

# The Effect of Using M-Banking System Approach in Small and Medium Enterprises

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**Abstract-** 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 globalized 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.

**Indexed Terms-** Mobile banking, SMEs, Approach, Effect.

## I. INTRODUCTION

Muscat Bank is the most popular nationalized banks in Oman. Majority of the Omanis hold their accounts in this bank and get satiable service from the banking professionals. It has been successful in building a strong reliability among the natives. However, the operations are manually performed. In this age of digitalization mobile banking provides a more advanced and comfortable service to bank customers (Sharma, et al. 2017.). The CEO has proposed the requirement of m-banking system to ease the customer's banking operations. Mobile banking is the latest application technology that helps in conducting transactions, retrieving account information, and administering banking procedures through mobile phones.

## II. RESEARCH OBJECTIVE OF M-BANKING SYSTEM

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 such 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 as it will be a round the clock service.

## III. RESEARCH PROBLEM

Despite being, the pioneer bank among the Omanis, Muscat Bank has all this while followed the manual system for their banking functioning. This account holders and customers had to literally travel to the bank branches to avail the accounting services. During times of insurgency, it became difficult for these customers to carry on with their banking activities. Not only were these three other problems faced by the banking professionals themselves because of this manual banking system. A manual maintenance of accounts and the ledger books was cumbersome and had human errors. This created dearth of security. There were huge training and staff maintenance costs incurred by the bank. All these factors lessen the customer trust, which in turn results in ill-reputation of the bank. That is why in order to sustain their goodwill it is preferable for Muscat Bank to implement the mobile banking system.

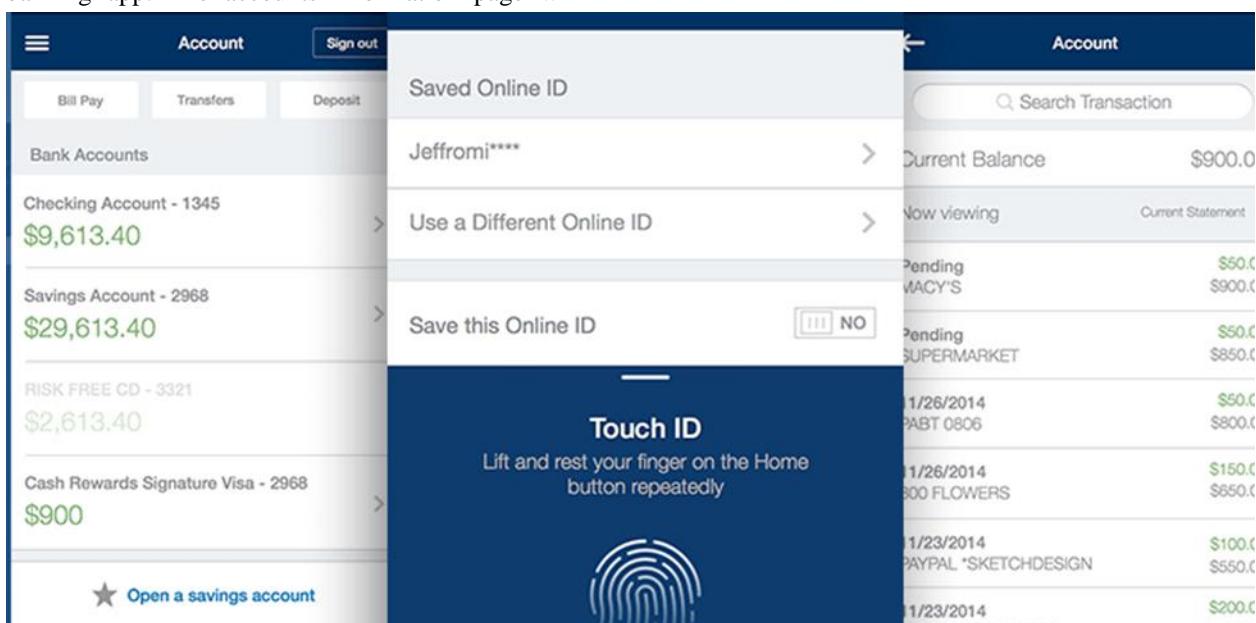
#### IV. PROGRAMMING LANGUAGE AND CORE BANKING FUNCTIONS

In order to develop a strong mobile banking application system, the best programming language that recommended is Java. Java is possibly the most popular software programming languages. Its capability of functioning on any platform inclusive if all-famous android makes it the favorite programming language for the software developers. Java is the best language for creating mobile applications of all types. This language will help in creating a specialized mobile banking application for Muscat Bank. It can also help create a website for the bank known as [www.muscatbank.com](http://www.muscatbank.com). This app will have a home page and clicking on this home page will diversify into several other pages namely accounts information, transactions, cards and loans, customer care, products and services and contact us. These are some of the pages that will be included in the Muscat mobile banking app. The accounts information page will

provide an in-depth information about the accounts details of the customer. The transaction page will help the customers conduct transactions through this app; these business dealings can include purchase of any product or transfer of money. The cards and loans page provides information about the debit and credit card and the latest loan offers from the bank for interested customers. Similarly, the remaining pages cater to the mentioned services respectively.

