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SMART INTANGIBLES INNOVATION CONCEPT DEVELOPMENT TO IMPROVE PERFORMANCE OF SMEs

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ABSTRACT

The long term goal of this research is to build a model of theoretical approaches to accomplish the conceptual controversies regarding the relationship of human capital, structural capital, customer capital, partner capital, social capital, the innovation comprehensively. In contrast to previous studies, which generally test the causality between tangible assets, innovation organizational performance. This study starts from the factors that may affect innovation, so as to obtain clarity about how to boost innovation in an organization. As for the specific purpose of this study is to conduct empirical testing and analyzing the influence of human capital, structural capital, customer capital, partner capital, social capital on innovation.

The method used is the analysis of literature deeply about human capital, structural capital, customer capital, partner capital, social capital, radical innovation, incremental innovation and company performance.

The results of this study are propositions formulated in the form of basic theoretical models and developed in the form of empirical research hypotheses and models that can be tested for further research. Outputs from this research is the development of a new concept, a model of the relationship of human capital, structural capital, customer capital, partner capital, social capital on innovation and strategy for improving innovation.

Keywords: human capital, structural capital, customer capital, capital partners, social capital, innovation.

CHAPTER I PREFACE

1.1. Background

To deal with the Asian Economic Community (AEC) takes the creativity and innovation of each product so that it can have a competitive advantage. In the last twenty-five years there has been a fundamental revolution corporation. Industries that previously relied on a physical tangible assets in transition to a new economy, namely the production of goods and services and the creation of value (value creation) become dependent on intellectual capital (Daum, 2003). Nowadays more and more recognized that intellectual capital and effective management is the source of sustainable competitive advantage (Tanaszi and Duffi, 2000).

Increasingly important role and contribution of intellectual capital can be seen in a comparison between the book value and market value on companies based on knowledge (knowledge based companies).

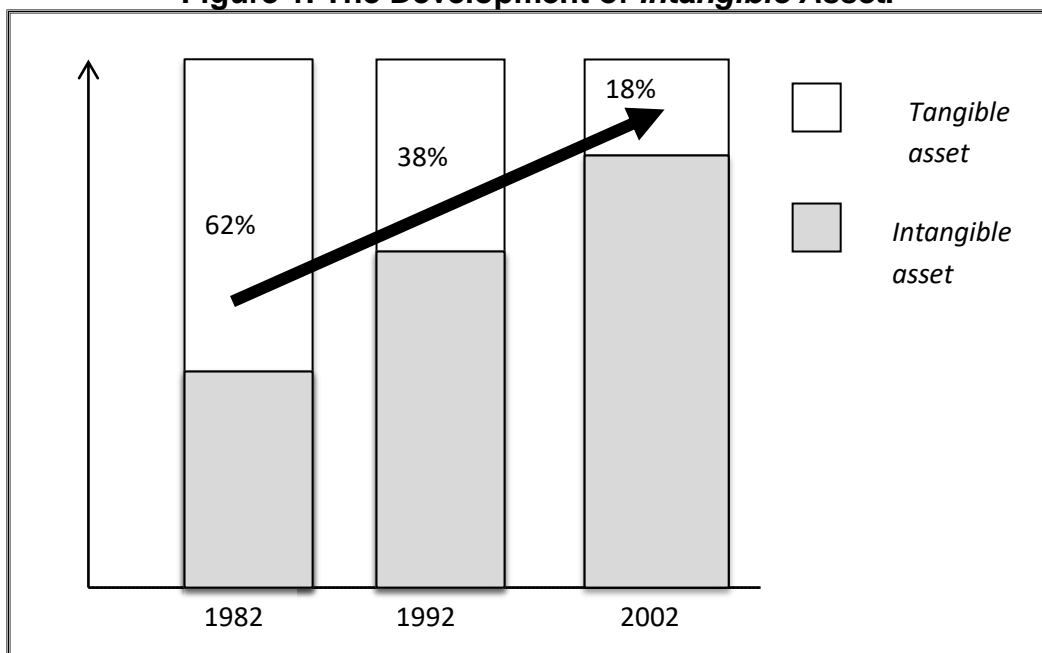
In a management system based on this knowledge, the conventional capital such as natural resources, financial resources and other physical assets become less important compared to capital based on knowledge and technology. By using science and technology will be obtained on how to use resources more efficiently and economically, which will give a competitive advantage (Rupert 1998).

