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Digital Transformation in the Economic Growth of Indonesian Sharia Bank Services

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Abstract

This study aims to analyze economic growth and digital banking transformation as seen from the Indonesian Islamic banking industry. The development of Islamic finance provides a new perspective on the study of the relationship between economic growth and the transformation of the digital banking industry. Digital banking transformation is an important issue in today's banking industry. The disruption of the digital era has changed the way a person conducts transactions in business. The dynamics of understanding the use of technology in financial literacy is still low so that it can encourage economic growth and improve people's welfare. In addition, there are very few studies on the growth finance nexus that can be viewed from an Islamic finance perspective, especially in Indonesia. The method in this study uses a literature study that is used in writing this article in the form of an assessment of research journals, dissertations, studies, and relevant mass media. This study uses qualitative data and secondary data sources. The implications of this research only focus on Islamic banking, making digital transformation a priority strategy in efforts to increase economic growth in Indonesia. So, this research contributes to the discussion of economic growth that can be influenced by digital transformation in the use of digital services in Islamic banks in Indonesian.

***Keywords**: Economic Growth, Digital Transformation, Development of Islamic Finance, Indonesian Islamic Bank*

Introduction

The COVID-19 pandemic has had a major impact on financial systems worldwide, including Islamic finance. The economic slowdown due to the Covid-19 pandemic has resulted in financing from the Islamic financial sector continuing to grow, but supported by government funding in the context of national economic recovery. The role of sharia financing from the issuance of securities and sharia financial institutions continues to increase, although there is still a gap between the needs of sharia businesses in the real sector and the available sharia financing capacity (Mawarni, 2021)[1]. Not only that, the Financial Services Authority (OJK) concluded that data from

[1] Mawarni, Rika. 2021. "*Penerapan Digital Banking Bank Syariah Sebagai Upaya Customer Retantion Pada Masa Covid-19*." Al Iqtishod: Jurnal Pemikiran Dan Penelitian Ekonomi Islam 9 (2): 39–54. https://doi.org/10.37812/aliqtishod.v9i2.233.

the 2019 Financial Literacy and Inclusion Index Survey shows that the level of public Islamic financial literacy is still very low and stands at 8.93%, which means that out of 100 people surveyed only 8 (eight) people who have been educated and have a good understanding (*well literate*) of financial management. The level of Islamic financial inclusion in Indonesia is not much different, namely at 9.01%, indicating that not all who have used financial industry products have a good understanding of the functions and benefits of an Islamic financial services industry product (Nasir Tajul Aripin et al., 2022)[2] . However, sectorally, the improvement of the link-and-match between sharia financing and the needs of the sharia economy can be seen from a number of things in sharia banking.

As a result, financial inclusion has a positive impact on improvements in people's welfare, thereby reducing poverty and facilitating adults in managing their household financial risks. Therefore, the government is preparing various strategies to increase financial inclusion, one of which is by encouraging increased access to financial services through technology such as mobile money (Allen et al. 2016)[3]. This improvement is good in terms of the field of business financed, as indicated by the inclusion of the agricultural sector in the top five sectors financed by Islamic banking, in terms of business scale the expanding reach of Islamic microfinance. In addition, from the monetary and macro prudential policy side on sharia, the weakening of demand affected the intermediary function of sharia banking, mitigated by accommodative policies to encourage financing for economic growth so that it continues to grow positive.

Economic Growth

Economic Growth Section

Important a political economy in within a country and system economy anywhere. In short, it can be assumed that economic growth create opportunities and Equality creates an economy larger (Umairah, 2016)[4]. One fact that cannot undeniably ,growth world economy in two centuries The latter has two effects very big namely prosperity achieved by the world community or increase in standard of living, both opened the field new job growth resident.

Fast development of the industrial revolution, science and technology in developed countries, there is poverty absolute and some

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[2] Nasir Tajul Aripin, Nur Fatwa, and Mulawarman Hannase. 2022. "*Layanan Digital Bank Syariah Sebagai Faktor Pendorong Indeks Literasi Dan Inklusi Keuangan Syariah*." Syarikat: Jurnal Rumpun Ekonomi Syariah 5 (1): 29–45. https://doi.org/10.25299/syarikat.2022.vol5(1).9362.

[3] Allen, Franklin, Asli Demirguc-Kunt, Leora Klapper, and Maria Soledad Martinez Peria. 2016. "*The Foundations of Financial Inclusion: Understanding Ownership and Use of Formal Accounts*." *Journal of Financial Intermediation* 27 (July): 1–30. https://doi.org/10.1016/J.JFI.2015.12.003.

[4] Umairah, Hasyim Tamim Linda. 2016. "*Peran Perbankan Syariah Terhadap Pertumbuhan Ekonomi Sektor Riil Di Indonesia*." Akrual Jurnal Akuntansi 8 (7): 11–27.

problems other economics (Ahmad, Iqbal, Kamran, et al., 2021)[5]. When At the same time, the situation in developing countries inequalities income, unemployment, food shortages, and various misery still colouring the majority of the world's population.

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According to (Mubarok & Suprayogi, 2021)[6] this condition is getting worse due to the global financial crisis and recession in various countries is wrong the only one in Indonesia. Economic growth also highlights the possibility of a simultaneous bias caused by the co-determination of financial development and economic growth (Jalloul, 2021)[7].

The occurrence of a crisis in the economy with an Islamic perspective is certainly inseparable from economic practices that are contrary to Islamic values, such as usury behaviour (in a broad sense), monopoly, corruption, and other actions (Naimi-Sadigh et al., 2022)[8]. If economic actors are used to acting outside of economic guidance, then it is not an exaggeration if the economic crisis that has hit us is a catastrophe that has been deliberately invited due to the actions of human hands. Mbama and Ezepue (2018) explore the relationship between digital banking, customer satisfaction, loyalty, and financial indicators. Koroleva and Kudryavtseva (2020) and Stoica et al[9]. (2015) argue that digital banks are distinguished by higher efficiency, i.e. return on assets, but leave the impact of digital transformation indeterminate on the part of loans and deposits.

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[5] Ahmad, Iftikhar, Shahid Iqbal, Muhammad Kamran, and Shahzad Jamil. 2021. "*A Systematic Literature Review of E-Banking Frauds: Current Scenario and Security Techniques Firm-Market Volatility Comovements View Project 3509 LINGUISTICA ANTVERPIENSIA A Systematic Literature Review of E-Banking Frauds: Current Scenario and Security T*." Researchgate.Net 2 (June): 3509 – 3517. https://www.researchgate.net/profile/Shahid-IqbaL

[6] Mubarok, Ahmad Shofiy, and Noven Suprayogi. 2021. "Determinan Pengungkapan Informasi Inklusi Keuangan Pada Bank Umum Syariah Di Indonesia." Jurnal Ekonomi Syariah Teori Dan Terapan 8 (2): 211. https://doi.org/10.20473/vol8iss20212pp211-220.

[7] Jalloul, Suha. 2021. "*The Impact of Islamic Banking and Financial Performance: The Case of Dubai Islamic Bank*." The EUrASEANs: Journal on Global Socio-Economic Dynamics 5 (5(30)): 60–70. https://doi.org/10.35678/2539-5645.5 (30).2021.60-70.

[8] Naimi-Sadigh, Ali, Tayebeh Asgari, and Mohammad Rabiei. 2022. Digital Transformation in the Value Chain Disruption of Banking Services. Journal of the Knowledge Economy. Vol. 13. Springer US. https://doi.org/10.1007/s13132-021-00759-0.

[9] Kolodiziev, Oleh, Mykhailo Krupka, Nataliya Shulga, Myroslav Kulchytskyy, and Olha Lozynska. 2021. "The Level of Digital Transformation Affecting the Competitiveness of Banks." Banks and Bank Systems 16 (1): 81–91. https://doi.org/10.21511/bbs.16(1).2021.08.

