



Strategy for Strengthening Business Incubators to Form an Entrepreneurial Spirit in Islamic University

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Abstract

The purpose of this study is to analyze the strategy in Strengthening Business Incubators to Form an Entrepreneurial Spirit in Islamic Higher Education. This study uses the Analytic Network Process method and the help of Super decision software. The results of the study show that the obstacles encountered in the Business Incubator Strengthening Strategy as forming an entrepreneurial spirit in Islamic Universities in North Sumatra can be divided into two, namely internal and external problems. Internal problems come from regulations, lecturers, digitization and infrastructure, while external problems come from network partners, environment and funding. Based on the results of the research that has been done, regulatory issues are a top priority in the Business Incubator Strengthening Strategy to Form an Entrepreneurial Spirit in Islamic Higher Education in North Sumatra with a score of 0.298.

Keywords: Strategy; Entrepreneuria Spiritl; Business Incubator; Islamic Higher Education

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1. Introduction

Indonesia's population continues to increase from year to year. The National Development Planning Agency (Bappenas) projects that in 2035 Indonesia's population will reach 305.6 million people, an increase of 28.6 percent from 2010. The increasing population of Indonesia makes Indonesia the fifth most populous country in the world. Based on the Indonesian Population Projection, the Indonesia Population Projection from the Central Bureau of Statistics shows that the increase in Indonesia's population coincides with the increase in the population of productive age (ages 15 to 65 years). Entrepreneurship is an important issue in the economy of a developing nation. The progress or decline of a nation's economy is largely determined by the existence and role of this group of entrepreneurs. There is no nation in the world that is capable of becoming a developed country without the support of a number of young people and entrepreneurial communities. In research by (Saiman, 2009), in developed countries both on the European continent and in the United States, every ten minutes a

new entrepreneur is born. This entrepreneurial growth brings extraordinary economic growth for a country, so that the more a country has entrepreneurs, the more it will improve its economy. The phenomenon that occurs in the development of entrepreneurs in Indonesia is currently still very low when compared to other countries in Asia. This statement can be seen from the number of existing entrepreneurs, in Indonesia only 3.47% of the total population. Meanwhile, a country can be said to be prosperous if there are entrepreneurs at least 4% of the total population.

On Bisnis.tempo.co.id The successful development achieved by Japan is one of the reasons for this is the role of entrepreneurs, who account for 2% at the medium level and for small businesses as much as 20% of the population. Besides Japan, there are also several countries whose economic progress is sponsored by entrepreneurs, namely Malaysia with 5% of the population's entrepreneurs, Singapore with 7% of the population's entrepreneurs, and America with more than 12% of the population becoming entrepreneurs. Unfortunately at present, the number of entrepreneurs in Indonesia is still small and the quality cannot be said to be great enough to support the economy, so that the issue of entrepreneurship is an urgent issue for the success of economic development in Indonesia. One of the ways of economic development is carried out through the provision of employment in order to anticipate a faster growth in the labor force than the growth in employment opportunities. Schumpete, an economist who initiated the theory of economic growth, stated that entrepreneurs have a big contribution to economic development through creating innovation, employment and welfare. To do this, the role of the government is needed to strengthen and encourage people to want to run entrepreneurship. One of the government's roles in encouraging entrepreneurship is through entrepreneurship education which is implemented in higher education. Higher education facilitates entrepreneurship education, entrepreneurial practices and ongoing assistance to make students have creative and innovative ideas that will later become reliable entrepreneurs and be able to become solutions to reduce unemployment which is expected to create jobs which will later become solutions to reduce unemployment.

In ([Susilaningsih, 2015](#)) research, entrepreneurship education should develop an understanding of the importance of entrepreneurship education for all professions produced by universities. That entrepreneurship education in tertiary institutions is needed in all fields of study, both exact and social. This has an impact on the competence of college graduates and has not met the needs of the labor market which results in not being creative enough to start entrepreneurship. Even though entrepreneurship can be built based on enthusiasm and serious guidance by universities. This is proven that of the 4,670 universities in Indonesia, only a small proportion (a handful of universities) are concerned with the importance of entrepreneurship on campus. For this reason, it is not wrong if until now the aim of almost all of our young generation in schools/universities is to become workers (job seekers) in a company. This can be proven by research produced by ([Alberti et al., 2004](#)) there is little empirical evidence about the positive impact of education on entrepreneurship and entrepreneurial success. For researchers it is difficult to identify clear effects of training and education on the performance of small firms, either at startup or at other stages in their development. The reason for this result may lie in the poor quality and quantity of training provided so as to encourage an innovation that is expected to reduce educated unemployment in Indonesia. In addition to the need to encourage a people's economy, of course students are also expected to be able to become creators to do entrepreneurship through educational training in higher education. This is also supported by ([Mebroui & Mosbah, 2020](#)) and strengthened in the Islamic Qur'an to leave it to the Muslim community to carry out business activities based on their own choices and in accordance with their own initiatives to ensure the economic survival of a region/ country. To ensure this also required the role of institutions or institutions.

