

Strategic Knowledge with Strategic Alliance Based to Achieve a Sustainable Competitive Advantage

Widodo¹

Strategic alliance has been acknowledged as an effective way to sustain a competitive advantage through knowledge management. However, research showed that strategic alliance has ignored new concepts on learning cycle and information that shared by partner. A failure of partnership in Small and Medium Entrepreneurship (SME) usually caused by foundation from low commitment of partnership. It does not base on their need to grow together with the partners. This study developed and tested strategic alliance model as strategic knowledge to achieve sustainable competitive advantage. Result of this study showed that strategic alliance as strategic knowledge can be used to improve social capital which then influence human capital. Social capital is developed through a trustworthy partnership model and networking quality. Human capital is developed through skill, creativity and be the best model.

1. Introduction

The fundamental problem of the strategy management is how an organization can achieve a superior performance and maintain a *sustainable competitive advantage* (Teece, D.J, Pisano.G and Shuen. A, 1997). However, the resources possessed by the organization, if it is too easy for a competitor to improve and create the more effective substitution resources, are not a major factor to achieve *sustainable competitive advantage*. Hsu (2007) and Partha Chowdhury Prasad (2013) define that , the easier the technology is imitated; with the rapid change of competitors and the rules of society; the more *organizational knowledge* emerges as a major source of competitive advantage. The study by Galunic & Rodan (2008) on *the resource-based view* emphasizes that the resources based *strategic knowledge* become an

¹Department of Management, Faculty of Economics, Universitas Islam Sultan Agung (UNISSULA) Semarang E-mail: widodo@unissula.ac.id

important component in the new economic era. Furthermore, the important element to create an effective strategic knowledge is an alliance strategic that its consequences can lead to achieve *sustainable competitive advantage* (Cegarara-Navarro, 2005).

Strategic alliances or partnerships is one of the effective ways to gain competitive advantage through knowledge transfer (Constantine Imafidon Tongo, 2013 and Liao , 2007). Strategic alliance or partnership is an agreement that arises between two or more organizations to share the costs, risks and benefits which is gained by developing new business opportunities involving exchange, sharing of knowledge, developing products, technology and services (Hong Ji , 2010) . Yet, the study by Yadong Lu (2008) evoke that the strategic alliance ignores new concepts of the learning cycle and given information provided by competitors. The failure of partnership on Small and Medium Enterprises (SMEs) are generally caused by a lack foundation of partnerships and merely based on mercies, under the coercion of others rather than on the need to move forward and develop together with partnered parties. A phenomenon in SMEs industry, especially batik, a hand craft in Central Java Indonesia, SMEs have low sustainable competitive advantage. It is because they do not optimizing the benefits of strategic alliance and do not take a learning condition between partner. As a result, most of SMEs members do their business with traditional ways, merely in production and marketing. Based on the description above, this article examines "*How a strategic alliances model as a strategic knowledge can realize the sustainable competitive advantage of small batik industry in Central Java Province.*"

2. Literature Review and Hypothesis Development

2.1 Strategic Knowledge

The process of learning as effect of the self-adjustment influences the relationship between a system and its external environment. The learning process can make people act in different ways according to the surrounding environment. In conclusion, it is the action of the actor itself that allows for learning. The strategic learning process refers to insight (an effort to find new things) and a view of the future. Nonaka and Takeuchi (1995) attribute the creation of knowledge with

continuous innovation; and continuous innovation with favorable competitive side. Therefore, strategic knowledge is knowledge that is created as a consequence of the cooperative learning process (David B. Zoogaha : 2011). Moreover, these include the following matters as follow:

a. Social Capital

Social capital is the actual and potential resources that can generate networking relationship with mutual respect and outfitting (Ferdinand, 1999). The study by Pennings , JM , K. Lee and A. van Witteloostuijn (1998) asserts that one of the important organizational resources is a *social capital* which is an experience of establishing a relationship with other organization. The relationship of the enterprises will continue to grow together with the value of social interaction (Salina David and Fadzilah Wan Yusoff Wan, 2010). Organizational resources and capabilities gained from the relationships are the source of strength and power of the enterprise (Elena Karahanna and David S. Preston , 2013 ; Tsai , 2005). In conclusion, the Indicator of social capital is reflected by the trust, quantity and quality of the networks.

b. Human Capital

Humans as a business actor have productive work ethics, skills, creativity, discipline, professionalism, and the ability to use, develop and control of science, technology and management skills. Human qualities as resources in various fields of the whole national life is in line with other advanced nations (Waseef Jamal, 2012). In real life, humans play a major role in improving productivity and advanced equipment of production. Moreover, It requires skilled and expert human resources by the expectation that their performance can improve the quality of life and humanism. The success of an organization is strongly influenced by the performance of human resources . Therefore, every organization or enterprise is always trying to improve the presence of *human capital* (Arnout Seghers , Sophie Manigart , and Tom Vanacker : 2012).

