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OPEN INNOVATION MODEL: EMPOWERING ENTREPRENEURIAL ORIENTATION AND UTILIZING NETWORK RESOURCES AS DETERMINAT OF INTERNATIONALIZATION SMALL MEDIUM AGROINDUSTRY PERFORMANCE

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Abstract

Agroindustry is one of the sectors which provides a big support to national economy. However, the added value given by this sector is still low, particularly for processed products, most of the products exported by this sector are raw materials. Agroindustry sector in Indonesia is generally dominated by Small Medium Industries that still have to face various limitations in order to give value added of the product both of manufacturing side and management aspect.

The tendency of market globalization and trade liberalization in the last decade has opened the business opportunities for entrepreneurs in agro industry sector to do many international activities, among others is through exports. The demand of the global era requires entrepreneurs who are willing to face risks, innovative, proactive and compete aggressively to be able to seek new opportunities and increase competition advantages.

Innovation is needed to provide value added to agroindustry products through value creation, so that raw material exports could be reduced. In the efforts in doing innovation, entrepreneurs can utilize open source that involves external parties by utilizing network resources.

This paper proposes conceptual model which can be used to conduct empirical study in the development of agro industry sector. This modeling is developed on the basis of empirical study and concepts related to entrepreneurial orientation, network resource and open innovation/co-innovation that can be used to increase the performance of SMEs.

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Keywords: entrepreneurial orientation, network resources, co-innovation, SMEs, value creation

1. Introduction

Promoting agroindustry sector may give a high economy impact particularly for SME entrepreneurs. The globalization era and free trade have opened the opportunities for SMEs conduct internationalization activities through export. Export as one of the internationalization methods provides opportunity for SMEs in developing the business by generating products with value added to improve performance. Verdin and Heck (2001:59) state there are three important benefits for companies in doing internationalization, namely: cost advantage, network benefit, dan learning opportunities.

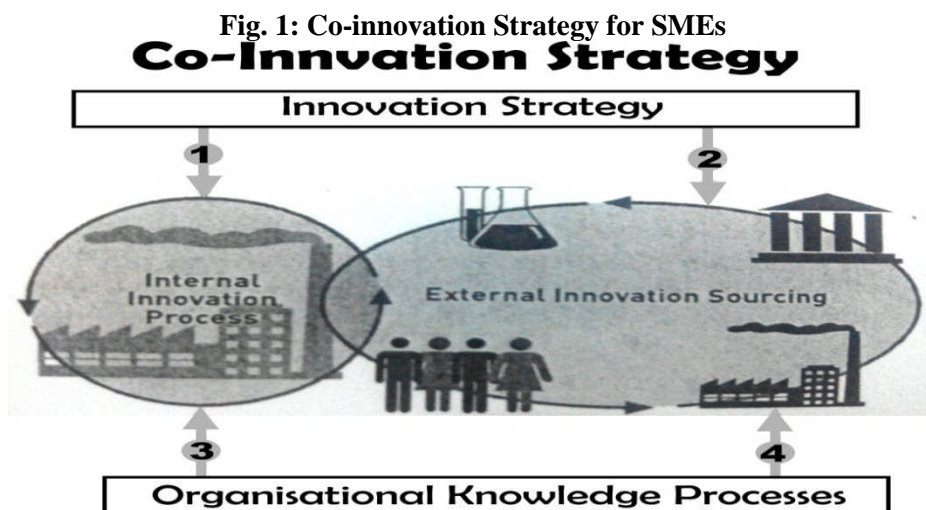
Doing business in international market for SMEs is a hard challenge. It is not an easy challenge because they have to prepare themselves for a tough competition with other business actors in international market. Regarding with Indonesia, there is a significant issue faced by SMEs, namely: whether they can be the main actor in international/global market and serve not only domestic or local market (Tambunan 2007:75). One of the dominant aspects to be able to prepare business actors who are ready to compete in global market is to have a high entrepreneurship orientation. The entrepreneurial orientation reflects the courage to take risk, be innovative, proactive and the ability to compete aggressively that are important to enhance the growth and performance of SMEs (Fairoz et.al. 2010:35). Companies where the actors have high entrepreneurial orientation level show the courage to take the risk, innovative proactive and the ability to compete aggressively and independent that they are able to find new opportunities and enhance both the competition and performance advantages (Chen et.al. 2011:705).