Based on the problems above, an interview was conducted with the incubator manager at the University of North Sumatra. For almost all universities in Indonesia to apply the College Business Incubator to develop a Business Incubator for universities throughout Indonesia, it is necessary to

have a mechanism for growing and developing a Business Incubator. One of the higher education incubators is the University of North Sumatra, which has become USU's CIKAL Business and Technology Incubator Center, founded in 1997, which has incubated and fostered small and medium enterprises. The incubation activity is carried out by providing training activities, guidance/consultation as well as implementing internship activities for students and final year students through a program focused on assisting start-up companies or start-up activities Facilitating Institutional Strengthening Technology Business Incubation from the Ministry of Research, Technology and Higher Education through the Directorate of Regions Science, Technology and Higher Education. Where, during the implementation of the second facilitation program, the incubation program was strengthened again for start-up business actors who were the result of innovation or research. Then carried out through interviews with the incubator manager of Muhammadiyah University of North Sumatra about the incubator, he conveyed that the incubator at UMSU started in 2018 and the number of tenants to date is 15 who have alumni there are 13, but in the management of the incubator on the UMSU campus this is very different from the incubator management system In general, those in other tertiary institutions, in this UMSU incubator, apply a sharia incubator system, where they will deduct 2.5% of the profits as a form of Lazismu. This is in line with research conducted by (Sudana et al., 2019) one way to make a university quality is to have an innovative business incubator. Strengthened by (Hernández & Carrà, 2016). The presence of an incubator in a university must be supported by the head of state in order to develop business and improve the economy. The purpose of this study is to analyze the strategy in Strengthening Business Incubators to Form an Entrepreneurial Spirit in Islamic Higher Education.

2. Literature review

A business incubator is an institution engaged in the provision of facilities and business development, both management and technology for small and medium enterprises to improve and develop their business activities and or develop new products so that they can develop into strong entrepreneurs and or new products that are competitive in the long term. certain time. Business incubators in tertiary institutions are in principle a catalyst for the process of starting and growing a business. The role of Business Incubators in Higher Education can be seen through the provision of entrepreneurship consulting services, service networks and equipment facilities needed by entrepreneurs to support their success. An experience in North America proves that Inbis in 2001-2004 was able to help more than 35,000 startup companies with 82,000 permanent employees who were able to grow revenues of more than 7 billion US dollars.

The framework for this research is as follows:

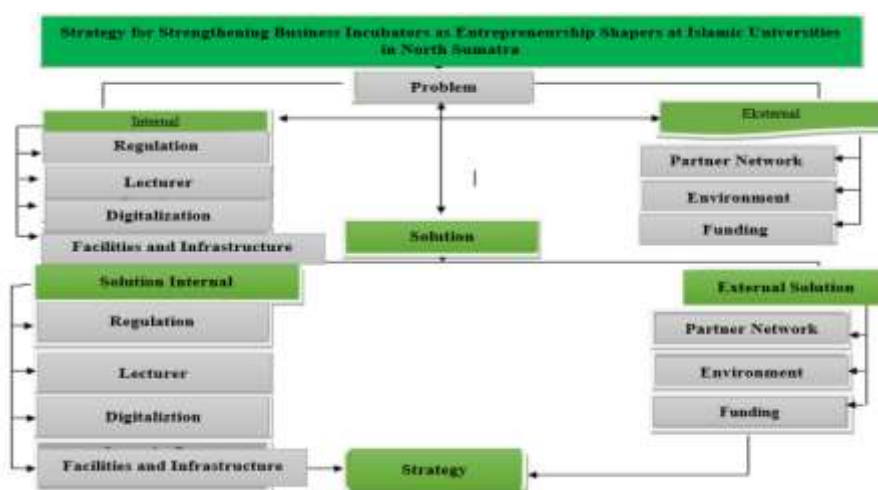


Figure 1. Research Thinking Framework

In the explanation above, it can be seen that business incubators certainly need a development in the form of a business model that aims to attract competitiveness or competency in entrepreneurial business for students. Higher education business incubators have a goal called technopreneur, collaboration and independence with the aim of developing the business of new entrepreneurs (tenants) under their assistance. Therefore, assistance is needed through a business incubator institution. which aims to foster technology-based startup entrepreneurs over a certain period of time. And business incubator institutions under the management of tertiary institutions use the concept of link and match. The concept of link and match is a form of learning in the form of mentoring by way of work based learning by practicing work in the industry.