Not only that, the emergence of Islamic banking in the world began with Mit Ghamr Local Saving in 1963 which was later taken over by the Egyptian Government to become the Nasser Social Bank in 1972. The development of Islamic banking in the Middle East then continued in Europe, Switzerland, Denmark, and countries in Asia. Southeast, where the majority of the people are Muslims. In Malaysia, Islamic banks were first established in 1982, while in Indonesia it was only nine years later, namely 1991 (Nurhayati and Wasilah, 2015:3)[10]. The development of Islamic banking in Islamic countries was followed by Indonesia. The birth of sharia banking in Indonesia began with the establishment of Bank Muamalat Indonesia (BMI) in 1991.(Jalloul 2021) Previously, non-bank banking institutions had also been established in Indonesia which implemented the sharia system in their activities. The government then made regulations for the implementation of Islamic banking through Law no. 7 of 1992 concerning banking and explained in PP no. 72 of 1992.

Based on Sharia Banking Statistics until November 2016, the number of Islamic Commercial Banks registered in Indonesia (Nasir Tajul Aripin, et al 2022). The following is the argument for information technology-based financing services based on sharia principles:

يٰٓاَيُّهَا الَّذِيْنَ اٰمَنُوْا لَا تَأْكُلُوْٓا اَمْوَالَكُمْ بَيْنَكُمْ بِالْبَاطِلِ اِلَّآ اَنْ تَكُوْنَ تِجَارَةً عَنْ تَرَاضٍ مِّنْكُمْ ۗ وَلَا تَقْتُلُوْٓا اَنْفُسَكُمْ ۗ

اِنَّ اللّٰهَ كَانَ بِكُمْ رَحِيْمًا

Translation: *"You who believe! Do not eat your neighbor's wealth in a vanity (unrighteous) way, except in buying and selling that applies on the basis of a mutual agreement between you. And don't kill yourself. Truly, Allah is Most Merciful to you."*

Digital Technology

According to (Shabri et al. 2022)[11] digital technology will continue to change the banking landscape in Indonesia. Our recent survey of financial services customers in the country shows significant growth in internet and mobile banking adaption, indicating that digital channels will become increasingly important in building loyalty and generating growth for financial institutions. To understand the dynamics of the personal finance sector, in 2017 McKinsey surveyed 900 financial services consumers across Indonesia about their banking habits- part of a wider

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[10] Nurhayati , Sri , and Wasilah. 2015. Akuntansi Syariah Di Indonesia. Indonesia.

[11] Shabri, Husni, Nur Azlina, Muhammad Said, Perbankan Syariah, Fakultas Ekonomi, Dan Bisnis, Uin Syarif, and Hidayatullah Jakarta. 2022. "*Transformasi Digital Industri Perbankan Syariah Indonesia*." El-Kahfi | Journal of Islamic Economics 3 (02): 1–7. https://www.ejournal.mannawasalwa.ac.id/index.php/elkahfi/article/view/88.

survey[1] approximately 17,000 personal finance consumers in 15 Asian markets[2] which is based on research started in 1998(Ahmad et al. 2021)[12]. Research in Indonesia shows a continuation of the shift to digital channels observed in the 2014 version of the survey. Digital penetration is 1.6 times the 2014 level, and has now reached 58 percent, in line with other developing Asian countries.

According to Delphi experts and professionals, and given the high-tech focus in this ranking to meet customer needs, the best digital strategy for organizations to simultaneously create value and create innovation for customers is the customer participation strategy. The aim of a customer engagement strategy is to use personal experience to build customer loyalty and change the approach to the market. This strategy provides a special advantage to those who can create a hands-on experience for customers by limiting the development and purchase of financial products. It also guides the innovation guidelines by developing trust, enthusiasm and customer loyalty. Companies that have opted for a customer engagement strategy are identifying new opportunities to connect with customers by recognizing customer expectations as quickly as possible. In many cases, customer engagement strategies target integrated experiences, versatile channels that customers can receive, respond to, pay for, and rush to support each channel at any time (A.Ross 2015). Digital technology built on this competitive motivation may not be new, but it is used to generate new impacts (Hirt & Willmott, 2014).

Digital strategy is a business tactic that aims to respond to changing market requirements by retaining unique capabilities inspired by powerful and easy-to-use technological capabilities. Developing digital tactics used to integrate all relationships and actions and benefits based on digital developments in the organization. This strategy helps organizations to manage all digital activities in the organization using business goals. So all the activities that we do in related organizations use digital tactics. Companies need to adopt individual digital tactics and perfect organizational and managerial structures (Naimi-Sadigh, Asgari, and Rabiei 2022)[13] To take advantage of the opportunities created by digital technology, the need for digital tactics will follow bank integration initiatives, operational backbones that put potential operational capabilities, and a digital service backbone that facilitates response to new market opportunities. Business leaders identifying the opportunities presented by new digital technologies have chosen one of two types of

[12] Mubarok, Ahmad *Shofiy*, and Noven Suprayogi. 2021. "*Determinan Pengungkapan Informasi Inklusi Keuangan Pada Bank Umum Syariah di Indonesia*." *Jurnal Ekonomi Syariah Teori Dan Terapan* 8 (2): 211. https://doi.org/10.20473/vol8iss20212pp211-220.

[13] Naimi-Sadigh, Ali, Tayebeh Asgari, and Mohammad Rabiei. 2022. *Digital Transformation in the Value Chain Disruption of Banking Services*. *Journal of the Knowledge Economy*. Vol. 13. Springer US. https://doi.org/10.1007/s13132-021-00759-0.

digital customer engagement tactics or digital solutions. This strategy provides a pathway that allows managers to direct digital initiatives, evaluate their progress, and direct their efforts where necessary (Ross et al., 2015)[14]. The perfect strategy choose the Integration point. With this goal, companies can form integrated capabilities (hard to repeat) to realize these tactics (Ross et al., 2015)[15]. In mature companies, digital technology is put to good use to achieve strategic goals.

The potential impact of technology across digital industries is very different. Business evolution is a guide for digital strategy. Digital technology built on this competitive motivation may not be new, but it is used to generate new impacts (Naimi-Sadigh, Asgari, and Rabiei 2022). Several large leadership organizations share the same challenge of how to maximize their profitability beyond mini and short term profits, taking into account the entire value chain. Developing digital tactics allows banks to take full advantage of opportunities to predict the future and creatively build organizational flexibility and adaptability. By drawing a digital competitive landscape, the bank determines how to deal with other competitors and ultimately how to follow the path of digital organizational transformation. Spending lots of time and attention to senior management will advance the digital package. Customer behaviour and competitive terms are evolving rapidly. An effective digital strategy requires extensive coordination, which is achieved using a hegemonic chief executive officer CEO (Gavril 2019)[16] . To formulate a strategy like that, we must investigate and analyse all aspects of the business that is transformed into transformational technology. This means that new decisions must be formed so that in addition to preventing disruption and reducing the risks caused by these technologies, we can make the most of the opportunities they create. In this study, first of all, using relevant documents and expert surveys, 9 digital technology-based tactics were identified and developed for banks.

Bank Indonesia (BI) noted, the value of digital banking transactions 4,359.7trillion in July of 2022. Number reached 27.82 percent if compared to the same period previous year. Up transactions in line with normalization community mobility. Transaction digital economy and finance experience a possible increase supported by increases community preference and acceptance in online shopping, expansion and easy payment systems digital, as well as digital banking. This supports the increase in economic growth as well as internal societal transformation use of digital transactions, wrong only in Islamic banks. For drive service implementation compatible payment system principles of integration,

[14] A.Ross, Stephen et al. 2015. *Corporate finance: core principles and applications.* New York : McGraw-Hill: Fakultas Ekonomi dan Bisnis

[15] Ross, Stephen et al. 2015. *Corporate finance : core principles and applications.* New York: McGraw-Hill: Fakultas Ekonomi dan Bisnis.

[16] Gavril, Roxana Maria. 2019. "236087038" 8 (1)

interconnection, and, Bank Indonesia interoperability also continues and strengthens Card implementation preparation Domestic Government Credit as well Open API National Standard Payment (SNAP).

