Advances in Economics, Business and Management Research, volume 204
Proceedings of the 2nd International Conference of Strategic Issues on Economics, Business and, Education (ICoSIEBE 2021)

The Synergy Model of Entrepreneurship Development Through SMEs in Samosir (Triple Helix Model)

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ABSTRACT
This research aims to elaborate the synergy pattern of development on Triple Helix-based SMEs in the Samosir tourist area. The main issue is the lack of synergy between the three academic, business and government sector actors in developing SMEs. The research uses a grounded theory approach in exploiting the Analytical Hierarchy Process (AHP) model, which aims to synthesize comparisons of decision-making considerations and solve complex problems to develop the weight or priority of SMEs who have successfully implemented the triple helix model as best practice. This research is expected to design a synergy model in developing the economy for SMEs in Samosir. Academia as a source of knowledge and technology focuses on generating innovative findings and applications. Capital business actors provide economic benefits and social benefits for the community, while the Government guarantees and maintains the stability of relations with conducive regulations. The results showed that the hierarchy for the synergy priority of SMES development is a triple helix hierarchy consisting of four levels of hierarchy, namely goal, steakholder (academic, business, government), criteria (guidance, mentoring, coaching, marketing access facilities, technology assistance, information assistance, capital loans, technology loans, information loans, and establishing working groups), and alternatives (short, medium, and long term).

Keywords: *Entrepreneurship, Sinergility Model, Triple Helix, Analytical Hierarchy Process4, grounded theory, SMEs*

1. INTRODUCTION

Micro, small and medium enterprises are a business sector that has been proven to play a strategic or important role in overcoming the effects and impacts of the economic crisis that hit Indonesia, such as the 1997 economic crisis. This strategic position, when viewed from the business sector, is also because this sector has several advantages over large/medium enterprises. The advantages of this sector include the ability to absorb labor and use local resources, as well as its relatively flexible nature, so that the economic crisis becomes an important momentum for the pendulum's swing to reverse from the dominance of the large business sector to the increasing role of SMEs [1]. The SMES sector turned out to be more resilient in facing the crisis and was able to save the Indonesian economy and become a dynamist of economic growth after the economic crisis. SMEs are also a source of social and economic life for the majority of Indonesian people who are able to absorb a large number of workers.

The development of micro, small and medium enterprises (SMEs) and cooperatives has great and strategic potential in increasing national economic activity, including providing domestic goods and services. The existence of SMEs and cooperatives that are widespread throughout the region plays a major role in the absorption of labor, because more than 79.1 million workers (99.5 percent of the total workforce in 2004) work in SMEs and cooperatives. Likewise, the tourist area of Samosir Island, which is the main tourist destination in North Sumatra, is very important for the Regional Government to develop cooperative businesses [2].

The Regional Government, especially the Samosir Island Cooperative Service, in carrying out its role and realizing its great potential, SMEs and cooperatives are still facing various problems. One

of them is the still unfavorable business climate, which includes (1) aspects of the legality of business entities and unclear licensing procedures that result in large transaction costs, lengthy licensing processes and the emergence of various unofficial fees; (2) business practices and unfair business competition; (3) uncertainty of business location; and (4) weak cross-agency coordination in empowering cooperatives and SMEs [3]. In addition, regional autonomy has not shown uniform progress in an effort to accelerate the growth of a conducive business climate for cooperatives and SMEs. This, for example, is reflected in the fact that there are still regions that view cooperatives and SMEs as sources of local revenue by imposing new unnecessary levies so that the costs of cooperatives and SMEs will increase. Therefore, the institutional aspect is still a serious concern in order to obtain the maximum possible range of results and benefits given the large number, diversity of businesses, and the spread of SMEs.

