International Journal of Business, Human and Social Sciences
ISSN: 2517-9411
Vol:3, No:10, 2009

Mobile Phone Services in Makkah, Saudi Arabia

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Abstract**—**This paper discusses telecommunication market developments in Saudi Arabia. Empirical research was carried in the holy city of Makkah to study the customer's preference for mobile cellular service and the factors influencing their subscription of the mobile phone service. Results indicate that the financial factor significantly influence the customer's selection of the service provider.

Keywords**—**Customer , Makkah, Mobile Phone, Operator, Saudi Arabia.

I. INTRODUCTION

TELECOMMUNICATIONS has experienced significant changes over the past few years and its paradigm has moved from wired to wireless communications. In the USA, revenues from cellular and other wireless telecommunications firms reached 126 billion US dollars in 2004 with an increase of about 14% from 2003. On the contrary, revenues for wired telecommunications carriers in 2004 suffered a shrink of about 5% to 211 billion US dollars compared to 2003 [1].

The idea of cellular communications was introduced by Bell Laboratories in 1947 with police car technology. The first commercial cellular telephone system was launched in Japan in 1979. Since that time, mobile cellular service has expanded rapidly. In 2008, mobile phone service was used by around 4.1 billion subscribers around the world, which represents 50% penetration. Indeed, wireless communications have penetrated into the general public irrespective of age or social class at a higher rate as compared to other technologies such as personal computers and the Internet [2]. Thus, mobile phones play an important role in the daily life of most of us. Besides its main use as an audio/video communication device, mobile phones are used today for several activities related to education, business, traveling, web-browsing, recording, and many more to come. Consequently, revenues from telecommunication services raised. In 2007, the European wireless telecommunication services market increased by 7.3% to reach a value of 197.2 billion Dollars. At the same time, the number of subscribers increased by 6.9% to reach a volume of 626.6 million subscribers. It is expected that by the year 2012, the European wireless telecommunication services market will reach the value of 237.3 billion Dollars, an increase of 20.3% since 2007, and the market volume will reach 717.1 million subscribers, an increase of 14.4% since 2007. The wireless telecommunications services market were refer to here includes cellular phones, pagers and any other wireless or cellular service [3].

In fact, developments in information and communication technology (ICT) plays an important role in the economical growth and improving quality of life in modern societies. Therefore, the long-term vision of the government of Saudi Arabia for ICT is the transformation into an information society and digital economy so as to increase productivity and provide communications and information technology (IT) services for all sectors of the society in all parts of the country and build a solid information industry that becomes a major source of income [4].

In the Kingdom of Saudi Arabia (KSA), mobile phone service was first offered in 1995. By the end of 2008, the total number of subscribers reached 36 million (143.6% penetration). Active subscription numbers were estimated to be 18% less than the total raw subscription numbers, based on the 90-day activity rule adopted by the Communication and Information Technology Commission (CITC) [5]. More recent data shows that the total number of subscriptions reached 37.4 million (148% penetration) in the first quarter of 2009 [6]. Prepaid subscriptions constitute 85% of all mobile subscriptions in KSA, which is in line with the trend in other similar markets around the world [5].

Currently there are three mobile service providers operating in Saudi Arabia. The Saudi telecom company (STC), which was incorporated in 1998, inherited the responsibilities of the mobile phone service from the ministry of posts, telegraphs and telephones (PTT). Competition in the Saudi mobile telecommunications market started in 2005 when Mobily started its service. Competition intensified in 2008 with the launch of the services of the third mobile licensee, i.e. Zain. In 2005, the total number of subscriptions was only 14.2 million (51% penetration). Thus, in ten years, since it was first offered in KSA, with a single service provider, the service penetrated to 51% of the population. Whereas, with three service providers, the number of subscription almost tripled in half the period of time. This has resulted in major developments in terms of service offerings, quality of service, customer care, reduced prices and subscriber growth [5]. While the cost of living index (CLI) increased

Part of this project was funded by the Saudi Telecom Company (STC) in 2008.

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by 19% in the period 2002 to 2008, the cost of telecom services decreased by 23.5% during the same period of time.

