

## Technology in the Study of Production of Islamic Financial Institution Services at Bank Muamalat

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<p><b>Article Information:</b></p> <hr/> <p><b>Keywords:</b>                  Financial Technology ;                  Strengths;                  Weaknesses;                  Opportunity;                  Threat;                  SWOT analysis</p> <hr/> <p><b>Article History:</b>                  Received : March 19, 2023                  Revised : April 10, 2023                  Accepted : April 20, 2023</p> <hr/> <p><b>Cite This Article:</b>                  Saifudin, S. (2023). Technology in the Study of Production of Islamic Financial Institution Services at Bank Muamalat. Indikator: Jurnal Ilmiah Manajemen dan Bisnis, 7(3), 113 - 119.                  doi:<a href="http://dx.doi.org/10.22441/indikator.v7i3.19926">http://dx.doi.org/10.22441/indikator.v7i3.19926</a></p>	<p><i>Abstract</i></p> <hr/> <p><i>This study aims to determine the strengths, weaknesses, opportunities and threats of financial technology for banks in Indonesia at Bank Muamalat. This type of research is descriptive qualitative research with the SWOT analysis method. Data collection was carried out using the method of literature study and documentation. The data source used is a secondary data source from the official website of Bank Muamalat obtained from information technology management reports published in 2020. The data analysis technique used is data reduction, data presentation and drawing conclusions. Based on the research conducted, it is known that there are 4 analyzes, namely the strengths of financial technology, weaknesses in financial technology, opportunities in financial technology and threats to financial technology at Bank Muamalat. By looking at these four factors, there is a strategy especially for Bank Muamalat to increase market share and income.</i></p>
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### INTRODUCTION

Economic growth in its development is inseparable from the role of the banking sector. Bank(Charalampos Basdekis et al. 2022) is one of the financial institutions that have an important role in the economy of a country. In principle, a bank is an intermediary institution that collects funds from people who experience a surplus of funds and distributes funds to people who need funds. Types of banks in Indonesia are divided into two types of banks, namely conventional and Islamic banks. Conventional banks are banks that carry out their business activities conventionally. Islamic banks, according to Sudarsono, are financial institutions whose main business is providing financing and other services in payment traffic and money circulation whose operations are in accordance with sharia principles or in their activities do not charge interest or pay interest to customers.

Islamic banking must also be able to adapt to various market conditions that are currently developing from all parts. Where this development can be seen from the side of the convenience in serving various transactions using technology that is increasingly widespread in the current digital era which has influenced patterns of human behavior in accessing various information and various features of electronic banking services. Indonesia has experienced a very rapid development process. Advances in economic management systems, changes in a country's policies and technological developments are some of the many factors triggering changes in banks(Ilias Ioannou and Guven Demirel 2022) and other financial institutions.

The rapid development of science and technology in today's digital era has influenced patterns of human behavior in accessing various information and various features of electronic services. One of the technological developments that has become the latest study material in

Indonesia is Financial Technology (FinTech) in banking institutions. The implementation of the use of digital technology in Indonesia is very large, even exceeding the combined population of other countries in ASEAN, and has changed people's behavior in almost all aspects of life, such as buying and selling online (e-commerce), digital social interaction, electronic books, electronic newspapers, public transportation (taxi and motorcycle taxis), tourism support services, and financial technology.

The use of financial technology is in line with the growing public demand for online-based financial services and the use of internet media to access digital data. The rapid growth of fintech in recent years has been accompanied by the era of the millennial generation who are increasingly literate in various aspects of life. Through breakthroughs that are now often made, payment of electricity, telephone or school bills and others can be done via smartphone, financing via online sites with peer to peer lending or crowdfunding schemes and even getting investment recommendations automatically via artificial intelligence (artificial intelligence). the use of digital information technology has helped the people of Indonesia to run the wheels of the economy more effectively and efficiently than before, especially in the financial sector, especially banking. An innovation of science and technology present in the field of the world economy today is very important for providing services to the community. One of the technological developments that has become the latest study material in Indonesia is financial technology or Financial Technology (Fintech) in banking institutions. According to the definition outlined by the National Digital Research Center (NDRC), financial technology is a term used to refer to an innovation in the field of financial services (Sovan Mitra and Andreas Karathanasopoulos 2020).

The concept of financial technology adapts technological developments that are integrated with the financial sector in banking institutions, so that it is expected to facilitate a more practical, safe and modern process of financial transactions between customers. Several innovations in financial technology services have been developed in the financial sector in Indonesia, including payment processes, transfers, buying and selling of shares, and peer to peer lending processes, which are online lending and borrowing services that allow users to share, search, and download files. , as well as many other innovations.

