# The Role of Electronic Customers Relationship Management in Enhancing Customer Loyalty at Jordanian Telecommunication Industry

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Abstract: The aim of this study is to demonstrate the role of E-CRM (Electronic customer relationship management) in enhancing the loyalty of the customer. E-CRM will be measured by its dimensions (customer service quality, information quality, fulfillment, rewards and ease of navigation) in customer loyalty. The study will focus on Jordanian telecommunication companies' customers. The sample size will be determined after the proposal acceptance. A questionnaire will be developed to collect the primary information, which includes the questions that measure the variables of this study. The study will use qualitative and quantitative statistical methods to study the data, test hypotheses and reach the study results.

*Key-Words:* - Electronic Customer Relationship Management, Customer Loyalty, Information quality, Customer service quality, Telecommunication Industry, Ease of Navigation, Rewards, Fulfillment, Jordan

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# 1 Introduction

A company's competitive pattern depends on price competition, non-price competition, or combination of both, both locally and globally, this competition can be seen as the cause of changes in the business environment that have led to customer growth. A vision of the available options for different products that result from brand diversity through the provision of these entities, whether on the product side or the service side. Service brands have become one of the most important assets of these entities, especially in terms of intangibles, but the importance of the brand is one of the assets, so it is not only financially good but also excellent. It is also important in terms of marketing. What is important is that the product itself is affected by brand management in the light of the International Trade Liberalization Agreement, as it affects many aspects, including spiritual image, consumer behavior, and other aspects. The impact on the life cycle. Telecommunication industry is considered as one of the most extensive rapid growing sector which include all population categories especially the young population category that always go after new updated technology [1] where population that mobile services Jordanian use in Telecommunication around organizations (8,700,000) with 85.3% penetration in Dec-2019 (internet world stats 2019 ) ; Jordanian

telecommunication organizations are working hard in order to surviving in demanding and changing environment [2] and because the customer is considered as the main component for the organization's continuity and success; besides the business environment change development where any organization looks for increasing profit and competitive advantage by meet its customers' demands and expectations in the course of the evolvement of technology and development of web-based customer service, where all leading to decrease cost and provide significant services quality, and serve to enhance customer loyalty. Moreover, the concept of E¬CRM was developed, through a period of followed technological transformation, interacting customers and potential customers concerned about the foundation, enlargement, and strengthening of individualized customer interactions in order to maximize customer value

lifetime value. [3] Due to Internet penetration, organizations need to reach and maintain their competition 47 deferential versus competitors to increase profit and market share. Thus, the strategy needs to build a long-lasting relationship with customers to enhance customer loyalty; therefore, organizations invest in developing their services and strategy that cause moving towards E-CRM; and resulting in meeting their customers' changing demands. The telecommunication industry's

awareness has heavily invested in technology and the internet. On the other hand, there still a lack of E-CRM as new technology and how to use it as a strategic solution to organize existing systems and stand the relationship with their customer to enhance customer loyalty.

# 2 Study's Objectives

The study explored The Role of Electronic Customers Relationship Management in Enhancing Customer Loyalty at Jordanian Telecommunication Industry. The research Importance arises in covering an important and vital industry sector, which is the telecommunication sector in Jordan, finding out the effect of E-CRM in enhancing customer loyalty at the Jordanian telecommunication industry, Assess E-CRM and its dimensions deeply, evaluating E-CRM with its dimensions and reflect its role and link it with customer loyalty, lead to create an facilitate application that will telecommunication companies in enhancing their customers' loyalty. The main research objectives are to measure the effect of each E-CRM dimension in Jordanian Telecommunication companies customer loyalty, also to discover which E-CRM dimensions have the most significant effect on customer loyalty at Jordan telecommunication companies, and recommend the essential E-CRM dimensions that the companies should consider in their process to enhance customer loyalty.

# 3 Study's Significance

The significance of the research is in covering an essential and vital industry sector, which is the telecommunication sector in Jordan, explore the using level of E-CRM and its dimensions at the Jordanian telecommunication industry, and Evaluate the impact of the E-CRM on customer loyalty. As far as the researchers know, this has not been mentioned in previous studies as it links important variables in vital sector such as the Jordanian telecommunications community represented by Orange, Umniah, and Zain.