Human capital is the characteristics of human resources which is determined by the knowledge possessed by them to create values for the organization (Collins and Clark , 2003). The findings by Penning et. al (1998) explains that human capital management should pay attention to

the sources of knowledge and the ideology of the knowledge itself. The ideology of knowledge is proposed as a process of skill development and institutionalization of knowledge aimed to the market. Human capital is constantly changing (dynamic) due to internal and external factors . External factors related to the necessity of new recruitment to replace those who has resigned from the organization . Moreover, it also associated with the mutation. Meanwhile, the internal factor deals with the quality of human capital itself (Subramaniam and Youndt , 2005). Human skills may be less dynamic, so, the organization must immediately improve it through specific training programs. The study by Hsui (2007) and Song (2008) state that the improvement of commitment to the consensus will increase the *human capital*. Human capital is constructed by the indicator of changing skills, creativity and will to be the best. Organizational learning is used as a self-control strategy which can help humans to improve their skills and capabilities to obtain knowledge, so that, it can improve their performance (Cumings, 2006) . The findings of the study show that a learning orientation is able to encourage human resources to work harder, so, they can totally enjoy their work and lead to the high achievement performance (Sujan , Weitz , and Kumar , 1994).

An organization with a high level of human capital is more able to build a strategic relationship with external partners. Employees with high motivation and competence are more willing and able to influence and fulfill the needs of external partners, so that the external partners will be more willing to develop a long-term cooperation with the organization. The researchers emphasize that the social external relationship of individual provides an access to the important resources for the enterprise (Brown & Duguid, 1998). Human capital is viewed as an anteseندن networking resource because it represents the organizational capability to effectively respond to the needs of external partners, resolve the problems and provide various kinds of information. Therefore, the hypothesis built is:

H1: There is relationship between human capital and social capital.

2.2 Strategic Alliance

Strategic alliance or partnership is an agreement that arises between two or more organizations to share the costs, risks and benefits gained by

developing new business opportunities involving exchange, sharing of knowledge, developing products, technology and services (Hong Ji , 2010; David B . Zoogaha , 2011) . Strategic alliances can help enterprises in various aspects. Andrew C. Inkpen (2005) and Constantine Imafidon Tongo (2013) argue that the strategic alliance is an important strategy to improve organizational learning and a crucial element in the enterprise's competitive strategy.

Generally, Enterprises are hard to obtain *sustainable competitive advantage* in the market structure with hyper level conditions of competition (Ulrich L, 2009). Therefore, to deal with such competition, they need to have a cooperation (alliances) in *corporate strategy* to reduce the level of competition (Hong Ji , 2010; António Carrizo Moreira , 2013) . The study by Cegarra - Navarro (2005) reveals the two main elements of the strategic alliance that are exploration and exploitation of knowledge among partners. Meanwhile, according to Ulrich L, (2009) the strategic includes exploration, transfer and transformation of knowledge. Briefly, it can be explained as follows:

a. Knowledge Exploration

Knowledge exploration is initiated by a search, modification, risk-taking, experiment, and innovation in which the stage of new theories is introduced (Paul E., 2009). SMEs can encourage the exploration of knowledge by arranging formal and informal meetings or activities where customers and sellers can interact and work together to achieve certain goals (John P. Meyer , 2011, Cegarra , 2005). Exploration of knowledge is often needed to explore new capabilities and increase the fundamental knowledge exist in organizations (Ahuja , 2002) . Hence, the organizational learning as the core of the exploration creates a range of experiences associated with expanding knowledge. The exploration activities involve searching for new organizational norms, routines, structures, and systems; experimenting new approaches to technology, business processes, or markets; innovating and adopting a long-term orientation, and reconsidering existing beliefs and decisions (Tom JM , 2007).

So, the exploration is a prerequisite for exploitation. However, the benefits of exploration certainly depend on the amount of knowledge that has been accumulated and learned through exploitation (e.g.

routines, rules and procedure). Furthermore, the indicators of the knowledge exploration include frequency of meetings, maintaining collaboration, informal activities, discovering new possibilities related to products/services, processes or markets; evaluating a variety of options related to products/services, processes or markets; a strong focus on the renewal of the products / services and activities that need to learn new skills or knowledge that can improve the human capital and networking (Tom JM : 2007; Javier Tamayo-Torres, Antonia Ruiz - Moreno . 2011) Therefore, the hypothesis proposed is :

H2 : There is relationship between knowledge exploration and human capital.

H3 : There is relationship between knowledge exploration and social capital.

b. Knowledge Exploitation

Exploitation is basically process of acquiring competence by adopting, synthesizing and implementing the existing knowledge. It requires knowledge that has been created and internalized to be used to build reliability in experience (Weiping Liu, 2006). Exploitation refers to the application of external knowledge to improve existing products in the organization and its process (Paul E. Bierly, 2009 and Manuela Presutti, Cristina Boari, and Antonio Majocchi, 2011). The indicator of knowledge exploitation is active management change in which the introduction of new things and problem solving happen among partners, so then, it will lead to obtain more experienced-activities by the use of obtained knowledge (Tom J. M, 2007) .