Accordingly, revenues from telecom services in KSA have been steadily growing at an annual cumulative average rate of around 14% since 2001. In 2008, revenues from mobile telecommunication services, offered inside KSA, exceeded 38 billion Saudi Riyals (10.13 billion Dollars).

The increasing number of subscriptions and competition between service providers causes continuous improvements in services and prices, which consequently motivate further increase in the number of subscriptions. Hence, it is important to evaluate the subscribers' opinions and expectations to identify the factors that matters the most from the subscribers' point of view. It is also important to know how the mobile phone subscriber chooses his/her preferred service provider. There are few studies investigating these issues, specifically, for the society in Saudi Arabia.

In this paper, we study mobile phone services in the holy city of Makkah, Saudi Arabia. We discuss some of the factors that make a customer prefer a certain service provider. Furthermore, we analyze customers' opinions and explore some of their requirements related to mobile phone services. Results presented here provide guidelines for service providers on how to attract more customers by addressing their needs and meeting their expectations.

In the next two sections, we discuss the research objectives and methodology. Then, analysis and discussion of the results is presented. Finally, the paper concludes with a summary, outlining the concluding remarks.

II. Research Objectives

The study has four aims. The first is to determine the main factors that influence the decision of an individual to prefer a certain service provider. The second is to investigate the reasons that compel a subscriber to change his/her subscription to another service provider or to have an additional subscription from another service provider. The third is to identify the important factors, from customers' point of view, in customer care call centers and customer service offices. The fourth is to specify the most important factor that attracts the customer towards the joint promotional offers between mobile service providers and mobile phone manufacturers.

III. Research Methodology

To determine the customers' preference for mobile phone services in Makkah, a survey was conducted during February 2009. The survey was distributed in shopping centers, offices, schools, university, and homes around the holy city of Makkah. Demographic variables like the gender, age, monthly income, and level of education were sought from the participants. A total of 193 useable participations from mobile phone subscribers were obtained. Hence there are around 1.7 million people living in the holy city of Makkah.

The survey consisted of fourteen questions, seven questions were about the demographic variables of the participant (gender, age, education, etc) while the remaining seven questions are designed to know:

- With which service provider is the participant's main subscription?
- If the participant has an additional subscription, with which service provider is his/her additional subscription?
- What is the most important factor that influence the participant's choice of the service provider?
- What is the most important factor that persuade the customer to have an additional subscription from another service provider or to change his/her subscription?
- Does the participant tend to subscribe with the same service provider of his/her family and friends?
- What is the most important factor of the customer care call centers?
- What is the most important factor of the customer care offices?

What is the most important factor in the joint promotional offers between mobile service providers and mobile phone manufacturers?

IV. Analysis and Discussion

Details of the demographic factors of the sample are given in Table I, which shows that the sample covered wide ranges of age, education, income, occupation, etc.

In order to identify the distribution of participants' subscription with the three mobile service providers, the participants were asked about their main subscription and additional subscriptions, if any. The responses are summarized in Table II. This shows that the majority of the participants have their main mobile service subscription with STC, whereas majority of the additional subscriptions are with Mobily. It is noteworthy that Zain has the least number of customers among participants because it has just launched its operations in August 2008.

In order to identify the most important factors related to subscription from the customer's point of view, each participant was asked to specify the factor that matters the most when he/she chooses the mobile service provider. Also, each participant was asked to indicate the most important factor that encourages him/her to have an additional subscription from different service provider or to change his/her main subscription. The responses, which are summarized in Table III, shows that the financial factor is the most important from the customer's point of view. Thus, more than half of the participants consider the prices to be the factor that matters the most in choosing their service provider. Whereas, the majority consider the promotional offers to be the most attractive factor that encourages them to have additional subscription or even change their subscription.

Each participant was asked whether he/she incline to subscribe with the same service provider of his family and friends. The responses, which are summarized in Table IV, shows that there is no strong trend to subscribe with the same service provider among family members and friends.

Table V, summarizes the results of responses to the questions about the most important factors, from the customer's point of view, of customer care call centers and customer care offices. Majority of the participants believe that understanding the problem and solve it within reasonable time is the most important in both cases. Good manners of the staff is found to be the second most important factor in customer care services.

