



email: jdmhi@walisongo.ac.id

Journal of Digital Marketing and Halal Industry

ISSN: 2716-4810 (print) ISSN: 2716-4802 (online)

The Role of Digital Banking Industry Towards Consumer Behavior During The Covid 19

Nur Aini Fitriya Ardiani Aniqoh, Ana Zahrotun Nihayah, Farah Amalia

State Islamic Walisongo University, Indonesia

ARTICLE INFO



Article history:

Received 28 February 2022

Accepted 26 August 2022

Published 30 October 2022

Keywords:

Digital Banking, Consumer Behavior, Covid 19

ABSTRACT

Covid 19 has had an impact on various changes, especially with the revolution towards a digital base, one of which is the banking system. This study aims to analyze the role of the digital banking industry in consumer behavior during Covid 19. The general objective of this research is to assist the government in determining appropriate policies regarding the digital banking industry. Referring to the formulation of the problem, this research uses a qualitative descriptive approach. Descriptive method is a method that describes an objective event or certain events based on visible or proper facts which are then accompanied by efforts to make general conclusions based on these historical facts. The Covid 19 pandemic has had a significant impact on the Indonesian economy due to a policy implemented by the government which prohibits people from gathering in large numbers. This policy makes people get used to utilizing various financial technologies to carry out their lives. Therefore, banks must accelerate the use of digital banking services. The implementation of digital banking can accelerate public acceptance of digital transformation. The banking industry needs to take advantage of the conditions of the Covid-19 pandemic to accelerate digital investment and further increase efficiency. Basically, banking has been carrying out digital innovations for a long time, including in the development of mobile banking and a number of other applications and platforms. This research will provide policy benefits in strengthening government institutions, especially the banking industry to control the implementation of digital banking in Indonesia so that it has a positive impact on consumer behavior.

@2022 Journal of Digital Marketing and Halal Industry

* Corresponding author. email: nurainifitriya@walisongo.ac.id

Introduction

The world is experiencing an extraordinary corona virus (Covid-19) pandemic phenomenon, including Indonesia. The epidemic has an impact on all sectors of life, including the banking financial system which is also affected. Covid-19 or known as Coronavirus Disease 2019 is an infectious disease that can cause lung disease which is quite serious. The Covid-19 case was first discovered in China in November 2019. Covid-19 is known to be an infectious disease caused by a new virus with a very fast spreading rate. As reported by the World Health Organization (WHO), the total confirmed cases of Covid-19 worldwide is 147,041,550 cases with 3,112,314 deaths (April 25, 2021). Indonesia is the country with the largest number of deaths due to Covid-19 among other ASEAN countries.

Research conducted by Michael McAleer concluded that global health security capabilities in 195 countries. GHS Index lists the countries that are best prepared for an epidemic or pandemic. While high-income countries reported scores an average of 51.9, the index shows that collectively, readiness international for epidemics and pandemics is still very weak (Michael McAleer, 2020).

The Covid-19 pandemic is a means of accelerating digital transformation which has become a necessity for the banking industry today. The banking industry plays an important role in financial digitization, as it controls nearly 85% of transactions on the financial market. As big players in the financial market, banks need to carry out a transformation to support the digitization of

the financial system. Banks can also interlink with financial technology (fintech).

The increasing competition in the financial services industry has encouraged banks to improve the quality of service to digital-based customers. In the future, demands for the existence of a banking that is highly resilient and efficient will increasingly emerge. The banking industry is required to be resilient, so that it does not become the epicenter of the financial crisis. On the other hand, however, banks are required to have a big role in economic growth. The metamorphosis of the banking industry is inseparable from the Covid-19 pandemic which has spurred banks to improve their digital services, to meet the needs of people who focus on ongoing digital transformation by improving and perfecting digital banking services (Ismanto et al., 2022; Violinda et al., 2022; Zahira & Kurniawati, 2022). Although it is still in the early stages of the transformation process, digital banking is starting to show promising results in customer acquisition and the number and volume of transactions.

