

Knowledge Sharing as an Intention of Employees in Communicating Knowledge (A Case Study of Telecommunication Company in Indonesia)

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Abstract. Implementation of knowledge sharing as a means of communicating knowledge in a telecommunication company in Indonesia does not run optimally. The data shows that the employees who do *sharing* is amounted to 57% which means not all of them actively participate in the sharing activity, whereas in 2020, it is predicted that about 50.72% of the employees will retire. This indicates that within five years, there will be a massive retirement resulting in a great deal of lost knowledge if the employee's knowledge does not become corporate's knowledge. Knowledge sharing can run optimally if all employees have a strong and consistent behavior in sharing. Theory of Reasoned Action states that the behavior of individuals is determined by the intentions based on attitude toward behavior and subjective norm which are believed. By involving 102 respondents and using multiple regression analysis method, it was found that the variable of social trust has a positive significant influence on attitude toward knowledge sharing behavior and the variable of attitude toward knowledge sharing behavior significantly influences the intention to share knowledge.

1 Introduction

Developed countries in Asia, for example South Korea, Japan and Singapore, where a majority of the GDP (about 80%) is donated from human capital, implement knowledge-based economic development, focusing on investments in education and training, fostering national innovation, information infrastructure, and economic policies that create stable and conducive conditions. A concept related to how knowledge is managed to be created, stored, developed and communicated or transferred to the needy to create competitive advantage called knowledge management [1].

Implementing knowledge management in companies will impact the performance of the organization. Organizational performance means the degree to which companies have achieved their business objectives [2]. Successful implementation of knowledge

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management provides many benefits, such as encouraging innovation, accelerating decision-making processes, improving customer service and increasing revenue [3]. The implementation of all existing knowledge of the individuals can create business value that ultimately benefits the company to act effectively and efficiently to generate sustainable competitive advantage and maintain the existence of employees' knowledge and skills systematically.

One proven effective way in communicating the widely disseminated knowledge in the company is through knowledge sharing activities as a part of knowledge management. Susanty and Wood [4] stated that sharing knowledge needs a lot of time, energy, and thought to prepare subject to be presented so the employees tend to reduce their willingness to share because it need high effort. On the other hand, organization really needs employees to participate actively in knowledge sharing. Knowledge sharing requires a willingness to collaborate with others within an organization because any indisposition to share knowledge may result in inaccurate, incomplete, and ill-timed and, in extreme cases, false information being shared [2].

Implementation of knowledge sharing as a means of communicating knowledge in one of Telecommunication companies in Indonesia has not been optimal because it is not formalized in the form of certain rules or procedures which stimulate that the activities of sharing to become one of the obligations to be done by every employee. The implication is that not all employees want to do the sharing regularly so there is still a lot of knowledge attached to the employees and it has not become the company's knowledge yet. Whereas in 2020 there is going to be a massive retirement reaching 50.72% of the total number of employees which will result in the loss of great amount of knowledge if the knowledge of the employees does not become the company's knowledge.

This indicates that the number of employees participating in the knowledge sharing is actually less than the number of knowledgeable employees. Meaning, not all employees participate actively in knowledge sharing, only around 57% of them who have done it. Though knowledge sharing activities are done to finalize the readiness and increase knowledge of the next generation to replace the predecessors who will retire and transform the knowledge of the employees to become knowledge of the company.

Knowledge sharing can run optimally if all employees have a strong and consistent behavior in sharing. Individual behavior is determined by an intention based on an attitude assessment of subjective behaviors and norms that are believed to be the references in behaving. In other words, an individual has the intention to communicate knowledge to other individuals or the organization if the assessment of subjective attitude and norm is believed to be in accordance with the wishes of the individual.

Based on the exposure of knowledge sharing phenomenon as a means of communicating knowledge, associated with massive retirement indication and the low percentage of employees in doing knowledge sharing, it is necessary to further research on any factors which affect the intention for knowledge sharing by using *Theory of Reasoned Action*.

2 Literature Review

2.1 Knowledge Management

Knowledge constantly evolves and needs to be identified, evaluated, transferred, stored, and reused. Therefore, there needs to be a system which manages knowledge to be used and becomes a value for the organization known as knowledge management. Knowledge management is a means of managing corporate knowledge in creating business value and generating sustainable competitive advantage by optimizing the process of creation,

communication, and implementation of all the knowledge needed for the achievement of business objectives [5]. The greatest challenge in knowledge management is the implementation of knowledge sharing. It is because not every individual willing to share his or her knowledge even though the knowledge is important for the organization.

