

# Virtual Reality adoption during Covid-19 in Sultanate of Oman: A Study

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## Abstract

Banking services provided to companies and it include stored value cards, commercial credit cards and treasury management arrangements. This research would influence the interest of many individuals specially during covid-19 to adopt with digital banking services. This study also explores the ways to improves the digital services through Covid-19 that reach the goals framed in the study to evaluate the effectiveness of digital banking services during the Pandemic, to propose suitable recommendation on the finding of the study, to measure the reliability and quality in adoption of digital banking service during the pandemic and to assess the usage of digital banking in adoption of digital banking service during the pandemic. The study focusses on identifying the important types of banking services provided by banks, analyzing the application of digital banking services provided during Covid-19, and evaluate the effectiveness of digital banking services during the pandemic. It also found positive results on the topic of the study according to the questionnaire that was submitted to identify the effectiveness of the application and activation of digital banking services during Covid-19 in the Sultanate. The objectives framed were positively answered in most of the questions and the most effective questions were chosen to answer the research topic. Ease of use of banking applications, speed of processing transfers, uncomplicated use of transfers, and ease of registration in banking applications through mobile phone. It is recommended that reliance on digital banking applications helps complete transactions in a shorter time, using digital banking apps during the pandemic helps reduce the risk of getting out and catching Covid-19, digital banking services must be developed to effectively cover all banks within the Sultanate during the pandemic and digital banking services must be provided with high quality. It is also recommended that increasing the speed of completing transactions through mobile banking applications, increasing awareness of the clients about the different fees for types of transfers and the maximum number of transactions allowed per day through the application and banks should always take customer feedback about apps to find out how satisfied they are with the digital banking services provided during Covid-19.

**Key words:** - *Online banking, Covid-19, banking services and Sultanate of Oman*

## Introduction

Most of the countries and territories in the world was influence by the coronavirus pandemic. This included most metropolitan groups and even country districts. With spread of the pandemic, practically all districts have executed lockdowns, closing down exercises that require human get together and connections including universities, schools, shopping centers and workplace. The lockdown has resulted in majority people taking to the internet and internet based services to communicate, associate, and proceed with their work duties from home. Internet services have seen ascends in utilization from 40% to 100%. In addition, during the pandemic instead of virus banks customers changed their conduct, reflecting adaptations to limitations and health and safety prerequisites. Fast increments happened in advanced opining of new connection (more than 70%), registration and usage of mobile pay application (more than 80%). These increments compared with the decrease of actual customer gatherings. At same time, the arrangement of organizations themselves must be digitally revised to reflect far off working, communication and client service. Quickly expanding the measure of far off working plans with most of employees, while likewise

keeping the level of client service predictable, addressed a huge operational test for the monetary administrations industry.

This experience assisted organizations with recognizing the groundbreaking digital channels and digital operational arrangement, just as the significance of new worth creation from information and investigation. In addition, the benefit of digital banking you can utilize your bank's site to cover your bills on the web and never stress over your check become mixed up via the post office. Most banks have a part where you set up payees. You should round out the data once, and afterward you can pick that payee each time you need to pay from that organization. Most banks offer a versatile application that permits you to all the more effectively exploit internet-putting money on your telephone. You can rapidly determine the status of your records when you are out shopping, move reserves so you don't wind up overdrawing, or ensure a vendor hasn't twofold charged you. You can rapidly move cash between accounts when you do it on the web. It is more advantageous than going to a bank face to face or utilizing a computerized telephone administration, which expects you to give data when provoked.