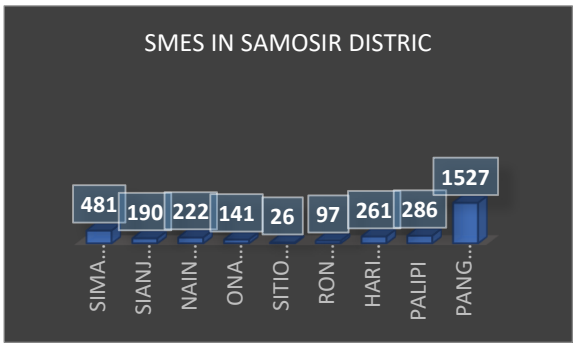

Figure. 1. Number of SMEs in Samosir Regency

Source: Data from the Samosir Cooperative Office, 2021

The picture above shows that there is still uneven distribution of SMEs in each sub-district in Samosir district, indicating that there is still no synergy between regions in developing small businesses. In addition, business actors have not been maximal in obtaining income from their business results. The main problem is the low productivity which results in a very wide gap between small, medium and large business actors. The development of labor productivity for micro and small businesses has not shown significant progress. Based on current prices in 2014, productivity per worker for micro and small businesses is IDR 112 thousand and for medium-sized businesses IDR 92 thousand, while productivity per worker for large businesses has reached IDR 1.3 billion. Such performance is related to the low quality of SMES human resources, especially in the fields of management, organization, mastery of technology, and marketing, as well as the low entrepreneurial competence of SMEs. This situation weakens the readiness to compete and adaptability in facing the implementation of free trade in accordance with the agreements that have been approved by the international community.

Facing the above phenomena, to help solve complex problems, the research method uses a triple helix approach with the Analytical Hierarchy Process (AHP). AHP is a method that synthesizes the comparison of judgments of paired decision makers at each level of the decision hierarchy by structuring a hierarchy of criteria, stakeholders, results and by drawing various considerations to develop weights or priorities.

The triple helix approach was introduced by Etzkowitz and Leydesdorff, emphasizing that the interaction of the three ABG components is the main key for improving conditions conducive to the birth of innovation, skills, creativity, ideas in the development of the creative economy for SMEs [4].

2. LITERATURE REVIEW

2.1 Entrepreneurship

Entrepreneurship is a process of thinking and acting to do something new, either making something completely new, or developing an existing one so that the added value can be in the form of increasing operating profit, improving employee performance, improving welfare or income. In this case, the main function of entrepreneurship is to mobilize resources, dynamism processes so that they become efficient, more effective, more productive and more profitable and provide more business success [5].

Entrepreneurs are people who dare to open independent productive activities. [6]. In a functional perspective, contemporary economists such as Hebert and Link describe the concept of "entrepreneurial action" by defining it as "the creation of opportunity as well as a response to existing circumstances". Meanwhile, recent research on entrepreneurship is dominated by the desire to define entrepreneurship through the identification of entrepreneurial traits. The main premise of this personality view is the thought that certain individuals have unique, prominent, stable and enduring personal characteristics and influence entrepreneurial activities. [7].

Entrepreneurship can be defined as risk-taking to run one's own business by taking advantage of opportunities to create new businesses or with an innovative approach so that the managed business grows to be large and independent in facing the challenges of competition. The keywords of entrepreneurship are: taking risks, running their own business, taking advantage of opportunities, creating new businesses, innovative approaches, independent (e.g. not depending on government assistance) [8].

2.2. Creativity

Creativity is an initiative towards a product or process that is useful, correct, appropriate, and valuable towards a task that is more heuristic in nature, that is, something that is an incomplete guide, guide, or guide that will lead us to understand, learn, or find something useful. new. The attributes of a creative person are: open to experience, likes to pay attention to seeing things in an unusual way, sincerity, accepts and reconciles contradictory things, tolerance for things that are not clear, independent in making decisions, thinking and acting, needing and assuming autonomy, self-confidence, not subject to group standards and control, willing to take calculated risks, persistent, sensitive to problems, fluent-ability to generate many ideas, flexible in nature, responsive to feelings, open to phenomena unclear, motivated, free from fear of failure, think in imagination, selective [9].

Creativity is “Thinking something new”. "Creativity as the ability to develop new ideas and to find new ways of solving problems in the face of opportunities".

The requirements for a creative person are:

a. Openness to experience
b. Observanvce seeing things in unusual ways
c. Curiosity and Tolerance of apporites
d. Independence in judgement, thought and action
e. Needing and assuming autonomy
f. Self-reliance
g. Not being subject to group standart and control
h. Willing to take calculated risks [10].

