

Creative and Innovative Power in the Development of Excellent HR Technopreneurship Model Through Triple Helix Synergy in Fisheries Sector SME in Labuhan Maringgai East Lampung

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Abstract

Small business actors are the main key in regional economic growth. The existence of empowerment of small business sector actors will make business actors prosperous and the community will prosper. The fisheries sector is a potential business opportunity when it is empowered properly. Small fishery business actors in East Lampung Regency are still very far from the reach of technology. The purpose of this research is how to be able to realize creative and innovative power in the development of the Technopreneurship model of superior human resources through Triple Helix synergy.

This research is a qualitative research by obtaining information from interviews with the main actors, namely business actors in the fisheries sector, the government and intellectuals who know about the scope of the problem, and information from secondary data, namely online media information. The results of the study show that collaboration is very necessary, the government plays an important role in mediating the provision of facilities and infrastructure for SMEs in the fisheries sector. The government bridges the training in terms of products, marketing and capital. Likewise with educators, although educators have not been maximal in providing initial education about using technology, so that as early as possible they have aroused interest in students and students to have an entrepreneurial spirit. Implication: the novelty model is formed from the collaboration of the government, business actors and educators. The synergy of educators, businessmen, and the government will create a circular pattern, namely: Manufacturing, Feasibility Analysis, Human Resource Management, Financial Management, Resources, Marketing, Networking and Digital Product Development.

Keywords: Superior HR, Triple helix, Creative, Innovative, Government, Educator, Business Actor

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1.1 Introduction

The era of the industrial revolution 4.0 which was marked by the digitalization system had a huge impact on all sectors in making changes in the fields of ideology, politics, economy, socio-culture and defense and security. This digitalization transformation requires human resources to excel, which is characterized by a creative and innovative level. The existence of creative and innovative power will ultimately provide a major role in competing in all sectors including the industrial sector.

Technopreneurship is the process and formation of new businesses that involve technology as a basis with the hope that the creation of the right strategies and innovations in the future can place technology as a factor for the development of the national economy (Sudarsih, 2013: 57). Technopreneurship can be said to be a business or entrepreneur based on innovation from technology that has the insight to develop an entrepreneurial spirit and improve entrepreneurship skills both for small business actors, students and students. technology that is not only high-tech but also the application of knowledge to human work, such as the application of accounting, order quantity economics, verbal and online marketing (Mopangga, 2017: 327).

Creative human resources are people who create new ideas, new technologies and methods as well as new content (Sagiyeva et al, 2018). It can be said that creative human resources are human resources who hone sensitivity and readiness to be proactive in dealing with changes through competitive competence by providing a lot of field-oriented, experience and development-oriented training. Creative resources are able to see opportunities, are always open to any input and have a desire for a positive change that can bring their business to continue to grow and have value (Okpara, 2007). In doing business, you must also have values that are positive and beneficial for many people. As stated by (Vuong and Napier, 2014) that Technopreneurship is a process of applying creativity and innovation to seek opportunities from problems that occur in society in everyday life by utilizing technology. Entrepreneurs who are creative and innovative in doing business do:

- 1) Create new ideas that are more innovative and have their own charm
- 2) Fighting the fear of change
- 3) Strong self-motivation
- 4) Receive opinions to be able to develop a creative business

5) Expand knowledge

A practical and effective coaching and development model in helping SMEs to grow their entrepreneurial spirit and spirit so that they can produce a superior generation that is creative and innovative, willing and able to enter into entrepreneurship, which in turn can create employment opportunities for the community and have an impact on reducing unemployment and poverty. especially for novice entrepreneurs. While the long-term strategy model is related to efforts to prepare a roadmap for SME development, build digital technology as a platform in SME business processes, develop modern MSME business models, and encourage collaboration between the government and corporations in empowering SMEs. Therefore, to realize collaboration that is able to develop SME business models in this case is through the concept of Triple Helix Synergy or often known as ABG (Academic, Business, and Government). Where the Triple Helix concept is an interaction carried out between academics, business actors and the government as a normative framework that is often used by researchers in terms of understanding the interactions between key actors in system innovation. In Supriyadi's research (2012) it was found that the success of cooperation between ABG actors is largely determined by the factors of cohesiveness, leadership, mutual understanding, trust, information, and transparency in the cooperation process. Cohesiveness can be formed based on the recognition and mutual fulfillment of needs between actors in forming strong social bonds.

Empirical facts show that SMEs in East Lampung Regency have not been able to implement technopreneurship as one of the competency programs that can produce superior human resources who are creative and innovative. In the development of Fisheries SMEs in East Lampung, in addition to being able to work on local potential in the fisheries sector by producing superior human resources for entrepreneurs in this sector, they must also be able to maintain the characteristics of local products which will later become the characteristics of local wisdom products, but can be able to compete in the community.

