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Exploratory Factor Analysis: Analysis of Islamic Bank Sustainability Factors in Facing the Disruption of the Industrial Revolution

Singgih Muheramtohadi[1], Choirul Huda[2], Retno Septia Adila[3]

[1,2,3]Faculty of Islamic Economics and Business, Universitas Islam Negeri Walisongo Semarang

Singgih_muheramtohadi@walisongo.ac.id

Abstract

Purpose - In this study, researchers are interested in analyzing the factors of resilience (sustainability) that must exist or be carried out by Islamic banks to challenge the disruption of the industrial revolution 4.0.

Method - This research is quantitative research. The research approach is exploratory which has the intention to obtain a description and understanding of the problems experienced by researchers. The instrument in this study was a questionnaire which was then tested for validity and reliability. After the data has been collected, the data is tested with the stages of testing confirmatory factor analysis data which is able to reduce a number of variables into several dominant factors that affect the sustainability of Islamic banks in facing the disruption of the industrial revolution 4.0.

Result - This study concludes that: 1) 18 variables each have a Measure of Sampling Adequacy (MSA) value higher than 0.5 and are categorized as having met the adequacy of the sample. 2) Factor analysis is suitable for simplifying the group of 18 variables. 3) Two dominant factors are formed, which are called the customer's financial benefit factor and the customer's safety and comfort factor.

Implication - This research helps Islamic banks to remain sustainable from the onslaught of the disruption of the Industrial revolution 4.0 based on the variables of customer desires.

Originality - This study focuses more on Islamic banking instead of professional banking as in previous studies and in the analysis the researcher uses exploratory factor analysis to determine the dominant factor from series of variables. The study is different from previous research.

Keywords: Sustainability, Islamic Banks, Disruption.

Introduction

The rapid movement of technological advances in the era of the industrial revolution today has an impact on increasing disruption in all lines of life (D. Bonnet, J. Buvat, 2018). Disruption in this case is the emergence of new breakthroughs that break old standards. No exception in the field of finance and banking (Dietz et al., 2016). The emergence of e-commerce, social-networking, digital banking, and also fintech has disrupted the digital banking industry by focusing on financial services (Martin, 2018). Financial services are disrupted due to technological advances (Martin, 2018). The rise of fintech also has an impact on decreasing visits to conventional banks(Picher, 2020). Fintech can earn a lot of income and can satisfy customers without the hassle of financing physical infrastructure. Fintech can be much more efficient than what conventional banks do. Conventional banking is increasingly being eroded by the emergence of new fintechs such as ShopeePay, AliPay, Ovo, Dana, GoJek and others. If conventional banks face disruption with the development of fintech-fintech in the current era of disruption, therefore, Islamic banking will also experience the same thing.

Islamic banking is a way of life based on Islam. The Islamic way of life affects all things, including all matters of livelihood, including the economy and financial institutions (banks) which are part of the development agency, not just a matter of ritual. Islam has special demands and regulations regarding the existence and continuity of financial business (banks) so that the blessing of Allah SWT is used as its main purpose to be realized. These various demands and regulations have created a banking system of its own in conventional banking procedures and regulations. The banking procedures and rules in question are Islamic banking which is very tempting and makes people in various parts of the world curious(Lubis, 2010).

Despite this relevance, the study of sustainability in the banking sector, in general, is still just beginning (Banhalmi-Zakar, 2016). Considering this, the two main points that are still being discussed are the concept of sustainability in this sector—sustainable banking—and its measurement. Regarding the

former, there is a lack of a universally accepted definition of sustainable banking (Dossa & Kaeufer, 2014). These concepts range from versions that focus solely on one dimension of sustainability such as green banking, green finance, or ethical banking to more comprehensive ones such as sustainable banking, or sustainable finance.

In response to this, Islamic banking in Indonesia should consider what factors affect the sustainability of Islamic banks. Sari, (2012) explained that there are three dominant factors that influence non-Muslim customers to choose Islamic banks including product quality, quality of facilities, and promotions. Karim explained that the variables that satisfy Islamic bank customers are the risk factor, employee service, comfort, and security in receiving salaries. There are also variables that do not satisfy Islamic bank customers, namely the difference between Islamic and conventional bank services, Islamic bank facilities, and Islamic bank human resources (Karim, 2017).

