Assessing Customer Satisfaction of m-banking in Oman Using SERVQUAL Model

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Abstract— **Mobile banking (m-banking) is a technology trend that is leveraged to become very important channel for banks to compete and deliver their services to customers. Knowing how to enhance this service is going to return positively on the earnings of the bank. This research paper studies the customer satisfaction while using mobile banking in Oman based on SERVQUAL model. The five factors of SERVQUAl were studied and it was reviled that reliability and tangibility had the strongest positive relation with customer satisfaction in positive way. Furthermore, assurance and responsiveness has moderate positive relationship. However, empathy had a very weak relation with customer satisfaction. The results will help banks to precisely study the factors that they need to improve e-baking service satisfaction.**

Keywords—mobile banking; Oman bank; SERVQUAL; m-Satisfaction; eBankQual

I. INTRODUCTION

Banks provide financial service like lending money to customers, paying bills, transfer money to other customers, and provide debit or credit cards to be used at shops or gas stations, and many others [4]. Some of these services occur at banks properties e.g. branches, head offices, or ATMs, while others can happen at third party sides like shops, restaurants, and health centers by using credit cards. Electronic services (E-services) evolvement made many corporates to rethink in how they can do their businesses. E-service is the process of providing traditional services over the internet. It is very important for banks to cope with the changes in the technology and utilize the internet to do more. Banks realize that coping with such change guarantee them a place in the challenge with other banks and it helps them to be profitable and successful. It also assists them to improve service performance by reducing waiting time which leads to customer's satisfaction [6]. Therefore, banks started to bring the e-service into their banking services.

On the other hand, electronic banking (E-banking) is the process of providing traditional banking services over the internet. The main driver for going with e-banking is to cut costs of delivering services to the customers. It also helps in reducing the cost of setting up new physical branches [7]. Therefore, investing in understanding what makes customers to use this new reshaped service will return positive earnings to the bank. Study revealed that lack of computer knowledge can be a hinder to the use of the electronic services, while security, privacy and increased level of awareness can affect the acceptance of the e-services by the bank clients [7].After the success of e-banking and the spread of the use of smart phones, corporate started to go with even better approach to deliver their services on mobile devices. Mobile Banking (m-banking) is providing the banking services through applications that are designed to work on smartphones. This approach allows the service of the bank to be in the hand of the customer regardless of customer location or even bank normal working hours.

Furthermore, satisfaction is the foundation in building relationship with customers [5]. Therefore, there is an increased focus on customer satisfaction in the last two decades [5]. The need of building mobile services customers' satisfaction is important as much as e-satisfaction. Mobile satisfaction (m-satisfaction) is the satisfaction that customers get from using mobile services through mobile applications. These mobile applications are developed for specific platforms e.g. Android, Windows Phone, or iOS. Smart phones are becoming popular option for customers – over PCs - to interact with service providers because they are becoming very powerful, and small that you can take with you anywhere-anytime [9]. Customer satisfaction is very crucial for the business as it indicates the points that they need to invest on and take care about [3]. Many companies decided to go with mobile to lower operation cost and provide better services to customers [2]. Therefore, evaluating service quality of the mobile banking services is very important for the banks in Oman. It will identify what are the elements of having high quality service and hence gain a competitive advantage in investing in them.

The remaining of the paper is divided as follows, section 2 presents a literature review on the mobile banking and what impacted the satisfactions most. Sections 3 and 4 will discuss the hypothesis and the methodology used to conduct this

research. Section 5, will discuss and analyze the findings of the data collected and studied. A conclusion and recommendation are discussed in section 6.

II. LITERATURE REVIEW

Advancing in technologies to bring banking services at hand is becoming more sophisticated. Having specific, highly-related, and strong-impacting satisfaction factors will maximize the investment in e-services (mobile banking, ATM, Internet Banking, etc…) for banking sector. Investing in the right area to satisfy m-banking customers should be the main objective of business. Therefore, knowing what to address first and invest in complementing the right strategy of customer retention. The right tool needs to be selected carefully to help in identifying such information. A number of research studies have adopted different models to satisfy the needs of bank into m-banking and eventually satisfy customers.

As m-banking is a service, having this service at its highest quality standards will boost customer satisfaction. There are many models that are proposed and available for studying. In this paper the authors used SERQUAL model [12]. SERVQUAL is used in different domain such as banks and hospitals to measure the service quality factors [13]. It initially started with 10 determinants and in 1990s they have been narrowed down to five and used RATER as acronym [14]. Studies showed that better service quality has significant impact on customer satisfactions [20]. SERVQUAL tool was proved by its reliability in different fields and hence it will be used in this research [17]. Some of the studies used in m-banking to improve customer satisfaction using SERVQUAL were carried out by [10]. This study concluded positive relationship between customer satisfaction and four factors; tangibles, responsiveness, reliability and empathy. On the other hand, assurance showed no relation with customer satisfaction. SERVQUAL is very generic model that is not specific only to mobile banking, but services in general. Such study would identify broad factors or variables that impact customer satisfaction. Another study revealed that tangibles, reliability, responsiveness and assurance factors have strong positive relation with customer satisfaction [1]. The empathy had insignificant relation with making customer satisfied. These findings concluded with some recommendations like more focus on visual design, security level, reliable, prompt at solving customers issues.

