

The Roles of Actors in the Product Innovation Process in the Entrepreneurial Ecosystem: A to F Theory

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ABSTRACT

This study intends to conduct an analysis of the role and interaction of actors involved in the product innovation process. This research is important to optimize the role of actors in the product innovation process as an effort to improve the entrepreneurial quality. This study uses a qualitative method with a descriptive analysis approach. Data collection was done by in-depth interviews. The informants in this study consisted of business, government, banking, university, market, and social community actors. The A to F theory from Trias de Bes and Kotler is used to help understand and analyze the position of the roles and interactions of the actors in the product innovation process that occurs within the entrepreneurial ecosystem. The results showed that each actor has a varied role position and dynamic interaction in the product innovation process. Banking actors become actors who lack a role in the creative industry product innovation process, while other actors have played theirs quite well. Increasing the role of the government and banks through collaboration with other actors as well as studies on the comparison of product innovation processes with the entrepreneurial ecosystem in other regions are suggestions given for further research.

Keywords: Entrepreneurial Ecosystem; A to F Theory; Entrepreneurship; Creative Industries.

1. INTRODUCTION

Based on the results of many studies on entrepreneurship, it shows that entrepreneurship has an important meaning in sustainable economic growth and prosperity (Auerswald, 2015). In Schumpeterian theory, Huggins (2013) explains that entrepreneurship, knowledge, and regional innovation capacity are generally considered as factors the key that underlies the future of economic development and regional trajectory growth. Therefore, this is the link between regional knowledge, entrepreneurship and innovation, and its capacity and capacity for growth are at the core of the concept of competitive advantage. This is possible because entrepreneurial behavior contains aspects internalized in self that is embodied to knowledge, attitude,

and skill to do business with innovation, initiation, taking-risk action, and competitiveness (R. Purbasari & M. Rasmini, 2018a; R Purbasari, HA Muhyi & I Sukoco, 2020a). Entrepreneurship is a catalyst for economic growth (Audretsch & Thurik, 2001; Carree & Thurik, 2003), new company creation, job creation, innovation, and productivity (Leutkenhorst, 2004).

Isenberg (2011) explains that fostering entrepreneurship has become a core component of economic development in cities and countries throughout the world. The main metaphor for fostering entrepreneurship as an economic development strategy is through the "entrepreneurial ecosystem". The entrepreneurial ecosystem is a set of actors and factors that are interrelated and formally and informally coordinated to unite with one another. The entrepreneurial ecosystem mediates and regulates entrepreneurial performance in the local entrepreneurial environment to help entrepreneurial success through all stages of creating new business and developing existing ones to produce productive entrepreneurship to enhance local competitive advantage (Isenberg, 2011; Clarysse et al., 2014; Mason & Brown, 2014; Stam, 2015; Purbasari, R et al, 2018). A good entrepreneurial ecosystem enables the creation of entrepreneurial quality and competitive values at the regional level (Fritsch & Michael, 2012; Tsvetkova, 2015; R. Purbasari et al, 2020b). The concept of entrepreneurial ecosystems emphasizes the relational elements between multi-actor networks within the region that govern entrepreneurship and knowledge creation (Mason & Brown, 2014). The entrepreneurial ecosystem can be a concept to support economic growth and the development of competitive advantage through a network of synergies between entrepreneurs, entrepreneurial organizations, institutions and the entrepreneurial process itself (Clarysse, Bart, et al, (2014).

Stam (2015) states that the entrepreneurial ecosystem is a set of actors and factors that are interdependent and coordinated in such a way as to enable the realization of productive entrepreneurship. Productive entrepreneurship has a higher chance of success for the progress of business and community life compared to unproductive and destructive entrepreneurship (Auerswald, 2015). In this case, entrepreneurial activity is considered as a process where individuals create opportunities for innovation. One of the requirements to be an entrepreneur is to innovate. Without this attitude, the capacity of the creative product business will be difficult to develop. This innovation will eventually generate new value in society, and therefore, innovation is the "end result" of the entrepreneurial ecosystem, while entrepreneurial activity will become an "intermediate output" system. However, for all entrepreneurial activities carried out, it is needed to have a number of elements or other actors supporting industry players to produce innovation (Isenberg, 2011; AG Santos, AC Zen, & VK Schmidt, 2017). The synergy of stakeholders will be effective and maximized if there is an attitude from businesspeople who continue to innovate and manage risk (Sugeng Santoso, 2016). Innovative products are products with added value that can be produced from resources and capabilities that have value, are scarce, difficult to replicate perfectly and the ability of organizations to manage these resources (Barney, 2001).