The drastic changes in behavior during the Covid-19 pandemic prompted the growth of the digital ecosystem. The increase in the number of digital transactions is also accompanied by banking and technology innovations that support online payment systems. Based on data from the Central Statistics Agency (BPS), there was an increase in online shopping activity by 42 percent during the pandemic and this continues to increase. The existence of digital transactions, both in banking and in several other channels related to the payment system, has an impact on offline transactions. This can be seen from year to year where there has been a significant increase in office closings and an increase in

ATM openings. This is the transitional impact of people's behavior. To support the creation of a good digital banking ecosystem, OJK is preparing a road map covering, strengthening competitive finance and structure, accelerating digital transformation, strengthening the role of banking in the national economy, and strengthening licensing and supervision arrangements. Therefore, this study focus on The Role of Digital Banking Industry Towards Consumer Behavior During The Covid 19.

The previous study relate to the digital banking is about special issue on the "Impact of COVID-19 Lockdown on Digital Banking: E-Collaboration Between Banks and FinTech in the Indian Economy". This journal examines the way the digital banking collaboration between banks and Fintech can resolve the problems provided by the COVID-19 pandemic and control the impending economic fallout in India and across the world. On the other hand, (Kamath, P, & Kulal, 2021) show that post-Covid-19 consumers are moving from physical to online transactions. It happened in all sectors, including banking. Customers are switching to internet banking to continue routine transactions such as paying bills, shopping for groceries, and shopping for brands (Naeem & Ozuem, 2021). The uneasy environment of the Covid-19 pandemic has strengthened the social practices of internet banking. In fact, during the early stages of COVID-19 national politics, hundreds of bank branches were temporarily closed and ATM withdrawals collapsed. As a result, these restrictions further encouraged the use of mobile or bank-driven digital banking services (Mahbubur Rahman & Islam, 2021). (Baicu, Gârdan, Gârdan & Epuran, 2020) Variables related to perceptions of the impact of the COVID-19 pandemic on

consumer lifestyles have direct and positive effects on variables related to attitudes towards internet and mobile banking services. Confirmed to give It is mediated by other variables, such as the safety of using the Internet and mobile banking, and trust in banks. The article also predicts that the trend to use internet and mobile banking services may continue in the post-pandemic phase as new consumer behavior models emerge. This paper will complement the previous study to make more comprehensive and relevant related to impact on the Consumer Behavior During The Covid 19 in Indonesia.

The general objective of this research is to assist the government in determining the right policy on the Digital Banking Industry. This research will provide policy benefits in strengthening government institutions in order to control the implementation of digital banking in Indonesia so that it give the positive impact on the society.

Literature Review

In a broad sense, digital banking refers to the employment of technology to conduct banking transactions in a smooth manner. It, therefore, includes online banking, electronic banking and mobile banking- the terms that are of common usage. Contrary to traditional banking, digital banks aim at developing adaptable digital products and services to meet the needs of their digital customers (Sardana & Singhanian, 2018). The Digital Banking scope covered includes electronic banking services via digital devices (e.g. t-banking, e-banking, m-banking, contactless card (e.g. tap and go), ATM and point-of-sale), excluding PayPal used by intermediaries (e.g. e-Bay) to interface with banks (Mbama et al., 2018). The

invention of the digital banking has dramatically changed the financial landscape by offering a simple efficient and cost-effective method to transfer money and make payments. Through agency banking, bank clients have been enabled access to basic financial services by allowing small businesses to operate as satellite branches (Melubo & Musau, 2020).

