

Mobile Banking as Technology Adoption and Challenges

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Abstract- Mobile banking system was innovated to give the customers an easy access to all sorts of banking operations. It becomes cumbersome for the people of Oman Sultanate to physically visit the Muscat Bank for any kind of banking procedures. Therefore, initiative has been undertaken by the CEO and the IT department of this bank to initialize the mobile banking system. The key objectives behind sure a venture would be varied. With this mobile banking system, it will allow the account holders of the bank to have an easy avail of mobile computing, mobile transactions and accounting information. The customers would not have to physically visit the bank to avail these services. They can proceed with their respective operations sitting at their comfortable places anytime anywhere at it will be a round the clock service.

Indexed Terms- Adoption, Challenge, Mobile, Banking, Operations.

I. INTRODUCTION

In the modern competitive market of highly globalized business world, the procurement of information technology can provide sustainable competitive advantage to the business organisations. Bank Muscat is the leading financial service provider of Oman with sheer reliability and trustworthiness among the customers. The globalised market has paved the way for mobile banking services for providing convenience to the customers. The bank CEO has proposed the service of mobile banking for persuading new customers with quick transactions and administration of the banking procedure. This assignment will deal with the aim of the mobile banking process along with the problem statement for Muscat Bank in addition with vivid recommendations to implement the system.

II. AIMS AND PURPOSE OF M-BANKING SYSTEM

The aspect of m-banking aims for the provision of sheer ease and convenience to the customers in banking operations. It is often very tough for the people to visit bank in daily busy schedule and hence the bank took this initiative for initializing the mobile banking system. There are many objectives of this venture as it can allow the account holders of the Bank Muscat to easily use the transactions and account computing through mobile internet process (Chaouali *et al.* 2017). The mobile banking is aimed to provide convenience to customers to allow them to make banking operations suiting comfortable in their houses beyond the regular banking hours.

III. PROBLEM STATEMENT

Bank Muscat uses to do the baking operations through manual system as the account holders and the customers ought to travel and visit the banking outlets to avail the services of Bank Muscat. In the advent of insurgency in Muscat, it became very tough for the customers to avail the banking services anymore whereas it also caused problem for the bank to maintain liquidity. The manual operations with the ledger books and the accounts involve chances of human error and cumbersome aspects of security (Hanafizadeh *et al.* 2014). The bank also had to invest huge amount on the staff training for the manual banking operation. Hence, the manual operation led errors decreased the trust of the bank among customers and thus the bank ought to make mobile banking fruitful to regain the market strength.

IV. RECOMMENDATIONS ABOUT PROGRAMMING LANGUAGE

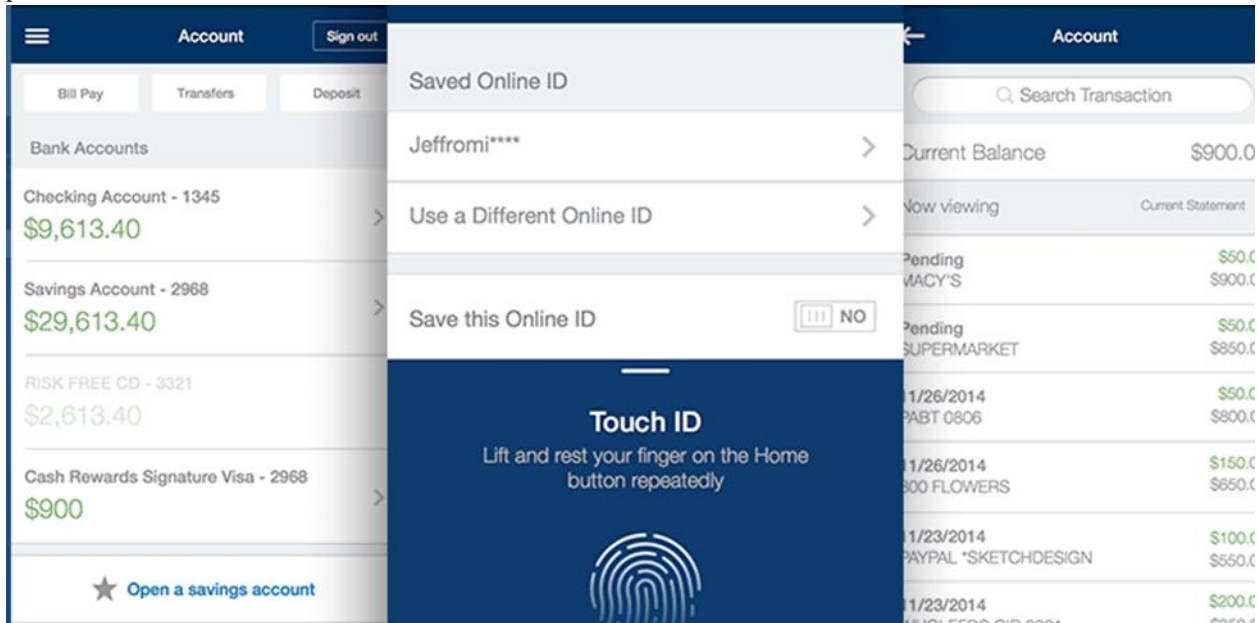
The Bank Muscat ought to use Java for the strong mobile banking system as Java is also the easiest programming language for using without glitches. In the market of android, it can still provide the most

