

## Social Capitala Fundamental Asset on IS/IT Investment

Robertus Nugroho Perwiro Atmojo, Suroto Adi and VianyUtami Tjhin  
School of Information Systems, Bina Nusantara University, West Jakarta, Indonesia

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**Abstract:** Doing the investment on IS/IT sector is not a simple matter to realized by the organization. Besides towards enormous costs and efforts, the risks of failure that may occur on the investments are terrible. However, the investments on IS/IT is a must for the organization because of a reason for the company to keep survive on the competition. Although, the investment impacts towards the success of the organization can't be directly perceived, they're must do the investment. Then, what factors that can be used as a success measurement? Moreover, how to measure it? In this study are presented some cases of the measurement of investment success on IS/IT sector. This study aimed to help people do the investment carefully and more effective in order to achieve the optimal benefits by using the social capital point of views.

**Key words:** Information technology investmen, knowledge management, information system investment, social interaction, social capital; organizational innovation

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### INTRODUCTION

In the business world, it is essential that every investment must generate benefits, especially if those investments are absorbing massive resources on money and efforts. The investment in Information Technology (IT) and Information Systems (IS) is one such example. Business intelligence, CRM, ERP, internet security and cloud infrastructure are several indicators of the high-cost investment on IS's/IT's. The high-cost investment occurs when the business requirements are complicated and there was a problem with the cultural issues (Dantes and Hasibuan, 2011). Expected business benefits from IS/IT investments are not easy to measure. Since, much business only focusing their sights on the successful of implementation or development of new technology but has forgotten the main purpose of their investment (Peppard *et al.*, 2007). Therefore, Michael Porter in 1996, separates the concept of Operational Effectiveness (OE) from the strategy (business). Where the operational effectiveness focuses on the efficiencies but the strategy tend to innovations. He states that OE's is an important thing but it was not sufficient for an organization (or individual) to compete with their rivals. Porter states that without the (competitive) strategy, the business rivalry based on OE's can be a mutually destructive. It means that the new technologies, new managerial techniques and the other new inputs could be easily obsolete because it can be easily imitated by the rivals. Hence that repetitive ineffective mechanism may lead to a

phenomenon; a phenomenon in which an organization has all sorts of new technologies and or procedures but fail to convert them into the business benefits. Or in another words, the workforce efficiencies may be reached but not about the benefits. Moreover in the end no one can win. The strategies can make an organization (or individual) have their identity on differentiations. The strategies could motivate the organization (or individual) to mixing it all values and place them in the right business needs. So, there was no resources end up in the waste because the benefits reached the maximum and it may assume as a success. This study merges the concept of Information Technology (IT's) and Information Systems (IS's) as an entity (component) that can't be separate each other where component are analogous to the bonds between technology (infrastructure, data, information and so on) and its users. There was not a complete discussion when discussing advanced technology but not discussing about the who its users are who are using it, who are capable of using it, who are manage it and what problems it can addresses. In this case, the users of the technology are the organizations and the individuals who use the technology as benefits generator tools for their business. And, the inclusion of individuals in this argumentation based on the today's sky-rocketing startup business models, since the facebook.com built from the brilliant idea of individuals. In the end, this study compiles several insights from literature to map the IS/IT success from many perspectives using case per case structure. So, make it easier for academician and

practitioners to sort out which the most suitable concept to implement as a “success” measurement of IS/IT investments, relating to the environment of their business or organization.

## THEORETICAL BACKGROUND

**Innovation as a measurement:** Previous study by Joshi *et al.* (2010) mentioned that the innovation could be applied as a success measurement for the firms. Where they added that sense of innovation itself is a discovery or a development from the old model to bring or to create new values that are useful and can be accepted by the market. Then these values can ultimately increase the financial revenue of the firms. Joshi *et al.* (2010) explained a method about how to measuring firm innovation that measurement is through, the outcomes of innovation. What are the outcomes of innovation? Outcomes of innovation can be either:

- The patent right
- The new products or services that offered to the market

Jeong and Kim (2014) describe patents as a solution towards unsolved problem through the invention of technology. Where they add that the purpose of patents is to get royalties from the invention of new technology, creating a barrier for new entrants, patents as a manifestation or form of recognition of intellectual property rights so as to reduce disputes over utilization of a creation and creating specific values for the firms. Furthermore, new products and or services offered to the market fundamentally has the identical concept with patent rights, it was a novelty. However, keep in mind that the novelty from new products and services can be described as the products of strategy that is owned by the firms to optimize all available resources to be converted into business advantages by seeking the potentials at market. So as the distinction to the patent rights, those resources do not always formed as technological invention.