(Kamath & Kulal, 2021) reveals that consumers are shifting from physical transaction to online transactions after covid-19. It happened in all sectors including banking. customer has moved toward internet banking with the purpose to continue routine transactions for paying bills, purchasing groceries, and shopping of brands (Naeem & Ozuem, 2021). The fearful environment of Covid-19 pandemic increased the social practices of internet banking. In reality, at the initial stage of the COVID 19 country policy, hundreds of bank branches were temporarily closed and ATM withdrawals were collapsed. As results, these constraints had further enhanced the usages of mobile-led or bank-led digital banking services (Rahman & Islam, 2021). (Baicu et al., 2020) confirmed that the variable concerning the perception of the COVID-19 pandemic effect on consumers' lifestyle has a direct and positive influence on the variable regarding the attitude toward internet and mobile banking services, mediated by other variables like safety of internet and mobile banking use and trust in banks. The article also predict that it is possible that the tendency to use internet and mobile banking services will prevail even after the post pandemic stage, as new consumption behaviour models are developing. Thus, ongoing digitization becomes a major tool helping the financial sector coping with the

challenges. It has started improving operational efficiency and minimizing expenditures in aim to address the problem at a faster pace. Financial sector, particularly Banking-sector have seen this as helpful for generating further country revenues [World Bank (2017), The Global Findex Database-2017, <https://globalfindex.worldbank.org>].

In this new era of digital banking, banks need to understand the opportunities and challenges they face in order to compete competitively. (Sharma & Piplani, 2017) mention that some of the problem bank faced are Internet connection and a smart device such as mobile phone, tablet or personal computer is a prerequisite to use these services. Also, the digital literacy in developing countries are still very low. Difficulty in understanding the usage of the digital banking services. Senior citizens preferring the traditional banking systems and people who are not tech-savvy are more prone to this difficulty. According to a report by Boston Consultancy Group on Encashing on Digital: 33% of banked population is not using digital banking as they find it complex to understand and operate. (Revathi, 2019) argue Because online banks rely so heavily on their online platforms, this means that they can generate substantial losses if their systems crash or if there are bugs in their code. A single technical issue that causes a bank to be down for a day could cost the bank millions in losses. (Baicu et al., 2020) confirmed this by stating that the risk component in the transaction has the most important influence on the intention to use e-banking services.

(Chaimankong et al., 2021) add that other challenge is that an increasing number of financial service providers compete for the same customers. Emerging technology and the

increasing use of mobile devices for banking and payments make it easier for new entrants to exploit dissatisfaction and underinvestment areas. Customers have more options than ever and do not view banks as having a significant advantage over more recent types of banks and technology companies, even when it comes to financial advice. Products and services are expected to increase in customization, performance, accessibility and convenience whilst prices are expected to decrease a little.

In spite of all challenges, banks in developing countries such as Indonesia will get smarter and more intelligent to implement digital banking in all possible areas so that it can provide better customer service, reduce bank's risks and cost of operations and also bring efficiency (Subudhi, 2019). The digital economy expected to have an opportunity to provide prime, fast and affordable economy services to all levels of society and makes economy activity efficiency and effectiveness (Maharani & Ulum, 2019). (Sutikno et al., 2022) add that by applying digital bank, consumer feel the convenience after the emergence of digital banking begins with the convenience of transactions without having to go to a direct bank. Also digital banking accelerates the activities of banks in Malaysia

analyze phenomena, events, social activities, beliefs, perceptions, thoughts of individuals and groups (Sukmadinata, 2007).

This study uses secondary data obtained from previous studies as well as from various existing phenomena. The research relate to digital banking service, which is the provision of service facilities to customers using electronic means owned by the bank or electronic media owned by the customer so that banking transactions can be carried out independently. With the existence of digital banking services, customers can carry out various kinds of transactions including registration, opening accounts, closing accounts, transferring between banks or different banks, checking balances and so on. Digital banking services are banking services or activities using electronic or digital means owned by the Bank, and / or through digital media owned by prospective customers and / or Bank customers, which are carried out independently. This research with a descriptive qualitative type is relevant to use because it emphasizes the systematic exposure of data and facts with data sources so that researchers are easy to understand and provide conclusions.

