The Relationship between Information & Communications Technology, Prior Experience and Customer Loyalty in Saudi Arabia Insurance Industry Companies

By Mohammed Saad Alawni, Rushami Zien Yusoff, Abdullah Kaid Al-Swidi & Ebrahim Mohammed Al-Matari

University Utara Malaysia, Malaysia

Abstract- This study is an attempt to examine the association between important variables of service quality namely information and communications technology, prior experience and customer loyalty in Saudi Arabia’s provision of health insurance. This study obtained primary data collected through questionnaire after which SPSS version 21 was employed to test the relationship between independence variables and dependent variable. The results of this study revealed a positive and significant association between information and communications technology and customer loyalty. In the same path, prior experience was found to have a positive and significant connection with customer loyalty. Finally, this study provides limitations and suggestion for future studies towards the end.

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The Relationship between Information & Communications Technology, Prior Experience and Customer Loyalty in Saudi Arabia Insurance Industry Companies

Mohammed SaadAlawni α, RushamiZienYusoff σ, Abdullah Kaid Al-Swidi ρ & Ebrahim Mohammed Al-Matari Ω

Abstract- This study is an attempt to examine the association between important variables of service quality namely information and communications technology, prior experience and customer loyalty in Saudi Arabia's provision of health insurance. This study obtained primary data collected through questionnaire after which SPSS version 21 was employed to test the relationship between independence variables and dependent variable. The results of this study revealed a positive and significant association between information and communications technology and customer loyalty. In the same path, prior experience was found to have a positive and significant connection with customer loyalty. Finally, this study provides limitations and suggestion for future studies towards the end.

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I. Introduction

Service quality has succeeded to become a significant co-efficient in the competitive market realm. In other words, survival in such an environment entails the delivery of quality services form economic enterprises (Sandhu&Bala, 2011). The delivery of quality service is crucial for any business survival and success in the current market environment (Kara et al., 2005) as once the quality services are delivered to customers, it would satisfy the said customers and this would result to obtaining their loyalty (Tsoukatos, 2007).

The relationship that exists among customer satisfaction, customer loyalty and quality service is based on the notion on which service-centered firms (e.g. insurance firms) are established on (Yang & Jolly, 2009; Malini, 2012; Rai&Medha, 2013). As a consequence, it is the service-centeredfirm’s goal to attract new customers and to maintain the satisfaction of current ones, in order to ensure their loyalty to the organization. This is because knowledge evidences that the costs of attracting new customers are greater than maintaining present ones via customer loyalty (Sigy&Samli, 1985; Terblanche&Bohoff, 2006). Nevertheless, some researchers are still not convinced of the universality of the relationship between service quality, satisfaction and loyalty, contending that other factors impact this link in various environments and cultures (e.g. Cadogan&McNaughton, 2002; Yang & Jolly, 2009). Therefore, this study examines the effect of several antecedent and moderating factors that are expected to impact the provision of quality service of Saudi insurance industry firms.

This is evident from the rules provided by the World Trade Organization (WTO) concerning financial service industries reforms, where developing nations should balance their survival goals with free trade. Financial service industries reforms should also heighten the global insurers’ incentives to enter emerging markets as reforms primarily lessen the barriers of entry in local markets. Following their decision to enter a new market, global insurers would think of the most optimum way of entrance (Ansari, 2011).

Insurance companies face many problems as they function with increasingly competitive pressures, due to the liberalisation of the financial services sector, which had led companies to focus most of their primary strategies toward improving service quality in order to enhance customer satisfaction and loyalty (Siddiqui&Sharma, 2010). Siddiqui and Sharma (2010) stated that nowadays the consumer is demanding services with higher standards and also becoming more and more aware of higher expectations. They further added that it is difficult for service providers to manage their services effectively, because the advancement of technology, especially in information and ICT, enables the consumer to make accurate and quick comparisons on the Internet. They concluded that this in turn leads to the..
fact that customer expectations and perceptions are continually changing and evolving.