Digital technology will continue to change the banking landscape in Indonesia. A survey (Shabri et al. 2022)[17] of financial service customers in Indonesia shows a sizable growth in internet and mobile banking adoption, indicating that digital channels will become increasingly important in building loyalty and generating growth for financial institutions. According digital banking, which was originally an application with standard transaction features, has now turned into an application with a variety of functions, ranging from opening savings and investment accounts, card less withdrawals, real-time gross settlement, point exchange, shopping, and several other types of transactions. (Mubarok and Suprayogi 2021)[18] Banks carry out digitalization to achieve customer satisfaction. Customer satisfaction is an important thing in the banking industry which is a service sector. Customers will move from one bank to another if they don't get what they expect ((Mawarni 2021))[19]. Therefore Islamic banks must be able to keep up with the pace of technological developments in providing digital-based services. According to (Mawarni, 2021) The banking sector is currently changing as a result of environmental shocks, technological change and innovation digital, the rise of the digital world and the provision of innovative services. The biggest turning point and change in smartphones, is that they don't even provide offline branches. Therefore, trust is a factor to consider when choosing banking services. Research (Priyono 2017)[20], found that trust plays an important role in technology acceptance, system reliability and availability when users need services are important factors influencing the adoption of these services. Other studies explain that hedonic motivation factors, habits, and beliefs have a significant effect on behavioral intentions to use, while beliefs have a fundamental effect in several years. Last no doubt is transition to pure digital banking (Morakannyane et al., 2017)[21].

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[17] Shabri, Husni, Nur Azlina, Muhammad Said, Perbankan Syariah, Fakultas Ekonomi, Dan Bisnis, Uin Syarif, and Hidayatullah Jakarta. 2022. "*Transformasi Digital Industri Perbankan Syariah Indonesia."El-Kahfi | Journal of Islamic Economics 3* (02): 1–7.

[18] Mubarok, Ahmad Shofiy, and Noven Suprayogi. 2021. "*Determinan Pengungkapan Informasi Inklusi Keuangan Pada Bank Umum Syariah Di Indonesia*." Jurnal Ekonomi Syariah Teori Dan Terapan 8 (2): 211. https://doi.org/10.20473/vol8iss20212pp 211-220.

[19] Mawarni, Rika. 2021. "*Penerapan Digital Banking Bank Syariah Sebagai Upaya Customer Retantion Pada Masa Covid-19*." Al Iqtishod: Jurnal Pemikiran Dan Penelitian Ekonomi Islam 9 (2): 39–54. https://doi.org/10.37812/aliqtishod.v9i2.233.

[20] Priyono, Anjar. 2017. "*Analisis Pengaruh Trust Dan Risk Dalam Penerimaan Teknologi Dompet Elektronik Go-Pay*." Jurnal Siasat Bisnis 21 (1): 88–106. https://doi.org/10.20885/jsb.vol21.iss1.art6.

[21] Morakanyane, Resego, Audrey Grace, and Philip O'Reilly. 2017. "*Conceptualizing Digital Transformation in Business Organizations: A Systematic Review of Literature.*" 30th Bled EConference: Digital Transformation - From Connecting Things to Transforming Our Lives, BLED 2017, no. December: 427–44. https://doi.org/10.18690/978-961-286-043-1.30.

The advantage of the bank is flexibility and ability to offer innovative services at a lower price and cheaper than the bank traditional. The main features that Mckinsey identified as such artificial intelligence, nanotechnology, robotics, internet of things, augmented reality, digitization and key areas of digital learning, mobile, tablet, and technology smart app. Digital banking or digital banking is a new product for some customers, as a new product it is certainly not easily accepted by customers (Umairah, 2016)[22]. All banking activities can be completed with one application against performance expectations, effort expectations and facilitation conditions (Kusumawati & Rinaldi, 2020).

Digital Transformation in the Sharia Banking Industry

Transformation digital will be a challenge for the banking industry to survivebusiness in the financial sector. Research conducted by Mckinsey (2020) explained that the banking industry is the most lagging sector on digital transformation compared to other industrial sectors. Pandemic Covid-19 encourages faster discovery in the Islamic banking industry form digital products and all digital services that are capable of minimizing physical relations between people during Large-Scale Social Restrictions (PSBB) and Restrictions on Community Activities (PKM) are enforced. Suppress the covid-19 virus. The existence of digital-based banking services can help and facilitate customers perform banking transactions such as transfers, bill payments monthly payments, online shopping payments, account opening or closing.

Aim digital transformation is an emphasis on technology, business models, and processes create new values for customers, employees, and organizational dimensions other. Capturing the value of digital transformation is crucial for the most part industry and in some cases crucial to sustaining life. There are the greatest digital value may be outside of customer performance (Naimi-Sadigh, Asgari, and Rabiei 2022)[23] Outside based on customer performance also leads, plan earlier it has become a necessity that cannot be denied for the bank for identify the key success factors of an organization using put the perfect solution to clear the confusion and share something the business. Access to digital banking services can be accessed using easy without time and place restrictions. It aims to improve operational efficiency & service quality the bank pays attention to satisfaction to customers. This target is based on Indonesia's position in 2020 is ranked 2nd globally in the Islamic Finance Development

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[22] Umairah, Hasyim Tamim Linda. 2016. "Peran Perbankan Syariah Terhadap Pertumbuhan Ekonomi Sektor Riil Di Indonesia." Akrual Jurnal Akuntansi 8 (7): 11–27.

[23] Naimi-Sadigh, Ali, Tayebeh Asgari, and Mohammad Rabiei. 2022. *Digital Transformation in the Value Chain Disruption of Banking Services*. *Journal of the Knowledge Economy*. Vol. 13. Springer US. https://doi.org/10.1007/s13132-021-00759-0.

Indicator (IFDI) Index, namely an index to measure the development of the financial industry sharia. Even at the New Year 2019, the Global Islamic Finance Report (GIFR) put the Islamic Finance Country Index (IFCI) first rank on Islamic finance development. Putra et al (2022), stated that the use Technology for transaction needs also needs to be considered, because at this time the manual banking system is no longer the main option for transactions. Factor Convenience, lifestyle, and high needs create banking transactions can be done anywhere, the bank must automatically adjust. Because of that, a separate representation based on the calculated digital transformation level be a factor that is applied when assessing a bank's competitive capacity found in the work of scientists (Kolodiziev et al. 2021)[24]. Examined the quality of internet banking services affect customer satisfaction and loyalty. Therefore, remember the current approach and the urgent need to reconsider comprehensive influence exerted in the competitive capacity of banks using the tool digital transformation, it is recommended for transaction transactions between different practices standards used to analyze and assess competitive capacity and bank digitization indicators.

Research Methods

The research in this conceptual paper uses qualitative methods to better understand the process of digital transformation of economic growth in an Islamic banking industry in Indonesia. The qualitative research method used is library research. The types of data obtained in this study are primary data and secondary data. Primary data is the result of data obtained from the first source either from individuals or individuals such as from interviews.

The primary data sources in this study were obtained from direct research in the field from interviews, observations and documentation from informants to determine for sure the digital transformation of economic growth in an Islamic banking industry in Indonesia Literature research is a type of research that collects information from notes, reports, books, journals, and other related scientific sources. (Mirzaqon 2018)[25] library research includes collecting information and data from books, scientific literature references, and other scientific references such as proceedings and reports from official institutions or organizations. This library research uses a Systematic Literature Review approach. The Systematic Literature Review approach (Ahmad et al. 2021)[26] is a series of

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[24] Kolodiziev, Oleh, Mykhailo Krupka, Nataliya Shulga, Myroslav Kulchytskyy, and Olha Lozynska. 2021. "The Level of Digital Transformation Affecting the Competitiveness of Banks." *Banks and Bank Systems* 16 (1): 81–91. https://doi.org/10.21511/bbs.16(1).2021.08.

[25] Mirzaqon, Abdi. 2018. "*Studi Kepustakaan Mengenai Landasan Teori Dan Praktik Konseling Expressive Writing Library*." *Jurnal BK UNESA*, no. 1: 1–8.

[26] Ahmad, Iftikhar, Shahid Iqbal, Muhammad Kamran, and Shahzad Jamil. 2021. "*A Systematic Literature Review of E-Banking Frauds: Current Scenario and Security Techniques Firm-Market Volatility*

methods for finding, assessing, and interpreting all existing study materials to provide answers to predetermined research questions. This research is basically also called concept research or is thought-provoking which cannot be separated from a philosophical approach consisting of linguistic analysis and concept analysis.

