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NETWORKS SYMBIOSIS CAPABILITY AS MEDIATOR BETWEEN STRATEGIC ALLIANCE AND BUSINESS PERFORMANCE: EMPIRICAL STUDY ON IKAT INDUSTRY IN BALI AND EAST NUSA TENGGARA

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ABSTRACT

Purpose - The trend of increasing cooperation between companies in the form of strategic partnership is currently considered as a response to the rapid changes on business environment. However, there are still contradictions on both the business phenomenon and the research result. Therefore, the purpose of this research is to examine the mediating role of networks symbiosis capability in bridging the relationship of strategic alliance and business performance

Methodology - The population of this research are tenun ikat businesses in the province of East Nusa Tenggara and Bali. The samples are 200 respondents in the Region of Sumba Timur, Kota Madya Kupang, Region of Gianyar and Klungkung. Data were collected with the use of questionnaires and analyzed using structural equation analysis with AMOS V.21.

Findings- The results show that the strategic alliances built by ikat businesses have no impact on the improvement of business performance. However, the network symbiosis capability plays a significant mediating role in bridging the relationship between strategic alliances and business performance.

Conclusion- Strategically, SMEs can improve business performance by developing the network symbiosis capability as a resource for their companies.

Keywords: Strategic alliance, network symbiosis capability, resource dimension, business performance.
JEL Codes: L140, M140, M21

1. INTRODUCTION

The changes occur in the last two decades have showed the increasing number of partnerships between companies done in order to face the quick changes of the business environment. The pressure of globalization, technological progress, increased customer expectations, and changes in the current regulations encourage companies to seek business partners who can complement the resources and capabilities. As a consequence, the strategic alliance between the companies became the focus of both the managers and researchers today (Culpan 2008 and Vailleux, Haskell, and Pons, 2012).

Contradictions remains from various studies conducted by experts on the relationship of strategic alliances and business performance. The model developed by Teng (2007) put the strategic alliance as an independent variable for competitive advantage in this case the company's performance. While on one hand studies conducted by Murray and Kotabe (2005), Lee (2007), Lavie (2007) and Lin, Yang, and Arya (2009) showed that strategic alliances brings positive and significant effects

on the company's performance, on the other hand, studies conducted by Goerzen (2007) and Camison, Boronat, and Villar (2010) found that the strategic alliance has no significant effect on business performance.

As a matter of fact, small businesses in Indonesia play strategic roles in supporting national economic growth so that the government put efforts to do business development programs through partnerships with State-Owned Enterprises (SOEs), to utilize and synergize the resources of the Ministry of Small and Medium-sized Enterprises (MSME) and Bank Indonesia in order to increase access to financing and development of MSME, and to improve the knowledge, abilities and skills of SMEs and to form clusters/industrial centers of SMEs that aimed at improving the competitiveness of small and medium-sized enterprises by emphasizing the value of the efficient use of time and distance in producing a product, which in turn led to lower the production and marketing costs. However, those efforts are still not sufficient to improve the performance of the SMEs. An interesting business phenomenon can be seen from the result of evaluation on the SMEs centers facilitated by the Indonesian Ministry of Cooperatives and SMEs which shows a decreasing in case of productivity before and after the retrofitting took place.

As described above that there is a discrepancy in the previous research on the relationship of strategic alliances and business performance, and as the phenomenon itself shows that partnership program does not necessarily generate good business performance, this study is aimed at examining the mediation role of networks symbiosis capability in bridging the relationship of strategic alliance and business performance.

The rest of the paper is organized as follows. The second section is the review of literature and hypotheses developments. İn the third section, the data and the methodology utilized in this study is explained. The fourth section is the report on findings and discussion. The final section concludes the findings of the study and make considerations on their implications for future research agenda.

2. LITERATURE REVIEW

2.1. Driver for Business Performance

Strategic alliance is a collaborative agreement which is an explicit part of the company's development plan, which covers not only the form of full ownership, but also includes the short-term agreement. Based on model developed by Forrest (1990), the strategic alliance may be helpful in overcoming the problem of lack of expertise or facilities in the production and the lack of marketing/distribution resources and the need for rapid exploitation of the technology. With the strategic alliance, the companies involved can benefit from various forms such as the ability of innovation, technological competitiveness and technology leadership, which then lead the company to achieve a high performance.

The company's (organizational) performance is a picture of the success of the company to achieve its goals and can be measured by objective and perception (Wang, 2008). Wiklund (1993), Avlonitis and Salavou (2007), categorize performance which based on perception into two categories namely financial performance and marketing performance perceptional. The perception of financial performance is measured by the perception of managers on the performance of the company compared with the competitor. Similarly, the perception of financial performance utilizing the perception of sales growth, employee growth, and the company's market share instead of its competitor.

