The influence of perceived privacy on customer loyalty in mobile phone services: An Empirical Research in Jordan

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Abstract

Concern about the privacy of personal information and communications is the top reason many consumers have stayed out off the online services including mobile phone services. The keen competitive in the communication and mobile phone service market place and the increasing numbers of mobile phone users all over the world has influence the researcher to investigate privacy as antecedents of customer loyalty in mobile phone services industry. Out of 800 questionnaires distributed, four hundreds and eighty eight set of questionnaires have returned and analyzed. The analysis shows that privacy was positively significant towards customer loyalty. Base on the results, it can be concluded that the mobile service provider has to ensure their services fully satisfied their customer privacy. Somehow, future research must investigate other factors as the antecedent for loyalty. Other initiative is to consider a model testing in difference context of electronic service to see any generalization on the research result.

Keywords: Privacy, loyalty, mobile services, Jordan.

1. Introduction

Communication industry is gaining popularity and importance in many advanced and developing countries. Today, communication is becoming the nerve of the life. Mobile usage is growing rapidly, and telecommunication marketers are developing new strategies to take advantage of the potential customers. According to Federal Communications Commission (2003), subscribers for mobile telephony services in the United States for 2002 stood at 141.8 million. Literature also shows that 7.5% of all mobile phone subscribers actually use the phones to browse the Internet. On the other hand, an estimated 11.9 million in the U.S. subscribe to mobile Internet service [2]. It has been estimated that in 2003 there were 1.4 billion mobile phones worldwide, half of them capable of being

internet-enabled (Clarke III, 2001). Communication devices for both entertainment and commerce, corporations are also increasing considering cell phones as a critical success factor to conducting business activities [3]. Recently, customers can go to market with the "mobility" that new technology has brought to customers' daily lives. Usage of mobile phones has now extended from voice communications to the internet, increase in extension of mobile internet technology and much development of m-commerce applications has opened great opportunity for mobile service users. However, surveys on US consumers' perceptions of mobile service show that the level of satisfaction is much lower for mobile service carriers compared to other service sectors [4]. Mobile service carriers need to be aware of drivers of customer satisfaction and loyalty in order to build effective business strategies for customer retention [5].

The objective of service companies that offers communication services is to develop services which satisfy the customers. In due time, satisfied customers will be those that will be loyal and help the company to sustain business. It is important to understand that in order to increase customer satisfaction and loyalty [6] which consequently increases a steady stream of revenue, customer equity and market share [7] service providers have to sustain a share of each customer to enhance customer satisfaction and loyalty. The drastic changes in the environment forced financial institutions to revise their marketing strategies and stress long-lasting relationships with customers [8]. Due to the many alternatives available to the customer, customers ease to switch service provider to any other competitors. Consequently, mobile phone service providers are losing 2-4 percent of their subscribers monthly; disloyal customers can amount to

millions of lost revenue and profit. Aydin and Ozer (2005), for instance indicated that; increasing customer retention (or customer loyalty) by 5 percent could lead to 25-75 percent profit growth [10].

Generally, the purpose of this study is to investigate the effect of privacy on customer loyalty. The context of this study is mobile telecommunication industry.

2. Literature Review

2.1 Customer Loyalty

In today's competitive and changeable market place, customer loyalty is seen to be critical factor to the success of business organizations because attracting new customers is more expensive than retaining existing ones [11]. Many authors suggested that loyal customers are a competitive asset and that a way of increasing customer retention is through secure and collaborative relationship between buyers and sellers [12]. Loyalty becomes a critical concept in the marketplace. Today, a number of studies have attempted to define the loyalty, researchers have used both attitudinal and behavioural measures to define and assess customer loyalty [13]. From an attitudinal perspective consumer loyalty is a specific desire to continue a relationship with suppliers and provider [14]. Oliver, (1997) defines customer loyalty as "A deeply held commitment to re-buy or re-patronize a preferred product/ service consistently in the future." According to Dimitriades, (2006) "loyal" are defined those customers who hold favourable attitudes toward an organization, recommend the organization to other consumers and exhibit repurchase behaviour.

Customers will be emotionally loyal when they feel appreciated: recognized by the first name, capable to chat with customer service and take pleasure in the experience of dealing with the company, the emotional or attitudinal preferences precede loyal behaviours [17]. Marketing literature propose that customer loyalty can be defined in two different ways which is related to individual's degree of loyalty toward product or service and behavioural loyalty which is related to continuing purchase services from the same supplier [18].

There are two types of measures for customer loyalty, which include both attitudinal and behavioural. Attitudinal measures can be seen in the intent to repurchase, willingness to recommend providing the basis for developing leading indicators of customer loyalty and behavioural measures such as; repeating purchasing,

volume or frequency of purchasing, returns, debt, complaints and interactions, customer retention and longevity [19].

