

INFLUENCE OF ELECTRONIC MEDIA AND EXTERNAL REWARD TOWARDS KNOWLEDGE SHARING MANAGEMENT TO LEARNING PROCESS IN HIGHER EDUCATION INSTITUTION

Alexander Setiawan

Informatic Engineering Department – Petra Christian University

Siwalankerto 121 – 131 Surabaya 60236 Indonesia

Telp. (031) – 2983455, Fax (031) – 8417658

Email : alexander@peter.petra.ac.id

ABSTRACT

The aim of this research is to examine the factors supporting individuals' knowledge sharing intention. Based on the theory of reasoned action, this study examined influenced of extrinsic reward, and channel richness to knowledge sharing intention. Data was collected using a field study of lecturer and student in higher education institution Yogyakarta. We employ independent sample t-test and PLS (Partial Least Squares) version 2.0. The result show that there isn't perception difference between student and lecturer about factors that supporting knowledge sharing intention. The result show that channel richness has played significant part influenced attitude toward knowledge sharing. Extrinsic reward imposed no impact on an individual's attitude toward knowledge sharing. The result from this study confirm the theory of reasoned action. This study also find that subjective norm greater influence knowledge sharing intention than attitude toward knowledge sharing.

Keywords :

Theory Of Reasoned Action, Extrinsic Rewards, Channel Richness.

1. INTRODUCTION

In business environment that is full of competition, an organization must have strategy to survive and win the competition in this global environment. Some key factors to success for an organization are determined by its ability to build human resources, taking advantage of information technology and processing knowledge. Human resources here means skills and abilities of an individual in an organization which is equal as how many knowledges exists in that organization (Douglas, 2002). In order for an organization to have a competitive advantage, individuals in that organization must share their knowledge with other individuals, whether they're in the same organization or not.

A strategy that is based on technology and knowledge is not only needed for business organization, but education organization also need it, as an example is a university. An University is an organization that has a mission to increase the intelligent and life of a nation/race, so that it can become a civilized race, and become a center of knowledge, science, technology, arts, social science, and civilized humanity by

conducting a good quality education. Education organization is different from Bussiness organization, a education organization consist of many human resources. Because education organization has many human resources, so the existence of a competition between individuals in that organization is the key to success for a university to increase its human resources quality.

In this research, researcher wants to test a phenomenon know as sharing knowledge, especially for teachers and students in accounting department. The existence of technological improvement in how to process accounting information in USA which pass through four levels, which are *manual system, book keeping machine system, punched card system, and computerized system* influencing a change in how to process accounting information in Indonesia which is based in information technology (Romney, 2007). The existence of this change made the skill requirement of an accountant change. Nowadays, an accountant must have skill in accounting information system, beside manual accounting system. All this time, the accounting education only use manual accounting system. Romney (2007) in their research also said that many accounting graduate that has no skill in information technology and limited teachers in accounting that understand accounting information system which is based in information technology. Whereas now many money transaction in an organization that is processed using computerized system and based in information technology. By observing phenomenon and to response against change in market needs for a competitive accountant (Romney, 2007), there exist the need to share knowledge in the field of accounting, especially in a university, which is reputed to educate and produce teachers and students in accounting.

There exist several researchs which test several factors that influence an individual in sharing his/her knowledge, among them are the researchs which is conducted by Fu-sheng (2005) and Ido (2005).

This writing aim to prove empirically about the influence of external rewards, organizational climate, pressure of social psychology, media diversity, attitude of a person's behavior to share knowledge, and subjective norms of one's intentions to share knowledge at university. It is expected that this paper can also provide empirical validation of growth factors that influence one's intention to share knowledge and are expected to contribute to the university to allocate resources or to facilitate teachers and

students of accounting for intention to increase the sharing of their knowledge. This means that accounting teachers and students are motivated to share knowledge with teachers and with other students.