Research on the product innovation process in the entrepreneurial ecosystem is crucial to understand how the roles and processes of interaction between actors in the entrepreneurial ecosystem can support entrepreneurs becoming more creative and innovative which will ultimately have an impact on the excellence of local competitiveness. This research was conducted in West Java which has been recognized to have a lot of economic potential, especially the potential of creative industries, namely industries based on creativity and innovation in the processing of natural

resources and the surrounding environment, thus requiring human resources who have knowledge to support their abilities. West Java is the province with the largest export contribution to the creative industries in Indonesia at (33.56%) (Creative Economy Agency (Bekraf), 2017).

The focus of this research is the creative industry of craft sub-sector in the East Priangan Region, West Java, with the locus of research consisting of the Regencies of Tasikmalaya (Mendong's woven craft industry), Kab. Garut (Akar Wangi craft industry) and Kab. Ciamis (coconut stick craft industry) with the consideration that each industry meets the criteria as an industry that already has a competitive advantage (R. Purbasari et al, 2018b). Based on preliminary observations and interviews, it is known that industry players still have limited knowledge and ability to innovate, making it difficult to continue to be sustainable and maintain competitiveness, especially in the current era of globally competitive and digital trade.

This study intends to conduct an analysis of the roles and interactions between actors involved in the product innovation process in the creative industries in the East Priangan Region. From the research results it is known that the role and interaction of each actor in the product innovation process can optimize the roles of these actors in supporting creative industry actors to be able to always produce more innovative and competitive craft products.

2. LITERATURE REVIEW

2.1. Entrepreneurial Ecosystem

The entrepreneurial ecosystem is a relatively new phenomenon both conceptually and theoretically rooted in economic geography (Audretsch & Feldman, 1996; Malecki, 1997), cluster theory (Bathelt, Malmberg, & Maskell, 2004; Bell, Tracey & Heide, 2009; Casper, 2007), competency blocks (Eliasson, 2000; Johansson, 2010), and the entrepreneurial community (Johnstone & Lionais, 2004; Feld, 2012). Entrepreneurial ecosystems are generally defined as areas where supportive culture, policies and leadership, human capital, abundant finance, and various institutional and infrastructure support to grow new businesses and expand existing businesses (Isenberg, 2010; Brush Corbett & Strimaitis, 2015; Stam, 2015; Spigel, 2017; R. Purbasari et al, 2019). A distinctive feature of each entrepreneurial ecosystem is the symbiotic relationship between different stakeholders, and that it is not only about trade but is seen as a solution to economic and social problems (Xavier, Kelley, Kew, Herrington & Vorderwu lbecke, 2013; Neumeyer, X., & Corbett, A.C, 2017).

The concept of ecosystem applied to entrepreneurship is related to the capacity of an area to create an actor and infrastructure system that supports the creation and development of innovative business activities outside the construction of inter-entrepreneur network structures. Therefore, the entrepreneurial ecosystem can be considered as a set of interdependent factors that are coordinated in such a way that encourages the emergence of entrepreneurship. These factors are related to the availability of real and potential knowledge, the presence of investors, human resources, culture, infrastructure, institutions, regulations and fiscal conditions, social and environmental quality, and the ability to produce innovation (Nicotra, .M., et al, 2017; Purbasari, R et al, 2018). According to Isenberg (2011) the entrepreneurial ecosystem consists of six main domains, despite the fact that an entrepreneurial ecosystem can consist of hundreds of specific elements. The six main domains are policy, finance,

culture, support, human resources and markets. The key to sustainable entrepreneurship lies in the specific combination of elements in the entrepreneurial ecosystem.

