Mobile Applications and Customers Satisfaction in Saudi Electricity Company

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Abstract – Mobile applications, also known as smartphone applications are currently in a revolutionary phase and are a major source of innovation in the field of business and communications. The resulting advances in the field of communications are having profound impact on our social and cultural behaviour. This revolution is global and Saudi Arabia, which is the focus of our study, is not an exception. Nowadays, many companies in Saudi Arabia are using mobile applications to communicate with their customers. One of these companies namely, the Saudi Electricity Company (SEC) has recently established an interesting mobile application, called Alkahraba. In this article, we shall analyse the design, usefulness, effectiveness, quality and impact of the Alkagraba mobile application on the SEC customers. The analysis will be based on academic texts and surveys of SEC customers, through which we will demonstrate direct correlation between the application design/service/quality/feedback, and customer satisfaction. We hope that this research would guide SEC to improve and further enhance their mobile application offering, which would result in greater customer satisfaction and ultimately benefitting the company.

Keywords: Saudi Electricity Company, Smartphone, Mobile Applications, Saudi Arabia, Customers Service, Design, Customer Services, Reputation.

1 INTRODUCTION

Mobile applications (apps) have become an integral part of every organization's core strategy and business. Today, with mobile devices extremely prevalent and affordable, many customers prefer to use mobile applications on their mobile devices as the medium of choice for finding and procuring goods and services.

In the last few years, many companies have launched websites on the world wide web (Internet) to enable their customers to undertake communications and business online with them; mobile applications hosted on mobile devices are now a natural progression to this.

Previously, there was heavy reliance on desktops/personal computers (PCs) and laptops/notebooks for all electronic transactions and usage, whether it be for business, education or personal use. In the last decade in particular, laptops became very popular due to their portability and the option of having mobile connectivity on them. Limitations such as high costs, the need to lug around a machine with charger and cables, and need for access points and internet connectivity (which was expensive) remained nonetheless. The advent of mobile devices such as smartphones and tablets significantly changed the technological landscape, with mobile applications now offering businesses the ability to transact with their customers in a dynamic manner, whilst also allowing businesses and their staff the ability to set up dynamic work environments.

1.1 Research Objectives

Well-developed mobile applications offer numerous advantages to companies all round the world in the field of customer service. In this research, we shall assess SEC's current mobile

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application and what improvements can be made and additional features added to drive high customer satisfaction.

For the SEC mobile app to achieve high customer service satisfaction, the following three primary variables need to be considered and investigated in this report:

- The application's design
- The application's functionality/features/services
- The application's rating/popularity/reputation

These variables will be evaluated and addressed through different questions in the survey and research to assess and measure the success and customer satisfaction of the mobile app.

2 MOBILE DEVICES

There was a time when mobile phones were primarily used for making calls and sending messages, but all this has dramatically changed in the last few years. Mobile phones and tablets have now become an integral part of our lives due to the revolution in communications and technology giving rise to a thriving mobile technology sector.

It was only recently that Apple brought smartphones to the mass consumer market, but smartphones have actually been around in one form or another since 1993. The difference between then and now is that early smartphones were primarily used as enterprise devices and were prohibitively expensive for most consumers (Reed, 2010).

2.1 The New Definitions of the Smartphones

(Cassavoy, 2016) There is no standard definition of the term smartphone across the industry, but we can say it is a mobile device that not only allows calls and messages but a multitude of features that you would have found only on a personal digital assistant or a computer such as the ability to send and receive e-mail and edit Office documents, for example and contain some features like Operating System, Internet access, mobile apps, traffic navigation etc.

2.2 Advantages and Disadvantages of Mobile Devices

Mobile devices can be your best friend and worst enemy at the same time. Mobile devices are a great means of maintaining contact with people, a dynamic means of entertainment such as movies and games, and also traffic navigation. At the same time they can be your worst enemy if it is falls in the wrong hands and used inappropriately. Smartphone can expose your personal content like contact details, passwords, private multimedia, banking information, and more. For this reason, mobile device users need to be aware about the advantages and disadvantages.

The advantages

Easy means to communicate, thousands of apps and functions in one device, unlimited access to the web on the go, and entertainment.

The disadvantages

Prevents human interaction, distraction, addiction, cost, security, health problems and privacy vulnerabilities.