- Sample layout design and features

Muscat Bank should enlist a secured mobile banking app to assure a robust security system to the customers. Apart from using the best software programming language and security tools, emphasis should be given on the design layout. The design layout should be secured at the same legible for the customers. It should be specifically customer centric and the respective customer should only have the access. The sample layout design can be something like this:



There has to be home page, which will have an online ID or a customer ID column and a required password. For better security reasons the customers will have to use the fingerprint option which will customized to those particular customers. Passwords can be hacked sometimes but fingerprints can be. It provides a tighter and intact security. The fingerprint option should be pressed several times to ensure and lock the customer's identity. Once the cust ID is securely fed

in then only it will provide access to the other pages. The first page being the accounts details page.

- Security measures

Since mobile banking is an internet-based operation that why there are possibilities of such applications being hacked. It may also be attacked by external virus. Therefore, it paramount to install an efficient and strong security tool to overcome such difficulties.

Especially for Muscat Bank the security of customers is of utmost priority. Dealing in the most delicate sector that is finance it is predominant for the bank to have a tight security service. Therefore, the security tool utilized by the Muscat Bank IT department is Zed Attack Proxy. Zed Attack Proxy is an uncomplicated security tool that is designed to test and protect mobile security. With its innate features, it provides a secured access and operation of the banking app.

#### V. BANKING SECTORS IN OMAN SULTANATE

Mobile banking is one of the significant and noteworthy innovations of IT industry. With the inception and modernization of IT services new techniques and innovations are creating waves in the commercial sector. Every business organization is being benefited from the latest IT developments. Varying from business organizations to government offices in Oman are greatly served by IT. Large business transactions, propagating government schemes, promoting new products and services have become online nowadays. This has an en masse reach and prompt feedback from probable customers. Muscat Bank being a vintage bank in Oman serves more than 50% of the total Omani population (Hanafizadeh, *et al.* 2014.). An initiation of mobile banking application has given many benefits to the customers. According to the customers, mobile banking is easy, compatible, and cheaper. Business transactions are rapid and convenient. It saves a lot of time and gives a comfort zone to the customers. Mobile banking provides 24 hours service that why the customers can access the banking website at any point of time according to their convenience.

#### VI. IMPACT OF MOBILE BANKING ON CUSTOMERS

Mobile banking is undoubtedly a fond service among the bank customers. It has made life easy for the customers who previously had to visit physically to the bank branches for any kind of banking activities. Survey has proved that mobile banking has gained popularity with time. It has made its way into the life of people off late. Every bank, small, medium or big has implemented this system of mobile banking to provide a more refined service to the customers.

Muscat Bank has a large customer base (Chaouali, Souiden and Ladhari, R., 2017). These customers are vintage and have accounts for many years. Therefore, it is the bank's responsibility to ensure satisfactory service in retaining old customers and attracting new ones. A specialized and advanced mobile banking application can indeed simplify the banking activities for these customers. This innovative service can assure a more convenient and cost-effective way of banking activity. Finances and transactions are easily manageable. It is designed in such a way so as to adjust to the lifestyle of people. With its strong features, it has left a strong positive impact on the customers.

#### CONCLUSION

This report aimed at the onset and impact of mobile banking system. It studies the details of this latest internet innovation that has become a sensation among the people. This report was designed to highlight on the key features of mobile banking including the features, advantages and objectives. Mobile banking has become a popular operation in every nation. This report especially emphasizes on its initiation in Muscat Bank. Muscat Bank being one of the upstream nationalized in Oman Sultanate is a reliable bank for its existing customers. They have a challenge of manually conducting the banking operations. The customers as well; as the banking professionals face problems due to this. This gives a reason for the CEO of the bank Mr. Khalid to come up with idea of initiate mobile banking instead of manual banking. This report analyses on the different strategies undertaken by the IT department to design a customer-oriented mobile banking app. It further describes the aims, virtues and vices of this app. It also informs about the security tools and the programming language utilized for a secured banking access.

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