**Statement of the problem:**

Our project objective is that how banks going to adaption and improves their digital services through covide-19 which stay for unknown of years in more effective and efficient way. Nowadays, technology being a part of our life that we use it in every aspect to make the life easier. people are using online banking services broadly because of wide speed of Wi Fi and 4G network and the clients can access to banking services at anytime and anywhere to reach their personal banking accounts, check the debit and credit account, pay bill of electricity and water and pay through credit card and so on. But due to covid-19 pandemic allot of things changed one of them is digital banking services which most of institution seek to keep abreast of technology one of them is banking sector which provide to bank customers or clients to conduct their financial dealing by using the internet and learn more about multiple banking services not only the limited and usual bank services which has become easier to reach it and deal with it. And it became one of the most safety ways. In addition, comforts founded as a key feature of internet banking services, as many electronic banking services can be performed within a few minutes and are available 24 hours. The most difficulty we faced that to read articles and understand. The study framed with the objectives to identify the significant types of banking services provided by the financial institution during Covid-19, to evaluate the effectiveness of digital banking services during the Pandemic, to propose suitable recommendation on the finding of the study, to measure the reliability and quality in adoption of digital banking service during the pandemic and to assess the usage of digital banking in adoption of digital banking service during the pandemic.

**Scope and Limitation:**

The adaption of digital banking services during the Covid-19 pandemic in Sultanate of Oman. This study will be only for banks in Sultanate of Oman and it will not be branched for banks all over the world. The researchers have decided to select some financial institution from Muscat city to collect data from the bankers who is working in the financial institution. The study is limited to financial institution where we can examine all the parts of the digital banking services that is provide by the financial institution. The study has not endeavored to do other significant businesses. The limitations of the study are there may be banks that offer better or vice versa. The search will depend on studying some models only, so it cannot be generalize to all banks in Oman, the customers in the selected organization may not have the time to answer the questionnaire, and they may not give us correct information or correct studies. Lack of availability of primary and secondary sources and references on research leads to a long time and effort spent searching for sources.

**Significance of the study:**

Recently, many changes occurred due to the Covid-19 pandemic, which affected the performance of institutions and companies, as it led to a change in the pattern of service provision to match the current conditions. As the banks provided most of their services in digital form to cope with the crisis. Digital banking services helped the bank's employees reduce paperwork and find better ways to do their

work and maintain their safety and the ability to work remotely. On the other hand, customers facilitate and end their transactions quickly and in a safe manner at the same time, in addition to avoiding waiting and saving time. Drigă, I., & Isac, C. (2014) highlighted that due to the advancement of technology, banking services have witnessed a great change as the requirements and needs of customers have changed. Today's customers need more customized banking services and can access them anywhere and anytime. Moreover, today the availability of customer service is not limited to branches only but can be accessed at any time through digital customer services. Digital services have become more and more demanding for their speed and ease, and have become the dominant way to deal with banks. At end, the researchers concluded their article by saying "there is no doubt that in the near future electronic banking will undeniably overcome traditional banking".

### Literature Review

The literature review is a very important part of our research in order to fill the gap of previous researches related to the adoption of digital banking services during the covid-19 pandemic in Oman or in the world in general, as well as to get the knowledge about the study. In this study, the first step in answering the research question (How has financial institution performance been affected by the Covid-19 pandemic, How financial institution has adapted with Covid-19, and What kind of banking services does financial institution provide during Covid-19) was to present the related literature. Pedraza, et al (2020), studied the performance of the banking sector during the Covid-19 pandemic. They study 896 commercial banks in 53 countries around the world by using bank data including the statement of financial position and stock prices. They found that the performance and value of bank shares were very weak in most countries compared to other sectors, especially at the beginning of the Covid-19 pandemic, specifically between March and April in 2020. In addition, the expectations were that banks would face greater losses than other companies and even greater than other financial institutions. Lack of liquidity was one of the features of the first phase of the crisis, and this shortage has exacerbated by the fluctuations in the stock market.