Another study compared two types of banks in Pakistan which are commercial conventional banks and Islamic banks [18]. This study indicated that tangibles and responsiveness impact positively on service quality in the studied commercial banks while assurance resulted in negative effect on service quality. On the other hands, tangibles, reliability and assurance had very strong impact in positively enhancing the service quality for the Islamic banks. Unlike the commercial banks, Islamic bank responsiveness and also empathy had negative impact on the service quality. There were more studies in the region as such in Iran [15,21]

One research plugged different approach on its study of customer satisfactions in e-banking area. The reality of different models to measure the satisfaction of e-services exists. However, few who were very specific to acquire well-related model to e-banking services. The study used eBankQual scale to retest the variables reliability and validity [11]. The results showed that service availability, the fulfilment of the e-service, accuracy, efficiency, security, system's response, ease of use, convenient use, cost effective, supportable, compensation, contact and perceived value are important factors of satisfaction in e-banking area. Although, this test was not to prove any relationships, it emphasized on the adoption of the eBankQual scale to test e-banking.

eBankQual scale is recent and still being developed and retested to strengthen its factors into the customer satisfactions in e-banking. Having this model in the current study will not serve the expected outcomes and objectives. Therefore, this study will acquire SERVQUAL to explore the factors done in previous study on the banks [10], and apply it in Oman in mobile banking.

The current study will be unique in Oman as studying the factors impacting customer satisfactions for mobile banking services. The studies that have been done so far don't address this area in Oman. This study will explore the SERVQUAL model in mobile banking specifically in Oman. The outcomes will be very important for the Omani banks studied to consider what factors they must consider to meet or increase m-satisfaction. Increasing m-satisfaction will definitely contribute a lot in generating more customer base and more revenue that every organization planned its strategy to operate as business model.

III. CONCEPTUAL MODEL AND HYPOTHESIS

This framework model will meet the objective of the research as it will be used to find out what are these factors that have very strong relation with m-satisfaction in Oman. The model has been used in many researches to help them to evaluate such relationship of service quality [1,10]. This model consists of five factors as shown in Figure 1. The factors are tangibles, reliability, responsiveness, assurance, and empathy.
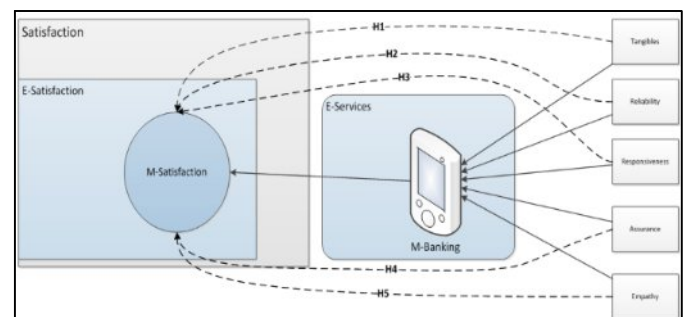

Fig. 1. Conceptual framework

This model has been used in this research with some hypotheses. These hypotheses were established to find the relation between each factor and m-satisfaction.

H1. Tangibles have positive impact on m-satisfaction.

Tangibles are the physical assets and facilities, equipment, personnel, and communication materials. They are things that are visible to customer and can touch or interact with like technology equipment, lightings, chairs, and the offices [19]. However, looking into how this is represented in mobile banking will be as the appearance of the mobile application interface, how information on the interface is communicated, and if the interface is attracting and intuitive [1].

H2. Reliability has positive impact on m-satisfaction.

Reliability is ability to deliver the promised service in an accurate way. One study showed that banks need to build well-trained staff to be able to handle customers' inquiries [15]. Also, management of information systems must be utilized to maximize the knowledge and experience of the staff and hence better experience with customer.

H3. Responsiveness has positive impact on m-satisfaction.

Responsiveness dimension is the willingness of helping customer and provide quick service. A study found and suggested that banking staff needs to be motivated in different aspects in order to have the spirit to better response to customers [15]. It has also found that accessibility of staff to job description and their responsibilities can improve with information while customer interacting with them. In mobile banking regards, responsiveness is how well the employee can answer the customer queries on the service and how easy and quick they can access the service [1].

H4. Assurance has positive impact on m-satisfaction.

Assurance is the knowledge and courtesy of personnel and their ability to convey/build trust and confidence. Assurance will be the ability of the employee to give reliable answers and maintain the privacy and security of the information as well as making sure that there is no issue in the mobile banking service [1,16]. A researcher suggested in his findings that banks need to up skill their staff knowledge by providing educational sessions [15]. This knowledge building approach needs to focus on most important issues that have been recently known, some rules and regulations.

