

# THE IMPACT OF CUSTOMER RELATIONSHIP MANAGEMENT ON CUSTOMER BEHAVIOR CASE STUDY OF OOREDOO FOR TELECOMMUNICATIONS

## L'IMPACT DE LA GESTION DES RELATIONS CLIENTS SUR LE COMPORTEMENT DU CONSOMMATEUR ETUDE DE CAS OOREDOO

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### **Abstract:**

This paper aims to determine the nature of the relationship between the dimensions of the Customer Relationship Management (Interactive communication, the service provided, and dealing with complaints) and the customer behavior (satisfaction and repurchasing).

The descriptive and analytical approaches were used by the researchers, the researchers used the descriptive approach by using the academic references to clarify the terms theoretically, and they used the analytical approach by making sample survey and analyzing the results statistically. The researchers designed a questionnaire to discover the influential relationship between CRM and customer behavior (for the customers of Ooredoo for telecommunications).

**Keywords:** CRM; Customer behaviors; Customer satisfication.

### **Résumé:**

Cet article vise à déterminer la nature de la relation entre les dimensions de la gestion de la relation client à savoir la communication interactive, le service fourni, la gestion des réclamations et le comportement. Les approches descriptives et analytiques ont été utilisées par les chercheurs, pour clarifier les concepts theoriques et analyser les resultants d'un questionnaire destine pour les clients d'Ooredoo pour les telecommunications pour expliquer la relation d'influence entre le CRM et le comportement des clients,

**Mots-clés:** CRM; Le comportement du client; Satisfaction du client.

## **1. Introduction**

CRM is a technology that gives the necessary opportunity for organizations to track and leverage every customer interaction to increase revenue opportunities and improve customer loyalty. But CRM performs much more than just track customer interactions. It also assists

organizations to optimize their operations by automating routine missions and standardizing best practices.

Finally, CRM permits organizations to better acquire, manage, serve, and extract value from their customers while improving operational efficiency, something that is critical in the present economy.

Actually, CRM was noted as a leading priority of business executives. This trend has continued, with some researches showing that more than a third of organizations plan for CRM upgrades in 2009.

## 2. The theoretical framework of CRM:

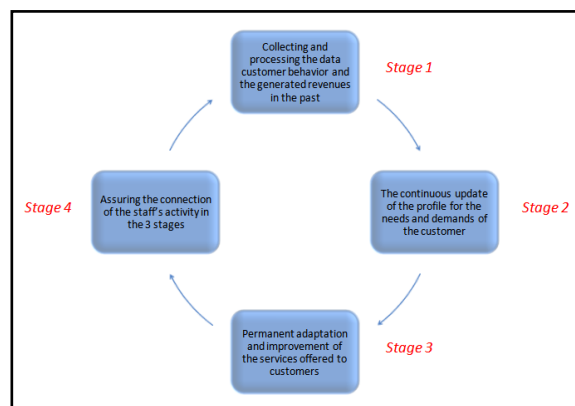
### 2.1. The Concept of Customer Relationship Management:

Customer Relationship Management (CRM) can be defined according to many aspects as following:

- Business Philosophy aspect: CRM is a relationship orientation, customer retention and superior customer value created through process management (Ryals, L., and Knox, S., 2001).
- Business Strategy aspect: CRM is a customer-focused business strategy that aims to increase customer satisfaction and customer loyalty by offering a more responsive and customized services to each customer (Croteau, A., and Li, P., 2003)
- Business Process aspect: CRM is a macro-level process that subsumes numerous sub-processes, such as prospect identification and customer knowledge creation (Srivastava, R. K., Shervani, T. A., and Fahey, L.. 1999)
- Technology aspect: CRM is an enabling technology for organizations to foster closer relationships with their customers(Srivastava, R. K., Shervani, T. A., and Fahey, L., 2009)

Kaufman defines CRM as a process that takes place in 4stages and is based on developing relationships with customers(Kaufman, M., 2001), these 4 stages can be illustrated in figure (1).