In their study of Joshi *et al.* (2010) modify the framework of Absorptive Capacity (ACAP) as a method for measuring the contribution of IS/IT towards firm innovation. Joshi *et al.* (2010) argue that ACAP which commonly used as an indicator of stakeholders acceptance towards technological changes can also be used for modeling the effects of IT-enabled knowledge capabilities on firm innovation. They combine ACAP with IT to establish the two measurement variables named IT-PACAP and IT-RACAP. Information Technology

enabled Potential ACAP (IT-PACAP) modeled on the foundation of firm’s knowledge acquisition and assimilation capabilities. Where both the foundations are extremely useful for organizations to identify, obtain and store knowledge into organizational memory, so that knowledge can be used at any time if necessary. Then, Information Technology enabled Realized ACAP (IT-RACAP) modeled on the foundation of firm’s knowledge transformation and exploitation capabilities. Where the purpose of the use of IS/IT in that model is as a method to synthesize the existing knowledge to exploited sustainably. Can be imagined when one of the formulation shapes of knowledge such as the inventions is fail to be commercialized by the organization. Then, such failure can be said as losses for the company, loss on money and or loss on efforts. Therefore, the primary role of IT-RACAP is to ensure that all of the knowledge that has been created by the firms is nothing useless. Joshi *et al.* (2010) splits innovation outputs into two parts, namely:

- Ideated innovation
- Commercialized Innovation (CI)

Ideated innovation defined as a product of the company knowledge which acquired from all process of exploration, invention and development of ideas and have potential benefits that can be exploited. While, CI described as a mechanism that converts ideated innovation to be commercialized to the market. The success of the company to converts the products of knowledge into commercialization shapes is very important. Because of that the company may possible to keep alive and evolve sustainably. In their study, Joshi *et al.* (2010) also adding the important roles of social interaction. In which the social interaction plays an important role as a trigger of the creation of social capital within organization. From that social issue, then arises the argumentation that IS/IT could be the solution to bridge the gaps that may exist in the social interaction through the computer-mediated communication as an integrated mechanism between IS/IT and the people. From that argumentation, Joshi *et al.* (2010) then establish a moderating variable called IT-enabled Social Integration (IT-SIC). Office-web/blogging community forums, knowledge management system, web-conferencing and groupware systems are the few examples of important instrument that can be used as a medium for conducting social interaction in organizations.

The test results of literature surveys that representing patent rights and new product of services from 110 companies, Joshi *et al.* (2010) draw some conclusions.

The conclusions illustrate that in this information era, investment on IS/IT is very critical that can't be separated from the business process of the organization, whatever and however the shapes of its business model. However, keep in mind that the organizations must be able to placing the IS/IT investment as an effort that could guarantee the creation of the innovation commercialization on their business process. Furthermore, to help the optimization the utilization of IS/IT as the innovation generators, organization must be able to build and develop an organizational culture based on IS/IT. Because that any advanced technology of IS/IT were invested the users are still human (social). Hence that the optimal formation of social interaction based on IS/IT may affect an excellent performance on social capital. From the excellent performance of social capital then triggers the creation of productive and sustainable innovation enterprise.

**A measurement instrument using business cases:** What are the procedures that must perform by the organization (or individuals) to measuring the success criteria of IS/IT investments? How the intangible (subjective) benefits that may exist in those investments can be measured? Who can do the measurement? To answer that questions Ward *et al.* (2008) have formulated some brilliant approach for measuring the success criteria on IS/IT investments through the business cases. The main purpose of the development of business cases is to obtain funding approval on financial investments from the steering committee. The another purposes are expected to be obtained if when the organization is implementing the business cases; the organization are expected will be able to:

- Determine the amount of investment that will be a priority
- Identify how IS/IT and business changes are possible to work together to realize the achievement of business benefits which planned on the business objectives
- Make sure to get a high commitment from the managers to achieve business benefits
- Establish the necessary basis for the review process on the realization has been achieved by the organization