2.3 Mobile Applications

As the market for mobile devices continues to surge, a large number of advanced and powerful phones and tablets are now on offer. This in turn fuels the need for various new and advanced mobile applications to take advantage of the hardware capabilities on offer. Mobile device manufacturers typically offer a suite of applications as part of the hardware offering. In addition to this, users have the ability to download mobile applications of their choice

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according to their needs and personal preferences such as banking, games, social media and sports channels. These mobile applications typically appear on the phones as icons and allow a varying level of customization. In contrast to a mobile phone from the 90s and early 2000s, mobile devices such as smartphones and tablets allow installation of third party compatible applications from what are knows as "App Stores" like Google Play or Apple App Store.

2.4 Various applications for mobile devices in business

In the age of technological advancements and high-speed connectivity, most people now use mobile applications to conduct their business rather than transacting from home on their personal computers. People desire speedy service and responsiveness, and changing paradigms now mean companies must now have an application to offer to their customers to stay competitive. Every business now whether it was small or big can gain benefits from offering a mobile application irrespective of type of business. A mobile app can bring a number of competitive advantages over its rivals. Mobile technology, including apps can provide a level of connection between company and customers whilst allowing sharing of information with them all the time, and through this connection the company can provide some services like:

- Marketing: Mobile apps can be one of the best ways of marketing because of it will yield
 a direct channel with the customers, by offering reminders of offers, promotions, and
 new products and services.
- Customer service: Any company without high customer service will find it hard to survive – having an app is a powerful and excellent customer service offering which provides customers a fast way to interact with businesses at any time, and from anywhere.
- Feedback: Mobile apps can be used to receive complaints and feedback about goods and services, and enable business to provide speedy responses.
- Customer's engagement: Mobile apps can be used to increase accessibility to customers.
 When the app is downloaded to the customer's phone, it allows instant and ongoing visibility of products and services at the tap of a screen. This creates a higher interaction, which ultimately translates to trust being built.
- Communication: Through the application, the information the company wants to share can be spread to the customers at the tap of the screen.
- Customer loyalty: In the past it was enough to gain customer loyalty through well built
 products and reasonable prices, but now customers look for more. Customer loyalty
 becomes something really different and difficult nowadays, and having apps as part of
 the offering helps.
- Social media: Many companies now are jumping onto social media like Facebook, which
 can be accessed through the app on the mobile device. This is also an opportunity for
 businesses to keep their customers happy so they leave good feedback for them, which
 becomes freely visible for everyone to see.
- Navigation: Most mobile applications provides the businesses with information about the
 location of the customer, which in return will give a chance to the company to tailor their
 goods and services to the customer depending on their lifestyle or guide them to the
 nearest store.
- Increased revenue: Some applications run as a "showroom" and can be a direct channel to customers when they want to purchase the goods or services, and at the same time providing businesses the opportunity to subscribe them for ongoing goods and services through offering quality customer service.
- Bring down the costs: Apps play a critical role in lowering the prices of goods and services due to reduced costs such as reduced inventory, less personnel, less dependence on call centres, minimal need of print advertising etc. Companies no longer need to pay huge money for billboards, magazines, newsprint, or TV to advertise the product; they simply send a push notification or feature the product in the app so people can become aware of it. These savings, once realised, can be passed on to consumers.

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- Competitive advantages: As we can see many companies now try to make their apps unique and with numerous features, especially if it is in a market with high level of competition.
- Speed tool: The app becomes an instrument of faster, direct interaction with the customer, so much so that an internet connection may not be required to use some of the feature.
- Improve visibility: The icons for the apps are like mini-advertisement that always exists on a user's device. If a customer uses your application daily, more probably than not, they will think of your company first when arriving at a purchase decision.

2.5 The Effect of Design, Services & Rating on Mobile Applications

Any successful app depends on the fundamentals of design, services, and rating. When the design of an app is highly functional yet simple and clear, the users can use it to access goods or services more meaningfully. When this happens, the good reputation and ratings of the app are built. In reality, most of the apps fail and this is because developers are careless in these three stages. Like any object, apps need to be unique. Some of the most successful apps on mobile devices today haven't introduced new ideas; they just make them better and highly functional. With this in mind, we wanted to take a look at what makes a good app great.

Design is the most critical component in building a successful app because it is the factor that you can change all the time and services and reputation depend on it.

When the design is great, other factors will follow. One of the most famous companies nowadays is Apple and this happened because of Apple's culture revolves around design excellence. It's no coincidence the apps Apple showcase are always well designed with a strong user focus.

