# Human Capital Traits and Informal Knowledge Sharing: the Role of Reciprocity Norm, Mutual Trust, and Cultural Interpretation Perspective by Oki Sunardi

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# Human capital traits and informal knowledge sharing: the role of reciprocity norm, mutual trust, and cultural interpretation perspective

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Abstract: The ability of enterprise to govern its human capital traits is believed to be the main issue to the sustainability of the enterprise. In knowledge economy era, knowledge becomes the key to competitiveness of any enterprises, and therefore, linking knowledge and human capital traits is considered as an important mission for any enterprises to achieve organizational sustainability. This study develops a conceptual model for understanding how the selected human capital traits (employee experience, employee skills, and education background) contribute to the process of knowledge sharing from informal interactions point of view, by examining the existence of reciprocity norm, mutual trust, and cultural interpretation perspective. Conclusively, the study enhances a sequence of propositions to predict the role of reciprocity norm, mutual trust, and cultural interpretation perspective to informal knowledge sharing process.

Keywords: human capital traits; reciprocity norm; mutual trust; cultural interpretation perspective; informal knowledge sharing.

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## 1. Introduction

In knowledge economy era, knowledge management has become the main process to enterprise sustainability, as well as the key to competitiveness of the enterprises (Nonaka and Takeuchi, 1995; Sveiby, 2001; Hsu et al., 2007; Bogner and Bansal, 2007; Hislop, 2009; Schiuma et al., 2012). Many prominent researchers believed that organization sustainability is mostly determined by the ability of any organizations to govern new ideas and innovations (Darroch, 2005). Innovations, in fact, is believed to be the main outcome of knowledge sharing process in any sustainable organizations.

The sustainability of any enterprises is also depend on the ability of the enterprises to manage their human capital (Omerzel et al., 2011). Enterprises are urged to capture and maintain the human capital who possess certain traits through knowledge sharing to produce certain knowledge. In other words, the ability of enterprise to govern its human capital traits is believed to the the key issue to the sustainability of the enterprise. Therefore, linking knowledge and human capital traits through knowledge sharing process is considered an important mission for any enterprises to achieve organizational sustainability (Radwan and Pellegrini, 2010; Acs and Virgill, 2010). However, previous studies revealed that many enterprises still not aware of the importance of governing human capital traits and organizational knowledge in relation to enterprise sustainability (Nafziger and Terrel, 1996; Nafukho et al., 2004; Bruhn at al., 2010).

The present of knowledge sharing activity has become the key activity to knowledge management process (Fathi et al., 2011). Knowledge sharing process has proven to limit knowledge loss when key employees leave the organization. Moreover, knowledge sharing drives the innovation process (Wasko and Faraj, 2000), understands the market needs better (Fathi et al, 2011), improves the product and service development (Sanchez and Palacios, 2007), shortens the response time to customers (Fathi et al, 2011), improves the organization performance (Quigley et al., 2007; Amayah 2013), and fosters the organization competitiveness (Felin and Hesterly, 2007; Amayah, 2013).

This paper outlines the reciprocal perspective in which certain human capital traits, such as: past employee experience, employee skills, and employee education background, create a crucial role for encouraging knowledge sharing process for organization members to foster enterprise sustainability. A following research question is derived: how do employee experience, employee skills, and employee education background foster the enterprise sustainability through knowledge sharing process? Answer to this question will help to provide meaningful insight about dynamics of human capital traits for creating organizational sustainability when implementing knowledge management. By examining contemporary literatures, this study characterizes essential human capital traits for the encouragement of knowledge sharing, and how knowledge sharing from informal perspective can be an alternative interesting way of creating knowledge. Then, a set of proposition is extracted to clarify the relation of certain human capital traits to informal knowledge sharing within the enterprise. The final part of this paper incorporates conclusion and implications for further studies.

## 2. Literature Review

Despite limited studies, previous researchers had strongly argued that employee education background (Becker, 1993; Brooking, 1996; Ross et al., 1997; Yamamura, 2010), employee experience (Becker, 1993; Bontis et al, 2000; Yamamura et al., 2005; Kim et al., 2006), and employee skills (Shane, 2000; Khalique et al., 2015) have become critical traits of human capital that contribute significantly to productivity, as well as to the success of