The enterprise ability to apply knowledge to the process of innovation can be a crucial element to achieve competitive advantage. There are many types of knowledge (Grant, 1996), however, they are not able to be effectively generated and applied in the enterprise. The transfer and use of knowledge from external sources can expand the basic knowledge of the enterprise. The study by Hsui (2007) shows that 80% of respondents agree that knowledge becomes a strategic assets, and 78% of them agree that business opportunities fail because of not able to exploit the existing knowledge in the organization. Hence, the hypothesis built is :

H4 : There is relationship between knowledge exploitation and human capital

H5 : There is relationship between knowledge exploitation and social capital.

c. Knowledge transfer

Knowledge transfer is a major mechanism to facilitate knowledge sharing and integration practices in order to improve both short-term performance and competitive advantage (Yang, J. 2008). Moreover, the transfer of knowledge can be defined as the transmission of knowledge among people and absorption of knowledge from one to another (Young Bong Chang, 2012). Thus, it can be concluded that transfer of knowledge is a process by which certain capabilities are transferred from the source to the receiver whether individual or group of individuals. So, if a knowledge is transferred effectively, the recipients will enhance their ability. Finally, the individual and organizational performance will get improved collectively (Szulanski, 2002). The indicator of knowledge transfer includes *well-informed* employees related the purpose and result in which employees participate in defining the content and form of the process of resolving problems and making decisions without asking the leader.

Experts of social organization argue that enterprises can be identified as a social community, if it is specified to the speed and efficiency of the creation and transfer of knowledge. A view on a base knowledge organization is initiated by individuals and enterprises become superior with their ability to integrate knowledge across individual/*sharing knowledge* (Kogut & Zander, 1996).

An organizational learning requires human resources to use the time to pursue knowledge beyond the scope of their work. If the organization does not encourage the development of knowledge, the human resources will not be motivated to perform learning activities (Calantone, RJ et al. 2002; Qile He, David Gallear, and Abby Ghobadian .2011). By efforts and experiences, organizations can establish the continuity of interaction that recognize the value of the potential opportunities and choose what elements to be combined and then facilitate the exchange of knowledge

to improve the human and social capital (Lane & Lubatkin, 1998). Thus, the hypothesis offered is :

H6 : There is relationship between knowledge transfer and human capital

H7 : There is relationship between knowledge transfer and social capital.

d. Knowledge Transformation

Transformation of knowledge refers to the retention of knowledge over time (Lane et al, 2006). Transformation of knowledge is very important because knowledge must be maintained for years in order to be applied in new products (Wen - Long Chang, 2006). The indicators of knowledge transformation are employees provide creative solutions and participate in social events

A group of people who are highly motivated and skilled is a competitive advantage because it represents the firm-specific resources that are important, unique and difficult to be imitated. Companies with highly skilled and knowledgeable human resources have a higher human capital and more likely to create knowledge, make the right decisions and have better innovation on technology (Hitt et al, 2001). Study by Hsui (2007) reveals that the organizational learning associate with the development of new knowledge, it is very important for the ability of innovation and performance of organizations. The process of organizational learning in strategic alliances is a mechanism where the organization make the competitors as strategic knowledge (Cegarra - Navarro.2005) . Therefore, the hypothesis proposed is :

H8 : There is relationship between knowledge transformation and human capital

H9 : There is relationship between knowledge transformation and social capital.

2.3 Sustainable Competitive Advantage

Framework of resource-based perspective, organization is viewed as a relationship of resources and capabilities that can not be freely traded in

the market (Norus.J. 2006 and Prasad 2013). If the resources and specific competitive of the enterprise produces economical advantages and can not be imitated by competitors, the related resources and competitive will become a potential source of *sustainable competitive advantage* (Barney, 1991). Resource of enterprise is a whole factors; both *tangible* and *non-tangible* owned and controlled by enterprises and organizations; and it is used for production process to produce goods and services to meet people's needs (Amit & Schomaker, 1993).

However, the resources of the enterprise, in fact, is not a fundamental element to achieve *sustainable competitive advantage*. It is caused by the ease of competitors to repair and substitute resources more effectively. Therefore, a new paradigm develops to achieve a competitive advantage that is from the resource-based view of advantage to a competency-based. Organizational competence is heterogeneous, distributed and dispersed in a competitive environment. A heterogeneous competence can produce a competitive advantage by the following object-state (Barney, 1991):

1. Competence of the enterprises allows them to exploit the existing opportunities and neutralize threats or competition in the business environment.
2. Only a small number of enterprises in a competitive environment who possess and master the competencies.
3. Organizational competence is relatively immobilized in providing economic benefits for the enterprise. Competence can be said to be immobile if not easily imitated by competitors and can not be transferred from one enterprise to another.

