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### **Business Ecosystem of SMEs with Value Network Analysis Approach: A Case Study at Binong Jati Knitting Industrial Centre (BJKIC) Bandung**

#### Dodie Tricahyono\* and Siti Rodliyah Purnamasari

School of Economics and Business, Telkom University, Bandung, 40257 Jawa Barat, Indonesia

#### ABSTRACT

The purpose of this study is to identify the parties involved in Binong Jati Knitting Industrial Centre (BJKIC) ecosystem. An ecosystem here refers to reciprocal and mutual relationship among connected parties. This study uses a transaction approach in mapping roles and parties involved in BJKIC ecosystem. It uses a qualitative method with the case study as its type of research. The result of this study shows a weakness of some parties in BJKIC. It brings about the decrease in terms of the number of knitting businessmen in BJKIC and consumer buying interest towards BJKIC knitting products. There has to be an evaluation and strategic planning for the future. It can be done by brainstorming with all parties in BJKIC ecosystem.

*Keywords:* BJKIC, business ecosystem, evaluation and strategic planning, Small Medium Enterprise, value network analysis

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*E-mail addresses:* dodietricahyono@telkomuniversity.ac.id (Dodie Tricahyono) sitirodsari@student.telkomuniversity.ac.id (Siti Rodliyah Purnamasari) \* Corresponding author

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#### **INTRODUCTION**

Small and Medium Enterprises (SMEs) contribute significantly to the economy of Indonesia and ASEAN. The SMEs contribute to job and revenue creation (Central Bureau of Statistics Indonesia, 2012). One of the features of SMEs is its endurance in facing critical situations and had survived from economic shocks and even 'rescued' the Indonesian economy during the 1997 and 2008 financial crises. One of the industrial centres in Bandung is Binong Jati Knitting Industrial Centre

(BJKIC) that produces all kinds of knitting material. The sluggish national and global economy and decrease in orders and interest for knitting products have all affected BJKIC drastically.

The BJKIC ecosystem has a network of knitting businessmen (individual), "Kampoeng Radjoet" (community), cooperative (organisation), supplier, the City of Bandung Industry and Trade Department (organisation), research institutions, media, and consumers with reciprocal relationships among parties called an ecosystem. According to Soemarwoto (1983), ecology and economy had numerous similarities. Unlike economy, the currencies used in ecology trading is not monetary but material, energy, and information stream. Moore (1996) said that the term 'business ecosystem' did not only cover the main supply chain and the company but also other stakeholders, such as industry associations and the government. Furthermore, a business ecosystem consists of all individuals, organisations, government, and regulations in which the business interaction includes consumers, competitors, media, and so on.

This study aims to identify all the parties involved in BJKIC ecosystem and their role in boosting its revenue. Value network analysis is used to show the interaction in the relationship of each of party in BJKIC business ecosystem. The role identification of each party will be used as a guidance in setting strategies to be performed for BJKIC ecosystem development.

#### LITERATURE REVIEW

#### **Ecosystem Concepts**

According to Soemarwoto (1983), a central concept in ecology was ecosystem which refered to a reciprocal relationship between creatures and their environment. It is a system consisting of components that are well organised and operate as a unit.

#### **Business Ecosystem**

Business ecosystem is the relationship and attachment of each actor in an ecosystem. In the nature of ecology, an ecosystem is formed by a reciprocal relationship between creatures and their environment. A biological ecosystem involves all organisms that interact with each other as well as the environment in the same place. Moore (1996) claimed that business worked hard to provide its best to consumers. However, many companies fail because they do not recognise, understand, and deal with the environment outside them. Businesses and organisations must have knowledge and be able to adapt to a change of environment surrounding them (Simamora, Jerry, & Hartono, 2016). Successful businesses and organizations also have to develop a mutual long-term relationship with other actors in their business ecosystem.

#### MATERIALS AND METHODS

This study used qualitative method where a case study was a model of qualitative research that focused in individual or a particular social unit in a certain amount of time (Herdiansyah, 2012). The data collection techniques employed in this study were observation, documentation, and interview. The informants were civil servants from City of Bandung Industry and Trade Department, two members of Kampoeng Radjoet community who were also businessmen in BJKIC, a member of Knitting Industrial cooperative Binong Jati, and a lecturer from Telkom University as the representative of the research institution. This study used Value Network Analysis model to identify roles and interactions of each of party in BJKIC ecosystem.

#### Value Network

A value network is any set of roles and interactions in which people engage in both tangible and intangible exchanges to achieve economic or social good. Internal value networks include activity-focused sets of relationships among individuals (e.g., the chief executive officer and the chief financial officer or team members) within and among work groups (e.g., those within and between the manufacturing, research and development, or sales departments), and among the various work groups that make up the organisation (Allee, 2008). The value network of the enterprise helps us to fully understand the role of knowledge and intangibles in value creation (Allee, 2008).

#### **RESULTS AND DISCUSSION**

Based on the observation and interview at BJKIC, there were several parties with significant roles in BJKIC. They were Binong Jati knitting businessmen, the government from City of Bandung Industry and Trade Department, the research institution, consumers, suppliers, communities, media, and a cooperative. In order to understand the role and interaction of each actor towards BJKIC knitting businessmen, a value network analysis is conducted.

A partial value flow map was used to describe the exchange value that commonly happens between BJKIC knitting businessmen and the stakeholders. In the description of the value exchange in BJKIC, there were forms and symbols used in this study: 1) oval forms were used in the value flow map to represent the key player in BJKIC; 2) straight lines were used to show flow of money or cash payment; 3) dotted wide lines were used to show the flow of goods, services, or value given as the direct exchange of money or cash payment (tangible); 4) small dash lines were used to show the indirect benefit flow; and 5) arrows showed the direction of value flow.

