Effectiveness of Fintech-Based Sharia Cooperative Development in the New Normal Era : Interpretative Structural Model Approach

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Abstract.

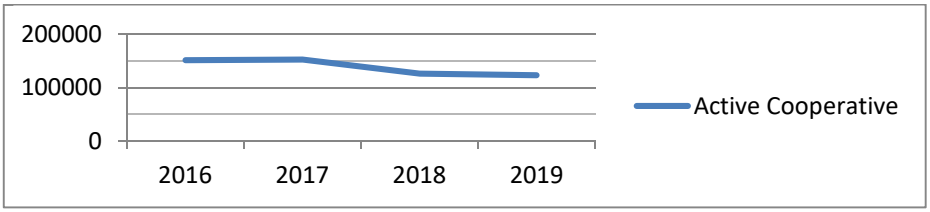
In the Covid Pandemic 19, sharia cooperatives must be a solution for the welfare of their members and the UMKM that they support so that they can move up in class, but how if it is difficult to access, therefore sharia cooperatives must be digital-based and include collaborating with fintech. This study tries to answer the problems that occur, strategies, and stakeholders involved in the development of Islamic cooperatives in collaboration with sharia fintech in Indonesia using the Interpretive Structural Model (ISM) approach. The core problem faced in developing sharia cooperatives in collaboration with sharia fintech is the lack of education and promotion of Islamic financial institutions collaboration, especially in sharia cooperatives with sharia fintech (E9), which initially became competitors to financial institutions because they were very flexible and fast and have become OJK's instructions that fintech must collaborate with financial institutions including sharia ones. Furthermore, it can be suggested for legislators, actors and drafter to constantly monitor and improve the process in the context of the progress and welfare of cooperatives and SMEs in Indonesia.

Keywords :*slamic Cooperatives; Islamic Microfinance Institutions;Interpretative Structural Modelling(ISM)*

I. INTRODUCTION

Sharia cooperatives are non-governmental groups as people's economic institutions that seek to develop productive and investment businesses based on the principles of sharia and Islamic maqasidZainil Ghulam (2016). Covid-19 has hit cooperatives and Small and Medium Enterprise (SME), plus the policy of physical distancing or large-scale social restrictions, inevitably, has greatly affected the economic activities of cooperatives and SME. The existence of a significant number of Islamic cooperatives in several regions in Indonesia is not supported by supporting factors that allow these micro-institutions to continue to develop and run well. For the development of sharia cooperatives in this post-pandemic, there is a need for facts on the ground showing that many sharia cooperatives have sunk and dissolved. It is recorded that consumer cooperatives are the unit of daily necessities cooperative segment that is the worst affected or around 45 percent of a total of 781 units, cooperative services are 158 units (8 percent), and cooperative producers are affected by 152 units (7 percent). The problems faced are lack of capital, decreased sales, and distribution is hampered, from the number of existing cooperatives from 2016 to 151,170 to 2019 it has decreased to 123,048 cooperatives, only a few percent are active and even active development has also decreased, which is illustrated in the figure below.

Figure1. Development of Cooperatives in Indonesia



Source: Cooperative Data Report dekop.go.id 2020

By looking at the above phenomena, the development of sharia cooperatives and cooperatives in Indonesia is deemed not fully able to answer the real economic problems that exist in the community, especially during the Covid 19 pandemic which greatly impacted the global economy, including the development of sharia cooperatives or KSPPS and the SME under their guidance. Viewed from the conception, Islamic cooperative is an institution whose existence is needed by the community, especially the micro community. However, on the other hand, namely in the operational field it still has many weaknesses. So these problems must be resolved properly in order to create a positive image for clean and trusted Islamic microfinance institutions by the public. During this pandemic, the Cooperatives and SME Service Offices continue to provide relief and relaxation to the fostered cooperatives (SME) in the LPDB- SME (Cooperative and SME Revolving Fund Management Institution) so that they can survive amid the Covid 19 outbreak in the form of relaxation policies and financing opportunities in the form of financing restructuring. for LPDB- SME recipients.

In addition to the financing policy from the government through LPDB, and to make it easier, the era of digitalization is increasingly developing in reducing "physical distancing" by using the online model, and now what is developing is Financial Technology (Fintech), even though its initial appearance was a threat to financial institutions (banking and even cooperatives) Sirajulhaq and Marifatulhaq (2019), however, there is a growing need for collaboration in financing. Fintech Ammana.id is the only sharia fintech that collaborates with Islamic financial institutions (KoperasiSyariah and KSPPS / BMT) in Indonesia. Meanwhile, fintech in Indonesia began to develop from 2006 with the number of companies initially only four companies and grew to 16 companies in 2007. Significant developments occurred in 2015 to 2016 where the number of companies running the fintech business model was around 165 companies and 31 companies. among them is sharia fintech which has begun to develop Lawrance and Basit (2017). Based on the development of fintech in Indonesia, OJK as the financial industry regulator has issued a legal standing for the fintech industry. The legal umbrella is in the form of OJK Regulation Number 77 / POJK.01 / 2016 concerning Peer-to-Peer Lending / P2P Lending Ownership Services issued at the end of December 2016 and Bank Indonesia No: 19/12 / PBI / 2017 concerning the implementation of Financial Technology However, these regulations only regulate fintech with a conventional system and do not yet regulate the sharia system which is currently also starting to grow.

