

Actors and Their Roles in Entrepreneurial Ecosystem: A Network Theory Perspective: Cooperative Study in Sukabumi, West Java

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ABSTRACT

This study aims to map and analyze the roles of actors involved in the process of knowledge transfer in the cooperative entrepreneurial ecosystem in Sukabumi, West Java. This mapping is important because it is useful to maximize the process of collaboration in improving the quality of cooperative entrepreneurship in Sukabumi. This study uses a mixed method with a sequential exploratory strategy involving cooperative managers as respondents and informants. A network theory approach is used to help analyze the role of actors involved in the entrepreneurial ecosystem. The role of each actor is then documented, explained, analyzed, and concluded. The results showed that market participants, the government and the social community had a dominant role in the process of knowledge transfer associated with improving the quality of cooperative entrepreneurship in Sukabumi. This article provides direction for further research.

Keywords: Entrepreneurial ecosystems, Cooperative, Network Theory, Sukabumi.

1. INTRODUCTION

1.1 Background

Indonesia business development has improved in recent years, in line with the starters entrepreneurship program of the Indonesian government (NJA Novel & R Purbasari, 2017), including Cooperatives. Cooperatives, according to the Law on Cooperatives, are business entities consisting of individuals or legal entities of cooperatives, based on their activities based on cooperative principles as well as a people's economic movement based on the principle of kinship. Cooperatives are proven to be the strength of the local economy of the community which, if managed properly, will contribute greatly to the national economy. The development of cooperatives as a people's economic movement in its development is inseparable from the participation of all parties involved in it, from the cooperative managers to the markets, communities, governments, universities and so on. However, according to the Head of the Cooperative, SME, Trade

and Industry Office of Sukabumi City, many cooperatives in Sukabumi City have not yet grown and developed due to the following factors:

1. The management's inability to manage cooperatives.
2. Inadequate level of education.
3. Limited creativity.
4. Limited service within the savings and loan business.

The Head of the Sukabumi City Cooperatives, SME, Trade and Industry Office said that there were 411 cooperatives in the City of Sukabumi. However, 102 cooperatives went out of business because the cooperative managements were unable to maintain their business activities. This shows that cooperatives in the City of Sukabumi is still experiencing problems. Available data reveals around 73.1% of cooperatives experience obstacles in carrying out business activities.

To advance the cooperative business activities, entrepreneurial factors are important to consider. 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 (Purbasari and Rasmini, 2018). Entrepreneurial activities increase the fluidity of the labor market (Evans, 1989; Roudy, 2017), job creation (Folster, 2000; Roudy, 2017) and the introduction of innovative products and services (Schumpeter, 1934; Roudy, 2017; Purbasari et al., 2018). In all of these actions, entrepreneurship results from interactions between individual attributes and the surrounding environment (Stam, E & Bosma, N, 2015; Acs., ZJ, Stam, E., Audretsch, DB, & O'Connor, A, 2017; Purbasari et al., 2018). Entrepreneurship is embedded in social relations (Nijkamp, 2003; Stuart & Sorenson, 2005; Borissenko & Boschma, 2016). Capital obtained by an entrepreneur from social relations can increase the capacity of collective learning by local networks, especially informal social relations (Doloreux & Parto, 2005; Borissenko & Boschma, 2016; Purbasari et al., 2018). Heny Kusdiyanti (2008) states that entrepreneurial competence within the framework of business continuity is closely related to the elements and roles that exist in the traditional business environment that can encourage increased competence and business continuity.

The main metaphor for encouraging entrepreneurship as a strategy for economic development is through the entrepreneurial ecosystem (Isenberg, 2011). 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 entrepreneur environment to help entrepreneurial success through all stages of the creation of new business and existing development to produce productive entrepreneurship to enhance local competitive advantage (Isenberg, 2011; Clarysse et al., 2014; Mason & Brown, 2014; Stam, 2015; Purbasari et al., 2018). A good entrepreneurial ecosystem enables the creation of entrepreneurial quality and competitive values at the regional level (Fritsch, 2013; Tsvetkova, 2015; Purbasari et al., 2019). Furthermore, the entrepreneurial ecosystem consists of network settings that are useful for developing policies that support competition (Isenberg, 2010).