2.2 Knowledge Sharing

Knowledge sharing is the process of exchanging information, ideas, experiences and knowledge from an individual to the others or the organization to enhance the knowledge of individuals and organization through varied methods and media. Tobing [6] outlined the benefits of *knowledge sharing*, as follows:

- 1) To create equal opportunities for members of the organization to access knowledge and learn it.
- 2) To increase the speed of learning or reduce the time required to acquire and learn new knowledge.
- 3) To accelerate the completion of tasks or problems, because the settlement no longer starts from zero.
- 4) To solve problems by utilizing methods which have been proven to be effective in the unit or elsewhere (thus, it prevents *reinventing the wheel*) based on the experience of others and the best practical solution.
- 5) To provide basic materials for innovation in the form of knowledge that varies and multi-perspective.
- 6) To exploit the knowledge maximally so that knowledge and organizational competence can be utilized to improve the competitiveness of the company.

Quoting the opinion of Connelly, Kelloway, Lin and Lee [7] who stated that: “Firm can successfully promote a knowledge sharing culture not only by incorporating knowledge in its business strategy, but also by changing employee attitudes and behaviors to promote willing and consistent knowledge sharing.” Therefore, the researcher realizes that the sharing activity is inseparable from the attitudes and behaviors of intention to share. Consequently, this study focuses on factors which affect intention using *Theory of Reasoned Action*.

2.3 Theory of Reasoned Action

Theory of Reasoned Action (TRA) is a theory stating that the decision to perform a particular behavior is the result of a rational process in which behavioral choices are considered, the consequences and outcomes of each behavior are evaluated and a decision is made. Schematically, TRA can be described as follows:

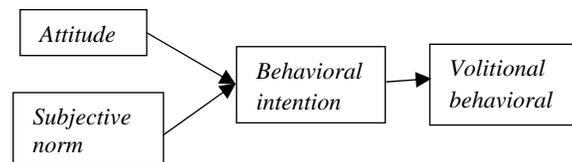


Fig. 1. Schematic of TRA

As we see in Fig. 1 that is schematic of TRA can be describe:

2.3.1 Attitude

Attitude in the context of knowledge sharing (in this study is labeled attitude toward knowledge sharing behavior) can be predicted by evaluating employees' beliefs on knowledge sharing, while the consequences of knowledge sharing can be influenced by attitude toward this behavior [8].

Based on research conducted by Dong [9], it was found that there are four factors influencing attitude toward knowledge sharing, among them are:

a) *Extrinsic Reward*. According to Dong [9] extrinsic rewards refer to positive outcomes which are not attached to the work itself, for example salaries, promotions, and other benefits. In the context of knowledge sharing, there is an economic exchange when individuals expect to receive special extrinsic rewards if they share knowledge [10].

b) *Social trust*, is an important component of knowledge sharing behavior because the level of trust among employees can affect the amount of knowledge sharing that occurs within a company. The higher the level of trust among fellow employees is, the more number of sharing there will be, and vice versa the lower level of trust among fellow employees is, the less number of sharing there will be [11].

c) *Sense of self-worth*, is a personal concept of liking oneself because he or she has great competence and authority or power judged from the view point of employees who see themselves as a part of an organization which contributes or values positively to the organization through knowledge-sharing activities [9]. In the context of knowledge sharing, employees who share knowledge are more likely to understand how those actions have contributed to the work of others or can improve organizational performance.

d) *Expected association*, is a situation in which employees believe that others can improve mutual relationships through knowledge sharing and create new relationships with other employees [9]. This has a positive effect on attitude to knowledge sharing behavior. Furthermore, Bock & Kim [12] also stated that the established associations are expected to generate trust among employees in improving relationships by offering their knowledge. Thus, employees who have a positive reciprocal relationship to the fellow employees will grow to become more positive individuals and able to encourage the attitude of knowledge sharing in the organization.

2.3.2 Subjective Norm

Subjective norm is the function of individual belief in terms of approving or disapproving certain behaviors. This refers to a person's perception of the expected behavior in a particular group and in a particular situation [8]. In the organizational context, management has control over employees in terms of compensation policies, performance appraisals and career advancement. Thus, it is reasonable that employees want to meet the management expectations to engage in knowledge-sharing behavior. In addition, relationships with fellow members of the organization also have an important effect on one's professional experience in knowledge sharing activities [13].