# **4 Study Objectives**

Current study's problem is represented by testing the effect of (E-CRM) in raising customer loyalty in the Jordanian communication industry. The targeted dimensions of such disclosure are (information quality, customer service quality, rewards, fulfillment, and ease of navigation dimensions).

Specifically, the study problem manifests in this question: (What is the effect of (E-CRM) in enhancing customer loyalty in the telecommunication industry in Jordan?) Where the above query will lead to answering these subquestions:

- 1- What is the effect of information quality on customer loyalty in the Jordanian telecommunication industry?
- 2- What is the effect of customer service quality on customer loyalty in the Jordanian telecommunication industry?
- 3- What is the effect of rewards on customer loyalty in the Jordanian telecommunication industry?
- 4- What is the effect of fulfillment on customer loyalty in the Jordanian telecommunication industry?
- 5- What is the effect of ease of navigation on customer loyalty in the Jordanian telecommunication industry?

# **5 Study Objectives**

H0: There is no significant E-CRM effect on customer loyalty at Jordanian Telecommunication Companies (a0.05≥) The following sub-hypotheses are derived from the main hypothesis:

Ho1: In Jordanian telecommunication firms, there is no statistically significant effect of information quality on customer loyalty at the level (0.05).

Ho2: In Jordanian telecommunication firms, there is no significant effect of customer service quality on customer loyalty (0.05).

Ho3: At the level (0.05), there is no substantial effect of awards on customer loyalty in Jordanian telecommunication businesses.

Ho4: At the level (0.05), there is no substantial effect of customer loyalty fulfillment in Jordanian telecommunication firms.

Ho5: At the level (0.05), there is no significant effect of ease of navigation on customer loyalty in Jordanian telecommunication businesses.

#### **6 Theoretical Framework**

The concept of E-CRM is derived from e-commerce. It uses an internet environment and touchpoint to interact with customers such as e-mail, website, internet, and intranet. E-CRM is basically through IT to assimilate external marketing strategies with internal organization resources, leading to recognizing and fulfilling customer needs [4]. Electronic customer relationship management refers to a set of marketing activity

tools and techniques using the internet to deliver it; that aims to build a long-term relationship between organization and customers to enhance customer experience and get customer loyalty [5]. [6] mentioned that E-CRM showed the act of handling customer relationships electronically to enable the organization to provide suitable services and products that will satisfy their customers and improve their loyalty. E-CRM work on smoothing and facilitating the communication between the organization and its customers' which will influence the customer expected and perceived service quality, wherein it impacts their loyalty and satisfaction.

E-CRM is considered a business strategy tool to develop customer relationships to enhance and boost income, profitability, and customers' needs [7]. Where [3] agreed that E-CRM indicates the marketing activities; tools plus techniques connected over the internet by technologies to build and enhance customers' relationships lead to customer loyalty. According to previous definitions, E-CRM is considered paramount for business and organization by using the internet, which reduces cost by connecting customers and services to gain customer loyalty.

#### **6.1 E-CRM Importance**

Based on E-CRM's above definition, it is obvious that any organization's key objective that has online marketing activities is to sustain the relationship with its customers to position a competitive edge between competitors; to maximize profit. E-CRM appears to enable the organization to achieve such objectives to focus in one of a most important goal that is to make the customer happy since they are the ones who keep the business in succession [8]; and as mobility and flexibility are the keywords that describe society today [9]so the organization has to have appropriate implementation for E-CRM; Execution process of E-CRM, in general, contains following phases: (i) Developing E-CRM vision, (ii) Defining E-CRM strategy plan, (iii) Develop E-CRM operational plan, (iv) Market assessment / Competition mapping, (v) Training the customer, (vi) Implement E-CRM program, and (vii) Analysis of E-CRM performance. (10).

#### **6.2 E-CRM Dimension**

List the This study contains five dimensions of E-CRM that help in investigating and assessing the role of E-CRM in enhancing customer loyalty in the Jordanian telecommunication industry.