Lavie (2006) extended the Resource-based View (RBV) to explain the interconnection of the company in dyadic collaboration/alliance by combining both internal and external resources which can lead to the achievement of competitive advantage of the company. This includes the relational advantages extracted from the shared resources among the partners. Therefore, strategic alliance brings a positive effect on the company's performance.

Empirical studies conducted by Cao and Zhang (2011) on the impact of supply chain collaboration to company's performance in manufacturing companies in the United States found that collaboration/supply chain alliances has a positive effect on company's performance. Previous studies by Lavie (2006), Lee (2007), Lin, Yang, and Arya (2007), Sarkar, Echambadi, and Harrison (2001), and Cao and Zhang (2011) found a positive influence of strategic alliances on company's performance. Then, the hypothesis can be formulated as follows:

H1: Strategic alliance has a positive effect on the company's performance

Czakon (2009) states that the development of alliances between organizations is followed by increased capitalization of networks which need to insert external resource ownership used together by the organizations. In this understanding, rents are raised cross-border organizations and inter-company collaboration. Resource exploitation occurs both inside and outside the organization. There are three processes of networking capabilities in strengthening the RBV namely *building, integration* and *reconfiguration* of the resource base of the company. From the perspective of RBV, the relational capabilities is defined as a type of capability dynamic with the capacity to deliberately create, expand, or modify the resource base of the company, added to include resources from partner alliances.

Lisboa, Skarmeas, and Lages (2011) argued that the strategic alliance is an important strategic resource that reflects the company's philosophy of how the business is run and adapt to the environment in order for the company to gain competitive advantages and generate the expected performances by developing organizational capabilities. This study develops the concept of networks symbiosis capability as a new concept. Symbiosis refers to a common understanding of living together closely. Barabel and Meier (2010) emphasizes that the term symbiosis shows compulsory relationship which has survival imperative and endurance as its characteristics that provide mutual benefits for both parties. It then can be inferred that the networks symbiosis capability is a company's ability to preserve and maintain a long term and mutually beneficial relationship in the network.

Mort and Weerewardena (2006) and Moller and Svhan (2005) argued that networks capability in the organizational level plays an important role in developing and maintaining the long term relationship which enables the partners to have access to the resources in order to improve their performances. Therefore, the hypothesis can be formulated as follows:

H2: Network symbiosis capability has a positive effect on the company's performance.

Lavie (2008) states that networking resources are the asset owned by the partners yet have the possibility to be accessed by the company by having close relationship with its partners. In the context of alliance, the main objective of establishing the network is to have access to the resources which are valuable for the company. Zhao (2014) says that based on the perspective of RBV, the resource factor is the key factor for the success of small-sized businesses so the network which supply the resource will be able to develop the company's performance. The hypothesis can be formulated as follows:

H3: The resource dimension has a positive effect on the company's performance.

2.2. Strategic Alliance and Networks Symbiosis Capability

Yan, Zhang, and Zeng (2010) states that business networking in the literature of cooperation development is described as a relationship of two or more independent companies that work together collaboratively to achieve greater business success through synergy. The researchers agree that network capability is acquired in the independent activities inter-companies. Networking capability is used to facilitate the collaborative activities in order to improve further activities carried out to develop the market so the specific resource of the companies can be used, shared, and improved merely if there is an equal solidarity between the organizations. Then, the hypothesis can be formulated as follows:

H4: Strategic alliance has a positive effect on the networks symbiosis capability.

2.3. Networks Symbiosis Capability and Resources Dimension

According to Swan et al (2007), in order to ensure a long term continuation of the innovation, the company needs to put efforts in improving its resources. It means that it is important to do approach of integrating knowledge and skills with the partners in the network. It then leads to the main objective of the inter-organizational relationship carried out by the company which is to creating value by combining the assets, sharing of knowledge, increasing speed to the market, and accessing the global market. Or, in other words, the establishment of relationship between the companies is to create a competitive advantage by minimizing risk and improving access to vital resources and information.

Ferer, Hyland, and Bretherton (2007) says that the company needs a networking capability to discover, develop, and manage the resources provided in partnership in order for the company to be able to promote innovations for the development of new products and processes to meet the market's demand. The hypothesis can be formulated as follows:

H5: Networks symbiosis capability has a positive effect on the resource dimension.