2. FOUNDATION OF THEORY

2.1 Knowledge Management

To be able to have a competitive advantage, companies are now required to adopt information technology. The development of information technology marked by the emergence of many new innovations. Innovation itself is characterized as a process of change from the three stages of *invention*, *innovation*, and *diffusion* (Ido, 2005). These innovations are not only influenced by the existence of information technology, but also the incorporation of the process of creation and knowledge transfer. Nonaka (2007) states that the essence of innovation is the creation of knowledge.

There are several advantages possessed by the knowledge that a company able to compete in the global environment full of competition, (Stenmark, 2000), which is a non-subtractive, can be owned by many parties, have different funding from other products, rarely have the economic scale, and *unpredictable*.

In order for knowledge can be used and used properly it is necessary to the existence of knowledge management. Some scholars tried to give a definition of knowledge management. (Sharp, 2003) tries to provide insight into the management of knowledge as a process in which the company gave birth to the values of intellectual assets and knowledge-based assets. Knowledge management is also defined as a process for obtaining, storing, sharing, and use of knowledge (Davenport & Prusak, 1998). From the above sense can be concluded that knowledge management is an approach to managing intangible assets in this case the intended knowledge so that the organization can have a competitive advantage compared to other organizations.

2.2 Theory of Reasoned Action (TRA)

This Theory of Reasoned Action (TRA) was developed by Icek Ajzen and Martin Fishbein. This theory explains how a person's behavior is influenced by one's intentions to do something. In accordance with its name as the theory of reasoned action, this theory reveals that basically a person behaves in a way that is consciously and based on a specific considerations.

Both the considerations of the gained outcome and taking into account the available information (Davis, 1986 in Gefen, 2003). Generally, the theory of reasoned action can be described as figure 1. From the pictures figure 1 can be explained that a person's behavior (actual behavior) is influenced by one's intentions toward the behavior (behavioral intention). According to Gefen (2003), behavioral intentions and behavior are two different things. Behavior intention or intention (behavioral intention) is the desire to do the behavior, so in this case intention is still not behavior. A person's intention towards a behavior is influenced by two main determinants, which are attitudes toward behavior and subjective norm. Attitude is determined by a strong

conviction about the behavior. While the subjective norm is determined by a belief that individuals or particular groups approve or not to a specific action (Gefen, 2003).

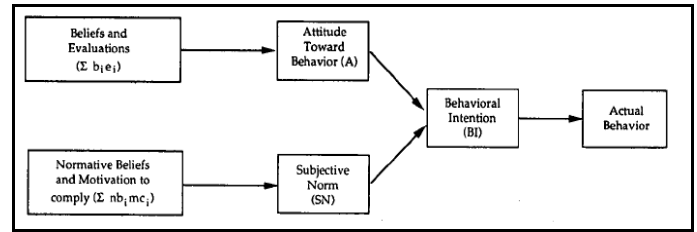


Figure 1. Theory of Reasoned Action

3. DISCUSSION AND ANALYSIS

3.1 Internal Reward Hypothesis

Social exchange theory which suggests that an individual have a desire to interact with other individuals because based on the individual's personal desires which usually cost analysis of the interaction benefit (Nolan, 2008). Based on the theory, it can be concluded that a person's behavior will be influenced by perceptions of the benefits to be gained from such behavior. In order to share knowledge, provision of benefits is expected that a person can be motivated to share knowledge.

There are several research that investigated the effects of external rewards to a person desire to share knowledge. Galia (2006), Moon & Park (2002) and Burgess (2005) examine the influence of factors external motivation in a person's behavior in the sharing of knowledge. The test results showed that external motivation positively influence employee behavior in the sharing of knowledge.

As in previous research, Nolan (2002) also examined the relationship between external rewards for someone behavior in the sharing of knowledge. Both this study uses the theory of reasoned action (TRA) as the basis to test someone intention in sharing knowledge. The result of research revealed that the awards as a form of external motivation and the negative effects are not significant for someone attitude in sharing knowledge.