3.3. Triple Helix

Triple Helix theory, popularized by Etzkowitz and Leydersdorff, is an approach in creating a synergy of cooperation between three actors, namely academic (A), business (B), and government (G) to build a knowledge-based economy [11]. From the synergies that are built, it is hoped that there will be a circulation of knowledge between the actors involved to give birth to various knowledge innovations that have the potential to be capitalized or transformed into products and services that have economic value. In its empirical development in various parts of the world, various actors other than the aforementioned ABG elements have emerged that have contributed significantly to the dynamics of the interaction of the three. With these emerging actors, a model which is the development of the Triple Helix model is needed, as an analytical tool in developing various models of knowledge-based economy cooperation policies. Leydersdorff argues that the Triple Helix model can theoretically be expanded into quadruple-helix models, and so on up to n-tuple helix without any limitations. However, Leydersdorff also notes that for methodological reasons, the development of the Triple Helix model should be carried out in stages as needed in order to provide explanatory power. There are three stages of the emergence of the Triple Helix innovation model, namely: 1) Internal transformation of each helix; 2) Effect of one helix on another; 3) Creation of a new stretch of trilateral network; 4) Organization of the interactions between the three helices[12]. The evolutionary process in the triple helix model involves a transition from a 'statist' stage where the government controls academia and industry, to a laissez-faire state relationship between the three institutional spheres; and finally to a hybrid stage where each institutional sphere retains its own distinctive characteristics, and at the same time takes on a different role[13].

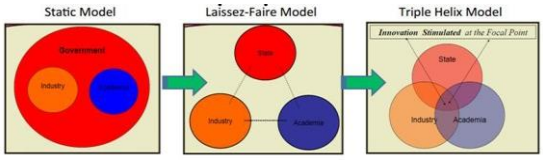

Figure.2 Triple Helix Synergy Model

Source: Etzkowitz and Leydesdorff

The quadruple-helix concept was first suggested by Carayannis & Campbell adding a fourth helix from the existing Triple Helix model. This fourth helix is identified as a helix associated with 'media', 'creative industry', 'culture', 'values', 'lifestyle', and 'art'. The reason for adding the fourth helix is that values and culture, on the one hand, and how public reality is formed and communicated by the media, on the other hand, have an impact on the innovation system of a community or country [14]. The role of the media is very important in shaping or directing what innovations are priorities in a country. The quintuple-helix concept is also suggested by Carayannis & Campbell where the fifth helix is an

emphasis on the natural environment (social ecology) aspects of society and the economy for knowledge production and innovation systems. In this case, a continuous balance between the direction of development of society and the economy with the natural environment in which they exist is seen as essential for the survival of human civilization. Therefore, the natural environment is also seen as a driving force for the advancement of the innovation system of a society or country. If the quadruple-helix is seen as a contextualization of the triple-helix, then the quadruple-helix can be seen as a contextualization of the quadruple-helix. The Triple Helix theory builds a conceptual framework and through in-depth interviews with various actors representing research institutions, universities, industry and the public sector, empirical material understands how a system develops in areas prioritized by political factors [15]. The triple helix is a product of government policy. This triple helix model is qualitative research because it describes social behaviors in society [16].

3. METHODOLOGY

This study is an case study that building a cooperative entrepreneurship model with an approach grounded theory, basically theorize the relationship, as shown in Figure 1.1 (inductive measurement process). Based on the picture at the level of theory, which is the last level after the empirical and operational levels. This research study formulates a triple helix formulation.

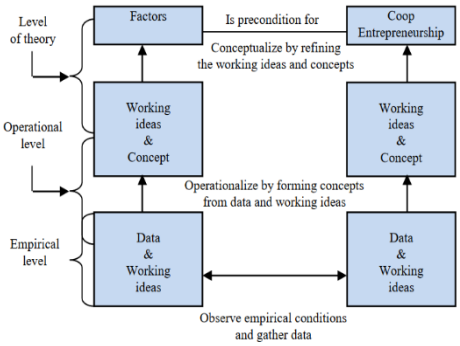

Figure 3. Process Inductive Measurement Model

Source: adapted from Lawrence Neuman

3.1. Sample and Data Collection

The data was collected through a survey conducted in the tourist area of Indonesia's Samosir island in March 2021. The target respondents are SMEs business actors, spread across nine sub-districts, among others:

Table 1. Sampling Data

No	Distric	SMEs
1	Pangururan	2
2	Palipi	2
3	Harian	2
4	Ronggur	2
5	Sitio – Tio	2
	Total	**10**

Source: Respondents of SMEs

In this study, the location and research subjects were selected purposively (non-probability sampling) or theoretical sampling, in which 10 cooperatives represented 5 categories of cooperatives that received the title of success, in Samosir island. The steps of data collection in this study were carried out in the form of a cycle with the following steps: 1) determining the location, 2) determining the respondents, 3) entering the field and building relationships, 4) collecting data, 5) recording information, 6) solving problems that arise and 7) data storage.