The Method, data, and analysis

Referring to the formulation of the problem, this study uses a qualitative descriptive approach. The descriptive method is a method that describes an objective event or certain events based on visible facts or as they should be which is then accompanied by efforts to make general conclusions based on these historical facts (Nawawi, 1994). Meanwhile, qualitative research is a way to describe and

Result and Discussion

The Covid-19 outbreak was first announced in Indonesia in March 2020. Efforts made by the Government of Indonesia in breaking the chain of the spread of this virus are by *implementing the large-scale social restrictions* policy, namely large-scale social restrictions that aim to limit activities outside the community's home so that people carry out activities from home. each. This policy must be submitted by the Regional Head to the

Central Government. The areas that are allowed to implement the PSBB are areas where the case of the spread of Covid-19 is happening rapidly.

The Covid 19 pandemic has a significant impact on the Indonesian economy due to policies implemented by the government which prohibit people from crowding together. This policy makes people accustom themselves to utilizing various financial technologies to carry out their lives. The government supports all efforts made to break the chain of spread of the virus by implementing *large-scale social restrictions* so that economic actors must carry out their activities from home by utilizing financial technology. Information technology has completely changed the life and operations of individuals and organizations. Information and Digital Technology have made major evolutionary developments in the areas of finance, economics, operating costs (Slozko & Pelo, 2015) and improving organizational performance. With the current pandemic conditions, cash less activities are increasing. In line with the rapid development of technology, the payment system in economic transactions has also undergone changes

Technological advances in the payment system have shifted the role of cash (currency) as a means of payment into a more efficient and economical form of digital payment. The era of innovation has come along with dynamic changes in the world business environment, where business transactions are constantly shifting from cash-based to electronic-based ones (Al-Laham et al., 2009). The increase in non-cash transactions occurred because the public assessed the effectiveness and efficiency of conducting non-cash transactions. As a result, the world's payment systems are

gradually changing from coins and banknotes to an electronic form that provides a more convenient, fast and secure payment process between individuals and organizations (Premchand & Choudhry, 2015).

Today, the rapid growth and innovation in technology, including the introduction of mobile phones, have created various opportunities for potential businesses that can be exploited (Barnes & Corbitt, 2003). Taking into account the innovations in the financial sector, digital banking is one such invention that has made consumers' lives easier by adding enormous flexibility in the consumption of services and by giving them easy access to banking. One of the variations of digital banking is mobile banking which is also known as mobile banking because of its use such as cell phones and handheld devices to approach financial networks via wireless application protocols (Wang & Li, 2010). M-banking customers can easily access bank services such as fund transfers, information inquiries, bill payments, etc. (Luarn & Lin, 2005). M-banking consumers can carry out banking activities such as getting real-time information about their accounts or making payments whenever and wherever they want (Wang & Li, 2010).

The development of information technology has an impact on the necessity of banks to develop digital banking services. The results of the use of digital banking services lead to the efficiency of operational activities and the quality of banking services. Therefore, banks need to establish a business strategy that focuses on digital banking services. The development of this business strategy requires adequate components or infrastructure. By waiting for bank readiness, the implementation of digital banking services in

Indonesia begins with the implementation of a "digital branch", namely the existence of a bank facility that has a special function to process customer transactions in the form of customer registration and account opening independently.

Discussion

Basically, digital banking or open banking payment transactions grew high above 52% related to fintech, especially some transactions. The policies implemented to encourage the digitalization of payment systems are integrated into the digital economy, especially Small Medium Enterprise and retail through the implementation of the Indonesia Payment System Blueprint 2025. One of them is through the Quick Response Code Indonesian Standard (QRIS) digital payment system. In fact, to date, more than 5 million merchants are connected via QRIS. In the future, the demands for the existence of highly durable and efficient banks will be increasingly raised. The banking industry is required to be resilient, so that it does not become the epicenter of the financial crisis. On the other hand, banks are required to have a major role in economic growth. The metamorphosis of the banking industry is inseparable from the Covid-19 pandemic which has spurred banks to improve their digital services, in order to meet the needs of the community. To support banking digitization, the Financial Services Authority (OJK) has issued a legal umbrella related to digital transformation in the form of OJK Regulation (POJK) No. 12/POJK/03/2018 concerning the Implementation of Digital Banking Services by Commercial Banks. Opportunities and Challenges of Digital Banking Industry. There are opportunities in the digital banking industry and its effect into

consumer behaviour.

