Abstract

Within a severe competition environment, customer intention for switching arises as a very crucial topic. Researchers and practitioners have spotted some light on intention for switching in marketing; therefore, this paper is concerned with analyzing the antecedents of intention for switching of telecommunication sector in Egypt on the basis of cost/benefit model in order to highlight the relative importance of enhancing customer perceived net benefits. A non-probability sample of 450 respondents has been drawn through intercepting them from the population of telecommunication service providers (Vodafone, orange, and Etisalat) customers in Sharkeya governorate. Results revealed that customers are comparing between switching cost and current service provider's benefits (service quality, promotional offerings, and affordability); moreover, they tend to continue with the current service provider if the net benefits are positive. It is also proved that the most important antecedents of intention for switching are affordability and service quality, while the relationship between intention for switching and promotional offers has been denied.

ملخص البحث

مع اشتداد المنافسة في كافة القطاعات الاقتصادية يحظى موضوع تحول العميل بأهمية كبيرة من جانب كل من الباحثين والأكاديميين والممارسين في مجال التسويق، ولذلك يهتم البحث الحالي بصفة أساسية بتحليل محددات نية تحول العميل في شركات المحمول في مصر (فودافون- اورانج- أتصالات) في ضوء نموذج التكلفة والعائد بغض الورق على محددات نية تحول عميل شركات المحمول، الأمر الذي يعود بالفائدة على كل من العميل و شركات المحمول لانتهاضها تعزيز صافي العوائد بالنسبة للعمل، و من خلال سحب عينة غير احتمالية تم اختيارها بطريقة الامتلاك قوامها 450 موردة ممثلة ( Intercept Sample) لمجتمع عملاء الشركات الثلاثة السابق الإشارة اليها في محافظة الشرقية، وقد اظهرت نتائج الدراسة الميدانية أن العميل يقارن بين تكلفة التحول وعوائد الشبكة المتميزة في جودة الخدمة والعرض والقدرة على الدفع و يستمرون مع نفس الشركة لو أن صافي العوائد إيجابية، و تبين أيضاً أن أهم محددات نية التحول بالترتيب مما يقره على الدفع وجودة الخدمة، إلا أنه لم تثبت الدراسة وجود علاقة معنوية بين نية التحول والعروض الترويجية المقدمة من مقدمي الخدمة.
1- Introduction

The mobile telecommunication market in Egypt is booming as reported by the ministry of communication and information technology. The total telephone subscriber’s base has reached 100 Million in January 2015. The mobile sector companies provide telecommunication services to almost 78% of the Egypt population demonstrating that the cell phone has turned into an omnipresent gadget which has cut over all strata of the populace (Ministry of communication and information technology, 2015).

Telecommunication sector in Egypt is classified into settled specialist corporations and Cellular specialist organizations. Cell specialist corporations are additionally sectioned into Global System for Mobile correspondence (GSM) and Code Division Multiple Access (CDMA). In Egypt, the Mobile Global System sector is dominated by Vodafone, Mobinil and Etisalat. The 1st license had been given to the national institution which had started the first mobile service in 1996 (the company is now named Orange). In order to privatize and liberalize the telecommunications market in Egypt at that time, MisrFone Group was given the 2nd license for Mobile Global System operations in Egypt (under the brand name of Click GSM, but now named vodafone). When the third entrant to the market, Etisalat Misr, was awarded the third license for mobile global system operations in 2007, the telecommunications market in Egypt grew further and became more competitive. Vodafone leads the Egypt telecommunication market with 41.8% market share, followed by Orange with 35%, and Etisalat with 23.2% market share (Ministry of communication and information technology, 2015).

The launch of advanced telecom services in Egypt such as third generation mobile (3G) and Internet Protocol Television (IPTV) had also pushed subscriber base to increase and expected to grow. The Mobile specialist corporations in Egypt has transitioned from offering only voice calls to offering value added to their clients, for example, Multimedia Message Service (M-MS) and internet services. As services greatly numerous and continuing improving, the customers are facing difficulty to select the suitable service provider (Ministry of communication and information technology, September 2015).

Portable phones (with all added features) connection sector is on a quick development track on the world generally and specifically in Egypt. While this study is conducted, Business Monitor Internationals” (BMI) expected the telecommunication offerings in Egypt to grow by more than 8% in January 2014. This information has been affirmed by insights demonstrating that versatile supporters expanded by 600 thousands (Ministry of correspondence and data innovation, September, 2015).

Over the most recent years, the cellular services sector in Egypt has experienced sensational changes. This market has taken after a change to oligopolistic after being monopolistic, a market which is roughly open and free. In the view of this evolving progression, the Egyptian cell phone providers confront some noteworthy difficulties. In the first place, retaining existing clients in a high advertising stir has turned out to be exceptionally dangerous and costly. Secondly, new customer acquisition is now
even harder than before as they are offered numerous options and offerings, moreover, operators are providing more and more attractive deals.

In general, Egypt's Cellular industry faced tough fiscal year 2014-2015. Price rising, power crisis, lower purchasing power, and currency devaluation were main disturbances for this sector in that year. Industry's growth is slowing down over the period of time, which means that new subscribers' addition is difficult and future competition will be focused further towards launch of innovative products/services to increase revenue streams. Attracting new customers is of top priority and, for sure up next; customer support will be vital factor. As many people already prefer to use single provider services, some other notable number of people can use more than one single service, therefore, studying factors affecting intention for switching is of massive importance.