Linguistic analysis is used to find out the real meaning, while concept analysis is used to find keywords that represent an idea. The conceptual analysis in this study uses descriptive analysis, which explains and describes the focus of the main research studies on concepts related to economic growth with an analysis of the opinions of scholars, scholars and experts who are competent in the study, so that the presentation presented becomes easier to read and understood. Meanwhile, to present conclusions using *deductive analysis,* where things that are general in nature are concluded into special conclusions. Based on a descriptive approach method in which the author describes and analyzes data from findings in the field, especially related to digital Islamic banking services contained in several sources issued by authorized agencies and literature reviews related to the object of research. In its application, the issue of economic growth raised will be studied through the eyes of Islamic economics. Choosing Islamic banks over conventional banks with Islamic windows is a big influence in our sample.

Sub Section 1

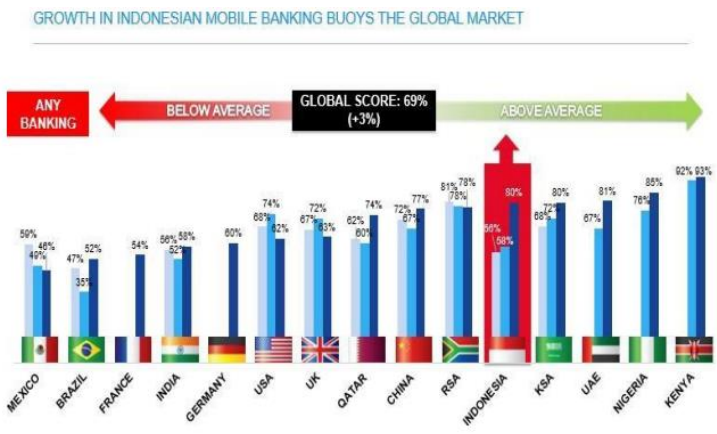
The discussion of digital transformation and economic growth for Islamic banks does not only talk about bank products that use technological advances, but begins with efforts to limit the number of bank office networks which is the first step for an Islamic bank to enter the digital era. The Covid-19 pandemic has accelerated the acceleration of digital transformation in the banking sector and has even become a necessity. This condition requires Islamic banking to place digital transformation as a priority and as one of the strategies in efforts to increase bank competitiveness. The Financial Services Authority issues regulations in an effort to encourage the banking industry to be more efficient, competitive and contribute to national economic growth.

Following are some charts according to S&P Global Ratings, it is estimated that the economy will grow by 10–12% from 2021 to 2022. 4 If we consider this rate of growth, IFSI will cross the USD 3 trillion mark by the end of 2021. Even though economic recovery is slow due to new variants COVID-19, the global sukuk market recorded a 21.2% year-on-year (yoy) increase in issuance to USD 42.3 Billion in Q1 2021 (Q1 2020: USD 34.9 Billion)

Comovements View Project 3509 LINGUISTICA ANTVERPIENSIA A Systematic Literature Review of E-Banking Frauds: Current Scenario and Security T.” Researchgate.Net 2 (June): 3509 – 3517.

Based on Figure 1 below, it can be explained that the results of research in 2015 conducted by The Global Community for Mobile Content & Commerce can be seen that mobile banking users have experienced a very sharp increase, it can be seen that mobile banking users in Indonesia in 2012 amounted to 56 %, then in 2013 as much as 58% and in 2014 as much as 80%.

Figure 1. Percentage of Growth in Mobile Banking Users in Indonesia and Several Other Countries



(Source: The Global Community for Mobile Content & Commerce, 2015)

Increased Economic Growth in the Real Sector due to Sharia Banking

Economic growth in the real sector, which means that the higher the third party funds, the higher the economic growth in the real sector. Third party funds are customer funds entrusted to Sharia Banks and/or Sharia Business Units with *wadi'ah* contracts or other contracts that comply with sharia principles in the form of savings, demand deposits, or other equivalent forms. Economic growth is in accordance with Schumpeter's theory which is continuous with the production function theory. Schumpeter's theory on the *finance* led *growth* or *supply-leading view shows* that the financial sector drives economic growth. In Islamic banking, the impetus for economic growth is carried out through the bank intermediary function, which distributes funds collected from parties who have excess funds to those who need funds. The funds are then channelled by Islamic banking based on the economic sectors in people. The people's favourite financing instrument for Islamic banks is *murabaha* (sales and purchases) which is consumer financing.

The Financial Services Authority Regulation is POJK NO.12/POJK.03/2021 concerning Commercial Banks. This regulation focuses on strength in institutional rules. The objectives of issuing this regulation include providing an umbrella for bank regulation in carrying out digital transformation, increasing the simplification and efficiency of banking office networks, improving banking quality and services for the community, strength he banking consolidation through synergies between banks and other FSI within the Bank Business Group, supporting the implementation of regulations effective and efficient supervision through redefining bank groupings, strengthening bank institutions by increasing bank capital requirements for the establishment of new banks. Furthermore POJK NO. 13/POJK.03/2021 concerning implementation of commercial Bank products.

This regulation focuses on strengthening licensing and administering bank products. The objectives of issuing this regulation include accelerating digital transformation and digital product and service innovation, accelerating the licensing process for product to encourage the development of bank product innovations, creating *level of playing field in* the banking industry, supporting the creation of a conducive environment for banks to innovate, as well as improve consumer protection through establishing an assessment mechanism. The issuance of this OJK Regulation provides certainty for Islamic banks in carrying out digital-based banking operations. So that in a short time digital banks emerged, both digital banks where all activities are carried out digitally and digital banking which only provides digital-based services such as opening accounts, transferring and closing accounts. Based on BI data, digital banking transactions for 2020 amounted to Rp. 27.4 trillion and will continue to experience growth in 2021 to Rp. 40 trillion and are projected to continue to increase to reach 48.6 trillion.

The development of Indonesia's sharia economy and finance is not limited in terms of volume, but also in terms of coverage which is increasingly complete in every component of the national economy and finance. In the real sector, sharia economic applications are growing in the form of the halal industry which covers various sectors such as halal food and beverages, Muslim fashion, Muslim-friendly tourism, halal medicines and cosmetics, and other halal industries. Meanwhile, in the financial sector, financial application Sharia does not only cover commercial finance but also microfinance and social finance. Thus, the application of Islamic finance is relatively complete to serve all groups of people based on their economic capacity, namely from medium-large business groups, micro-small businesses to poor community groups.

Effect of Digital Services on Economic Growth

Chart 1: Transaction Volume of Halal Products through *E-Commerce Marketplace*

Source: Bank Indonesia, 2021

Digital services have an effect on economic growth in accordance with Schumpeter's theory (1912) which states that *financed growth* or what is commonly called *the supply leading hypothesis* shows the supply relationship between the financial sector and growth economy. This theory states that the financial sector drives economic growth. The financial sector, in this case Islamic banking as a financial intermediary, functions as a distributor of funds from parties who have excess funds to those who need funds through efficient funding sources which will then drive economic sectors and spur economic growth. (Ahmad et al. 2021) state that the growth of the financial sector influences economic growth. (Umairah 2016). A study explains that the intermediary function of financial sector institutions will drive economic growth. This is because it will reduce costs in project appraisal. If the number of projects increases in a growing economy, the bank will enter the market as a form of bank activity and increase profits. Financing provided by Islamic banks is based on the type of user and business category, one of which is UMKM (Micro, Small and Medium Enterprises).