Based on the research conducted by Alhalhouli [14] there are two variables (which are used as the dimensions in this study) that influence subjective norm, namely:

a) *Leadership*, Srivastava, Bartol and Locke [14] suggested that leaders play an important role in realizing knowledge sharing to encourage and maintain knowledge-sharing behavior. The indicator used in this research is leadership quality which is measuring the knowledge quality of leaders or superiors, and measure how big the leaders or superiors support is to the members or subordinates.

b) *Organizational Culture*, According to McDermott and O'Dell [14] that the great value of culture is the result of its relationship with actions and expectations of the individuals.

Individuals will be more open to share their knowledge and experience in the organizations which have a strong culture of knowledge sharing.

2.3.2 Behavioral Intention

According to Bock & Kim [15] behavioral intention in the concept of knowledge sharing labeled as intention to share knowledge is the degree to which a person believes and desires to engage in knowledge-sharing activities. Basically, individuals tend to share their knowledge with others if they have a strong intention to do so [10]. Intention in sharing knowledge is positively related to knowledge sharing behavior. Individuals who have intentions in sharing knowledge with fellow members of the organization tend to use all the methods or ways they have.

Organization must be able to optimize the knowledge sharing activity by ensuring that individuals within the organization participate actively in it. Sharing activity will not work optimally if it is not supported by the intention of individuals to share knowledge.

Theory of Reasoned Action is used to predict knowledge sharing behavior which is influenced by intention to share knowledge. Behavioral intention is determined by the individual's attitude and subjective norm believed, it is because individuals are rational and the behaviors to be explored are within their own will [8].

As what has been described, the model of this study is illustrated as in Figure 2:

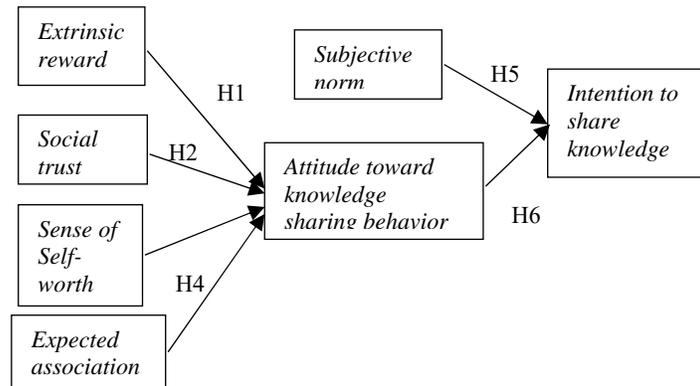


Fig. 2. Research Model

Based on the framework and research model used, the hypotheses in this proposed research which will be tested are as follows:

- H1: *Extrinsic reward* significantly affect *attitude toward knowledge sharing behavior*
- H2: *Social trust* significantly affect *attitude toward knowledge sharing behavior*
- H3: *Sense of self-worth* significantly affect *attitude toward knowledge sharing behavior*
- H4: *Expected association* significantly affect *attitude toward knowledge sharing behavior*
- H5: *Subjective norm* significantly affect *intention to share knowledge*
- H6: *Attitude toward knowledge sharing behavior* significantly affect *intention to share knowledge*

3 Research Method

3.1 Operating Variable

Variables used in this research are:

1) Independent variables which influence attitude toward knowledge sharing behavior consisting of:

- X₁: Extrinsic reward
- X₂: Social trust
- X₃: Sense of self-worth
- X₄: Expected association

2) Independent variables which affect intention to share knowledge consisting of:

- X₁: *Subjective norm*
- X₂: *Attitude toward knowledge sharing behavior*

3.2 Population and Sample

Population to be studied are employees at the level of *officers* and *managers* who become the target of knowledge sharing by using non probability sampling technique with census method. This technique was chosen with the consideration that the population number is small only 119 employees and the generalizations made will only have very small errors. Out of 119 distributed questionnaires, 102 were found to be filled.

3.3 Data Processing

Before being processing, validity testing was performed and data shows that all statement valid with $r_{tabel} > 0.195$ and all the question items are reliable with the Alpha Cronbach value > 0.7 .