When a customer selects to purchase a new telecommunication service or package, he/she will find many choices. Companies offered numerous services to meet the unique demands of their customers, but this trend had its disadvantages because it reduces buying speed of customers who aren’t able to choose the service which best suits them, then switching behavior occurs (Nassar, et al., 2013).

Switching behavior is a consumer behavior varies based on customers' level of satisfaction of service providers. The behavior of switching has been also defined as "the process of being loyal to one service and switching to other service, due to dissatisfaction or any other problems", while intention for switching refers to "the extent to which a consumer is willing to switch from one service provider to another" (Kim et al., 2010; Kaur et al., 2012).

The switching behavior in the mobile service has attracted a lot of attention from academics and practitioners because of the cost involved in switching behavior to other providers (Jahanzeb & Jabeen, 2012; Nimako & Abiodun, 2010). High rates of switching lead to a decrease in profit margins of service providers (Rajkkumar & Chaarlas, 2012; Antwi-Boateng, et al., 2013). So, this research has been conducted in the same stream to investigate the factors affecting consumers switching (changing) service provider. Factors pushing consumers to switch their mobile phone have been determined after reviewing literature. Particularly, this paper argues factors such as switching cost, service quality, service affordability and promotional offers.

The problem of this study has two points. First, previous studies about switching intention in Egypt in particular are some kind insufficient. Most empirical research on switching intention focused on foreign consumers other than the Arab world market (Sathish et al., 2011; Turel & Serenko, 2012; Malhotra & Kubowicz Malhotra, 2013; Alam et al., 2016). Therefore, a study about switching intentions antecedents in Egypt would increase the body of knowledge specifically within the developing countries context. Second, the Egypt’s Mobile Telephone Industry (EMTI) suffers from the consequences of losing customers specially when facing increased competition, consequently, it is now crucially important for mobile telephones communication service providers to un-
2 -Research Objectives:
Based the research problem, the objectives of this study are twofold:

- To examine the influences of switching cost and benefits (service quality, service affordability and promotional offers) on intension for switching.

- To construct a model identifying the factors influencing switching behavior in Egypt.

In order to fulfill these objectives, the research is divided into the following sections: Section 3- literature review, Section 4- theoretical background; section 5- Research model and hypotheses; section 6- research methodology; section 7- analysis and results; section 8 discussions and managerial Implications; and section 9- conclusion section finally future research.

3 -Literature Review

A model of consumer switching behavior was firstly introduced by Keaveney (1995). This model contains eight main casual factors namely; pricing, inconvenience, service encounter failures, core service failures, worker responses to service failures, competitive problems, moral issues and involuntary factors. Moreover, another factor has been added; rating drawback as service failures and denied services are the most effective factors on switching (Bhattacherjee & Park, 2014).

Regarding mobile telecommunication service providers, there are many prior empirical studies. Pirc (2006) introduced a comprehension about the affecting factors on customer switching. Based on the consumption system perspective, it has been concluded that mobile services usage affects intentions for switching in a curvilinear way (positive linear and negative quadratic) and budgetary constraint regarding the service is the most influencing factor. The experience gained from previous mobile service also contributes to the intention to switch. Customer retention is positively affected by mobile phone ego involvement; however customer risk has been increased due to purchase involvement (both mobile phone and mobile services).

Mohammad & Wajidi (2009) concluded that the sensitivity of consumers towards connectivity is high and they greatly value those low cost offerings. Reasonable costs, immediate & reliable client service, commitment with clients have all been considered critical parts in customer switching intention (Srinuan et al, 2011; Zhang et al., 2012).

A study conducted in Pakistan has concluded same factors of switching as those of other locations. Khan et al. (2012) in their research concluded that customer satisfaction is highly affected by fairness of price, call clarity. Customer support services; value-added services, user friendliness, and processing of customer complaints are almost the same; therefore, they have no major impact on customer satisfaction in Pakistani cellular industry. In Germany, customer satisfaction is affected by network quality and price, but not customer support (Geppott et al., 2011). Kim et al. (2012) in a survey of South Korean customers found that call quality, value-added services and customer support were significant, but not price, handset, and convenience in procedures.
Arthur et al. (2014) researched the determinants that make cell phone clients alter full loyalty to intention for switching. The results showed that there are diverse factors, for example, cost; service quality, technical service quality, and cost of switching, and so on. Moreover, price is the most important factor which pushed customers to concede loyalty to one service provider to switch to another provider.

In an attempt to summarize the factors based on literature, factors affecting mobile phone customer switching behavior include price, quality, and network coverage; value added services, reliable service and customer support services. To have a different perspective of the literature, the current study aims at studying the effect of cost / benefit model on consumer switching intentions. To accomplish the objective, variables are classified into cost (switching cost) and benefit (current carrier network benefit). These variables represent the basis on which switching intentions are based.

In this manner, the study highlights the mechanism and justifications (reasons) for switching, whereas previous studies handled switching intentions in relation which other factors (variables) neglecting a theory explain reasons for switching for intentions. Therefore, in the current study, factors that were considered switching costs and benefits of the current carrier network which included three items; Service quality, Promotional Offers and Service Affordability.

4- Theoretical Background
4.1 Costs-Benefit Model

The model presented in this research is built on the decision making framework which contains cost-benefit inference. Kim & Kankanhalli (2009) paper is based on the concept of cost-benefit analysis to evaluate the switching behavior of information systems. Based on the comparison between changes in outcomes and changes in inputs, an equity implementation model (EIM) has been performed to evaluate consumer behavior (Joshi, 1991).