To identify the actors and get a proper analysis of their roles, this study uses a network theory approach (defined as the mechanism and process of interaction in the network structure) to obtain certain results for individuals and groups (Boggati & Halgin, 2011). Several arguments justify the possibility of studying the entrepreneurial ecosystem using a network theory approach. Letaifa (2016) argues that ecosystems are an extension of network theory. In the perspective of network theory, the aspect that is understood is the relational structure between various stakeholders in the entrepreneurial ecosystem and the

level of connectivity among actors that influence social network connectivity (Neumeyer & Santo, 2017). A network theory approach and strategic thinking are considered suitable in exploring the relationships and interdependencies of ecosystem actors for value creation (Zahra & Nambisan, 2012; Kapoor & Lee, 2013; Purbasari et al., 2019). Research is needed on the entrepreneurial ecosystem, especially to identify actors and their roles in the entrepreneurial ecosystem, as driving factors for the dynamics of interaction in the context of knowledge transfer, to improve the quality of entrepreneurship, and to be creative and innovative.

This study aims to map and analyze the roles of actors involved in the process of knowledge transfer in the cooperative entrepreneurial ecosystem in Sukabumi, West Java. This mapping is important because it is useful to maximize the process of collaboration in improving the quality of cooperative entrepreneurship in Sukabumi. The role of each actor involved in the cooperative entrepreneurial ecosystem in Sukabumi will then be documented, explained, analyzed, and concluded. The article also details the implications of this research for academics and practitioners, and provides direction for further research.

2. LITERATURE REVIEW

2.1 Entrepreneurial Ecosystem

The concept of ecosystem comes from the field of biology. This term refers to the natural environment and its elements, including living organisms (biotic factors) in an area as well as the physical environment (abiotic factors), which function together as a single unit. Roy Clapham (1930) originally coined the word to show the physical and biological components of an environment that form a single unit (Nicotra, M, et al., 2017). This notion of ecosystems has been adopted into the perspective of the business environment (Moore, 1993), with particular reference to entrepreneurial networks. To succeed in today's competitive environment, companies must become components of the ecosystem where they jointly develop skills, innovate, and develop. In this case, the ecosystem is slowly changing both in terms of business and naturally from confusing collection to systems with structured elements. Moore (1993) asserts that ecosystems symbolize responses to the need for promotion of innovation and creativity in the process of determining answers to economic and social problems. The concept of ecosystems as applied to entrepreneurship goes beyond the development of inter-entrepreneurial network structures. This idea includes the capacity of a region to create actors and infrastructure arrangements that support the development and development of pioneering business activities (Nicotra, M, et al., 2017; Purbasari et al., 2018).

Along with increasing attention to the importance of the entrepreneurial ecosystem, Isenberg (2010, 2011) then defines the entrepreneurial ecosystem as a set of institutional networks with the aim of helping entrepreneurs to drive success through all stages of new business creation and development processes. The entrepreneurial ecosystem is an adequate framework for studying the interdependence and relationships between various actors who interact in complex economic systems, such as individuals, organizations, entities, local, regional and national institutions, and policy makers and stakeholders in regional contexts (Cohen, 2006; Nambisan & Baron, 2013; Morris, Neumeyer, & Kuratko 2015; Neumeyer & Santo, 2017; Purbasari et al., 2018). This can be understood as a service network, where entrepreneurship is the focus of actions and measures of success (Purbasari et al., 2019).

2.2 Network Theory

Networks often express patterns of "co-operation," which reflect a specific balance between cooperation and competition. Intra-networks and internetwork relations are founded on a mixture of collaboration and opposition (Carayannis E.G. & Campbell D.F.J., 2011). Network theory refers to the mechanism and process of interaction in network structures to get specific results for individuals and groups (Burt, 1992; Fritsch, Michael; Kauffeld-Monz, Martina, 2008; Boggati & Halgin, 2011; Neumeyer & Santos, 2017; Purbasari et al., 2019). The network consists of a set of actors or nodes together in a series of certain types of bonds (such as friendship) that connect them. These relationships are interrelated to achieve the same goal to form a path that indirectly connects actors who are not connected or directly bound. The bonding patterns in the network produce certain structures, and actors occupy positions in these structures. Most network theory analyzes look at the network structure characteristics and position of actors and try to relate them to the achievements/outputs produced by groups and actors (Boggati & Halgin, 2011).