SMEs need business actors who have a high entrepreneurial orientation due to the high competition level in international business. As stated by SME Directorate General-Ministry of Industry (from Gema, March 2011:7), “Business actors who are entrepreneurial oriented are an important pillar for SME development and become a success indicator of SME”. Allegedly, business actors in Indonesia have not been optimally to be entrepreneurial oriented. This is characterized by the low number of entrepreneurs. The source from Ministry of Industry states that it is estimated that Indonesia only has 440.000 entrepreneurs or 0.18% of the total population, while developed countries such as United States and Singapore have the total of entrepreneurship of 11.5% and 7.2% of the total population (from Gema, December 2010:11). Next, the growth of global knowledge economy related to the emergence of variety of intensive needs of SME to capital intellectual in international market surely requires high entrepreneurial oriented business actors. Developing as strong entrepreneurial orientation is expected to encourage the involvement of SMEs in doing international business (Lan and Wu 2010:56). This is an interesting phenomenon to be studied furthermore because there have not been many studies regarding entrepreneurial orientation based on strategic orientation to utilize the opportunities of international market particularly in the developing countries (Jones et.al. 2009:1).

Besides the entrepreneurial orientation, the reason why SMEs are not optimal in doing international business is thought to be caused by the limitation in utilizing network resources causing difficulties in: accessing knowledge, resources and entering international market (Cerrato and Piva 2008:5). However, it's not easy to build network for SMEs. Abdulah and Zain (2011) in their study showed the reason why SME did not perform any international business, among others is the difficulty in utilizing network resources. Other than the obstacles faced, it is suspected that practices implied in building network still rely on social network. This network building practice emphasizes more on the social aspect, done based on friendship, both personally and informally without any specific agreement or contract (Johanson and Vahlne 2003:83), that SMEs have not been able to build network optimally which can be used as capital or strength (network capital) by calculating investment aspect that is “economic, rational, calculative,

investment and logic” (Huggins 2009:522). The networking formation of SMEs is a new business practice in utilizing network resources which has been depending a lot on social capital (Huggins, 2010). Shaw (2006:6) in his empirical study showed that small enterprises tend to use informal source compared to formal sources in obtaining information and input in developing network. This phenomenon still occurs that the practices of social network-based formation to enter international market are not “the most interesting scholarly issues”, it means that today the utilization practices of network resources are thought to be important. Other argumentation is proposed by Tang (on Jones et.al. 2009:119) who conducted a study on SMEs in di China that social and personal network is quite important as a foundation in business development of companies in China, however today it is no longer important. Companies in China need to utilize wider network resources to overcome the obstacles related to internasionalization.

In order for agroindustry products to compete in global/international level, building collaboration with other parties in network resources is a perfect strategy to use open source in innovating. SMEs can develop the co-innovation strategy with partners in the open innovation-based network involving external sourcing (Odentahal ,2004) (See Fig. 1). Open innovation is a rapid step so that innovation can be done quickly and can reduce cost by utilizing supports of all parties in the network. Innovation done by companies is experiencing breakthrough of closed innovation into open innovation (Melese et. al.,2009; Chesbrough,2011). Chesbrough (2011) describes that in closed innovation companies are working alone in developing the ideas of innovation, fabrication, marketing and distribution. On the other hand, open innovation involves knowledge and expertise outside the company that can be utilized to provide added value to company. Then, Marques (2014:200) affirms that it is not easy to utilize the open resources since the essence of open innovationis sharing information, but openness can be related to sensitive knowledge, which can cause to difficulties of commercialization and technology. Next, Arigo (2012:60) proposes that open innovation expressly to the use of inflows and outflows of knowledge among many partners to accelerate innovation. In short, open innovation emphasizes on the importance of utilizing knowledge from external environment and change it in innovative process, product and service. The similar statement is proposed by Ebert (2007) “open sources drive innovation”. The latest empirical studies of some experts (Reed and Barness,2012; Martinez et al 2014, Baldwin and Hippel 2010) show that open innovation supports the creation of competitive advantage that can generated profit through investment of innovative design that performance in term of survival can be maintained.