Entrepreneurs or entrepreneurs who are creative and innovative in accordance with technological developments, using the technopreneurship model in MSMEs can provide benefits or impacts, both economically, socially and environmentally (Danang Satrio, 2018). The entrepreneurial development model is an activity cycle consisting of: (1) orientation, (2) social preparation, (3) group organization, (4) program planning, (5) group business/activity implementation, (6) monitoring and assessment (monitoring and evaluation). Where the context of the implementation is done by way of mentoring. If one examines the existence of SMEs in the fisheries sector, it can be said that East Lampung SMEs are still far from using technology, considering the location factors that are still in rural areas far from the city center, as well as being close to the coast, plus the mindset of the people. which is still traditional, of course, things related to technological knowledge are still very minimal, including the facilities and infrastructure used in the teaching and learning process, which is still far from what is expected.

1.2 Research Problem

- 1) What is the government's role in the development of Fisheries SMEs in East Lampung Regency in developing creative and innovative Technopreneurship Models in order to realize Superior Human Resources in the field of fisheries in East Lampung Regency?
- 2) What is the role of education/academics in developing creative and innovative Technopreneurship Models to produce Superior Human Resources in Fisheries SMEs in East Lampung Regency?
- 3) What strategies have the implementing Government and Education/Academics in the triple helix collaboration with Fisheries UKM players in East Lampung Regency in supporting the development of creative and innovative technopreneurship models to produce superior human resources?

1.3 Research Objectives

- 1) Knowing the government's role in developing Fisheries SMEs in East Lampung Regency in developing creative and innovative technopreneurship models in order to realize Superior Human Resources in the field of Fisheries in East Lampung Regency.
- 2) Knowing the role of education/academics in developing creative and innovative technopreneurship models to produce superior human resources in fisheries SMEs in East Lampung Regency.
- 3) Knowing what strategies are implemented by the government and education/academics in triple helix cooperation for Fisheries SMEs in East Lampung Regency in supporting the development of creative and innovative technopreneurship models to produce superior human resources.

2. Literature Review

2.1 Theory of Planned Change

Kurt Lewin explained that organizational change is a systematic change, namely the change from an object that is interesting for some academics and practitioners to an object that is attractive to company executives for the survival of the organization (Shirey, 2013). Where the development of the organization aims to make changes

with the intention of improving the organization as a means of change that must occur and broadly the development of the organization can be said to be one of the changes in the organization concerned. Thus, organizational change is a technical approach to organizational change which contains a process and technology for the preparation of the design, direction and implementation of organizational change in a planned manner. Meanwhile, in organizational change, there are two factors that influence organizational activities, namely:

- 1) Internal Factor. Internal factors are all factors that exist within the organization, where these factors can affect the organization and organizational activities, such as; Changes in environmental policies, changes in objectives, expansion of the operational area of objectives through the development of segmentation, increased activity volume and standardized attitudes and behavior of members of the organization.
- 2) External Factors. External factors are the causes of change that come from outside or often called the organizational environment and organizational activities. Lewin's theory is known to explicitly emphasize that change is a real thing. Therefore, Kurt Lewin introduced a planned change model in 3 stages, namely: (1) Unfreeze, this process is needed to overcome pressure individually and in groups. (2) Change (Movement), this stage is important to move the targeted system towards a new balance. (3) Refreeze, this stage is carried out after the changes are implemented with the aim of maintaining sustainability.

2.2 Human Capital Theory

Wealth of Nations (Adam Smith, 1776), human capital in the form of abilities and skills acquired through education, self-study, and learning while working. Where humans as the basic capital invested will produce educated people who are productive and increase in income as a result of the quality of work displayed by these educated people. Adam Smith also said that Human Capital consists of skills acquired through education and useful for all members of society. Adam Smith also said that Human Capital consists of skills acquired through education and useful for all members of society. In addition, investment (human capital) is carried out with the aim of obtaining a higher level of consumption in the future. While the concept of "Human Capital" according to Adam Smith, resources in the form of education, skills, talents, and competencies of a person can be viewed as a form of capital. Human capital is one of the productivity factors of a country, in addition to natural resources, technology, and other capitals. Human Capital can be defined into three, namely: 1) The first concept is human capital as an individual aspect. 2) The second concept states that human capital is knowledge and skills acquired through various activities. 3) The third concept views human capital through a production orientation perspective.

2.3 Technopreneurship

Technopreneurship is a process within an organization that prioritizes innovation and continuously finds the organization's main problems, solves problems, and implements problem-solving methods in order to increase competitiveness in the global market (Okorie, 2014). Technopreneurship is a technology-based business incubator, which has the insight to foster an entrepreneurial spirit among the younger generation, especially for students and students, which is one of the new breakthrough strategies in dealing with the increasing problem of intellectual unemployment. Technopreneurship is an integral character between competence in applying technology and the spirit of building a business. A technopreneur can contribute to improving the standard of living of the Indonesian people by generating jobs and building the Indonesian economy as well as technology.

The development of Technopreneurship has become very important and interesting at this time in Indonesia. The factors that cause this include: 1) Indonesia has a lot of economic potential. There are several experts who say that Indonesia will become the 7th largest economy in the world by 2030. 2) The number of internet users in Indonesia is very large. 3) Many foreign investors enter Indonesia to invest.