Furthermore, customer service is more pertinent in service businesses as compared to manufacturing companies, since service characteristics are often inseparable and intangible. Due to improved technologies, growing customer sophistication, and increased private player competition, the recent years had witnessed greater thrust on achieving higher levels of efficient customer service. It can be observed that customers are becoming more and more advanced in their requirements and expectations, which in turn demands considerably higher standards of service (Sachdev&Verma, 2004). For the consumer, the term service can entail many meanings and go under different names, some of which include customer relationship, customer satisfaction, service delivery, customer delight, and etc. Because of this, there is increasing interest in improving customer service, which means that objectives of the business must be aligned closely with the customer service elements. Meanwhile, according to Payne (1995), initiatives related to quality improvement go hand in hand with customer service initiatives. Previous research reported that the concepts of marketing, customer service, and quality have been integrated to form a new perspective on the old concept (Christopher &Ballantyne, 1991). Thus, marketers now are of the opinion that achieving quality has become a pivotal concern. Therefore, in order for service providers to attain better positions in the market place, a vital key is consistent superior service delivery (Brown & Swartz, 1989).

II. Literature Review and Hypothesis Development

a) Information and Communications Technology and Customer Loyalty

Technology is described as the bulk of knowledge, tools, methods and innovations developed from science and practical experience that is utilized in developing, designing, producing and applying products, processes systems as well as services (Pier, 1989). The technological revolution that precipitated in the middle of the 20th century brought with it the possibility of computers where in data can be stored and modified. However, arguably the greatest technological event of the twentieth century was the discovery of the Internet (Ilie, 2008), since it made it easier for people to communicate from different parts of the world. As stated by Warrick and Stinson (2009), more than 1.2 billion people are Internet users, and the numbers continue to rise. An invention that took the use of the Internet to a critical edge was the introduction of smart phones where people are able to transfer data, check their emails, use social media, and communicate without the need to use a computer or a laptop. Organisations worldwide have been making use of emerging technologies for the sake of enhancing their organisational performance and securing a competitive advantage in a highly competitive market.

In their nature, human beings are very adaptable and they tend to cope with the changes that take place in the world around them (Chuluunbaatar, 2011). People are always making decisions, and constantly altering them according to what is appropriate for the time and circumstance. Therefore, sustainable development of a society requires judgment about today and being prepared to modify constantly through time and space. During the past few decades, the technological advancements created demographic, economic, cultural, and social challenges that are a consequence of scientific innovations. Adoption is a slow and continuous process, yet it is adoption rather than innovation that ultimately determines the pace of economic growth and rate of change in productivity (Hall and Khan, 2003). Companies in general made use of these technological advancements including service-oriented companies to facilitate their activities and enhance their performances (Chuluunbaatar, 2011).

In measuring the construct of ICT and how insurance companies utilise these new technologies to provide good services to customers, ideas from Davis’s (1989) Technology Acceptance Model (TAM) are used as part of this study. An assumption in TAM is that both perceived ease of use (EOU) and perceived usefulness (U) components of a new technology would be foremost in affecting the attitude of the individual toward using that particular technology. Meanwhile, the behavioural intention to use a technology is hypothesised to be influenced by the attitude of the individual, which finally ends in the relation to the actual use. Perceived usefulness (PU) is the belief that adoption of the (ICT) technology would lead to workplace activity that is augmented (Davis, 1989). Meanwhile, the perception of EOU component refers to the (IS) system being effortless to use. Previous research efforts by Abdel-Waha (2008), Mathieson (1991), and Pavri (1998) discovered that TAM is capable of explaining a high degree of the variance for why users choose to use systems.

Moreover, the importance of ICT was addressed by Al-Mudimigh (2009) who stated that, “the use of technology will be a very strong factor for our future research. The customer will interact directly with the organisation without any hesitation and the appointment system will be enhanced: the customer will make appointments online without going to the concerned organisation”. Additionally, Rahim (2010) also recommended using the construct of ICT as a factor in future studies. He stated that, “new technologies and ICT must be incorporated as a factor to measure service quality in future researches”, and that incorporating new technology in future work would...
provide a deeper understanding of the service quality offered by different service-oriented firms.

Coviello (2008) conducted a study that attempted to examine the impact of ICT on the insurance industry. He argued that the increasingly introduction of ICT brought about monumental changes in the insurance sector, and changed the method of operation thus enabling the enrichment of services provided to end users. The study concluded that adopting ICT is highly important for the relationship between insurance companies and their customers and more adoption of ICT results in better service quality encounter.