Source: Camlek (2012:121)

2. Propositions and Conceptual Model

2.1. Propositions

Actors in agroindustry are forced to have a high entrepreneurial orientation. In relation to small and medium enterprises, Fairoz et al (2010:35) states entrepreneurial orientation shows "innovation, proactive, and the quality of courage in taking risks is essential for the growth and performance of small and medium-sized enterprises". Other experts such as Quince and Whittaker (2003:1) states entrepreneurial orientation is seen in the innovative behavior of companies such as proactive and willing to take important risk for small high-tech enterprises". Wiklund and Shepherd (2005:74) suggests the definition of entrepreneurial orientation as a strategic orientation of the company, to understand specific aspects of entrepreneurship such as decision-making styles, methods, and practices ". Other experts such as Moreno and Casilas (2008:507) states "entrepreneurial orientation is a logical consequence of innovative, proactive, and risk-taking behaviors that are important for the growth of small and medium enterprises". The point is, business actors who have high orientation can show willingness to take risk, innovative, proactive, compete aggressively and independent to increase the internationalization intensity. The connection between entrepreneurship and internationalization intensity is supported by empirical studies conducted by several experts (Clerg et.al.,2005:415; Melia et.al.,2007:78;and Lan & Wu, 2010:67) which show the support of entrepreneurial orientation to the degree of internationalization. This is affirmed by Okpara (2009:1283), "entrepreneurial orientation in terms of utilizing international market means to be active, proactive, and aggressive in doing international activities (export). The results of several empirical studies can be used as bases to propose the following proposition:

Proposition 1: "Intensity in doing international activities needs to be supported by business actors with strong entrepreneurial orientation.

Actors in agroindustry are required to be able to utilize network resources as open source to increase product innovation. Product innovation is done by establishing interaction with all parties in network resources. Therefore, the innovation becomes open innovation which combining internal innovation process through capturing new ideas to putting concept into practice. One important to be taken into consideration by SMEs is the engagement aspect, namely interaction intensity between members in the community which can be identified from the participation. Co-innovation becomes a cutting edge so that SMEs do not perform innovation individually but supported by all parties in the network. This argumentation is based on the concept and empirical studies conducted by several experts (Lush and Vargo 2004; Ramasvamy, 2008, Odenthal et al, 2004; Ebert, 2007; Jaka et al 2011; Marques, 2014; Dvorak 2014). On the basis of opinions and the support of prior empirical researches, the next proposition is made:

Proposition 2: "Creation process of Value becomes the benchmark of the success of value creation by involving external parties where engagement as crucial point so that interaction and participation can run optimally to develop co-innovation. The involvement of open source as external innovation sourcing needs to be combined with internal innovation process so that value creation can run optimally".

The success of the agroindustry players in entering the international market cannot be separated from its ability to produce value added products. Value creation is an important factor in order to provide benefits and solutions to customers better than competitors' products. Competitive advantage through value creation will maintain the sustainability of products in the international market. Some experts (Piller et al, 2011; Ramaswamy, 2008) have made the development of the concept and an empirical study which stated that the value creation results in increased business activity of the company. On the basis of the opinions

and supports of empirical research that have been done before, the following proposition can be stated as follow:

Proposition 3: The success to increase the intensity of internationalization is influenced by the efforts of the company in developing value creation.