the enterprises. Preliminary research by Sunardi and Tjakraatmadja (2013) tested that certain human capital traits such as employee experience, employee skills, and education background play significant role to knowledge management implementation within the enterprises. However, the previous studies were not in the role to provide an understanding of how employee experience, employee skills, and education background influence the knowledge sharing process to create certain knowledge. Moreover, it is important to understand that knowledge is constructed through interactions amongst human capital within organization (Nonaka and Takeuchi, 1995). Interaction will likely to happen whenever one member exchange idea to other members through formal as well as informal interactions (DeMarest, 1997). Nevertheless, informal interactions (e.g. lunch, break, sport, toilet, etc.) are believed to be the most effective way to exchange idea and information (Li et al., 2009; Hsiao et al., 2011; Eze et al., 2013). Therefore, this study tries to explore more about the creation of knowledge through informal knowledge that perspective. The following literature review will examine the roles of selected human capital traits (i.e. mployee experience, employee skills, education background) to knowledge creation through informal knowledge sharing process.

The ability of enterprise to create knowledge is mostly determined by its adeptness to foster informal interaction amongst human capital (Li et al., 2009). Interaction between human capitals is a key source of new knowledge and value generation (O'Donnell et al., 2003). Through informal interaction, employees and organizational units share their knowledge more freely. In contrast, this condition is difficult to find in most of formal interactions (Lam, 1997). Moreover, informal interaction is important considering that knowledge cannot be constructed without fluid communication (Hsiao et al., 2011), whereas fluid communication is mostly existed in informal occasions. Relaxed communication enabling the exchanging process of tacit knowledge, possessed by each member of organization. Many times, critical ideas and innovations emerge from informal interaction process. Ideas and innovations, in fact, are the source of organizational survival and sustainability.

In formal knowledge sharing, human capital interacts based on normative motivation (Lam and Ford, 2010; Wang and Noe, 2010; Eze et al., 2013; Amayah, 2013). Normative motivation drives every member of the organization to share their knowledge based on their obligation as formal employees. However, in informal context, the eagerness to share knowledge is mostly based on inherent motivation (Fathi et al., 2013). Inherent motivation mostly rely on what the employees believe to be his role to increase the quality of life. For most employees, possessing certain skill becomes a critical factor to be involved in interactions. In other words, employee skill is considered as an important source of any employee to involve in knowledge to foster his quality of life (Li et al., 2009; Fathi et al., 2013), as well as his quality of work. The better the quality of work among employees, the higher the chance of any organization to survive and sustain (Hsiao et al., 2011).

In informal knowledge sharing, employee experience allows human capital to interact with each other to share and capitalize knowledge that lead to new ideas and innovations, while ideas and innovations are believed to be critical to the sustainability of enterprises. Previous employee experience is believed to be one of the crucial traits in exploiting organizational opportunities (Bontis et al, 2000; Yamamura et al., 2005; Kim et al., 2006). However, employees experience becomes an effective source of new ideas when an employee believe that the knowledge is in line with his interest (Pfeffer, 1994; Florin et al, 2003). In this case, when interest exists, employee experience becomes an important source of informal knowledge sharing, because in informal knowledge sharing, employees

with interest but less experience tend to question and act as receivers. In other words, employee experience becomes the media to the interaction and the production of new ideas.

However, in knowledge sharing process, the main differentiating characteristic of knowledge shared is the degree of difficulty of its articulation. Knowledge shared that can be easily articulated is labeled "explicit knowledge". Knowledge, that is difficult to articulate and therefore difficult to transfer is labeled "tacit knowledge" (Nonaka and Takeuchi, 1995). Since both tacit and explicit knowledge are complementary, the interpretation of knowledge will depends on the ability of employees to articulate the idea behind it. The articulation ability, most of the times, depends on each employee education background (Bontis et al, 2000; Yamamura, 2010), and therefore, may vary among employees. Many organizations foster the diversity of employee education background, because it is believed as an important factor to the generation of creative ideas and innovations (Ross et al, 2007; Yamamura, 2010; Unger et al., 2011). And again, innovations become one of the most important aspect of organizational sustainability.

## 3. Conceptual Framework

The arrangement of the study in this paper is to synthesize the findings from relevant research to develop a conceptual framework (Wacker, 2008). The conceptual framework tries to provide a better comprehension about the interaction mechanism, as well as the role of human capital traits to organization sustainability through is formal knowledge sharing. The conceptual framework is then deducted to suggest some propositions (Handfield and Melnyk, 1998).