Example: Softbank investing in Toko Pedia and other startups in Indonesia. Meanwhile, the reasons for entering the world of Technopreneurship are: 1) No need for big capital. 2) High return value. 3) No need for a lot of resources. Therefore, there are many models used to develop new business units that are thick with the use of technological innovations including franchise models, partnerships, mentoring, business incubators, or patterns of entrepreneurship education in vocational schools and universities developed by government or non-government agencies (Mopangga, 2007). 2015). So that the development of the technopreneurship model is also expected to be able to adapt to the needs so that what is developed later can be useful for oneself, organizations or institutions as well as the community. Technopreneurship is also an application of technology with one's knowledge or ability to do work according to one's competence with the aim of creating creativity and innovation in the work industry and business. Because technology is a direct application of the knowledge we have, where the purpose of engineering this technology is a tool to facilitate human work in meeting needs according to its function.

2.4 Creative Economy Theory (John Howkins)

Creativity is an idea that arises from a person as a result of the development of knowledge produced either in the

form of an idea or in the form of a product. The term creative economy was first introduced by a character named John Howkins who also wrote a book entitled "Creative Economy, How People Make Money from Ideas". Where "Creative economy is an economic activity where the input and output is an idea or idea". Meanwhile, Uno and Mohamad (2011: 154) argue that: a) Creativity is often described with critical thinking skills and lots of ideas, as well as lots of ideas; b) Creative people see the same thing, but through different ways of thinking; c) The ability to find or get new ideas and solutions.

Student creativity is the ability to find and create something new, new ways, new models that are useful for students in the learning process (Enco, 2005 in Kenedi, 2017: 330). Howkins realized that the emergence of a new wave of creativity-based economy after seeing in 1997, explained that the creative economy as an "economic activity" in society that spends most of its time generating ideas, not just doing routine and repetitive things. So that the economic characteristics according to Howkins, include: 1) Collaboration is needed between various actors who play a role in the creative industry, namely intellectuals (intellectuals), the business world, and the government which is a basic prerequisite. 2) Based on ideas or ideas. 3) Unlimited development in various business fields. 4) The concept that is built is relative.

2.5 Innovation Theory (Development Innovation)

According to Law No. 19 of 2002, the definition of innovation is research, development, and or engineering activities carried out with the aim of developing the practical application of new scientific values and contexts or new ways to apply existing science and technology into products or services. the production process. Based on the theory of innovation according to Scumpeter that innovation has the meaning: "Efforts to create and implement something into a combination so that, with innovation one can add value to products, services, work processes, and policies not only educational institutions but also stakeholders and society". Because innovation according to Everett M. Rogers (1983: 11) is an idea, idea, object, and practice that is based on and accepted as something new by a certain person or group to be applied or adopted. Where innovation usually contains new breakthroughs about a thing that is researched by the innovator (the person who makes the innovation) and is deliberately made through various kinds of planned actions or research. Where the characteristics of innovation according to Subandijah (1993) are as follows: (a) Distinctive. (b) New. (c) Planned. (d) Have a Purpose. Because successful innovation according to Fontana (2009: 18) means not only economic success but also social success. So successful innovations are innovations that create greater value for consumers, for communities and for the environment at the same time.

2.6 Superior Human Resources

Human Resources are productive individuals who work as drivers of an organization, both in companies and institutions that have a function as an asset, so that their abilities must be trained and developed so that they can be useful as a sustainable thing. According to Hariandja M.T.E (2007: 2), human resources are the most important capital and wealth of every human activity in a company, in addition to other factors such as financial, technological and physical. As for educational institutions, preparing superior human resources for their graduates is one of the main goals of skill activities for students in exploring their competencies so that they are able to compete in the work industry and business in accordance with the development of science and technology. Because superior human resources are not only intended for job seekers but to create jobs. So that superior human resources must be smart, skilled and have character and an independent spirit. According to the opinion of Hadari Nawawi (2008: 40) mentions three notions of Human Resources, namely: 1) Human Resources are humans who work within an organization (also called personnel, labor, workers or employees). 2) Human Resources are human potential as the driving force of the organization in realizing its existence. 3) Human Resources is the potential which is an asset that functions as capital in a business organization that can be realized into real potential physically and non-physically in realizing the existence of the organization.

2.7 Triple Helix

Triple Helix is an approach that describes how an innovation arises from a balanced and reciprocal relationship, and is continuously carried out between (1) Academics (research and development institutions, (2) Government (Government) and (3) Sector actors. The Triple Helix, popularized by Etzkowitz and Leydersdorff (1995), is an approach in creating a synergy of cooperation between three actors, namely academics (A), business (B), and government (G) to build a knowledge-based economy. -based economy). From the synergy that is built, it is hoped that there will be 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 or services that have economic value. Lucy Yang Lu and Etzkowitz (2008) stated that There are three stages of the emergence of the Triple Helix innovation model, namely: (1) Internal transformation of each helical alien; (2) Effect of one helix on another; (3) Creation of new expanses of trilateral networks; (4) Organization of the interactions between the three helices.

Soo Jeung Lee and Thanh Ha Ngo (2012: 161-163) in explaining the Triple Helix concept emphasized the importance of using and utilizing knowledge for community development has become more important in the competitive environment of globalization. Where previously the government's social policies and efforts only paid attention to the creation and production of knowledge. But the quantitative increase in knowledge production is not always accompanied by the growth of qualitative and utilitarian knowledge, so it is more important to produce useful knowledge and understand the context of knowledge capitalization for community development.