The accurate measures of customer loyalty are hard to determine because it can be measured in many ways. Researchers have used either attitudinal or behavioral measures [13]. The assumption made under attitude measurement is that a variety of important feeling generate an individual's overall attachment to a product or service and the company which in turn defines the individual degree of loyalty. The second is behavioral; under this method customer, loyalty can be measured as continuous purchase, frequent purchase, scope of a relationship, recommendations make to other people, friends and customers [20].

There are three characteristic approaches to measure behavioral measurements; lovalty: attitudinal measurement; and composite measurements [21]. The behavioral measurements consider repurchase as an indicator of loyalty, attitudinal measurements use attitudinal data to reflect the emotional and psychological attachment underlying in loyalty, composite measurements combine the two dimensions and measure loyalty by customers' product preferences, tendency of brand switching, repurchase, and amount of purchase [22]. Furthermore, differentiate between true loyalty and bogus loyalty is important. Many studies have proposed that true loyalty covers a non-random behavioral response as a result from evaluation processes consequence in commitment [23].

Loyalty program is important in attracting and retaining customers. Marketers have invested great amount of their resources to develop loyalty programs. Capizzi and Ferguson, (2005) conducted a study to investigate the effectiveness of loyalty marketing in practice; they suggested that a well-designed loyalty program with strong value propositions is the key factor of successful loyalty marketing. Another Study by Go'mez et al., (2006) investigate the behavioral and affective loyalty of retailer customers in order to establish the role played by loyalty programs and the effect of loyalty programs on customer loyalty. They found that participants in loyalty programs are more behavioral and affectively loyal than non-participants. However, most customers after joining a loyalty program do not change purchase behavior. To develop an effective loyalty program, it is important to understand the process of customers' loyalty decisions as the customer needs and value propositions vary across different types of service and products. Evidently, it is becoming clear that loyalty program played significant role to achieving true customer loyalty and enhancing profitability.

Today, marketers and managers have shifted their stress and focus to their customer's loyalty. Recent trend in marketing is to create attractive and lasting experiences for the customers in attempt to create total loyalty. Mascarenhas et al., (2006) conducted a research to review the concepts of total customer experience and lasting customer loyalty in order to sustain lasting customer loyalty. They found that total customer experience is captured in three important interactive factors: physical moments, emotional involvement moments, and its value chain moments. Therefore, a typology of customer loyalties is proposed as a function of high versus low levels of the three constitutive factors of total customer experience.

This paper investigates the influence of privacy on customer loyalty. Even though Taylor and Hunter (2002) indicated that customer loyalty is influenced by customer satisfaction, while Yang and Peterson, (2004) found that e-satisfaction exhibits a positive impact on e-loyalty and important factor for a long-term relationship between a customer and service provider. The next paragraphs discuss more about privacy and then it provided some justification why privacy was chosen as one of the antecedent of loyalty especially in online service environment.

2.2 Customer Privacy

The factor had been chosen as antecedent variable in the present study is customer privacy. Privacy has been used to indicate a wide number of interests including personal information control, reproductive autonomy, access to places and bodies, secrecy, and personal development. Privacy interests also appear to be culturally relative – for instance, in some culture opening a door without knocking might be considered a serious privacy violation and yet permitted in another, that's mean culture some time can effect privacy [29]. Privacy has long been defined as the right of a person to be left alone and to be able to have control over the flow and disclosure of information about him or herself [30]. The Federal Trade Commission (FTC) has been evaluating the online marketplace and has identified privacy as a key issue that Internet marketers need to recognize and address [32]. Generally, Consumer privacy identified as a "significant marketing issue of the 90's" [33].

Concerns about privacy are not new. It has often surface because new information technologies and information systems have improved the collection, storage, use, and sharing of personal information [34]. In the wide world web, internet environment and online services, consumers became very concerned about the privacy and security of their personal information and looking for greater protections. Concern about the privacy of personal information and communications is the top reason many consumers have stayed out off the Internet [35]. Online users have to learn as much as possible how to protect their privacy and the possible threats of using the services, mobile phone users are not exempted.

People logging on to the Internet and online services are on the rise. The Internet and online browsers activities are bringing new threats to personal privacy. Customer activities, whether passive or active, can provide company a great deal of information about customer [36]. It is clearly that information security and privacy is the most critical problem faces by online service users. Past study found that the customers have very strong views about protecting their privacy on the online services; companies must protect their consumers' information and privacy [36]. Furthermore, they suggest that consumer's behaviours about online services are depended on many factors, privacy is one of them.