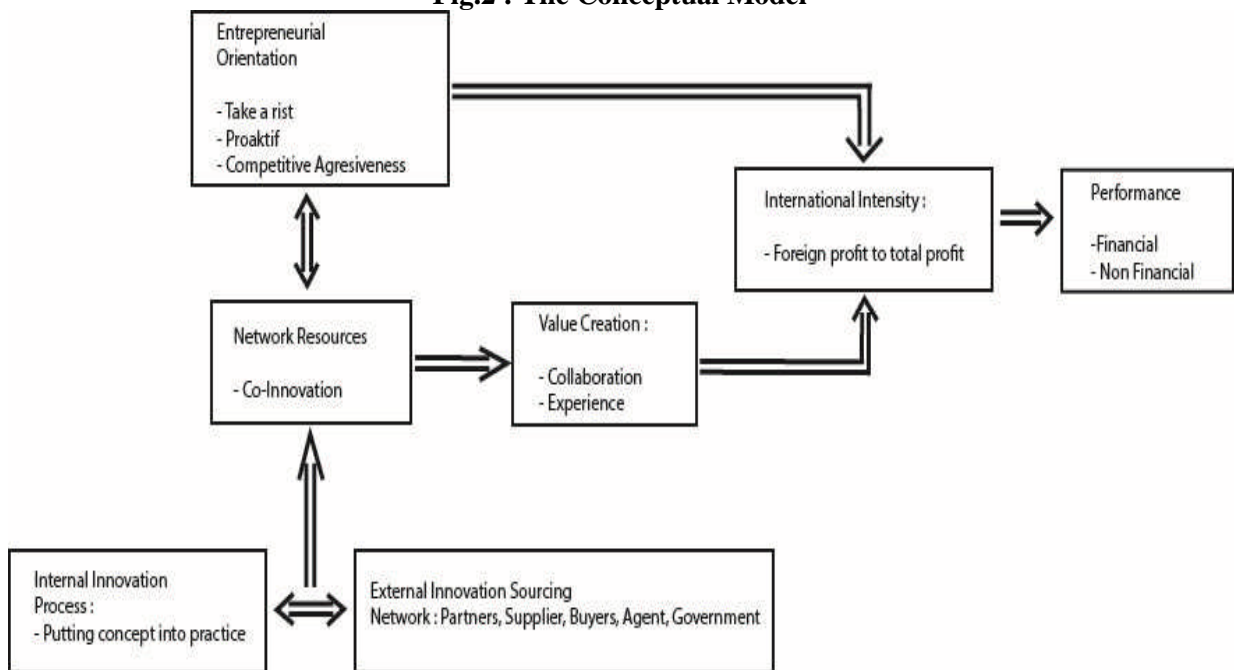
Performance of agro industry players in the sector may be affected by the high intensity of internationalization, because it can increase the opportunities for growth in sales and profit. Based on empirical studies (Sullivan1994: 337; Rieck et al, 2005: 23; Loncan and Nique 2010: 49 and Chelliah et al, 2010: 33) the positive influence of internationalization and business performance can be proved. Based on the opinions and support of empirical research that have been carried out before can be stated as the following proposition:

Proposition 4: Performance of SMEs increases if they can take advantage of the opportunities of international market by conducting international activity through export.

2.2. The Conceptual Model

Based on these propositions, the conceptual model to increase the performance of SMEs in agroindustry sector is as follow:

Fig.2 : The Conceptual Model



Source: Author

3. Discussion

Business actors in the agroindustry sector are required to improve the ability to process products, so that the resulting products can provide added value. By producing products that can provide value to consumers, business actors can increase the intensity to explore the global/international market which has a big potential. However, it is not easy to enter the international market because the competition with other business actors is very tight and the high demands on product quality.

To be able to enter the international market, it is required for businesses actors to have high entrepreneurial orientation namely willing to take risks, proactive, active, independent and able to compete aggressively. In addition to the entrepreneurial orientation, businesses actors are required to utilize network resources as open sources to be able to perform co-innovation activities. Utilizing the open sources is a form of open innovation that utilizes external innovation sourcing from various parties such as suppliers, agents, government and buyers. These parties can be utilized by businesses actors to support innovation aimed at creating value co-creation.

So, businesses actors who are entrepreneurial oriented and able to utilize the network resources to perform activities of co-innovation is expected to smooth the way to enter international market. The higher the intensity of internationalization will result in performance improvement. Therefore, business actors in the agroindustry sector can take part in the international market.

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