Other similar models applying similar concepts are the “push-pull” models. Bansal et al (2005) explained it as "According to the push-pull model, there are factors at the origin that encourage (push) consumer to leave and factors at the destination that attract (pull) consumer toward it". Cost-benefit models in general are based on switching costs, switching benefits and switching behavior perceived net benefit. Switching costs are defined as “the factors that curb a broadband connection subscriber from updating his/her service”. In terms of additional monetary expenses (costs like switching fees, time required to make the switch, effort needed to conduct the switching process, and general discomfort for the switching), these costs were defined (Jones, et al., 2000; Chuang, 2007).

Switching benefits can be expressed in the granted advantages by the switch to another provider of the service. Customer benefit can be clarified based on the importance of providing internet to customers, the expected efficiency improvement, the expected productivity improvement, reducing the minute rate, and any offers are available through the networking addition to the expected reinforcement in usage experience (Moore & Benbasat, 1991). The benefits are mainly subjectively evaluated based on the expected utility of the new service.
The subjective evaluation of the overall utility of a switch is finally the perceived net benefit given the switching costs required. Perceived net benefit measures the range within which it is considered worthwhile to switch given the costs he/she another mobile network (Ranganathan et al, 2006). Intention for Switching is the signal of termination of customer's relationship which implies the extent to which the switching to a new provider is economically worthy (Zeithaml, 1988; Nikbin et al., 2012; Nimako et al., 2014).

4-2-Intention for Switching.

Customer switching is "the migration of customers from one service provider to another partially or fully". Partial switching permits customer to keep the relationship with the existing service provider while adopting new behaviors (Vogel et al, 2008). Although it may be reasonable to suppose that a single critical incident can influence customers to switch service providers, many researchers propose that multiple problems faced by customers over time may also cause defection (Antón et al., 2007; Oh & Yoon, 2009; Nimako & Winneba, 2012).

In analyzing the decision of mobile subscribers to change service provider, intention for switching is taken into consideration to investigate the motivation for customers' intention to switch (Roos, 2009; Liu & Xiao, 2013).

Past researches have represented distinctive antecedents of the behavior of switching in the versatile telecoms industry. Kim & Kwon (2011) analyzed the determinants influencing Korean mobile subscribers’ behavior by applying a conditional logic regression models. They concluded that the attractiveness of mobile subscribers is increased due to operator with large number of subscribers.

A similar work by Kim & Yoon (2013) studied the antecedents of customer switching behavior in the light of correlation between the loyalty and the degree of customer satisfaction. In addition, Kim et al (2012) investigated other switching behavior antecedents such as service quality, value-added services, and customer support affect customer loyalty.

Wide research shows that customers’ perceptions about alternative attractiveness and price and service failure and satisfaction could be deciding factors for customers to switch (Antón et al., 2007). Furthermore, a recent database of mobile subscribers’ characteristics also needed to be able to satisfy all the kinds of needs of all subscribers. Therefore, service providers must raise customer switching costs based on these determinants in addition to the full interest of keeping existing customers. Martins (2013) proved the view that switching cost is coming more and more dangerous and an important barrier to compete efficiently in the telecommunication market.

The motivation to switch is generally a function of customers’ estimate perception of the performance of their existing service provider; and whether or not they believe there are more preferable alternatives available in the market that may appeal to them (Chih et al., 2012; Xavier & Ypsilanti, 2014). There may be no expected benefit from switching when the market is perceived to be undifferentiated (no better choices) or where the current provider is perceived to be the best on the market on any cri-
4-3- Switching Costs

Colgate & Norris (2007) described the concept of switching costs which includes the situations in which customers feel trapped in the current service provider for various reasons by. Friends and family using one service provider make it highly financially co-sting for a customer to switch to another service provider which may include extra charges per minute and specialized knowledge of the other service provider (Colgate & Norris, 2007).

There are three forms of switching costs – learning costs, transaction costs and contractual costs (Saeed et al., 2011), while Burnett (2014) explained the multidimensional nature of switching costs, stressing that the three main dimensions are: continuity costs (contractual lock-in costs that penalize a discontinued service relationship), learning costs and sunk costs (mostly psychological).

Asiegbu et al. (2012) studied the effects of two categories of switching costs: some of customers (transaction costs and efforts to learn to use new options) and costs that would lock customers with a service provider, such as penalties for relationship termination or contractual restrictions, while learning costs and transaction costs represent switching social costs.

An artificial type of costs (which is different from the other two where there are no social costs of switching) is the contractual costs (Klemperer, 1987). Contractual costs are from the name made by corporation in competitive markets due to long-term contracts set to punish customers switching behavior to afford relationship initiation costs that cannot be recovered. Martins (2013) named them contractual lock-in.

Yang & Peterson (2014) pointed out that switching costs are costs that block customers from switching or moving to competitors. Factors determining switching costs vary from consumer to consumer, industry to industry, or the nature of product and situation (Tiamiyu & Mejab, 2012). Switching cost may include time, transaction costs, contractual costs, learning costs, bureaucratic barriers, and psychological effort included when facing the risk of dealing with a new operator (Dick & Basu, 1994; Hu & Hwang, 2006).