2.8 Fishery Sector SMEs

Fisheries are all activities related to the management and utilization of fish resources and their environment from pre-production, production, processing to marketing, which are carried out in a fishery business system (Article 1 paragraph 1 of the Law of the Republic of Indonesia Number 31 of 2004 concerning Fisheries), in accordance with Article 3 of this Fisheries Law, fisheries management is carried out with the objectives of: (1) Improving the standard of living of small fishermen and small fish raisers; (2) Increase the country's revenue and foreign exchange; (3) Encouraging expansion and employment opportunities; (4) Increase the availability and consumption of fish protein sources; (5) Optimizing the management of fish resources; (6) Increase productivity, quality, added value, and competitiveness; (7) Increase the availability of raw materials for the fish processing industry; (8) Achieve optimal utilization of fish resources, fish cultivation land, and fish resource environment; (9) Ensure the sustainability of fish resources, fish cultivation land, and spatial planning. Article 6 (paragraph 1) stipulates that fishery management in the fishery management area of the Republic of Indonesia is carried out to achieve optimal and sustainable benefits, as well as ensure the sustainability of fish resources. (2) Management of fisheries for the purpose of catching fish and raising fish must take into account customary law and/or local wisdom and take into account the participation of the community.

3. Research methods

This study uses a qualitative descriptive analytical approach. Where the authors carry out research planning or preparation activities, research implementation includes data collection, analyzing and interpreting data and compiling research results. As stated by Bogdan and Taylor (1993: 5) that there are five main characteristics in qualitative research: (1) Qualitative research has a natural background and the researcher acts as the core instrument. (2) The qualitative research is descriptive considering that the data collected is mostly in the form of words and pictures. (3) Qualitative research emphasizes more on the process. (4) Qualitative research tends to analyze data inductively, and (5) Qualitative research emphasizes meaning. Informants in this study were determined by using the purposive sampling method, where the sampling technique of data sources with certain considerations and aims so that the data obtained can be more representative. Data analysis techniques are carried out by (1) Analysis before in the field, where this analysis is carried out on data from preliminary studies or secondary data used to determine the focus of research that is temporary and will develop after researchers conduct research in the field. (2) Analysis during the field Miles and Huberman Model: Data Collection, Data Reduction / Data Reduction, Data Display (Data Presentation), Conclusion Drawing / Verification.

4. Research Results And Discussion

4.1 Triple Helix Technopreneuship Ecosystem

The Triple Helix synergy was appointed as an idea on how the interaction between elements of Academics-Business - Government (A-B-G) should build a synergy of creativity to innovate. Triple Helix states that the interaction between these A-B-G elements is the "key" to building the creative power of knowledge-based innovation. Academics as a source of new knowledge and technology; Business acts as the locus of "production"; while the government acts as a manager of interaction, knowledge/technology transfer, and contractual relations between the two so that it runs productively and is beneficial for the community at large. Application of the three elements of the triple helix for downstream research and innovation; but between the three of them have not yet formed a sense of mutual understanding and trust.

4.2 Triple Helix Technopreneuship Government

According to the East Lampung district government, the MSME actors in the fisheries and marine sector in Lampung, especially East Lampung, actually have a very good opportunity if the government is able to pay attention to these fields. This is due to the limited capital and budget owned by the local government of East Lampung where the local government prioritizes the agricultural sector for food crops and horticultural crops compared to MSMEs. Meanwhile, regarding training activities and capital for MSMEs in the fisheries and marine sector, the government will work closely with the fisheries and marine services and other stock holders to be able to provide real training and direction in order to form an entrepreneurial spirit for each fishery and marine MSME actor. To be able to increase maximum results, it takes hard work and the participation of all

parties, including the government, educational institutions, business actors, community leaders, fishermen and the community.

Business actors in the field of seafood processing in the East Lampung area, the government has not carried out special handling so that this becomes a PR (Homework) for the government if they want the business to grow and develop. Therefore, the government hopes that SMEs in the fisheries sector must creatively make new breakthroughs by using technological means to be able to innovate as needed to be able to compete in the modern market and the business world. In order for all of that to run smoothly in accordance with the conditions in the field, cooperation between the government, academics, and entrepreneurs is needed, considering that the training that the government does to MSMEs in East Lampung can only be given twice a year and that is only for 60 MSME actors where in one training force consists of 30 business actors.

The problems that occur are due to the limited budget from the government related to capital and special personnel in the field of fisheries and marine affairs. Limited human resources in the future. The government hopes that there are parties from academics and big businessmen who are willing to cooperate in terms of assisting SMEs related to businesses that use technology or often referred to as technopreneurship in order to create superior human resources who are able to manage their business creatively and innovatively, especially in the field of seafood processing considering East Lampung, has a large potential for fish resources.

