

Indonesian Islamic Banking Innovation Strategy in the Digital Economy Era

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Abstract: Digital economy adaptation seems to be almost pervasive in all sectors, including the financial and banking sectors. Islamic banks as one type of financial institution that provides sharia-based banking services to customers also need to adapt and innovate technology to be able to compete. The aim of this study is to analyze the innovation strategies that have been implemented in Islamic Banking in Indonesia in the Digital Economy Era. The strategy is intended to create more advanced technology-based services to adapt in the digital economy era. By doing so, it is expected that more customers will place their funds in Islamic banks and Islamic banks can continue to grow in the Digital Economy Era.

1 INTRODUCTION

The existence of a Sharia Bank in the Indonesian banking system is a commercial bank based on Islamic sharia (legal) principles, in line with the enactment of Law Number 21 of 2008 concerning Islamic banking providing a legal basis for Islamic Banks both in terms of institutions and operations. Furthermore, with the enactment of Law Number 23 of 1999 which has been amended by Act Number 3 of 2004 concerning Amendment to Law Number 23 of 1999 concerning Bank Indonesia, Bank Indonesia can implement a policy of monetarization of sharia principles, Bank Indonesia can affect liquidity through Islamic banks

Post-Law No. 10 of 1998 Regarding banking, the banking level continues to grow. Islamic banking assets are expanding. In 2017, the growth of Islamic banking assets is quite large, surpassing the growth of conventional asset banks. Data from the Financial Services Authority (OJK) recorded until October 2017 noted that the growth of Islamic banking assets reached 19.79% on an annual basis to Rp395.89 trillion. In the same period, the growth of conventional banking assets amounted to 11.20% to Rp. 7,183.77 trillion (Simbolon, 2018)

But at this time in the digital economy era, the competition in the banking industry in Indonesia was very tight. The digital economy was born and developed through the use of information and communication technology that can also globalize

the world. According to Dalle (2016) world economic history has gone through four eras in human life, namely the era of agricultural society, the era of machinery after the industrial revolution, the era of oil hunting, and the era of multinational corporation capitalism. The previous four economic waves have exclusive characteristics and can only be achieved by certain elite groups. Digital economic waves are present with sloping topography, inclusiveness, and spread the equality of opportunities.

This characteristic has a competitive concept which is an industrial spirit that is easily lifted by startups who prioritize collaboration and synergy. Because of that, the digital economy is an 'economy of sharing' which raises many small and medium businesses to enter the business world.

At present the government is proclaiming Indonesia as the largest digital economy in 2020 and becoming the largest in Southeast Asia. One of the cornerstones of national development in this declaration is the digital sector. The government targets e-commerce transactions to reach US \$ 130 billion and create 1000 technopreneur with a business value of US \$ 10 billion in 2020 (Balitbang Kominform, 2017)

Therefore, to achieve a credit card, you can make many choices to use financial services for customers. Product and service innovations carried out by banking institutions. Apart from developing technology, community needs are increasingly

complex. For spending with innovations made by Islamic banking. As a bank of choice for Muslim communities, Islamic banking offers many services that provide benefits to increase the life force in business in Indonesia.

Based on the description above, the purpose of this study is to analyze innovation strategies that have been implemented by Islamic banks in Indonesia.

2 THEORETICAL FRAMEWORK

2.1 Digital Economy Era

Digital economy started in the 1990s along with the growing usage of the World Wide Web, and also called network economy. The drivers of digital economy era such as network effects, critical mass of users, standardization, interoperability and globalization, and is enabled by the innovation of technology (Stähler, 2002).

According to Tapscott (1996) in Schweighofer and Ebner (2015), digital economy is a global knowledge economy, which is based on brief cycles of innovations and digital information stored in networks. There are microeconomic processes of the transition from the industrial society to the information society made in digital network economy. The structures of economic and social systems are changing constantly, but there are temporary phases with increased transformation. This can be caused, by technical innovations that causing the further developments in technical, economic and social level by itself. The basic innovations are made exclusively responsible for these phases. However, the changes are only possible due to the adaptation of behaviour in society (Stähler, 2002).

Some authors use the term Internet economy to describe the transformation in the 1990s. This change is based on the information performance boost of communication technologies and as a result of digital network (Zerdick, et al., 2001). However, the digital economy is a technology driven economy or network economy. Brief innovation cycles of technologies and applications or business models to link users and to generate a critical mass of participants in a net of collective interests are the basic for increasing network effects. Furthermore, vendors can continue to expand and get an advantage against their competitors, although their products reach the critical mass of users (Arthur, 1996).