H5. Empathy has positive impact on m-satisfaction.

Empathy is providing caring and attention to customer individually. The empathy dimension is based on giving special consideration to the customer on using the mobile service and making exceptional treatment based on customer needs and convenience [1].

IV. METHODOLOGY

The methodology of study was based on recent researches on customer satisfactions and SERVQUAL model. Those researches were journal articles while others were online resources from researchers who studied customer satisfactions and banking services [1,5,10,11]. Most of them were evaluating SERVQUAL factors on their local banks. It highlights main findings of these studies from factors wise perspectives and how these factors relate to customer satisfactions. The review narrowed down from banking services and e-services into mobile banking and m-satisfaction.

An online survey was design focusing on different group of users and surveyed them based on the five factors of the SERVQUAL which are tangibles, responsiveness, reliability, assurance, and empathy. Also, the surveying mechanism tried to find demographic information of the users like ages, education, and gender. The demographic profiles of respondents were less critical comparing to the five factors. However, these demographics can help to find also trends among the users who use the m-banking.

There are almost no studies done previously on m-banking in Oman. Therefore, there was a need to conduct this research and adapting SERVQUAL model to evaluate the satisfaction on Omani banks. Also, the strength of relation between service quality and customer satisfaction made such model useful in such research [20]. This study is considered as an extension to previous studies on m-banking but in different countries [1,10]. The collected data will be exported from the surveying platform and brought to analysis stage. This stage will find the trends and relationship between different variables those being studied.

V. FINDINGS

The survey has been categorized into the five factors as set of questions ranged from 1 as strongly disagree to 5 as strongly agree. Out of 120 surveys sent to users of commercial and Islamic banking in Oman 91 were completed and the data set has been collected and tabulated for the analysis. The analysis done on the data collected was to identify each factor of SERVQUAL trends in correspondence to the satisfaction. Therefore, correlation coefficient has been calculated for each factor against the satisfaction. Correlation coefficient is an indication of relation strength between two variables. Using such indicator assisted in evaluating the hypotheses and analyzing the results to support each hypothesis. Table 1 is showing the summary of the results:

TABLE I. FINDINGS SUMMARY

No.	Factors Correlation Coefficient	
	Factors	*Correlation Coefficient*
1	Tangibles	0.517
2	Reliability	0.572
3	Responsiveness	0.336
4	Assurance	0.474
5	Empathy	0.258

The research found that reliability (0.572) and tangibles (0.517) are the strongest factors that have positive relation with m-satisfaction. This identifies that the customer who are happy with m-banking, experienced good stability of the service and can depend on. Also, it showed that the interface design of the service and ease of use contributes in the satisfaction. The results are supporting what has been found in previous researches on reliability and tangibles as having positive relationship with satisfaction [1,10]. However, the study done in Iran for Mobile banking showed that there is no relation between assurance and m-satisfaction [10]. On the other hand,

having the m-banking transactions assured and secured efficiently will build the trust of customers and lead to satisfaction as this current study showed. The results found that assurance (0.474) has moderate relationship to increase the satisfaction. The same finding was addressed in a research in Pakistan [1] for internet banking.

Responsiveness (0.336) and empathy (0.258) had the least positive relation with m-satisfaction as moderate and weak respectively. Increasing the speed and service level support of bank employee can assist in increasing the responsiveness of the service. Consequently, this will lead to the satisfaction to some extent, whereas the emotional attachment and special treatment of the customer might have weak impact on increasing the satisfaction. Although speed of m-banking and how promptly the employees provide assistants appear not a very strong factors to increase the customer satisfaction, this can be due to the awareness of the users. The surveyed users were mostly aged between 24 and 40 and also most of users were holding bachelor or master degrees. This can indicate that the level of awareness of these respondents is high in technology. Most of the new generation now is already technology self-aware. Many of them know how to use the technology and will need less time to waste on calling for help.

At the end, these collected data provided holistic picture of what are the impact of the factors and what type of users who were involved. The results will help definitely to provide the same picture but very precise into the factors that banks need to look at in Oman. These findings have prioritized these factors from the most important to the least. Therefore, it will be easier to initiate some investments focused on most value returned from the factors of service quality.

VI. CONCLUSION

The study identified positive impacts of the tangibles, reliability, responsiveness, assurance and empathy on m-satisfaction. Therefore, Bank in Oman needs to invest in tangibles and reliability of the m-banking as first priority as they are the most impacting factors on customer satisfaction (m-satisfaction). Assurance and responsiveness can be the next planned investments that will impact the m-satisfaction positively. This research looked in depth in the factors that impacting the mobile banking customers' satisfactions in Oman. The output of this research is very important to both bankers and researchers.

On the other hand, researchers can take such findings forward with more specialized factors. There will be a need to define very precise factors related only to m-banking. Security can be one of concerns that need to be more investigated in Oman as it was tested in different researches [8,11].

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