Study by Chiquan G (2007) emphasizes that *sustainable competitive advantage* is based on durability, imitability and the ease to match the strategic assets of the enterprise. A group of people who are highly motivated and skilled is a competitive advantage because it represents the important, unique and unimitated resources of the enterprise. Companies with highly skilled and knowledgeable human resources have higher human capital and more likely create knowledge, make the right decision and have better innovation on technology and competitive advantage (Hitt, 2006). *Sustainable competitive advantage* is determined

by the strength of social capital. This makes sense because social capital is the actual and potential resources that can generate networking relationship of mutual respect and outfits (Ferdinand, 2005). Therefore, the hypothesis offered is:

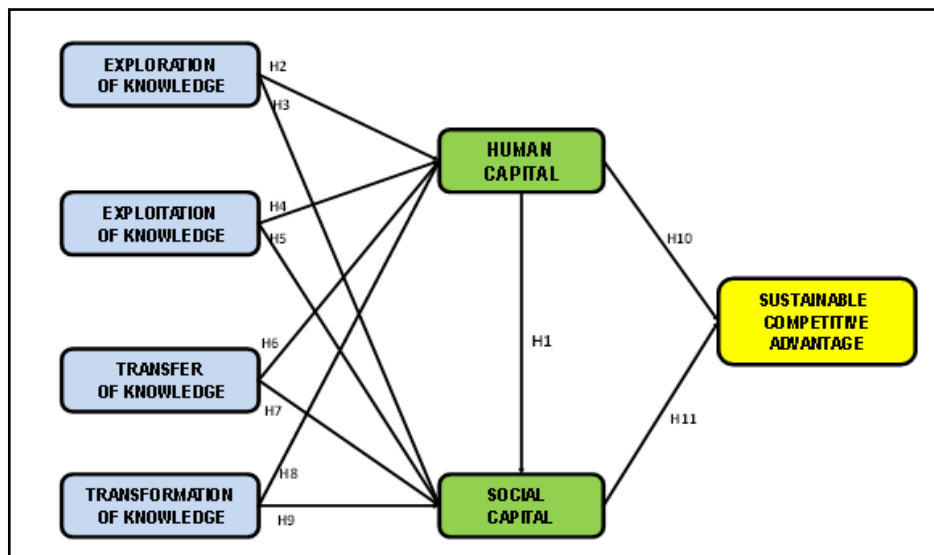
H10 : There is relationship between human capital and sustainable competitive advantage.

H11 : There is relationship between social capital and sustainable competitive advantage.

2.4 Empirical Model

Study that will be conducted is to identify and analyze models of strategic alliances as a strategic source of knowledge to achieve the sustainable competitive advantage of small batik industry in Central Java Province. Briefly, the research model can be seen in Figure 1 below:

Figure 1: Empirical Models



3. Research Methods

3.1 Sampling Technique

The population in this study is the whole small batik industries through out Central Java by the total of 1201 (Disperindag Prov.Jateng 2013). Then, the sampling used is purposive sampling technique, it means that it is based on the characteristics of the population covering area and location. The number of samples (sample size), according to Hair et al (1996), is indicators multiplied by 5 to 10 or at least 100 respondents. To be more optimal in generalizing the study sample, the sample of this study includes 150 respondents.

3.2 Variabel and Indicators

Variables and indicators in this study can be seen in the following table:

3.3 Analysis Techniques

To analyze the data of the study, it is used *the Structural Equation Modeling* (SEM) of the AMOS 5.0 software package. This model is a collection of statistical techniques that allow the testing of a relatively complex set of relationships. The excess of SEM application in management research is its ability to confirm the dimensions of a concept or a factor as well as its ability to measure the relationships that exist theoretically.