Triple Helix Technopreneurship Education/ Academics Education or training plays an important role in fostering creativity and innovation, by providing training as early as possible or from the start, for example, since being in a vocational school, it gives hope for great opportunities towards superior human resources. Talking about the role of the world of education in the implementation and review of creative and innovative human resources, intellectuals cannot ignore the quality of human resources, because education plays a very important role in the process of improving the quality of human resources. As is the case with the SMKN 1 Labuhan Maringgai environment in East Lampung, it has tried to introduce education about entrepreneurship to its school environment, but since it was founded in 2017 it has not played much role in shaping entrepreneurial intentions for students due to the lack of knowledge of teachers in applying mindsets and attitudes. education system that refers to prospective graduates to become entrepreneurs. The provision of technology in computer subject matter is expected to become reliable human resources who are Technopreneurship, but because this school has only graduated its students for two periods, not many of the graduates of the school have become entrepreneurs.

Recognizing the importance of the process of improving the quality of human resources, the government together with the private sector have jointly and continuously strived to realize this mandate through various efforts to develop higher quality education, including through the development and improvement of curriculum and evaluation systems, improvement of educational facilities, development and procurement teaching materials, as well as training for teachers and other education personnel. Maximum training is practice, it is necessary to carry out direct field implementation so that creativity and innovation can be formed by observing and imitating. Students at the entrepreneurship vocational school in Labuhan Maringgai are more of a terrorist. Due to the limited equipment owned by this school, in practice we as entrepreneurship teachers find it difficult to teach students how technology advances in today's era. This is due to a lack of budget or funds to buy the required accessories. So we teach more theoretical and not practical. In order to increase creative and innovative resources, graduates from Vocational Schools and the Ministry of Education and Culture encourage the capacity building of Vocational High Schools to become First Party Professional Certification Institutions. As for the involvement of academics from the University of Lampung in training for MSME actors in East Lampung, especially the fisheries and marine sector, we have done it, but only in the marine sector, such as training on how to maintain and preserve and manage Mangrove leaves so that they can be useful. Never had cooperation in processing marine products.

Triple Helix Technopreneurship Entrepreneur Interpreting the word creative, we are often trapped in the thought that only those with artistic blood are creative people. Creativity is something related to art / art so it is not needed by those of us who are not artistically gifted. One of the factors that hinder the empowerment of the fisheries SME sector in East Lampung is the absence of modern integrated management to support creativity and production innovation. The fishing sector industry on a small scale in general has not been handled seriously, especially in comprehensive production management so that it becomes a creative fish product processing industry that supports the community's economy. Entrepreneurship-based management is awareness and practice of independent-based business management and optimizing one's potential and the surrounding environment. The creative fish processing sector industry as a whole is in dire need of entrepreneurial management. The fish product processing industry which is mushrooming in East Lampung Regency is facing serious problems related to capital, marketing, and production innovations in the fishery sector.

A successful entrepreneur is actually an innovator who is able to turn an opportunity into an idea that can be sold, can provide added value through effort, time, cost, and skill with the aim of making a profit. Innovation itself is an output from an organization that utilizes input resources in the form of knowledge, information, and experience owned-mostly by its employees. Innovation must also involve creativity and experimentation

resulting in new products, new services, or better technological processes. However, there are a number of things that make an innovation unattractive to potential buyers, namely how the product is made, the materials used to the shape that may be scary. The existence of an idea that is an advantage in creating products with various current models so that consumers will not be bored. Therefore, in order for this to work in accordance with the needs in the field, it is necessary to have a training process provided by the government and educational institutions/academics as a form of cooperation and attention to MSME business actors. Where so far, SMEs have had difficulty developing due to lack of capital and limited insight related to the use of technology in management and marketing processes. Therefore, the role of the government is the main key in encouraging the innovation of SMEs, especially the handling of industrial problems in the fisheries sector in East Lampung which must be handled thoroughly, one of the hopes is in the hands of the government, in this case the Ministry of Industry and Trade.

The obstacles faced by creative industry players are: 1) Human Resources: Limited knowledge of craftsmen due to lack of knowledge and lack of education has a very broad impact on various fields of activity. The skills possessed in production are usually acquired from generation to generation or self-taught. So that the impact on marketing insights, optimal company management, access, and information and various other activities will be limited. 2) Marketing: Technology has an important role in today's business development, technological knowledge is becoming a problem. Factors of education and training are needed. The source of inspiration for improving work methods, quality product designs that suit consumer tastes is done here. So that mastery of technology is very profitable and provides enormous added value to production capabilities, marketing systems, and facilitates access to information related to the development of the craft industry. 3) Capital: Small or handicraft industry players that will improve product quality and expand marketing networks and have the potential to be developed require additional funds as working capital. 4) Management: Small craftsman players usually in carrying out their work management system usually only involve their husband, wife, close family or neighbors around the house even though their knowledge ability is very low. Things that are less profitable are looking at competitiveness, discipline and responsibility.