Based on social exchange theory and the results of previous research, the first hypothesis formulated buffers as follows:

H1 : External rewards associated with attitudes toward the behavior of someone to share knowledge.

3.2 Media Diversity Hypothesis

There are several research that examine the influence of media diversity in the willingness to share knowledge. Research conducted (Nolan, 2008) examined a variety of media communications, meetings, and training in order to motivate knowledge sharing. His research shows that there is a positive relationship between the diversity of the media to attitudes toward the behavior of someone to share knowledge.

Based on the results of previously conducted research, the hypothesis can be formulated as follows:

H2 : Media diversity to share knowledge related to positive attitudes toward the behavior of someone to share knowledge.

3.3 Theory of Reasoned Action Hypothesis

This theory explains how someone act is influenced by his/her intention to do something. There is one research that examined the relationship between the influence of attitudes toward someone behaviour to share knowledge with the intention of someone to share knowledge, the influenced of subjective norm to share knowledge with someone intention to share knowledge is researched by Gefen (2003). The result of the research is showed that there is positive relation between someone attitude to share knowledge and subjective norm with someone intention to share knowledge. In addition to Gefen (2003) also examined the influenced of subjective norm toward attitude to share knowledge. This based on argument assumption is suggest that an individual can be motivated to be positive in knowledge sharing when that situation is fit with group norm. On this research Gefen (2003) discovered there is a positive relation between subjective norm of knowledge sharing with attitude toward behaviour of knowledge sharing.

Based on the theory of reasoned action (TRA) and the previous rearsch that conducted, the hypothesis can be formulated as follows:

H3 : Subjektive norm to knowledge sharing is positively associated with the attitude toward behaviour to knowledge sharing.

H4 : Attitude toward behaviour to knowledge sharing is positively associated with someone intention to knowledge sharing.

H5 : Subjektive norm to knowledge sharing is positively associated with someone intention to knowledge sharing.

This type of research is hypothesis testing research. Hypothesis figure 2. which want to tested in this research is the influenced of external rewards, organisation of climate, social phsycology tension, media diversity, an attitude toward someone behaviour to knowledge sharing, and the subjective norms toward someone intention to knowledge sharing. Methods of data collection in this research is the survey by using the technique of distributing questionnaires to the respondents.