According to their study, Ward *et al.* (2008) also explain that many organizations are less successful when investing in IS/IT are caused by their action that tend to restrict the targets about the business benefits associated with improved innovation and co-operation on their

business cases planning. Or if analogues by another study conducted by Joshi *et al.* (2010) that issues was about the deals in respect to the investments on social capital (social interaction which is less encouraged in the organization). Targets restriction on the social capital benefits usually done for the reasons of efficiency improvement and or cost savings. Alternatively in other words, the organization prefers to "play safe" by not investing too much on the investment sector that may only generate subjective benefits. More about the efficiency in terms of social capital, Denise M. Morrison the president and CEO of Campbell Soup Company, confirms that one of the leakages on Campbell's strategies besides ineffective decision-making was a courage which they did not perform to spending more money and efforts on the social capital sectors within their organization. Campbell's was playing safely by not wasting their investment on subjective benefits sector, however in fact, that action seems to be an inhibitor on their success. Then to overcome that problem, Morrison (2014) states that human factors (social capital) is a valuable asset for the company. Hence, companies need to make changes to its organizational culture by empowering its employees to think bigger and acting bolder if they want to generate more innovation outcomes.

One of the ways in which Campbell Soup was struggling to support those changes is building a new performance management system. The new system was built to trigger employees to think bolder and act more creative. Moreover of course, the construction of such systems is also accompanied by the granting of rewards for the employee who has contributed a positive and significant impact for the company. Because of the importance of social capital factor in an organization, then the formulation of business cases instrument by Ward *et al.* (2008) also consider the factors of non-financial benefits as a standard. Where the formulation is divided into six sections, including:

- The business drivers and investment objectives
- Identification benefits, the measures and owners
- The benefits structure
- Identification of the benefits on the organizational changes
- The explicit values of each benefits
- Costs and risks identification

#### **THE MOST IMPORTANT ROLE OF LEADERSHIP AND TRUST WITHIN ORGANIZATION**

**Role of leadership towards the creation of good corporate performance:** There's no doubt that the role of leadership

on people development in the organization seems to be crucial. A leader in the organization is analogous to a helmsman who must take full responsibility for the safety of its fleet at any condition. Without having a captain skilled in leading, motivating and organizing the crew when the ship hit by big waves or terrible storm continuously. It is the matter of time that sooner or later the ship will be sinking and buried on the seabed. Moreover in the organization, a manager is required to understanding the condition and situation of their staffs. When the leader has a strong comprehension and understanding of the organization environment, it will be easier for her to be able to infuse the vision, mission and organizational culture into the staff minds. So from that people in the organization have a sense of love, emotional attachment and also a strong sense of belonging toward their working place. Thus, there will always present a high sense of responsibility from each person in the organization for always give their best effort for the good progression and success of the organization.

Buckingham (2012) stated that the most valuable assets from the leaders are their authenticity or the original identity of them. Each leader has their style of leadership and it can't be generalized for all. In other words in the era of information and consumer-centric age, the companies that will be succeed are companies that tend to be able for appreciating the aspirations of its staffs and provide enough freedom for the leaders to conducting state-of-the-art leadership when they lead the organizations. It is no longer her time when leaders must always be forced to adopt a leadership pattern hereditarily. In his review, Buckingham (2012) mentions that the leadership style of the leaders can affect the performance of her staff in the hierarchy structure of a particular group. And that was a natural thing when a leader has a leadership style which is innovative and out-of-the-box creating as long as it is still in line with the values and norms of the organizational culture. And also have supports for the creation of healthy and productive work environment. In his case study, Buckingham (2012) takes a few examples of creative leadership style and "unusual" in an organization. One interesting example is the role of Ralph Gonzales as a leader in Best Buy™, the company that engaged in the retail business of electronic products.

Gonzales uses leadership style that he described as 'La Revolucion' by using a 'whistle' as a tool for motivating employee performance. Where the aim is to establish a vibrant performance of the entire company and keep the energetic spirit among them. Working mechanism for the 'whistles for everyone' concept was unique. In which every employee of best buy is equipped with a

whistle that has a specific color to represent their position in the hierarchical structure of the organization from the manager to the front-liner. If an employee saw their colleague do something that may seem to be special or unique. Then they can blow the whistle (that she/he carried) as a marker that they had found her co-workers have worked well and special. Can be imagined that special and unique behavior comes from a store manager who serves the customers with a friendly smile at the same time, he did the 'Gangnam style' dancing as a joyful expression and remarks his gratitude to the customers when the consumer agrees to purchase certain products through the recommendation from the manager. And then, one of his subordinates who had a position as a sales force can blow the whistle as a sign that the manager made the sale and did 'Gangnam style', dancing. The sound blows as an expression of joy and gratitude. In the end, the leadership style of 'La Revolucion' initiated by Ralph Gonzales has been successfully sky-rocketing Best Buy retail store as one of the world's most successful electronics products retailers. But unfortunately, the leadership style from Mr. Gonzales can't be used as a Standard Operation Procedure (SOP) for the next successor of him in best buy because 'La Revolucion', can't be used as a proprietary leadership asset. And merely work well for the Mr. Gonzales only.