These dimensions are:

1.Information Quality: The information quality describes as an info used to describe the status of the organization. This description could be applicable for a person, an object, or a location that is thought to be the interface between a user and an application. An entity could be a person or an item [2]; there was a suggestion for information quality major dimensions that consisted of accessibility fundamental quality (content quality), contextual quality, as well as represented quality were all considered. On the other hand, [11] for information quality suggested four different update dimensions in his model, he has updated factors for information quality, which determine the satisfaction of users, leading to customer loyalty by the intention of future use. Many studies conducted the relationship between customer organizational loyalty gained through customer satisfaction and information quality. [11] model indicated that all four dimensions for information quality (content quality, connection quality, interaction quality contextual quality) are related to user satisfaction positively. It mentioned that the user's satisfaction is positively connected to users' purpose of use the organization's facility. [12] confirmed that there are characteristics that affect the consumer plans for online use concerning website information quality such as richness, readability, and updated newness of website information; richness refers to enough knowledge, readability is accurate, while originality is to information novelty.

2. Customer service quality: Generally speaking, service is defined as a work done or duties formed for a government, company, or other entities (Oxford Advanced Learner's Dictionary). [13] penned that the service defied economic activities that generates time, location, form, or psychological serviceability. They also add service 50 fined contrary to goods as tangible objects that can be created and sold. On the other hand, service is intangible since it is produced and consumed at once. Service quality is an essential element for using e-services and organizations' websites because of the increase in services among the competitors [14]. Customer service is a set of activities designed to develop customer satisfaction which appears apparently through the impression that customer has when a product or services Customer expectations and perceptions must be met, as well as, quality is to be measured if customer service output is in track with the organization standard and conditions [15]. Where [16] penned that, to get the service's quality, top management must consider service performance, not only financial performance. In this regard, [17] mentioned that service quality is the result according to the customer experience between their expectation and perceptions of the way for services received.

3. Rewards: Rewards are considered one of the central pillars for loyalty and retention programs to gain customer loyalty; getting new customers will cost the organization five times more than retain customers or get their satisfaction. Rewards programs are designed to target customers selected according to terms and conditions that the organization developed and admit to set them to enjoy and benefit from it. Customers will be enrolled in loyalty programs because loyalty programs' main goal is to keep customers and satisfaction for spared positive word of mouth. Accordingly, loyalty programs are designed to distinguish customers who frequently buy in substantial amounts [16]. Rewards are defined by 18] as an attribute used to attract customers and consider their technique segregated since it allowed the customer to get points regarding each visit or purchase. Rewarding, according to [19] it is a strategy using in a different domain to improve people's effectiveness where a successful reward strategy dramatically enhances the engagement of the applicable target audience. Rewards defined by [20] as a loyalty program which offered from the organization to customers who have purchasing behavior of repeated purchasing, [20] mentioned examples for the reward under the lovalty program such as free merchandise, coupons. [21] noted that the objective of the rewards program divides into groups. Firstly, those programs are designed to save and protect the current customers and, at the same time, maintain sales level, profit as well. Secondly, it is to enhance the market share by increasing the sale. The third one is to motivate crossed-selling for the organization's products and services.

4. Fulfillment: Fulfillment is one of the E-CRM elements and is defined as the process responsible for providing consumers with their requests in a specific time frame and correctly; in other words, it means transferring customer's business needs into solutions [22]. In this vein [22] added, the mentioned process was created to inform customers about their request status, either a purchase order or complaint or any other services to ensure completion on time as a result that will guide to delight satisfy customers. In this regard, [23] argued that effective fulfillment strategies would give customers many advantages: significant quantities of customers' information, which lead to prospects quickly, easily, efficiently, whatever if provided service or product. Responses to customers request in fulfillment way is critical for the organization.

Accordingly, [23] stated that organizations must have an infrastructure and capability to fulfill since fulfillment is important for the organization to support and serve their customer. On the other hand, [24] considered fulfillment a dimension of online ethics as they defined the fulfillment "on-time and accurate delivery of an online purchase, accurate product representation and proper technical functioning of the website" where it affects positively on customer satisfaction. [25] mentioned that fulfillment is one of the dimensions of fluctuations in the quality of electronic services. In this context, they emphasized the Fulfillment gap identified as a general contradiction between customer expectations and real perceptions. In this regard, they develop the sub-dimension of quality of fulfillment that affects electronic services that indicate variation in Service stability.