Based on data from Islamic Banking Statistics for 2016, the total working and investment capital provided by Islamic banks and Islamic business units to MSMEs is IDR 54,530 billion. Even though the financing provided to MSMEs is lower than the financing provided to non-SMEs and with a total customer of 18 million people, which is only 8.94% of the total Muslim population in Indonesia, it has affected economic growth at 68.4%. So if the entire 207 million Muslim population in Indonesia invests their funds in Islamic banks, we can imagine how fast the economy will grow. However, to encourage public interest in investing their funds through Islamic banks, it is necessary to realize that these people must first believe that Islamic banks are capable of realizing their investment objectives. The existence of this belief makes many people refrain from investing through Islamic banks. Digitalization is a major concern in strength the digital economy as one of the focuses of developing the Islamic economy. In the framework of developing the Islamic digital economy in Indonesia, several strategies have been devised in the framework of utilizing digital technology in efforts to develop the Islamic economy, including encouraging digital Islamic economic literacy to prepare human resources who understand the digital Islamic economy well, encouraging digital transformation for Micro, Small and Medium Enterprises (MSMEs) in order to strengthen the *national halal value chain*, encourage the development of digital infrastructure and develop innovation in order to support the development of the *halal value chain* through digital economic development, take advantage of industrial progress 4.0 to encourage the growth of the Micro, Small and Medium Enterprises (MSMEs) industry), and support the strengthening of sharia-compliant finance, regulation and ecosystems in the digital economy. This growth is the COVID-19 pandemic, which has encouraged people to transact digitally. The availability of information that convinces customers of the ability of Islamic banks is one of the tools to develop public trust. The source of this information comes from Islamic bank financial reports prepared in accordance with PSAK.

In addition, because it is still in the early stages of development, some people's understanding of the Islamic banking system and principles is still not correct. Basically, the Islamic economic system clearly prohibits the practice of usury (interest). However, the differences in product characteristics of conventional banks and Islamic banks have created reluctance for users of banking services. This reluctance was partly due to the loss of the opportunity to get a steady income in the form of interest from deposits. Therefore, it is necessary to socialize that placement of funds in Islamic banks can also provide competitive financial benefits.

The highest financing thereafter was *musyarakah* and *mudharabah* which provide long-term financing in productive economic sectors, without interest with profit sharing according to the agreement. The relationship between fund owners, entrepreneurs and Islamic banking based on the concept of profit sharing then increases productivity in real economic sectors, so that the financial sector is more stable because there is no interest rate risk which then increases economic growth. In the profit-sharing principle, the basis for determining it is net profit, while in the interest system, the basis for determining it is the amount of the loan. In the principle of profit sharing, if the entrepreneur suffers a loss, then there is no need to provide additional funds to the donor.

Therefore, the business can still run and entrepreneurs are not bothered with the obligation to pay extra. Meanwhile, in the interest system, interest payments must be made according to the agreement without considering whether the business is profitable or losing money. In this case, the entrepreneur suffers a loss because he has to find other funds to pay the interest. Improvement of sharia banking services can be done by adding a network of sharia banking offices. This addition is necessary considering the number of sharia banking offices is still very minimal compared to conventional banks. Increasing the number of sharia bank offices will improve service quality and encourage innovation in sharia banking products and services.

The Urgency of Developing Services for Digital Payments in Sharia Banking

The development of digitalization in the banking sector increases the risk of cyber security for banks. The rise of cyber-attacks has prompted the need to increase cyber resilience through strengthening cyber security. Referring to international standards and best practices from various countries, a framework for strengthening the banking sector's cyber security framework has been prepared, consisting of Cyber Security Management, Cyber Security Exercise, and Cyber Security Reporting.

The expansion in the use of digital technology has opened up various opportunities that can be used for the benefit of solving various problems, including inclusive economic activities. The development of digital technology can help massively increase economic capacity and increase innovation and productivity. With the potential for this varied technological development, the university can take a role in the following aspects:

1. **Knowledge** - The University as a scientific and educational centre can take a role in increasing knowledge and developing the capacity of Human Resources to suit Industry needs.
2. **Innovation** - The University as a scientific research centre has the opportunity to provide new breakthroughs regarding economic digitalization innovations, especially in the field of Islamic Economics.
3. **Globalization** - With the loss of geographical space limitations in the aspect of knowledge, universities can become a means for academics around the world to share and study together good digitalization implementation programs.
4. **Discordance** - Digitalization is closely related to changes in cultural and social structures that have an impact on everyday life. Academics from the University can analyze these effects and keep digitalization in line with existing sharia principles.

In the midst of today's technological disruption, sharia banking must also compete not only with conventional banks but also with financial technology (fintech) companies. The era of banking 4.0 has revolutionized and transformed the Islamic financial sector so that Islamic bank innovation in terms of technology services to consumers is an absolute must. Changes in consumer behaviour require banks to be more adaptive to digital technology. Because if not, then Islamic banking customers will be able to leave and switch to other Islamic financial institutions such as Islamic financial technology. According to a survey from (Mawarni 2021) it shows only 14 percent of Islamic banks say that the purpose of digitization is to increase revenue from Islamic banks. Even though the digitization of Islamic banking can have an impact on cost efficiency incurred so that it can increase Islamic bank income. Today's Islamic banks cannot only rely on physical outlets but must also reach their customers through digital services such as internet banking and mobile banking. (Ministry of National Development Planning/Bappenas, 2020).

There are two types of strategies known in the world of marketing, namely the strategy of finding new customers and strategies to retain existing customers (customer retention). The two strategies can be implemented simultaneously, but the customer retention strategy deserves greater attention. This means, the organization must always strive so that its customers are always satisfied and make repeat purchases. organizations need to align competencies, technological resources owned with the needs and desires of these dynamic customers.(Mawarni 2021) Customer retention is a marketing activity in retaining customers carried out by the company through a planned strategy, focusing on developing marketing activities, building relationships, maintaining customers and create customer loyalty. Realizing that the role of customer retention is very important to increase profits and common goals between companies and customers and vice versa. (Mawarni 2021).

According to the Financial Services Authority (OJK) regulation number 12 / POJK.03 / 2018 concerning the Implementation of Digital Banking Services by Banks In general, where the notion of digital banking is a service for electronic banking that is developed in order to maximize the utilization of customer data in order to serve and provide information to customers more easily, quickly, and in accordance with the needs (customer experience), and can be run completely independently by third parties. customers, taking into account various aspects of security (Fitra et al. 2022). The application of digital banking in Indonesia is evidenced by the existence of various services that can make it easier for customers, including: First, the existence of Internet Banking. Second, there is Phone Banking. Third, there is SMS Banking. Fourth, there is Mobile Banking. Banks can cooperate with cellular operators, so that the Global for Mobile Communication (GSM) SIM Card (cellular chip card) has a special program installed to be able to carry out banking transactions. The process of customer transactions will be easier on mobile banking compared to SMS Banking (OJK RI, nd).

The Role of the Indonesian Sharia Economy at the Global Level In 2020, the development of Indonesia's Islamic economy and finance will receive significant recognition from the international community. This is illustrated by the increase in Indonesia's ranking based on *the State of the Global Islamic Economy Report* (SGIE) by the Dinar Standard. Developments in the last three years show the position of the Indonesian halal industry which continues to increase. In addition, Indonesia's role as a top 10 *global player* in the six halal industries in 2020 shows an increasing focus on national-scale policies, which is also supported by increased foreign investment (SGIE, 2020). Meanwhile, the position of Indonesia's sharia financial sector in the global arena has also increased. Based on the Islamic Finance Development Index

Issued by *the Islamic Corporation for the Development of the Private Sector* (ICD), Indonesia's Islamic finance industry managed to rise to 2nd place after last year's 4th position. This is supported by improvements in the *Knowledge, Awareness & Governance*. This achievement is complemented by Indonesia's pioneering in the application of Islamic microfinance and Islamic social finance, it is hoped that it can become an example for other developing countries that wish to develop this sector in order to serve the needs of financial services for micro-small business groups and the poor community. These achievements reflect the improvement in Indonesia's reputation internationally. In addition, this condition also shows the progressive development of the national Islamic economy at the global level in various aspects, starting from industry performance and investment in general, regulatory and governance tools, and the role of the general public as a basis for domestic demand. This development is inseparable from the results of efforts to synergize the national sharia economy in implementing its policies so far. In the future, the synergy certainly needs to be further strengthened, especially the synergy of the halal industry sector and the Islamic finance sector so that the Islamic business ecosystem is more harmonious and conducive to accelerating the development of Islamic economics and finance.