The use of network theory approaches in the entrepreneurial ecosystem is considered relevant because the ecosystem consists of elements that interact with different network configurations. Letaifa et al (2016) state that "ecosystems are an extension of network theory." Network theory can be used to describe relationships between organizations that have common or complementary features that facilitate access to resources and information or to determine the structure of social interaction between organizations. Jack (2010) considers that network theory has become a key element of entrepreneurial research. A network approach and strategic thinking are suitable ways to explore the relationships and interdependencies of ecosystem actors for value creation (Kapoor & Lee, 2013; Zahra & Nambisan, 2011; 2012; Purbasari et al., 2019). The relational structure between various stakeholders in the entrepreneurial ecosystem is implied in the perspective of network theory. Social network connectivity is influenced by the degree of interrelation between employers, government agencies, incubators, or members of accelerator organizations, and investors or constituents of higher education organizations (Xaver Neumeyer & Susana C. Santos, 2017; Purbasari et al., 2019).

3. RESEARCH METHODS

This research is a mixed methods study using exploratory sequential mixed methods (Creswell, 2010). The exploration design was carried out in two stages, which were marked by an initial phase carried out with a qualitative data collection and analysis phase, then continued with a quantitative data collection and analysis phase.

The informants and respondents in this study were 16 cooperative management actors in the City of Sukabumi. The identification of actors involved in the entrepreneurial ecosystem is obtained from interviews and questionnaires based on the perspective of business actors in the context of knowledge transfer. The actors identified include cooperative management actors, government, banking, professionals, markets, and social communities based on concepts developed from Isenberg (2011), Mason and Brown (2014), and Erik Stam, (2015).

The dimensions used to identify actors involved in the entrepreneurial ecosystem and their role refer to the concept of network theory perspective based on Burt (1992), Hanneman, Robert, A. & Mark Riddle (2005), Fritsch, Michael & Kauffeld-Monz, Martina (2008), Xaver Neumeyer & Susana C. Santos (2017). They are the dimensions of Knowledge Transfer, Knowledge Absorption and Cohesion.

The level of analysis used is the level of individual analysis (cooperative managers). This is because the entrepreneurial ecosystem has one of the characteristics of complexity which is characterized by the large network of actors and factors (relational structures) involved in it (Kantise Frederico, 2012), so it will be difficult to analyze the entrepreneurial ecosystem as a whole, thus requiring a limited level of analysis (Letaifa, et al, 2016). The individual analysis level (micro level) was chosen with the consideration that the type of network analysis at the micro level can be applied to the entrepreneurial ecosystem (Borissenko, Yana & Bochna, Ron, 2016). Furthermore, the results of research data are documented, explained, analyzed, and concluded.

4. RESULTS

The findings are explained in a number of dimensions as follow.

4.1. Dimension of Knowledge Transfer

The knowledge transfer dimension measures the knowledge transferred by cooperative management actors to other actors in the cooperative entrepreneurial ecosystem in Sukabumi. The processed questionnaire data (2019) shows that the majority of cooperative managers provide knowledge to other actors (63%), while the rest do not (38%). This means that in the cooperative entrepreneurial ecosystem in Sukabumi, the transfer of knowledge has taken place in this case from the business actor to other actors. Most of the cooperative managers provide a large amount of knowledge (44%) and quite a lot (31%) which means that businesses provide most of their knowledge to other actors, while most other business actors do not (25%). The type of knowledge provided by most cooperative managers consists of cooperative business management systems (44%), product knowledge (25%) and cooperative policies (membership requirements, etc.) (19%). This means that knowledge about cooperative business management systems, knowledge of products and cooperative policies is the most needed knowledge by the actors involved in cooperatives in Sukabumi based on the perception of cooperative managers. The knowledge was mostly given by cooperative members (56%) and cooperative technical management (19%) because of their involvement in cooperative business activities.

Knowledge transfer is an effort to ensure the effective application of intellectual capital in a company or network to achieve certain goals (Werner, Dickson, & Hyde, 2015). The success of the knowledge transfer process depends very much on the role of the cooperative manager (business actor) as a leader in his business. As Andrews (2002a) has stated, the ability to transfer knowledge depends on leadership, culture, infrastructure, technology, and acceptance of the need for continuous improvement. Knowledge transfer is important to note because in public policy, there is a tendency to encourage the creation of an entrepreneurial ecosystem among various types of social actors as a tool to promote local development. This process requires knowledge transfer, because knowledge fosters innovation and economic growth (Adão Flores, Elsa Pereira, and Henrique Graça, 2017), as well as cooperatives as part of the local economic component of the community which are essential for the growth and competitiveness of the national economy.