Supriyaningsih explained that based on the assessment of Islamic banks based on the Islamicity Performance Index (IPI), the profit sharing performance of Islamic banks was considered poor, social performance was considered poor, halal investment was considered very good, income distribution was considered quite good.(Supriyaningsih, 2020). Meanwhile, Prijanto et al explained that the level of customer satisfaction on the service quality of conventional banks is higher than Islamic banks (Prijanto et al., 2021). Therefore, Tahliani (Tahliani, 2020) explained that in dealing with banking disruption caused by problems outside of banking, Islamic banking should consider several breakthroughs (variables). The first is to provide bank services both in fundraising and digital financing. The second is to suppress non-performing financing (NPF) during the disruption period. The third is to explore new markets.

With this in mind, there is a need to better understand the concept of sustainable banking, as well as to identify the role of these institutions and the elements that should be measured in relation to sustainability in the sector (Raut et al., 2017). In other words, to clearly define the construct to be

measured—sustainable burning—as well as the domain or scope of its measurement—what is to be measured. The definition of the construct and its domain is a key aspect of any measurement effort stemming from the "validity of what is being measured" as the rest, in terms of its operationalization and measurement, will "to a large extent depend on its definition and content domain"(RG Netemeyer, WO Bearden, 2003). The concept of bank sustainability, in this case Islamic banks, that is offered is the development of financial products and services to meet the needs of the community and protect the environment while generating profits (Yip & Bocken, 2018).

The sustainability of Islamic banks based on this definition does not mean that Islamic banks must launch products first. The explanation contains the meaning of breakthroughs such as what Islamic banks should do to significantly affect the sustainability of Islamic banks in facing the disruption of the industrial revolution 4.0, in this case banking disruption. Therefore, it is necessary to understand the will of the customer as the market share of the Islamic bank itself.

In the world of economics, this is called pain. Knowing pain means knowing the obstacles faced by customers. The antidote to the pain is breakthroughs or variables that affect the sustainability of Islamic banks in facing the disruption of the industrial revolution 4.0, in this study banking disruption.

Literature Review

Banking Disruption

In every organization, the incorporation and utilization of new digital technologies leads to disruption of business models as a result of structural and organizational challenges (Horlacher & Hess, 2016). Digital technology fundamentally challenges adaptation and innovation primarily through the creative destruction of the existing processes, capabilities and structures in which organizations currently operate (Clarke, 2019). These technologies will change industries and institutions and evolve over time to create new

industries and institutions. As new digital technologies change customer experiences, processes and business models, digital disruption occurs and how value is created by actors in the ecosystem changes (Bolton et al., 2019). These tactical or strategic changes in business models allow companies to create completely new ways to add value (Haffke et al., 2016). The concept of digital disruption is often referred to as "environmental disruption caused by digital technology", which leads to the erosion of boundaries and approaches that have been used as the basis for regulating production and setting value. (Skog et al., 2018). New technology requires a different mindset and skills than the previous wave of conversion technology(Fitzgerald et al., 2013).

The three main building blocks of digital disruption include digital innovation, digital ecosystems, and value logic. ICT inputs (such as dedicated ICT personnel and ICT outsourcing) and internal supporting ICT infrastructure (standard ICT applications, such as ERP, SRM, CRM, and SCM) are important determinants of digital innovation (Arvanitis & Loukis, 2020). Digital disruption is distinguished from digital development in at least two aspects. Digital disruption represents a specific innovative process, not the cumulative effect of this process. On the other hand, digital disruption is evolving faster than digital development (Skog et al., 2018). An organization's response to disruption can be a fundamental change in operations(Karimi & Walter, 2015)or technological changes that support the business-to-business model(Rauch et al., 2016), or even a change in organizational and professional identity within it (Utesheva et al., 2016).

The banking sector has traditionally been constrained by barriers to entry (laws and regulations), these barriers are rapidly eroding, and banks are pressured by digital structural changes (K. Still, T. Huhtala, 2016). Digital disruption has the dual potential of reducing the role and relationship of banks or helping them create better, more flexible and value-added services (Haddad & Hornuf, 2019). As new network or technology ecosystems emerge and form, digital disruption is still in its infancy. So, the roles of the different actors are unknown and no one knows what will happen in the future (K. Still, T. Huhtala,

2016). The future of technology is determined by continuous adaptation, permanent innovation, and the search for new potentials (Clarke, 2019).

When new logic becomes the prevailing industry condition, digital disruption is likely to create opportunities and challenges for companies trying to enter or stay in the industry (Skog et al., 2018). To address the challenges and opportunities associated with digital transformation, many companies have adapted their organizational structures by integrating chief digital officers (CDOs) into their top management (Haffke et al., 2016).