Jennen T, et al (2016) state that the entrepreneurial ecosystem is not static but is driven by innovation and develops and grows in accordance with the prevailing conditions. Autio and Thomas (2014) reveal the entrepreneurial ecosystem as a network of interconnected organizations, connected with the focus of the company or platform, which combines the actors of production and the use side in creating and adjusting new values through innovation. An entrepreneurial ecosystem implies cooperation and productive relations between different organizations. In many countries, this relationship occurs between startup companies, large companies, universities, and research institutions. In a dynamic ecosystem, people and ideas flow between these organizations, start new ventures, join existing companies, and link innovations together (Saxenian, 1994; Auerswald, 2015). A profitable entrepreneurial ecosystem is very important for innovators and entrepreneurs, even for industrial and national development (Pahnke et al., 2015; Kuratko, D. F., Fisher, G., Bloodgood, J. M., & Hornsby, J. S., 2017)).

2.2. A to F Theory

Trias de Bes and Kotler (2011) introduce a model called the A-to-F model that is designed to achieve innovation success. As befits an entrepreneurial ecosystem that is filled with the innovation process in it certainly needs to use this model to support the success of the innovation. The A-to-F model seeks to answer the question of how an organization becomes more innovative, can look for new ideas more systematically and how to change new ideas to be more successful.

In the process of innovation in an entrepreneurial ecosystem involves the interaction and collaboration of various actors and factors involved in the ecosystem. This is in line with the view of Trias de Bes and Kotler (2011) that, in fact, the stages in the innovation process must be the result of interactions of the actors involved in the innovation process. The A-to-F model emphasizes the role of the team (actors and factors) at each stage in the innovation process where the phase or stage of the innovation process cannot be predetermined, but must emerge as a result of the interaction of a set of functions or roles performed by a particular individual, meaning that the role appears first and the innovation process is the result of interaction between these roles.

Roles in the innovation process are as follows (Trias de Bes & Kotler, 2011):

1. (A) Activators: people who start the innovation process, without worrying about stages or phases. In essence, their mission is to start the process.
2. (B) Browsers: experts in finding information. Their task is not to produce something new, but to provide information to the group / team. Their mission is to investigate the entire process and to find relevant information both at the beginning of the process and the application of new ideas.
3. (C) Creators: people who generate ideas for other group members. Their function is to look for new ideas and possible new concepts and find new solutions at every point in the process.
4. (D) Developers: special people who turn ideas into products and services; they are people who "balance" ideas, who give shape to concepts and develop marketing plans. Their function is to take ideas and turn them into solutions.

5. (E) Executors: people who take care of all matters relating to implementation. Their function is to apply, which is to bring innovations that are being developed to the organization and to the market.
6. (F) Facilitators: those who approve new expenses and investments needed as the innovation process moves forward. They also set the process to prevent traffic jams. Their mission is instrumentation of the innovation process.

The stages in the A-to-F model are not the same as the stages of the traditional innovation process. The stages of the innovation process in this model are the result of group dynamics among the six types of roles that lead to natural and spontaneous flexibility, giving freedom to be responsible for the innovation process because they have to obey prescribed rules and provide space to move forward and backward in the innovation process when something that is done is not efficient so the A-to F model is very flexible and easy to follow (Trias de Bes & Kotler, 2011).

2.3. Innovation System Theory

Innovation is basically a "learning" procedure that involves a network of innovators as a "Gift Exchange" or "Studied Trust" to achieve "Adjacent possible" or cross "Structural Holes" from known innovators to unknown ones. Based on Freeman (1995) and Lundvall (2010), the concept of innovation systems is used to understand the systemic processes that underlie knowledge generation and knowledge transfer. The main focus of this concept is its emphasis on the relational aspects between different institutional actors and how this facilitates the innovation process (Brown Ross & Mason Colin, 2017). Economic geographers quickly see the attractiveness of this approach to examining the regional knowledge architecture in many countries by initiating the concept of a regional innovation system (or RIS) (Cooke et al., 1997; Asheim et al., 2011; Brown, Ross & Mason, Colin, 2017). Key Actors in RIS are universities, research organizations, technical training colleges, regulatory institutions and venture capitalists. These actors are considered to play a key role in regulating the process of innovation in the regional economy (Cooke et al., 1997; Brown, Ross & Mason, Colin, 2017).