3. DATA AND METHODOLOGY

The population of this study are the companies included in the category of textile industry that is focused on the sub-category of industrial spinning, weaving, and finishing which are under the code 131 based on the KBLI 2009 (Klasifikasi Baku Lapangan Usaha Indonesia year of 2009). There are 200 samples used in this study, on the grounds that the amount has been fulfilling the adequacy of the number of samples for *maximum likelihood estimation* technique. The selection of 200 samples is centralized in the cities that have the weaving industry in the province of East Nusa Tenggara and Bali. In East Nusa Tenggara, the focus is in East Sumba and Kota Kupang, while in Bali, the focus is in Gianyar and Klungkung regency. The sampling technique used in this study is the combination of *systematic sampling* and *purposive sampling*. The reason of using the purposive technique is that the sample/respondents need to meet the requirements of 5 years of operating as a company and have a network of cooperation (partnership) with the other parties.

Data collection method used in this study was visiting respondents and asking them to fill in the questionnaires after passing the validation that particular respondents meet the specified criteria. Then, the respondent was given an explanation of the purpose of the study and asked for their willingness to fill in the questionnaire of the study. The

questionnaire which was used as an instrument of data collection covers the statements that are developed to measure the variables studied in this research. The scale of measurement used for each variable was the interval scale. Interval scale is a data measuring device that can produce a range of values that has meaning, which makes it possible to perform parametric statistical tests. The technique used in this study was the *agree-disagree scale* that is by developing a statement that generates answers of agree or disagree in a variety of ranges of values (Ferdinand, 2011). The range of values used was from 1 for strongly disagree to 10 for strongly agree with the statements. Further, the testing of models and hypotheses, which have been formulated in this study, based on data obtained was carried out by using the analysis of *Structural Equation Model* (SEM) with the support of AMOS 21 program.

4. FINDINGS AND DISCUSSIONS

We collected data in June 2016. The characteristics of the respondents, which are shown in the Table 1, indicate that most of the companies are start-up companies with 5 to 10 years of business operation, employ 5 to 19 employees, and have assets of less than IDR 50,000,000.

Table 1: Description of Respondents

Variables	Frequency	Percentage
Years of Business Operation		
5 – 10 years	67	48.2
11 – 15 years	42	30.2
16 – 20 years	19	13.6
> 20 years	11	8.0
Number of Employees		
< 4	32	23.0
5 – 19	92	66.2
> 20	15	10.8
Assets		
< IDR 50,000,000	88	63.3
IDR 50,000,000 – 500,000,000	41	29.5
> IDR 500,000,000	10	7.2

Data analysis began with the process of ensuring the quality of data that met the requirements of structural equation modeling technique, especially related to normality. The first stage was to re-evaluate the stability and consistency of data that have extreme response of each indicator given by the respondents. The second stage was to remove the data which were *outlier*. Those earlier stages helped obtaining the data profile which did not indicate the presence of data which were not normally distributed. The data then can be received and used for structural modeling analysis (Ferdinand and Killa, 2014). There were 139 data series remained which were further analysed with the support of AMOS V.21. It then, in turn, produced the good model (*goodness-of-fit model*) that can be received, as presented in the following figure.

Figure 1: Testing of Structural Equation Modeling

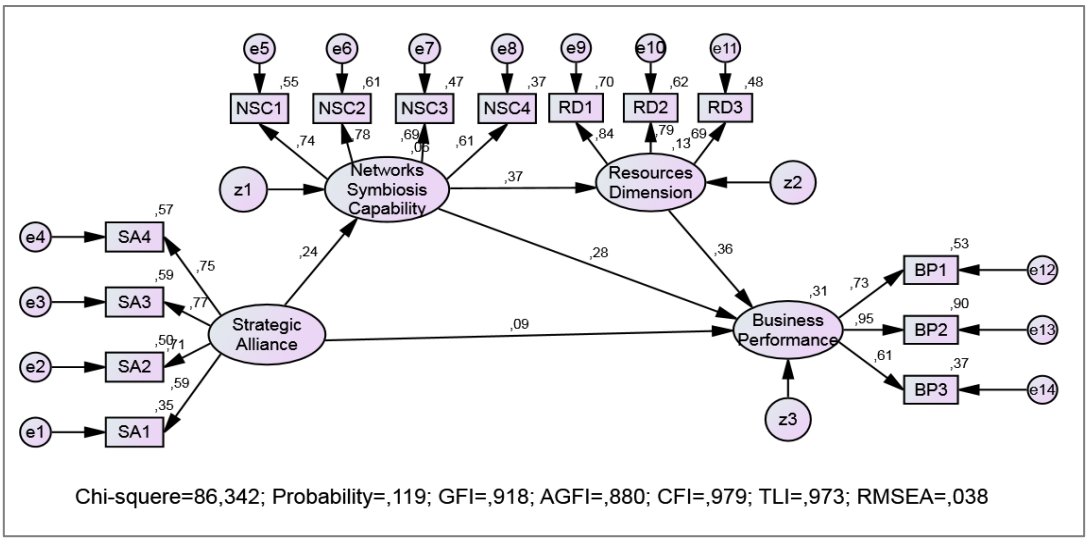


Figure 1 shows that all the required criteria of goodness index model indicats the good criterion with the level of significance (probability) of more than 0.05, a low value of Chi- square, the GFI index which is more than 0.90, the CFI which is more than 0.90, and RMSEA which is less than 0.08. Although one of the indices, in this case the AGFI index is less than required, but the overall goodness model is acceptable and can be used to test the hypothesis.