Improving the economy (people's purchasing power)

Rapid shift towards digital financial technology and banking shows that technology is able to play a strategic role in Indonesia, which can provide access to financial services. It is in linewith the behavior of consumers who want services without being physically present at the bank, insurance office or other financial company. Service availability and digital banking products are highly valued by customers, both individuals as well as business people, especially Micro, Small and Medium Enterprises (MSMEs).

Currently, digital banking financial services have developed with such as internet banking, mobile banking, AMS banking, ATM, e-money, phone-banking, payment gallery, branchless banking, online debit, digital outlets, virtual credit card, cash management system, EDC, mobile branch, mobile accounts, and smartphone-based financial applications. Lots of product choices Digital banking is certainly intended to motivate customers to become more loyal and become part of the modern lifestyle. Furthermore, Financial technology is also able to present sellers who accept payment by debit and credit card is low cost so it helps build banking infrastructure in an effort to boost purchasing power Public. Banking institutions benefit greatly because they can stop operating costs and collect low-cost funds from customers, including expanding services in space and time. The presence of the era economy, Digital technology can be a new opportunity as well as a serious threat to the industry banks that switch to digital banking because they have to maintain existing customers and attract new

customers who come from generations millennial.

Banking transactions more effective and efficient

The Covid-19 pandemic has changed people's behavior so that they are all digital. This is a blessing for the banking industry, because digitalization makes banks more efficient. Bank Indonesia observed the increase in efficiency in banking operations at the beginning of the year. This is because banks have reduced labor costs and rental costs due to digitalization, which decreased by 3 bps yoy and 5 bps yoy respectively until January 2021.

Because it offers customers independent banking capabilities, digital banking has a higher level of effectiveness and efficiency, than when doing it the conventional way. Banking activities, such as opening accounts and deposits, which previously could only be done by visiting the branch office of the bank concerned, can now be accessed anywhere and anytime, so there is no need to pay extra to go to the bank office. Not only that, digital banking also makes it easier for customers to be able to interact with the bank, to manage their business or financial needs. You can do various banking activities such as checking balances, transferring funds, and paying various bills, as well as your needs using digital banking facilities. Besides being able to be accessed at any time, the customers don't need to have to set aside time and money to carry out these 'trivial' activities. Simply by using the device they have, they can carry out banking activities any time you need it.

Facilitate the Bank in Understanding Customer Needs

Through the digital banking platform, the

bank concerned can easily keep a track record of banking activities carried out by each customer. The banking platform, can also provide you with information about the transactions you make via email or SMS as evidence of these activities. That way, the execution of the bank in giving awards or rewards to customers can be more targeted and in accordance with the provisions. This, of course, can increase customers satisfaction, as well as your loyalty to the performance of the bank.

With digital banking or digital banking facilities, both the bank and the customer will get many benefits. In addition to a higher level of efficiency in all banking activities, security is also increasing. Responding to financial problems can also be done as quickly as possible. Of course, customer satisfaction with services from the bank will increase. As a result, both parties will be able to feel the advantages of digital banking technology, rather than using the conventional banking system.

Minimize the spread of covid 19

The 2019 coronavirus disease (Covid-19) pandemic has forced people to practice physical distancing or keep their distance to break the chain of spreading the virus. Therefore, efforts are needed for the community to keep their distance when doing their daily activities. One way that can be done is to apply a non-cash payment method. With the non-cash payment method, the public can minimize direct contact when transacting. This can help reduce the spread of Covid-19. The reason is, the World Health Organization (WHO) itself has warned that paper money may be able to spread the corona virus. As a result, the use of digital transactions is safer

than using paper money at this time. Bank Indonesia (BI) also noted that the use of non-cash transactions has increased in Indonesia during the Covid-19 pandemic.