Alkharusi, S. Murthy, R. (2020), highlighted the sustainability and stability of 30 large banks in the GCC. These banks represent 70% of the total Gulf banks. The sustainability and stability of large banks is important in all countries because they are the basis for economic growth and financial sector stability. The study showed that the Covid-19 pandemic led to economic turmoil, which made that some banks may lose their sustainability due to an adverse and unacceptable decline in capital ratios, negative profitability and an increase in the possibility of credit losses. Demirguc-Kunt A, Pedraza A, Ruiz-Ortega C. (2020). Examined Banking Sector Performance During the Covid-19 Crisis. This Article analyzes bank stock prices in the world to evaluate the impact of the Covid-19 pandemic on the banking sector. For instance, Borrower assistance and prudential initiatives have increased the stress on banks that are already lack of capital or operating in countries with low fiscal vulnerabilities, and will need to be carefully monitored as the pandemic continues to impact the world's space. Ramasamy, K (2020), Covid-19 influences different businesses and economies over the globe. India is one of the nation's extremely influenced and 3<sup>rd</sup> put all inclusive. BFIS division, which is one of the center for the India economy, too influenced ineffectively due to Covid-19. In this paper, we talk about different variables such as lockdown approach, ban, and diverse impacts in keeping money, budgetary administrations and protections division. Advance, we have given a few suggestions to relieve the circumstance so that the money related administrations can proceed with the less negative affect which can offer assistance for superior administrations to the client and negligible income misfortune to the money related associations.

Wu D.D., Olson D.L. (2020), studied the effect of covid-19 on the banking sector. Covid-19 pandemic has a huge effect in the global economy. The impact of Covid-19 has on the Chinese banking sector which consists of three aspects: short-term, long-term, and systemic risks. Because of Covid-19 there is a need for support especially for financial services. The small and medium companies are need for support through reduce tax or reduce interest rates on loans and postponement of payment for a period until those companies exceed this crisis. And there should be the presence of

digital transformation at faster rate to improve of smart risk control system. Ketema, E (2020), Covid-19 widespread postured an awesome challenge for the monetary industry in Ethiopia driving to an increment of portable managing an account administrations which gets to be an unused typical and need for clients of monetary administrations. The think about looks for observationally to test the effect of m-banking quality benefit on bank of Abyssinia customer's fulfillment amid Covid-19. A quantitative think about approach and a graphic investigate plan with overview inquire about strategy were utilized. East Addis Ababa area office was chosen as a test employing a non-probability plan within the shape of comfort testing to gather information

Flögel, F, Gärtner, S. (2020). "The Covid-19 Pandemic and Relationship Banking in Germany. The relationship between the main bank and the business clients based on the clients purchasing the financial products at their Hausbank and the main bank provides flexibility and liquidity. Banks provide their banking services through electronic platforms "financial technology" during the Covid-19 and supply financing to small and medium-sized companies by providing an alternative to bank loans. As the pandemic and social closure continue, which may cause an increase in the demand for liquidity by small and medium companies, banks will provide the economy with liquidity during the crisis through financial technology. Many banks have expanded their banking services during the pandemic of Covid-19 and allowed contracts to be concluded electronically through banking apps.

Buddhika, H. Gunawardana, T. (2020), focused on determining the familiarity and comfort of Sri Lankans with digital banking services from 2011 until now. As he mentioned in his article that, at present, financial institutions resort to digital banking services to complete their operations instead of traditional banking services. In other articles conducted by the researchers, it was note that digital services are uncomfortable and satisfactory for Sri Lankans. Some pointed out that the Sri Lankans think different and unexpected about digital services, due to the lack of awareness of bank customers and the difficulty of getting used to and adapting to these services. According to Wu D.D., Olson D.L. (2020), Studied the effect of covid-19 on the banking sector. They are found that there is a big and huge effect of Covid-19 on the global economy. During theirs studies they are agreed that the digital banking should be readily improves and develops of the risks. Through studies that were found related to the adoption of digital banking services during the covid-19 pandemic in Oman, we concluded that many of these studies are unable to clarify the goal of implementing digital banking services during the Covid-19 pandemic. During this study, the researchers will explain the digital services that has been provided by banking sector during covid-19.