The innovation system is defined as follows:

1. Innovation systems consist of participants or actors and all activities and interactions carried out, as well as the socio-economic environment in which the functions of these participants or actors are located, all of which together determine the performance of innovative systems (Eggink, 2013). Some interactions between these actors can be cooperative, but at other times it can be competitive
2. Innovation systems are used to understand the systemic processes that underlie the development and transfer of knowledge (Freeman, 1995; Lundvall, 2010; Brown, Ross & Mason Colin, 2017).

Brown Ross and Mason Colin (2017) explain that in building an entrepreneurial ecosystem, entrepreneurship is the main actor, whereas in the innovation system literature where institutions play a comprehensive role (Stam, 2015). This implies that the development of a successful entrepreneurial area is not just a function of company-specific attributes but is mediated by the broader context in which the business location operates (Mason, Colin & Brown, Mason, 2014). Not surprisingly, most studies of entrepreneurial ecosystems are very much in accordance with the systemic literature on innovation systems described above (Borissenko, Y & Boschma, R, 2016; R. Purbasari

et al, 2020b), especially those that focus on the relational elements between multi-actor networks within the region that govern the creation of entrepreneurship and knowledge creation (Brown & Mason, 2017).

According to Nelson (1993) and Patel & Pavitt (1994), the innovation system is formed by four main elements (Warnke, Philine et al, 2016):

1. The institutional structure of a country, region or sector: formed by companies, universities, research and training organizations, norms, routines, networks, financial organizations, and policies to promote and regulate technical change.
2. The incentive system of a country, region or sector. This includes incentive systems for innovation, technology transfer, learning and qualifications, for business formation and job mobility within and between organizations.
3. Innovative skills and creativity of economic actors in a country, region or sector. Both between companies within a country and between companies within a country, there are large differences in the diversity and quality of products, services and opportunities to forge new development paths.
4. The unique culture of a country, region or in a sector that is maintained.

3. RESEARCH METHOD

This study used a qualitative method with a descriptive analysis approach and contextual techniques regarding the creative industry product innovation process in the East Priangan Region. The data collected was primary data derived from in-depth interviews with informants, namely the actors involved in the product innovation process in the creative industry of craft sub-sector entrepreneurial ecosystem in the East Priangan Region. The determination of informants was carried out using snowball technique based on the perspective of business actors. The informants in the study consisted of business, government, banking, university, market, and social community actors based on a concept developed by Isenberg (2011), which involved 62 informants.

This research was conducted in the East Priangan Region, West Java, which included Garut, Tasikmalaya and Ciamis Regencies, using the boundaries of the types of creative industries studied, namely the creative industry of craft sub-sector in the East Priangan Region. The selection of locations and types of creative industries is based on the results of previous research conducted by R. Purbasari, C Wijaya., R, Ning., & M, Erna (2018b), which states that the creative industry of craft sub-sector in Garut, Tasikmalaya and Ciamis Regencies are creative industries that already have advantages competitiveness in the East Priangan Region.

To understand and analyze the roles and interactions of actors in the product innovation process that occurs within the entrepreneurial ecosystem, this study used an A-to-F model from Trias de Bes and Kotler (2011). The level of analysis used is the level of individual analysis (Business Actors). Mars et al (2012) revealed that industrial-based ecosystems consist of individual organizations, which also describe individual ecosystems. Individual ecosystems have work processes based on specific goals and agendas to achieve them. Every entity in an ecosystem has a well-defined role and outcome (Theodoraki, C. & Messeghem, K., 2017). In addition, another reason for the individual approach was chosen because the individual has mainly been recognized as playing an important role in the creation of a dynamic local economy (Feldman et al., 2005; Mason & Brown (2014). Furthermore, to ensure the validity of the data is done through a triangulation process using data from previous studies, company and

government documentation related to the creative industry product innovation process in the East Priangan Region.