 Corporations gain some advantages from switching cost; it reduces customers’ price sensitivity, level of satisfaction. Firm force exclusivity agreements on customers or the offer discounts that offer very low prices for repeat purchases product or using service (Oyeniyi & Abiodun, 2009). If the switching costs are high, customers may switch because of the feeling of being pinned by the current service operator (Colgate & Norris, 2007; Han & Hyun, 2013). Asiegbu et al. (2012) concluded that intention for Switching is negatively influenced by switching costs, meaning that as long as the switching cost is getting higher, switching intentions will be lower.

4-4: Benefits of Current Service Provider:

Benefits of the current service provider include three items: Service quality, promotional offers and service affordability.
4-4-1: Service Quality

Parasuraman et al. (1988) developed conceptual model of service quality which determines customers’ willingness to remain loyal or switch from one service provider to another. Superior service quality enhances intentions for favorite behavior which leads to retention and continued profit.

Zeithaml, et al (1996) provides an interesting model for service quality which highlights mobile services customers’ behavior which as a result affects their decision whether to keep loyalty or switch. Their view is that superior service quality is followed by suitable intentions. They further classified service quality in five general dimensions of reliability, responsiveness, assurance, empathy, and tangibles.

Mobile telecommunication service quality has been conceptualized from various perspectives. Mobile service quality has been considered as a multidimensional concept, while dimensions’ number and content are different across studies. Some studies utilized and used general models like SERVQUAL to measure mobile service quality (Wang & Lo, 2010) in the Chinese telecommunication mobile sector where customers’ value satisfaction and behavioral intentions of customers have been studied within the integrated frame-work of service quality.

In addition, Eshghi et al. (2011) reviewed literature to identify thirty two mobile industry features. Factor analysis was used to derive six factors involving reliability, competitiveness, relational quality, reputation, customer support, and transmission quality, which all have been considered as service quality dimensions. Based on regression analysis, customer satisfaction is greatly influenced by competitiveness, reliability, relational quality, and transmission quality.

Accordingly and in a trial to modify SERVQUAL scale to best fit the Ethiopian market, Negi (2011) conducted a research about mobile phones. Three extra dimensions were added involving compliant handling, network quality, and service convenience. Network quality was the best in forecasting customer satisfaction then reliability, empathy and assurance according to regression analysis.

The quality of Mobile telecommunication service is also related to the extent to which the service’s major functional features are available on one side and the customer’s service experience of the other useful features on the other (Yoon & Kijewski, 1997). Major functional features are considered the source of main advantages that customers expect to gain when purchasing it. Generally, these features in comparison with those of competitors form customers’ evaluations of a product’s overall quality (Van Der Val et al, 2012).

4- 4- 2: Promotional Offers

Promotion is a powerful tool side by side to quality of service offered by various brands to attract subscribers. Nigam & Kaushik (2011) stated that promotion is “a set of incentives that are offered intermittently” and it enhances customers’ awareness about products. Promotion is concerned with enhancing awareness about the company and the
products or services it provides for the market (Henriksen et al., 2012). Also it involves inducing purchase behavior. Hosseini et al., (2013) stated that “promotion is when companies inform, persuade, or remind customers and the general public of its offers”. Switching behavior and perception about service providers are intended to be affected by each of the promotion methods.

Customer's perception is planned to be affected by promotion as it is used to be connected with customers about service offerings. It likewise supposed to have a crucial role in determining market prosperity and profitability as well as a tool to achieve of their objectives (Khan et al., 2012).

Promotion offer in mobile telecommunication service implies the presentation of promotional packages which are intended to attract customers to subscribe/continue service consumption (Bediako et al., 2013). Moreover, Chinnadurai & Kalpana (2006) studied the competitive trends in telecommunication industry by analyzing the change in trend of mobile subscriber taste and preference. These conditions forces service providers to change their promotional strategies. It has been concluded that advertisement has a critical effect on customers although majority of them have an attitude that telecommunication service providers’ promotional strategies are sale oriented rather than customer oriented (Arthur et al., 2014).

Olatokun & Nwone (2013) tended to study the factors that play an important role in Nigerian telecommunication customers’ choice process. It has been shown that service providers are concerned with woo/versatile subscribers’ through presenting them significant attractive promotions and services. Telecommunication service operators offer various promotional offers such as prepaid offers on top-up recharge, E-recharge mobile top-up coupons, choate re-charge top-up, phone alarms of astrology, bonus cards, limited time free internet usage, call tunes, Short Message Services (SMS) offers, various sorts of ring tone services, dialer tone services, call management services, call management services, cricket score and another promotional offers to attract the mobile subscriber (Arthur et al., 2014).

4.4-3: Service Affordability

Affordability in general measures of the total cost or the amount of money consumers afford paying in return for a service or a product. Service affordability can be expressed in terms of the monetary cost that a customer can and will buy for any item. Ookoo et al (2014) argued that price plays a strong role especially in telecommunication markets and particularly for the service providers. He concluded that different prices for different products must be developed (price discrimination) in order to satisfy different customer needs and wants and meet all their preference.
Draganska & Jain (2006) proved that customer preferences should be distinguished by using product line as a price discrimination tool through providing variety of prices strategies according to customers’ preference. In Egypt, there are 100 Million mobile subscribers. Information Mobile Intelligence reports showed that average call minutes per user (AMPU) in Egypt is 25 to 30 minutes per day and average messaging minutes per day is nearly 15 to 20 minutes. Vodafone, one of the main mobile service providers in Egypt, claims that on November 2010 that monthly average revenue per user (ARPU) is 90 pounds recording a 20% decrease and a further decrease is anticipated. Although mobile subscribers’ number increased and AMPU also increased, AR-PU declined and telecommunication operators are putting several plans (such as attractive price offers) to attract Mobile subscriber (Ministry of communication and information technology, 2015).