4. Discussion

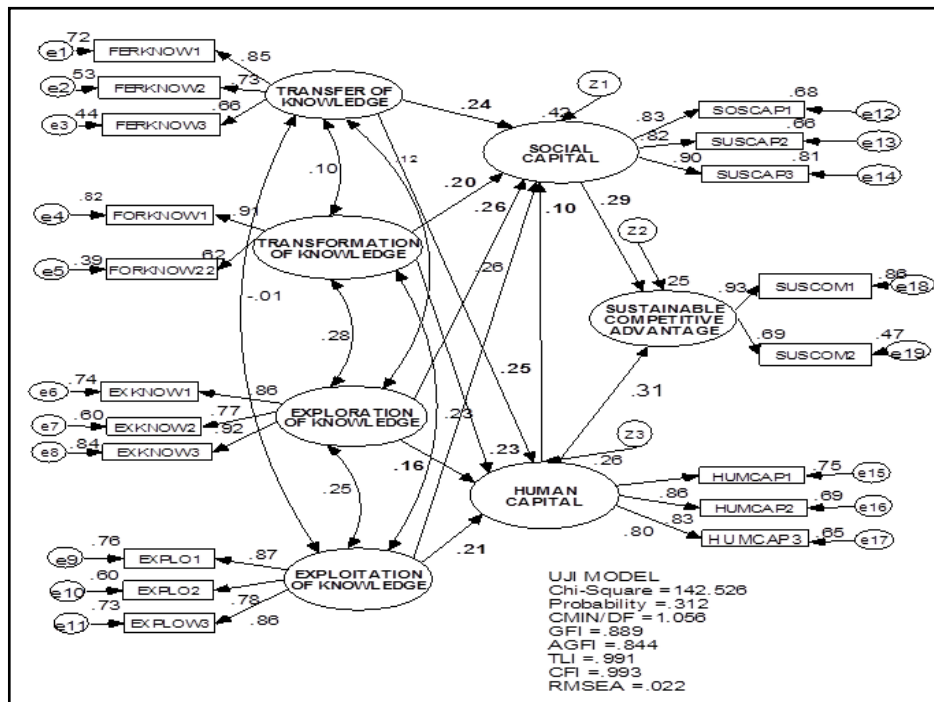
Based on the data analysis using AMOS software of full model *Structural Equation Model* (SEM) as shown on the figure 2, the test model shows that this meets the data or fits to the data used in this research. This is proven by Chi-Square, Probability, CMIN/DF, and TLI which are in a distance of expected score eventhough GFI and AGFI are accepted marginally. Then, based on this fit model, it will be conducted a hypothesis test proposed in this research as described in tabel 2.

Table 1: Variables and Indicators

No	Variables	Indicators	Sources
1	Knowledge Exploration New capabilities, and improvement of the basic knowledge existing in organizations.	<ul style="list-style-type: none"> • New possibilities • Evaluating options • Learning new skills or knowledge 	Ahuja (2002)
2	Knowledge Exploitation The process of acquiring competence by adopting, synthesizing, and implementing existing knowledge. It requires knowledge that has been created and internalized to be used to build experience reliability.	<ul style="list-style-type: none"> • Being active on receiving the changes and introduction • Solving problems together • Using knowledge 	Weiping Liu (2006)
3	Knowledge transfer The primary mechanism for sharing practice and facilitating the integration of knowledge in order to improve both short-term performance and competitive advantage	<ul style="list-style-type: none"> • <i>Well-informed</i> about the purpose and results • Making decisions without asking manager. • employee participation 	Yang. J. (2008).
4	Knowledge transformation Related to the retention of knowledge over time	<ul style="list-style-type: none"> • Creative Solutions • Getting involved in social events 	Lane et al (2006)
5	Human Capital Characteristics of human resources which are determined by human knowledge used to create value for the organizations.	<ul style="list-style-type: none"> • Changes in skills. • Creativity • The new idea • Being the best 	Collin and Clark, (2003).
6	Social Capital An actual or potential resources which are capable of producing network working relationship of mutual respect and mutual interpret	<ul style="list-style-type: none"> • Confidence with partners • The quality networking • Quantity 	Ferdinand (1999)

7	<p><i>Sustainable competitive advantage</i> Resources that have sustainable competences.</p>	<p>networking</p> <ul style="list-style-type: none"> • Possessing a long-standing excellence. • Possessing the excellence that the organizations do not have 	<p>Barney (2009)</p>
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Figure 2: Full Model Of Sustainable Competitive Advantage



Equation :

- $Y_1 = 0,23 X_1 + 0,23 X_2 + 0,18 X_3 + 0,21 X_4 + e$
- $Y_2 = 0,24 X_1 + 0,20 X_2 + 0,28 X_3 + 0,26 X_4 + 0,26 Y_1 + e$
- $Y_3 = 0,29 Y_1 + 0,31 Y_2 + e$

Tabel 2: Standardized Regression Weight

	Std.Estimate	S.E.	C.R.
HUMAN_CAPITAL <- EXPLORATION_OF KNOW	0.264	0.104	2.622
HUMAN_CAPITAL <- EXPLOITATION_OF KNO	0.205	0.096	2.043
HUMAN_CAPITAL <- TRANSFORMATION_OF K	0.230	0.114	2.948
HUMAN_CAPITAL <- TRANSFER OF_KNOWLED	0.249	0.135	2.444
SOCIAL_CAPITAL <- TRANSFER OF_KNOWLE	0.238	0.137	2.447
SOCIAL_CAPITAL <----- HUMAN_CAPITAL	0.299	0.110	2.958
SOCIAL_CAPITAL <- TRANSFORMATION_OF	0.200	0.114	2.808
SOCIAL_CAPITAL <- EXPLORATION_OF KNO	0.264	0.104	2.775
SOCIAL_CAPITAL <- EXPLOITATION_OF KN	0.261	0.096	2.751
SUSTAINABLE_COMPET <- SOCIAL_CAPITAL	0.292	0.115	2.775
SUSTAINABLE_COMPETI <- HUMAN_CAPITAL	0.305	0.123	2.872

5. Hypothesis Testing and Interpretation

The estimated parameter between human capital and social capital shows a significant result with CR score = 2.298 or $CR \geq \pm 2,00$ with 0,05 (5 %) of significant level. Based on this finding, thus the first hypothesis is accepted. This result indicates that human capital builds the improvement of social capital. Each organization or enterprise always tries to improve human capital. It is a characteristic of human resources which is determined by the owned skill which is used to create a value for the organization.