The services accessible through the app can include marketing, customer service, complaints and feedback and these services should be conceived into the app design process in its inception. In an October 2013 survey of executives at companies with annual revenues of at least \$250,000 conducted by Forbes Insights and Adobe, it was found that 83% of respondents were using customer-facing apps to communicate with businesses. Apps also featured provision of customer service or support (79%), the provision of information about a product (74%), facilitation of transactions (69%) and brand engagement (67%) (emarketer, 2014).

We exist in a time where we cannot absolutely control what is said about the businesses. There are currently many different opinions coming from people who are using the product or services. Bad reputation and negative feedback is something that a company has to deal with today, but yet big companies cannot address each and every issue raised about them all the time and that's why the reputation of a business is very important.

In a new research by Hill+Knowlton Strategies (H+K) in gulf countries found that nearly four out of five senior executives across the UAE, Saudi Arabia and Qatar, consider their company's corporate reputation as "extremely important". This figure rises to 95% when those who ranked it as "important" were also included. 82% percent of those interviewed also said that their company's reputation was linked to their bottom line and overall business success and 84% of senior executives "agreed" with the statement that a strong reputation can help a company recover quickly in a crisis (Hill+Knolton Strategies, 2015).

2.6 Mobile Applications in KSA

According to a research into mobile applications in Saudi Arabia, Saudi citizens ranked third after the United Arab of Emirates and Korea in use of smartphones, with Singapore and

Norway following after (Omran, 2015). The revenue generated by Saudi telecommunication companies is 66 billion Saudi Riyals (17.6 US dollars), the largest in the Middle East. The average of download apps per smartphone is 82 apps, which is a very high number. The downloads are not just the free apps, but a smartphone on average has at least 7 paid applications. A report by Arab Net conducted by one device research company found (Al-Watan, 2015) that 53% of smartphone users in Saudi Arabia pay to download the application. This is one of the reasons why Saudi Arabia is considered to be the second largest country for using the mobile network, according to the Internet World State web site (Internet World Stats, 2015). Through the last 15 years, Saudi Telecommunications Company (STC) was the only telecommunications company in Saudi Arabia. With the sharp rise in mobile phone usage, two additional companies Mobily and Zain have successfully entered the market, with rom for more players still. This surge in the communication sector in Saudi Arabia provides a fertile ground for increase in highly functional mobile apps.

3.7 Barriers to Mobile Application development in KSA

Saudi society, like many other nations, are very keen users and consumers of the mobile apps. As commented earlier, the usage of smart phones in Saudi is very high. Here we present some details associated with the usage of apps.

- Network coverage: People Saudi Arabia have a large and growing telecommunications needs, which can put strains on the existing networks, thus limiting the capabilities and use of mobile apps.
- Language: Most of the applications come with English words and some people are
 only proficient in Arabic, which can be barrier to the usage of a vast number of
 existing apps.
- Mobile Device Price: Some of the smartphones can be very expensive for the customers in Saudi Arabia like the iPhone and Samsung high-end devices. Many phone offerings based on the Android system are affordable, though not necessarily fast or reliable.
- Apps price: Some of the applications can come with high price tags like the traffic navigation applications which prevent some users from having access to them.
- Ethics: Some applications are not appropriate in the Saudi social setting like gambling and dating apps.
- Religion: Some application contains materials that are contrary or disrespectful to with the Islamic faith.
- Subscription price: Subscriptions to the telecommunication companies can be really expensive egg. Content services, data services etc.
- Culture: Some people e.g. in the countryside are not tech savvy and others only know how to use mobile devices solely for entertainment.
- Application capacity: Some apps are large in size and occupy a lot of memory, hence slowing down the phone or not allowing other useful apps to be installed.
- Security: For security reasons, App Stores do not allow some non-compliant or non-trustworthy apps to be hosted there. This sometimes means that for users is Saudi Arabia, the app may be available on Android's Google Play store, but not in Apple's App Store hence limiting access to the app.
- Application type: Some applications are designed for specific countries with specific specifications and applications, meaning they can be not relevant or tailored for Saudi users
- Application credibility and reputation: The popularity and reputation plays a huge factor to use the application in Saudi Arabia. For example, there are millions of applications to communicate with people like Line, Tango, but people still like WhatsApp.
- Health problem: The world is become as one global village which it means what happens in the USA can be happen in KSA and vice versa. Citizens are now becoming ware of the adverse affects of mobile devices through health reports

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- coming from other countries, which is resulting in some people becoming cautious and other becoming over-cautious by reducing their use.
- Privacy: Privacy is very important in Saudi culture, especially for adult females.
 With mobile devices being used for storage of the private pictures, documents, and messages, there is an ongoing concern if it gets lost or is hacked.