Minimize the risk of banking errors

Conventional banking activities, which still rely on human labor and paper in practice, have a risk of error reaching 40 percent. If it is proven that there is an error, like it or not, the banking process must be repeated. This kind of risk, of course, is almost impossible with the help of a digital banking platform that has a more practical and efficient verification process. Because it has been programmed accurately through special information technology for business and banking tools, accounting activities will definitely be executed more carefully. Because it relates to financial and business issues, increasing accuracy in the transaction process is certainly something that is really needed. What's more, with digital banking technology, you can access information from your banking process more transparently. There are challenges in the digital banking industry and its effect into consumer behaviour.

Compete with Fintech Startup Companies

The development of technology is something that cannot be avoided in life, because technological progress will run in accordance with scientific advances. Humans cannot be separated from technology. This means that technology is an easy way in every human activity. Therefore, with the development of technology it will be a solution in completing activities effectively and efficiently. The rapid development of technology has changed a number of aspects of people's lives, including banking services. This is accompanied by innovations carried out by banks by utilizing

technology in creating banking services, so that this can benefit the services of the bank and customers or the public.

For the banking industry, most financial technology companies are starting to grow where their business operations are almost the same as existing services, namely collecting funds and providing loan funds, this is a threat to incumbents (banking industry) when they are not aggressive in making capital investments for technology development. Based on data from the Financial Services Authority in the period March 2021, the number of registered conventional fintech players was 94 fintech's and 7 registered Islamic fintechs. And the total assets of both conventional fintech and sharia fintech are IDR 4.524.850.000.000 (OJK, 2022). Banks have the potential to lose their debtors and they can switch to the fintech industry, such as P2P (peer-to-peer) lending, which is an electronic system-based financial service provider by utilizing the internet network by bringing together people who are excess funds with people who need funds. P2P service is a provider that already has a legal form in Indonesia that provides information technology-based lending and borrowing services. Through the P2P platform, someone can channel their funds to someone who needs a loan so that customers no longer need to need intermediary institutions such as banks.

Limited Internet Access Users

In today's digital era, customers do not need to come to the bank to complete banking transactions. Several transactions can be completed independently via cell phone. In the process of completing banking transactions via cellular telephone, a cellular

telephone signal is required. According to data from the Central Statistics Agency, it is explained that in 2019 there are 77,965 (92.89 percent) villages / wards that have been able to receive cell phone signals. But this is not matched by users of internet access. In 2019 the percentage of the population aged 5 years and over who stated that they had accessed the internet in the last three months was around 43.51 percent. In urban areas, the percentage of internet users in 2019 was 53.53 percent, while internet users in rural areas in 2019 were 30.81 percent (BPS, 2019). There is still a large percentage of people who have never accessed the internet, namely 46.57%, which is a challenge for the development of banking services in the field of technology.

Cybercrime potential for digital banking transactions

The development of banking services carried out through digital banking is increasingly developing in line with the increasingly rapid growth of information technology. Security issues are not only for the benefit of customers but also for the benefit of the digital banking provider bank itself and the banking industry as a whole. Behind the convenience obtained from using digital banking, there are also risks involved in using this service, including the problem of transaction security and customer protection in the event of legal violations involving personal data through digital banking transactions. The risks suffered by bank customers in the use of digital banking are caused by IT criminals. Therefore, the banking industry must be able to prepare security features that are able to maintain the level of public confidence that electronic transactions are safe. In this regard, the need for legal protection to be given to customers using digital banking is needed in order to

protect the rights of customers as consumers in banking services. Bank Indonesia has issued PBI Number 09/15 / PBI / 2007 related to the implementation of risk management in using information technology by commercial banks (BI, 2007).

The risk management process is carried out on aspects related to Information Technology which include the development and procurement of Information Technology, Information Technology operations, communication networks, information security, Business Continuity Plans, end user computing, Electronic Banking, and the use of Information Technology service providers.