#### **Organizational trust and the employee competencies:**

When an organization has a bossy type manager who behaves harsh, difficult to accept the suggestions, stubborn, arrogantly domineering of course more or less would affect the performance and competence of employees. Creativity of the people in the organization for aspiring and innovating as limited and constrained by strict organizational procedures. Afraid of being scolded by the boss, afraid of being fired from the company and fear imposed certain sanctions are among the reasons that often arises in the minds of followers in the organization, so that they become afraid to act and make certain decisions which may critical for the company. If that situation allowed continuously, the condition might dwarfing the creativity of the followers and could ultimately hinder the success of the organization. As for Kellerman (2007) defines followers as people who have a low rank in the organizational hierarchy and does not have the power and authority as well as a more powerful influence than their superiors. And if the followers are not given the opportunity to develop, create, innovate and has a participation in the decision-making process within the organization, it can be said that the organization let the work environment as it will never be able to capitalize on the huge potential of social capital assets (Joshi *et al.*, 2010).

There were a lot of technological companies in Japan, so quickly spawned innovation. A wide variety of technology products such as automobiles, industrial machinery, electronic devices, even advanced mechatronics in the world, are many labeled as 'made in Japan'. The question is why companies in Japan are so creative and so fast when creating and generating the innovation? The simple answer is an organizational trust. Nonaka (2007) in his revised article states that the principle of knowledge-creating company in Japan, focusing redundancy as a fundamental design of corporate working culture there. Redundancy defined as repeated or duplicated process for one creation in various methodologies to generate something new. The creation intended may be the creation of innovation that are beyond the future of present invention such as re-creation of work procedures, business process re-engineering and or the modification of an existing business model. Companies in Japan are like to make redundancy as an effort to create a high social interaction within the organization. Social interactions describe as a dialog among fellow researchers and or communication across divisions (example: communication between the marketing division and the R&D Department). When many Western companies assume, duplication will only lead to a waste of resources (especially for financial resources) and also time (Nonaka, 2007). In Japan, redundancy is considered as an important mechanism for knowledge creation and utilization. When building a car, the Japanese not only have one way to get it done. But, they have two, three or four ways to build and create a product that named as a car. Companies in Japan consider a redundancy as the most powerful way to gather a wide range of solutions and perspectives when solving a problem. Technological company leaders in Japan have an excellent strategy to trigger the birth of continuous and sustainable innovation. They always offer a challenge to anyone, the followers within the organization to have a contribution for the organization. Leaders believe that every follower have high potential, talent and ability that can be useful for the progression of the organization. Therefore, the leaders in Japan have a characteristic that open-minded and did not hesitate to provide specific information for their followers. Or in other words, a follower who has a position as a front-liner in a hierarchical structure it is possible to gain access to the same information knowledge repository with a manager or even the CEO of the organization, except for access to personal data of employees. In terms of organizational knowledge creation in Japan, it can be hypothesized that organizational trust is well aligned with the employee competencies improvement.

## CONCLUSION

Social factors, one from several keys to being succeed on IS/IT investments. Without optimal empowerment on human resources, IS/IT investments are tend to the operational effectiveness. When Porter (1996), Joshi *et al.* (2010) and Ward *et al.* (2008) stated that innovation is the most important success measurement for the organizations. Because from the innovations could be arising a variety of knowledge products such as intellectual property rights (patents, industrial design and so on) and also new products and services being offered to the market. Thus, making the organization keep survive and continuing the competition with rivals on the market. Moreover, the births of innovations are most possibly generated through the people within the organization not from the machines. It would be a challenge for organizations in promoting knowledge transfer within the organization, especially in medium and small scale companies. That problem is not without a solution. Kane (2014) maps a concept concerning the use of social media as a medium for knowledge transfer which is useful in the era of consumer-based information such as the present day. Kane (2014) considered that integrate and communicate knowledge in organizations is not easy and costly. But, the company can utilize social media to gain more knowledge and extends from outside the organization for example is to gain unpredictable experience by the consumers. It believed through social media; organizations can encourage social interaction between the internal organization and the external organization because through the social media people can foster transparent communication with the intimacy atmosphere. Therefore, it is better for the company to develop an organizational culture that is adaptable and easy to learn towards the environment changes, specifically, towards the technological changes first before they planned to do the investments.

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