5. Ease of navigation: [18] defined ease of navigation as one of the E-CRM dimensions that indicate building customer gates formatting the content simple to use, navigating quick access to information needed, and minimizing users' efforts. [26] stated that OCE (online customer Experience) is considered one of the business results regarding customer loyalty. One of the OCE elements is website ease navigation, which [26] posits that it positively impacts customer loyalty. The websites that facilitate any action on the website, either purchasing, complaining, or complete order, are the websites' features and tools. [26] stated, ease of navigation features and tools would enhance understanding of online shopping benefits and increase the chance of repurchasing.

Moreover, it reduces the mental and physical efforts used by shoppers, which will result in customer loyalty. In the same vein, [26] stated that to reduce electronic inadequacy negativity on customer loyalty; marketers need to work on enhancing ease using of the website or the application by adding a self-explanatory video that shows to users the steps for any action customers need to do either requesting; complaining or follow- up process order. On the other hand, marketers may use data analysis to determine if there are issues customers face while navigating on the website, which will help them revamp the website and enhance the features and tools used to ease website navigation.

#### **6.3 Customer Loyalty**

[16] defined customer loyalty as a "highly commitment from customers to re-buy or to repatronized for preferred service or product in the future even though of situational influences and marketing efforts which have potential to cause

switching behavior." The same vein [28] defined customer loyalty as ongoing repurchase a preferred service or product from the telecom service provider regardless of marketing efforts or choices to encourage customers to change. When customer loyalty defies competing offers, customer retention strategies that are executed professionally, a competitive advantage of the organization, confirmed that customer loyalty is considered a crucial investment return tool. Loyal customers provide positive word of mouth and do positive business reviews to potential customers.

#### **6.4 Customer Loyalty Importance**

After revising many types of research and scientific papers, there was much different importance that an organization will get benefit from loyal customers, the most discussed and agreed as the following:

- 1. Less price-sensitive: [33] mentioned that satisfied customers are less sensitive to the price change, and competitors' attacks will take less influence for those considered loyal customers for the organization. The similarity [15] mentioned that once customers become familiar with the organization provided services and the prices. Hence, as they are loyal customers and joy and satisfied with the services, the price will not be a stumbling block for the organization towards its customers.
- 2. Loyal customers: are easy to keep and serve [16] penned that loyal customers are easy for marketers to attract and serve. [15] Since loyal customers buy repeatedly and E-CRM ease to keep this info for the organization, their demands and wants are known, which means that organization will provide the wanted services and products that match their interests and needs.
- 3. Loyal customers are retaining with organization: [15] According to the customer's loyalty dimensions, either behavioral and attitudinal loyalty, if organizations satisfies its customers, it will reflect on their attitude and behavior towards its products and services.

#### 6.5 Jordan Telecommunication

Jordan's communications infrastructure is welltelecommunications developed. Jordan's infrastructure is rapidly evolving and being updated and expanded. Jordan uses a variety of media to communicate, including the telephone, radio. television. and the internet. [34]. telecommunication and information technology sector participate in a huge portion in the Jordanian GDP (Gross Domestic product). By developing the services provided to be considered access and base for economic growth and social life in the Kingdom, workforce's market-oriented policies, infrastructure, and rehabilitation have contributed to strengthening and encouraging local and foreign investment [35].The contribution telecommunication sector in GDP (Gross Domestic Product) was 4% and ranked with the seventh place among the ten sectors that contributed Jordan economic (Jordan Economic Growth Plan 2018 -2022) from [36]. Orange: In 2006, the JTG integrated its four companies under one umbrella to become Jordan's sole integrated operator, marking the most major integration of its sort in the market. [37]. Umniah: Apart of Bahrain's Batelco Group, soon established a reputation for being first. The company was a forerunner in delivering cuttingedge communication technology that successfully democratized broadband access for personal and business usage. [38]. Zain: In 1995, Zain Jordan modified Jordanian telecom by launching mobile GSM services.