In the context of insurance companies, Fadun (2013) examined the impact of ICT (Information and Communications Technology) upon the profitability of insurance companies and identified the imperatives for ICT adoption in the hopes of promoting efficient and effective service delivery and of attaining profit maximization in Nigeria. The study employed a structured questionnaire and distributed it to 152 respondents in 18 insurance and the results showed a positive relationship between ICT adoption and Nigerian companies’ profitability. This indicates that insurance companies ICT adoption can improve their efficiency, their quality of service delivery and their profitability. Hence, considering this line of argument, the researcher proposes the following second hypothesis.

**H1:** There is a positive relationship between Information and Communications Technology and Customer Loyalty.

b) **Prior Experience and Customer Loyalty**

As far as the insurance industry is concerned, customers’ prior experience refers to the previous encounter customers have had with the insurance company (Urban, 2010). Customers’ prior experience is believed to be a very influential factor in determining service quality in the service-oriented companies in general and in the insurance industry in particular keeping in mind that people are highly influenced by the previous experiences they normally have with the company, especially their first experience (Urban, 2010).

In this regard, Edvardsson (2005) described experience as the service encounter that is retained in the cognitive, emotional and behavioural responses of the customer and remains for the long-term. According to him, such experiences often affect the customers’ quality perceptions and thus, major companies like Ikea and Volvo relate their service components to physical products stressing on the experienced-based quality, and therefore, physical products become the root of the customers’ experiences.

There is still a significant room to which the role of experience as service quality predictor can be examined because in this context, there is notable lack of studies (Urban, 2010). The experiences of customers’ service consumption may eventually impact the future expectations of customers from rival providers. Based on Tam’s (2005) longitudinal study, predictive expectations were greater after a positive experience and remained so after a negative experience. The duration of the constant service consumption is expected to influence the way customers perceived such a service, their expectations of it, and the frequency of their consumption. According to prior studies, individuals as customers learn to keep track of novel perceived marketers’ approaches in a gradual manner (Friestad & Wright, 1994) and hence it is expected that they will also remember and learn from their experienced service while they are being served.

Thus, it is critical to identify the role of cooperation with a service provider in quality development and the impact on the consumption level of other competing services. Some other expectations are the impact of customers’ expectations on their service perceptions and the overall quality of services. To this end, Edvardsson (2005) stated that customer experiences require emphasis and focus among scientific and business authors, in order to identify the role of customer experiences in the future situations.

When measuring the construct of prior experience, a number of researchers used Parasuraman’s (1988) five-dimension measure to assess customers’ prior experience arguing that perceived service quality means judging a service based on prior experience or after having used the service (Markovic & Raspor, 2010). Other researchers used different measures to assess customers’ prior experience such as Urban (2010) who conducted a study to examine whether the intensity of prior experiences by the customer with the same firm and other firms affect perceived service quality. In Urban’s (2010) research, three dimensions were used: length of experience, frequency of experience with the company (current), and frequency of experience with other (previous) companies.

For the purpose of this study, most of the previous views on the construct of prior experience and the way it influences service quality in the insurance industry were conducted on Western countries while the impact of prior experience on service quality in developing and emerging countries witnessed limited examination. Thus, this study attempts to fill in the gap in the literature regarding this matter by examining how the construct of customers’ prior experience influences service quality in the insurance industry in an emerging country context, namely Saudi Arabia.

The role of experiences as a predictor of service quality has largely been untouched and researches dedicated to customers’ experiences are scarce. The experiences of customer service consumption and their experience from rival service providers are expected to affect their future experience. Tam’s (2005) longitudinal study showed expectations to be higher after a positive
experience after which it remains stable even after a negative experience. In other words, the duration of constant consumption of a specific service may affect the customers’ perception of such a service and their expectations from it as well as their consumption frequency. Previous studies contended that individuals as customers learn to accept novel tactics of perceived marketers after a span of time (Friedstad & Wright, 1994) and hence, it is logical to expect that they remember and learn from their experience.