The central theme of this study is that past employee experience, employee skills, and employee education type are identified as crucial human capital traits that foster the sustainability of organization through informal knowledge sharing. There are four fundamental assumptions for the presence of informal knowledge sharing. First, informal knowledge sharing positively affect the organizational performance (Li et al., 2009; Hsiao et al., 2011). Great organizational performance creates more possibility to sustainability (Unger et al., 2011). Informal interaction assumes that knowledge creation will not be existed without fluid communication amongst employees. Communication enables knowledge exchange, and knowledge exchange fosters knowledge combination. The new combined knowledge drives the innovations amongst employee. Second, employee experience "should not be equated with knowledge, because experience may or may not lead to increased knowledge" (Sonnentag, 1998 in Unger et al., 2011). This assumption suggest that organization should not solely depend on employees experience to produce knowledge. Employee experience, as well as other human capital traits, need certain mediators in order to contribute to knowledge sharing process, such as trust (Cai et al., 2013; Eze et al., 2013). Third, employees repeatedly interact with each other reciprocally through informal interaction. Reciprocity is argued to have positive impact to knowledge sharing (Amayah, 2013), as well as in other interactions (Axelrod, 1984). In knowledge sharing context, reciprocity assumes that each employee in the informal circle has information about what skills other employee has acquired in the past. Employee is willing to share his skill related knowledge when he believes that he can earn more enrichment to the skill he has by sharing knowledge. The informal knowledge sharing members create mutual understanding by sharing knowledge to resolve a certain need. Fourth, informal interaction generates social process, in the form of mutual relationship and or persuasive tendency, and becomes one of crucial condition in knowledge creation process (Chua, 2002; Hsiao et al., 2011; Huang and Lai, 2012). Social process sometimes creates problem because of the difference in articulation of knowledge shared. The differences in articulation is believed as the effect of diversity of education background of employees. The differences can be overcome by providing example from cultural interpretation (McAdam et al., 2012). It is assumed that cultural perspective can be exploited to overcome the differences of articulation of knowledge shared during informal interactions.

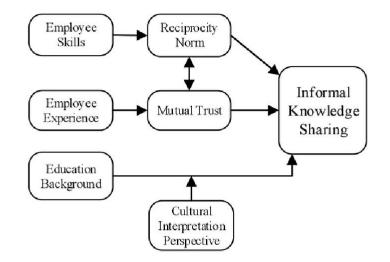


Figure 1. Schematic overview of the relationship of employee experience, employee skills, and difference of education background to informal knowledge sharing

## 3.1. Employee skills, reciprocity norm, and informal knowledge sharing

In knowledge economy, employee skills is considered as an important source of an organization (Sveiby, 2001; Newell et al., 2002; 72). Employee skills is used as important input in the organization's internal work processes. However, skills-based works often associated with works that lack of routines, with high attention on informal interactions (Gotvassli, 2012). Muthusamy and Palanisamy (2004) found that organizations that alter on formal interactions are less capable to generate insights that can be a source of sustainable competitive advantage. Moreover, skills-based organizations may be composed of individuals with various skills from different organizations background. The degree of expertise of each skill possessed may varied among each individual. Expertise in one area will differentiate a person's perceptions and understanding (Eveleth, 2011). This differentiation of perception and understanding may lead to the enrichment of current skills possessed by interacting individuals. However, each individual should first create common understanding by concentrating on building each other's skills to solve specific needs. The mutual relationship process takes time and need to be repeated by all parties via the norm of reciprocity (Emerson, 1976 in Radaelli et al., 2011), in order to impact positively to the interaction (Axelrod, 1984; Amayah, 2013), and promotes future skill development (Arik and Dunne, 2014).

Proposition 1: When individuals in the organization reciprocally focus on building each other's new skills, the exploration of employee skills amongst individuals affect positively to the informal knowledge sharing process.

## 3.2. Employee experience, mutual trust, and informal knowledge sharing

Informal knowledge sharing is considered as a form of interaction mechanism which is taken place in informal occasion and place. Interaction mechanism enables knowledge transfer through participative learning (Gulati and Gargiulo, 1999). Participative learning is characterized by extensive knowledge sharing by individuals. Nevertheless, individuals who involve in the knowledge sharing activities must first define potential risk of sharing their tacit knowledge to others. This is the stage when individuals build mutual trust. Developing mutual trust and credibility through knowledge sharing requires extensive social interactions amongst knowledge disseminators and knowledge recipients (Orlikowski, 2002; Sole and Edmondson, 2002).