3.2. Data Analysis

The data analysis technique in this study uses descriptive analysis. While the data analysis process, following the tradition of qualitative researchers, is carried out by "moving in analytic circles rather than using a fixed linear approach" [17]. Therefore, the spiral process of qualitative data analysis includes activities such as representation, visualization, description, classification and interpretation. This research build a holistic, complex picture, analyze words, report detailed views of informants and conduct studies in natural situations.

4. RESULT AND DISCUSSION

4.1. Implementation of the Triple Helix Model on SMES Development in Samosir

The limited resources owned by each of the stakeholders, both ABG parties (academics, businesses, and the government) have led to the importance of priorities for the sustainability of SMEs. The synergy aspect of the triple helix needs to be considered a priority because it has an impact

on the sustainability of SMEs, so it is necessary to arrange the triple helix hierarchy. The results of the study related to the regulations of the Ministry of Cooperatives and SMEs, the Tri Dharma of Higher Education and the wishes of other business actors, obtained several aspects of the triple helix related to an SMES, as shown in the table below:

Table 5. Application of Synergy with the Triple Helix Concept for SMEs in Samosir

No	Implication of Triple Helix
1	Colleges/universities provide guidance/consultation services
2	College/university provides Mentoring
3	Colleges/universities provide coaching/training
4	College/university facilitates Marketing Access
5	Colleges/universities provide information Assistance
6	The government provides guidance/services to SMEs
7	The government provides assistance
8	The government provides coaching/training
9	Government provides Marketing Access
10	Government provides Capital Assistance
11	Government provides Technology Assistance
12	Government provides Information Assistance
13	The government provides access to capital distribution
14	The Evolution of Digital Cooperatives for SMEs
15	Business actors create and establish RKB (BUMN Creative House) in order to raise the level of SMEs to be more modern, technology literate and go global
16	Business actors (industry) facilitate Marketing Access
17	Business actors (industry) provide capital assistance
18	Business actors (industry) provide technological assistance
19	Business actors (industry) provide information assistance
20	Business actors (industry) provide capital loans

Source: Triple Helix Synergy Modification

4.2. Implementation of the Synergy Model

Entrepreneurship is a process of thinking and acting to do something new, either making something completely new, or developing an existing one so that the added value can be in the form of increasing operating profit, improving employee performance, improving welfare or income. In this case, the main function of entrepreneurship is to mobilize resources, dynamize processes so that they become efficient, more effective, more productive and more profitable and provide more business success.

The results of direct observations on SMEs in Samosir Regency found that there were three key problems faced, namely:

a) Related to the entrepreneurial mindset.
b) Relating to managerial quality.
c) Regarding how SMEs in Samosir Regency are able to optimize every opportunity generated from the external environment, starting from the micro, macro and global external environment.

Moving on from these three problems, entrepreneurs need social capital, namely social capital in the form of information, market access, access to permits, access to finance, access to business facilities and networks that can improve their business. This can be contributed by the penta helix which is often known as ABCGM, namely academia, Business, Community, Government and Media. At the initiative of the Head of the Samosir Regency Cooperative Service, stakeholders who are committed to helping themselves to advance to class in particular and entrepreneurs in general are invited so that they really become entrepreneurs who can advance to class from micro, small, medium and large scale.

The first pillar in the formation of synergies in the development of SMEs is the Academics who have a strategic role in the efforts to develop SMEs because they have the resources needed by SMEs, namely:

a) Business-relevant concepts and theories that can help SMEs solve various business problems.
b) The results of research that are needed by SMEs in development efforts. 3) Various information needed by SMEs in growing their business
c) Training programs, coaching provided through the Business Incubator Center
d) Community service programs that are relevant to the study program and related to SMEs.

The second pillar in the formation of synergistic development of SMEs is companies/industry or business actors who have a concern for SMEs. The existence of the company is very strategic because it can play a role in various things that can meet the needs of SMEs to develop. The role of companies or business people in this ABCGM synergy team can help:

a) Providing Corporate Social Responsibility (CSR) programs to SMEs in the form of financing, access to marketing, training.
b) Become a strategic partner for SMEs in the form of business processes owned by the company and related to SMES businesses such as suppliers for companies, running an online business for SMEs.
c) Funding from banks.