Bank Sustainability

The banking industry is important for achieving sustainable development because of its unique intermediary role, which is essential for mobilizing financial resources towards sustainable goals (Alexander, 2014). For example, the provision of resources for green projects and the sustainable management and distribution of investment funds (SRIs) help ensure the funding of the Sustainable Development Goals (SDGs). Several external shocks greatly affected the pillars of the banking industry's business model, such as the 2008 financial crisis (Mattila et al., 2010), Fourth Industrial Revolution (Schwab, 2016), and the COVID-19 pandemic. This shock accelerates the digital and sustainable transformation of banks (Forcadell et al., 2020).

Sustainable banking is defined as the delivery of "financial products and services, developed to meet the needs of society and protect the environment while generating profits (Yip & Bocken, 2018) Sustainable banking (M. Jeucken, 2010) and related terms such as Corporate Social Responsibility (CSR) bank, ethical bank (Birindelli et al., 2015), eco-banking, and green-banks (Bahl, 2012) have been analyzed extensively, as they play an important role in promoting sustainable development. The increasing relevance of sustainable banking as an entity's own field of study requires an extensive review of the existing literature. A review of the existing literature on the focus of sustainable banking on a particular niche, fails to offer a complete picture of the sustainable banking domain (Aracil et al., 2021). For example, Gutiérrez-Nieto and Serrano-Cinca (B. Gutiérrez-Nieto, 2019) reviewing the microfinance

literature, Fabregat-Aibar et al (Fabregat-Aibar et al., 2019) analyzed social responsibility funds, and Zhang et al (D. Zhang, Z. Zhang, 2019) and Sarma and Roy (Sarma & Roy, 2021) reviewing green banking. However, a comprehensive review governing the sustainable banking literature as an area of research does not exist.

Methods

In this study, researchers are interested in analyzing the factors of resilience (sustainability) that must exist or be carried out by Islamic banks to challenge the disruption of the industrial revolution 4.0. This research is quantitative research. The research approach is quantitative exploratory (explorative) which has the intention to obtain a description and understanding of the problems experienced by researchers.

Participants in this study included 206 customers of Bank Syariah Indonesia (BSI) in the Semarang area, which were selected as participants in this study using convincing sampling. Then, they are homogenized based on fintech knowledge. After homogenization, 206 participants were selected in this study. Participants consisted of 144 women and 62 men. Participants are domiciled in Semarang. Participants' ages ranged from 19 to 35 years.

Results and Discussion

Analysis Data

In this study, the authors took steps to test the quality of the instrument. The first step is instrument item analysis, where each item represents one variable. These variables are freedom of transactions, maximum security, ease of borrowing with a certain amount, availability of investment learning platforms, availability of investment with low capital, investment profit opportunities, availability of platforms for smartphone users, official and supervised permits, fulfillment of urgent needs, ease of doing transactions. , time-saving transactions, transaction security, time-saving transactions, transaction security, transaction convenience, availability of promotions, incentives, good service management, minimizing investment risk, and

accelerating the loan process. When items are created, reviewed, and revised, the instrument was tested on 206 participants. The author analyzes the validity of the instrument items collected from this administration using the Pearson correlation coefficient formula.

The results of the analysis of the validity of the questionnaire items on the sustainability factors of Islamic Banks in the industrial revolution 4.0 distribution show that all questionnaire items are valid. The second step is instrument reliability analysis. The reliability test of the measuring instrument is carried out with the intention of knowing the reliability of the measuring instrument in order to obtain a measurement accuracy that is widely accepted. The formula used in analyzing the reliability of the measuring instrument in this research is the Cornbach coefficient (α).

Based on the results of the analysis of the questionnaire instrument regarding the sustainability factors of Islamic Banks in the distribution of the industrial revolution 4.0 to respondents using the Cronbach Alpha reliability formula, the value of r11 = 0.884 was obtained.