To oversee the national Islamic economy and finance in the new normal era, acceleration will be carried out through three strengthening strategies in each of its pillars. The three strengthening strategies include (i) Infrastructure Strengthening including digitalization, (ii) Institutional Strengthening, and (iii) Expansion of Implementation. Through these three strategies, it is hoped that the recovery period and acceleration in the Program Strengthening Stage will run more efficiently and effectively in efforts to develop an Islamic economic and financial ecosystem, to be further escalated to the National Implementation Stage.

Infrastructure Strengthening Strategy including digitization. Digitalization of processes to increase efficiency and halal *traceability*, as well as expansion of online markets, including *virtual market* corporate support for sharia businesses *end-to-end*, including Islamic boarding schools through the implementation of HEBITREN Replication and business models *end-to-end* and expansion of *linkages* between sharia business actors, including capacity building. Replication and development of *end-to-end* and expansion of *linkages* between sharia business actors, including capacity building. Development of data and digitization of Islamic finance, as well as FMI as part of the implementation of the BSPI and BPPU.

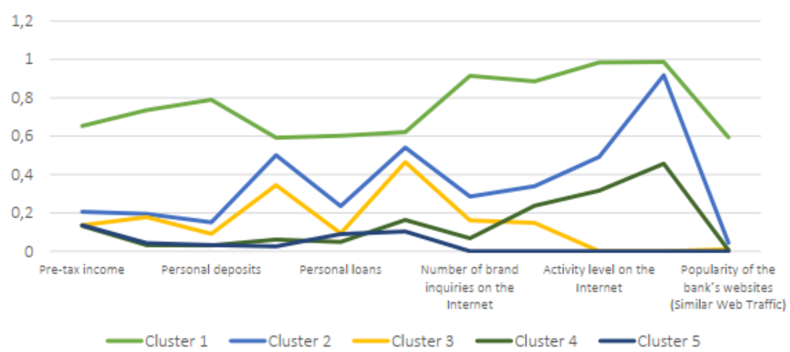
Support for the development of data and digitization of Islamic social finance. Support for institutional strengthening of sharia banking mergers and *spin offs.* JPKSI developer support and acceleration of the establishment of a coordination forum for Islamic social finance authorities. Development of sharia financial instruments, both in terms of policy implementation, market deepening, and alternative sharia business financing. Development and expansion of the implementation of sharia social finance integration instruments as an alternative to sharia business financing.

Preparation of *go-digital* for sharia economic and financial business actors. Digitizing education, including vocational and certification, as well as socialization through organizing *events.* Strengthening international standard Islamic higher education institutions as *centres of excellence*. Development and implementation of research and exyar education in various lines, both formal and non-formal education. In the Islamic finance pillar, infrastructure strengthening and digitization are carried out as part of the implementation of the BSPI and BPPU. In the implementation *Blueprint* of the Indonesian Payment System *Blueprint* the Money Market Development. Development *Financial Market Infrastructure,* as well as data development and digitization will strengthen and increase the efficiency of money markets, including the Islamic money market. Strengthening this infrastructure supports the realization of *end-to-end sharia compliant process* in transactions and financing in sharia economy and finance. In the pillars of education and outreach, an important step in welcoming the digitalization era is increasing the readiness of sharia economic actors (*people*) to *go digital*. For this reason, education programs are needed, both formally and non-formally, as a form of increasing the digital capacity of the *mindset* of human resources in the Islamic economy. Strengthening the educational infrastructure is also pursued through the preparation of various teaching materials and popular books to increase public literacy regarding sharia economics and finance. Digitalization is also carried out in the form of program implementation.

Result and Discussion

Digital Transformation is a Driving Factor for Increasing Competitiveness

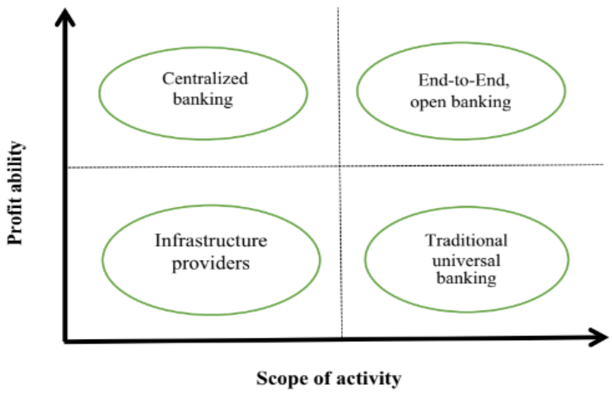
Chart 2. Graphical Interpretation of the Bank Cluster Characteristics by the Competitive Capacity Level



According to the results of the cluster analysis, it has changed the potential of digital transformation to become a driver of competition in the current conditions, determine the competitive advantage of banks and create additional opportunities to expand their customer base and service range. Active development of online services (albeit less significant than the first cluster), in particular, the popularity of bank mobile applications represents a feature of the second cluster. As can be seen above, the qualitative research of the results obtained from the cluster analysis proves that digitalization is a driver of competition in modern conditions that determines the competitive advantage of banks and broadens their customer base and range of services. The research findings can overall show that digital transformation is a driving factor in increasing the competitiveness of domestic banks, especially those that focus on providing services to private customers.

The defined position becomes the focus found when studying the attributes given to some banks the competitive position by digital transformation, which determines the focus of banking products in the transformation condition. One of them is Sharia banking in Indonesia where there is digital transformation which is a bridge for Islamic banks to grow and develop in Indonesia. Every application that can be downloaded on the Google Playstore will also affect the amount of income for each bank in an application (mobile banking).

Figure 2: Banking Business Model



Source: Journal of the Knowledge Economy, 2021

According to Figure 2, four different business models for banks can be considered. The digitization of the banking industry has made it possible to use new business models. This model follows a different strategy. This model represents the size or scale of the bank's activities and profit margins in each case. The emergence of digital business in society, banks are compelled to modify this model and are forced to switch to open banking. Therefore, the customer requests a change in service, and the bank does not seek a change. The banking centralization model is a creative economy model. This causes open banking to be primarily a customer. The core banking system is a set of banking services implemented in software suites and the information is largely integrated into a centralized database and capable of providing services to all branches and bank sub-branches from this centralized database location. Centralized banking is a comprehensive and integrated system to respond to customer requests in a timely, accurate manner and report their information through various communication channels between customers, banks and general databases in all branches to remain competitive. In this case, the bank does not produce all financial products and services but instead uses the partner ecosystem and transforms itself into a distributor of financial services or products.

A better strategic move by pursuing a model that allows banks to absorb network effects and take advantage of existing competitive advantages. Open banking is a turning point in the evolution of the banking industry from product oriented to customer service oriented. It will also make personalization and meeting the specific needs of each customer as easy as possible and will provide high potential value to financial institutions and banks. In the traditional banking model and the infrastructure example, although asset sensitive, they have low profit margins which reduces the attractiveness of this tactic compared to using the other 2 tactics. The centralized banking model, which covers all products from production to distribution, has good profit margins, but is more vulnerable than other examples and less risk averse. Due to the high risk, the possibility of missing this sample and the loss due to failure will be very likely. Banking managers' concern about open banking is a security issue due to the lack of a standardized API, and product development portfolio. Today, all large and mini banks use a centralized banking system as a platform and infrastructure to provide other new services. The centralized systems operated by banks are largely outdated due to the loss of their cutting-edge capabilities. Many of these systems are supported and still operate at high ports. The tools and processes available in a centralized banking system cannot keep up with the pace of change. For this reason, the bank intends to replace its centralized system and replace the old system with a new one.

Adoption of various *emerging technologies and applications* is very important in digital banking transformation. Banks are encouraged to adopt various *emerging technologies and applications* in a responsible manner. However, Banks need to pay attention to the principle of adopting information technology (*responsible adoption principles*) so that innovation becomes trusted and useful and in line with the wishes and interests of consumers. Indonesian consumers are very open to digital banking. Over the past three years, monthly usage of digital banking channels in Indonesia has grown at twice the rate of other Emerging Asian markets. Additionally, 55 percent of non-digital customers say they are likely to use digital banking in the next six months; this is the second highest figure for any country in Developing Asia, after Myanmar.