Currently the implementation of intellectual capital is something new, not only in Indonesia but also in the global business environment, only a few developed countries that have begun to implement this concept, for example, Australia, the United States and the Scandinavian countries. In general, businesses still have not found the right answer about the value of what is owned by the company.

This study was also based on the research gap in previous studies, namely:

1. Reduced or even the loss of fixed assets in the company's balance sheet does not cause a loss of market appreciation against against them. (Rupert 1998) reveals that this is reflected in the many companies that have tangible assets that are not significant in the financial statements but market appreciation on these companies is very high (Roos et al. 1997) as in figure 1 also reveals that "the market value of Reviews These companies is many times Reviews their net asset value, that is the value of Reviews their physical. The difference between the two values is the company's "hidden value", the which can be expressed as a percentage of the market value ".

Figure 1. The Development of *Intangible Asset*.



2. According to Robert F Thomas M Hurley and Hult (1998), research on innovation in developing countries are still relatively small, most of the research on innovations made in industrialized countries. Therefore it is necessary to do research on innovation in developing countries such as Indonesia where the interests of innovation strongly conditioned by

national / regional context that is different from the proposition interest in innovation in developed countries that are not heavily dependent on the national or regional context. This difference is the basis exciting to do research replication in developing countries.

3. According to Mc Elroy, 2002, innovation is a social process, not an administrative process that gives managers the sense of managing the flow and quality of knowledge and its use. The view that innovation as a social process helps us to understand that in the real world, innovation is a process that can not be managed / unmanaged. There is a very strong relationship between innovation and Complexity Theory. From these studies it can be seen that social capital is very important in the development of innovation.
4. Most studies have not entered the Intellectual Capital social capital as part of the intellectual capital (Andriessen & Tissen, 2000; Guthrie & Petty, 2000; Mayo, 2000), whereas social capital is an important part of intellectual capital .
5. Results of research conducted by Marques, Simon and Caranana (2006) at the 222 biotechnology companies and telecommunications in Spain shows that the innovation consists of Schumpeterian competence and continuous improvement positively associated with human capital, structural capital and relational capital. While the results of research conducted by Subramaniam and Youndt (2005) in 208 vice president / director of marketing and R & D in the US shows that innovation incremental positively associated with human capital, organizational capital and social capital and radical innovations positively associated with organizational capital and social capital and negatively related to human capital.

1.2. Problems

From the background described above, the subject matter of this research is to develop new theoretical approaches to determine the effect

of human capital, structural capital, customer capital, partner capital, social capital on innovation capabilities?

1.3. Specific Objectives

As for the specific purpose of this study is to conduct empirical testing and analyzing the influence of human capital, structural capital, customer capital, partner capital, social capital on innovation capabilities.

1.4 Urgency Research

The background and the problems above, the urgency of this study are described as follows:

1. Occurrence of corporate fundamental revolution which the industry previously based on the physical tangible assets in transition to a new economy, namely the production of goods and services and the creation of value (value creation) become dependent on intellectual capital (Daum, 2003).

2. Intellectual capital is still difficult to be codified (Kogut and Zander, 1992; Conner and Prahalad, 1996) as well as hard to trade (Barney, 1986).

3. Research on innovation in developing countries are still relatively small, most of the research on innovations made in industrialized countries.

4. Most studies have not entered the Intellectual Capital social capital as part of the intellectual capital (Andriessen & Tissen, 2000; Guthrie & Petty, 2000; Mayo, 2000), whereas social capital is an important part of intellectual capital.

