Role of Customer Relationship Management in Service Quality: Case of Mobile Service Providers in Egypt

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Abstract
Knowing your customers better will enable you to serve them better and keep them ever. This is the main theme of Customer Relationship Management (CRM). The objective is to identify the key factors that influence the extent to which CRM helps to improve the service quality of mobile service provider in Egypt that seems to have satisfactory level of customer satisfaction. The study concentrates on three factors of CRM (communication, interpersonal relationship, efficiency) through questionnaire that distributed for 70 clients. Correlation analysis and multiple regressions used to test the hypothesis. The study shown that all independent variables (interpersonal relationship, communication, efficiency) significantly correlated with the dependent variable (service quality).

Keywords: Marketing, CRM, Telecommunication, Egypt.

1. Introduction
In the rapidly changing global and technological environment there has been a growing interest among service organizations as well as other types of businesses to cultivate customer relationship. The need for firms to strengthen their business relationship with customers is perceived as a strategic step for business growth and competitiveness (Wali et al., 2015). Customer relationship management (CRM) behavior theory is comprehensively aimed at examining and strengthening business relationship between the customer and the service suppliers (Wali et al., 2015). According to Wail et al. (2015) CRM is a method through which the customers cooperate with organization through marketing, services and sales. Management and customer relationship are considered as the key components of CRM, people process and technology. CRM is the collection of strategies, methodologies, processes, software, and systems that help companies in effective and organized CRM to retain existing customers, attract new customers and create value to the customers as well (Nuri and Khoshiman, 2014). CRM is the process of building and keeping profitable relations with customers by providing products that are valuable to consumers and create satisfied customers (Kristian and Panjaitan, 2014). CRM consists of essential functional areas: marketing, service and support, and sales. Also, information technology and information systems can be used to support and combine CRM methods to satisfy the needs of organizations' customers (Rahimi and Yazdanfar, 2015).

Today, many businesses such as insurance companies, banks, and other services organizations recognize the importance of CRM and its supporting in capture new customers and retain existing ones and maximize their lifetime value. The growth in service sector leads to it becoming much more competitive, transforming the management and marketing of service organizations (Roy and Ahmed, 2016). This paper focused on CRM in terms of service quality of mobile service providers in Egypt.
Many businesses such as insurance companies, telecommunication, banks, and other service organizations realized the importance of CRM and its potential to help them acquire a new customer retain existing ones and maximize their lifetime value by using some analytical approaches in CRM applications. The main objective is to identify the key factors that influence the extent to which CRM helps to improve the service quality of mobile service provider in Egypt that seems to have acceptable level of customer satisfaction. In today competitive environment organizations seeks to improve CRM to provide a better service and this is a big challenge. This has encouraged researchers to conduct a survey to find alternative solution to improve service quality. They tried to find the factors that need to look at or do further research on CRM that helped to improve service quality.

This research proposed to investigate the following research questions:

1. Is there any significant relationship between interpersonal relationship and service quality in the context of mobile service provider in Egypt?
2. Is there any significant relationship between communication and service quality in the context of mobile service provider in Egypt?
3. Is there any significant relationship between efficiency and service quality in the context of mobile service provider in Egypt?

2. Literature Review

Many companies implement CRM to understand customer needs and demands. CRM allows companies to collect information about customer purchases, preferences, demands, and other data about them. CRM can also help the organization's ability to achieve the goals of customer maintenance and having a competitive advantage over competitor (Rahimi and Yazdanfar, 2015). A relationship includes two stages: firstly, attracting the client, and secondly building and managing the relationship over time so that the economic and social objectives of both parties are achieved. The first phase of “attracting”, “establishing” or “creating” involves customer relationship marketing that centers on developing or establishing a continuous or long-term relationship between a service providers and a customer. The second phase, during which the service provider tries to enhance relationships and retain the clients, is customer relationship management (Roy and Ahmed, 2016).