By using multiple regression analysis method, data processing shows that all variables meet the classical assumption test values required. Based on the research model and the analysis conducted, two regression equations were obtained, namely:

$$Y_1 = 1,476 + 0,066X_1 + 0,380X_2 + 0,072X_3 + 0,100X_4 + e \quad (1)$$

Explanation:

- Y₁ = Attitude toward knowledge sharing behavior
- X₁ = Extrinsic reward
- X₂ = Social trust
- X₃ = Sense of self-worth
- X₄ = Expected association
- e = Residual Error

$$Y_2 = 1,856 + 0,083X_1 + 0,417X_2 + e \quad (2)$$

Explanation:

- Y₂ = Intention to share knowledge
- X₁ = Subjective norm
- X₂ = Knowledge sharing behavior
- e = Residual Error

Based on the equation which has been mentioned, there are two stages of data processing, namely phase 1 data processing using equation (1) and phase 2 data processing

using equation (2). Consequently, the following results with t_{table} value of 1.985 were obtained:

Table 2. Hypothesis Testing Result

	Hypothesis	Statement	Value of t_{count}	Result
Phase 1	H ₁	<i>Extrinsic reward significantly affect attitude toward knowledge sharing behavior</i>	0,621	Not Support
	H ₂	<i>Social trust significantly affect attitude toward knowledge sharing behavior</i>	3,718	Support
	H ₃	<i>Sense of self-worth significantly affect attitude toward knowledge sharing behavior</i>	0,615	Not Support
	H ₄	<i>Expected association significantly affect attitude toward knowledge sharing behavior</i>	0,913	Not Support
Phase 2	H ₁	<i>Subjective norm significantly affect intention to share knowledge</i>	0,873	Not Support
	H ₂	<i>Attitude toward knowledge sharing behavior significantly affect intention to share knowledge</i>	4,385	Support

4 Result and Discussion

Based on Table I. Hypothesis Testing Result, it can be concluded that:

- 1) Social trust becomes the variable having a significant influence on the variable of attitude toward knowledge sharing behavior with the t_{count} of 3.718
- 2) Attitude toward knowledge sharing behavior becomes the variable having a significant positive influence on the variable of intention to share knowledge with the t_{count} of 4.385

Social trust among employees will affect the amount of knowledge sharing which occurs within a company. The higher the level of trust among fellow employees is, then the more the number of sharing will be. Vice versa, the lower the level of trust among employees is, then the less the number of sharing will take place. This happens because employees will be selective in exchanging the knowledge with colleagues. When an employee does not trust his coworkers, then the knowledge exchange process will be minimal and not optimal.

In relation to telecommunication companies, cognition based trust is the type of trust that occurs, which is a trust based on rational decisions in reference with the information

about knowledge and capabilities possessed. This happens to the dissemination of knowledge in an integrated system where the content uploaded by the employees will be validated by the experts before it is published. The implication is that the accessible contents are those appropriate and well-targeted to the scope of work, so that the employees will believe to use or access the knowledge as it may be useful in working as well as adding new knowledge.

In fact, knowledge is not only disseminated through an integrated system, but also through formal or informal forums so it is necessary to increase the frequency of meetings among employees to facilitate communication and cooperation to establish an affect based trust which is a trust based on the emotional level, this type of trust is made up of the relationship closeness among the employees which has been established within a certain time. By having frequent communication and cooperation rates, it will establish bonding among employees and facilitate the exchange of information and knowledge, this can enhance the sharing of knowledge and information.

The attitude toward knowledge sharing behavior will affect the intention or inclination of the employees in sharing knowledge. The more positive the nature of knowledge sharing behavior is, the more intentions to share the employees have. Conversely, the more negative the nature of knowledge sharing behavior is, the less intentions to share the employees have. This happens because, the attitude is formed by the perception of individuals based on belief and evaluation of the consequences. In the context of knowledge sharing, this assessment is based on individual expectations such as the expectation to be rewarded when sharing knowledge, wish to improve relationships with other members of the organization, and hope that sharing knowledge will contribute positively to the organization.

In relation to telecommunication companies, knowledge sharing activities have been well systemized. This is evidenced by the availability of an integrated system which facilitates employees in disseminating knowledge quickly and on target, reward system for sharing, as well as a special unit that handles *Sharing & Utilization*. These points become a positive assessment for employees in addressing knowledge-sharing behavior. But this is not a guarantee that employees will respond positively if it is not accompanied by consistent behavior in doing the knowledge sharing. The more positive values the employees have in sharing, the more positive the attitude of the employees in knowledge sharing behavior will be which ultimately increases the intentions of the employees to share knowledge.