Meanwhile, Urban (2010) conducted a study that attempted to verify whether service quality is affected by the intensiveness of the consumers’ prior experience with the same services provider in comparison with other services providers. This particular study setting was the auto-service sector, in which an empirical investigation was conducted. The findings of the research concluded that the whole aspect of service quality is not influenced by the consumer’s experience, where this experience is prescribed by two aspects, namely by frequency of service used and lengths of relationships with a service provider. However, customers’ longitudinal experience (e.g., perceptions concerning reliability and responsiveness, and expectations of service assurance) and the assurance quality gap do affect some aspects of service quality. Thus, in line with the above argument, the following hypothesis was formed.

H2: There is a positive relationship between Prior Experience and Customer Loyalty.

III. Research Method and the Study Models

As far as this research is concerned, a group of items, objects, or people forms a sample that is taken for measurement purposes from a larger population with the aim of representing the overall characteristics of the entire population so as to ensure that the findings from the research sample can be generalised (Bryman, 2008). In the present research, the population involved with this study includes the Saudi customers who have insurance policies with the Saudi health insurance companies. There are 26 health insurance companies listed on the Tadawul Stock exchange. The Saudi Arabian health insurance sector is dominated by the three big players - Tawuniya, Medgulf and Bupa Arabia. The top three health insurance companies comprise of nearly half of the total market share, at 49.91%, in terms of GPW as of 2011 (Capital Standards, 2013). Specifically, 23.95% of health insurance customers are under Tawuniya health coverage, 15.19% of health insurance customers are under Medgulf health coverage, and 10.77% of health insurance customers are under Bupa Arabia health coverage.

The selection of the 400 respondents of health insurance in Saudi Arabia was based on their percentage in each of the 3 health insurance providers. In order to ensure that the targeted number of the 400 respondents is achieved, the questionnaire was distributed to a larger number of respondents. Specifically, the questionnaire was distributed to 800 customers. The reason why 800 were selected is because similar research studies that were conducted on service quality in Saudi Arabia generated a response rate of 77% (Alharbi, 2012). Thus if the 800 respondents generate 50% response rate, the final sample of 400 recommended by Sekaran (2003) could be secured.

Figure 1: Research Framework

a) Measurements of Instruments

In this study, a 6-item measure as adopted from Aponte (2012) who conducted a study that attempted to examine how the advancements of technologies and internet that took place recently influenced customers’ perceptions about service quality. His attempt is aligned with the present study’s attempts to examine customers’ perceptions about ICT that took place due to the advancements in technology and internet.
For measuring prior experience in this study, Urban’s (2010) dimensions of customer prior experience are adopted. Urban (2010) conducted a study to establish whether the intensity of prior experiences by the customer with the same firm and other firms affect service quality. The title of Urban’s (2010) study is “Customers’ Experiences as a Factor Affecting Perceived Service Quality”. Three dimensions were used in Urban’s (2010) research, which are, length of experience, frequency of experience with the company (current), and frequency of experience with other (previous) companies. Urban’s (2010) measurement of prior experience is suitable for this study as the measure assesses customers’ perceptions about their previous experiences with their current insurance providers and also their previous insurance providers and this is what this study attempts to examine.

IV. Data Analysis and Results

The gathered data is analysed with the help of IBM SPSSs with the aim of providing a description of the data and of testing the hypotheses.

a) Descriptive Statistic

The continuous variables descriptive statistics are presented in Table 1 and they consist of mean, standard deviation, minimum, and maximum obtained via SPSS, version 21.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICT</td>
<td>3.614</td>
<td>.9354</td>
<td>2.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Prior_Experience</td>
<td>3.307</td>
<td>.8323</td>
<td>1.33</td>
<td>5.00</td>
</tr>
<tr>
<td>Customer_Loyalty</td>
<td>3.415</td>
<td>.9684</td>
<td>1.40</td>
<td>4.60</td>
</tr>
</tbody>
</table>

b) Correlation Analysis

Table 2 offers a summary of the results from the correlation analysis. The findings revealed that the correlations are lower than 0.80, which meets Gujarati and Porter’s (2009) contention that the correlation matrix should not go higher than 0.80 to ensure the absence of multicollinearity issue. The tolerance values of the present study’s variables are presented in Table 3 and they range between 0.426 while the VIF values ranged between 2.349 indicating that all the tolerance values are higher than 0.1 and VIF are below the threshold of 10 as recommended by Hair et al. (2010). Stated differently, both the tolerance and VIF values of the variables are within the recommended range. It can thus be concluded that the multicollinearity issue is non-existent.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Tolerance Value</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICT</td>
<td>0.426</td>
<td>2.349</td>
</tr>
<tr>
<td>Prior_Experience</td>
<td>0.426</td>
<td>2.349</td>
</tr>
</tbody>
</table>