The basic principles of those social or economical networks are some drivers and laws. As

an example, direct network effects are generated by standardization and interoperability. The value of networks, business networks for users depends primarily on the value of the utilization of the applications or products. Metcalfe's law postulates that the number of participants and the value of the network are related (Zerdick, et al., 2001). Moreover, switching costs and network effects produce lock-in effects (Schweighofer and Ebner, 2015). Thereby, not only material switching costs are consider, but immaterial "switching costs" (e.g. trust) have to be considered also.

These indirect and direct network effects cause returns to increase continuously (Arthur, 1996). Furthermore, attractiveness and its size also increased by those effects. As a result, participation of users are more encouraged in this network, and it will in turn generate direct and indirect network effects. These relationships form the core of the positive feedbacks. (Zerdick, et al., 2001)

However, finally technology is the foundation of new applications, business models and social behaviour transformation. Furthermore, the rules of the digital economy are the background of strategic management in these markets or business models.

2.2 Inovation Strategy

Jaruzelski and Dehoff's (2007) research shows that there are two factors that influence company performance, namely strategic alignment and customer focus. Strategic alignment refers to the compatibility between innovation strategies towards overall corporate strategy. While customer focus refers to the company's efforts to pay attention to the needs of consumers in each series at each phase in the innovation value chain, from the stage of extracting ideas, developing ideas to marketing.

Based on the two things above, namely strategic alignment and customer focus, Jaruzelski and Dehoff (2008) classify corporate innovation strategies in three categories, namely need seekers, market readers and technology drivers as shown in Figure 1 below:

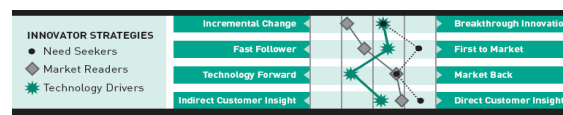


Figure 1: Three kind of Company Innovation Strategy Profile

Source : Jaruzelski dan Dehoff (2008)

Each innovation strategy has very different characteristics depending on the emphasis on innovation priorities.

1. Need Seekers

The company emphasizes that its products become the first to enter the market (first movers) and proactively explore input from consumers in conducting product research and development. The product produced is a radical development (breakthrough).

2. Market Readers

Companies tend to make product changes in stages (incremental) and quickly adapt products that are on the market (fast follower). Like Need Seekers, product development is also based on consumer needs.

3. Technology Drivers

The company uses the technology superiority approach to innovate and does not directly involve input from consumers in the product development process. The products produced are also radical developments (breakthrough). Very large companies invest in research and development to drive innovation.

Fontana (2009) categorizes Need Seekers and Market Readers as an innovator organization that adjusts to market needs, while Technology drivers as a type of pull power.

trend is still increasing. OECD (2015) noted that the investment value in the telecommunications sector in the world since 2000 reached an average of 200 billion US dollars per year. In line with this, the total telecommunications connections consisting of analog, digital (ISDN and DSL) telephones, modems, fiber, and cellular reached approximately 2.1 billion connections in 2013. This indicates that the world community's preference for cellular phones is getting higher. The number of internet users has increased, especially in Asia. In 2009 internet users in Asia numbered 713 million people, in 2015 it increased by more than 200 percent, namely 1,445 million people (Wirabrata, 2009).

In terms of consumers, Indonesia is also a very potential market. As a country with the 4th largest population in the world, domestic market power certainly cannot be underestimated. Moreover, the per capita income owned by the Indonesian people shows an always positive trend increasing since 2006. The digital industry will certainly be even more excited about this condition.

The growth of the middle class and internet penetration also cannot be ruled out. The World Bank notes that Indonesia has experienced a fantastic growth in the middle class since the monetary crisis in 1998. The growth of the middle class is predicted to continue to increase until 2030 with a population of 141 million.

As mentioned earlier, the potential of the digital economy is also inseparable from the current internet penetration. The Indonesian Internet Service Providers Association (APJII) noted that in 2014, the number of internet users in the country had reached 88.1 million with a penetration of 34.9 percent, an increase of around 16 percent from 2013 of 71.2 million with a penetration of 28, 6 percent. This number is predicted to continue to increase along with the advancement of technology in Indonesia. The Kompas R & D predicts that the number will continue to increase and in 2017 the number will be 117 million. This makes Indonesia a very potential market for traders or digital trading businesses.

This great potential certainly will not be able to be used optimally if stakeholders do not anticipate future problems. One potential problem is the loss of potential taxes and the legal vacuum that regulates the process of digital trade transactions.