Banking institutions need to take advantage of the application of financial technology to increase the efficiency of operational activities and the quality of bank services to their customers, because the use of financial technology is in line with the growing public need for online-based financial services and the use of internet media for digital data access. Especially at Bank Muamalat there are several fintech (financial technology) (Tien-Yu Hsu 2021) such as the Shar-e which was launched in 2004 and received an award from the Indonesian Record Museum (MURI) as a sharia debit card with the first chip technology in Indonesia as well as e-channel services such as internet banking, mobile banking, ATMs and cash management.

Based on the background described above, the formulation of the problem raised is, "what is the purpose of using technology in service production?, how is information technology in the Islamic financial services sector?, and how is information technology a competitive advantage in the Koran. In order to answer the formulation of the problem above, this study uses a review of financial and banking literature. Thus, this research is expected to be a recommendation material for banking management to increase banking service users in all regions of Indonesia through the implementation of the latest financial technology. Based on the explanation above, the researcher is interested in raising a title related to "Technology in the Production of Islamic Financial Institution Services Studies at Bank Muamalat".

**LITERATURE REVIEW**

There have been quite a lot of discussions related to services, but previous studies also had a different focus, one of the results being financial ratios(Alexandros A. Papantoniou 2022) in the form of CAR, ROA and ROA before and after Branchless Banking which were significantly different, while FDR was not significantly different. In-depth understanding of the value chain will provide a competitive advantage to improve performance and profits(R. Villalba et al. 2004). To produce productive competition between Islamic Banks and Conventional Banks, banking regulations(Alina Tatarenko 2006) are needed specifically for Islamic Banking so that it is able to carry out its duties without having to follow the conventional system.

In the previous research above, it discussed more about financial ratios, to improve performance and profits and to generate productive competition between Islamic and conventional banks. While researchers will discuss technology in production with the method of library research and documentation

**METHOD**

In this study applying descriptive qualitative research(M. Germain et al. 2016). Descriptive is determining and interpreting existing data, for example something that is experienced, a relationship of activities, views, attitudes that appear or an ongoing process. The implementation of this method is not limited to data collection, but includes analysis and interpretation of the meaning of the data(J. Mohr et al. 2016). Source of data in this research is secondary data. Secondary data is data collection that is collected through second hand(Martin Yuille et al. 2010). Data collection technique(Adolfo Paolin et al. 2016) such as: Literature Studies (Library Research) and Documentation. Data analysis(Alessandro R. Marcon, Blake Murdoch, and Timothy Caulfield 2021) such as: Data Reduction, Data Presentation, and Drawing Conclusions.

**RESULTS AND DISCUSSION**

A. Data Analysis

In carrying out system planning and development, Bank Muamalat Indonesia's Information Technology refers to the submission of business development needs and according to the Bank's business plan. Throughout 2020, the Bank carried out 21 Information Technology developments and innovations. Of the 21 developments and innovations, as many as 12 developments and innovations have been completed while the rest are still in the process stage. The following is a description of the developments and innovations that have been successfully carried out by Bank Muamalat until 31 December 2020 along with their objectives/benefits and their status.

**Tabel 1. Technology Development and Innovation in 2020**

No.	Fintech description	Benefit	Status
1	Host-to-Host (H2H) BPRS & Fintech	Provision of H2H services as a financial payment gateway for BpRS and Fintech partners.	completed
2	MDIN QR Payment	Provision of payment features using mobile applications banking.	completed

3	Vis 3DS Debit Online E-Commerce	Provision of a visa debit feature for customers to increase the ease of doing so online shopping transactions.	Completed
4	Cash Deposit Machine	Provision of form filling options as an alternative to ease of service for customers at branch offices.	Completed
5	Smart Account Opening	As an alternative to printed forms for convenience customers.	Completed
6	Smart PIN Mailer	Use of EDC in setting up passwords and no need to print a PIN.	Completed
7	Smart office Muamalat	Provision of a platform to accelerate circulation and bank internal memos.	Completed
8	Robotic Process Automation	Speed up and simplify the banking process.	Completed
9	SKN-BI Jitu	Improve service to Customers and meet the needs of regulators.	Completed
10	Enhancement JFAST	Further development of the financing system to improve services to customers.	Completed
11	LiveChat SalaMuamalat Customer Support	Providing Whatsapp LiveChat channels for customers to make inquiries and complaint.	Completed
12	Digital Account Opening	Ease and speed services for prospective customers.	Completed
13	Project AI-Basith Antasena Regulatory	Quality improvement project data.	In Progress
14	Smart AML	Development of improved anti money.	In Progress
15	MDIN Cardless Cash Withdrawal	Digital development provides a secure cardless withdrawal feature using the MDIN mobile application.	In Progress
16	MDIN QRIS Acquiring	Provision of Quick Response Indonesia Standard QriS for customers and partners.	In Progress
17	Cash Management	Provision of Customer Fund Accounts.	In Progress
18	Financial Supply Chain	Financial supply development business unit chain systems.	In Progress