The Internet consists of a huge number of linked computers carrying many information and data. When the customer access to the Internet he is opened for various threat and may lose vital data [36]. Nowadays databases are becoming accessible from the Internet and search engine make it quite easy and accessible. The threat of long-term storage and revelation of personal and private information is significant issue over internet world [37]. Today, the internet has developed dramatically especially with respect to its use as a tool for communication, entertainment, and marketplace trading [38]. This growth has been a great concern particularly to do with the collection and distribution of data online. These concerns relate to the customer privacy not only over the internet but also mobile phone users.

The nature of interactivity process generates opportunities and challenges for online marketers and researchers. Sheehan and Hoy, (2000) indicated that online privacy concerns are more complex than concerns in the traditional marketing communication. Marketers have to translate their customer's wants and needs into effective communication strategies and understand consumer privacy concerns and address these concerns in their marketing communications. They have to understand customer concerns with privacy and information gathering and use their knowledge and expertise to build a confident customer base online to reach online commerce



successfully and enhance customer satisfaction and loyalty.

When the customer feel the information is used only for the major purpose of transaction, consumers normally become unconcerned about privacy. Nevertheless, if marketers use information beyond the original transaction, consumers become more concerned with privacy [39]. Privacy becomes a matter of concern when customers are feeling that information about them is being collected without their permission, or they do not know how the information is being used specifically. A great challenge for marketers in the online environment is to build trustworthy relationships with online users. It should be clear to what extent customer privacy should be protected. Four basic rules considered. Namely, the customer should be notified their personal information is collected and will be used for specific purposes, the customer should be able to decline to be tracked, the customer should be allowed to access their information and correct it, and customer data should be protected from unauthorized usage [40].

Protecting customer privacy on web is a critical issue since customer accessing to an electronic product catalogue, is required to identify him during the purchase and service phases to ensure customer privacy. Elovici et al., (2005) proposed solution for customer privacy including the following advantages: All privacy components enhancing mechanism are under the customer control completely. Consequently, the customers do not need to depend on not a trustworthy provider. Second, the solution allows customer to protect his or her privacy without remaining unknown. This is required for commercial transaction concerning products and services delivery.

Companies have to understand how to reach an appropriate balance between developing customer insight and maintaining the customer's privacy, and how to manage their customer individual privacy. Companies must make every effort to deliver more-effective post-sale interactions with their customer evidently, customer information privacy is also a important consideration for customer service [42]). Unfortunately, companies sometimes use customers information's without customer agreement leading to bad feelings on the part of their customers since this violation is a customer privacy violation. Customers can provide important data about themselves to the company but the company has to know how to handle their data when it comes to Privacy [42].

According to the study by Horn et al., (2005) in addition to personalization, privacy is another value added feature that an e-business can utilize to enhance customer relationships. Without privacy, customers may not trust or

feel secure while interacting with e-business. This lack of trust may in turn affect the customer's overall relationship with E-business. Privacy is an important issue in traditional communication and online environment; therefore it is important factors to be considered in customer decision to loyal toward the online services.

Based on the above literature we notice that privacy is a significant important factor influencing e-businesses and e commerce acceptance. Therefore, there is a relationship between customer privacy and service loyalty. This research proposes customer privacy as one of antecedents of customer loyalty in mobile phones services. This paper explores the important of privacy on customer loyalty in mobile phone services in Jordan.

3. Methodology

3.1 Samples for the study

University students are selected as the respondents for this research. In this research, students were chosen as the study samples for several reasons. Firstly, using university students for this study was appropriate because this group is an important target market for mobile phone services providers [44]. The students represent professional users who handle typical mobile phone service activity such as SMS, chatting, games and other services [45]. Furthermore, in a recent study of mobile phone usage, consumers in the 18-24 year age group used mobile phones 71% more than the average for all age groups [46]. A stratified sampling was used to select approximately equal numbers of customers from each university. 800 questionnaires distributed to five universities in the northern, southern and central states of Jordan. 488 questionnaires returned and analysis. This brings the response rate of around 57 percent. All items were adopted from previous researches. Each of the items was accompanied by five -point response format, ranging from 5 =strongly agree to 1 = strongly disagree. Before the actual research, a pilot study was conducted to investigate the reliability and validity of the items, which are mostly adopted from the previous research early responses are compared to late responses [47]. According to a t-test analysis, these two groups of respondents had no significant differences across all of the variables. Accordingly, it seems that non-response bias did not appear to be a significant problem.