Table 1. Analysis of instrument item validity

Items	rxy	r table	Conclusion
1	0,555	0,138	Valid
2	0,672	0,138	Valid
3	0,713	0,138	Valid
4	0,752	0,138	Valid
5	0,692	0,138	Valid
6	0,693	0,138	Valid
7	0,636	0,138	Valid
8	0,416	0,138	Valid
9	0,784	0,138	Valid
10	0,730	0,138	Valid
11	0,732	0,138	Valid
12	0,699	0,138	Valid
13	0,690	0,138	Valid
14	0,667	0,138	Valid
15	0,714	0,138	Valid
16	0,687	0,138	Valid
17	0,676	0,138	Valid
18	0,749	0,138	Valid

Table 2. Value of measure of sampling adequacy (msa)

Variable	anti image correlation matrix	Information
X1	0,957	> 0,5
X2	0,946	> 0,5
X3	0,94	> 0,5
X4	0,956	> 0,5
X5	0,916	> 0,5
X6	0,915	> 0,5
X7	0,951	> 0,5
X8	0,903	> 0,5
X9	0,94	> 0,5
X10	0,942	> 0,5
X11	0,951	> 0,5
X12	0,917	> 0,5
X13	0,882	> 0,5
X14	0,935	> 0,5
X15	0,943	> 0,5
X16	0,962	> 0,5
X17	0,942	> 0,5
X18	0,926	> 0,5

The data analysis technique in this research uses exploratory factor analysis. In exploratory factor analysis, there are several analyzes that must be done. The first is the feasibility analysis of the variables using the testMeasure of Sampling Adequacy (MSA), Kaiser-Meyer-Olkin(KMO) measure of sampling adequacy and Bartlett of sphericity. The second is the analysis of the adequacy of the sample size using the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy index and the significance value of Bartlett's Test of Sphericity. The third is the analysis of the formation of factors using several stages, namely: 1). the test of determining the number of factors; 2). communality test; 3). component matrix test; and 4). rotated component matrix test. Fourth is the interpretation of factors. The sixth is factor naming.

Referring to reliability test results, it is known that the Cronbach Alpha coefficient value is 0.838, which is more than r table 0.138. It can be concluded that these variables have high reliability because they exceed 0.7 and can be continued in further analysis, namely exploratory factor analysis. To determine the feasibility of the variables, this study used the Measure of Sampling Adequacy (MSA).

From the table 2, it can be seen that 18 variables each obtained an MSA value higher than 0.5. This indicates that the variables are sufficient for further analysis. From the table 3, it is found that factor analysis is suitable to be used to simplify the group of 18 variables.

The determination of the number of factors based on the eigen values is two factors, based on the total variace explained is two factors (see table for the total variace explained), based on the scree plot is two factors. The meaning is that the 2 factors created have been able to represent the 18 variables of Islamic Bank sustainability in facing the disruption of the industrial revolution 4.0. Therefore, the summary of the 2 factors obtained can be stopped and is in accordance with the second category.

The screening process at the output of this research is aimed at obtaining factors with relatively clear factor loads for interpretation. The rotational component matrix is a correlation matrix that shows the distribution or distribution of variables that is brighter and more significant than the component matrix.

The results of the rotated component matrix explain that the factor load of each variable is sufficiently differentiated and is worthy of interpretation. All variables already have a large factor load on one of the factors and have a relatively small factor load on the other factors.

Table 3. Results of KMO and Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**,935**
Bartlett's Test of Sphericity	Approx. Chi-Square	1979,285
	Df	153
	Sig.	,000

Table 4. Rotated component matrix

	Component	
	1	2
X1	,269	,524
X2	,266	,735
X3	,667	,312
X4	,627	,430
X5	,622	,335
X6	,733	,193
X7	,365	,548
X8	,009	,623
X9	,674	,420
X10	,443	,621
X11	,460	,600
X12	,287	,757
X13	,243	,795
X14	,727	,160
X15	,758	,200
X16	,380	,621
X17	,657	,267
X18	,794	,222

After the creation of a factor in which each group consists of the analyzed variables, the next step is to name the factor referring to the special characteristics that suit its members.

The first factor consists of the variable ease of loan with a certain amount, the availability of investment learning platforms, the availability of investment with light capital, investment profit opportunities, meeting urgent needs, the availability of promotions, providing incentives, minimizing investment risk, accelerating the loan process. By generalizing the nine variables, the first factor is then named the customer's financial benefit factor.

Table 5. Grouping variables into factors

Factor	Variable
1	3, 4, 5, 6, 9, 14, 15, 17, 18
2	1, 2, 7, 8, 10, 11, 12, 13, 16

The second factor consists of the variables of freedom of transactions, maximum security, availability of platforms for smartphone users, official and supervised permits, ease of transactions, time-saving transactions, transaction security, transaction convenience, and good service management. By generalizing the nine variables, the second factor is then named the customer safety and convenience factor.