Figure n° 1: The Stages of CRM



## **2.2.Models of CRM:**

Philosophically, CRM can be seen from 3 perspectives(Kumar, V. Mohan, 2013):

- Stakeholder model: Relationship management and marketing are powerful tools for developing long-term relationships with clients, suppliers and distributors.
- Supply chain model: Relationship between channel participants is the key strategy for pursuit of efficient supply chain. This minimizes the costs of transactions and the entire supply chain costs.
- Marketing concept model: Every customer relationship is important for profitability. Relationship with existing customers is the lifeblood of a business organization and is paramount for the future direction of the business. Organization must deliver what the market needs and wants. Deliver more efficiently, effectively and add more value than competitors. Both internal and external marketing efforts are necessary to do this successfully.

## **2.3.The pros and cons of CRM:**

Certainly a benefit for each company is to achieve better economic results thanks to achieving higher value from every interaction with a customer. Competition is very sharp in current market. Companies must take care of a customer in every area of their specialization by using various communication channels. Customer expects perfect services whether he calls a help line, asks a dealer, browses a web site or personally visits a store. It is necessary to assure him/her in a feeling that he/she communicates with the same company whatever form of communication, time or place he chooses. The basic advantages and benefits of CRM are(Matušínská, Kateřina, 2009):

- Satisfied customer does not consider leaving
- Product development can be defined according to current customer needs
- A rapid increase in quality of products and services
- The ability to sell more products
- Optimization of communication costs
- Proper selection of marketing tools (communication)
- Trouble-free run of business processes
- Greater number of individual contacts with customers
- More time for customer
- Differentiation from competition
- Real time access to information
- Fast and reliable predictions
- Communication between marketing, sales and services

- Increase in effectiveness of teamwork
- Increase in staff motivation

Unfortunately some negatives exist. One of them is the fact that proper implementation and running of CRM is very difficult (technology, people – employees, initial money investment etc.), another one is the safety of information that companies keep about their customers, sharing information with third party and its overall protection. The entire operating principle of CRM (gathering information, recording calls, analyzing all clients' activities etc.) is invasion of privacy of customers(Wojnarowska, H., 2007).

For effective relationship management it is necessary for a company to not only hold onto their perspective but also try to understand why it is beneficial for a customer to establish a long term relation. Customer always cares primarily about satisfaction of his needs. If a company wants to establish mutual long-term relationship it must offer him something extra, some “reward” that will give him the desired value. The success rate of company being able to satisfy this desired value represents the quality of CRM. One hundred percent success rate is rarely achieved. However if the success rate in “rewarding” is acceptable then the customer continues in the relationship (makes further purchases) (Laketa, Marko et al., 2015).

#### **2.4.The Indicators of CRM Success :**

Measuring success of CRM concept is a challenge for companies. It is difficult to establish a direct connection between CRM activities and financial results, because success of CRM concept can be expressed in quantitative and qualitative indicators(Richards, Keith, and Jones, Eli, 2008).

Successful implementation of CRM concept requires investments in CRM technology, change of processes and organizational structures in order to accept CRM strategy. Companies have to define performance indicators of CRM concept, as set of activities, which will help company to achieve objectives defined in marketing strategy. CRM concept is successful if sales, marketing, support, and information technology within company are organized around same goals: cooperation with existing customers; acquisition of new customers; maximizing value of each customers; improving support services to customers without increasing costs. Organization of described functions will enable improvement of operational efficiency, which contributes development and sustainable and healthy growth(Kim, Jonghyeok, Suh, Euiho, and Hwang, Hyunseok, 2003).

There are three indicators of success of new business philosophy(Greenberg, Paul, 2004):

- Client indicators, which aim is to show which customers are willing to accept new solutions that bank conducted (using new channels of communication); is willingness of customers to provide information to company increases; are customers activities and their satisfaction increased.
- Financial indicators, which should show an increase in customer responses to marketing campaigns, reducing cost of acquiring new customers; increase customer retention rates; increase revenue per employee working with customers; growth in

number of transactions per customer; increase cross-selling of products and services; growth sales of additional products and services.

- CRM technology indicators: how employees use CRM technology; the number of customers in database; the time it takes for employees to obtain desired customer information using CRM technology.