The demand of telecommunication services is ever-increasing in different geographical regions, therefore, it is profitable for mobile service providers to accredit price reduction strategies based on the service affordability to attract potential subscribers and retain current ones through reducing call rates (Bhattacherjee & Park, 2014). Oyeniyi & Joachim, (2008) analyzed the significance of yield management and pricing discrimination in mobile services industry. Telecom operators’ and similar organizations can depend on yield management methods to optimize the advantages they derive from hidden management of information networks and partnerships. Therefore, Service affordability of other networks is one of the major factors influencing switching benefits.

5. Research Model and Hypotheses

The research model and hypothesized relationships of the effects of switching cost, benefits of current carrier network (Service quality, Promotional Offers and Service Affordability) on intention for switching is presented in Figure 1.

5.1 Switching Costs, Benefits and Intention for Switching

This study aims at investigating the interaction between main constructs within the switching cost model and switching benefits. The effect of switch costs on intention for switching has been reviewed in many literatures. Yang & Peterson (2014) represented the concept of sacrifice which resembles the definition of switching costs. The researchers concluded that sacrifice negatively affects the perceived value which follows customers’ behavioral intention. It is also confirmed that higher level of perceived value and loyalty are direct results of switching costs of the current provider.
Based on this argument, the following hypothesis is proposed:

**H1:** Switching cost has a significant negative effect on Intention for Switching.

Here, Intention for Switching reflects perceived net benefit. Customer compares switching cost with benefits of current Mobil service provider. According to “canonical” form of cost-benefit model the customer is willing to choose another service provider whose net benefit is higher based on his own preferences (Samuelson & Zeckhauser, 1988). It is also confirmed that when perceived net benefit of a switch increases, intention for switching decreases. Moreover, a decrease in perceived net benefit will result in increasing intention for switching. The previous confirmations are consistent with different literature on the relation between perceived value and behavioral intention (e.g., Kim & Kankanhalli, 2009; Sirdeshmukh et al., 2012). Lee & Murphy (2010) pointed out that perceived values are the benefits customers receive relative to total costs. Based on argument, the following hypothesis is proposed:

**H2:** Current service provider benefits have a significant negative effect on Intention for switching.

This hypothesis is divided into three sub–hypotheses as follows:

**H2-1:** Current service provider quality has a significant negative effect on intention for switching.

**H2-2:** Current service provider promotional offers have a significant negative effect on intention for switching.
H2-3: Current service provider service affordability has a significant negative effect on intention for switching.

6-Research Methodology:
6.1 Population and Sampling
The research population is individual subscribers of the three mobile phone service providers in Egypt including: Vodafone, Orange, and Etisalat. A survey has been conducted of subscribers of mobile telecom service providers in April 2016. A non-probability sample has been drawn through intercepting respondents (intercept sample).

Sample size determined according to sample size table is 384 units (Sekaran, 2013). Proportional distribution has been applied to take into consideration the percentage of service providers to the total market. For more accuracy and to avoid non-response bias, 650 instruments have been distributed, 500 instruments have been collected, reviewed, and 450 instruments have been found correct. Table (1) shows that the percentage of actual sample units is similar to the percentage of the calculated sample units. The researcher decided to apply the 450 instruments to statistical analysis to get more accurate results.

Table (1): Proportional Distribution of Sample Unit

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>% of Total Market*</th>
<th>Calculated Sample Size</th>
<th>Actual Sample Size</th>
<th>% to The Actual Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vodafone</td>
<td>41.8%</td>
<td>161</td>
<td>178</td>
<td>39.5%</td>
</tr>
<tr>
<td>Orange</td>
<td>35%</td>
<td>134</td>
<td>155</td>
<td>34.5%</td>
</tr>
<tr>
<td>Etisalat</td>
<td>23.2%</td>
<td>89</td>
<td>126</td>
<td>26%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>384</td>
<td>450</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: The researcher.

During selecting the sample, it has been carefully taken into consideration to include only subscribers who have been using the mobile of a single operator services for the past twelve months at least in order to able to judge the service provider’s benefits and offerings. In addition, respondents of more than one service provider are asked to fill out instrument about only one service provider to avoid confusion. The questionnaire was distributed personally by hand and for nearly two months.

6.2 Research Instrument
The survey instrument is composed of 2 parts. Part 1 consists of demographics and personal data. Part 2 includes scaled of the research variables, benefits current service provider (service affordability, promotional offers, and mobile service quality), switching cost, beside Intention for Switching. Scales were obtained from literature.

A self-administered, structured questionnaire (closed-ended question items on a 5 point likert scale as recommended in Danaher and Haddrell [1996] st-
udy) were evaluated by 3 researchers; sometimes were reformulated, deleted items or added items to ensure content validity. It was advanced and pre-tested on a sample of thirty customers for clarification the overall structure of questionnaire to test its consistence and reliability of questions to its research objective. The pretest were conducted with person resulted in the elimination of somewhat items and reformulating others. A few adjustments have been made based on the pre-test to improve the questionnaire.

The research instrument consisted of 28 questions. The first 6 questions are related to demographics (age, gender, education) and questions about mobile service provider mainly used and the duration of network use. The remaining 22 questions are related to benefits of current service provider (service affordability, promotional offers, and mobile service quality), switching cost, and finally questions about intention for switching. These questions have been derived from literature and have been adjusted to best suit the context of the mobile subscribers in Egypt’s mobile telecommunication sector.