Notes: ***Correlation is significant at the 0.01 level (2-tailed).
**Correlation is significant at the 0.05 level (2-tailed).
*Correlation is significant at the 0.1 level (2-tailed).

c) Testing the Normality of the Error Terms

Pallant (2011) referred to linearity as the residuals that display a straight line relation with dependent variables’ predicted scores. This study determined linearity via scatterplots. Normality was confirmed through the use of histogram and the normality probability plot (p-p plots) of the regression standard residual via kamagorovsmiron, skewness and kurtosis value. Data distribution did not significantly deviate from the normal curve as presented in Figure 1 and hence data can be said to be normally distributed.
The results of the regression analysis ran on customer loyalty are presented in Table 4. From the table, it is evident that the $R^2$ value is 0.687 indicating that the model explains 69% of the performance variance as measured by customer loyalty in what is deemed to be a respectable result. Moreover, the adjusted coefficient of determination, $R^2$, shows that the independent variables explains 0.685% of the variation in the dependent variable, which indicates that the performance variation as gauged by customer loyalty was statistically accounted for by the regression equation. The results listed in Table 4 also reveal that the model is significant and valid owing to the significant value of $F$ where ($F=435.340, p<0.01$).

**V. Discussion**

*a) Information and Communications Technology and Customer Loyalty*

The results indicate that hypothesis H1 is supported. They show that Information and Communications Technology contributes in improving customer loyalty. Added to this, the results presented in Table 4 provide support for prior studies that reported relationship between the Information and Communications Technology and customer loyalty. One plausible explanation of the positive and significant relationship between information and communications technologies and service quality is that technology is described as a body of knowledge, tools, methods and innovations obtained from science and practice that is utilized to develop, design, produce and apply products, processes, systems as well as services (Pier, 1989). Therefore, utilizing the ICT is more likely to improve the
performance of the company especially with matters related to the customers and consequently will heighten the perceived quality of the services offered.

b) Customer Knowledge and Customer Loyalty

The finding, as apparent in Table 4, reveals that customer knowledge has positive and significant relationship with customer loyalty. This positive relationship between prior experience and service quality may be justified by the meaning of the customers’ prior experience – it primarily refers to the previous encounter of the customer with an insurance company (Urban, 2010). It is also believed to be a significant factor in the determination of service quality in service firms, like the insurance industry as individuals are largely influenced by their first experience or prior experience with any service provider (Urban, 2010).

VI. Conclusion, Limitations and Recommendations

This study is an attempt to examine the relationship between information and communications technology, customer knowledge and customer loyalty in Saudi Arabia’s insurance industry companies. The sample was comprised 400 respondents of health insurance in Saudi Arabia and was obtained based on their percentage in each of the 3 health insurance providers. Moreover, this study used SPSS to test the relationship between independent variables and dependent variable. Finally, this study revealed a positive and significant relationship between both information and communications technology, and customer knowledge and customer loyalty in Saudi Arabia insurance industry companies.

Not unlike prior studies, the present one has limitations and recommendation for future studies. Firstly, this study used two antecedent factors of service quality and as such, future researchers may consider studying other factors like communication and customer knowledge with customer loyalty. Secondly, this study examined the direct relationship between the two antecedent factors of service quality and customer loyalty – it recommends future studies to take into account the same relationship through a third variable such as culture and customer satisfaction. Finally, this study was applied in the context of Saudi Arabia and hence future researchers are recommended to apply in other countries, particularly those in the GCC region.

References Références Referencias

17. Marković, S., &Raspor, R. K. (2010).Customer expectations measurement in the restaurant...