### **Research methodology**

In this study, the quantitative and qualitative study used to present the information of this study. Where the data collected by providing an online questionnaire to banks users. After that, the data will be analyzing to see the extent to which the bank's digital services are adapted with Covid-19. Participants in this study were chose to apply the questionnaire and get their views on digital banking services provided by banks during the Covid-19 pandemic. Samples will be taken from the community of different ages, levels, and clients of different banks within the Sultanate to collect information and achieve the goal of the study. Distribution of questionnaires to clients of different financial institutions, whom is dealing with the digital banking services. After collect data from responses, information was collected, compared and filter it then classified to relevant and non-relevant information which related to our study adoption of digital banking services during covid-19 phenomenon in Oman. Then use frequency table to analyze the information and show it in easy and more effective manner.

### **Findings and discussion**

The Covid-19 Pandemic in Oman in a selected financial institutions in Muscat city. The questionnaire responded to by different Banks in Muscat city, so to check the impact of automation of accounting we measured it by quality, reliability, ease of use and efficiency, each of these consist of 5 statements The Liker scale method used for replying the questionnaire consist of strongly agree, agree, neither



agree nor disagree, disagree and strongly agree. When distributing the questionnaire to bank customers, we asked clients about the impact of Covid-19 on their transactions and whether their transactions were obstruct or not. Bank Muscat clients have emphasized the impact and disruption of their transactions during the pandemic. While clients of the National Bank of Oman and other banks in Oman did not confirm that. In addition, we asked clients about the technical problems they face when using the banking app. We have found that the biggest technical problem facing bank customers is that the system is under maintenance.

The respondents were asked the questions in which the first section was for the quality of Digital Banking Services during the Covid-19 Pandemic in Oman. The researchers asked whether bank's applications ensures latest technological updating or not, the most clients from NBO and others bank not sure whether to agree or not but most respondents from Bank Muscat agreed, in which agreed was 48.8%. Another question asked whether overall customer satisfied with mobile banking services through the application, the maximum number of respondents from Bank Muscat agreed for it only 15.5% disagree but the respondents of NBO bank most of them not sure whether to agree or not. When it comes to the digital banking services ensures high- quality information, about of 39.3% Bank Muscat customers agreed but only 16.7% disagreed and NBO customers also most of them agree by 37.5% but others banks were not sure. In addition, researchers examined the digital banking services provided during the pandemic are of high quality, most of the respondents of Bank Muscat were agree by 31% only some of the respondents were not sure about it also NBO and other banks customers agreed. Moreover, 33.3% of respondents of Bank Muscat agreed that in banking applications has high quality, which 22.6% strongly agreed, and others banks maximum of respondents agreed. However, NBO customers they got equal percentage in strongly agreed and disagreed.

Through our analysis of the results and regarding the reliability of the digital services provided through the banking application during the Covid-19 pandemic, in general, we found that Bank Muscat and other banks in Oman enjoy greater reliability. On the other hand, the clients of the National Bank are not sure about that. Regarding the assurance that the banking application data are free of errors, we found that customers of the National Bank of Oman and other banks assured that the data is free of errors. While Bank Muscat did not agree that, the banking application data is free of errors. In addition, with regard to customer awareness about the fees for various transactions and the number of transactions allowed per day during the banking application. We found that Bank Muscat clients enjoy more awareness than National Bank of Oman and other banks clients. As for ease of use, 58.1% from majority of the participants in the study from selected banks in the sultanate has agreed that using digital banking services provides by banks during the Covid-19 is easy and smooth in use and they adopt with it smoothly "Out of 110 participant 49 agree and 15 strongly agree", Compared to 26.3% who was disagree and strongly disagree (14 and 15 respectively). However, 17 participant has choose neither agree nor disagree (15.4%). The adoption of digital banking services provides faster completion of banking transactions through digital services instead of visiting branches during the pandemic and the lockdown as well, which was agreed by 65.5% participants (29 strongly agree and 43 agree) of total 110 participants in the study where 27.3% was disagree (13 disagree and 17 strongly disagree). Regarding to the Adoption of digital banking if it is complex to use or not, 42.7% of total respondents was agree that it is complex and 26.4% was disagree. Around 50 % of respondents faced difficulty registering for the mobile banking application in different selected banks in the sultanate, however around 30% didn't faced any difficulty in registration, 20% was neither agree nor disagree. 51.8% of the respondents know how to use digital banking services through mobile applications; on the other hand, 24.5% do not know how to use.