7-Analysis and Results

Demographic information on gender, age, education, and the duration of use network through frequency analysis are shown in table (3). Among the respondents, 3.8% are less than 20 years of age, 23.6% inside the age group from 20- less than 30 years, 8.7% in the age range from 30- less than 40 years, 20% in the age range from 40 - less than 50 years and 44% in the age range from 50 years and over. 64.4% of the population is male while 35.6% is female.

The majority, 69.6%, of the study sample is in the bachelor level of education, whereas 16% is in Intermediate Diploma, also 6% above bachelor level (Postgraduate), 5.6% less than a public secondary and 2.9 public secondary. 72.9% of the population are the duration of use network More than 5 years, 10.9% use the network from 4 years to less than 5 years, 7.6% use the network from 3 years to less than 4 years, 4.7% use the network from one year to less than two years and 4% use the network from two years to less than 3 years.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>290</td>
<td>64.4</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>260</td>
<td>35.6</td>
</tr>
<tr>
<td>Age</td>
<td>Less than 20 years</td>
<td>17</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>From 20 -less than 30 years</td>
<td>106</td>
<td>23.6</td>
</tr>
<tr>
<td></td>
<td>From 30 – less than 40 years</td>
<td>39</td>
<td>8.7</td>
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<tr>
<td></td>
<td>From 40 – less than 50 years</td>
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<td></td>
<td>50 years and over</td>
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<td>Education</td>
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<tr>
<td></td>
<td>Public secondary</td>
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<td>2.9</td>
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</tbody>
</table>
Dr. Samia Elsayed Mahmoud

Using Cost-Benefit Model to Measure Antecedents

<table>
<thead>
<tr>
<th>Duration of use</th>
<th>Intermediate Diploma</th>
<th>72</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bachloria</td>
<td>313</td>
<td>69.6</td>
</tr>
<tr>
<td></td>
<td>Postgraduate</td>
<td>27</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration of use</th>
<th>Year to less than 2 years</th>
<th>21</th>
<th>4.7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Years to less than 3 years</td>
<td>18</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Years to less than 4 years</td>
<td>34</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td>Years to less than 5 years</td>
<td>49</td>
<td>10.9</td>
</tr>
<tr>
<td></td>
<td>More than 5 years</td>
<td>328</td>
<td>72.9</td>
</tr>
</tbody>
</table>

**Source:** Researcher based on statistical analysis results.

Reliability has been tested using the inter-element consistency measure of Cronbach's alpha based on the proposal of Nunnaly (1978). As shown in Table 4, reliability coefficients of all the constructs exceed the minimum level recommended by Nunnaly (1978) which equal 0.70., which confirmed the reliability and validity of the measurement scales and meet the standards of acceptable measurement qualities.

**Table (4): Reliability test results**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Items</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intension for Switching</td>
<td>3</td>
<td>0.801</td>
</tr>
<tr>
<td>Switching Cost</td>
<td>4</td>
<td>0.730</td>
</tr>
<tr>
<td>Benefits current Service Provider :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Quality</td>
<td>6</td>
<td>0.807</td>
</tr>
<tr>
<td>Promotion Offers</td>
<td>3</td>
<td>0.842</td>
</tr>
<tr>
<td>Service Affordability</td>
<td>6</td>
<td>0.829</td>
</tr>
<tr>
<td>Total Measurements Instrument</td>
<td>22</td>
<td>0.731</td>
</tr>
</tbody>
</table>

**Source:** Researcher based on statistical analysis results.

Descriptive analysis of variables indicates the relevance of the construct under consideration. The mean value of benefits current service provider (M=3.3158; SD=.63451) is indicating that benefits are present among the subscribers and switching cost (M=2.7472; SD=.72212), on the other hand, it reflects intention for switching (M=2.5778; SD=.92880) which means that most customers analyses benefits current carrier network and switching cost.

Factor then not changing their preference for the services they use and it is very significant role for most subscribers. As shown in table(5), all variables under consideration generated mean values which is compatible with our hypothesizes and justifies proposed relationships.
Table (5): Summary of Descriptive Statistics (n = 450)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>ST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intension for switching</td>
<td>2.5778</td>
<td>0.92880</td>
</tr>
<tr>
<td>Switching cost</td>
<td>2.7472</td>
<td>0.72212</td>
</tr>
<tr>
<td>Benefits current Service Provider</td>
<td>3.3158</td>
<td>0.63451</td>
</tr>
<tr>
<td>Service Quality</td>
<td>3.5522</td>
<td>0.72212</td>
</tr>
<tr>
<td>Promotion Offers</td>
<td>3.0689</td>
<td>0.87950</td>
</tr>
<tr>
<td>Service Affordability</td>
<td>3.3263</td>
<td>0.70904</td>
</tr>
</tbody>
</table>

Source: Researcher based on statistical analysis results.

Further measurement of relationship reveals as well the degree of correlation between the independent variables (switcning cost and benefits of current the-service provider) and the dependent variable (intention for switching). The correlation relationship was subject to a 2-tailed statistical significance at p<.01.

The researcher analyzed all data collected from the survey through correlation analysis. The findings appeared in Table 6 confirmed that intention for switching is negatively correlated to switching cost (r= -0.231, p<.01) as well as benefits of the current service provider (r = - 0.462, p<.01).