Using the EFA method on eighteen Islamic bank sustainability variables, this study finds that two dominant factors affect the sustainability of Islamic banks in facing the disruption of the industrial revolution 4.0. These results are generally linear with the proposed findings (Sari, 2012). However, in this study, these variables are breakthroughs that Islamic banks should make in order to be sustainable in facing the disruption of the industrial revolution 4.0. These results are in accordance with recommendations based on exploratory factor analysis to define general patterns of variation among a set of variables (Watkins, 2018).

Conclusion

Feasibility analysis of eighteenvariables that affect the sustainability of Islamic banksin the face of the disruption of the industrial revolution 4.0by usingThe Measure of Sampling Adequacy (MSA) shows that these eighteen variables are sufficient for further analysis, namely the analysis of sample adequacy testing.

Sampling adequacy analysis of eighteenvariables that affect the sustainability of Islamic banksin the face of the disruption of the industrial revolution 4.0by usingThe Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy index, the significance value of Bartlett's Test of Sphericity and the significance of Bartlett's Test of Sphericity indicate that the size or number of

samples used in this study, namely 206 respondents, is sufficient for factor analysis.

Factor formation analysis of eighteenvariables that affect the sustainability of Islamic banksIn dealing with the disruption of the industrial revolution 4.0, it shows that based on eigen values, total variance explained, and scree plots, there are two dominant factors. The first factor is the customer's financial benefit. Meanwhile, the second factor is the safety and convenience of customers.

References

Alexander, K. (2014). Stability and Sustainability In Bank Reform. Are enviromental risk in Basel III. CISL & UNEP FI: Cambridge and Geneva.

Aracil, E., Nájera-Sánchez, J. J., & Forcadell, F. J. (2021). Sustainable banking: A literature review and integrative framework. Finance Research Letters, 42(December 2020).

Arvanitis, S., & Loukis, E. (2020). Reduction of ICT Investment Due to the 2008 Economic Crisis and ICT-Enabled Innovation Performance of Firms. Journal of the Knowledge Economy, 11(1), 1–27.

B. Gutiérrez-Nieto, & C. S.-C. (2019). 20 years of research in microfinance: An information management approach,. International Journal of Information Management, vol 47, 183-197.

Bahl, S. (2012). Green banking-The new strategic imperative. Asian Journal of Research in Business Economics and Management, vol 2.2, 176–185.

Banhalmi-Zakar, Z. (2016). The impact of bank lending on the environmental outcomes of urban development. Australian Planner, 53(3), 221–231.

Birindelli, G., Ferretti, P., Intonti, M., & Iannuzzi, A. P. (2015). On the drivers of corporate social responsibility in banks: evidence from an ethical rating model. Journal of Management and Governance,

19(2), 303–340. https://doi.org/10.1007/s10997-013-9262-9

Bolton, R. N., Chapman, R. G., & Mills, A. J. (2019). Harnessing Digital Disruption With Marketing Simulations. Journal of Marketing Education, 41(1), 15–31.

Clarke, T. (2019). Creative destruction, technology disruption, and growth. Oxford Research Encyclopedia of Economics and Finance,.

D. Bonnet, J. Buvat, & K. S. (2018). "When digital disruption strikes: how can incumbents respond? Cap Gemini Consulting,.

D. Zhang, Z. Zhang, & S. M. (2019). A bibliometric analysis on green finance: Current status, development, and future directions. Finance Research Letters, vol 29, 425–430.

Dietz, M., Härle, P., & Khanna, S. (2016). A digital crack in banking's business model. McKinsey Quarterly, 2, 50–53.

Dossa, Z., & Kaeufer, K. (2014). Understanding Sustainability Innovations Through Positive Ethical Networks. In Journal of Business Ethics (Vol. 119, Issue 4).

Fabregat-Aibar, L., Barberà-Mariné, M. G., Terceño, A., & Pié, L. (2019). A bibliometric and visualization analysis of socially responsible funds. Sustainability (Switzerland), 11(9).

Fitzgerald, M., Kruschwitz, N., Bonnet, D., & Welch, M. (2013). Embracing Digital Technology: A New Strategic Imperative | Capgemini Consulting Worldwide. MIT Sloan Management Review, 55(1), 1–13. https://www.capgemini-consulting.com/SMR

Forcadell, F. J., Aracil, E., & Úbeda, F. (2020). The Impact of Corporate Sustainability and Digitalization on International Banks' Performance. Global Policy, 11(S1), 18–27.