3.8 Saudi Electricity Company

On 05/04/2000, Saudi Electricity Company was established as a Saudi joint stock company with a paid-up capital of (41,665,938,150) Saudi Riyal. This amount was divided into (4,166,593,815) shares. This was achieved by virtue of the Council of Ministers Order (No. 169) Dated 11/08/1419H which stipulated the merger of all Saudi electricity companies in the Central, Eastern, Western, and Southern Regions in addition to the ten small companies operating north of the Kingdom as well as the other electricity operations managed by General Electricity Corporation, into a single joint stock company which is now known as the Saudi Electricity Company (Saudi Electricity Company, 2015).

The principle activity of SEC is the generation, transmission, and distribution of electricity within the Kingdom - the largest economy in the GCC. It is the leading producer of electricity and sole owner of the entire transmission and distribution network throughout the Kingdom, serving all types of consumers (Saudi Electricity Company, 2015).

4 RESEARCH METHODOLOGY

The researchers used the descriptive statistic, which is practiced to draw an exact profile of person, events or situation. We universally agree that descriptive statistics have a very clear position in management and business research. The online survey conducted is not based on a probability sample and therefore no estimate of theoretical sampling error can be calculated. The devised survey was employed to allow accumulation of a great amount of information in a highly economical way, whilst also gathering quantitative information, which is used in this research.

4.1 Data Collection

The researchers chose to use questionnaires for data collection because they are useful in descriptive statistics. Self-administered questionnaires are used to collect data and this enabled the researchers to distinguish and describe the variability in different phenomena. An Internet questionnaire were set by the researchers and sent to prospective participants to complete. Study results were extracted from Statistical Package for Social Sciences [SPSS] program to provide quantitative analyses.

Each item in the questionnaires was analysed separately and then as a group. A determination and recommendations are then provided which are derived from the findings.

4.2 Sample Collection

The method used by the researchers for the sample size was self-selective sampling. The researchers allowed for the possible participants to identify their desire to be a part of the research on one condition, that the participant must have had already downloaded SEC's Alkahraba mobile application previously and used it before. After applying this condition, the resulting sample size was 151. The questionnaires were created by using Google Documents service and were sent to the previous 151 participants through WhatsApp mobile app and email and including the questionnaire's link in the message. The questionnaires were in English.

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4.3 Statistical Procedures

Descriptive statistics were used to analysis the variables numerically by using SPSS program. The questionnaires included attribute questions like nationality, gender, age, occupation, and education.

The second part of the questionnaire was opinion questions by using Likert-style rating scale in which the respondent is asked how strongly she or he agrees or disagrees with a statement or series of statements. In the questionnaire, the Likert scale is provided with seven points and presented in a straight line as follows:

1: Completely Disagree, 2: Disagree, 3: Somewhat disagrees, 4: Neutral, 5: Somewhat agree, 6: Agree, 7: Absolutely agree.

5 SURVEY RESULTS

The analysis of this survey results was extracted from the SPSS program to provide a descriptive analysis by using tools to calculate the frequency and mean.

5.1 Demographic Profile

5.1.1 Nationality

Fig. 1. shows that 90.7% of the respondents were Saudi and 9.3% was Non-Saudi. The study revealed that, the application users were mostly Saudi. According to General Authority for Statistics in KSA (Alriyadh, 2016), the population of Saudi Arabia in 2014 was 30.8 millions, of which 20.7 million are Saudi [67.3%] and 10.1 million was Non-Saudi [32.7]. Our sample composition is similar and consistent to the country's population composition.

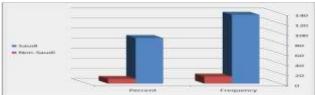


Fig. 1. The Frequency and percentage of respondents' nationality

5.1.2 Gender

Fig. 2. shows that 77.5% of the male and 22.5% of the female respondents in ALKAHRABA survey. The study revealed that, the application users were deviated toward males. According to General Authority for Statistics in KSA, (General Authority of Statistics in Saudi Arabia, 2016) Saudi male population between 15 to over 65 years in 2014 was 12.648.521 million. The female population between 15 to over 65 years was 9067040. This is mean that the male is more than female, and the results obviously find our sample being majority male.