19	Branch Delivery System	Single Platform Development Application for improving front liner service.	In Progress
20	Robotic Input Process Financing Data MCB	The use of robotics to accelerate data input processing.	In Progress
21	Muamalat Smart Office-SOP, SE, PPIB, Workflow Operation.	Smart Office Platform, for Document Approval, Processing, Publication of Policy Procedures and Workflows Organization.	In Progress

Technology development strategy as an effort to realize the Bank's vision and mission to support the Bank's business growth, Bank Muamalat Indonesia has launched comprehensive Information Technology development plans and strategies that include:

- a. Human Resource Development
- b. Infrastructure
- c. Application
- d. operational
- e. Risk management and control

## **RESULTS AND DISCUSSION**

### **Result**

The method used in this study uses SWOT analysis, so after analyzing it with a descriptive qualitative method by interpreting data sourced from the official website of Bank Muamalat, namely in the form of information technology published from 2020.

1. Financial Technology Strength Analysis at Bank Muamalat
2. Analysis of Financial Technology Weakness at Bank Muamalat
3. Analysis of Financial Technology Opportunities at Bank Muamalat
4. Analysis of Technology Financial Threats at Bank Muamalat

### **Discussion**

#### **1. Financial Technology Strength Analysis at Bank Muamalat**

After the analysis is carried out, several factors become the strengths of Financial Technology at Bank Muamalat in carrying out its business. The strength possessed by the company is usually in the form of resources owned by the company, both human resources and other resources. This power is used to minimize threats or eliminate the impact caused by surrounding threats.

Financial technology is closely related to the internet and gadgets, therefore activities in it are transparent, easy and flexible. So that people can easily access financial service data and can make transactions anywhere. The strength of this financial technology is in common with Bank Muamalat in the service sector which aims to facilitate access to financial service data such as Muamalat ATMs, Muamalat Mobile, and internet banking.

#### **2. Analysis of Financial Technology Weakness at Bank Muamalat**



Weaknesses are limitations or deficiencies in resources, skills and capabilities that effectively hinder the performance of Financial Technology companies. Information technology is developing faster and easier for all community activities. However, there are still people who have not fully mastered online-based financial services, many people use the internet only to socialize.

### **3. Analysis of Financial Technology Opportunities at Bank Muamalat**

Based on the results of the analysis conducted on the external environment of Financial Technology, it is possible to identify the opportunities and threats faced by Financial Technology companies and their impact on Bank Muamalat. Opportunity is an opportunity that a person has to achieve goals (profit, money, wealth) by doing business that utilizes various resources owned. Meanwhile, financial technology opportunities for Bank Muamalat are opportunities owned by financial services that combine with technology that can change business models to achieve goals.

This is supported because financial technology works together with technology-based companies to expand the network, so that the acceleration of Muamalat services is easy to realize in all regions. Then, customers can receive (income) or issue (outcome) funds only with the help of an application. Another opportunity that arises from this collaboration is to produce adequate and unlimited digital banking infrastructure, thereby minimizing disruptions during the transaction process which can increase revenue for Bank Muamalat.

### **4. Analysis of Technology Financial Threats at Bank Muamalat**

Threats are important unfavorable situations in the corporate environment. Threats here can be interpreted as a challenge. A challenge is a thing or form of business that has the goal of awakening abilities. The financial technology challenge for Bank Muamalat is innovation that is present in the world of technology which can threaten the survival of Bank Muamalat. The existence of the internet has positive and negative impacts on society. The positive impact is that there are facilities, so that it helps people meet their needs. Then the negative impact that is currently happening is the occurrence of crimes as a result of technological advances or called cyber crime.

### **Thank-You Note**

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### **CONCLUSION**

Based on the results of the analysis and discussion that have been described, the researcher concludes that:

1. The strengths of financial technology at Bank Muamalat are the convenience in utilizing access to financial service data, being able to serve communities in areas not reached by direct services, building an effective organizational structure, data center information technology infrastructure is always in optimal condition and designing application systems with added superior new features.
2. Weaknesses in financial technology at Bank Muamalat, namely that financial technology is very dependent on internet networks, people need knowledge about the internet, human resources (HR) are still not ready to carry out online financial services, are prone to breaches and security, are at risk of fraud.
3. Opportunities from financial technology at Bank Muamalat, namely being able to generate income for Bank Muamalat through collaboration with financial technology companies, facilitating the process of digitalization and automation of financial institution services,

- setting regulations and supervision by the Financial Services Authority, developing information technology infrastructure, developing features mobile banking.
4. Threats from financial technology at Bank Muamalat, namely the rise of crime in the world of information technology (cyber crime), the trend of globalization and free cross-border transactions, the threat of Termination of Employment (PHK), the company's data center is vulnerable to hacking and data theft, Phishing attacks ( fraud).

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