Furthermore, the results of hypothesis testing can be seen in the coefficient structure of regression value as presented in the following table.

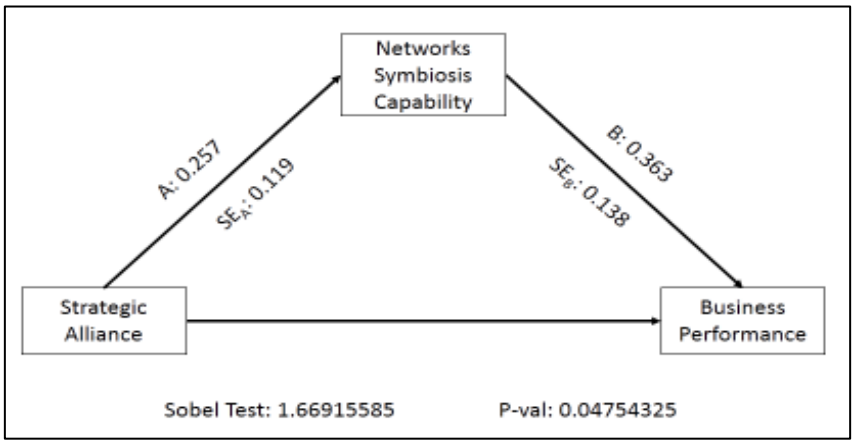
Table 2: Structural Coefficient Value

			Estimate	S.E.	C.R.	P
Networks_Symbiosis_ Capability	<---	Strategic_Alliance	.257	.119	2.165	.030
Resources_Dimension	<---	Networks_Symbiosis_Capability	.504	.145	3.478	***
Business_Performance	<---	Strategic_Alliance	.135	.130	1.037	.300
Business_Performance	<---	Resources_Dimension	.341	.099	3.442	***
Business_Performance	<---	Networks_Symbiosis_Capability	.363	.138	2.635	.008

The result of the hypothesis testing presented in Table 2 indicates that H1 (*Strategic alliance has a positive effect on the company's performance*) has the CR value (Critical Ration or *t* value) of 1.037, which is smaller than 1.96 (the required value for accepting a hypothesis). It means that H1 is rejected. While H2 (*Network symbiosis capability has a positive effect on the company's performance*.) has a CR value of 2,165 that is greater than the value of the acceptance requirements. It means that the H2 hypothesis is accepted. Similarly, the H3 (*The resource dimension has a positive effect on the company's performance*), H4 (*Strategic alliance has a positive effect on the capability of network symbiosis*) and H5 (*Network symbiosis capability has a positive effect on the resource dimension*) had CR values which are higher than required for the acceptance. Then, the hypothesis H3, H4, and H5 are also accepted.

The Sobel Test is then used to ensure the mediating role of variable of network symbiosis capabilities in bridging the gap between strategic alliances and business performance. The Sobel Test was done online at http://www.danialsoper.com. The result of the Sobel Test is presented in the figure below:

Figure 2: Sobel Test of Network Symbiosis Capability Mediation Role



The result of the Sobel Test presented in Figure 2, indicates that the network symbiosis capabilities have a significant mediating role in the relationships of strategic alliance and business performance. This is proved by the P-val value which is less than 0.05. This means that the strategic alliance will have an impact on improving the business performance if the company has the network symbiosis capabilities.

5. CONCLUSION

This study provides empirical evidence that strategic alliances built by ikat businesses has no impact on the improvement of business performance. However, the business performance can be improved through two indirect ways, firstly, strategic alliance – network symbiosis capability – business performance, and secondly, strategic alliance – network symbiosis capability – resource dimension – business performance.

Considering the importance of the role of networks symbiosis capability as the mediator in bridging the gap between strategic alliances and business performance, practically companies need to develop and improve the network symbiosis capability as a resource for the company. Thus, further research agenda is directed to, beside replicating the model that has been built and tested in other industrial types, also using other approaches such as social network analysis approach to ascertain the role of the importance of networks symbiosis capability.

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