When mutual trust existed, individuals who involve in the interaction tend to reduce risk associated with the knowledge sharing activity (Narayanan and Raman, 2004). By reducing risk, individuals start to build a sharing collaboration in order to achieve their needs (Fawcett et al., 2012). However, confirming successful collaboration to share knowledge within organization is evidently difficult because knowledge sharing contains high social interaction (Dalkir and Wiseman, 2004: 64). Cai et al. (2013) believed that trust is a very important factor in any interactions before any party share their knowledge, especially when the knowledge shared is very valuable such as their valuable experience. Employee experience is an important asset as long as this asset can be shared before the owners leave the organization (Barney, 2002). In this case, trust should be earned by all parties in knowledge sharing process, in term of mutual relationship. When mutual trust exists, the process of importing knowledge (Andrews and Delahaye, 2000) and combining knowledge (Tsai and Ghoshal, 1998) will become more fluid and accurate.

Proposition 2: When mutual trust exists among individuals in the organization, the use of employee experience improves the quality of knowledge shared in the informal knowledge sharing process.

## *3.3. Education background, cultural interpretation perspective, and informal knowledge sharing.*

Modern organizations mostly believe that education plays a significant role to productivity (van der Merwe, 2010). However, higher level of education does not related to direct incensement of productivity, but merely to increase the ability of individual to learn in order to be more productive. In this case, higher-education facilitates individuals to better manage personal capitals and establish competitiveness (Blundel et al., 1999; Arik and Dunne, 2014). However, organizations with more higher-educated individuals tend to be more mechanistic. Idea and knowledge shared mostly conducted through formal interactions (e.g. formal meetings, reports) are the media to share cognitive concept (Biddle, 1986). Cognitive concept describes how individuals act through 'symbolic interaction' in which they understand what they do and share, and interpret what they share through formal behavior. Biddle argues that the limitation of formal occasions is the lack of concerns to individuals' roles, feelings, and self-concepts. In fact, individual role, feeling, and concept have strong relationship with intention to share knowledge (u and Yong, 2011).

Biddle argument appears acceptable. Formal interactions are considered lack of social process, in which individual role, feeling, and concept can be expressed more freely. Informal interactions, on the contrary, generate more possibilities to express self-concept as fundamental situation in knowledge creation (Huang and Li, 2009; Huang, 2010; Hsiao et al., 2011). Nevertheless, in informal interactions, whereas self-concept and feeling are

mostly influence the interactions, can sometimes generates interpretation problem because of the difference in articulation of knowledge shared among individuals. Diversity of culture of employees is believed as one source of differences in articulation (Ford and Chan, 2003), while this cross-culture condition may be developed from diverse educational background of employees, who continuously interact within their previous organizations. Eldridge and Wilson (2003) found that diverse educational background plays a significant role to study and resources capacity of each human capital. These diversity affected significantly to the maturity of knowledge absorbed by each individuals from any different education institutions. Another reason for contextual variation in articulating knowledge shared is the differences in language (Hendricks, 1999). However, Nonaka (1994) argued that stories, analogies, and metaphors can be exploited to decrease the difficulty in knowledge articulation and interpretation. Through stories and metaphors, knowledge can be articulated more effective (Swap et al., 2001). In other words, the differences in knowledge articulation can be overcome by providing example from cross-cultural interpretation (Ford and Chan, 2003; Dalkir and Wiseman, 2004; McAdam et al., 2012; Seba et al., 2012).

Proposition 3: When organizations consist of employees from diverse educational background, the use of cultural stories, examples, and metaphors improve the knowledge formulation in the informal knowledge sharing process.

### 3.4. Reciprocity, mutual trust, and informal knowledge sharing

Any value creation through collaboration relies on a stable foundation of trust as it comprises individuals interacting closely with other individuals (Moldoveanu and Baum, 2011). Eppler and Sukowski (2000) previously found that trust is evidently considered as a crucial factor that supports knowledge sharing, particularly when tacit knowledge is the main essence in the sharing interaction. Informal collaboration such as informal knowledge sharing also demands that each interacting individuals should first aim to form strong foundation of trust before any knowledge is willing to be shared, especially when it comes to tacit knowledge. Through interactions and dialogues, trust can be developed by individuals continuously (Sridharan and Simatupang, 2013). However, trust requires that individuals in the interaction possessed certain competencies (Handfield and Bechtel, 2004). These competencies act as insurance, so that each interacting individual is reliable enough to be the partner in the interaction. Nevertheless, reliability perspective requires both interacting parties to have the same belief. Believing other party to take part in certain knowledge sharing interaction is a form of risk, since each party is not in the condition to previously understand what is being shared, whether it is a correct knowledge or a misleading one. Rempel and Holmes (1981) states that trusting other party in an interaction is a risk, and each individual should be willing to take the risk in order to be trusted. This argument is analogous to reciprocity theory. Reciprocity theory believes that individual human beings are born to be involved in various interactions (Nowak and Sigmund, 2005). In reciprocity perspective, individual will likely to provide some benefits to the other interacting individual if he believes that the interaction partner is trustworthy and will be able to provide what he needs.