From the tables and graphs in Efficacy part, we found that the Bank Muscat customers are mostly active and Agree in all the kinds of questions that they agreed about the bank and services and mobile APP and etc. However, we got lower percentage that the customers are disagree about then bank but still Bank Muscat customers have a good impact on our research that its providing in efficient way during covid-19. NBO customers have the highest efficiency according to our findings, that we found the highest percentage of NBO clients are agree and strongly agree about the bank digital services,

bank App, efficiency during covid-19 and etc. However, very few percentages are disagreed about bank efficacy during covid-19. But in overall most Bank Muscat and NBO clients both are agreed about banks efficiency during covid-19 pandemic. In addition, we also found some response from other Banks (other than Bank Muscat and NBO customers) and we found that the efficiency result is fluctuating around agree, strongly agree, neither agree or not and disagreed. However only few percentages of customers are disagreed. So that means still other banks providing in effective way during covid-19 pandemic and customers can depending to banks to providing their business transactions even through covid-19. In general, the Digital Banking Services and new technology used by the banks to help the customers in finish their service fast and safely, so the time saved banks finding new other hypotheses and find other useful results. As well as, the automation of accounting effect on the performance of organizations (reduce costs, improving the quality and effectiveness in decision-making). All advance technology and new programs used within banks to improve the Digital Banking Services, this raises the level of competition between banks and help the customers to be safe and comfortable with services

### **Conclusion and Recommendation**

To conclude this study focus on identifying the important types of banking services provided by banks, analyzing the application of digital banking services provided during Covid-19 and evaluate the effectiveness of digital banking services during the pandemic. This study search on adoption Digital Banking Services during the Covid-19 Pandemic in Oman. We reached positive results on the topic of the study according to the questionnaire that was submitted to identify the effectiveness of the application and activation of digital banking services during Covid-19 in the Sultanate. All questions were positively answered in most of the questions and the most effective questions were chosen to answer the research topic. The first section was about the quality of digital banking services provided by banks during the pandemic, such as the bank's applications guarantee the latest technological updates and that they guarantee obtaining high-quality digital information and services and ensuring the quality of digital banking mobile phone applications. The section concerns the reliability of banking applications, as we reached 90% positive results, as respondents were agree that digital banking applications have high reliability. Questions were asked about reliability such as: awareness about fees for types of transfers and the number of transfers allowed during the day and ensuring the reliability of data while using banking applications and finally, the data is free from errors and reliance on the data in the banking applications during the completion of bank transfers and other operations. The third section concerns the ease of use of digital banking applications during Covid-19.

Questions were raised about ease of use of banking applications, speed of processing transfers, uncomplicated use of transfers, and ease of registration in banking applications through mobile phone. The results were positive by 89%. The fourth section concerns efficiency. The results shows that the respondents agreed by 70% that digital banking applications are highly efficient, as they are free from errors and they provide useful digital services and can be relied upon in completing banking transactions. Many digital banking services were introduced and applied during the pandemic, such as digital bank transfers, bank account statements, etc. Which in turn contributed to the completion of banking transactions during the lockdown as shorter as possible time without the need to go out and visit the branches during the pandemic. It is recommended that reliance on digital banking applications helps complete transactions in a shorter time, Using digital banking apps during the pandemic helps reduce the risk of getting out and catching Covid-19, digital banking services must be developed to effectively cover all banks within the Sultanate during the pandemic and digital banking services must be provided with high quality. It is also recommended that increasing the speed of completing transactions through mobile banking applications, increasing awareness of the clients about the different fees for types of transfers and the maximum number of transactions allowed per day through the application and banks should always take customer feedback about apps to find out how satisfied they are with the digital banking services provided during Covid-19.

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