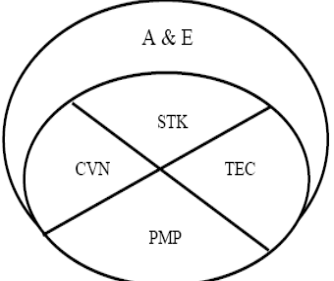
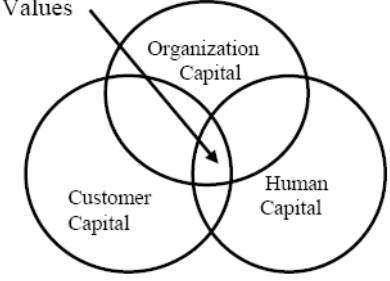
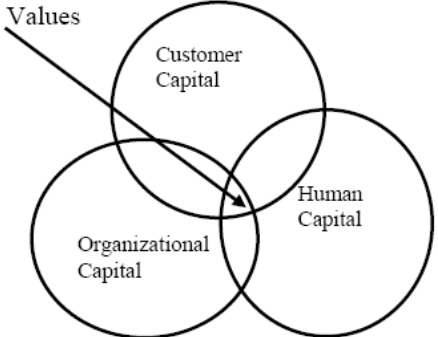
5. There is a contradiction between the results of research relations intellectual capital and innovation.

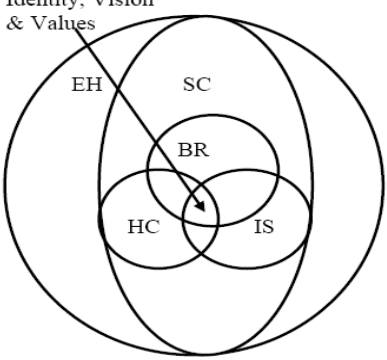
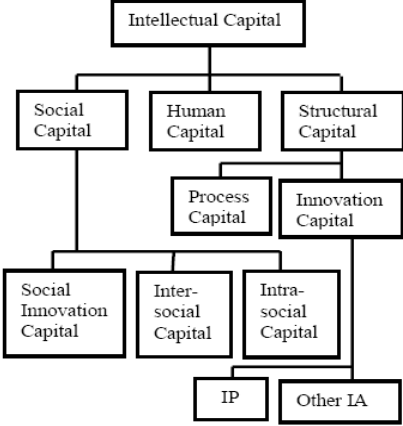
CHAPTER II LIERATURE REVIEW

2.1 State of The Art

The development of the definition of the concept of intellectual capital from 2000 to 2005 can be seen in Table 1 below:

Table 1. Intellectual Capital Concept Development 2000 – 2005

Andriessen & Tissen (2000)	
<p>Five categories of intangible assets: (In) expertise and tacit knowledge (Ii) norms and collective values (Iii) Technology and explicit knowledge (Iv) The management process primer (V) Assets & Endowments</p>	
Guthrie & Petty (2000)	
<p>intellectual capital consists of: (I) Internal : organization (structured) capital. (Ii) external: customer (relational) capital (Iii) employee competence: human capital</p>	
Mayo (2000)	
<p>The general form of intellectual capital: (I) Customer (external) capital: pelanggans' relationship, loyalty, satisfaction and image. (Ii) Organizational (internal structure) capital: systems, patents, know-how, databases, knowledge, culture. human capital: the competency and experience of the individual, judgment, leadership and motivation</p>	

Allee (2000)	
<p><i>Expanded view of IC:</i></p> <p>(i) <i>Business relationship – alliances & business relationship with customers, partners, suppliers, investors and government (BR)</i></p> <p>(ii) <i>Internal structures – systems, work processes that leverage competitiveness including IT, communication & technologies (IS)</i></p> <p>(iii) <i>Human competence(HC)</i></p> <p>(iv) <i>Social citizenship (SC)</i></p> <p>(v) <i>Environmental health (EH)</i></p> <p>(vi) <i>Corporate identity (CI)</i></p>	
Mc Elroy (2002)	
<p>Modification of intellectual capital model Edvinsson:</p> <p>(i) human capital</p> <p>(ii) structural capital</p> <p>(iii) social innovation capital</p>	
OECD (1992; dalam Johanson (2000), p.58)	
Intellectual capital includes all spending by the company's long-term aimed at improving future purpose other than the purchase of fixed assets	
Lev (2001)	
Modal intelektual adalah klaim ke manfaat masa depan yang tidak mempunyai wujud fisik atau keuangan (saham atau obligasi) .	
Upton (2001)	
index scores, ratio, calculations, and other information that is not in the financial statements. excluding tangible assets or financial instruments; items that are not defined as an asset, but it is an essential element of business success, the so-called non-financial information.	
Blair/Wallman (2001)	
Non-physical factors used in the production of goods or provision of services, or which are expected to generate a profit earning yad for individuals or companies that control the use of these factors.	