4. RESULTS AND DISCUSSION

Based on the perspective of business actors, the role of each actor involved in the product innovation process in the creative industry entrepreneurial ecosystem of the East Priangan Region will be explained as follows:

4.1. The Role of Business Actors

In carrying out their role as explained earlier, business actors are required to use high conceptual skills, be able to create new variations in the form of products and services, be adept at organizing, collaborating, diplomating (the spirit of collaboration and orchestration), steadfast in facing failure experienced, mastering the technical context and financial planning capabilities. Business actors also need to consider and support the sustainability of the creative industries in every role they play. With the relationship between business actors, especially in the process of various knowledge and information, it certainly helps these efforts.

Based on the results of interviews, referring to the A to F theory (Trias de Bes and Kotler, 2011), in the process of product innovation, most of the creative industry business actors in the East Priangan Region are included in the category models B (Browsers), D (Developers), E (Executors) and F (Facilitators).

Business actors have a role as Browsers (B) whose task is to find and provide information about all rights related to their business to other parties who are part of their group. Business actors seek information from various sources, especially the surrounding community, fellow business actors, some others from the government, universities and markets which are then given to other parties involved in their business such as employees, craftsmen and their families.

Creative industry business actors also play a role as Developers (D), who try to change the ideas or business ideas they receive into products and services, give shape to the concept and develop marketing plans. Business actors in relation to consumers, always try to realize the demand for product designs and models demand from consumers. In this endeavor, business actors negotiate the possibility of design or model being realized so that there are certain contributions from business actors towards contributing ideas for the fulfillment of products desired by consumers.

As Executors (E), even though they already have craftsmen, business actors are still directly involved in the execution process of the product they want to create. This is because business actors master basic skills in weaving handicraft products so that they continue to involve themselves both in the routine production process, and for the product innovation process if there is demand for a particular model or design.

The creative industry business actors in the East Priangan Region also play a role as Facilitators (F) by ensuring that the product innovation process is always moving forward and not impeded. In this case the business actors want to ensure that the products produced are in accordance with market demand.

Meanwhile, based on the results of interviews about the product innovation process according to A to F theory, there are a small number of business actors in the East Priangan Region who have roles as Activators (A) and Creators (C). As Activators (A), business actors play a role in starting the product innovation process. Business actors that are categorized as model (A) are able to produce handicraft products that

tend to be different from other business actors. Usually these business actors, in addition to having the courage to try to innovate, also generally have strong connections with university and government actors, who provide input on new ideas that not all business actors are willing to realize. As a result, these business actors often become inspirators and motivators in their business environments. In addition, in the end it is also often involved by the government to become instructors and resource persons in the program of activities organized by the government for the development of similar industries. As Creators (C), business actors play a role in generating ideas for their business environment. Business actors often look for new ideas and new solutions at every point in the innovation process.

Unfortunately, few business actors are included in models A and C, because most creative industry business actors in the East Priangan region do not focus on product innovation but rather on the amount of production produced. Coupled with the lack of courage to try something new and the limited ability to explore the latest information. This certainly can be an obstacle to the creative industry product innovation process in the East Priangan Region.

This condition is supported by the opinion that entrepreneurs who focus on innovation in products, production techniques, and markets play a key role in economic growth (Akbas, MI, Gunaratne, C., Garibay, OO, Garibay, I., & O'Neal, T, 2015; Purbasari, R., Wijaya, C., & Rahayu, N., 2018). Similarly, creative industry actors in the East Priangan Region, have an important role and function in creating quality jobs and innovation. The entrepreneurial ecosystem approach emphasizes the entrepreneurial relationship with the environment. When well developed, this environment stimulates the growth of new companies and is crucial for the creation and development of innovative companies (Autio et al., 2014). At the same time, Entrepreneurship, then, is a central element of the ecosystem (Diego Alex Gazaro dos Santos, Aurora Carneiro Zen, & Vitor Klein Schmidt, 2017; Purbasari, R., Wijaya, C., & Rahayu, N., 2018).

4.2. The Role of Government

Based on the results of interviews with reference to the A to F Theory (Trias de Bes and Kotler, 2011) regarding the role of government in the creative industry product innovation process in the East Priangan Region, most government actors in each region are included in Model B (Browser) and F (Facilitator).