2.1. Definition of Strategy

According to practitioners, the term strategic tends to refer to organizational orientation and plans for how business goals are to be achieved through people. This is based on three propositions: first, that human capital is the main source of competitive advantage; second, that the people who carry out the strategic plan; and, third, that a systematic approach should be used to define the direction and goals of the organization to be achieved. Strategic HR Management is a process that involves using a holistic approach to HR strategy development, which integrates vertically with business strategy and horizontally with one another. This strategy determines orientation and plans related to overall organizational considerations such as organizational effectiveness, and HR management such as resources, learning and development, rewards and employee relations ([Maciej Serda et al., 2014](#)).

2.2. Incubator and Business Incubation

The central incubator program is designed to accelerate the development of successful young entrepreneurs and their businesses through various support resources and services ([Elmansori & Arthur, 2015](#)). Various supports are provided by the business incubator, by establishing partnerships with several parties, such as academia, business and government, as the person in charge of business acceleration. Services provided by business incubators to tenants according to ([Setyawan & Suyudi, 2014](#)) must cover the scope of 7 S, namely: (1) Space, namely providing space for tenant business activities; (2) Shared office facilities, namely the provision of office facilities that can be used together. For example facilities such as fax, telephone, photocopying, meeting rooms, computers, and secretaries; (3) Service, namely conducting management guidance and consulting: marketing, finance, production, technology, and so on; (4) Support, namely providing assistance to support research and business development and access to the use of technology; (5) Skill Development, namely increasing the ability of tenant human resources through training, preparation of business plans, management training and so on; (6) Seed capital, namely the provision of start-up funds and efforts to obtain access to capital for financial institutions; and (7) Synergy, namely t([Setyawan & Suyudi, 2014](#))he creation of good business networks between businesses, both local and international businesses ([Setyawan & Suyudi, 2014](#)). The objectives of this research are: Identify potential SMEs in Medan City that have the ability to manage and develop markets, Create a business incubator mentoring model for SMEs so that their businesses progress.

2.3. Business Models

In the Indonesian dictionary, business is trading business, commercial business. Business itself has two different meanings, namely: first, business is an activity, and second, business is a company. One of the right methods to implement is the Business Model Canvas method or what is commonly called BMC. The proposed Canvas Business Model ([Osterwalder & Pigneur, 2010](#)). That is a simple framework for presenting the important elements contained in a business model, using the model canvas some of these elements can become a complete business strategy. A comprehensive design is one of the advantages to make it easier to describe and visualize business components. The Canvas

Business Model can provide benefits for companies where it can recognize what are the value propositions, how to build and run key activities and key resources in creating value propositions, getting revenue streams, and understanding how the products and services offered by companies can be communicated with good to consumers until it reaches the hands of consumers for consumption. Important elements in the Canvas Business Model include: customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, cost structure.

2.4. Entrepreneurship

In fact, there have been many experts who put forward the notion of entrepreneurship based on their respective perspectives. However, the essence of a crucial understanding is always present in every understanding put forward by these experts and becomes a fundamental thing. Peter F. Drucker said that entrepreneurship is the ability to create something new and different ([Kasmir, 2015](#)). This definition was more broadly stated by Hisrich in Suryana, who said that entrepreneurship is the process of creating something different to generate value by devoting time and business, followed by the use of money, physical, risk, and then generate rewards in the form of money as well as personal satisfaction and freedom. Meanwhile, Zimmerer defines entrepreneurship as a process of applying creativity and innovation in solving problems and finding opportunities to improve life (business) ([Kasmir, 2015](#)). ([Wiratmo, 2020](#)) in the book *Introduction to Entrepreneurship Basic Framework for Entering the World of Business* defines entrepreneurship as the process of creating something with a different value by using the necessary effort and time, assuming the accompanying financial, psychological and social risks, and receiving financial rewards and personal satisfaction..