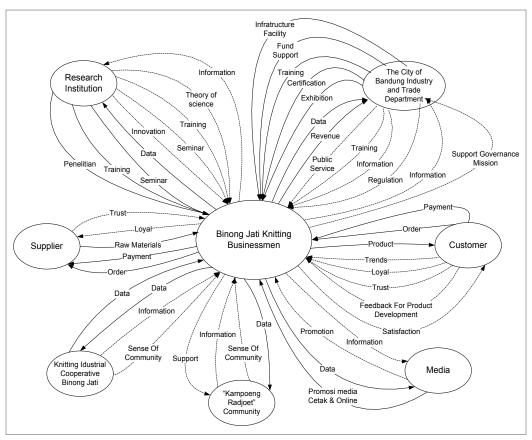
#### **Mapping Transaction**

Figure 1 shows the activity that happens in BJKIC. An arrow with a label shows all tangible and intangible transactions between one party and the other. The model in Figure 1 shows the real condition of each <del>of</del> party who takes a role in BJKIC.

#### **Binong Jati Knitting Businessmen**

One of the criteria of SMEs according to Article 5 of Regulation of The Ministry of Cooperative and Small and Medium Business is there are at least 20 people working in the SMEs with the capacity for production that can cover the area of

Dodie Tricahyono and Siti Rodliyah Purnamasari



*Figure 1.* Mapping transactions in BJKIC Source: research result

the industry which is prospective to be developed. At the moment, BJKIC has 200 businessmen who produce knitting products in Binong Jati.

#### Supplier

In the tangible value network analysis as in Figure 1, it can be seen that there is a transaction between the supplier and the knitting businessmen in Binong Jati (raw materials). A supplier is a provider of both raw materials and finished goods for a company (Pangemanan, Talumingan, Olfie, & Tangkere, 2014). There is also a transaction that occurs between the businessmen and the supplier that is order and payment. In the transaction between the supplier and the businessmen, it brings about trust between the supplier and the businessmen in which many businessmen purchase raw materials by credit from the supplier. Therefore, the businessmen become loyal to a supplier and not look for other suppliers.

#### **Research Institution**

Research institution has a task in coaching SMEs by conducting training, teaching

innovation to support development and providing theories related to business matters as well as seminar and workshop about digital knowledge, operation knowledge, entrepreneurship, and so on. Besides that, research institution also conducts research aimed at producing solutions for issues faced by the businessmen and for BJKIC development. The current research benefited from information and data from the businessmen.

## The City of Bandung Industry and Trade Department

The City of Bandung Industry and Trade Department has a more prominent role in terms of funding support, doing training, providing infrastructure facilities, holding an exhibition, giving certification, regulation, providing information, and performing public services that help all activities of BJKIC. It is supported by the theory proposed by David (2009) that both the central and the local government are regulation and deregulation makers, subsidiser, employer, and main consumers of an organisation. Besides that, the transaction that occurs between the businessmen and the government is due to the provision of data, information, and income to help regional development and support the government mission.

#### Customers

The BJKIC produces knitting materials for all ages and all sex. According to Article 1 Paragraph 2 of Indonesian Constitution No. 8 in 1999, consumers are those who use goods and/or services available in society, either for themselves, family or others. In buying and using knitting products, consumers order and pay the businessmen. When the need of the product is fulfilled, there will be the feeling of satisfaction from consumers. Consumers are divided into two parts: end customers and wholesale - around 80% of BJKIC consumers are wholesale and rest are end users. The fulfilled needs of wholesale consumers lead to their loyalty in addition to providing feedback to the development of knitting products useful for businessmen who are involved producing knitting products.

#### Kampoeng Radjoet Community

Based on Indonesia Dictionary (2017), a community is an organism group (person and so on) that lives and interacts with each other in a particular area. The community of Kampoeng Radjoet has a vision for BJKIC y, such as data delivery from both the community and the businessmen. Besides that, to realise this vision, the community also provides important feedback to all businessmen in Binong Jati by evoking a sense of togetherness and support to move forward and grow.

# Knitting Industrial Cooperative Binong Jati

Cooperative is an economic unit which benefits its members. The purpose of a cooperative is to encourage business growth of its members who are businessmen in the knitting industry. The transaction occurs between the cooperative and the businessmen in the form of data delivery. Besides that, the cooperative gives information and does some activities to evoke a sense of togetherness for all businessmen in Binong Jati in order to make BJKIC move forward and grow.

#### Media

Based on the definition of Association of Education Communication Technology (AECT), media a form of communication to convey a particular message. Media involvement is vital for BJKIC to promote its knitting products through printed media and online media. To do so, the media needs data and information from the businessmen.

#### CONCLUSION

The business ecosystem in BJKIC is where the parties have selected roles that will benefit the centre. Based on the result of observation and interview, the parties involved BJKIC are Binong Jati knitting businessmen, community, cooperative, supplier, City of Bandung Industry and Trade Department, research institution, media, and consumers. In order to understand the role and relationship of each party, a value network analysis was conducted which showed not all the players in BJKIC performed their role well.

This inevitably led to a reduction in in the number of businessmen in BJKIC and which affected its profit and economic growth of Binong Jati. Evaluation and planning of strategies for the future are vital by brainstorming with all the parties in BJKIC for a healthy ecosystem. Future study should provide solutions for the development of BJKIC ecosystem and for every actor in performing their roles properly.

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