5. Discussion

5.1 The Government's Role in Increasing Superior Human Resources Technopreneurship for SMEs in the Fisheries Sector

The role of the government in collaborating with intellectuals in comprehensive development of the community, training intended for teachers and the general public in order to improve their skills and knowledge, as well as the role of job training centers in providing free certification and training, plays an active role in producing superior, reliable human resources, and professionals, especially in the field of information technology. "Assistance has been provided in the form of a dryer in the manufacture of crackers but it has not been maximized, and training has been carried out but is still not optimal. Involvement in the development of creative industries is very much needed, bureaucracy access permits, training and capital. Building human resources has the meaning of building human character. It is hoped that later the character of the nation's leaders in the future will have superior character, Indonesian character, and have the character of Pancasila. Improvements in terms of human resources, marketing, and products will be carried out with assistance. Meanwhile, efforts to improve products in terms of taste, quality and appearance will be improved, so that marketing will be easier to do. Collaboration is carried out by the government with the franchise (Modern Store) so that it will improve the quality of its marketing.

5.2 The Role of Education/Academics in Improving Human Resources, Technopreneurship, MSMEs in the Fisheries Sector

Creativity is an inseparable part of the thinking of the campus academic community, especially students and students, where creativity is the ability to produce new things that have never existed before. Creativity is a process or ability that reflects fluency, flexibility (flexibility) and originality in thinking, as well as the ability to elaborate (develop, enrich, detail) an idea. Intellectuals or educators here act as agents of disseminating and implementing science, art and technology, as well as agents of forming constructive values for the development of creative industries in society. From various theories, creativity is divided into various kinds to get innovation, namely: (1) Creating something that has never existed into existence; (2) Convey creative ideas, so that creativity can be known by others; (3) Creating a creation that if used by others, the benefits can be felt and make it creative; (4) Realizing the creativity of the previous levels to be beneficial for the whole society; (5) New innovation, which means creating new creativity or innovation. The Entrepreneurship Vocational School in Labuhan Maringgai, East Lampung Regency does not prepare prospective entrepreneurs, only training and learning about computers but implementation towards a business incubator is not carried out. Assistance to small business actors in the fishery sector is carried out only on fish cultivation but the processing of fish products has not been carried out.

5.3 The Role of Business in Improving HR Superior Technopreneurship in Fisheries Sector SME

Business actors are craftsmen, investors and creators of new technologies, as well as creative industry consumers. Fisheries SMEs in East Lampung Regency are in dire need of training and assistance. Many of these business actors do not yet have the ability to develop their businesses. The business is run only inspired by seeing the efforts of friends or relatives, even the great opportunity from the fish obtained only raises the intention to build a business but in the end the business is not running optimally. These SMEs in the fisheries sector need training, and capital, where this requires synergy from the government and intellectuals. The role of government is highly expected by SMEs, both in providing capital, training and marketing. The creative industry, namely SMEs in the fisheries sector, has the potential to be developed so that it needs the support of collaboration between intellectuals, business (business) and government (government), which is called the Triple Helix. Triple Helix circulation is the driving force behind the birth of creativity, ideas, and skills. Creativity and innovation in product development are very much needed, because they will make human resources superior for business actors, but of course this is driven by the role of the government.

5.4 Triple Helix collaboration in generating Innovative Creativity will form a Technopreneurship pattern:

- 1) The government and educators are able to increase the capacity and quality of a nation through the development of superior human resources which is a joint task in creating a strong nation and a prosperous country.
- 2) Educators play an important role in developing the quality of human resources, among others, first is a good and quality education system.
- 3) Educators and the government create a professional and skilled workforce according to market demands/needs, which is a factor in the superiority of a nation in facing global competition.
- 4) Educators and the government consider the strategic role of HR for accelerating the country's development, so the third discussion held by the Directorate of Research and Community Service is expected to describe policies and strategic steps for a comprehensive work program to realize superior Indonesian human resources and be able to compete at the national level. global.
- 5) Good cooperation between intellectuals, government and business can encourage innovation ability by creating dynamic interaction and communication.
- 6) Creativity is an individual activity that leads to the birth of innovation, while innovation is more of a sub-sector activity that has focused on a problem-solving target but rarely leads to creativity (Howkins, 2005).
- 7) Synergy between central and regional government departments and agencies is needed to achieve the vision, mission and goals of creative industry development.

5.5 Triple Helix synergy is expected to be able to:

- 1) Improve Product Efficiency
- 2) Generating Innovation Ideas
- 3) Creating a Marketing Pattern
- 4) Creating New Markets in the Community

5.6 Findings And Implications Of The Findings

New Research Findings (Start of the Art)

Creating superior human resources in the digital era for small business actors in East Lampung will be a new pattern of collaboration between small business actors, the government and educators which becomes a technopreneurship pattern. The synergy of educators, businessmen, and the government will create a circular pattern, namely: Manufacturing, Feasibility Analysis, Human Resource Management, Financial Management, Resources, Marketing, Networking and Digital Product Development. The following is a diagram of the development of the Triple Helix Synergy Technopreneurship Model:

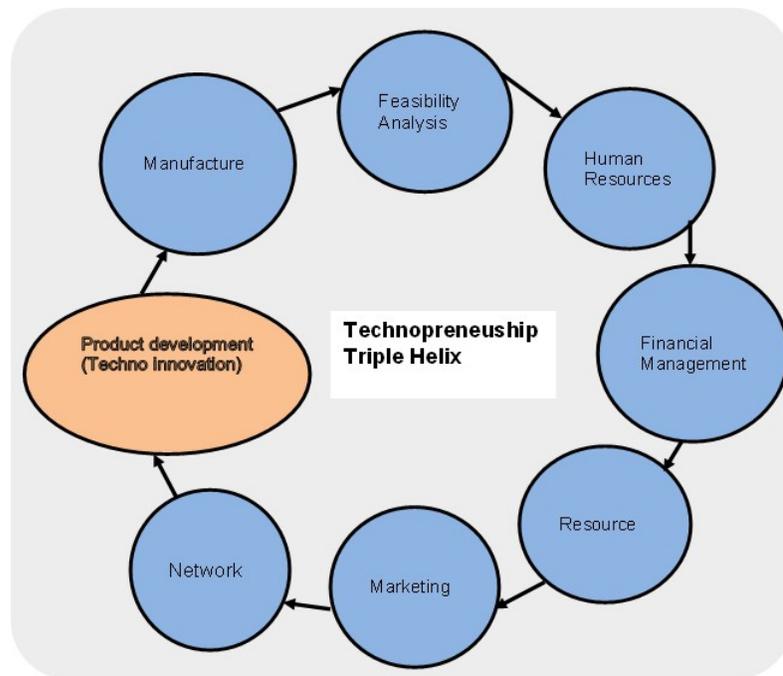


Figure 1. Triple Helix Synergy Technopreneurship Model

- 1) Manufacturing Manufacturing is a production process to produce physical products. Manufacturing is the process of converting raw materials into physical products through a series of activities that require energy, each of which creates a change in the physical or chemical characteristics of the material.
- 2) Feasibility analysis A feasibility study is an analysis of how successfully a project can be completed, taking into account the influencing factors such as economic, technological, legal and scheduling factors. The data received at the feasibility stage is processed data from the manufacturer, where this data can be a source of information about the value that will be given to consumers by adopting technology, looking for suppliers or cooperation partners. The raw information data obtained from the manufacturing stage then goes to the next stage, namely the feasibility stage.
- 3) Human resource management Human resource management is the driving force of all business cycle activities, while the required information must be processed in a maximum manner at the human resources stage, and reliable human resources are needed in utilizing the information obtained.
- 4) Financial management Every business actor always needs funds in order to meet his daily operational needs and to develop his business. Financial management is strengthened by human resource management, with human resources who are responsible in knowledge and will be able to manage financial resources optimally. The small business environment will have minimal capital, therefore human resource management data is social capital that is finally able to share knowledge.
- 5) Resources Resources can be in the form of knowledge, capital, and other information which can be obtained from self-search or from the government or stakeholders. Human resource management is closely related to changing patterns of creativity and innovation related to small business capital, a lot of information is extracted, one of which is connected with visible or invisible resources. Human resource management and financial management are capital resources to carry out activities for developing digitalization patterns.
- 6) Marketing Marketing is very important in creating added value from the resulting product. Marketing can range from creating unique products, products that are liked by many people, different products or creating a neat product display design. Raw data obtained from the manufacturing process, selection process, management concept, even the utilization of all resources that produce a business model concept or a fostered product.
- 7) Network A strong network will make it easier to acquire resources, marketing and more. The data provided by the presence, having a network can be anything, resources can be visible or invisible resources. Meanwhile, all the information obtained is reprocessed because it has a strong network.
- 8) Digital product development Digital products mean that the products produced can be marketed online, are able to last a certain time and can be marketed in any market. The data received for the development of

digital products is raw data in the form of all sources of information related to the development of business ideas such as market segmentation, the value generated from the design, which is the basis for running a management system in carrying out the production process or developing business innovation.

5.7 Research Limitations

This study has several limitations in the results of the study which cannot be generalized in all conditions, as follows:

- 1) The research only focuses on SMEs in the fisheries sector in East Lampung Regency. Other sector analysis studies were not carried out, which may produce different results in the application of different business sectors in the Lampung Province region;
- 2) This research involves educators, business actors and the government where there are still many business actors who are not registered with the Department of Trade and Industry in East Lampung;
- 3) This study is a cross sectional study with three main sources of informants, namely only researched in a limited time and only to prove the conditions that occurred during the research period and changes that might occur cannot be observed.

6. Conclusion

- 1) The role of the government is an important indicator in mediating between fishery business actors in East Lampung Regency and intellectuals. The role of the government is still very minimal in assisting the development, empowerment and guidance of business actors. The government's role has not been maximized, which is acknowledged by business actors and government informants so that this must be re-evaluated.
- 2) Educators from both vocational high schools or universities in Lampung, especially East Lampung, have not yet come up with creative ideas in fostering an entrepreneurial spirit. This is because the education community only introduces the application of technology but not towards the application of entrepreneurial technology. Meanwhile, intellectuals have not been maximal in providing assistance and introducing how to be creative in fostering an entrepreneurial spirit and innovation to do business, especially in the fisheries sector. This is because business actors do not have sufficient creativity or knowledge, so they are not optimal in innovating products because of the many obstacles faced in the field.
- 3) Strategies that can be carried out by business actors so that they are able to develop and demonstrate creativity and innovation in product and technology development (simple) and can make good business plans (business plans) in order to build new businesses related to the products/technology they want to produce, namely by building collaborations between the government, educators/academics, and business actors to establish cooperation in terms of intense mentoring and training, as well as the need for technological knowledge for SMEs in conducting business, one of which is to make it happen in the form of fostered groups. Focus on developing marine product processing production by making local wisdom a superior product for Lampung Province, especially East Lampung.