Proposition 4a: Reciprocity norm and mutual trust have a reciprocal positive effect one to another.

4b: When level of trust increase within individuals, reciprocity level will also increase, and both promote the proper level of informal knowledge sharing process.

## 4. Conclusions

This study suggests a conceptual framework to comprehend how human capital traits foster the creation of knowledge through informal knowledge sharing. It enhances the finding from previous study that certain human capital traits can contribute to knowledge management implementation. The impact of employee skills to informal knowledge sharing is mediated by reciprocity norm that focus on creating mutual relationship amongst employees to build each other new skills. This condition helps to build mutual trust amongst individual in the organization. When mutual trust exists, employee experience can be exploited to improve the quality of knowledge shared in the informal knowledge sharing. In the same way, when mutual trust increases, reciprocity norm also elevates, and both develop better informal interactions. Moreover, this study reveals that informal knowledge sharing is also influenced by the diversity of employee educational background. Diverse education background is a source of study and resources capacity that can enrich the knowledge shared by each interacting party in the informal interactions. Though, the diversity sometimes create differences in articulation, the use of cultural interpretation perspective can help to overcome this problem. The use of cultural stories, examples, and metaphors can improve the knowledge formulation in the informal knowledge sharing process 2

This study has aided to the current theory by refining the relationship between employee skills and reciprocity norm, employee experience and mutual trust, and education background and cultural interpretation perspective, as well as the relationship between reciprocity norm, mutual trust, cultural interpretation perspective, and informal knowledge sharing process. Nevertheless, this study has a limitation of empirical evidence. Future study could try to assess from actual informal knowledge sharing. However, measuring informal knowledge sharing may prove difficult, especially at individual level, as this study is focusing on. Future study may concerned about measuring it at other level of analysis (i.e. cross-level, intergroup, etc.).

This study also recommends several practical implications. First, the existence of employee skills, employee experience and education background are useful to create an effective stimulus to individuals in the informal knowledge sharing process. By understanding the role of reciprocity norm, mutual trust and cultural interpretation perspective, individuals who involve in the informal interactions can build more productive knowledge sharing behavior, as the basis of effective knowledge creation and combination. Second, managers and leaders who involve in the idea and innovation generation can accommodate the informal knowledge sharing process by creating the appropriate knowledge sharing climate. Managers and leaders need to take advantages of what appropriate climate can deliver to the creation of innovations and the organizational sustainability.

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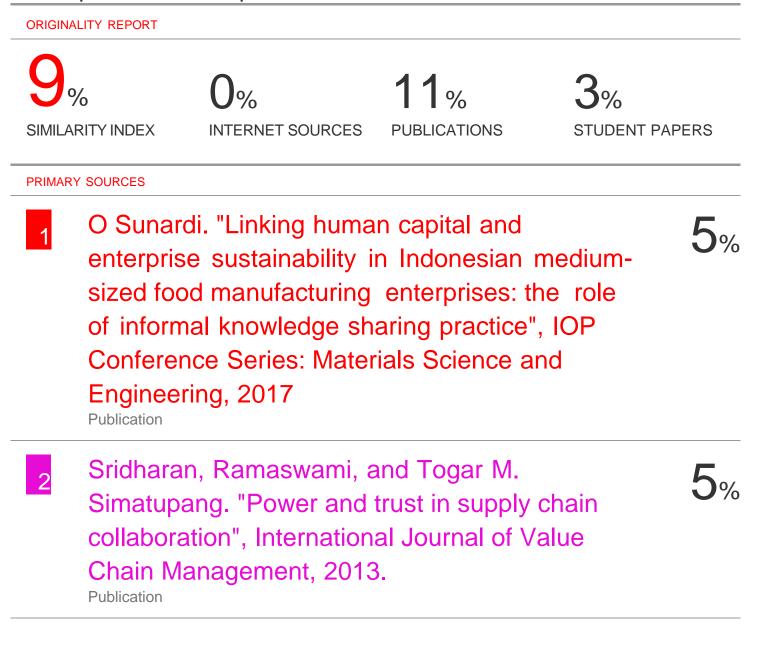
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