The government in its role as Browsers (B) seeks to investigate the entire production process and seeks to find relevant information for the advancement of innovative industrial products in the East Priangan Region. While the government as a facilitator (F) seeks to ensure that business actors are facilitated in the process of product innovation through various programs and facilities that support business actors to innovate. Some of the activities carried out by the government in the East Priangan Region to support the product innovation process include entrepreneurship training programs, industrial product exhibition programs, business funding programs, and so forth. The government in the East Priangan Region also provides facilities in the form of a product cast building that is open to tourists, which is used to help introduce and market creative industrial craft products.

However, based on the perception of business actors, government actors involved in the product innovation process in the creative industry entrepreneurial ecosystem in the East Priangan Region are considered to still have many shortcomings, especially in the implementation of activity programs. Like for example the limited information received by business actors, most of the activity programs are considered

unsustainable and have a less significant impact on the innovation of creative industry products.

Related to these conditions, the role of government in fact is to remove obstacles and provide ideal prerequisites for entrepreneurship development (Isenberg, 2011; Mason & Brown, 2014). This prerequisite is related to reforms within the legal, bureaucratic and regulatory framework (Cohen, 2006; Isenberg, 2010; R. Purbasari, C. Wijaya & N. Rahayu, 2020a, 2020b). Actions to meet this objective include simplification and regulation of tax collection, decriminalization of bankruptcy, protection of shareholders in the presence of creditors, capital market creation, liberalization and simplification of termination of employment contracts and support for unemployment (Isenberg, 2010; 2011; Autio et al., 2014).

Meanwhile according to Creative Economy Agency (Bekraf) (2017), the main role of the Government in the development of creative industries is as follows:

1. Catalysts, facilitators and advocates who provide stimuli, challenges, encouragement, so that business ideas move to a higher level of competence.
2. Regulators that produce policies that produce policies relating to industry, intermediation, resources, and technology. Government can accelerate the development of creative industries if the government is able to make policies that create a creative climate.
3. Consumers, investors and even entrepreneurs. The government as an investor must be able to empower state assets to be productive in the scope of the creative industries and be responsible for investment in industrial infrastructure. As a consumer, the government needs to revitalize its procurement policies, with the priority of using creative products. As an entrepreneur, the government indirectly has authority over state-owned enterprises (SOEs).
4. Urban planner. Creativity will flourish in cities that have a creative climate. In order to develop this creative economy well, it is necessary to create creative cities in Indonesia. Refer

Referring to the explanation, the government in the East Priangan Region needs to revisit its role in the creative industry product innovation process in order to make a real contribution to increasing the strength of the industry's competitiveness.

4.3. The Role of Banks

The role of banks based on A to F theory (Trias de Bes and Kotler, 2011) in the process of product innovation in the creative industries in the East Priangan Region illustrates that most banking actors do not have a role in the product innovation process. This is due to the fact that the majority of banking actors have very little relationship with these business actors. Not only does it lack a role in providing knowledge to business actors, banking actors also lack a role in accessing capital. Most business actors use private capital to fund their business.

However, a small portion of banking actors, especially BRI (Bank Rakyat Indonesia) can be said to belong to Model B (Browsers). The banking actor helps provide information and knowledge to business actors who are connected with him/her about financial management and aid and business programs, as well as connecting business actors with the market.

In fact, the relationship between business actors and banking actors is important because this field is one of the three main aspects of the entrepreneurial ecosystem (WEF, 2015). Access to finance, in turn, is considered by entrepreneurs as one of the three main aspects of the entrepreneurial ecosystem - the others are markets and human

resources (WEF, 2015; R. Purbasari, C. Wijaya & N. Rahayu, 2019). Ease of financial access will help simplify the process of innovation in creative industry products because it can be a resource that supports the product innovation process. Financial resources, public or private, must be available, visible and accessible to all segments and sectors of the ecosystem (Stam, 2015).

Based on this explanation, it can be understood that banking actors have an important role as a facilitator in providing resources that support the sustainability of the product innovation process of creative industry. Therefore, as with government actors, banking actors in the East Priangan Region need to be aware of this condition by improving and maximizing their role in supporting the innovation of creative industry products.