3.2 Measurement

The entire dimension used in this research is adapted from the previous research. For the purpose of the current study, the wording of the scale was modified slightly to match



the domain of mobile phone users. The details are explained below in below;

Table 1: Sources of the Items to Represent the Variables

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Variable	Questionnaire design	Sources				
Customer loyalty	Likert scale 1-5	De Ruyter et al. (1998)				
Customer Privacy	Likert scale 1-5	Flavian and Guinaliu,(2006)				

4. Result and Discussions

4.1 Correlation Analysis

Pearson correlation was used to describe the strength and direction of the relationship between two variables [48]. The values of the correlation coefficients (r) given in the table 2 indicate the strength of the relationship between variables. The computation of the person correlation coefficient was performed to obtain an understanding of the relationship between all variables in the study. The value of the correlation coefficients (r) indicates the strength of the relationship between the variables.

According to Tabachnick and Fidell, (1996) and Pallant, (2001) the correlation between predictor and dependent variables must be below 0.7. If the score is more than 0.7, the variables must be deleted from the study. On the other hand, perceived privacy is statistically correlated with customer loyalty with correlation values at 0.553 as shown in the table below.

Table 2 Person Correlations of Study Variables

	Privacy	Loyalty	
Customer Loyalty	.553	1	
Customer Privacy	1	.553	

^{**} Correlation is significant at the 0.01 level (2-tailed). Correlation is significant at the 0.05 level (2-tailed).

4.2 Regression analysis

To determine the effect of perceived privacy on customer loyalty regression analysis was undertaken. The major assumptions take in our consideration are sample size, Multicollinearity and singularity, Outliers, Normality, linearity, homoscedasticity. All these assumptions have

been tested to make this data suitable for regression analysis.

The table below provides evidence on the influence of the antecedent factors on customer loyalty. With the F-statistic of 213.752 and Sig 0.000(a) provides evidence that the relationship between the independents and dependent variables is significant ($R^2 = .305$; Sig = .000(a)). The R^2 obtained indicates that the antecedent factors account for 30.5 percent of the variation in customer loyalty.

Table 3: Regression Analysis

14670 07 11081 0867011 1111411 9515						
Model	Unstandard Coefficient		~	ndardized efficients	t	
	В	Std. Erro	r	Beta		
(Constant)	.1541	1	.742		11.315	
Privacy	.149		.038	.563	3.725	
Note; D V:	Customer Lo	oyalty	R =	.553(a); R	Square=.305;	
F=213.752; S	ig=.000					

5.0 Research Contribution and Limitation

The contribution of this research from the theoretical perspective lies in identifying multiple ways through which privacy impact customer loyalty, principally in the context of mobile phone service in Jordan. The present study contributes to the literature by investigating the issue of customer loyalty within the context of mobile phone service subscribers who are directly experience using the services. Since subscribers have direct experience in using services, it is logical if we choose them to determine their loyalty in the services. This study helps to build theory concerning customer intention to stay with service providers longer, deeper and build long lasting relationship with mobile phone service providers. This study constructed loyalty as adoption behaviour that is similar to the concept of actual usage in the Technology Acceptance Model [50].

The results of this study give several implications for mobile service providers and marketing managers with regard to how to plan and market services that will be considered valuable by customers and used in the future. Furthermore, the present study considered as important grounds for formulating and implementing privacy strategies in assessing service providers to assign proportionate amount of resources to achieve sustainable customer loyalty. In addition, results of this research will also go a long way in minimizing the observed inconsistency between; the service provider strategy and customers perspective, which enable service providers to



compare their customer perception of their offering strategy in relation to other providers.

However there is some limitation of this research. From a methodological point of view, data in this research were obtained from university students in the selected universities. It would be useful to obtain a broader sample of respondents in the future studies. This would minimize any potential bias in the data resulting from the level of the informants. While student subjects have been found to be appropriate for theory testing [51], the findings of this study should be tested on other populations of interest to marketers. While it is likely that relationships are important to customers in a variety of target markets and scenarios, each situation is unique and should be examined carefully. In addition to the limited sampling framework, another limitation is associated with the use of selfcompletion survey methods. Even though survey research is the most widely used approach in the world [52], there are a number of problems associated with this approach. The lack of researcher control in self-completion process necessitates that the resultant data sample will not be fully representative of the population as valid respondents may choose not to complete the survey. In addition, respondents sometimes give expected answers or pattern responses to questions.

6.0 Conclusions

This study found privacy that one of the determinants of customer loyalty. Therefore, students use the mobile phone for other purposes such as making and receiving calls, SMS service, discussing studying issues by concerning on privacy. Concerning the factor that influencing customer loyalty, the present research suggests that privacy as an important determinants. Mobile phone service providers should strive on it to improve performance in their efforts to attain higher level of customer loyalty. The current study finding provides beneficial implications for both academic research and practitioners based on an insightful review of the existing work on some of the antecedents of loyalty. However, since there are so many other factors that might influence customer loyalty besides the chosen factors, it would be useful and practical if they modelled and tested in an integrated framework and expanding the framework across industries and integrating more important factor that may influence loyalty.

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