Table (6): Summary of Correlation Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Switching Cost</th>
<th>Benefits Current Service Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intension for Switching</td>
<td>-0.231</td>
<td>-0.462</td>
</tr>
<tr>
<td>Switching Cost</td>
<td>-</td>
<td>0.031*</td>
</tr>
<tr>
<td>Benefits current service provider</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* Correlation is not significant at the 0.01 level

Source: Researcher based on correlation analysis results.

Using multiple regression analysis, the relationship between the dependent variables and independent variable was examined. As shown in table (7), the coefficient of R square is 0.260 pointing out that the two independent variables explain 26% of the variance in dependent variable (intention for switching). Also Durbin Watson of 2.433 indicates that there is no auto correlation problem (criterion correlation value 1.5 –2.5). Multi–collinearity problems hasn’t been revealed as tolerance levels are all greater than 0.1 and variation Inflation Factors (VIF) are all lesser than 10. A significance level of 1% or .01 was set as the basis for accepting or rejecting hypotheses.
Table (7): Summary of Regression Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta</th>
<th>T</th>
<th>Sig</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>Switching Cost</td>
<td>-0.217</td>
<td>-5.330</td>
<td>0.000</td>
<td>0.999</td>
</tr>
<tr>
<td>Benefits Current Service Provider</td>
<td>-0.455</td>
<td>-11.183</td>
<td>0.000</td>
<td>0.999</td>
</tr>
</tbody>
</table>

R square = 0.260, Adjusted R square = 0.257
F value = 78.654, Durbin Watson = 2.433

Source: Researcher based on regression analysis results.

8-Discussions and Managerial Implications:

Discussion:

After reviewing the literature, a framework has been designed consisting intention for switching as dependent variable and switching cost, benefits current the service provider as independent variables. The analysis displays an insight into the relationship of the above mentioned variables in context of the Mobil telecommunication sector in Egypt. As shown table (7), hypothesis (1) is accepted (H1: Beta = -0.217, p<.01) pointing out that switching cost is negatively related to intention for switching which is compatible with results of past studies (Aydin, &Özer, 2005; Han et al., 2011). It is also emphasized the truth that subscribers are not willing to suffer for experiencing something new because they perceive switching cost as an added investment (Yanama-ndram &White, 2006).

Hypothesis 2 (concerning the benefits of current Service Provider) is supported (H2: Beta= -0.455, p<.01) which reflects willing to maintain the benefits. This again confirms the fact that subscribers applied Cost-benefit analysis therefore the higher benefits in return switching cost leads to lower intention for switching and is consistent with previous studies (Maicasetal., 2009; Nassser etal. 2013 ). Switching intention is the signal of termination of customer’s relationship as long as the subscriber believes switching to another provider is justified economically (Olatokun, 2012). The results may be explained in the view of dominate reality in the Egyptian Mobil telecommunication sector. As such in a lot of developing countries, customers’ options of purchasing a service are significantly affected by the financial side.

Kumarvel & Kandasamy (2011) detected that there are three significant factors (service quality, Service Affordability and Promotional Offers) which are influencing the mobile subscriber’s intention to switch the service provider. As shown table (8), sub- hypothesis 1 (H2-1): Current service provider quality has a significant negative effect on intention for switching is accepted because Beta = -0.41, p<.01. It reflects the significant negative influence for
current service provider quality on mobile subscriber intention for switching to new service provider and explains only 17% \( (R^2=0.17) \)of Mobil subscriber intention for not switching to new service provider. This result is consistent with the findings each of Wang & Lo (2010), Van der Wal et al. (2012), and Rahman (2012).

Table (8) indicates that Sub – hypothesis 2 (H2-2): Current service provider promotional offers have a significant negative effect on intention for switching is not accepted because of Beta = -0.01, \( p= 0.833 \), so the current service provider promotional offers has not a significant negative effect on Mobile subscriber intention for switching .That is because subscribers know that all service providers provide same promotional packages. This result is different from what both Sathish (2011) and Wright (2012) have reached.

While Sub – hypothesis 3 (H2-3): Current service provider affordability has a significant negative effect on intention for switching is accepted because of Beta = -0.48, \( p<.01 \). This reflects a significant negative influence for service affordability on mobile subscriber intention for switching to new service provider and explains only 27% \( (R^2=0.27) \) from mobile subscriber intention for not switching to new service provider. This result is consistent with the findings of Kollmann (2000), Sathish (2011), and Tseng & Lo (2011).

Concerning the relationship between service affordability and intention for switching, it reflected that there is high negative significant correlation \( (r = -0.577) \) which formulates reverse relationship, meaning that high service affordability leads to reducing Mobil subscribes intention for switching. Concerning the relationship between current service provider quality and intention for switching, it reflected that there is a high negative significant correlation \( (r = -0.510) \) which formulates reverse relationship, meaning that more the service provider quality is given less the Mobil subscribes think to switch. Concerning the relationship between current service provider promotional offers and intention for switching, it reflected that there is negative significant low correlation \( (r =-0.28) \) which formulates reverse relationship, meaning that more attractive service provider promotional offers are not given less the mobile subscribes think to change.