#### 7 Literature Review

[39] This study aims to observe the impact of customer satisfaction, trust, privacy, and service quality on the success of electronic customer service relationship management (E-CRM) systems. This study's approach is a survey method where the study sample comprises 378 valid questionnaires; partial least squares verify the study model with structural equation modeling. The study's conclusion showed that the quality of service affects customer satisfaction and trust, which leads to customer loyalty and success of E-CRM systems in Organizations. [40] This study aims to assess the importance of organization website ideas and test its elements that lead to developing the competitive advantages of marketing services in the UK and Russia. The methodology of Study qualitative exploratory is conducting 14 interviews with marketing experts that are experts in website design, communication. marketing, and The conclusively shows that the corporate website reflects the corporate identity towards its strategy. In the same vein, research suggests a group of factors that affect the corporate competitive advantage. One of them is navigation in addition to (visual, information, usability, customization, security, availability, website credibility, customer service, perceived corporate social responsibility, and perceived corporate culture). The study findings from Russia and UK customers the importance of useful corporate websites, but UK customers are more demanding in the level expectations form

websites than a customer from Russia. [41], The study's objective of the study is to search marketing analysis by improving a customer loyalty method for (SMEs) in the service sector, based on (CRM) in developing the economy. The method of this study is considered exploratory research with a qualitative approach. The study results revealed a need to improve the framework for customer loyalty for SMEs based on CRM and make it operational. [42], In this study, the researcher searched for customer satisfaction (in the electronic-customer relationship management (e-CRM) and customer loyalty relationship by records for one of the largest retail banks in Kenya. The study's approach is the survey method, the results analyzed by exploratory factor analysis to define the validity scale, besides the path analysis and multiple regressions modeling to test hypotheses. The study sample was 78 valid questionnaires. The study conclusions demonstrated that the interaction between e-CRM transaction types and customer satisfaction was statistically primary and expected customer loyalty to happen. However, the interaction did not significantly account for more variance than just e-CRM features and customer satisfaction. The path analysis showed a lack of potential significant mediation effects of customer satisfaction on the relationship between e-CRM and customer loyalty. [26], The goal of this research is to look into the many aspects of online customer experience (OCE) and how they affect satisfaction and loyalty in the context of clothes ecommerce. Besides, it searches for the influence of gender on the OCE-satisfaction-loyalty chain. The study's methodology consisted of a conclusion according to the literature and using two samples (exploratory factor analysis and confirmatory factor analysis) for people using online shopping for clothes in India. The study conclusively showed a relationship between OCE psychological and OCE functionality factors, where both OCE dimensions affect the loyalty direct or indirect through satisfaction. On the other hand, the study faced limitations as the results limited to OCE factors in India regarding the clothing e-retail context. [43] This study aims to analyze online satisfaction and etrust to mediate the relationship between e-service quality and online loyalty (attitudinal and behavioral elements). The study's usage sample consisted of (302) website users of amazon.com in Jordan. The study's approach is confirmatory factor analysis, and structural equation modeling was performed to test the study's relationship dimensions. The study results showed that confirmed relationships that satisfaction mediated the relationship between electronic service quality and behavioral and attitudinal loyalty and mainly explanatory factors of electronic service quality with efficiency, privacy, and customer service. [2], The study's objective is to measure the impact of customer relationship management systems CRMS and their dimension: (System Quality, customer information quality, system usage, user satisfaction, and system impacts) Jordanian Telecommunication Companies' Performance. The usage sample of the study consisted of Jordanian Telecommunication Companies (Orange; Zain; Umniah). The thesis used a purposive sampling consisted of the employee who deals directly with systems; 140 questionnaires were valid to analyze. methodology was descriptive using frequencies, percepts, means, and stander deviation. The study findings showed a high positive impact on the customer relationship management system on Telecommunication Jordanian Companies' performance. [1], The study's objective is to identify the service quality constructs for the telecommunication industry in Egypt and study customer satisfaction and switching barriers on customer loyalty and mediating between switching barriers on the customer satisfaction and loyalty. The study's approach is an empirical causal framework developed and tested through qualitative and quantitative phases. The study results showed that the quality of the network, customer support, and pricing structure are the key service quality hypotheses that affect the customer satisfaction, and shows how the customer is more interested in the essential services other than benefits and valueadded services.

[15], This study aims to determine the effects of E-CRM on customer loyalty in Zain telecommunication Company in Jordan regarding; information quality, customer service quality, personalized level, and fulfillment. The study sample consisted of randomly of (500) business customer employees from different job positions. The study findings confirmed an effect for E-CRM with information quality, customer service quality, and customer loyalty that contains attitudinal and behavioral loyalty in Zain Company in Jordan.