Meritum (2003)
<ul style="list-style-type: none"> ✓ Resources nonmonetary of economic benefits yad, beyond the physical substance, controlled or influenced by the company as a result of the incident and the previous transaction (own production, purchase or other types of acquisition) and may or may not be sold separately from the assets of corporate else. ✓ Intellectual capital includes an assortment of immeasurable, used or owned, or informally spread; not just the sum of human resources, structural and relational concerning the company, but also how it hired to create value (connectivity capital). Representing the unit is not measurable or elements of intellectual capital, which may be recognized as assets in accordance with current accounting model.
IAS 38 (Epstein / Mirza (2005))
Asset nonfinancial without a physical element that is held for use in the production or supply of services or goods or for rental, or for administrative purposes, which can be identified and controlled by the company as a result of the events of the past and of the future economic benefits expected to flow.
<i>Intangibles Research Center, New York University</i>
<p>broad definition: intangibles are non-physical sources of future economic benefit to a unity or as an alternative to all the elements of a company's existing business in addition to monetary and tangible assets.</p> <p>Narrow definition: intangibles is a source of non-physical of future economic benefit to a unity that has been acquired in an exchange or developed internally on the costs that can be identified, has a limited life, has a market value regardless of unit, and owned or controlled by a single entity.</p>

Source: Adapted from various sources .

2.2 Empirical Research Model and Hypothesis Development

Human Capital Relationship with Innovation Capability.

In the new organization, the nature of work has changed and a high level of skilled labor is needed. Consequently workers with low skills to do the training or recruiting new personnel who have high skill. Rajan and Zingales (1995) argue that human capital is the key to competitiveness (competitiveness) in the new economy and the key to innovation (Zambon 2003).

Structural Capital relationship with Innovation Capability

Structural capital is the knowledge assets within the organization that are generated through the institutionalization of knowledge either individually or in groups during the learning process within the company (Pablos, 2004). Structural capital is also a tacit organizational routines associated

with the informal aspect of the life of the organization known as the dimensions of organizational culture (Swart 2005). Structural capital to create the conditions to accelerate the sharing of knowledge and collective growth, as well as organizational capability for learning, innovation and adaptation more quickly with changes in technology and markets (Daum, 2003).

Perspective structural capital other focuses on the formal aspects and explicitly referred to as the backbone of the organization (Burr and Girrardi, 2002) where not only as an intellectual property but also as an infrastructure comprised of the organization's strategy, processes and policies (Dzinkowski, 2000). Subramaniam Youndt (2005) also argued that the structural capital has influence to the innovation capabilities both radical and incremental.

Customer Relationship Capital to Innovation Capability.

According to Daum (2003) the company will be able to fully dominate the supply channel to customers and gain value generated in the supply channel. In addition to customer-bound capital as individual customers who have been there, there are two other forms, namely: brand reputation capital and public capital. Brand gave information about the source or creator of the product. Therefore the brand can help the consumer to make a decision to simplify product selection. (Keller, 2003).

To amplify the marketing can be done through branding (Blackett and Robins, 2001). A strong brand (powerful brand) by Blackett and Robins (2001) has potential advantages. In the meantime, customer capital in the form of the company's reputation has an important role in creating a sustainable competitive advantage (Carmeli and Cohen, 2001).

Capital Partner relationship with Innovation Capability.

In the international business literature has identified some positive outcomes of the strategic alliance (strategic alliance) including a high

return on equity, a better ROI and higher efficacy compared to integration through mergers and acquisitions (Todeva and Knoke, 2005). According to Todeva and Knoke (2005) issue of confidence (trust), selection of partners, transfer of knowledge through cooperative business venture, complementarity and synergy among partners, has been a discourse (discourse) scientific.

Choosing a partner with complementary skills and technology considerations are very important, on the one hand that the partner will not become the new competition and on the other partner brings something new as planned originally (Lei, et al. 1997). It is also important for companies about the common perception of performance and partnerships (Wipple and Frankle, 2000). Effects combination enables partners to take the lead from the resulting opportunities and strengthen its strategic position in the globalized market quickly (Sarkar, et al., 2001).