Conclusion

Nowadays all industries are busy doing digitization, including banking. Apart from technological developments, the COVID-19 pandemic has quickly created a shift in consumer behavior. There are several challenges faced by bank. These are competition with Fintech Startup Companies, Limited Internet Access Users and Cybercrime potential for digital banking transactions. Nevertheless, there are opportunities bank will get from doing digitization. These are Improving the economy (people's purchasing power), effectiveness and efficiency of Banking transactions, Facilitate the Bank in Understanding Customer Needs, Minimize the spread of covid 19 and minimize the risk of banking errors.

Recommendation

The main limitation of this study is that the respondents were limited to one area in Central Java and involved 100 participants.

For this reason, the future study can elaborate on more areas and industries entire Indonesia, to observe more comprehensively and can be used as a comparison with this study. The addition of the determinant factor of repurchase intention can be considered in future research, such as customer satisfaction.

References

- Al-Laham, M., Al-Tarawneh, H., & Abdallat, N. (2009). Development of electronic money and its impact on the central bank role and monetary policy. *Issues in Informing Science and Information Technology*, 6, 339-349.
- Baicu, C. G., Gârdan, I. P., Gârdan, D. A., & Epuran, G. (2020). The impact of COVID-19 on consumer behavior in retail banking. Evidence from Romania. *Management & Marketing*, 15(s1), 534-556.
- Barnes, S. J., & Corbitt, B. (2003). Mobile banking: concept and potential. *International journal of mobile communications*, 1(3), 273-288.
- Bhasin, N. K., & Rajesh, A. (2021). Impact of COVID-19 Lockdown on Digital Banking: E-Collaboration Between Banks and FinTech in the Indian Economy. In *Collaborative Convergence and Virtual Teamwork for Organizational Transformation* (pp. 160-176). IGI Global.
- BI. (2007). *Peraturan Bank Indonesia PBI Bank Indonesia*
- Boon-itt, S. (2015). Managing self-service technology service quality to enhance e-satisfaction. *International Journal of Quality and Service Sciences*.
- BPS. (2019). *Statistik Telekomunikasi Indonesia 2019*. Badan Pusat Statistik.
- Chaimankong, B., Chaimankong, M., Jermittiparsert, K., & Chetthamrongchai, P. (2021). The impact of covid-19 on thai consumer behaviour in using digital banking. *Academy of Strategic Management Journal*, 1-9.
- Ismanto, K., Fachrurazi, F., & ... (2022). The Role of Islamic Banks in Development of Halal Tourism: Evidence from Central Java Indonesia. *Journal of Digital Marketing and Halal Industry*, 4(1), 35-49. <https://doi.org/DOI>: <http://dx.doi.org/10.21580/jdmhi.2022.4.1.12493>
- Kamath, R., & Kulal, A. (2021). Impact of covid-19 on customer behaviour in retail banking in Dakshina Kannada and Chickmagalore District.
- Kotler, P., & Keller, K. L. (2002). *Perilaku Konsumen*. In: Jilid.
- Lee, J., & Allaway, A. (2002). Effects of personal control on adoption of self-service technology innovations. *Journal of Services marketing*.
- Luarn, P., & Lin, H.-H. (2005). Toward an understanding of the behavioral intention to use mobile banking. *Computers in human behavior*, 21(6), 873-891.
- Maharani, S., & Ulum, M. M. (2019). Digital economy: opportunities and future challenges of islamic economy in Indonesia. *PROCEEDINGS BOOK*, 24, 129.