The management of human capital must pay attention to the sources and the ideology of knowledge. The ideology means as a process of skill

development and institutional knowledge especially something related to the market. Human resources with a high motivation and competence are better to desire and have more ability in influencing and fulfilling the need of external partner, so then the external partner wants better to improve a long relationship with the organization. The researchers state that the social relationship of individual external gives an access to important human resources of enterprises. This study shows that the higher human capital, the wider social capital. This is in line with Brown & Duguid (1998) who state that human capital is viewed as an antecedent of resource networking because it represents the capability of organizations to effectively respond external partner need, and solve several problems and information.

The second hypothesis *there is relationship between knowledge exploration and human capital*. The estimated parameter between *knowledge exploration and human capital* shows a significant result with CR score = 2.264 or $CR \geq \pm 2,00$ with 0,05 (5 %) of significant level. Hence, the second hypothesis is supported. The result also indicates that the intensity of knowledge exploration will improve the human capital. The knowledge exploration begins with searching, making variation, taking a risk, experimenting, and innovating. Those are steps where new practices and theories are introduced. Thus, organizational learning is the main point of exploration activity that creates several experiences related to broaden knowledge. The exploration activity includes finding norm of new organization, rutinity, structure, system, and experiment to new approach dealing with technology, bussines process, or market, innovation and long term orientation adaption, and reconsideration of current theory and decision.

Exploration is a prerequisite to exploitation. Yet, the advantage of it also depends on the number of knowledge which has been accumulated and learned through exploitation (rutinity, for instance, rule and procedure). This accepted hypothesis is in line with Tom J.M. (2007) study which states that meeting frequency, maintaining collaboration, informal activity, finding new possibilities related to product or service, process or market, evaluating various choices related to product or service, process or market, focusing on strong renewal of product or service, and also activity which needs to learn new skill or knowledge that can increase human capital and network.

The third hypothesis is *there is relationship between knowledge exploration and social capital*. The estimated parameter between *knowledge exploration* and social capital shows a significant result with $CR = 2.775$ or $CR \geq \pm 2,00$ with 0,05 (5 %) of significant level. Thus, the hypothesis is accepted. The result also indicates that to increase human capital, it needs the intensity of knowledge exploration. Knowledge exploration begins with searching, making variation, taking risk, experimenting, and innovating. Those are the steps where new practices are introduced. Hence, organizational learning is the core of exploration learning that creates several experiences related to broaden knowledge. This exploration activity includes searching new organization norm, rutinity, structure, and system, experiment using new approach to technology, business process, or market, innovation and adaption and reconsideration current theory and decision. Exploration is prerequisite to exploit. Yet, the advantage of it also depends on the number of knowledge which has been accumulated and learned through exploitation (rutinity, for instance, rule and procedure). This accepted hypothesis is in line with Tom J.M. (2007) study which states that meeting frequency, maintaining collaboration, informal activity, finding new possibilities related to product or service, process or market, evaluating various choices related to product or service, process or market, focusing on strong renewal of product or service, and also activity which needs to learn new skill or knowledge that can increase network and social capital.

The fourth hypothesis is *there is relationship between knowledge exploitation and human capital*. The estimated parameter between knowledge exploitation and human capital shows a significant result with $CR = 2.043$ or $CR \geq \pm 2,00$ with 0,05 (5 %) of significant level. Hence, the hypothesis is accepted. This results also indicates that to increase human capital, it needs intensity of knowledge exploitation. The knowledge exploitation is based on external knowledge implementation to repair current product of organization and increase its process. In other word, exploitation is further usage development of the current competence. The ability of enterprise to implement knowledge toward innovation process can be an important source of competitive advantage. There are much knowledge (Grant, 1996), not all of it is effective to be practiced and applied in the enterprise. This supported hypothesis is in line with the result of Hsui study (2007) which shows that 80% of respondents agree that knowledge becomes a strategic asset.

While, 78% agrees that business is failed because of unable to exploit the knowledge available in an organization. Transferring and using knowledge from external sources broadens knowledge basis.