A number of studies have also shown various positive impacts on the use of sharia cooperative cooperation in collaboration and synergy with Yuliana (2019) with sharia fintech as research by Elida and Budi (2019), research by Rusydiana (2018), research by Budianto and Julius (2019) and through fintech Islamic cooperatives can fulfilling the needs of its customers according to Julianto (2016) and cooperatives can foster fintech-based entrepreneurial MSMEs as research by Kusumaningsih (2018) to stabilize the financial system according to Yoshida (2019).

However, even though the number of fintech start-ups has started to develop from 31 fintech companies, only a few are still one sharia fintech that collaborates with sharia cooperatives, namely Ammana.id and most fintechs go directly to the community, namely B2C, which here is still a few B2B and there is still a lot of research above. and regulations are still incomplete until sharia compliance is not formulated. According to Alam, Gupta and Zameni (2019) there is still little research on the strategy of developing Islamic financial institutions with Islamic fintech.

Therefore, based on the background and gaps that have been described above, this paper intends to examine what are the obstacles faced by Islamic cooperatives in Indonesia, and what are the measures of the effectiveness of the development of sharia cooperative collaboration with sharia fintech in Indonesia. With the Interpretative Structural Modeling (ISM) method approach, some of these questions will try to be answered and searched for solutions and become a reference for stakeholders for better development in the future.

II. METHOD

Interpretive structural modeling (ISM) is an onward design kualitativemethodology utilized to recognize, examine and summarize several correlations among factors which explain a problem, issue, or model. ISM is a decision-making method took from the complexity situation by correlating and organizing the idea into the visual map. ISM basic concept is using expert and practitioners to generate complexity system into some subsystem (element) and build a hierarchy structural modeling. The second stage is constructing Structural Self Interaction Matrix (SSIM) model. SSIM is constructed from the variables founded from decomposition step, then develop the contextual relationship among variables and gathering into one variable i and variable j.The third stage is creating a reachability matrix (RM) by conversing the V, A, X, and O used into the numbers 1 and 0. The last stage is to classify the sub-elements into 4 sectors (Saxena, 1994):

a) Weak driver _ weak Dependent variables (AUTONOMOUS), the variables in this sector are generally not system related, the relationship is little.
b) Weak driver strongly-dependent variables (DEPENDENT), the variables that enter into this group are dependent variables,
c) Strong driver strongly dependent variables (LINKAGE), the variables in this sector must be studied carefully because their interactions can have an impact and feedback on the system.
d) Strong driver weak Dependent variables (INDEPENDENT) variables in this sector have a strong influence in the system and greatly determine the success of the program.

There are several studies on Islamic economics and finance that have been done using the ISM method. Some of them are done by Rusydiana and Devi (2018) about sharia cooperatives, Ascarya et al. (2012) about the development of shariah banks, and Devi and Rusydiana (2016) on group lending model. Meanwhile Bolanos et al. (2005), and Kanungo & Batnagar (2002) for other industrial applications. The research using ISM method with more theoretical has been done by Lee (2007) and Thakkar et al. (2006).

III. RESULTS AND DISCUSSION

Based on the results of discussions with experts, related parties and research in the field, various factors of the effectiveness of fintech-based sharia cooperative development were obtained from the results of the questionnaires that were filled in by the respondents, then making a Structural Self Interaction Matrix (SSIM) matrix as shown in table 1. Furthermore, based on table 1 Regarding the SSIM matrix then it is made in the form of a Rechability Matrix (RM) table by replacing V, A, X, O into the numbers 1 and 0. So, the results are obtained as shown in table 1 below.

Table 1. Structural Self Interaction Matrix (SSIM)

Elemen	E1	E2	E3	E4	E5	E6	E7	E8	E9
E1: Optimization of sharia cooperative financial collaboration with sharia fintech has been achieved		X	V	V	V	V	V	V	V
E2: There is full government support for the development of Islamic cooperatives			V	V	V	V	V	V	V
E3: Achieved HR professionalism of Islamic cooperatives				V	V	O	V	V	V
E4: Achieving the welfare of sharia cooperatives and their members					X	A	A	V	V
E5: The existence of MSMEs assisted by sharia cooperatives has been upgraded						A	A	A	V
E6: The number of bankable Muslim people's MSMEs							V	A	V
E7: There is a sharia compliance								X	V

formulation in the collaboration of sharia cooperatives with sharia fintech									
E8: Increased operational cost efficiency									V
E9: There is an educational program, socialization and promotion of digital-based cooperatives									

Source: Data processed from questionnaires

Note: Entry in table: V when row affects column; A when the column affects the line; X when rows and columns influence each other; and O when there is no relationship between rows and columns.