convenient experience for mobile banking with proper software development. The Java can help in procuring the website interface and the mobile application of bank Muscat. The application will be made with Java with a sustainable interface of homepage that can direct the users to different pages of different services easily. The other pages should be the transactions, cards and loans, products and services, account information, customer care or contact us (Luarn *et al.* 2015). The account information page will have to provide detail account of the transactions and balance

whereas the transactions page will help in depositing and withdrawing money from the account. Apart from that, it needs adequate internal memory to run properly with visual studio emulators and SDK version to support the mobile application.

i) Sample layout design

The design layout ought to be focused to provide easiness to users for using and accessing with fingerprint scanner for better accessibility.



This homepage will bear customer ID and online ID along with a password to access to the account. The fingerprint option is for security and back up access to lock the identity of customer. The layout should not be complex to allow every user to avail the mobile banking services whereas the directing method from the layout interface ought to be easy and smooth (Sharma *et al.* 2017). The visual look of the interface layout can be furnished with Bank Muscat logo for better appearance.

ii) Security process

The internet based mobile banking application ought to be secured with the anti-virus system for preventing hack or data theft. The Bank Muscat impose sheer priority of the security of mobile banking as they tend to use Zed Attack Proxy to prevent the accounts from external threats of malware, adware or virus infiltration that can steal or manipulate data to make

unauthorised financial transaction (Zhou *et al.* 2010). The encryption tool is also used for encompassing a tight security for the application based on cloud network for preventing any security threat.

V. DISCUSSION

i) Role of IT and m-banking

The aspect of mobile banking is a notable innovation of the IT industry through the period of inception. The banking industry too is benefitted with IT innovations and development irrespective of public or private sectors of Oman. All the services of transactions, propagation of schemes or promotion of new products are done through online platform nowadays. This allows the customers to avail the service easily and the organisations to obtain the feedbacks easily (Wang *et al.* 2010). The Bank Muscat holds 50% market share whereas the enhancement of availability of services through mobile banking will help in availing more

market share. The m-banking is cheaper and easier for customers as it saves time by providing service anytime of the day from remote locations.

ii) Possible effects of mobile banking

The mobile banking is a popular service among customers by providing them with ease to avail the financial services. It is always helpful for customers to make transactions from home without visiting the bank in the busy lifestyle. Moreover, all kind of banks irrespective of their operating income are using mobile banking to provide convenient satisfaction to the customers (Koshksaray *et al.* 2014). The mobile banking can hence enhance the customer satisfaction level and thus can lead Bank Muscat to get customer loyalty for availing long term benefits in the business.

CONCLUSION

This report has provided with sheer account of the mobile banking operations of Bank Muscat. The need for the adaptation of mobile banking is described along with purpose of the m-banking service. The Java programming language can be used to make the m-banking application as that can provide the bank and customers with sheer enhancement and easiness of services. The application ought to be secured properly as the mobile banking can have huge impact on customer satisfaction and customer loyalty to help Bank Muscat to improve their market share in Oman.

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