### **2.5.Key Dimensions of CRM:**

Generally, researchers divide different mechanisms of CRM into internal and external programs. Internal programs emphasize on organizational structure, culture and knowledge management while external programs include interactive activities with customers (for example information exchange with the customer or involving him/her). From this point the researchers focused on external programs of CRM.

Five famous activities of CRM are explained as following (Ghafari, Peyman, Karjalian, Reza, Mashayekhnia, Ali, 2011):

#### **2.5.1 Information Sharing**

Information sharing refers to the exchange of essential and exclusive information between organizations and their customers through interactive activities. This information includes some matters such as market demand, customer preferences, sales promotion, introducing new products to the market and so on.

#### **2.5.2. Customer Involvement**

This term means involving the customer in activities related to development and improvement of a new product, holding technical meetings, supply chain annual conferences, and market evaluation conferences. Usually, customers provide market trend and technical support for the organizations there pore; it should lead to better understanding of future market demands.

#### **2.5.3. Long-term Partnership**

Long-term partnership means that there is commercial relationship with trust and commitment between two parties or two organizations. In this partnership both parties must have similar goals and follow mutual profits based on a reliable and dependable base

#### **2.5.4 Joint problem-solving**

This term can be described as a kind of collaboration between organizations and customers for solving problems and also sharing the responsibility when a problem occurs or difficult and unexpected conditions are encountered

#### **2.5.5. Technology-based CRM**

Reference believe that this term includes organizations that use computer technology to facilitate different activities of CRM and actively offer technical aides including data storage, data mining and CRM software systems to their customers.

### **3. The practical part :**

### 3.1. The study methodology:

The descriptive and analytical approaches were used by the researchers, the researchers used the descriptive approach by using the academic references to clarify the terms theoretically, and they used the analytical approach by making sample survey and analyzing the results statistically.

The researchers designed a questionnaire to discover the influential relationship between CRM (Interactive communication, the service provided, and dealing with complaints) and customer behavior (Satisfaction and repurchasing) for the customers of Ooredoo for telecommunications. The questionnaire was designed according to related scientific researches, and it was refereed by some referees. The questionnaire consists of 22 paragraphs distributed over 5 dimensions, as shown in table (1).

**Tablen° 1: The Dimensions and their paragraphs of the questionnaire**

Dimension	No. of Paragraphs
Interactive communication level	1 – 4
Service provided level	5 – 8
Dealing with complaints	9 – 12
Customer satisfaction	13 – 18
Repurchasing	19 - 23

<sup>a</sup>.Source: by the researchers depending on the outcomes of SPSS

### 3.2. Sampling Approach :

The sample population of the study consisted of all customers of Ooredoo for telecommunications in Algeria (13 Million customers). A non-random sampling is done in this study based on [www.surveysystem.com](http://www.surveysystem.com), the sample size was 384 participants. Figure (2) shows the determination of sample size.

**Figure n° 1: The determination of sample size**

**Determine Sample Size**

Confidence Level:  95%  99%

Confidence Interval:

Population:

Sample size needed:

<sup>b</sup>.Source: by the researchers depending on the outcomes of SPSS

### 3.3.The Validity Indicators of the Job Content Questionnaire:

The questionnaire was distributed to a group of specialized academics, and the researchers confirmed the validity of the questionnaire by using Cronbach Alpha equation as shown in table (2).

**Table n° 2: the validity of the questionnaire by using Cronbach Alpha equation**

Dimensions	Cronbach Alpha Values
Interactive communication level	0.760
Service provided level	0.722
Dealing with complaints	0.725
Customer satisfaction	0.684
Repurchasing	0.778
The total of variables	0.777

The validity indicators of the Job content questionnaire was (68 - 77), it means that the questionnaire has acceptable internal consistency for the study.

### 3.4.Results of the descriptive study:

#### 3.4.1 Independent variable:

Table 3 shows the means of measuring CRM (the main independent variable) and its dimensions (the subsidiary independent variables) were acceptable

The 3rd subsidiary independent variable (dealing with complaints) was in highest level of approval by (M=3.077) then the 1st subsidiary independent variable (interactive communication level) by (M=3.051), and the last one was the 2nd subsidiary independent variable by (M=2.990).