4.2. Dimension of Knowledge Absorption

The knowledge absorption dimension measures the knowledge received by cooperative management actors from other actors in the entrepreneurial ecosystem. The

processed questionnaire data (2019) shows that most cooperative managers in Sukabumi receive knowledge from other actors (60%), while a small proportion do not receive knowledge from other actors (40%). The cooperative manager receives knowledge from other actors because he is aware of the need for knowledge to improve entrepreneurial skills and the progress of the cooperative business. The majority of business operators receive a considerable amount of knowledge from other actors (44%) and a lot (40%), while the rest say a little (16%), with most types of knowledge received in the form of systems and changes in cooperative policies (30%), good ways of managing cooperatives (28%) and accounting systems (13%). This means the system and changes in cooperative policies, how to manage cooperatives well and bookkeeping systems are the most important types of knowledge to have, and basic knowledge that must be learned by cooperative managers in Sukabumi in running their cooperative businesses. Meanwhile, the most instrumental actors in providing knowledge (knowledge sharing) to the majority of cooperative managers in Sukabumi include the Department of Cooperatives, SMEs, Trade, and Industry (35%), senior managers (19%) and other cooperatives (10%).

In addition, the majority of cooperative managers have implemented a considerable amount of knowledge they have received (35%) for the progress of their businesses. Knowledge of the system and changes in cooperative policies (80%), good ways of managing cooperatives (75%) and bookkeeping systems (60%) are knowledge that has been implemented by most cooperative managers in Sukabumi. This means that the system and changes in cooperative policies, good ways of managing cooperatives, and bookkeeping systems are the most needed and important knowledge to be implemented in cooperatives in Sukabumi.

The process of absorbing this knowledge has become a necessity for business people. This is because competition and selection are in the midst of various choices that allow individuals (and companies) to learn from the successes and failures of themselves and others. This learning process allows individuals to improve their skills and adjust their attitudes (Wennekers & Thurik, 1999), to the state of the business environment. Regarding efforts to implement the knowledge received by cooperative managers, it is important to note that entrepreneurial action is needed to change knowledge investment from having the potential to create value (Hitt et al., 2001; Agarwal, Audretsch, and Sarkar, 2007; R. Agarwal, D. Audretsch, and M. Sarkar, 2010). The actions of entrepreneurs are a key element of the entrepreneurial process (Acs, Autio & Sczerb, 2014), because they often produce innovation (Bird, Schjloedt, & Baum, 2012).

4.3. Dimention of Cohesion

The cohesion dimension shows the cooperative manager's relationship with other actors in the context of the transfer of knowledge about the cooperative effort that is undertaken. This dimension is measured by the following indicators:

4.3.1 Connectivity with Business Actors

The processed questionnaire data (2019) shows that most of the cooperative managers in Sukabumi in carrying out their business activities are not interconnected with other cooperative management actors (81%). This shows that cooperative managers in Sukabumi tend to run their own cooperative businesses and not cooperate with other cooperatives. In fact, the manager of a cooperative can obtain knowledge from other cooperatives, especially with the same type of business, which from the process of transfer of knowledge and information, of course, can help efforts to advance their cooperative

efforts. Furthermore, it was found that the cooperative managers in Sukabumi who were most connected with cooperative managers in the same industry consisted of the manager of the Kokassiyifa cooperative, the Rukun Sejahtera cooperative and the BMT Nurul Ummah (6%). The main reason that connects the cooperative managers is the existence of a form of cooperation (procurement contract), capital and partnerships (8%).

The managers of cooperatives as entrepreneurs and how they relate to each other have an important role in quality innovation. Stam, E and Bosma, N (2015) state that entrepreneurship is the result of interactions between individual attributes and the surrounding environment. This means that in carrying out its function, business actors need the role of other actors in their environment. In this case the entrepreneurial ecosystem tries to provide conditions ideal for entrepreneurship to succeed and remain sustainable. When properly developed, this environment stimulates the growth of new companies and is essential for the creation and development of innovative companies (Autio et al., 2014). At the same time, the entrepreneurial ecosystem approach emphasizes the entrepreneurial relationship with the environment. Entrepreneurship, then, is a central element of the ecosystem (Diego Alex Gazaro dos Santos, Aurora Carneiro Zen, and Vitor Klein Schmidt, 2017).