[44] This study analyzes the relationship between customer satisfaction dimensions and customer loyalty by examining the meditating role marketing relationship skills in Mobile service operator (MSO) in Jordan. The study approach was empirical. The data sample consisted of 1350 mobile subscribers 1007, which was valid to analyze; the framework was developed and tested through qualitative and quantitative phases. The study results indicated that customer satisfaction comprises three factors or

dimensions (overall satisfaction, functional satisfaction, and technical satisfaction). The results showed a positive effect between customer satisfaction dimensions and customer loyalty. On the other hand, marketing skills are partially mediating the relationship between customer satisfaction and customer loyalty.

# 8 Methodology

The study describes study variables indication at which of them is preferable from the respondents' perspective, and analyze the impact of the E-CRM on customer loyalty at the Jordanian telecommunication companies, as well as the effect of each dimension of E-CRM on customer loyalty at Jordanian telecommunication companies.

Population and sample study: The study targeted the three Jordanian telecommunication companies' customers (Orange, Zain, Umniah) who benefit from their company's online services by using E-CRM technology internally. The researcher used a random sample to reach the customers who benefit from online services. The researcher distributed questionnaires online to randomly reach customers for the three companies (Orange, Zain, Umniah); out of 384 received responses, 315 questionnaires were found valid, representing (82 %) of overall received questionnaires.

Statistical analysis of data: The researcher used the following statistical methods in analyzing data and testing hypotheses according to the SPSS program:

- 1.Reliability: Cronbach's Alpha reliability coefficients for study variables were calculated, according to [45] Cronbach's Alpha is considered acceptable (0.70) or above. The Cronbach alpha coefficient values of the study's dimensions are within the range of 64.7 % 96.1 %.
- 2. The natural distribution test: The test results showed the values of the Skewness was (-.126 to .175), the Kurtosis was (-0.655 to .349), sig was .068. Based on the results, the data collected have a normal distribution. [46]
- 3. The Multicollinearity test: The current study's researcher calculates the variance inflation factor (VIF) and tolerance levels. Less than 1 and larger than 0.2 are the tolerance levels. Values of the variance inflation factor (VIF) are fewer than five. That rule eliminates the possibility of a Multicollinearity issue. It denotes that the information can be used for statistical analysis [47].

# 9 Descriptive Statistic Results

There's differentiation in the number of customers in Zain, Orange, and Umniah, Umniah is represented with (21%), while Zain and Orange were (39.4) % and (39.4) % respectively, which shows that both Zain and Orange own the largest market shares, and that matches the reports issued by [35]. 71.1 % of the responses were from nonstudents, and ranges between "26-35 years" 36.2% and that agrees with [50] on that people aged (15-64) years is 62%, which indicates that the users of technology are youth. Females were represented by 67% while males were 33%, Most of the participants were "Married", and the 59.7% of them are holding "Bachelor" degree.

# 10 The Descriptive Analysis Results

- 1) The information quality variable as a whole scored; (Mean = 3.579), and the statement "The company keeps coordinated its website to meet customers' needs" took the highest response (3.70).
- 2) Customer Service Quality variable in total scored; (Mean= 3.382), and the statement "The company website provides sufficient facilities to complete the search for services and products" took the highest response (3.60).
- 3) The variable Rewards in total scored; (Mean=2.730), the statement "The loyalty program that company used is appropriate" took the highest response (3.41).
- 4) The variable fulfillment as a whole scored (Mean= 3.382). The statement "company provides a match with the required service" took the highest response (3.80).
- 5) The ease of Navigation variable as a whole scored (Mean= 3.681), the statement "company's website uses the easy and clear language" took the highest response (3.80).
- 6) Customer Loyalty variable in total (Mean= 3.630), and the statement "Always consider my company as a first option" took the highest response (3.67).

#### 11 Results

The findings of testing the primary hypothesis are presented in this section by the current study's researcher. Using multiple linear regression analysis, the primary hypothesis was put to the test. The following are the findings of this investigation:

#### 11.1 Multiple Regression

The As shown in table (1) H0.1: the results of multiple regression indicate that there's a significant effect of Electronic Customer Relationship Management (E-CRM) on customer loyalty in the Jordanian telecommunication industry as (F=85.294, P <0.05). Accordingly, the null hypothesis is rejected, and the alternative hypothesis is accepted. The results show that  $(R^2 = 0.580)$  points out that Electronic Customer Relationship Management (E-CRM) explains 58% of the variance in the dependent variable customer loyalty at Jordanian Telecommunication companies. "Information Quality "and "fulfillment" weren't significant since the sig. is (<0.05) and the analysis was multi-step regression Standardized.