Interbank Money Market Based on Sharia Principles (PUAS) the interbank money market based on sharia principles is a medium for the Islamic finance industry to manage its liquidity risk. To support PUAS to function properly, PUAS is being developed through several strategies, namely: (i) strengthening regulations, (ii) developing instruments, (iii) strengthening infrastructure and institutions, and (iv) expanding the issuer and investor base. The PUAS instrument development strategy is carried out by developing PUAS instruments that are in line with the needs of the sharia banking industry.

PUAS instrument development in 2020 will be carried out by issuing a new instrument Certificate of Fund Management Based on Interbank Sharia Principles (SiPA). SiPA is a certificate issued by BUS or UUS as a statement of acceptance of fund management at PUAS with the Wakalah Bi Al-Istitsmar contract. The presence of the SiPA instrument was followed by regulatory improvements, namely Bank Indonesia Regulation No.22/9/PBI/2020 concerning the Interbank Money Market Based on Sharia Principles. During the 2020 period, there were 43 banks that conducted PUAS transactions, consisting of 13 BUS, 12 UUS and 18 BUK (Chart 3.26). Conventional Commercial Banks (BUK) can carry out PUAS transactions, but are only limited as fund investors.

Organizational Capability and Elimination Sharing (Gap Analysis) Models

Organizations strive to remove barriers to digital transformation by closing innovation gaps (Naimi-Sadigh, Asgari, and Rabiei 2022). Rules, competition, and customer behavior ultimately force banks to concentrate on providing an inclusive and comprehensive experience (Naimi-Sadigh, Asgari, and Rabiei 2022). Improvement: The desired constructive component exists in the current situation, but needs to be revised and changed. The constructive components are not in the desired condition and must be removed. The matrix is used to analyze gaps. This matrix, according to the gap analysis axis (9 areas of digital technology that are developing in the banking industry), determines what steps should be taken to bridge the gap between the status quo and the desired situation. Collecting, categorizing and evaluating information about the bank's IT areas is necessary to complete the gap analysis. Within this matrix, the digital technology fields line up. Matrix columns can have four states: Within this matrix, digital technology fields are lined up. Matrix columns can have four states: Stabilization: Consistent existing and desired constructive components. Creation: The desired constructive component is not yet visible in its current state and must be created. Improvement: The desired constructive component exists in the current situation, but needs to be revised and changed. Removal: The constructive component is not in the desired condition and must be removed.For each axis of gap analysis (digital technology field), it is determined what steps should be taken to enhance, stabilize, create, and eliminate the desired situation. After several meetings with banking system experts and examining their perspectives on various areas of digital technology regarding the current status of Bank IT, internal factors (strengths and weaknesses), and external factors (opportunities and threats), Table 4 is reached. Customer expectations are no longer optimized by internal processes and outsourced actions. Banks are currently seeking to digitize their financial operations and are spending billions of dollars to modernize their ICT infrastructure. Remembering that the purpose of strategy is to anticipate and mitigate future risks and remove obstacles.

Tension analysis is used to distinguish the tension between the status quo and the optimal situation in the area of synchronous digital technology tactics using value chain processes and ultimately identifying the expected series of projects and actions to achieve the desired structural situation of the bank. For each axis of tension analysis (the field of digital technology), it influences what steps must be taken to enhance, align, create, and eliminate the desired situation. After several meetings with banking system experts and assessing their perspectives on various areas of digital technology regarding the Bank's current IT status, internal factors (strengths and weaknesses), and external factors (opportunities and threats), Customer expectations are no longer evaluated for internal processes and outsourcing actions. Today's banks seek to digitize their financial operations and spend billions of dollars modernizing their ICT infrastructure. Remembering that tactics are the goal of anticipating and mitigating future risks and removing obstacles. Stabilization: The constructive component that is consistent and present is desirable. In this term, using ICT capabilities in the areas of agility, flexibility, adaptability, organizational competence, weaknesses and deficiencies in ICT in infrastructure, networks and a digital technology expert (social media, cellular, big data, cloud recovery, internet of things, artificial intelligence, fn-tech, blockchain, empirical dream, and augmented empirical), the hoped-for action to transform digital banking has been broken.

Cash and non-cash payment transactions are on a recovery trend in the second half as economic activity improves. In December 2020, UYD again increased by 13.25% (yoy). The value of non-cash payment transactions with ATMs, Debit Cards and Credit Cards in December grew again to a positive 1.36% (yoy) after experiencing a contraction in the previous month. Digital economic and financial transactions continue to grow rapidly in line with the increasingly widespread use of e-commerce platforms and digital instruments during the pandemic, as well as the strong public preference and acceptance of digital. This can be seen from the value of Electronic Money (EU) transactions in December 2020 which grew 30.44% (yoy). In addition, digital banking transactions also continue to increase. In December 2020, the volume of digital banking transactions reached 513.7 million transactions, or grew 41.53% (yoy) with a digital transaction value of IDR 2,775.5 trillion, or grew 13.91% (yoy). Meanwhile, the nominal value of e-commerce transactions increased by 19.55% (yoy) in the third quarter, so that overall in 2020 it grew 29.6% (yoy) in 2020, supported by increased preference from the public for using digital platforms and promotional strategies for a number of marketplaces. (Bank Indonesia, 2020). Service is not limited to serving, but understanding, understanding, and feeling.

Thus, the delivery of services will affect the customer's heart share. Then it can grow customer loyalty to a product. So that it has a positive impact on the company's image. The challenges of transforming the use of digital technology are more Rika Mawarni, et al. than just providing online and mobile banking services, necessary for banks to innovate in combining digital technology with customer interaction, in this case the findings of these new technologies must make it easier and provide convenience for users in accessing Islamic banking services.

Conclusion

The application of these methods and strategies at the research stage made it possible to strengthen the significance of the digital transformation level factor considered when assessing a bank's competitive capacity. The relationship between the level of competitiveness of banks and the level of digital transformation is very close and direct. Digital transformation affects all important indicators of bank activity: income, assets, deposit volume, and loans. The foregoing identifies effective tools for competition, determines direction and opportunities for the development of banking institutions. The most significant impact of digital transformation is seen in the increase in personal savings and loans, income and assets. Moment applying the proposed approach based on a certain regression equation, they will be able to assess efficiency and make informed management decisions about investing in digital tools and services. Further research should be aimed at developing a methodological approach to assessment comprehensive bank digital transformation and its effectiveness in Islamic banking in the world.

Digital transformation can be seen in the form of digital evolution and digital disruption in banks. Digital evolution involves re-evaluating the value chain through the provision of digital services, provide new channels of communication with customers and partners, and deliver new digital services to new partners in the digital banking ecosystem. On the other hand, disruption. Digital is changing business models and replacing traditional services with services digital thus creating new market opportunities. Bank restructuring including revising all the processes, structures and operations used by the bank. The new bank requires shared digital infrastructure that supports the entire organization. Best plan forFinancial institutions in this field are using digital technology to empower and motivate customers. Digital technology is committed to communicate between the organization, customers, and stakeholders, such such a way as to strengthen communication, promote brand, and improve profitability.

Digital transformation of Islamic banking is a necessity because technological developments are increasingly rapid. The process of digital transformation of Islamic banking has been accelerated by the COVID-19 pandemic which has limited direct activities. Product innovation and digital-based sharia bank services continue to be carried out following the pace of development of technological advances in order to meet the needs of customers and society in general. Currently Islamic banks are able to provide a variety of digital products and digital services such as mobile banking, internet banking, SMS banking and phone banking services, which are easy, convenient and safe to use. Meanwhile, there is only one Islamic digital bank, namely Bank Aladin Syariah. Before the spread of the corona virus in Indonesia, Islamic banking was expected to continue to record double-digit growth.