2.5. Islamic College

Based on the Republic of Indonesia Government Regulation Number 60 of 1999 defines tertiary institutions as educational units that organize higher education whose institutions can be in the form of academies, polytechnics, high schools, institutes or universities. Meanwhile, Islamic Higher Education (PTAI) is an advanced educational institution from the Islamic education level to madrasah and Islamic boarding schools and is equivalent to high school which is a higher education institution that has Islamic characteristics, which distinguishes it from other public tertiary institutions ([Dunn & Husien, 2018](#)). Higher Education has a role as the last gate of education in entering the world of work. Higher education through a learning process that develops independent learning abilities. The fact shows that until now it has been identified that higher education institutions in Indonesia are considered less able to respond to the challenges of change and the demands of society, because they are less able to adapt to the needs of users or the world of work which is always changing rapidly as a result of technological advances followed by economic and social changes.

3. Methodology

This research is a combination research or (mixed methods). Combination research is a research method that combines or combines quantitative methods and qualitative methods to be used together in a research activity, in order to obtain data that is more comprehensive, valid, reliable, and objective. Comprehensive data is complete data which is a combination of quantitative and qualitative data. Valid data is data that has a high degree of accuracy between the actual data and the data reported by the researcher. Reliable data is data that is consistent over time and from person to person. Objective data is data that is agreed upon by many people. By using a combination method, the data obtained through subjective qualitative methods can increase the objectivity of a wider sample using quantitative methods ([Ramdhan, 2021](#)). This research was conducted from January to July 2022.

4. Discussion

4.1. Overview of Research Locations

Muhammadiyah University of North Sumatra, abbreviated as UMSU, is a business charity under the Muhammadiyah organization based on Islam and based on the Al-Qur'an and Sunnah which was founded in Medan on February 27, 1957 based in the city of Medan, North Sumatra Province. Muhammadiyah University of North Sumatra, was founded on the initiative of several Muhammadiyah clerics, including H. M. Bustami Ibrahim, D. Diyar Karim, Rustam Thayib, M. Nur Haitami, Kadiruddin Pasaribu, Dr. Darwis Datuk Batu Besar, H. Syaiful U.A, Abdul Mu'thi and Baharuddin Latif. The current UMSU stems from the birth of the Muhammadiyah Islamic Philosophy and Law Faculty (FAFHIM) which later became the North Sumatra Muhammadiyah College (PTM) in 1968, caring for 3 (three) faculties: (1) the Faculty of Education (FIP), (2) Faculty of Religious Sciences Department of Da'wah (FIAD), and (3) Faculty of Sharia.

4.2. Incubator Education and Training Sector

This field has the main task of providing entrepreneurship education and training services for students such as PMW implementing students (Student Entrepreneurial Program), as well as training of trainer (TOT) programs for entrepreneurship assistant lecturers/supervisors. Entrepreneurial students who are included in the incubator include students who are interested in entrepreneurship, students who have businesses and students who want to do entrepreneurship. Activities include:

- a. Entrepreneurship Curriculum and Module Development
- b. Entrepreneurship training
- c. Entrepreneurship competition guidance for students
- d. TOT for lecturers
- e. Seminar and dialogue on Entrepreneurship.
- f. Consulting Services
- g. business assistance

4.3. Research and Development Field

This field develops and establishes business partners, namely Small and Medium Enterprises (UKM) which can potentially partner with UMSU. In addition, there are also partners with other entrepreneurial institutions, such as companies, banks and cooperatives which are expected to help develop entrepreneurship at UMSU. Activities include:

- a. Talk shows in various mass media
 - b. Networking dengan lembaga pemerintah dan swasta, dalam kegiatan bimbingan teknis, pemberian permodalan, keikutsertaan dalam pameran produk.
 - c. Networking with MSMEs, in entrepreneurial apprenticeship activities, field studies to see the entrepreneurial process
- 1) The short-term and long-term Work Programs of the UMSU Entrepreneurship Development Center are carried out as follows: Modules / Teaching Materials
 - 2) Entrepreneurship Workshop
 - 3) Training
 - 4) Expos

- 5) Community Service
- 6) Cooperation with the Government and Business Entities
- 7) Comparative Study
- 8) Student Cooperative
- 9) Entrepreneurial internship at UKM

The establishment of the UMSU business incubator can be a means of implementing two elements of the Tri Dharma of Higher Education, namely research and community service. With this incubator, various experiments can be carried out on business ideas using the theories and methods received in lectures. Besides that, it can be a research tool to study the application of certain methods directly to various real business problems. From these trials and research, the best method that produces the most optimal output is expected to be widely applied in society. So that this form of community service is aligned with institutional competence. In addition, the UMSU business incubator also has great economic potential. The cooperation of the UMSU business incubator with business people, for example the policy and distribution of its UKM development facilities, as well as collaboration with the community as the end user is expected to make UMSU's existence and competence increasingly recognized.