7. Recommendation

- 1) There needs to be collaboration between all parties, students, researchers, the government, the community in supporting the role of technopreneurs to maximize the national economy. Because the government is the bureaucracy, policy maker, legal, protection and guarantee of intellectual property rights, the provider of facilities in developing technopreneurship in East Lampung Regency. The community as partners will become moral support, participating in their respective capacities.
- 2) The government is more intense in monitoring small business actors in the fisheries sector because this will provide welfare for business actors and increase the economy in the area.
- 3) Development, training and coaching must be carried out both in terms of human resource development, marketing and products.
- 4) The government pays more attention to capital, because the obstacle faced by small business actors is that capital is the main problem in the development of their business.

Reference

- Bogdan, R., and Taylor, S. J. (1993). *Introduction to Qualitative Research Methods*, translation of the National Enterprise. Jakarta.
- Etzkowitz, H. and Leydesdorff, L. (1995). The Triple Helix - University - Industry-Government Relations: A Laboratory For Knowledge Based Economic Development. *EASST Review* , 14(1), pp. 14-19, 1995. Available at SSRN: <https://ssrn.com/abstract=2480085>
- Fontana, A. (2009). *Innovate We Can!* Gramedia Widiasarana Indonesia.
- Hariandja, M. T. E. (2007). *Human Resource Management*. Jakarta: PT.Gramedia Widiasarana Indonesia.

- Kenedi. (2017). Development of Student Creativity in the Learning Process in Class II of State Junior High Schools 3 Rokan IV Koto. *Suara Guru*, 3(2), 329–348.
- Lee, Soo Jeung, and Thanh Ha Ngo.”Riccardo Viale and Henry Etzkowitz (eds): The Capitalization of Knowledge: a triple helix of university-industry-government.”(2012): 161-163
- Mopangga, H. (2015). Case Study of Technology-Based Entrepreneurship Development (Technopreneurship) in Gorontalo Province. *Trikonomika*, 14(1), 13–24.
- Mopangga, H. (2017). echnopreneurship for Local Economic Learning and Empowerment in Gorontalo Province,“. In National Seminar and Call For Paper, FEB Unikama “Improving National Economic Resilience in Facing Global Competition”. *Malang* (Vol. 17).
- Nawawi, H. (2008). Human Resource Management for Competitive Business. Yogyakarta: Gadjah Mada University Press.
- Okorie, N. N., Kwa, D. Y., Olusunle, S. O. O., Akinyanmi, A. O., and Momoh, I. M. (2014). Technopreneurship: An urgent need in the material world for sustainability in Nigeria. *European Scientific Journal*, 10(30), 1857–7881.
- Okpara, F. O. (2007). The value of creativity and innovation in entrepreneurship. *Journal of Asia entrepreneurship and sustainability*, 3(2), 1.
- Republic of Indonesia. Law of the Republic of Indonesia Number 31 of 2004 concerning Fisheries (2004).
- Rogers, E. M. (1983). Diffusion of Innovation. New York: The Free Press, A Division of Macmillan Publishing Co., Inc. New York.
- Sagiyeva, R., Zhuparova, A., Ruzanov, R., Doszhan, R., and Askerov, A. (2018). Intellectual input of development by knowledge-based economy: problems of measuring in countries with developing markets. *Entrepreneurship and Sustainability Issues*, 6(2), 711.
- Satrio, D. (2018). Technopreneurship Development Model for MSMEs in the Pantura Region. In *Proceedings of the 37th Anniversary of Pekalongan University National Seminar*.
- Shirey, M. R. (2013). Lewin’s theory of planned change as a strategic resource. *JONA: The Journal of Nursing Administration*, 43(2), 69–72.
- Smith, A. (2013). An Inquiry into the Nature and Causes of the Wealth of Nations. *An Inquiry into the Nature and Causes of the Wealth of Nations*, II(October).
<https://doi.org/10.7208/chicago/9780226763750.001.0001>
- Subandijah. (1993). *Curriculum Development And Innovation*. Jakarta: Raja Grafindo Persada.
- Sudarsih, E. (2013). Technopreneurship Education: Increasing the Innovation Power of Engineering Students in Business. In Proceedings of the National Seminar on "Innovation and Technopreneurship" IPB.
- Supriyadi, RE.(2012). Local Economic Development And Triple Helix: Lesson Learned From Role of Universities In Higher Education Town of Jatinangor, West Java, Indonesia. *Procedia-Social and Behavioral Sciences*, 52, 299-306. <https://doi.org/10.1016/J.SBSPRO.2012.09.467>
- Uno, H. B., and Mohamad, N. (2011). Learning by approach PAILKEM. *Jakarta: Bumi Aksara*.
- Vuong, Q. H., and Napier, N. K. (2014). Making creativity: the value of multiple filters in the innovation process. *International Journal of Transitions and Innovation Systems*, 3 (4), 294–327.