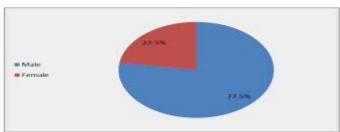


Fig. 2. The percentage of respondent's gender

5.1.3 Age

Fig. 3. shows that, the respondents age was divided into four main categories, which are between 20 to 30, between 30 to 40, between 40 to 50, and over 50. The majority of respondents fell into category no. 2 which is between 30 to 40, followed by between 20 to 30,

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then between 40 to 50, and finally over 50. According to General Authority for Statistics in KSA, (General Authority of Statistics in Saudi Arabia, 2016), the number of Saudi citizens between 15 to 19 age category were 2.555.386, between 20 to 30 were 7.552.792, between 30 to 40 were 6.014.029, between 40 to 50 are 4464289, and over 50 are 3.684.251. The total was 21.715.561. The majority of respondents in our case fell into category no. 2 which is between 30 to 40 although their numbers are less than category no. 1 which is 20 to 30.

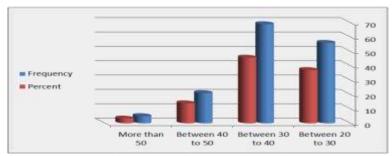


Fig. 3. The Frequency and percentage of respondents' age

5.1.4 Education

Fig. 4. shows that the respondents' education divided into four main categories, which are high school or less, bachelor degree, master degree, and PHD degree. The majority of respondent came in category no. 2 which is bachelor degree, then high school or less, followed by master degree, and finally PHD degree. According to General Authority for Statistics in KSA (General Authority of Statistics in Saudi Arabia, 2016), illiterate Saudi citizen totaled 1.155.940. Ones who could read and write were 2.103.333. Ones with primary education were 3.054.060. Ones with intermediate level were 4.730.660. Ones with secondary were 5.991.833. Ones with diploma were 916.957. Ones with bachelor degree at university were 3.489.547. Ones with master's degree were 176.996, whilst ones with PHD were 96233. The majority of respondents in our instances fell into category no. 2 which is bachelor degree; although the number in General Authority of Statistics shows that the majority number with a secondary school degree or less are more.

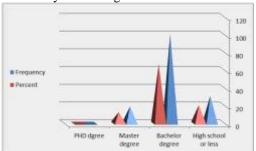


Fig. 4. The frequency and percentage of respondents' education

5.1.5 Occupation

Fig. 5. shows that, the respondent's occupation was divided into four main categories, which are student, government employee, private sector employee, and free business. The majority of respondent came in category no. 2 which is a government employee, then private sector employee, after that student, and finally free business. According to an Argam website about report from the Ministry of Civil Service shows in 2015 (Argam, 2015) that 1.26 million worked for the government sector. According to the speaker of Ministry of Labor in KSA (Almjrhnews, 2016) the total number of workers in the private sector is 11.1 million by the end of 2015. The number of Saudi citizens who were working in the private sector was 1.7 million and the number of non-Saudis who were working for the private sector is 9.4 million.

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According to Alriyadh website (Alriyadh, 2015) the number of students in KSA by the end of 2015 is 7.058.279. Unfortunately, there are no actual numbers for people who are working in free business in KSA. The results showed that most of the respondents were working as government employees, although their number is less than the people who are working in the private sector.

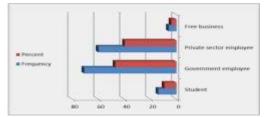


Fig. 5. The frequency and percentage of respondents' occupations

5.1.6 The Opinions & Analysis

The researcher used the Likert scale to measure the opinions in the three variables, which are:

- 1. The application design which includes in question 1 to 3
- 2. The application services which include in questions 4 to 13
- 3. The application rating/reputation which includes in questions 14 to 20
- Explanation about Likert scale measure:

To find the weighted average, this formula is applied

The time period between the scale category / the scale category numbers = weighted average We use a raster scale of 7 weights with the following meanings: 1= Completely Disagree, 2=Disagree, 3=Somewhat Disagree, 4=Neutral, 5=Somewhat Agree, 6=Agree, 7=Absolutely Agree. Our survey recorded weighted average of 6 or 0.85 for all the periods.

5.1.7 The Application Design

The mean for question no. 1 is 5.29 which means, people agreed that the application is easy to use, for the application design is simple and clear. The mean was 5.23 which means, people agreed to, and for question no. 3, people somewhat agreed about data and information on the application about services are clear. After analyzing the results of the variable the application design from the three previous questions, table. 1 indicates that the mean is 5.26 which are between 5.25 to 6.09 in the wweighted average, which means the result is agreed. This result means that the fundamental application design was good based on the responses with some scope for improvements.