4.4. The Role of Universities

Based on the A to F Theory (Trias de Bes and Kotler, 2011), in the process of product innovation in the handicraft creative industry in the East Priangan Region, most of the university actors are included in the B (Browser) and C (Creators) models. University actors help find ideas and ideas for design and models and technology for product development from creative industry business actors in the East Priangan Region. The business actors then provide knowledge and information and help apply these new ideas and concepts to his/her products which are generally carried out through training and community service programs. To find solutions related to improving the quality of creative industry products, university actors contribute through research activities. The research results obtained are then socialized and implemented in the creative industry products.

This is in line with the opinion which states that the role of universities is to produce or transfer knowledge and provide leadership for the creation of entrepreneurial thinking, actions, institutions and 'entrepreneurial capital' (Audretsch, 2014; Guerrero et al., 2014). University performance is a relevant factor in shaping innovation capacity and competitiveness in certain regions (Li, 2009; Bonardo et al., 2010; Lehmann et al., 2012; Huelsbeck et al., 2013; Guerrero et al., 2014; R. Purbasari, C. Wijaya & N. Rahayu, 2019).

From this explanation, it can be understood that university actors have played quite well in the product innovation process of creative industry of craft sub-sector in the East Priangan Region by providing information, knowledge and experience that supports the product innovation process.

4.5. The Role of Market

Based on the A to F Theory (Trias de Bes and Kotler, 2011), most of the market actors involved in the entrepreneurial ecosystem of creative industries in the Eastern Priangan Region are included in the B (Browser), C (Creators) and E (Executors) models. As Browsers (B) and Creators (C), market actors help business actors in providing knowledge and information about product ideas and models, looking for new ideas and solutions in the creative industry product innovation process. While as Executors (E), market actors play an important role in bringing innovation by helping to market and sell products to the target market.

The market has a role in the entrepreneurial ecosystem in two ways. The first thing is the market in the form of large companies that provide resources, space and commercial opportunities (contracts or initial customers). Another thing that market actors can provide is networking. Networks encourage the creation of new business

from knowledge and are the main source of information, resources and access to domestic and international markets (Zahra, S., Wright, M., & Abdelgawad, S.G, 2014).

From this explanation it can be understood that market actors have played quite well in the product innovation process of creative industry of craft sub-sector in the East Priangan Region by assisting business actors in providing information and knowledge about the development of new model trends and helping to provide market networks that can absorb the results of creative industry product innovation.

4.6. The Role of Social Community

Based on the A to F Theory (Trias de Bes and Kotler, 2011), the results of interviews show that most surrounding community actors, who are part of the social community actors, are included in models B (Browsers), C (Creators), D (Developers) and E (Executors). This means that the surrounding community actors have a role in finding and providing knowledge and information (Browsers) in the product innovation process carried out by business actors. Lots of surrounding community actors are directly involved in the creative industry businesses owned by business actors, making it possible. In addition, the surrounding community actors also helped in finding solutions (Creators) in the product innovation process because of their experience and ability to produce products from business actors. After receiving instructions from business actors regarding new products, surrounding community actors together with business actors develop and realize the planned products (Developers). As Executors (E), surrounding community actors play a role in helping to take care of all matters related to the implementation of product realization so that it is ready to be accepted by the market.

The essence of an entrepreneurial ecosystem strategy is a view of what factors shape and how the entrepreneurial ecosystem evolves. The need for an ecosystem strategy stems from the observation that when looking at communities where entrepreneurship occurs with order or self-preservation, then a unique and complex environment or ecosystem has evolved (Isenberg, 2011). Cultural elements represented by social community actors have an important contribution to the evolution of the entrepreneurial ecosystem. Culture is an important component in the entrepreneurial ecosystem as expressed by Aldrich and Fiol (1994) that "entrepreneurial culture" is historically and locally embedded where collective values and norms that are positively oriented towards entrepreneurship can be important in growing the community's environment social conditions conducive to entrepreneurship (Aldrich 1990; Aldrich & Fiol 1994; Andersson, Martin & Henrekson, Magnus, 2014).