Haddad, C., & Hornuf, L. (2019). The emergence of the global fintech market: economic and technological determinants. Small Business Economics, 53(1), 81–105. https://doi.org/10.1007/s11187-018-9991-x

Haffke, I., Kalgovas, B., & Benlian, A. (2016). The role of the CIO and the CDO in an Organization's Digital Transformation. 2016 International Conference on Information Systems, ICIS 2016,

December.

Horlacher, A., & Hess, T. (2016). What does a chief digital officer do? Managerial tasks and roles of a new C-level position in the context of digital transformation. Proceedings of the Annual Hawaii International Conference on System Sciences, 2016-March(January 2016), 5126–5135.

K. Still, T. Huhtala, & S. S. (2016). FinTech as business and innovation ecosystems. Kuala Lumpur, Malaysia: A Paper Presented at ISPIM Summit. www.ispim.org

Karim, K. (2017). Kajian Mengenai Kepuasan Nasabah Bank Syariah di Kota Makassar. Conference: Forum Dosen Ekonomi Dan Bisnis Islam (Fordebi), 1–15.

Karimi, J., & Walter, Z. (2015). The role of dynamic capabilities in responding to digital disruption: A factor-based study of the newspaper industry. Journal of Management Information Systems, 32(1), 39–81. https://doi.org/10.1080/07421222.2015.1029380

Lubis, I. (2010). Bank dan Lembaga Keuangan Lain. Medan: USU Press, 101.

M. Jeucken. (2010). Sustainable finance and banking: The financial sector and the future of the planet,.

Martin, S. K. &. (2018). Six Digital Growth Strategies for Banks,. In McKinsey & Co.

Mattila, A. S., Hanks, L., & Kim, E. E. K. (2010). The impact of company type and corporate social responsibility messaging on consumer perceptions. Journal of Financial Services Marketing, 15(2), 126–135. https://doi.org/10.1057/fsm.2010.10

Picher, J. (2020). Branches in Decline: Last One Out, Turn Off the Lights. The Financial Brand.

Prijanto, B., Ferina Pulung, R., & Rusiana Sari, A. (2021). Analisis Perbandingan Kualitas Pelayanan Bank Syariah Dengan Bank Konvensional Di Kota Depok Menggunakan Carter Model. Jurnal Tabarru': Islamic Banking and Finance, 4(1), 178–194.

Rauch, M., Wenzel, M., & Wagner, H. T. (2016). The digital disruption of

strategic paths: An experimental study. 2016 International Conference on Information Systems, ICIS 2016, December.

Raut, R., Cheikhrouhou, N., & Kharat, M. (2017). Sustainability in The Banking Industry: A Strategic Multi-Criterion Analysis. Business Strategy and the Environment, 26(4), 550–568.

Sari, E. Y. dan R. L. (2012). Analisis Faktor-Faktor yang Mempengaruhi Non Muslim Menjadi Nasabah Bank Syariah Mandiri di Medan. Jurnal Ekonomi Dan Keuangan, vol 1.no.1, 46–60.

Sarma, P., & Roy, A. (2021). A Scientometric analysis of literature on Green Banking (1995-March 2019). Journal of Sustainable Finance & Investment, 11(2), 143–162.

Schwab, K. (2016). The Fourth Industrial Revolution: what it means and how to respond. World Economic Forum, 1–7.

Skog, D. A., Wimelius, H., & Sandberg, J. (2018). Digital Disruption. Business and Information Systems Engineering, 60(5), 431–437.

Supriyaningsih, O. (2020). Analisis Kinerja Perbankan Syariah Di Indonesia Dengan Menggunakan Pendekatan Islamicity Indeces. REVENUE: Jurnal Manajemen Bisnis Islam, 1(01), 47–60. https://doi.org/10.24042/revenue.v1i01.5714

Tahliani, H. (2020). Tantanganperbankan Syariah Dalam Menghadapi Pandemi Covid-19. Madani Syariah, 3(2), 92–113.

Utesheva, A., Simpson, J. R., & Cecez-Kecmanovic, D. (2016). Identity metamorphoses in digital disruption: A relational theory of identity. European Journal of Information Systems, 25(4), 344–363. https://doi.org/10.1057/ejis.2015.19

Watkins, M. W. (2018). Exploratory Factor Analysis: A Guide to Best Practice. Journal of Black Psychology, 44(3), 219–246.

Yip, A. W. H., & Bocken, N. M. P. (2018). Sustainable business model archetypes for the banking industry. Journal of Cleaner Production, 174, 150–169. https://doi.org/10.1016/j.jclepro.2017.10.190