The amount of social trust influence on the attitude toward knowledge sharing behavior in this research is 21% and the influence of attitude toward knowledge sharing behavior on intention to share knowledge is 19.80%. In the effort to increase employee participation to be willing to share, Telecommunication companies must increase the social trust. By having a high level of social trust, it is expected to increase a positive attitude toward behavior that will ultimately increase the participation of employees in sharing. In addition to social trust, the employee's positive attitude toward knowledge-sharing behavior also needs to be improved by continuing to inculcate positive values of knowledge-sharing behaviors and habits which provide values for the employees, thereby it will increase the employees' intention to participate in sharing.

One of the strategic steps implemented by telecommunication companies to improve their sharing activities is by running a points system related to CBHRM assessment which provides the employees opportunities for promotion, remuneration and other rewards. This step is expected to encourage employees to participate in the sharing in consideration with the extrinsic reward has the value of economic exchange which can encourage employees to perform certain behaviors, in this case is sharing. However, based on the results of data

analysis obtained in this study, it is shown that the variable of extrinsic reward has no significant effect on the research object.

These results are in line with the research conducted by Casimir [10], Dong [9] and Bock [12] which stated that extrinsic reward is only temporary and not an actual behavior performed by individuals. The correlation with Telecommunication companies is that with the positions of officers and managers who have qualified compensation (salary and allowances), so that the monetary award is no longer a driving factor in conducting knowledge sharing.

Another variable tested is sense of self-worth with the results that it has no significant effect on attitude toward knowledge sharing behavior. Sense of self-worth is a personal concept of liking oneself because he or she has great competence and authority or power. In the context of knowledge sharing, individual competencies are able to provide input or new ideas to the company to solve problems or improve company productivity to achieve corporate business goals.

In telecommunication companies, the sense of self-worth is insignificant because the employees at the levels of officers and managers have the same level of competency, so there is no sense of superiority from other colleagues. In addition, employees with managerial positions have responsibilities in the form of management contracts containing job targets and becoming an assessment of their performance so that the employees will work effectively and efficiently to improve the productivity of the company. Therefore, the sense of self-worth variable is not a factor that encourages employees to share.

As with extrinsic reward variable, the expected association variable has no significant effect on employees' willingness to share, since employees do not expect reciprocity from sharing activities. The last variable which has no significant influence is subjective norm on intention to share knowledge. This indicates that the presence or absence of the leader's role does not affect the sharing activity because the employees with the position of officers and managers act as the leaders for the other co-workers so that they become the role model in sharing.

Culture that has been implemented in telecommunication companies does not actually affect the participation of employees in knowledge sharing, this proves that the culture of sharing has not been consistently done and not attached to the employees.

5 Conclusion and Suggestion

5.1 Conclusion

In the effort to increase employee participation to be willing to share, Telecommunication companies must increase the social trust. By having a high level of social trust, it is expected to increase a positive attitude toward knowledge sharing behavior that will ultimately increase the participation of employees in sharing. In addition to social trust, the employee's positive attitude toward knowledge-sharing behavior also needs to be improved by continuing to inculcate positive values of knowledge-sharing behaviors and habits which provide values for the employees, thereby it will increase the employees' intention to participate in sharing.

5.2 Suggestion

1) To improve the social trust, it is necessary to increase the intensity of meetings among employees in informal forums consistently, for example morning coffee, family gathering,

- and others. Frequent meetings will establish a smooth communication which can form a mutual trust bonding (affect based trust) and this will increase the intensity of sharing.
- 2) To enhance the role of Top Leaders in sharing periodically either through an integrated system or formal or informal forum. When leaders who share, knowledge or information conveyed will be more trusted because it has been proven through the competence, experience and achievements of the leaders. This will increase the social trust among employees that the leaders are concerned and willing to share their knowledge so that it will generate mutual trust and increase participation in sharing.
 - 3) To ensure the positions of employees are in accordance with the competencies they have, for example there are still positions of officers and managers occupied by those who have high school education level while their colleagues have higher education levels. This can be overcome by conducting regular training related to the job descriptions carried out. Employees who are competent in accordance with their level of position will be trusted by their colleagues (cognition based trust).
 - 4) To improve the attitude toward knowledge sharing behavior, it is necessary to do periodical education on knowledge sharing so that the understanding of employees in line with organizational goals. Periodic education can be done in the group context so it can be more effective.
 - 5) To make knowledge sharing as a part of the employee's job description stated in the Individual Work Unit (SKI) so it can force the employees to share. This obligation will make sharing becomes a routine thing to do which will increase the employees' participation in it.
 - 6) To spread the words of motivation associated with sharing activities in the work environment to form a positive paradigm encouraging employees to share.

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