Table. 1 weighted values for the application design

5.1.8 The Application Services

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Table. 2 shows weighted values for the application services and most of the respondents agreed that the application saves their time and effort because the mean was 5.40. Most respondents also agreed that they could access the company services through the app easily as indicated by the mean of 5.34. Most of respondents somewhat agreed that can find the latest news about the company through the app as the mean of 5.06 indicated. They also somewhat agreed that they don't need the company website to conduct their business based on the mean of 4.60. The respondents highlighted a negative impact when they were neutral about they don't require to get the company offices because of the app, which is indicated by the mean of 4.33.

Most of the respondents agreed that the app needs to support more languages based on the mean of 5.36. Respondents somewhat agreed that the app creates fast communications with the company based on the mean of 5.01. Most of the respondents agreed that the app helped them to remember their bills through the pushing notifications service through the application menu (mean of 5.34). They agreed that they can easily see the bills through the app because of the mean which was 5.64. Respondents somewhat agreed about the response to the complaints through the app because of the mean was 4.57.

After analyzing the results of the variable the application services, table. 2 indicates that the mean is 5.06 which is between 4.40 to 5.24 in the weighted average, then the result is somewhat agreed. This result means that the application services had somewhat agreed from most of the respondents and this is something good.

Table. 2 weighted values for the application services

Clause	Measure	Comp. Disagre	Disagre	Somewh at	Neutral	Somewh at agree	Agree	Absolut ely	Mean	Std. Deviatio	Results
Q4	Freq.	3	2	4	20	55	28	39	5.40	1.322	Agree
	%	2.0	1.3	2.6	13.2	36.4	18.5	25.8			
Q5	Freq.	5	3	7	18	43	37	38	5.34	1.470	Agree
	%	3.3	2.0	4.6	11.9	28.5	24.5	25.2			
Q6	Freq.	7	6	8	14	55	37	24	5.06	1.515	Somewhat
	%	4.6	4.0	5.3	9.3	36.4	24.5	15.9			Agree
Q7	Freq.	13	12	11	26	36	30	23	4.6	1.797	Somewhat
	%	8.6	7.9	7.3	17.2	23.8	19.9	15.2			Agree
Q8	Freq.	19	13	17	24	33	18	27	4.33	1.95	Neutral
	%	12.6	8.6	11.3	15.9	21.9	11.9	17.9			
Q9	Freq.	5	6	8	15	37	36	44	5.36	1.577	Agree
	%	3.3	4.0	5.3	9.9	24.5	23.8	29.1			
Q10	Freq.	5	7	9	17	55	39	19	5.01	1.440	Somewhat
	%	3.3	4.6	6.0	11.3	36.4	25.8	12.6			Agree
Q11	Freq.	6	2	6	20	46	28	43	5.34	1.506	Agree
	%	4.0	1.3	4.0	13.2	30.5	18.5	28.5			
Q12	Freq.	2	4	1	14	43	41	46	5.64	1.288	Agree
	%	1.3	2.6	0.7	9.3	28.5	27.2	30.5			
Q13	Freq.	9	7	6	51	40	21	17	4.57	1.512	Somewhat
	%	6.0	4.6	4.0	33.8	26.5	13.9	11.3			Agree
The applicat	Freq.	74	62	77	219	443	315	320	<mark>5.06</mark>	1.172	Somewhat Agree
ion service	%	4.9	4.09	5.11	14.5	29.3	20.8	21.2			Agree

5.1.9 The Application Rating

Table. 3 shows weighted values for the application rating/popularity/reputation and most of the respondents somewhat agreed that the application can provide a competitive advantage to the company based on the mean of 5.05. They are somewhat agreed and satisfied about the app services rating based on the mean of 5.01.

Respondents agreed that the application needs more development based on the mean of 5.42. Respondents somewhat agreed that the app is important for them based on the mean of 5.24. Respondents agreed that they will advise their friends and relatives to download the app as suggested by the mean of 5.52.

A somewhat negative response was received when people were asked if they will buy the app if its not free, to which a neutral response was received as the mean of 3.77 suggests. Respondents agreed that they like to use the app in general as indicated by the mean of 5.36.

After analyzing the results of the application rating/reputation variable, table. 3 indicates that the mean is 5.06 which is between 4.40 to 5.24 in the weighted average. This is consistent with what was expected.

