management) as independent variables as follows:

The table 7 shows each of the Pearson correlation coefficient R between the independent variables CRM (Key Customer Focus, CRM Organization, CRM Technology, and Customer Knowledge Management) and the dependent variable competitive advantage, which is a very strong positive correlation that shows the strong direct relationship between the CRM and competitive advantage , in addition to the high R Square, which indicates the suitability of the model for estimating the direction of the relationship between the variables. Plus the Adjusted R Square resulting from F Change 264.442, and Sig. F Change .000 which shows the quality of the regression trend in estimating the relationship between (Key Customer Focus, CRM Organization, CRM Technology, and Customer Knowledge Management) and competitive advantage.

From the ANOVA table 8, we find that the value of Sig = 000, which is less than the level of significance 0.05, so the regression is significant, and therefore there is a linear relationship between the variables that can be predicted towards improving competitive advantage in terms of the dimensions of CRM (Key Customer Focus, CRM Organization, CRM Technology, and Customer Knowledge Management).

From the table 9 the multiple regression model can be written between the dimensions of CRM (Key Customer Focus, CRM Organization, CRM Technology, and Customer Knowledge Management) and competitive advantage as follows:

$$\text{Competitive advantage} = .035 + .320 \text{ Key Customer Focus} + .185 \text{ CKM} - .217 - \text{ CRM Technology} + .714 \text{ CRM Organization.}$$

Through the value of sig in the table, we find that the only independent dimensions X₄ which express CRM Organization is the only significant dimension within the CRM (sig is less than 0.05). While we find that all other variable coefficient, in addition to the constant, are not a significant because sig value greater than 0.05, which indicates that CRM Organization is the reason for the significance of the variance analysis of regression towards improving competitive advantage. This explains the importance of this factor and their contribution to improving and developing the competitive advantage.

3.5.Hypothesis 5:

H0: There are no differences in improving the competitive advantage within telecoms operators between before and after implementation of the CRM.

The table 10 shows the statistical characteristics to improve the competitive advantage before and after the CRM applications. We notice that this rate was 2,5592 with a standard deviation, 75275 and ,10754 as Std. Error Mean before the observation, and after the observation it became 4,2082 with a standard deviation ,77777 and ,11111 as Std. Error Mean and the difference between the two rates is a large difference from an empirical point of view. The trend towards CRM applications has had an effective effect in changing the trends of telecoms operators in improving the competitive advantage. Therefore, the results are expected to be significant.

Another indicator of what CRM applications wrought, it is the correlation between the scores before and after the CRM applications. We expect the correlation to be strong if the effective effect of CRM so that the change is clear and regular (in the same direction) for all or most agencies within the sample, and we find the value of this correlation in the same results in the following table.

From the table 11 we notice that the value of the correlation between the competitive advantage before and after CRM applications is high, 936. And its Sig. is 0,000. The important result in this test is the result of the dependent T test, which appears in the following table.

We notice from the table 12 the value of the dependent T-test is -41,902 and this value is significant, $P = 000$ because it is less than 0.05, and this means that the CRM applications have had an impact on the advantages of the telecom operators and change actually from their trends towards improving the competitive advantage.

IV -Conclusion:

Relationship Marketing has three main forms which are database; Interactive and Networks Marketing. database marketing relies heavily on marketing research and information systems, marketing intelligence, brand development and management, and customer relationship management (CRM) with a shift from the traditional view of "transaction marketing" to focusing on creation of relationship and manage it , or what is called « Relationships marketing » "based on data provided by information technology; In addition to interactive marketing, where there are direct interactions between the organization and its customers, whether that personal interaction, through the phone (ear-to-ear), or through e-mail,

- Social ties and trust are extremely important in creating value for both sides of the exchange; and finally, multi-level marketing (network marketing), which works to provide tools that enable the elimination of intermediaries and deal with the final customer directly. So that network marketing can communicate with all parties involved at all levels.
- Regardless of the opportunities that the current business environment may provide, its challenges may lead to exit from the market; it thus poses an urgent problem for business organizations to seek to recruit various methods and marketing practices in order to build adequate strategies to face the threats.
- Depending on information technology in marketing represents a form of differentiation , and this method of shopping allowed customers to obtain the required information in various parts, for multiple purposes and to obtain their needs from the products of Multinational organizations regardless of the company's location, as the global network of the Internet has removed Barriers and geographical boundaries,
- The most important thing that can be taken into account by making a value chain comparison between two organizations is that the differentiation in the value chain has a stronger impact on the continuity of the superiority of the business organization in its field of activity.
- Competing business organizations with similar organizational scheme can easily possess and develop the same skills related to the activity in which the superiority lies, unlike business organizations that differ in the activities that make up the value chain, where building and developing the same system The improvement of skills in that activity requires a very significant time.