The Initiative Study Center estimates that the potential tax that can be extracted from this industry can reach IDR 10-15 trillion per year. This number is certainly not a nominal amount. The Director General of Taxes in Circular Letter Number SE / 62 / PJ / 2013 concerning Confirmation of Taxation Terms on e-Trade Transactions states that there is no new tax on e-Trade transactions so that general

3 RESEARCH METHOD

This type of research is library research, namely a series of studies relating to library data collection methods, or research whose research objects are explored through a variety of library information (books, encyclopedias, scientific journals, newspapers, magazines and documents) (Sukmadinata, 2009).

Literature review or library research is a study that formulates its theoretical and methodological contributions to specific topics from critically reviews or examines knowledge, ideas, or findings from academic-oriented literature.

4 ANALYSIS & RESULT

4.1 Potential and Challenges of the Digital Economy Era

The development of the digital economy in the world is so rapid that it is reflected in several indicators. The value of investment in the telecommunications sector is quite high and the

provisions apply and there is no difference in the application of tax laws between conventional and electronic transactions. This certainly causes the government to lose the potential for state revenue. It is important for the government to innovate related to new and more applicable tax collection for digital transactions.

The issue of regulatory vacancies also deserves mutual attention. In the memory of March 2016, there were demonstrations by conventional taxi drivers over the presence of online taxis. Many people think that online taxis damage the existing economic order, but not a few also feel that they benefit from the presence of online taxis. This debate can certainly be solved by the presence of a regulation.

On the one hand, the application of digital technology increases productivity and reduces production costs. On the other hand, the conventional way of doing business generally absorbs more labor. The application of digital technology has the potential to replace conventional business so that it can reduce employment. In this case Government policy is needed to ensure the development of the digital economy has a positive impact on the overall economy.

4.2 Inovation Strategy of Sharia Bank In Digital Economy Era

Islamic banks as one type of financial institution that provides sharia-based banking services to customers also need to adapt and innovate technology to be able to compete.

Digital banking adaptation coupled with the management of sharia-based funds will be an advantage of Islamic banks. If this is not done, Islamic banks will lose (or even die) face competition from conventional banks that have adapted to digital banking or even defeated by fintech companies. This is not impossible, because there is a theory known as disruptive innovation. The theory says that old markets with old technology will be replaced with newer and more innovative ones that will create new markets.

According to Fatahilah (2018), seeing existing digital economy developments, financial technology, and digital banking raises the question of whether Islamic banks in Indonesia can implement them. At least until now, we have not been able to find Islamic banks that can provide facilities and services like the two bank products mentioned earlier. For this reason, Islamic banks in Indonesia have to begin developing products and facilities that lead to digital banking immediately.

Digital banking that has developed to date, such as ATMs, internet banking, mobile banking, video banking, phone banking and SMS banking. Some banks have also launched officeless financial services (branchless banking) which are primarily intended for people who do not have access to banking (unbanked).

If in the future Sharia Banks only sell sharia-based management then it is not enough to be able to survive in the digital economy era. Consumers need other facilities to support their various needs. The ease and speed must be a major concern for Islamic banks in order to continue to grow or at least survive in the era of competition like now.

Coupled with competition with conventional banks that can provide a lower cost to customers. Rational consumers will certainly prefer cheaper rates with better facilities and conveniences.

On this basis, Islamic banks must start investing to create more advanced technology-based services to adapt to the digital economy era. Islamic banks must also be able to operate efficiently so they can provide competitive products to customers. By doing so, it is expected that more customers will place their funds in Islamic banks and Islamic banks can continue to grow.

Some sharia banking terms that encourage digital technology, among others, and banking concepts in terms of transactions, require separate ways of inclusion and literacy. The community needs literacy in order to have an easy and correct understanding that the Islamic banking system is more profitable than conventional systems. Because literacy is a process to increase knowledge (knowledge) and add insight, beliefs (beliefs), and skills (skills) of consumers and the wider community who are able to manage finances better.

We involve the public using digital methods that make it possible to carry out easy and practical ways, fast, safe, not queued, simple and more cost-effective and borderless and more custom-made. Listening to consumers more carefully is the key to continuing to compete. In particular, in the midst of increasingly fierce competition and shifting choices in payment methods that are increasingly becoming the challenges of the Islamic banking industry.

The community is accustomed to using the internet through cell phones and computers with the largest internet users in the group of students (87%) and students (69%). However, the group predicted to contribute the largest revenue to the banking industry and financial services in the next 10 years (McKinsey, 2015). Trends in the use of growth services for people with people, people and students.