Based on that explanation, the social community represented by the surrounding community has many roles at each stage of the product innovation process in the creative industry of craft sub-sector in the East Priangan Region.

5. CONCLUSION

The entrepreneurial ecosystem supports the creation of an innovation system especially the emphasis on the relational elements between multi-actor networks within the region that govern entrepreneurship and knowledge creation. Productive entrepreneurship is realized through entrepreneurial actions to transform the potential investment of knowledge into innovation. Entrepreneurship (business actors) in creating innovation requires the role of other actors. These actors include governments, banks, universities, markets and the social community. The ability to produce knowledge

intensively, increase productivity and innovation will provide competitive advantage in companies, regions and countries. Thus, the entrepreneurial ecosystem ultimately drives the success of innovation systems, the knowledge economy or national competitiveness policies.

From the results, it is found that in the product innovation process, most of the creative industry business actors in the craft sub-sector in the East Priangan Region are included in B (Browsers), D (Developers), E (Executors) and F (Facilitators) models. Unfortunately, only a few business actors are included in A (Activators) and C (Creators) models, because most creative industry business actors in the East Priangan Region do not focus on product innovation but on the amount of production produced. Coupled with the lack of courage to try something new and the limited ability to explore the latest information. This certainly can be an obstacle to the creative industry product innovation process in the East Priangan Region.

As for government actors, most of them fall into B (Browser) and F (Facilitator) models. The role of government actors is considered to be still lacking, especially in the implementation of program activities. Like for example the limited information received by business actors, most of the activity programs are considered unsustainable and have a less significant impact on the innovation of creative industry products.

Most university actors are included in B (Browser) and C (Creators) models. University actors have played quite well in the product innovation process of creative industry of craft sub-sector in the East Priangan Region by providing information, knowledge and experience that supports the product innovation process.

In contrast, most banking actors do not have a role in the product innovation process. Not only does it play a less role in providing knowledge to business actors, banking actors also lack a role in accessing capital. However, a small portion of banking actors, especially BRI (Bank Rakyat Indonesia) can be said to belong to B (Browsers) model. The banking actor helps provide information and knowledge to business actors who are connected with it about financial management and aid and business programs, as well as connecting business actors with the market.

For market actors, most of them fall into B (Browser), C (Creators) and E (Executors) models. Market actors have played a role by assisting business actors in providing information and knowledge about the development of new model trends and helping to provide market networks that can absorb the results of creative industry product innovation.

Finally, there are social community actors. Most social community actors fall into B (Browsers), C (Creators), D (Developers) and E (Executors) models. The social community represented by the surrounding community has many roles at each stage of the product innovation process in the creative industry of craft sub-sector in the East Priangan Region.

6. RECOMMENDATIONS

To enhance the role and contribution of each actor in the entrepreneurial ecosystem of creative industry of craft sub-sector in the East Priangan Region, the government specifically as a policy maker is advised to make an acceleration program for the entrepreneurial capacity of creative industry in the East Priangan Region to improve the sustainability of the industry through a sustainable mentoring process related to management modernization business, product innovation, online marketing strategies, product standardization and IPR. All of these activities must be carried out in

collaboration in an integrated manner with other actors involved in the entrepreneurial ecosystem.

Banking actors who are still considered to have less role in the entrepreneurial ecosystem of handicraft creative industry in the East Priangan Region, should redefine the requirements and improve the implementation of the program of dissemination and distribution of business capital and increase knowledge transfer activities on financial management that are integrated with programs to improve the quality of good entrepreneurship that organized by the government and universities. This is done to overcome the problem of limited access to capital that is often experienced by business actors and increase the ability of business actors to manage their business finances.

Further research should perform a comparative study of the product innovation process in the entrepreneurial ecosystem in other creative industry sub-sectors that have the same characteristics as this study, to test whether the findings in this study will be relatively the same or even different. In addition, a comparison of the product innovation process in the entrepreneurial ecosystem of creative industry in other countries can also be conducted, especially to see the role of the government in building creative industries so that they are competitive and sustainable.

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