The third pillar in the formation of synergies in the development of SMEs is the community which is a group of SMEs that have the same interests and activities to be able to improve their business. The existence of the business community is strategic because the SMEs that will develop are in this community. The strategic role of the community in the ABCGM synergy team is in the form of: (1) Members who are ready to develop, and (2) Programs owned by the community that can be relevant to the program to be able to help SMEs develop.

a) Helping SMEs to get to know SMEs more closely so they can be friends with the media.
b) Provide education to SMEs to have good relations with the media and even optimize opportunities from the media.
c) Promote yourself, your company and SMES products to the target market.

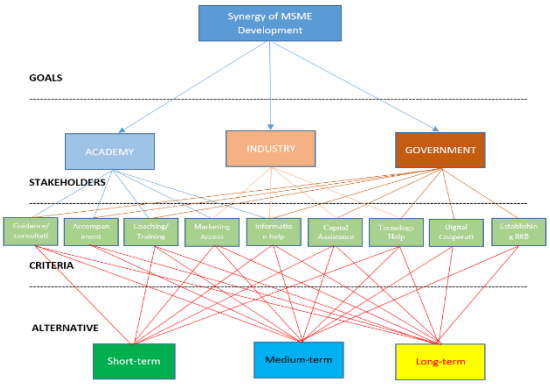

Figure. 4. SMES Synergy Model

Creativity is: “Thinking something new”. "Creativity as the ability to develop new ideas and to find new ways of solving problems in the face of opportunities”.

5. CONCLUSION

Each party has a different role according to its capacity and capability. SMEs are parties who enjoy business development services, while the local community (host community) is a local community that can provide various services needed by SMEs. The local government plays an important role in making regulations and controlling as well as supervising SMEs where the business area is located. Various SMES businesses, including tour operators, travel agents, transportation, homemade and others, have a high contribution to business development.

The fact that the perception of SMES entrepreneurship by SMES entrepreneurs still has experience with what has been developed by the academic world (experts), as well as the low level of innovation, indicates that there are problems in organizing knowledge (knowledge) both by universities, on the one hand. , as well as by SMEs on the other hand. Whereas "science has become the most "important factor in economic life [18]. Long before had stated "capital consists of a great part of knowledge and organization, knowledge is our most powerful engine of production". Then, confirming this Alfin Toffler in 1990 stated that "we are now" living in a knowledge-based society, where knowledge is the source of the highest quality of power". In a world where markets, products, technologies, competitors, regulations and even society are changing rapidly, innovation and the knowledge that supports these innovations have become an important source of sustainable competitive advantage. Therefore, today's management experts consider knowledge and the ability to create and utilize knowledge as the most important resources for companies to grow and develop, at least to stay "survival". This is often not realized by the SMES movement. This is the challenge faced by SMES entrepreneurs (reformers), namely how to create a knowledgeable SMES community.

The innovation in the SMES movement can be drawn into a wider scope, namely as a result of the failure of SMEs as a whole. To analyze the failure of SMEs in Indonesia, a number of concepts or approaches (theories) can be used. At least the approach from the cultural and social aspects can be chosen. First, the national cultural approach developed by Hofstede can be used. According to Hofstede, national culture consists of elements: power distance, individualism-collectivism, masculinity-femininity, uncertainty avoidance, life orientation. Using Hofstede's concept, Indonesia has

LPD (Large Power). Distance), tends to be a collective society, tends to be a masculine society, tends to have strong uncertainty avoidance (SUA) and short-term orientation (STO). Although they tend to be collective societies, LPD, SUA and STO tend to hinder the growth of SMEs.

Furthermore, the failure of SMEs can also be analyzed using dependency theory. According to the dependency theory developed by Frank, it is not feudalism or traditionalism that causes developing countries to become undeveloped or underdeveloped. Underdevelopment is something natural, but a creation of the long history of colonial domination experienced by developing countries [19]. For example dependency and underdevelopment in Indonesia. According [20], the forced cultivation system implemented by the Dutch colonial government was one of the most important factors responsible for the proliferation of underdevelopment and poverty in Indonesia. At that time, they said, there had been a very large economic surplus from Indonesia to the Netherlands. Cultivation has also led to a small increase in the number of well-to-do farmers, in other words, it has helped to increase the number of the "village proletariat".

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