However, currently Islamic banks must start revising their growth targets due to the impact of the spread of Covid-19. Islamic banking must also see the problem of the spread of this virus as a challenge that must be turned into an opportunity to improve, especially from the aspect of digital services. Now people are thinking, how people want to open accounts, save money, apply for credit or loans and other banking services, without having to physically present themselves at the bank in question. This is what is captured as a potential and opportunity by the bank, to increase the interest of prospective customers to become customers at the bank, to provide the services that customers want so that they are loyal to the bank. The economic slowdown due to Covid-19 reduced payment activities, but accelerated the adoption of digital financial technology. The growth in cash contracted in line with the implementation of the PSBB which reduced mobility and the need for cash transactions for the community. In December 2020, UYD again increased by 13.25% (yoy). The value of non-cash payment transactions with ATMs, Debit Cards and Credit Cards in December grew again to a positive 1.36% (yoy) after experiencing a contraction in the previous month. Digital economic and financial transactions continue to grow rapidly in line with the increasingly widespread use of e-commerce platforms and digital instruments during the pandemic, as well as the strong public preference and acceptance of digital. This can be seen from the value of Electronic Money (EU) transactions.

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and providing lecture facilities so that this article can be completed properly and the results of this research become the basis for developing learning media or applying further learning media.

Appendix A Section Title of First Appendix

Digital transformation is a demand in social life and patriotic. Not only a matter of technology, but also pay attention to social elements such as *culture* and society. To realize digital transformation, do it can't walk alone? All components need collaboration to make it happen. One form of digital transformation is encouraging development of the digital economy. On the other hand, digitization also creates gap due to literacy problems from the community. Digital transformation, also not limited to technology and also *lifestyle*, but also reduce *the gap* and speeds up balance and also supports faster recovery. Therefore, Airlangga explained, the G20 has placed the issue of digitalization as one of the main catalysts for economic growth.

Digital culture and skills are a big obstacle to success in digital transformation. Due to the competitive advantages of banks such as trust, high customer rates, large amounts of data, drastic value chain adoption, access to funds, cheap budgets, and large capital is still high. The main focus is on the implementation of events that, while complex, deepens relationships and enhances customer centred interactions. Successful organizations choose and strengthen programs and strategies that are efficient and useful for their business. The ultimate goal of a bank's digital transformation is to digitize the customer journey from start to finish with a customer-centric digital strategy. This will be achieved when the bank uses a dream financial assistant to improve customer service and interaction real time and also leverage artificial intelligence as a leverage to make loan decisions. That is, the machine can decide to lend to real persons or borrowers, with or without collateral. Machine learning is the heart of artificial intelligence used for data analysis and artificial intelligence estimation. In fact, data is useless without artificial intelligence. Bank experts have tried digitizing the entire journey by identifying five parts, such as discovery customers, customer credit, acquaint customers with types of services and loans available, and lend to their clients based on rules and regulations. Organizations with higher digital maturity are more likely to use a variety of dig technologies. This research focuses on innovation and value in banks, and the other three items still require further work and further research in the future. Projects about information technology are mainly classified into infrastructure, development, and business, by the nature and degree of impact on business and ICT. The successful implementation of these programs helps to bridge the gap between different organizational groups. For the successful management of digital transformation plans, customer journeys, competition, data, innovation, and value need to be reviewed within the organization.

References

A.Ross, Stephen et al. 2015. *Corporate finance : core principles and applications.* New York : McGraw-Hill: Fakultas Ekonomi dan Bisnis.

Nurhayati , Sri , and Wasilah. 2015. *Akuntansi Syariah Di Indonesia.* Indonesia.

Ahmad, Iftikhar, Shahid Iqbal, Muhammad Kamran, and Shahzad Jamil. 2021. "A Systematic Literature Review of E-Banking Frauds: Current Scenario and Security Techniques Firm-Market Volatility Comovements View Project 3509 LINGUISTICA ANTVERPIENSIA A Systematic Literature Review of E-Banking Frauds: Current Scenario and Security T." *Researchgate.Net* 2 (June): 3509 – 3517.

Allen, Franklin, Asli Demirguc-Kunt, Leora Klapper, and Maria Soledad Martinez Peria. 2016. "The Foundations of Financial Inclusion: Understanding Ownership and Use of Formal Accounts." *Journal of Financial Intermediation* 27 (July): 1–30. https://doi.org/10.1016/J.JFI.2015.12.003.

Fitra, Akira Bintang, Arief Suharko, Sugina, Fauzan Manafil Albar, and Dwi Apriliasari. 2022. "Examination Of Customer Interest In The Use Of The Mandiri Syariah Mobile Application At PT. Bank Syariah Mandiri Bekasi Branch Office." *IAIC Transactions on Sustainable Digital Innovation (ITSDI)* 3 (2): 110–25. https://doi.org/10.34306/itsdi.v3i2.517.

Gavril, Roxana Maria. 2019. "236087038" 8 (1).

Jalloul, Suha. 2021. "The Impact of Islamic Banking and Financial Performance: The Case of Dubai Islamic Bank." *The EUrASEANs: Journal on Global Socio-Economic Dynamics* 5 (5(30)): 60–70. https://doi.org/10.35678/2539-5645.5(30).2021.60-70.

Kolodiziev, Oleh, Mykhailo Krupka, Nataliya Shulga, Myroslav Kulchytskyy, and Olha Lozynska. 2021. "The Level of Digital Transformation Affecting the Competitiveness of Banks." *Banks and Bank Systems* 16 (1): 81–91. https://doi.org/10.21511/bbs.16(1).2021.08.

Mawarni, Rika. 2021. "Penerapan Digital Banking Bank Syariah Sebagai Upaya Customer Retantion Pada Masa Covid-19." *Al Iqtishod:*

Jurnal Pemikiran Dan Penelitian Ekonomi Islam 9 (2): 39–54. https://doi.org/10.37812/aliqtishod.v9i2.233.

Mirzaqon, Abdi. 2018. "Studi Kepustakaan Mengenai Landasan Teori Dan Praktik Konseling Expressive Writing Library." *Jurnal BK UNESA*, no. 1: 1–8.

Morakanyane, Resego, Audrey Grace, and Philip O'Reilly. 2017. "Conceptualizing Digital Transformation in Business Organizations: A Systematic Review of Literature." *30th Bled EConference: Digital Transformation - From Connecting Things to Transforming Our Lives, BLED 2017*, no. December: 427–44. https://doi.org/10.18690/978-961-286-043-1.30.

Mubarok, Ahmad Shofiy, and Noven Suprayogi. 2021. "Determinan Pengungkapan Informasi Inklusi Keuangan Pada Bank Umum Syariah Di Indonesia." *Jurnal Ekonomi Syariah Teori Dan Terapan* 8 (2): 211. https://doi.org/10.20473/vol8iss20212pp211-220.

Naimi-Sadigh, Ali, Tayebeh Asgari, and Mohammad Rabiei. 2022. *Digital Transformation in the Value Chain Disruption of Banking Services*. *Journal of the Knowledge Economy*. Vol. 13. Springer US. https://doi.org/10.1007/s13132-021-00759-0.

Nasir Tajul Aripin, Nur Fatwa, and Mulawarman Hannase. 2022. "Layanan Digital Bank Syariah Sebagai Faktor Pendorong Indeks Literasi Dan Inklusi Keuangan Syariah." *Syarikat: Jurnal Rumpun Ekonomi Syariah* 5 (1): 29–45. https://doi.org/10.25299/syarikat.2022.vol5(1).9362.

Priyono, Anjar. 2017. "Analisis Pengaruh Trust Dan Risk Dalam Penerimaan Teknologi Dompet Elektronik Go-Pay." *Jurnal Siasat Bisnis* 21 (1): 88–106. https://doi.org/10.20885/jsb.vol21.iss1.art6.

Shabri, Husni, Nur Azlina, Muhammad Said, Perbankan Syariah, Fakultas Ekonomi, Dan Bisnis, Uin Syarif, and Hidayatullah Jakarta. 2022. "Transformasi Digital Industri Perbankan Syariah Indonesia." *El-Kahfi | Journal of Islamic Economics* 3 (02): 1–7. https://www.ejournal.mannawasalwa.ac.id/index.php/elkahfi/article/view/88.

Umairah, Hasyim Tamim Linda. 2016. "Peran Perbankan Syariah Terhadap Pertumbuhan Ekonomi Sektor Riil Di Indonesia." *Akrual Jurnal Akuntansi* 8 (7): 11–27.