Marketing has moved from a brand-centered focus to a customer-centered approach (Mithas et al., 2005). A primary motivation for organization to implement CRM applications is to track customer behavior to gain insight into customer tastes and evolving needs. By organizing and using this information, organizations can design and develop better products and services (Davenport et al., 2001; Nambisan 2002).

Rababah et al. (2011) demonstrated that there are four major perspectives of CRM processes, which are customer facing level processes, customer oriented processes, cross-functional CRM processes, and CRM macro-level processes. Results suggest a pre-implementation plan for CRM programs/systems. Such a plan aims to initiate and communicate a customer-oriented culture within the organization. In same time, all parties in the organization will understand the CRM concept, communicating, and spreading the benefits of CRM systems.

Khedkar (2015) cited CRM has a positive relationship between customer satisfaction and customer loyalty. Soliman (2011) mentioned a positive relationship between CRM and marketing performance in financial institutions. Kristian and Panjaitan (2014) demonstrated total quality service has significant effect on customer satisfaction and customer loyalty. Also, CRM has significant effect on customer satisfaction and customer loyalty in fast food restaurant. Al-Qedd et al. (2017) found a strong correlation between CRM and customer satisfaction, loyalty and the service quality of Jordan banking. Moreover, Oluseye et al. (2014) parent relationship management has a positive impact on the students’ willingness to recommend their universities to others.

Mang'unyi et al. (2017) cited that electronic customer relationship management has a positive and significant relationship with loyalty, and that the pre-service and during the service features significantly predict loyalty. Thus, enhancing electronic customer relationship management practices could be a strategic competitive tool to impact the banks’ relationship with their customers. While in Ghana bank Anabila and Vitor (2013) found a strong positive relationship between CRM practice and customer loyalty and they recommend bank management to continue with the CRM practices and effectively communicate their CRM policy to customers to improve customer loyalty. Amoako et al. (2012) showed that effective CRM has an impact on customer loyalty at hotels sector. Furthermore, customer relationship effectively builds customer trust in the organization. Dubey and Srivastava (2016) showed a positive impact of service quality on CRM and customer loyalty, and that tangibility has a significant impact on customer loyalty.
Wasaya et al. (2016) cited that service quality, customer satisfaction and customer value were significant in predicting customer loyalty also CRM quality was significant in predicting customer loyalty being having a positive relation. Njuguna and Mirugi (2017) showed that service quality has a positive influence on service delivery and relationship management enhances service delivery.

In Saudi Arabia Talet et al. (2011) cited that perceived quality of service offered by mobile telecom companies yield the most influence to customer satisfaction. Arora (2013) and Toyese (2014) showed that service quality affects the customer intention to stay with a particular service provider. Thus, service providers should maximize service quality to improve customer acquisition, retention rates and as result enhance customer loyalty. Tauni et al. (2014) found that CRM and customer retention were significantly related in the telecom industry of Pakistan. Roy and Ahmed (2016) mentioned that the communication and the interpersonal relationship had significant influence in enhancing the Grameen bank service quality. Cvijovic et al. (2017) showed that perceived utility value to be the most important factor for mobile CRM services, followed by: ease of use, context, compatibility, cost, risk and personal innovativeness.

The telecom sector is technologically fast in implementing certain CRM technologies this is clearly so because of the high market demand for the service in the state. Mobile services industry in Egypt is one of a very competitive industry. Due to this challenging environment, organizations working in this industry are trying to attract and retain clients. In recent years, organizations have been using CRM as a method to gain a competitive advantage: it has become a necessity for their survival. As markets become increasingly competitive, the development of relationships that can be maintained in the face of the many inducements to switch service providers is seen as a method of creating a sustainable competitive advantage.

3. Conceptual Framework

Based on the literature review, research hypothesis and research objectives, the conceptual framework of this study is developed and shown in figure 1.