4.4. Problem Synthesis Analysis

Table 1. of Synthesis of Priority Cluster Aspects of the Joint Perspective Problem

Problem Aspect	Academics	Entrepreneurs / Tenants	Manager	All Respondents	Ranking
Internal Problems					
M1. Regulation	0,4545	0,2914	0,2918	0,2986	1
M2. Lecturer Factor	0,1685	0,1083	0,1166	0,1136	7
M3. Digitization	0,1636	0,1185	0,1183	0,1165	5
M4. Infrastructure	0,1765	0,1193	0,1183	0,1197	2
External Issues					
M5. Partner Network	0,1605	0,1309	0,1183	0,1196	3
M6. Environment	0,1649	0,1101	0,1183	0,1140	6
M7. Funding	0,1661	0,1215	0,1183	0,1180	4
W= 0,024					

4.5. Analysis of Solution Synthesis Results

Based on the results of data processing on the analysis of the results of the synthesis of solutions in the previous point, the solutions in the Business Incubator Strengthening Strategy as Entrepreneurship

Shapers at North Sumatra Islamic Universities are divided into two groups, namely internal solutions and external solutions. Following are the results of priority aspects of the solution.

Table 2. Solution Aspect Priority Cluster Synthesis Results

Aspek Solusi	Academics	Entrepreneurs / Tenants	Manager	All Respondents	Ranking
S1. Regulation	0,2425	0,1942	0,1952	0,1947	1
S2. Lecturer Factor	0,1436	0,1144	0,1161	0,1153	6
S3. Digitization	0,0787	0,0640	0,0635	0,0636	7
S4. Facilities and infrastructure	0,1760	0,1425	0,1414	0,1419	5
S5. Partner Network	0,2136	0,1734	0,1716	0,1723	2
S6. Environment	0,1786	0,1428	0,1434	0,1434	4
S7. Funding	0,2095	0,1686	0,1688	0,1688	3
Rater Agreement (W) = 0,310					

4.6. Analysis of Strategy Synthesis Results

Based on the results of data processing, strategic priorities were obtained according to the opinions of all respondents as shown in the following table:

Table 3. Results of Synthesis of Cluster Priority Aspects of Strategic Solutions

Strategy	Academics	Entrepreneurs / Tenants	Manager	All Respondents	Ranking
1. Business Incubator Strengthening	0,4731	0,4884	0,4550	0,4721	1
2. Carrying out Incubation Activities at Islamic Higher Education	0,4620	0,4479	0,4479	0,4536	2
3. All Parties Collaboration	0,0649	0,0637	0,0971	0,0743	3
Rater Agreement (W) = 0,669					

4.7. Interpretation of Research Results

Based on the results of the description above, it is possible to compare the results of priority problems, solutions and strategies put forward by lecturers, managers and entrepreneurs at Islamic tertiary institutions regarding the strategy of strengthening Business Incubators as forming Entrepreneurship

at Islamic Universities in North Sumatra. In the table below you can see a comparison of priorities between respondents, managers and entrepreneurs.

Table 4. Comparison of Geomean Lecturers, Managers, and Entrepreneurs

		Geometric Mean Results		
		Lecturer	Manager	Businessman
INTERNAL				
1. Regulatory Factors				
A. Problem		0.014478	0.013506	0.013555
1	Higher Education Regulatory Policy Not Available	0.069555	0.068778	0.069551
2	Incubation Services Not Available	0.043755	0.042871	0.043378
3	No SOP	0.051684	0.052716	0.051508
B. Solution		0.008859	0.008847	0.008875
1	College Regulations	0.033980	0.036711	0.034237
2	Incubation Process System	0.035301	0.033676	0.032696
3	SOP	0.031669	0.030299	0.033831
2. Lecturer Factor				
A. Problem		0.005366	0.005020	0.005415
1	There is no Entrepreneurship Teaching Team yet	0.018425	0.018187	0.018688
2	Low Research Related to Incubators	0.015074	0.015024	0.015095
3	Less Supportive Research Activities	0.020913	0.021332	0.020681
B. Solution		0.005244	0.005214	0.005283
1	Teaching	0.020184	0.020552	0.020190
2	Study	0.018418	0.018303	0.018525
3	Devotion	0.017216	0.016939	0.016900
3. Digitization Factor				
A. Problem		0.005211	0.005495	0.005494
1	Technology Not Supported in the form of Applications	0.019069	0.019343	0.020020
2	Unavailable IoT services	0.017768	0.017551	0.016831
B. Solution		0.002875	0.002914	0.002898
1	Technology	0.027000	0.026394	0.026976
2	e-commerce	0.026928	0.027522	0.026951
4. Facility and Infrastructure Factors				
A. Problem		0.005621	0.005529	0.005494
1	Lack of Facilities	0.012535	0.012952	0.013551