The fifth hypothesis is *there is relationship between knowledge exploitation and social capital*. This estimated parameter between knowledge exploitation and social capital shows a significant result with $CR = 2.751$ or $CR \geq \pm 2,00$ with 0,05 (5 %) of significant level. Hence, the hypothesis is accepted. This result also indicates that to increase social capital, it needs the intensity of knowledge exploitation. Knowledge exploitation is basically a process of gaining competence through adaption, synthesis, and implementation of the mastered knowledge. This needs knowledge which has been created and internalized to use and create mastery of experiences. Knowledge exploitation is based on external knowledge implementation to repair the existance product of organization and increase its process. In other word, exploitation is a further usage development of the existing competence. Enterprise ability to implement process of innovation can be an important source of competitive advantage. There are much knowledge (Grant, 1996), not all of it is effective to be applied and practiced by the enterprise. This accepted hypothesis is in line with the result of Hsui study (2007) which shows that 80% of respondents agree that knowledge becomes a strategic asset, while 78 % agree that business is failed because of unable to exploit the knowledge available in an organization. Transferring and using knowledge from external sources broadens knowledge basis, so it maintains the continuity of social capital.

The sixth hypothesis is *there is relationship between knowledge transfer and human capital*. This estimated parameter between knowledge transfer and human significant result with $CR = 2.444$ or $CR \geq \pm 2,00$ with 0,05 (5 %) of significant level. Hence, the hypothesis is accepted. This result also indicates that to increase human capital, it needs the intensity of knowledge transfer. Knowledge transfer can be knowledge transmission and knowledge absorption from one to another. Hence, transferring knowledge as process of certain ability is moved from source to receiver, where the source or receiver can be a person or individual group. So, if an effective knowledge is transfered, the receiever experiences increasing ability which results the increasing of individual work achievement as well as collective group of organization. The

experts of social organization state that enterprise can be understood as a social community which specializes in speed and creature efficiency and knowledge transfer. The view of knowledge-based-organization begins with individual and enterprise which become superior of their ability in integrating knowledge across individual or sharing knowledge. This accepted hypothesis is in line with the study result (Lane & Lubatkin, 1998), which states that with an effort and experience, organization can build interaction continuity which recognizes value of potential chance and chooses what element will be combined and then facilitates knowledge exchange so that it can increase human capital.

The seventh proposed hypothesis is *there is relationship between knowledge transfer and social capital*. This estimated parameter between knowledge transfer and social capital shows a significant result with $CR = 2.447$ or $CR \geq \pm 2,00$ with 0,05 (5 %) of significant level. Hence, the hypothesis is accepted. It means that the higher the intensity of knowledge transfer is, the higher social capital will be. This result also indicates that to increase social capital, it needs the intensity of knowledge transfer. Knowledge transfer is the main of mechanism to share practice and facilitate integrated knowledge in order to increase either short-term work or competitive advantage. In other word, the transmission of knowledge is an absorption of knowledge from one to another. Hence, Transfers knowledge is a process in which certain ability is moved from source to receiver, where the source or receiver can be a person or individual group. So, if an effective knowledge is transfered, the receiever experiences increasing ability which lead them to increase the individual work achievement and, collectively, the whole organization. The experts of social organization state that enterprise can be understood as a social community which specializes in speed and creature efficiency and knowledge transfer. The view of knowledge-based-organization begins with individual and enterprise which become superior of their ability in integrating knowledge across individual or sharing knowledge. This supported hypothesis is in line with the study result (Lane & Lubatkin, 1998), which states that with an effort and experience, organization can build interaction continuity which recognizes value of potential chance and chooses what element will be combined and then facilitates knowledge exchange so that it can increase social capital.

The eighth hypothesis is *there is relationship between knowledge transformation and human capital*. The estimated parameter between knowledge transformation and human capital shows a significant result with $CR = 2.948$ or $CR \geq \pm 2,00$ with 0,05 (5 %) of significant level. Hence, the hypothesis is supported. It means that the higher the intensity of knowledge transformation is, the higher human capital will be. This result also indicates that to increase human capital, it needs the intensity of knowledge transformation. Knowledge transformation is important because it should be maintained for years till it has been implemented to new product. A group of high motivated people and skilful is competitive advantage because they represent important certain resource of enterprise, rare and difficult to be imitated. An enterprise with high skilful and knowledgeable has higher human capital and more possibility to create knowledge, make right decision and have technology innovation better. This supported hypothesis is in line with the result of Cegarra-Navarro (2005) study which states that organizational learning connects to the development of new knowledge. This is very important to transformation ability, innovation, and a work of organization. The process of organization learning on strategy alliance is a mechanism where organization makes competitors become strategic knowledge.