- Mbama, C. I., Ezepue, P., Alboul, L., & Beer, M. (2018). Digital banking, customer experience and financial performance: UK bank managers' perceptions. *Journal of Research in Interactive Marketing*.
- Melubo, K. D., & Musau, S. (2020). Digital banking and financial inclusion of women enterprises in Narok County, Kenya. *International Journal of Current Aspects in Finance, Banking and Accounting*, 2(1), 28-41.
- Naeem, M., & Ozuem, W. (2021). The role of social media in internet banking transition during COVID-19 pandemic: Using multiple methods and sources in qualitative research. *Journal of Retailing and Consumer Services*, 60, 102483.
- Nawawi, M., Martini, H. (1994). Penelitian Terapan. In: Gadjah Mada University Press. Yogyakarta.
- OJK. (2016). *Panduan Penyelenggaraan Digital Branch oleh Bank Umum*. Otoritas Jasa Keuangan
- OJK. (2022). Statistik Fintech Lending Periode Maret 2022. In: Otoritas Jasa keuangan.
- Premchand, A., & Choudhry, A. (2015). Future of payments-ePayments. *International Journal of Emerging Technology and Advanced Engineering*, 5(1), 110-115.
- Puspitadewi, I. (2019). Pengaruh Digitalisasi Perbankan Terhadap Efektivitas Dan Produktivitas Kerja Pegawai. *Jurnal Manajemen Dan Bisnis Indonesia*, 5(2), 247-258.
- Rahman, A. M., & Islam, S. (2021). COVID-19 Brings Blessing for Digital-Banking in World-Economy Country-Wise: An Analysis Under Demand-Supply Model of Market Economics. *Journal of Business and Economic Development*, 6(2), 65-72.
- Revathi, P. (2019). Digital banking challenges and opportunities in India. *EPRA International Journal of Economic and Business Review*, 7(12), 20-23.
- Sangadji, E. M. (2013). Perilaku Konsumen; Pendekatan praktis disertai himpunan jurnal penelitian.
- Sardana, V., & Singhania, S. (2018). Digital technology in the realm of banking: A review of literature. *International Journal of Research in Finance and Management*, 1(2), 28-32.
- Schiffman, K. (2008). Perilaku konsumen. *Zoelkifli Kasip (terjemahan) Customer Behaviour*. Edisi Tujuh. Jakarta: PT, Mancana Jaya Cemerlang.
- Sharma, A., & Piplani, N. (2017). Digital Banking in India: A Review of Trends, Opportunities and Challenges. *International Research Journal of Management Science & Technology*, 8(1), 168-180.
- Slozko, O., & Pelo, A. (2015). Problems and risks of digital technologies introduction into e-payments. *Transformations in Business & Economics*, 14(1).
- Subudhi, S. (2019). BANKING ON ARTIFICIAL INTELLIGENCE: OPPORTUNITIES & CHALLENGES FOR BANKS IN

- INDIA. *International Journal of Research on Commercial, Economic and Management*, 9.
- Sukmadinata, S. (2007). Metode penelitian pendidikan. *Bandung: Remaja Rosda Karya*, 169-170.
- Sutikno, S., Nursaman, N., & Mulyat, M. (2022). The Role Of Digital Banking In Taking The Opportunities And Challenges Of Sharia Banks In The Digital Era. *Journal of Management Science (JMAS)*, 5(1), 27-30.
- Violinda, Q., Alfadila, A., Gultom, H. C., & Wattagama, E. J. (2022). Customer Satisfaction: A Central Phenomenon in Digital Marketing J&T Express. *Journal of Digital Marketing and Halal Industry*, 4(1), 56-66.
<https://doi.org/http://dx.doi.org/10.21580/jdmhi.2022.4.1.10889>
- Wang, C., Cheng, Z., Yue, X.-G., & McAleer, M. (2020). Risk management of COVID-19 by universities in China. In (Vol. 13, pp. 36): MDPI.
- Wang, Z., & Li, Q. (2010). Information content weighting for perceptual image quality assessment. *IEEE Transactions on image processing*, 20(5), 1185-1198.
- Zahira, N. A., & Kurniawati. (2022). Predict Repurchase Intention Via E-satisfaction as a Mediator Against Consumer Attitudes in Use Face Recognition Payment. *Journal of Digital Marketing and Halal Industry*, 4(1), 17-34.
<https://doi.org/http://dx.doi.org/10.21580/jdmhi.2022.4.1.12383>