B. Solution		0.006427	0.006493	0.006449
1	Space	0.008025	0.008089	0.008051
2	Shared	0.008732	0.008842	0.008422
3	Service	0.008185	0.008446	0.008201
4	Support	0.007756	0.007591	0.007614
5	Skill Development	0.007730	0.007601	0.007628
6	Seed Capital	0.007731	0.007607	0.007893
7	Synergy	0.007779	0.007752	0.008071
EKSTERNAL				
5. Partner Network Factor				
A. Problem		0.005111	0.006066	0.005494
1	Relation	0.009839	0.010722	0.011558
2	Training of trainer	0.009174	0.009171	0.008971
B. Solution		0.007803	0.007900	0.007823
1	Participate AIBI	0.032786	0.033080	0.031563
2	Professional Assistance	0.033245	0.032966	0.034474
6. Environmental factor				
A. Problem		0.005252	0.005105	0.005494
1	Primary Environment	0.017754	0.017253	0.017663
2	Secondary Environment	0.019061	0.019523	0.019005
B. Solution		0.006523	0.006507	0.006543
1	Culture	0.016375	0.015955	0.015668
2	Human Resources	0.017392	0.017912	0.016440
3	Family	0.016941	0.016820	0.018613
7. Funding Factor				
A. Problem		0.005291	0.005633	0.005494
1	Investor	0.013155	0.013054	0.013742
2	Grant	0.012263	0.011612	0.011404
B. Solution		0.007653	0.007682	0.007710
1	University/Institution	0.015214	0.014773	0.015001
2	Banking	0.015463	0.015218	0.014699
3	Matching Fund	0.014882	0.015595	0.015831
STRATEGY				
1	Forming a Business Incubator in Strengthening Entrepreneurship at Islamic Universities in North Sumatra	0.035211	0.036414	0.033816
2	Carrying out Incubation Activities at Islamic Higher Education	0.034390	0.033401	0.033474
3	All Parties Collaboration	0.004832	0.004750	0.007352

5. Conclusion

The establishment of business incubators at Islamic tertiary institutions can be a means of implementing the elements of the Tri Dharma of higher education, namely teaching, research and community service. With the existence of this incubator, various strengthening of business ideas can be carried out by using the theories and methods received in lectures. Based on the results of research that has been done:

Regulatory issues are a top priority in the Strategy for Strengthening Business Incubators as Shapers of Entrepreneurial Spirit at Islamic Universities in North Sumatra. Furthermore, the second priority issue is the problem of facilities and infrastructure. Furthermore, the third priority issue is facilities and infrastructure. Based on the results of data processing on regulatory issues, it shows that all respondents place the problem of Higher Education Regulation Not Available. For the second and third priorities, there are no SOPs and no incubation services available. Furthermore, according to a combination of all respondents in the cluster of facilities and infrastructure problems, the main priority is the lack of space, followed by the problem of Seed Capital and Unsupported Support. In the partner network cluster, the top priority is Not Registered in AIBI Membership (Association of Indonesian Business Incubators), followed by No Professional Assistance and Lack of AIBI Information.

The solution that is the top priority is regulation, followed by a network of network partners and funding. In the cluster of regulatory issues, the top priority is the Higher Education Leadership Regulations, followed by the Incubation Process System and SOPs. In the partner network solution cluster, the top priority is Professional Assistance followed by Join AIBI. Furthermore, in the funding solution cluster, the top priority is Matching Fund, followed by Banking and University/Institution solutions.

Strategy for Strengthening Business Incubators as Entrepreneurship Shapers in Islamic Higher Education in North Sumatra, the top priority is Strengthening Business Incubators, followed by a strategy of Carrying Out Incubation Activities at Islamic Higher Education and Collaboration of All Relevant Stakeholders.

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