The ninth hypothesis is *there is relationship between knowledge transformation and social capital*. The estimated parameter between knowledge transformation and social capital shows a significant result with $CR = 2.308$ or $CR \geq \pm 2,00$ with 0,05 (5%) of significant level. Hence, the hypothesis is accepted. This result also indicates that to increase social capital, it requires the intensity of knowledge transformation. Knowledge transformation is based on maintaining knowledge from time to time. It is important because it should be maintained for years till it has been implemented to new product. A group of high motivated people and skilful is competitive advantage because it represents important resource of certain enterprise, rare and difficult to be imitated. An enterprise with high skilful and knowledgeable resources has a higher human capital and more possibility to create knowledge, make right decision and have technology innovation better. This supported hypothesis is in line with the result of Cegarra-Navarro (2005) study which states that organizational learning connects to the development of new knowledge. This is very important to transformation ability, innovation, and a work of organization. The process of organization learning on strategy alliance is a mechanism

where organization makes competitors become strategic knowledge. Moreover, it is in line with the study result (Lane & Lubatkin, 1998), which states that by an effort and experience, organization can build interaction continuity which recognizes value of potential chance and chooses what element will be combined and then facilitates knowledge exchange so that it can increase social capital.

The tenth hypothesis proposed in this study is *there is relationship between human capital and sustainable competitive advantage*. The estimated parameter between human capital and sustainable competitive advantage shows a significant result with $CR = 2.872$ or $CR \geq \pm 2,00$ with 0,05 (5 %) of significant level. Hence, the hypothesis is accepted. This result also indicates that to increase sustainable competitive advantage, it needs the human capital. Every organization or enterprise always tries to increase human capital. It is the characteristic of human resources which is determined by knowledge known and used to create value for organization. Human capital management must consider knowledge sources and the ideology of those knowledge. The ideology means as a process of skill development and knowledge classification which is specially related to market. Human resources with high motivation and competence want better and has more ability to influence and meet external partners' need, so that they want better to extend long relationship with the organization. Some researchers state that social relationship of individual external gives acces to an important resource of enterprise. This study result which shows the higher human capital, the higher sustainable competitive advantage, is in line with the study of Hitt (2006) which concludes that a group of high motivated and skillful people is competitive advantage because they represent important certain resource of enterprise. An enterprise with high skilf and knowledge has higher human capital and more possibility to create knowledge, make right decision and have technology innovation better and competitive ability. The continuous competitive ability is determined by the power of human and social capital.

The tenth hypothesis proposed in this study is *there is relationship between social capital and sustainable competitive advantage*. The estimated parameter between between social capital and sustainable competitive advantage shows a significant result with $CR = 2.775$ or $CR \geq \pm 2,00$ with 0,05 (5 %) of significant level. Hence, the hypothesis is accepted. This result also indicates that to increase sustainable

competitive advantage, it needs the social capital. Social capital is an actual and potential resource which can result networking of work relationship which is respectful and understands one another. One of the important organization resources is social capital which covers experience in creating relationship with other organizations. The relationship will grow more and more based on value of social interaction. Resources and organizational ability acquired from those relationships are the source of power and authority of enterprise.

6. Conclusion

Based on the significant support of hypothesis test, the research problems have been answered. There are six steps to improve strategic knowledge which can create sustainable competitive advantage. Those are: first, the steps on strategic alliance as strategic knowledge, which can create sustainable competitive advantage, can be done by increasing or improving social capital which is built by human capital. Second, the steps on strategic alliance as strategic knowledge, which can create sustainable competitive advantage, can be done by increasing social capital. Third, the steps on strategic alliance as strategic knowledge, which can create sustainable competitive advantage, can be done by increasing human capital which is affected by transfer of knowledge. Fourth, the steps on strategic alliance as strategic knowledge, which can create sustainable competitive advantage, can be done by increasing social capital which is affected by exploitation of knowledge. Fifth, the steps on strategic alliance as strategic knowledge, which can create sustainable competitive advantage, can be done by increasing human capital which is affected by transformation of knowledge whose indicator is that the employee gives creative solutions and participates in social activities. Sixth, the steps on strategic alliance as strategic knowledge, which can create sustainable competitive advantage, can be done by increasing social capital which is affected by exploration of knowledge.

7. Limitations and Future Research

The test results of full model SEM show that the model is relevant and fit with the data used. However, there are two conformance tests that are marginally accepted, those are *the Goodness of Fit Index* (GFI = 0.889) and *the Adjusted Goodness of Fit Index* (AGFI = 0.884). Then, the

development of strategic knowledge model does not include the variable of environment. This happens because the study only focuses and starts with the phenomenon of internal conditions and the research gap.

Thus, for future research, organizational culture is an integrated pattern of human behavior related to the issue of adjustment or integration of internal and external conditions. Organizational culture has a role in the development of strategic knowledge as an effort to improve organizational performance. So, the upcoming study on organizational culture in the development process of sustainable of competitive advantage will become more interesting. Then, in some advanced countries, the trigger of the improvement of organizational performance is generally centered in the internal condition . Meanwhile, in developed countries, the external conditions (environment) are the dominant aspect of the improvement of the organizational performance. Environmental conditions include : 1) . Environmental Complexity as the diversity of factors and problems that exist within the organization. 2) . Environmental dynamics which describes the level of changes occurred in the environment in which the organization operates. Thus, the future research agenda needs to be considered.

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