TABLE I: DEMOGRAPHIC FACTORS OF THE PARTICIPANTS

Factor	Item	Percentage
Gender	Male	67.4%
	Female	32.6%
Age (years old)	< 15	1.6%
	15-18	4.7%
	19-25	37.8%
	26-35	36.3%
	36-45	12.4%
	> 45	7.3%
Matrimony	Married	52.3%
	Non-Married	47.7%
Nationality	Saudi	86.5%
	Non-Saudi	13.5%
Monthly Income (Saudi Riyals)	No Income	17.1%
	< 1000	14.0%
	1000-3000	17.6%
	3001-6000	22.3%
	6001-9000	15.5%
	< 9000	13.5%
Education	Primary	1.0%
	Intermediate	4.1%
	Secondary	21.8%
	Dplpoma	5.2%
	Bachelor	57.5%
	Post Graduate	10.4%
Occupation	Student	29.0%
	Government Employee	40.4%
	Private Sector Employee	18.1%
	Policeman (officer)	2.1%
	Businessman	2.6%
	Retired	0.5%
	Housewife	4.7%
	Non-Employee	2.6%

TABLE II: MOBILE SERVICE SUBSCRIPTION

Subscription	Provider	Percentage
Main	STC	73.1%
	Mobily	19.7%
	Zain	7.3%
Additional	STC	34.9%
	Mobily	40.4%
	Zain	24.7%

TABLE III: FACTORS INFLUENCE CUSTOMER'S CHOICE OF THE SERVICE PROVIDER

Type	Item	Percentage
The factor that matters the most in choosing the service provider	Prices	52.8%
	Mobile network coverage	29.0%
	Customer care services	9.3%
	Company name	8.3%
	Quality in all aspects	0.5%
The factor that is most attractive to have additional subscription or to change main subscription	Promotional offers	58.0%
	Easy bill payment	7.3%
	Special numbers	7.3%
	Variety of services	18.7%
	International roaming	5.7%
	Others	3.0%

TABLE IV: TENDENCY TO SUBSCRIBE WITH THE SAME SERVICE PROVIDER AMONG FAMILY MEMBERS AND FRIENDS

Description	Percentage
Always	17.1%
Sometimes	46.6%
Rarely	11.4%
Never	24.9%

TABLE V: IMPORTANT FACTORS OF CUSTOMER CARE CALL CENTERS AND CUSTOMER CARE OFFICES

Type	Item	Percentage
The most important factor of the customer care call centers	Good manners of staff	22.3%
	Understanding the problem and solve it within reasonable time	39.9%
	Short waiting time	17.6%
	Answering in all times	19.7%
	Nothing	0.5%
The most important factor of the customer care offices	Good manners of staff	33.2%
	Understanding the problem and solve it within reasonable time	34.2%
	Short waiting time	15.0%
	Distribution of offices in suitable locations	17.1%
	Cash bill payment or via bank card	0.5%

Recently, there has been several joint promotional offers between service providers and mobile phone manufacturers. Therefore, the participants were asked to indicate the most important factor in such joint promotional offers. Table VI, which summarizes the results, shows that substantial majority of the participants consider the price of the offer to be the most important factor.

TABLE VI: IMPORTANT FACTORS IN THE JOINT PROMOTIONAL OFFERS

Description	Percentage
Price of the offer	73.1%
Mobile phone manufacturer's company (Brand name)	16.1%
Service provider	10.9%

V. CONCLUSION

Telecommunication market is growing rapidly in Saudi Arabia. The number of mobile cellular subscriptions have tripled in the last five years. Competition between the three service providers lead to improvements in services and prices, which is expected to provoke further increase in the number of subscriptions. High revenues are evident for mobile cellular services in Saudi Arabia and there is potential for further increase.

Results of the empirical research demonstrated tendency, among some of the participants, to have more than one mobile service subscription. The financial factor is essential in customer's selection of the service provider. Currently, there is no strong tendency to subscribe with the same service provider among family members and friends. The two most important factors in customer care services, from customer's point of view, are understanding the problem and solve it within reasonable time and good manners of the staff.

While this exploratory research has revealed some interesting results. Further improvements can be considered by involving larger sample and studying additional factors related to customer's evaluation of services and prices for the different service providers.

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