#### 11.2 Simple Regression

The first hypothesis test shows that information quality has a major impact on customer loyalty in Jordan's telecommunications business. The alternative hypothesis (t = P0.05) is accepted, whereas the null hypothesis is rejected. The results demonstrate that in the Jordanian Telecommunication business, information quality explains 25.1 percent of the variation in the dependent variable customer loyalty (R2 = 0.251).

The second hypothesis test shows that customer service quality has a considerable impact on customer loyalty in Jordan's telecommunications business. The results demonstrate that (R2 = 0.249) information quality explains 24.9 percent of the variation in the dependent variable customer loyalty in the Jordanian Telecommunication business, where (t = P0.05) the null hypothesis is rejected and the alternative hypothesis is accepted.

The third hypothesis test reveals that incentives have a major impact on increasing customer loyalty in Jordan's telecommunications business. The results demonstrate that (R2=0.445) incentives explain 44.5 percent of the variation in the dependent variable when the null hypothesis is rejected and the alternative hypothesis is accepted (t=P0.05) (customer loyalty in the Jordanian telecommunication industry).

The fourth hypothesis test reveals that fulfillment has a major impact on customer loyalty in Jordan's telecommunications business. The results reveal that (R2 = 0.400) fulfillment explains 40.0 percent of the variation in the dependent variable customer loyalty in Jordanian Telecommunication firms when the null hypothesis is rejected and the alternative hypothesis is accepted (t = P0.05).

The final hypothesis test reveals that navigation ease has a major impact on customer loyalty in Jordan's telecommunications business. The alternative hypothesis (t=P0.05) is accepted, whereas the null hypothesis is rejected. The results suggest that the dependent variable (R2=0.451) explains 45.1 percent of the variation (customer loyalty in the Jordanian Telecommunication industry).

# 12 Results Analysis and Discussion

The relationship between E-CRM effort and customer's loyalty is positively related and that agrees with [3], [2], and [18] showing that using E-CRM characteristics such as customer service quality that provided to customers has a significant effect as considered the first point when customer assess the website, additionally; [49] presented that using CRM, in general, can ease the processes for marketing as well as sales' processes, which will have an impact by improving customer services; identifying customer loyalty and increase market share which resulting increase companies' competitiveness. And that agrees with [30] that showed that the quality of service affects customer satisfaction and trust, which leads to customer loyalty and success of E-CRM systems in Organizations. The result of R2 for electronic customer relationship management E-CRM was (R2 =0.580), which considered high; and in this vein, considered reasonable according to [3] as mentioned that set in E-CRM strategy into business strategy will lead companies for better understanding for its customers' needs and wants which will affect directly improving company's profitability through increased customer loyalty. As a result, the main hypothesis Ho1 There is no a significant effect between using electronic customer relationship management and customer loyalty at Jordanian Telecommunication Company was rejected, and the alternative positive hypothesis that says: There is a positive effect of ECRM  $a \le 0.05$  was accepted.

## 13 Conclusions

The study concluded that E-CRM has affected the customer loyalty positively in the Jordanian telecommunication companies. The researchers also recommend increasing the focus on customer information quality level in (Orange, Zain, Umniah) telecommunication companies in order to be able to provide the right and reliable information at the

right time with correct and organized manner, it will be beneficial if (Orange, Zain, Umniah) companies offer different rewards programs to its customers in order to increase customer loyalty, It is worth for (Orange, Zain, Umniah) to update their websites and applications that customer used according to periodical survey that meet customer needs and recommendations, and increase attention is needed for the factors such as (Ease of Navigation and fulfillment) for the websites and application which positively in customer loyalty. effect researchers recommend future studies to make more investigations about E-CRM in different sectors, and to study in depth the dimensions such as (perceived trust, personalization level, price attractiveness) that are not discussed in this article. The article advices decision makers in the Jordanian Telecommunication companies to adopt E-CRM systems since its proven that it will affect loyalty.

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