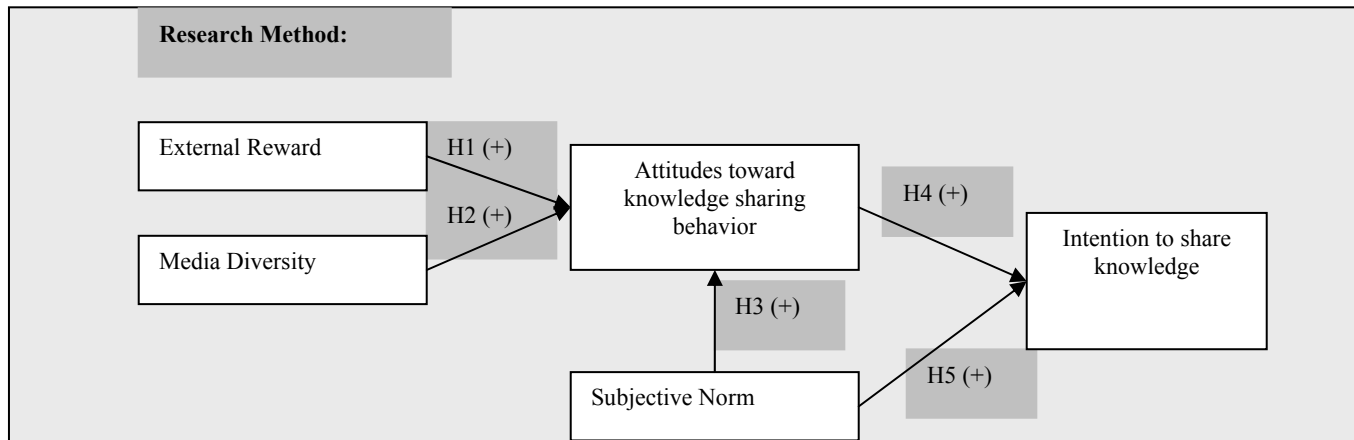


Figure 2. Research Method

3.4 Validity and Reliability Test

Validity test is related to the precision measuring instrument to do its work to reach target (Hadi, 2004). Validity test is divided into two groups namely the content validity and construct validity. The validity of measuring the extent to which the content items in the instrument that measured characteristics represent the attributes to be measured. To ensure content validity, researchers conducted a review of research questionnaires to a friend as well as research respondents during the preliminary tests carried out. Construct validity indicates how well the results obtained from the use of a measure in accordance with the theories used to define a construct. Construct validity was assessed through convergent validity and discriminant validity. Convergent validity is judged by the correlation between score items/indicators with it's construct score. individual indicators considered valid if the correlation value above 0.7 (Hadi, 2004). Following table 1 convergent validity test results from the data obtained.

Table 1. Validity Test

Variabel	Factor Loading
Reward1	0.858
Reward2	0.958
Channel1	0.916
Channel2	0.869
Attitude1	0.770
Attitude2	0.910
Attitude3	0.921
Attitude4	0.943
Norm1	0.915
Norm2	0.862
Intention1	0.773
Intention2	0.763
Intention3	0.744
Intention4	0.748

Source : Data Processed

as measured by using a construction validity convergent validity test has also been measured discriminant validity. Discriminant validity can be measured by comparing the crossloading between indicator with its construct (Hadi, 2004). The following table 2 and the correlation between the construction of indicators.

Table 2. Validity Discriminant Test

	attitude	channel	Intent	Norm	Reward
Attitude1	0.928759	0.431286	0.329921	0.392481	-0.044929
attitude2	0.931646	0.435813	0.328741	0.361232	-0.074412
attitude3	0.949785	0.442991	0.390573	0.452985	0.014466
attitude4	0.946775	0.422948	0.408685	0.429814	-0.075293
channel1	0.456862	0.920508	0.329702	0.345458	-0.088856
channel2	0.353880	0.863455	0.174409	0.312140	-0.112330
intention1	0.222601	0.196849	0.779668	0.513577	-0.062163
intention2	0.350836	0.302128	0.768262	0.428170	-0.222665
intention3	0.297027	0.153599	0.737716	0.264574	0.031028
intention4	0.342626	0.210936	0.740631	0.322907	0.107814
norm1	0.478657	0.339176	0.485229	0.912954	-0.054942
norm2	0.287726	0.317093	0.431331	0.864368	0.026695
reward1	-0.00749	-0.23255	-0.00606	-0.02817	0.743624
reward2	-0.05147	-0.08824	-0.07026	-0.01864	0.995248

Source : Data Processed

Reliability is the level of how much a gauge to measure the stable and consistent (Hadi, 2004). Research instrument is said to have high reliability value if the results of the implementation of various measures on the same subject obtained relatively similar results, for aspects that are measured in the subject have not changed.

Reliability of measurement can be done by looking at the value of composite reliability (Hadi, 2004) and cronbach's alpha (Nunnally, 1978 in Hadi (2004). A construct is considered reliable if its reliability composite score above 0.7 (Hadi, 2005) and values cronbach's alpha above 0.7, but the scale of development research is acceptable loading 0,5-0,6. The following Cronbach's alpha values and the composite reliability of each building.

Table 3. Reliability Test

Construct	Composite Reliability	Cronbach's Alpha
Reward	0.868827	0.805960
Channel	0.886587	0.748221
Attitude	0.959968	0.937485
Norm	0.882797	0.737317
Intention	0.842730	0.754494

Source : Data Processed

3.5 Testing Research

There are two types of tests in this research is to use a test average of different tests and test research models. Average difference test in this research using SPSS 12 (*Statistical Program for Social Science*). While to test the relationships between research variables used PLS 2.0 (*Partial Least Square*).