The total level of approving on independent variable dimensions was (M=3.039).

**Table n° 3: The results of analyzing the independent variable**

Dimensions	Mean	Rank
Interactive communication level	3.051	2
Service provided level	2.990	3
Dealing with complaints	3.077	1
The total	3.039	-

<sup>c</sup>Source : by the researchers depending on the outcomes of SPSS

#### 3.4.2 Dependent Variable :

Table 4 shows the means of measuring the customer behavior (the main dependent variable) and its dimensions (the subsidiary independent variables) were acceptable.

The 2<sup>nd</sup> subsidiary dependent variable (repurchasing) was in highest level of approval by (M=3.310) then the 1<sup>st</sup> subsidiary independent variable (customer satisfaction) by (M=3.041).

The total level of approving on dependent variable dimensions was (M=3.175).

**Table n°4: The results of analyzing the dependent variable**

Dimensions	Mean	Rank
customer satisfaction	3.041	2
repurchasing	3.310	1

The total	3.175	-
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<sup>d</sup>.Source : by the researchers depending on the outcomes of SPSS

### 3.5 Testing hypotheses:

#### 3.5.1 Testing the first hypothesis:

There is no statistically significant relationship at a significance level  $\alpha \leq 0.05$  for interactive communication level in customer behavior of Ooredoo for telecommunications.

Table 5 shows the results of analysis of variance (ANOVA) to identify the impact of interactive communication on customer behavior of Ooredoo for telecommunications, the researchers found that there is an impact of interactive communication on customer behavior. The value of the coefficient of determination ( $R^2$ ) = 0.192, what indicates the ability of the independent variable (interactive communication) to explain 19.2% of the changes in the dependent variable (customer behavior), The value of correlation coefficient ( $R$ ) = 0.438, while the value of  $F = 91.273$  confirmed the impact at significance level  $\alpha \leq 0.05$

**Table 5: The results of ANOVA to test the model validity of interactive communication level on customer behavior**

Model	Sum of squares	ddl	Avr. of squares	F	Sig.
Regression	27.777	1	27.777	91.273	0.000 <sup>b</sup>
Residue	116.863	384	0.304		
Total	144.641	385			
R = 0.438 <sup>a</sup>		R <sup>2</sup> = 0.192		Adjusted R <sup>2</sup> = 0.190	

<sup>a</sup>Dependent variable : customer behavior

<sup>b</sup>Predicted values : interactive communication

Table 6 shows the results of statistics analysis to identify the impact of interactive communication on customer behavior of Ooredoo for telecommunications. The value of ( $t$ ) = 9.554 was acceptable at significance level  $\alpha \leq 0.05$ .



**Table 6: The results of simple regression analysis to test the impact of interactive communication on customer behavior**

Model	Non-stand. coefficients		Stand. coefficients	t	Sig.
	A	Stand Error	Beta		
Constant	2.193	0.107		20.55	0.000
Interactive communication	0.322	0.034	0.438	9.554	0.000

Based on the above, the researchers refuse the null hypothesis (H0) and they accept the alternative hypothesis (H1) that is "The interactive communication effects on customer behavior of Ooredoo for telecommunications".

### 3.5.2. Testing the second hypothesis:

There is no statistically significant relationship at a significance level  $\alpha \leq 0.05$  for service provided level in customer behavior of Ooredoo for telecommunications.

Table 7 shows the results of analysis of variance (ANOVA) to identify the impact of service provided level on customer behavior of Ooredoo for telecommunications, the researchers found that there is an impact of service provided level on customer behavior. The value of the coefficient of determination ( $R^2$ ) =0.378, what indicates the ability of the independent variable (service provided level) to explain 37.8% of the changes in the dependent variable (customer behavior), The value of correlation coefficient (R) =0.615, while the value of  $F = 233.109$  confirmed the impact at significance level  $\alpha \leq 0.05$ .