	Clause	Measure	Comp. Disagree	Disagree	Somewha t disagree	Neutral	Somewha t agree	Agree	Absolutel y Agree	Mean	Std. Deviation	Results
	Q14	Freq.	5	5	8	32	43	26	32	5.05	1.511	Somewhat Agree
		%	3.3	3.3	5.3	21.2	28.5	17.2	21.2			
Q1	Q15	Freq.	5	7	6	22	58	30	23	5.01	1.440	Somewhat Agree
		%	3.3	4.6	4.0	14.6	38.4	19.9	15.2			
Q1	Q16	Freq.	4	5	1	22	41	37	41	5.42	1.435	Agree
		%	2.6	3.3	0.7	14.6	27.2	24.5	27.2			
	Q17	Freq.	2	6	4	30	39	40	30	5.24	1.375	Somewhat Agree
		%	1.3	4.0	2.6	19.9	25.8	26.5	19.9			
	Q18	Freq.	3	5	2	13	50	33	45	5.52	1.380	Agree
		%	2.0	3.3	1.3	8.6	33.1	21.9	29.8			
	Q19	Freq.	33	13	14	36	21	19	15	3.77	1.978	Neutral
		%	21.9	8.6	9.3	23.8	13.9	12.6	9.9			
	Q20	Freq.	4	5	3	15	49	43	32	5.36	1.383	Agree
		%	2.6	3.3	2.0	9.9	32.5	28.5	21.2			
	The	Freq.	56	46	38	170	301	228	218	<mark>5.05</mark>	1.109	Somewhat
	applicatio n	%	5.28	4.34	3.6	16.0	28.4	21.5	20.6			Agree
	reputatio											
	n											

Table. 3 weighted values for the application rating/reputation

6 RESEARCH ANALYSIS

6.1 Some Remarks

The study results showed that most of the respondents were Saudis, which is hardly surprising as the study took place in the Kingdom of Saudi Arabia, in Makkah city. According to General Authority for Statistics, the number of Saudi citizens is double of Non-Saudis, so the result is consistent. As for the gender, the survey results indicated that most of the respondents were male and this is something expected, as the number of males in KSA are more than females. Furthermore it is known that in Saudi culture, males are responsible

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for providing for their families. One of entailed responsibilities is monitoring and paying of bills which the males would be inclined to do through the available app, which females would find useless. The study results also showed that most of the respondents' age was between 30 to 40, and this was a surprise because the age between 20 to 30 is more than 30 to 40 according to General Authority for Statistics in KSA. This is because of most of the young Saudis are still living with their parents at this stage, meaning they don't have the need to concern themselves with the issue of bills etc. given their minimal responsibilities and bachelor status. People in the age of 30 to 40 had most interest in hearing about and using the new technology. They were also the ones in the position and responsibility to pay the bills whilst being able to also monitor usage and due dates. The survey result indicated that most of the respondents with had bachelor degrees, although their numbers are few according to General Authority for Statistics in KSA. A lot of them though had interest in using something new. Moreover most of the Saudi citizens progress the bachelor degree as a means to finding a comfortable job with higher pay. In addition, Saudi government encourages the citizens to complete the education by providing incentives such as scholarships and entry into colleges. In addition, the survey results indicated that most of the respondents' were working as government employees which was an interesting finding given the actual number of citizens who are working for the government is less than citizens working in the private sector. This could be explained by the fact that government employees have more free time to research and experiment with mobile apps. The result of the application design was consistent with the research, which indicated that the application design is clear and simple and most of the users can utilize it easily and can generate the sufficient information through it. The application design did not deter the application use, which is a good outcome in the current time and state. The result of the application services was somewhat consistent, suggesting that the application services are beneficial without being excellent. Users still have doubts and suspicion for the application services, or they see it as an insufficient medium of communication with the company. The company must give the app service some attention given none of the received responses suggested absolute agreement. It is imperative that services provided through the app by a service-oriented company like SEC must make a strong impact on the customer.

The result of the application reputation was somewhat consistent and it was implied that the application reputation is good, but not excellent. The company must give considerable attention to the usability/features/popularity/reputation of the application because it is considered as the main factor for the people to download it and creates a huge channel to communicate with them.

6.2 Limitations

The limitations of this research were that is focused on the design, services, and ratings/reputation of the specific Alkahraba app, and these areas can be differ from app to app depending on the design, sector and clientele. The research focused on the people who lived in the Makkah city only and the opinions can be different in other cities and the sample size was small, so the results cannot be fully generalized. Therefore, future research needs to be in all the cities of the Kingdom with bigger samples.