4.3.2 Connectivity with the Government

Data from the questionnaires shows that most cooperative managers in Sukabumi have a relationship with government actors (63%). Government actors connected with cooperative managers in Sukabumi include the cooperative and umkm offices (34%), disperindag (23%) and the sharia council of Sukabumi city (6%). This means that the SME and Trade Cooperative Service, the Industry and Trade Council and the Sharia Council of Sukabumi City are government actors who have a greater role in the entrepreneurial ecosystem of cooperatives in Sukabumi. Government actors must understand their great role in developing the entrepreneurial abilities of cooperative managers by designing and organizing targeted programs so that they can provide sustainable benefits for cooperative managers in Sukabumi.

Some of the government's roles in facilitating entrepreneurship include removing barriers and providing ideal prerequisites for entrepreneurship development (Isenberg, 2011; Mason & Brown, 2014). This prerequisite is related to reforms within the legal, bureaucratic and regulatory frameworks (Cohen, 2006; Isenberg, 2010). There are many ways in which policy makers can improve the conditions of local institutional frameworks, including steps to reduce the regulatory burden and streamline administrative processes related to business. Local regulations governing business must be efficient and transparent. These include local taxation, housing regulations, zoning laws and overall quality of public services, especially health and school services (Andersson, Martin; Henrekson, Magnus, 2014). Both businesses and governments can use ecosystems as concepts to enhance entrepreneurship and innovation (Acs, Stam, Audretsch, and O'Connor, 2017). For a country to be competitive and have a strong entrepreneurial culture, public policy must form a pillar of competitiveness and the formation of an entrepreneurial ecosystem (Rodríguez and Soto, 2015).

4.3.3 Connectivity with Banks

The majority of cooperative managers in Sukabumi have a relationship with banking actors (56%). While the banking actors connected with the cooperative manager consisted of BNI Syariah (19%), Bank Supra (13%) and BRI (8%). This means that BNI Syariah is a banking actor with a greater role in the cooperative entrepreneurial ecosystem

in Sukabumi than other banking actors. In supporting business funding for business actors, the role of banking is demonstrated by working together with the government to provide various facilities that can be utilized by cooperatives to develop businesses, especially in relation to capital programs. Banking is considered necessary to intensify the socialization of the existence of these program facilities so that they can be utilized by cooperatives so that the role of banking can improve for the progress of cooperatives in Sukabumi.

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, 2013). Financial resources, public or private, must be available, visible and accessible to all segments and sectors of the ecosystem (Stam, 2015). A well-developed financial market reduces the cost of capital acquisition by the company and facilitates the flow of money, which allows the company to develop faster (Kshetri, 2014).

4.3.4 Connectivity with Universities

Most of the cooperative managers in Sukabumi have no relationship with the University (88%). While the University actors connected with a small number of cooperative management actors consisted of STIE (10%) and Unpad (2%). This means that STIE is a University actor who has a greater role than other University actors in the cooperative entrepreneurial ecosystem in Sukabumi. The limited role of university actors is certainly very unfortunate, considering universities as the center of knowledge and innovation that should be able to contribute greatly to the process of knowledge transfer that can be utilized for the progress of cooperative management in order to have entrepreneurial qualities and high competitiveness.

Universities are home to academics who have invested significant resources into the configuration of supporting mechanisms to enhance innovation and entrepreneurship (Mueller, 2007). In some studies, the entrepreneurial ecosystem has been linked to the activities of universities and public institutions and the importance of the success of new business projects (Carvalho, Dominginhos, & Costa, 2010; Shackles, Greene, & Rice, 2010; Liu, Xia, & Zou, 2009; Fernández, Blanco Jiménez and Cuadrado Roura, 2015). As a result, these activities can produce several externalities in demographics, the economy, infrastructure, culture, mobility, education and social challenges, all of which will be reflected in productivity, competitive advantage, regional capacity, regional networks and identity (Goldstein, 1990; Goldstein and Renault, 2004; Powers and McDougall, 2005; Guerrero, Urbano, and Fayolle, 2014).