![Conceptual Framework](image)

**Figure 1: Conceptual Framework**

4. Research Hypothesis

In the light of the problem and goals of the research, the study hypotheses can be formulated as following:

H1: There is a relationship between interpersonal relationship and service quality in mobile service provider in Egypt.

H2: There is a relationship between communication and service quality in mobile service provider in Egypt.

H3: There is a relationship between efficiency and service quality in mobile service provider in Egypt.

5. Methodology

This research is a quantitative research using a questionnaire survey. The questionnaire is proven to have high reliability and consistency.
This survey instrument allows the researcher to investigate the relationship among interpersonal relationship, communication, efficiency as independent variables and service quality as dependent variable in the context of Mobile service providers in Egypt. Due to time constraints, a total of 70 mobile users were selected as our respondents and questionnaires were distributed to mobile users in Alexandria only from 15th July to 25th July 2018. Sekaran (2003) recommends that sample sizes larger than 30 and less than 500 are appropriate for most studies. Pearson’s Correlation analysis was used to find out whether any relationship existed between the independent and dependent variables. After collecting the data, correlation matrix for the variables was prepared and the researchers used stepwise regression to test the strength of associations between the study variables. The Statistical Package for Social Sciences (SPSS) version 23 was employed to analyze the data collected from the survey. The number of respondents was 70 of mobile users.

6. Analysis

Table 1: Number of Items and reliability coefficient of customer relationship management (Interpersonal relationship, communication, efficiency, and service quality).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of Items</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal Relationship</td>
<td>4</td>
<td>0.769</td>
</tr>
<tr>
<td>Communication</td>
<td>5</td>
<td>0.771</td>
</tr>
<tr>
<td>Efficiency</td>
<td>5</td>
<td>0.854</td>
</tr>
<tr>
<td>Service Quality</td>
<td>5</td>
<td>0.870</td>
</tr>
</tbody>
</table>

Nunnally (1994) suggested that the reliability of 0.50-0.60 is sufficient, although a coefficient of 0.70 or above is desirable (Hair et al., 2006). In this research the Cronbach's Alpha coefficient was used to evaluate the reliability of the measures. The Cronbach's Alpha coefficient for all variables fall within the acceptable range as it’s all range from (0.769) to (0.870).

Table 2: Descriptive Statistics for Relationship with mobile service provider customers (Interpersonal relationship, communication, efficiency and service quality).

<table>
<thead>
<tr>
<th>Scale</th>
<th>Number of items</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal Relationship</td>
<td>4</td>
<td>2.3571</td>
<td>0.83685</td>
</tr>
<tr>
<td>Communication</td>
<td>5</td>
<td>2.3257</td>
<td>0.80012</td>
</tr>
<tr>
<td>Efficiency</td>
<td>5</td>
<td>2.2914</td>
<td>0.81271</td>
</tr>
<tr>
<td>Service Quality</td>
<td>5</td>
<td>2.2257</td>
<td>0.85866</td>
</tr>
</tbody>
</table>

Mean scores have been computed by equally weighting the mean scores of all items. On a five-point scale mean score for interpersonal relationship is 2.3571 (SD = 0.83685). The mean score for communication is 2.3257 (SD = 0.80012). The mean score for efficiency is 2.2914 (SD = 0.81271). The mean score for service quality is 2.2257 (SD= 0.85866). A correlation analysis was conducted on all the variables to explore the relationship between variables.

Table 3: Correlation Matrix (Interpersonal Relationship, Communication, Efficiency) to Service Quality.