- The theory of resources is based on the need to focus on the analysis of the peculiarities of the business organization from the inside rather than relying on the peculiarities of the competitive environment in order to translate performance in the market, the theory considers the business organization is the level that must be searched for competitive advantage not the sector,
- The principles of the resource-based approach can be summarized in the fact that a business organization is a set of resources, the abundance of resources (particularly tangible resources) does not guarantee the business organization's superiority in the market, and its deficiency does not necessarily prevent it from achieving this superiority ,
- Every business organization differs in the way of using and mixing resources, which results in differences in performance between business organizations. Improving productivity must be through increasing the volume of outputs and not the volume of inputs used. The rational use of resources is what achieves the business organization's superiority.
- Effective strategy requires the business organization to develop a resource portfolio, which has a high potential for featured positioning. Thus, it allows achieving the competitive advantage,
- Resources are the group of visible and invisible assets associated with the activity of the business organization during a relatively long period of time.

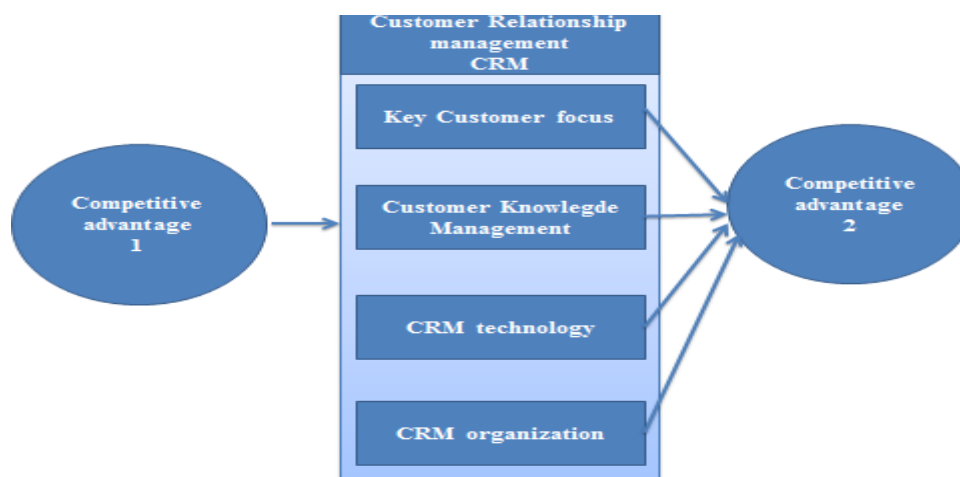
- **Recommendations and suggestions:**

Through the previous results, some recommendations and suggestions can be presented as follows:

- Rely on organizational requirements that provide information about each customer individually, and facilitate to communicate between them and their important customers in order to build a relationship with customers.
- Intensifying marketing activities to provide good communications and exchange values and how to present them in a way that allows be recognizing and using in a way that enables them to maximize benefits.
- Finding mechanisms that enable it to improve flexibility, adapt to market conditions and find appropriate solutions, with every situation through action and reaction.
- Listening to the customer by searching for important customers in the market among the total customers and trying to meet their needs and desires constantly.
- Maximizing the value given to the customer by researching and maintaining important customers (key customers) and working to maximize the value they obtain by various strategies, methods and communicative means.

- Appendices:

Figure 1: The proposed model



Source: By the researcher depending on the study perception

Table1: Cronbach alpha test for CRM and competitive advantage

Y	Area		Cronbach's Alpha			
	Dimensions	N of Items	AT N=64	WTA N=51	OTA N=38	Total N=153
X1	Key Customer Focus	5	.820	.821	.820	.842
X2	CKM	3	.821	.842	.822	.821
X3	CRM Technology	3	.762	.827	.842	.821
X4	CRM Organization	4	.821	.832	.823	.821
Y	Competitive advantage	5	.832	.821	.821	.829
X	Total CRM	15	.824	.852	.824	.832

Source : By the researcher depending on SPSS.V23 output

Table2: Guttman Split-Half test for CRM and competitive advantage

Y	Area		Guttman Split-Half Coefficient			
	Dimensions	N of Items	AT N=64	WTA N=51	OTA N=38	Total N=153
X1	Key Customer Focus	5	.820	.821	.821	.832
X2	CKM	3	.811	.841	.832	.811
X3	CRM Technology	3	.712	.827	.841	.820
X4	CRM Organization	4	.831	.822	.813	.811
Y	Cmpetitive advantage	5	.842	.820	.820	.828
X	Total CRM	15	.827	.849	.814	.822