7 CONCLUSIONS

SEC embraced the mobile channel by developing the Alkahraba mobile app service. Undoubtedly it was a good decision given that it is one of largest companies in the Middle East with powerful economic presence, and customer expectations would be high. The mobile application design was simple and clear, with no complaints received. The application allowed the company to recognize the demands of the customers and deal with the complaints and demands promptly. The app provides the necessary information and news to the customers, whilst saving them time and helping SEC achieve customer satisfaction. The

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study did highlight that there are improvements yet to be made, particularly in areas of application services and application rating/popularity/reputation through strong app development complemented by strong marketing. The marketing needs to convince people of the efficiencies and features the app offers and how it can make the lives of customers easier. The company should not forget its female clientele even if they are under-represented as the demographics may change. The application may be better served if caters for more languages, as there are numerous people of various nationalities residing in KSA and not all can speak or read Arabic or English. The application should continue to be free without any fees, as paying puts a barrier to its usage. The app has not been exposed to any security and privacy vulnerabilities thus far but if the company adds new features like paying the bills online through the app, it must increase the security and privacy. The company may add some health advice to the users about over-usage when they are using the app because most of them have awareness about these issues. The company must give the user the ability to customise the app to their liking for usability purposes like changing the color or the boldness of writing. Through the research we can find that the application design, services, and rating/reputation have a main role for the people to use the apps, and they can affect the apps future in any company or organization.

SEC should build on their mobile app success and continue to keep up with technological advancements and assess the needs of its customers by continually engaging with them and subsequently release ongoing updates.

7.1 Recommendations to Users

Following are some recommendations for mobile device/app users, which can enhance the experience of using these applications:

Security and Privacy issue:

- Always lock your phone with a password, as this is the simplest means to protect the
 mobile device. The mobile device will then be inoperable without entering the
 passcode. Ensure the settings are such that it always locks the screen automatically
 within a short period.
- 2. Use the "locate your device" feature, which allows you to track or deactivate your mobile device if lost or stolen. This is very simple to activate. Other features can be provided by this service, such as permanently locking the device or erasing the data.
- 3. Take good care of your device in public places
- 4. Always keep your phone updated with the latest software updates as they contain privacy and security features from the manufacturer.
- 5. Manage the location services because of most of the apps now request your location like BB, Twitter, or Facebook. In most situations you can control the location setting for every app separately, only switch on the location service when necessary.
- Download only trusted apps provided by the device's app store and avoid unknown apps from an unknown market, which may contain malware and security vulnerabilities.
- 7. Back up your data utilising a top-rated back up service, in the case you had to wipe out important information if your mobile device is stolen.
- 8. Install security software as your mobile device is like the computer.

7.1.1 Cost Issue

There are a wide variety of smartphones now in the market with competitive prices that include the features of expensive phone. They may vary in design, processor speeds and storage, but they will include the basic features of the smartphone, which will be sufficient

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for the customers if they cannot purchase the expensive one. For the apps, there are numerous options that are free. For most pay apps, there are free versions that contain the basic characteristics, which should be enough for the common users. For lower phone bills, use Wi-Fi services in the trusted places whenever it is available and shop around for competitive deals with different telecommunications providers. Try to use some apps like Tango to call different people in different countries without paying anything.

7.1.2 Language issue

This problem has become increasing easy to resolve as most of the mobile devices and the hosted apps support different languages. Moreover there are transition apps available to make life simpler.

7.1.3 Application Capacity

In most mobile devices, users now have the ability to install additional memory to allow extra data storage without slowing the phone down. Alternatively, there are cloud services like iCloud, Google Drive and DropBox.

7.1.4 Ethics, Culture, and Religion Issue

Some of these issues have no enforceable solutions, due to restrictions within Islam. Mobile devices open up users to immoral uses like gambling so users must be educated about these pitfalls and vulnerabilities.

7.1.5 Network Coverage

The network coverage has improved nowadays thanks to a competitive market that features three large telecommunications providers that cover the whole country

7.1.6 Health Issues:

We have to advise people that they must not over-expose themselves to these devices as they can cause issues such as with eyesight loss, hands/tendons stress, and weigh gain due to not doing physical activities instead.

7.2 Implications

This study provides the main guidelines for organizations that want to launch a successful mobile application. Organizations must give due attention to the app design, services, and usability/rating/reputation. The organization must consider application design as critical as app services and the success/reputation depend on it. When the design is simple yet highly functional, the users of the app will duly provide their custom leading to the popularity and wider take-up of the app. Moreover, this study should form a good basis for other research in this area.

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