<table>
<thead>
<tr>
<th></th>
<th>Interpersonal Relationship</th>
<th>Communication</th>
<th>Efficiency</th>
<th>Service quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal Relation</td>
<td>----</td>
<td>.487</td>
<td>.643</td>
<td>.653</td>
</tr>
<tr>
<td>Communication</td>
<td>----</td>
<td>.683</td>
<td>.636</td>
<td></td>
</tr>
<tr>
<td>Efficiency</td>
<td></td>
<td></td>
<td></td>
<td>.866</td>
</tr>
<tr>
<td>Service quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result of correlation analysis for all the variables is shown in this table-3. It examines the correlation among interpersonal relationship (IR), communication, efficiency and service quality to customer relationship management. The variables significantly correlated with customer relationship management were interpersonal relationship (r= 0.487, p<.01), communication (r=0.636, p<.01), efficiency (r=0.866, p<.05)

The result of the study depicted that the variable interpersonal relationship is significantly correlated with service quality so the results of analysis have provided support for research hypothesis 1. The result of the study depicts that the variable communication is significantly correlated with service quality. So the results of analysis have provided support for research hypothesis 2.
The result of the study depicts that the variable efficiency is significantly correlated with service quality. So the results of analysis have provided support for research hypothesis 3.

Table 4: Multiple Regressions to Service Quality.

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>1</td>
<td>.877</td>
<td>.769</td>
<td>.758</td>
<td>.42229</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Efficiency, IR, Communication

<table>
<thead>
<tr>
<th>ANOVA^a</th>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1</td>
<td>39.104</td>
<td>3</td>
<td>13.035</td>
<td>73.092</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td></td>
<td>11.770</td>
<td>66</td>
<td>.178</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>50.874</td>
<td>69</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: SQ
b. Predictors: (Constant), Efficiency, IR, Communication

<table>
<thead>
<tr>
<th>Coefficients^a</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>Constant</td>
<td>-.065</td>
<td>.177</td>
<td></td>
</tr>
<tr>
<td>IR</td>
<td>.162</td>
<td>.080</td>
<td>.158</td>
</tr>
<tr>
<td>Communication</td>
<td>.073</td>
<td>.087</td>
<td>.068</td>
</tr>
<tr>
<td>Efficiency</td>
<td>.759</td>
<td>.098</td>
<td>.718</td>
</tr>
</tbody>
</table>

a. Dependent Variable: SQ

The regression output results are summarized in table 4. It is found that CRM dimensions overall have positive relationship with Services Quality in mobile service provider in Egypt (R=0.877). However, based on the adjusted R square value of 0.769, these dimensions explain 76.9% of variance of dependent variable which is Services Quality.

It is obvious that independent variable with higher level of \(\beta\) has higher impact on dependent variable; therefore, study results revealed that the dimension of efficiency has significant impact on Services Quality with t-statistic 7.747 and significance level is 0.000, which is less than P-value 0.05 and the Beta value (\(\beta=0.718\), sig<.05) is the most influential dimension on SQ followed by interpersonal relationship with Beta value (\(\beta=0.158\), sig<.05), t-statistics 2.031 and significant at 0.046.

Moreover, communication has shown the third influential dimension with t-statistics 0.841 and level of significance is 0.403. Since the Beta value is greater than 0.05, the study accepts the null hypothesis and concludes that there is no statistically significant relationship between communication and service quality. Thus, supporting that interpersonal and efficiency are the only CRM dimensions that have significant impact on Services Quality provided by mobile service provider in Egypt.

7. Conclusion

The study shown that all independent variables (interpersonal relationship, communication, efficiency) are significantly correlated with the dependent variable (service quality). Moreover, this study differs from Roy and Ahmed (2016), who indicate that communication and interpersonal relationship are significantly correlated to service quality while efficiency is not significant factor to enhance service quality. That means that mobile service providers in Egypt should take in consideration communication system, interpersonal relationship, and efficiency to enhance customer service requirements.

Thus, the implication of the research has shown that it is very important for any mobile service provider in Egypt to take effective measures to improve service quality through interpersonal relationship, communication, and efficiency.
However, the study was applied only in the mobile service sector in Egypt with a limited sample size. Because of the limited sample size, the results may not be generalized for other sectors. Thus, further research is required to consider a larger sample size in the same sector or in any other industrial sector. In a further study, the researchers may try to explore more appropriate variables in relation to the customer relationship management in enhancing service quality.

References