**Table 7: The results of ANOVA to test the model validity of service provided level on customer behavior**

Model	Sum of squares	ddl	Avr. of squares	F	Sig.
Regression	54.637	1	54.637	233.109	0.000 <sup>b</sup>
Residue	90.004	384	0.234		
Total	144.641	385			
R = 0.615 <sup>a</sup>		R <sup>2</sup> = 0.378		Adjusted R <sup>2</sup> = 0.376	

<sup>a</sup>Dependent variable : customer behavior

<sup>b</sup>Predicted values : service provided level

Table 8 shows the results of statistics analysis to identify the impact of service provided level on customer behavior of Ooredoo for telecommunications. The value of (t) = 15.268 was acceptable at significance level  $\alpha \leq 0.05$ .

**Table n° 8: he results of simple regression analysis to test the impact of service provided level on customer behavior**

Model	Non-stand. coefficients		Stand. coefficients	t	Sig.
	A	Standard Error	Beta		
Constant	1.876	0.089		21.175	0.000
Service provided level	0.434	0.028	0.615	15.268	0.000

<sup>e</sup>. Source: by the researchers depending on the outcomes of SPSS

Based on the above, the researchers refuse the null hypothesis (H0) and they accept the alternative hypothesis (H1) that is "The service provided level effects on customer behavior of Ooredoo for telecommunications".

### 3.5.3. Testing the third hypothesis:

There is no statistically significant relationship at a significance level  $\alpha \leq 0.05$  for dealing with complaints in customer behavior of Ooredoo for telecommunications.

Table 9 shows the results of analysis of variance (ANOVA) to identify the impact of dealing with complaints on customer behavior of Ooredoo for telecommunications, the researchers found that there is an impact of dealing with complaints on customer behavior. The value of the coefficient of determination ( $R^2$ ) =0.315, what indicates the ability of the independent variable (dealing with complaints) to explain 31.5% of the changes in the dependent variable (customer behavior), The value of correlation coefficient (R) =0.561, while the value of F = 176.281 confirmed the impact at significance level  $\alpha \leq 0.05$ .

**Table n° 9: The results of ANOVA to test the model validity of dealing with complaints on customer behavior**

Model	Sum of squares	ddl	Avr. of squares	F	Sig.
Regression	45.508	1	45.508	176.281	0.000 <sup>b</sup>
Residue	99.133	384	0.258		
Total	144.641	385			

$R = 0.561^a$	$R^2 = 0.315$	Adjusted $R^2 =$ 0.313
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<sup>a</sup>Dependent variable : customer behavior

<sup>b</sup>Predicted values : dealing with complaints

Table 10 shows the results of statistics analysis to identify the impact of dealing with complaints on customer behavior of Ooredoo for telecommunications. The value of (t) = 13.277 was acceptable at significance level  $\alpha \leq 0.05$ .

**Table n° 10: The results of simple regression analysis to test the impact of service provided level on customer behavior**

Model	Non-stand. coefficient		Stand. coefficients	t	Sig.
	A	Standard Error	Beta		
Constant	1.853	0.103		17.994	0.000
dealing with complaints	0.430	0.032	0.561	13.277	0.000

Based on the above, the researchers refuse the null hypothesis (H0) and they accept the alternative hypothesis (H1) that is "The dealing with complaints effects on customer behavior of Ooredoo for telecommunications".

#### 4. Conclusions:

The researchers conclude the main results as following:

- CRM has become very important in providing the organization with a significant market share in its competitive market.
- It has become necessary for the organization to find an effective mechanism to deliver its products and vision to customers, and this is done only by creating an interactive communication between the organization and its customers.
- CRM becomes an integrated system that contributes to achieve the objectives of the organization, especially if all its components are relied on necessary and consistent.

#### 5. Recommendations :

According to the conclusions of the research, the researchers recommended the following:

- The need to pay attention to customers by conducting researches for studying the customer behaviors constantly to know their aspirations and desires and identify them effectively.

- The need to converge the organization the current and potential customers by improving and developing its communication mechanisms.
- The need to establish a department to study and analyze the competitive environment of the organization and identify the strengths and weaknesses of competitors.
- The need to reflect the elements of CRM to the status of the organization, and focus on the most important elements to attract the customer.

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