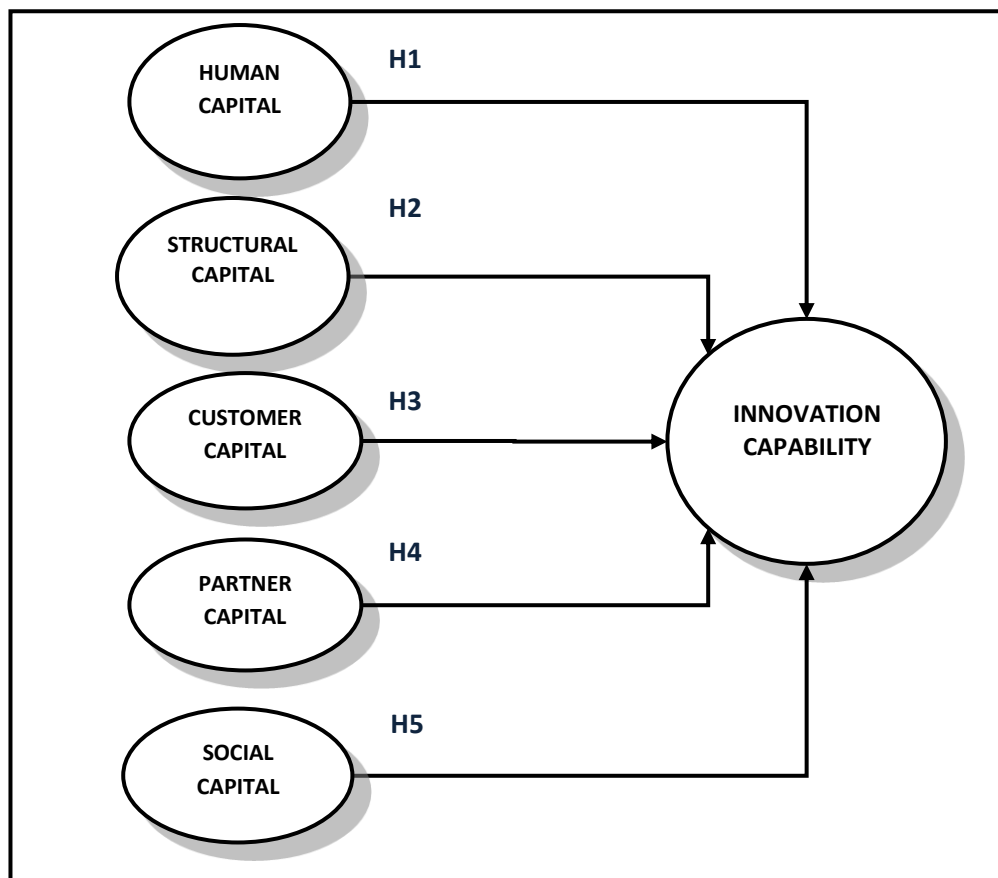
Social capital relationship with Innovation Capability.

The influence of social capital on innovation can be described as a form of environmental innovation (Dakhli and de Clercq, 2004). A good research on the development of theories related to social capital as a factor of innovation can be found in Landry et al. (2002).

Dakhli and de Clercq (2004) argued that the higher norms of behavior, for instance, the norm of helping others, the higher the level of innovation. Landry et al. (2002) analyzed the influence of networks and trust in the likelihood and the radicalness of innovation at the company level. According to Clegg et al., 2002, Elements of confidence has implications in the innovation process. Subramaniam and Youndt (2005) showed that the overall positive social capital affects incremental and radical innovation capabilities. Ackomak and ter Weel (2006) which analyzed data European regional level, finding that the trust has a positive influence on the number of patent applications.

Based on the literature review above, then developed a model of empirical research on the impact of intellectual capital on innovation as in Figure 2 below :

Figure 2
Empirical Research Model Concept *Smart Intangibles Innovation*



Source: Developed for this study

Based on empirical research model above, then formulated the following hypotheses :

- H1: The effect of Human capital towards innovation capabilities is positively significant.
- H2: The effect of Structural capital towards innovation capabilities is positively significant.
- H3: The effect of Customer capital towards innovation capabilities is positively significant.

H4: The effect of Partners' capital towards innovation capabilities is positively significant.

H5: The effect of Social capital towards innovation capabilities is positively significant.

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