Then, based on the results of the interpretation of the final Rechability Matrix (RM) matrix, a hierarchy of linkages between fintech-based sharia cooperative collaboration factors can be described in table 1 above the initial RM for the enabler of the sharia fintech industry development strategy built. Furthermore, by incorporating the concept of transitivity (Ravi, 2015), the final RM is obtained. Transitivity in contextual relationships is a basic assumption made in the ISM. This concept states that if the variable X is related to Y and Y is related to Z, then X must be related to Z (Venkatesh et al., 2015; Jabeen et al., 2017). The RM also provides the driving power and dependence power of each enabler. Thus, in the last RM table (Table 2), the influencing power for E1 and E2 (Collaboration and government role) is the total number of entry values in the row, i.e. strengthening government collaboration and support. Meanwhile, the value of dependence power for E9 (the number of entries in the column) is a digital / fintech-based cooperative socialization and education promotion program. Similarly, the driving power and dependence power values calculated for all remaining enablers provide the following rating information:

Table 2. MatrixRechability Matrix (RM)

No.	E1	E2	E3	E4	E5	E6	E7	E8	E9	Driving Power	Ranking
E1	1	1	1	1	1	1	1	1	1	9	1
E2	1	1	1	1	1	1	1	1	1	9	1
E3	0	0	1	1	1	1	1	1	1	7	2
E4	0	0	0	1	1	1	1	1	1	6	3
E5	0	0	0	1	1	1	1	1	1	6	3
E6	0	0	0	1	1	1	1	1	1	6	3
E7	0	0	0	1	1	1	1	1	1	6	3
E8	0	0	0	1	1	1	1	1	1	6	3
E9	0	0	0	0	0	0	0	0	1	1	4
Dependence	2	2	3	8	8	8	8	8	9		
Hirarki	4	4	3	2	2	2	2	2	1		

Source: Data processed from the questionnaire, 2020

From the final RM, the next step is to build a reachability set The levels identified help in building the quadrant and final model of ISM through the MICMAC (matrix of cross impact multiplications applied to classification) classification (Jabeen& Faisal, 2018).

In his research, Godet (1986) in Rusydiana (2018) has popularized the cross impact multiplication matrix or MICMAC to classify the system variables under study. The basis of this classification is the driving power and dependence power which is calculated in the final RM. In addition, MICMAC analysis can be used to examine the direct and latent relationships among the energies obtained from the ISM technique. So, based on the driving power and dependence power, the enablers in this study are classified into four groups, as shown and explained below:

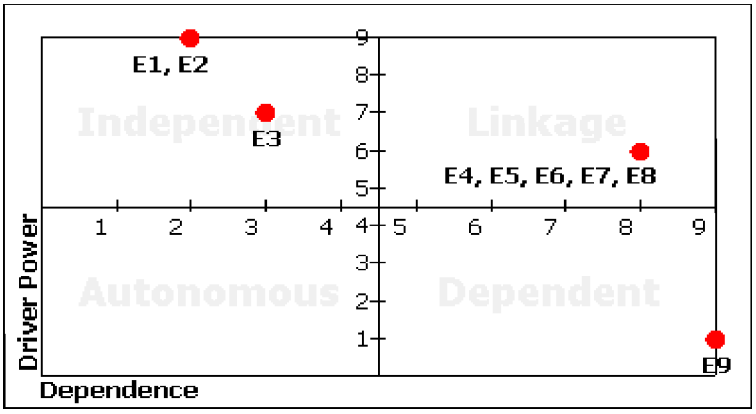


Fig 2. Driving power and dominance diagram of the enablers

Figure 3 shows the levels of problems and challenges in the development of Islamic cooperatives in the collaboration of the Islamic fintech industry in Indonesia. The important problem, among others, is the lack of educational instruments for promotion and outreach (E9) at level 1 as a key level. Then there is still a lack of level of welfare for members of Islamic cooperatives (E4), and there are still many umkm who have not graduated (E5), there are still many cooperative members who are unbankable Muslim people's (E6), and there is no formulation of sharia compliance collaboration between sharia cooperatives with sharia fintech which is still the “sand box” model (E7) and the high operational costs of this collaboration (E8) at level 2. The next challenge is the challenge of unprofessional human resources for sharia cooperative management because they are considered new and related to technology (E3) at level 3 and The last challenge that is no less important is the collaborative activity (E1) and the support of the government and related agencies in the development of sharia cooperatives by Diskop and UKM, OJK, KNEKS, Akademis, AFSI, AFPI, Sharia Fintech and its cooperatives. (E2) to form the following model:

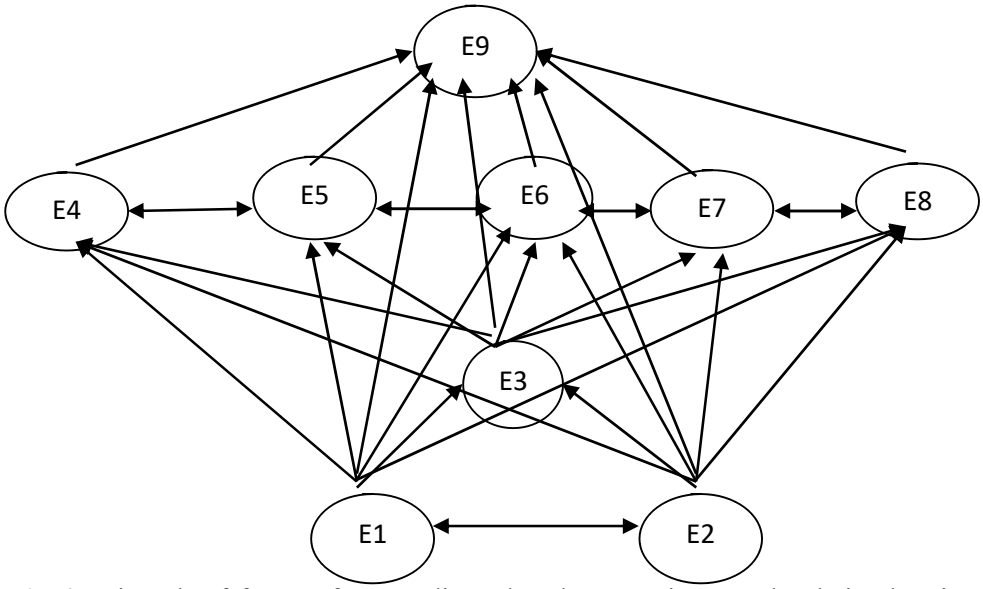


Fig 4: Digraph of factors for coordinated and responsive supply chain showing relationship between the factors

OJK Regulation Number 77 / POJK.01 / 2016 concerning Direct Technology-Based Loan Services, the concept of sharia fintech is not included in the stated regulations. Likewise, the regulation that is being drafted by OJK, in which the concept of sharia is not contained in it. OJK explained that the rules drafted were a legal umbrella. This means that these regulations govern fintech companies in general. However, it is possible that the authorities will issue special regulations (related to sharia fintech) in the near future. Moreover, the sharia-based financial services market is quite popular in

today's society. Regarding human resources, which is the second challenge, this is often a common problem faced by other industries. For example, in the world of Islamic banking (Rusydiana, 2016) and microfinance, HR problems are crucial issues that need to be solved. Likewise, what happened to other Islamic financial industries (Rusydiana& Devi, 2017).

Referring to the results of processing with the ISM method, it shows that the strategy needed in the framework of developing a collaborative Islamic cooperative with sharia fintech in Indonesia, a strategy that is considered important is that this activity is aimed at growing new cooperatives and improving the institutional quality of Islamic cooperatives so that Islamic cooperatives can grow, develop and run in accordance with the objectives of the Islamic cooperative. The strategic direction is carried out through:

a) Increasing support from the government and agencies related to institutional development of Sharia Cooperatives.
b) Administrative arrangements and evaluation of sharia cooperative legal entities and sharia compliance.
c) Socialization and Education of the Benefits of Cooperating in the community.
d) Coordination and synchronization of the implementation of policies in the institutional sector and empowerment of Sharia Cooperatives.
e) Revitalization of Sharia Cooperative Institutional Functions in advancing its members so that they go up in class.
f) Increasing the capacity and quality of SDI (Human Resources) Islamic cooperatives.

IV. CONCLUSSION

From the description of the discussion, it can be concluded that there are 9 factors from the opinions of experts contained in the development of fintech-based sharia cooperatives that the key evaluation is the lack of education and promotion of collaboration of Islamic financial institutions, especially in Islamic cooperatives with sharia fintech (E9) which was originally fintech become a competitor to financial institutions because it is very flexible and fast and it has become OJK's instruction that fintech must collaborate with financial institutions including sharia ones. By conducting this ISM analysis, this development strategy is expected to be an evaluation of the effectiveness of the implementation of Islamic cooperative collaboration with sharia fintech with 6 strategic directions. Furthermore, it can be suggested for legislators, actors and drafter to constantly monitor and improve the process in the context of the progress and welfare of cooperatives and SMEs in Indonesia.

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