Source : By the researcher depending on SPSS.V23 output

Table3: Structural Validity of the CRM and Competitive Advantage

Y	Dimensions	Pearson Correlation				Sig. (2-tailed)			
		AT N=64	WTA N=51	OTA N=38	Total N=153	AT N=64	WT A N=51	OTA N=38	Total N=153
X1	Key Customer Focus	.874*	.891*	.890*	.887**	.000	.000	.000	.000
X2	CKM	.863*	.898*	.881**	.871**	.000	.000	.000	.000
X3	CRM Technology	.874*	.802*	.853**	.864**	.000	.000	.000	.000
X4	CRM Organization	.910*	.880*	.803**	.863**	.000	.000	.000	.000

Y	Competitive Advantage	1,000	1,000	1,000	1,000	-	-	-	-
X	Total CRM	1,000	1,000	1,000	1,000	-	-	-	-

** . Correlation is significant at the 0.01 level (1-tailed)

Source: By the researcher depending on SPSS.V23 output

Table4: One-Sample Kolmogorov-Smirnov test for CRM and competitive advantage.

		Key Customer Focus	CKM	CRM Technology	CRM Organization	competitive advantage
N		153	153	153	153	153
Normal Parameters ^{a,b}	Mean	4.2337	4.0712	4.0205	4.2003	4,2612
	Std. Deviation	.50901	.61193	.63312	.60237	,75112
Most Extreme Differences	Absolute	.189	.184	.149	.139	.156
	Positive	.189	.184	.108	.128	.116
	Negative	-.165-	-.149-	-.149-	-.139-	-.156-
Kolmogorov-Smirnov Z		1.195	1.169	.924	.898	.911
Asymp. Sig. (2-tailed)		.199	.223	.475	.571	.394

a. Test distribution is Normal.

b. Calculated from data.

Source: By researcher based on the SPSS.V23 outputs

Table5: One sample T-test for CRM dimensions and competitive advantage

Code	CRM, Test Value = 3.5					
	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Key Customer Focus	4.454	152	.000	.53030	.2878	.7728
CKM	5.253	152	.000	.65152	.3989	.9041
CRM Technology	8.648	152	.000	.92424	.7066	1.1419
CRM Organization	3.830	152	.001	.50000	.2341	.7659
Competitive advantage	4.695	152	.000	.59091	.3345	.8473
Total CRM	5.659	152	.000	.63939	.4093	.8695

Source: By the researcher depending on SPSS.V23 output

Table 6: Correlation between CRM and competitive advantage.

		Key Customer Focus	Knowledge Management	CRM Technology	CRM Organization
Pearson Correlation	C.A	.971	.941	.948	.980
Sig. (1-tailed)	C.A	.000	.000	.000	.000
N	CA	153	153	153	153

By the researcher depending on SPSS.V23 output

Table 7 : Summary of the model CRM and competitive advantage

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.987 ^a	.974	.971	.10654	.974	264.442	4	148	.000

a. Predictors: (Constant), Key Customer Focus, CRM Organization, CRM Technology, and Customer Knowledge Management

b. Dependent Variable: Competitive advantage

Source: By researcher based on the outputs of SPSS.V23

Table 8 : ANOVA of CRM and competitive advantage

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.005	4	3.001	264.442	.000 ^b
	Residual	.318	28	.011		
	Total	12.323	32			

a. Dependent Variable: competitive advantage

b. Predictors: (Constant), Key Customer Focus, CRM Organization, CRM Technology, and Customer Knowledge Management

Source: By researcher based on the outputs of SPSS.V23

Table 9 : Coefficients of CRM and competitive advantage.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.035	.259		.133	.895
	Key Customer Focus	.320	.184	.311	1.741	.093
	CKM	.185	.101	.189	1.830	.078
	CRM Technology	-.217-	.179	-.165-	-1.212-	.236
	CRM Organization	.714	.128	.663	5.574	.000

a. Dependent Variable: competitive advantage

Source: By researcher based on the outputs of SPSS.V23

Table 10 : Paired samples statistics of competitive advantage

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	CA .b	2,5592	153	,75275	,10754
	CA.a	4,2082	153	,77777	,11111

CA: competitive advantage

Source: By the researcher depending on SPSS.V23 output

Table 11 : Paired samples correlations of competitive advantage

		N	Correlation	Sig.
Pair 1	CA .b & CA.a	153	,936	,000

CA: Competitive Advantage

Table 12 : Paired sample test of competitive advantage

		Paired Differences					T	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	CA .b - CA.a	-1,64898	,27547	,03935	-1,72810	-1,56986	-41,902	32	,000

Source: By the researcher depending on SPSS.V23 output

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