### Table (8) Summary of Regression Analysis to Sub - Hypothesis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta</th>
<th>R</th>
<th>T</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality</td>
<td>-0.41</td>
<td>-0.51</td>
<td>-9.519</td>
<td>0.00</td>
</tr>
<tr>
<td>Promotion Offers</td>
<td>-0.01</td>
<td>-0.28</td>
<td>-0.211</td>
<td>0.833</td>
</tr>
<tr>
<td>Service Affordability</td>
<td>-0.48</td>
<td>-0.58</td>
<td>-11.5</td>
<td>0.00</td>
</tr>
</tbody>
</table>

R square = 0.256 , Adjusted R square = 0.251

F value = 51.120 , Durbin Watson =2.593

Source: Researcher based on regression analysis results.
As Table (9) indicates, service provider quality has high correlation with both service provider affordability on one side ($r = 0.572$) where there is a need to relate the current service provider quality and the ability to pay, and service provider promotional offers on the other side ($r = 0.536$) because it is necessary to improve service provider quality. Service provider gives additional promotional offers to pull the subscriber and decrease the intention to switch. Service provider promotional offers have less correlation with service affordability ($r = 0.448$) where promotional offers decrease the total cost of the service because of increase service affordability by subscriber.

**Table (9): Summary of Correlation for Benefits**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Service Quality</th>
<th>Service Affordability</th>
<th>Promotion Offers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality</td>
<td>-</td>
<td>-0.572 *</td>
<td>-0.536*</td>
</tr>
<tr>
<td>Service Affordability</td>
<td>0.572*</td>
<td>-</td>
<td>0.498*</td>
</tr>
<tr>
<td>Promotion Offers</td>
<td>0.536*</td>
<td>0.448*</td>
<td>-</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.01 level.

**Source:** Researcher based on correlation analysis results.

In brief, research results revealed that service provider’s costs and benefits have a significant influence on intention for switching which is consistent with the results of (Nasser et al., 2013) confirmed that the net benefits (benefits after excluding costs) have direct effect on intention for switching.

**Managerial Implications:** Sensitivity about additional cost associated with switching to new service providers has been recorded high in the telecommunication sector in Egypt. This might be due to lower switching cost which motivates mobile subscribers to try out another service provider. Switching cost played role in our given analysis requires further research because the current study supported the hypothesis that mobile subscribers are reluctant to switch based on comparing switching costs with benefits of the current service provider, which as a result clarifies that subscribers prefer to continue the relationship because of positive net benefits.

This is for sure some good news for the service providers having small market share since their attempt to lower switching cost must be accompanied by greater benefits until they become acceptable in the long term. It might attract potential subscribers to shift their attention away from competitors. This implies that economic (financial) assessment of benefits and costs plays a significant role in mobile subscribers’ switching behavior decision.
9 - Conclusion

This research is based on the cost - benefit analysis to determine the factors which are affecting the subscriber intention for switching into mobile telecommunication market in Egypt. This market has a great growth in mobile subscribers and huge competition between the three service providers (Vodafone, Orange, Etisalat), at present there is not research - within the limits of the researcher's knowledge – available in Egypt to detect the factors affecting subscriber’s intention for switching between the three above-mentioned companies. The present study confirmed that the decision to switching the economic networks where subscriber is calculated by comparing the net benefits of the current service provider benefits at a cost of transformation based model Cost - Benefit.

The findings of current study reveals that the factors which are affecting the subscriber intention for switching into mobile telecommunication market in Egypt both service affordability and service quality – respectively- as benefits

Follow by switching cost whereas promotional offers have no significant influence on subscriber’s intention for switching service provider. Also the study reveals a high correlation between service provider quality and service affordability.

In brief, the results of current research contribute to a better awareness of the relationship between services provider quality, service affordability, promotional offers and its influence on intention for switching service provider as benefits current service provider in addition to switching cost. In this way, the results in this study can help researchers and practitioners to realize the level of influence that these factors have on subscriber intention for switching the service provider and the correlation between these factors.

10- Recommendations:

Mobile service operators in Egypt should consider the results of this research in the following manner in order to raise the service benefits and raise the switching cost:

1- Service provider's customer care service centre should be given special attention in order to provide customers the highest support possible through listening to complaints, considering suggestions, and making customer support center available 24/7. Customer care service centre is one of the most important service quality dimensions.

2- Connections clearness should be given special attention as customers comprehended that when connections are clear, service quality and service benefits increases, the-refore, intension for switching declined.

3- Continuous improvements should be undertaken concerning price systems as a major factor affecting service affordability. Customers should be classified according to their affordability and preferences, and then price systems should be tailored to each class. By applying this plan, switching intension to other service provider decreases and customers' attraction from other service providers is enhanced.

4- Service providers should also care about raising switching costs such
as increasing switching time (increasing relationship termination steps), increasing switching expenses, increasing the difficulty of relationship termination and making it requires more and more effort than expected.

11- Future research:

Based on the current research results, the following ideas are provided for future research:

- This research has been applied on Sharkeya governorate because of some constraints such as cost and time, therefore, studying the benefit/cost model to explore the intension for switching of telecommunication customers in a number of governorates or even Egypt as a whole is recommended.

- Figuring out the effect of benefit/cost model on intension for switching of other commercial sectors other than mobile service sector such as mobile phones and electric sets.

- Figuring out the effect of benefit/cost model on customer satisfaction and loyalty.

- Measuring the perceived value of products/service based on the benefit/cost model.

- Studying behavioral consequences of the benefit/cost model of different service sectors.

References:


74. Sirdeeshmukh, D., Singh, J., & Sabol, B. (2012). Consumer Trust, Value, and Loyalty in Relational Exchang-