In this research used PLS analysis methods because the research model used in this research complex. PLS analysis methods are also deemed to have included multiple regression analysis, path analysis, and canonical correlation (Nolan, 2008).

In this research, testing the average difference is used to examine differences in faculty and student perceptions of the factors that influence one's intention to share knowledge. The following test results using different test average at table 4.

Table 4. Independent Sample Test for faculty and student

Variable	t-test	significance
Reward	1,966	0,049
Channel	1,632	0,092

Source : Primary Data Processed

From the table above can be seen that there is no real difference between faculty and student perceptions related to several factors that affect a person's attitude in sharing knowledge, including external rewards (REWARD) and diversity of the media (CHANNEL).

Hypothesis testing in this study using PLS (Partial Least Squares). PLS is used in hypothesis testing in this study using the 2.0 version of PLS. The following figure 3 research hypothesis testing results.

4. CONCLUSION

The purpose of this research is to prove empirically the factors that influence someone to share knowledge that consisting of external rewards, media diversity, sharing knowledge and attitudes toward the behavior of knowledge sharing and subjective norms toward someone intention to share knowledge. Test the average differences that have been performed to determine the different perceptions of students and faculty indicate that there is no significant difference in perceptions regarding the factors that influence one's intention to share knowledge between lecturers and students. Data processing results concluded that external rewards do not significantly affect someone attitude in sharing knowledge. The results of data analysis concludes that media diversity is the main factor affecting the attitude of sharing knowledge with faculty and students. The test results also concluded that the purpose of sharing someone knowledge has been influenced by subjective norms than by attitudes toward knowledge sharing behavior. This is due to the culture of which the place of this research is conducted has a culture of collectivism, so the behavior, largely determined by the rules and the wishes of the community in general than the personal desire for an individual.

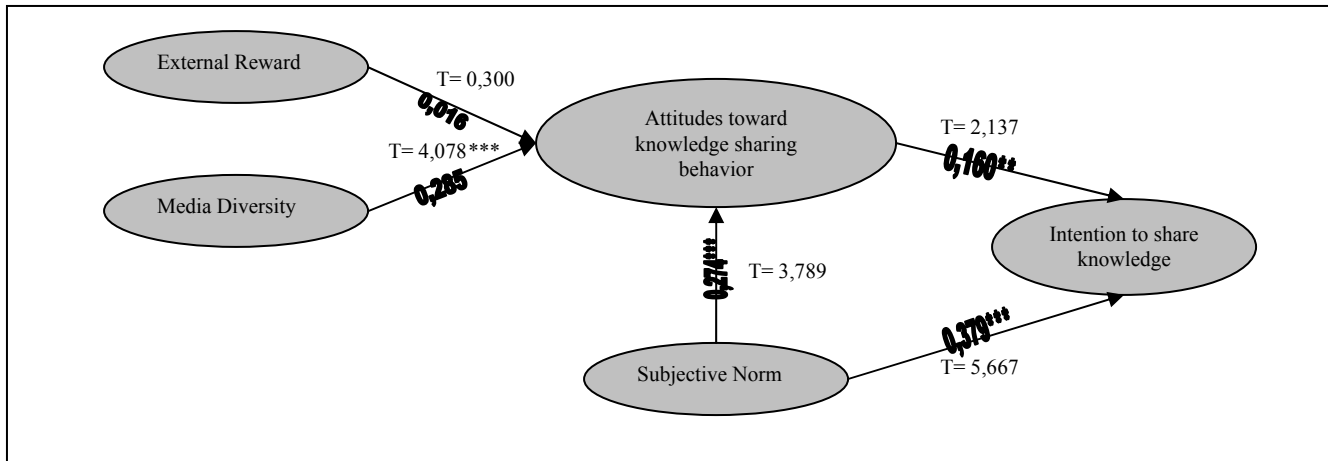


Figure 3. Hypothesis Testing Result

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