The role of universities is to produce or transfer knowledge and provide leadership for the creation of entrepreneurial thinking, actions, institutions and what Audretsch calls 'entrepreneurial capital' (Audretsch, 2014; Guerrero et al., 2014). University performance is a relevant factor in shaping innovation capacity and competitiveness in certain regions (Bonardo et al., 2010; Huelsbeck et al., 2013; Lehmann et al., 2012; Li, 2009; Guerrero et al., 2014). Because of the importance of the role of the university, the cooperative manager felt it was necessary to establish a strong relationship and encourage the university to get involved sustainably with cooperative actors in an effort to achieve the progress of the cooperative business in Sukabumi.

4.3.5 Connectivity with the Community

The majority of cooperative managers have a relationship with social community actors (60%). Relationships between cooperative managers and social communities occur

because of the conditions of mutual need for one another. The cooperative manager in running his business needs labor that can be more easily obtained from the surrounding social community. Therefore, social actors are actors that cannot be separated from cooperatives in Sukabumi. Social community actors connected with cooperatives in Sukabumi consist of surrounding communities (31%), local youth (18%) and community leaders (11%) which means that surrounding community actors are social community actors who have a greater role than community actors others in the cooperative ecosystem in Sukabumi.

The cultural elements represented by social community actors have an important contribution to the evolution of the entrepreneurial ecosystem. This refers to strengthening informal institutions for entrepreneurs to feel insecure when doing business. Successful business actors are usually people who have experienced failure at least once before becoming successful (Isenberg, 2010; 2013). For cultural change to occur and people who face failure to be potentially useful, entrepreneurship must be communicated as a high social priority.

Relationships with many actors involved in the entrepreneurial ecosystem will increase the ability and productivity in entrepreneurship. This relationship will certainly have an impact on the culture of regional entrepreneurship in the ecosystem of a region. The concept of regional entrepreneurial culture is often used for the level of social acceptance and encouragement of entrepreneurial activities (Fritsch and Wyrwich, 2012; Beugelsdijk, 2007; Andersson and Henrekson, 2014). Therefore, these areas can influence entrepreneurial activities through a shared culture or a set of formal and informal rules (Werker and Athreye 2004). This can be found in areas where entrepreneurship is seen as a valuable gift and entrepreneurs are exemplary, a sustainable entrepreneurial culture can be formed (Saxenian, 1996; Huggins and Williams, 2011). There is a strong relationship with social community actors, providing strong cultural and social capital for cooperatives in Sukabumi to grow and develop.

4.3.6 Connectivity with the Market

All cooperatives have a relationship with market actors (100.0%). Market actors play a role in buying, marketing and selling cooperative products, even cooperating in a partnership providing products and services. Therefore, all cooperatives must be connected with market actors for the smooth and progress of their business. The most connected market actors with cooperatives in Sukabumi consist of Planet Computer (23%), final consumers (20%) and paramon (18%).

The market has a role in the entrepreneurial ecosystem in two ways. One 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, Wright, & Abdelgawad, 2014).

5. CONCLUSION

The research identified that there are several actors involved in the cooperative entrepreneurship ecosystem in Sukabumi in the context of knowledge transfer. These actors include cooperative actors (managers), government, banks, universities, social communities and markets. Actors in the cooperative entrepreneurial ecosystem in Sukabumi based on the Network Theory perspective show that market actors, governments

and social communities have a dominant involvement in the process of knowledge transfer related to the progress of the cooperative industry in Sukabumi. Market actors consist of Planet Computer, end consumers and paramon. Government actors consist of the cooperative and public service offices, the Industry and Trade Council and the Sharia City Council of Sukabumi. While social community actors consist of the surrounding community, local youth and community leaders. Each actor has made a real contribution in advancing the entrepreneurial quality of cooperative managers in Sukabumi through a different knowledge transfer process. Banking actors and university actors become actors who have very limited involvement with cooperative managers in the process of transferring knowledge in the cooperative entrepreneurial ecosystem in Sukabumi.

6. RECOMMENDATION

Future research is suggested to consider the use of a system dynamics approach to describe the causal relationships between actors involved in the entrepreneurial ecosystem, particularly in cooperative studies. The resulting causal relationship will be able to help find lever factors that can increase the resilience and competitiveness of the entrepreneurial ecosystem.

The concept of collaboration in the process of interaction between actors in the cooperative entrepreneurial ecosystem can also be studied in further research. This is important because the integration of the actors can improve the performance of the cooperative entrepreneurial ecosystem in improving the quality and productivity of entrepreneurship.

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