According to Salam (2018), the technology service that is the mainstay of the bank is online banking. The expansion of Islamic banking through

sharia service units (office channeling) in branch offices makes online banking a standard of service. Online banking can be an added value for Islamic bank products. Technological innovation can reach microfinance rural areas or can be used as a tool to help small and medium business enterprises to develop. There has been banking competition leading to branchless banking to reach people in the region.

Digital capabilities that can create these values in practice can be used as follows: First, digital technology increases bank connectivity not only with customers but also with employees and suppliers. This extends from online interactivity and payment solutions to cellular functions and opportunities to increase the bank's brand on social media. Second, digital withdrawal on large data and sophisticated analysis to expand and improve decision making. This kind of analysis is being used by the most innovative banks in many fields, including sales, product design, price and underwriting and truly extraordinary customer experience designs. Third, direct processing, which automates and digitizes a number of repetitive processes, low value and low risk. Process applications, for example, increase productivity and facilitate regulatory compliance, while direct imaging and processing processes lead to lighter and paperless workflows. Fourth, digitalization is a means to encourage innovation across business products and models, including social marketing with the support of crowd sourced and digitally centered business models.

4.3 Obstacles and Challenges of Implementation Innovation Strategy of Sharia Bank In Digital Economy Era

The Financial Services Authority (OJK) said that there are at least three challenges faced by banks in Indonesia in digital banking services, namely the evaluation of Bank Indonesia (BI) digital banking service trials related to bank information systems, network availability, and consumer education and protection (Salam, 2018).

In addition to the three challenges related to digital Bank Indonesia above, in digital practice banks still face various obstacles that disrupt the digital development of the Islamic banking economy, including network infrastructure that is less extensive so that it cannot be accessed by everyone. The low interest of the Indonesian people who carry out digital economic activities, only about 35% of the Indonesian people conduct financial digital transactions. Business contributions in the

digital sector are still minimal for Gross Domestic Product (GDP).

The next challenge is facing bank CEOs to take leadership in the development and implementation of a comprehensive change program that simultaneously addresses the culture, systems and capabilities needed. Some of the digital economic challenges to the development of banking business are the security or security department. With the increasingly sophisticated security technology along with the increasingly sophisticated theft technology in the digital realm. One of the most common crimes is identity theft or phishing. Phishing is the theft of other people's important data such as full names, residential addresses, and telephone numbers used to break into customer accounts. All that is done by users (users) who are not responsible, such as the emergence of new criminal acts in the form of threats hacking websites to steal company data, rampant fraud under the guise of online business and so on.

The development of technology and the internet that is increasingly fast and agile is actually very helpful for effectiveness and efficiency in efforts to inclusion and financial literacy of Islamic banking operations. However, various technical and operational obstacles must be interpreted as challenges and must be used as a trigger to create and produce something that will help human work more organized and directed. The digital world has entered the financial industry such as e-commerce, which is increasingly increasing transactions from day to day.

People in this digital era want and like convenience. They will openly accept all openness and technological progress. In the financial industry, there are already various electronic money that is intended to facilitate various daily human activities. Ranging from electronic money attached to mobile phones to balances in certain applications to facilitate payment. Opportunities and challenges in this digital era will be felt by all sectors including the financial industry and the Islamic banking industry.

To overcome the various problems mentioned above, there are at least several steps that can be taken by Islamic banking as an effort to develop digital banking: First, consumer experience, namely digital companies must give the best impression to consumers in using their services. Because consumers in the digital world are very easy to turn to other companies. Second, cyber security, namely banking together with the government must work together in providing security for transactions carried out.

Third, connect online with offline. Fourth, companies must also use data-based analysis to

determine the needs, behavior and desires of consumers. Fifth, various companies and governments must have started to build digital DNA. So, the government and company must issue regulations that support digitalization.

With the digital bank, it is expected that banks can make it easier to store and analyze customer data. So that it can help banks to maintain relationships with consumers, better deal with consumer complaints, and be able to develop more appropriate products or services more quickly, cheaply, clearly and transparently for consumers. Banks are more efficient because they no longer invest in branch offices and customers do not have to bother to branch offices for example to transfer money to families in different regions.

5 CONCLUSION

Islamic banks as one type of financial institution that provides sharia-based banking services to customers also need to adapt and innovate technology to be able to compete. If in the future Sharia Banks only sell sharia-based management then it is not enough to be able to survive in the digital economy era.

On this basis, Islamic banks must start investing to create more advanced technology-based services to adapt to the digital economy era. Islamic banks must also be able to operate efficiently so they can provide competitive products to customers. By doing so, it is expected that more customers will place their funds in Islamic banks and Islamic banks can continue to grow

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