THE INFLUENCE OF ALTRUISM, SELF EFFICACY AND TRUST ON KNOWLEDGE SHARING

Eugene Okyere-KWAKYE[*]
Khalil Md NOR**
Seyyedali ZIAEI***

Abstract: The objective of this study was to investigate factors that influence knowledge sharing. Based on the Social Cognitive Theory, we developed a research model in which altruism and self efficacy had influence on knowledge sharing. In addition, drawing from previous studies, another construct i.e., trust was added to the research model. One hundred and twenty five questionnaires were distributed to administrators in one public university in Malaysia. Multiple regression was used to analyze the data. Findings of the study indicate that altruism and trust has an influence on individuals' behaviour to share knowledge. However, surprisingly self efficacy effect on knowledge sharing was not supported. Practical implications of these results were discussed.

Keywords: Knowledge, knowledge management, knowledge sharing, and social cognitive theory (SCT).

Introduction

In the present business economy environment, organisations are expected to produce creative and innovative products. Knowledge has been recognized as one of the key tools which propel an organisation to achieve a sustainable competitive advantage and enjoys a better performance level. The importance of knowledge has not been only considered by businesses but is one of the areas in the academics that has been extensively researched as Scarborough (1999) posits that knowledge has been given a great attention in the academics as numerous published and unpublished journals and articles has been written on it.

Organisational knowledge management is identified as the most important bedrock of today's business activities. It influences the performance of an organization such as on efficiency, effectiveness, financial value and a good management decision making (Becerra-Fernandez et al., 2004). Knowledge management makes it possible for employees to rely on past experience and knowledge in conducting their current operations. This benefits the organisation by maximising profit. Hence, it is beneficial for organisations to invest into managing their knowledge as much they invest into the other organizational assets (Quinn, 1992) and Probst et al. (2000) argues that, knowledge is worth managing since it is the only organisational resource that increase in value with time.

The current business practice, are shifting from the old bureaucratic ways to knowledge based activities which require organizations to excel in their respective market domain (Becerra-Fernandez et al, 2004; Nonaka and Tekeuchi, 1995; O'Dell, 2008). The current environment is what Drucker (1993) called knowledge economy which he argued knowledge as the most valuable resource in the organisation notwithstanding the other factors of production.

Knowledge management can be defined as the process of identifying, sharing, creating, storing and applying of knowledge (Becerra-Fernandez et al., 2004). Knowledge management can also be defined as the act of finding, selecting, sharing information and expertise essential for organizational activities (Gupta et al., 2000).

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[*] Faculty of Management and Human Resource Development, Universiti Teknologi Malaysia (UTM), 81310 Skudai, Malaysia. eokyerekwakye2@gmail.com **m-khalil@utm.my, ***ali_ra@fppsm.utm.my

Individual employees are been recognised as the main prerogative source of knowledge in the organisation (Jarvenpaa and Staples (2001; Nonaka and Tekeuchi, 1995). Through the process of knowledge sharing new knowledge can be generated. Classifying individuals as the most intriguing part of organisational knowledge management initiatives, several researchers have found that individual employees do not like to participate in knowledge sharing initiatives which may stalls the growth and strength of an organisation (Bock and Kim, 2003; Davenport and Prusak, 1998).

Owning to the fact that employees are disinclined to the notion of sharing their knowledge, the cause of their unwillingness is subject to investigation. Therefore, the rationale behind this study is to investigate the influence of three individual factors namely: altruism, self efficacy, and trust on knowledge sharing. The two constructs, altruism and self efficacy were drawn from the Social Cognitive Theory (SCT) and trust was derived from previous studies.

1. Knowledge

Defining knowledge is quiet exigent, however some researchers have made an effort to define it. Davenport and Prusak (1998), define knowledge as "a fluid mixed of flamed experience, values, contextual information and experts' insights that provides a framework for evaluating and incorporating new experiences and information". Tiwana (2000) defines knowledge as a deeper and expansive form of information which is put into action. According to Zack (1999, p.125) knowledge is defined as "the meaningful organized accumulation of information through experience, communication or inferences". Becerra-Fernandez et al. (2004, p12) defined knowledge as a "justified beliefs about relationships among concepts relevant to that particular area".

Most people use data, information and knowledge interchangeably. However, Becerra-Fernandez et al. (2004) make an effort to differentiate between these concepts. They identified data as raw facts, figures and the truth of an event which has no context. Data may have no meaning by itself, it can be captured, stored and shared by using diverse forms of media. Information on the other hand, can be denoted as data that is relevant in context and can be manipulated. Knowledge is akin to information and data but knowledge is the richest and deepest among them (Becerra-Fernandez et al., 2004). According to Alavi and Leidner (2001), the difference between knowledge and information is not only by its context and structure but also it dwells in the individuals mind.

1.2. Types of knowledge

Generally, tacit and explicit knowledge are noted as the main taxonomy of knowledge (Nonaka and Tekeuchi 1995; Polanyi, 1966). Explicit knowledge is the type of knowledge that is communicated in a formal and systematic mode (Nonaka and Tekeuchi, 1995). Explicit knowledge is related to information and easy to articulate (Nonaka and Tekeuchi, 1995). Explicit knowledge is easy to be captured, manipulated and accessible. Examples of explicit knowledge are manuals, drawings, audios, and computer programs.

However, tacit knowledge is quiet complicated to express and formalize (Nonaka and Tekeuchi, 1995). According to Nonaka and Tekeuchi (1995) tacit knowledge is found in individuals' minds and thoughts and difficult to codified. Ipe (2003) denotes that tacit

knowledge is difficult to transfer or share than explicit knowledge. Examples of tacit knowledge are insights, intuitions, hunches, ideas and visions.

1.3. Knowledge Management

Alavi and Leidner (1999) define knowledge management (KM) as "a systemic and organizationally specified process for acquiring, organizing, and communicating both tacit and explicit knowledge of employees so that other employees may make use of it to be more effective and productive in their work'.Knowledge management is also defined as the process of capturing, storing, sharing and using knowledge (Davenport and Prusak, 1998). In another definition, O'Dell et al. (1998) define knowledge management as "a conscious strategy of getting the right knowledge to the right people at the right time and helping people share and put information into action in ways that strive to improve organizational performance." According to Becerra-Fernandez et al. (2004), the effect of knowledge management on organisations includes job satisfaction, increased return on investment, competitive advantage and improvement of the process of production.

1.4. Knowledge Sharing

Knowledge sharing is the keystone of knowledge management; perhaps it is the most important aspect of knowledge management (Gupta et al., 2000). Davenport and Prusak, (1998) defined knowledge sharing as an exchange of ideas, experience and knowledge among groups and individuals. Chen (2001) defined knowledge sharing as the means to create knowledge which contributes to the increase in employees' performance and harnessing innovation. Hislop (2002) defines knowledge sharing can be defined as the process of exchanging ideas to create new knowledge. According to Connelly and Kelloway (2003) knowledge sharing is "a set of behaviors that involve the exchange of information or assistance to others".

Yang (2007) argues that if an organization decided to invest in creating and storing of knowledge without a considerable attentions to enhance sharing activities the benefits of the knowledge that has been acquired and stored will not be actualized.

2. Theoretical Background

2.1 Social Cognitive Theory and the Constructs.

Social Cognitive theory was introduced by Bandura (1989) and has its foundations in social learning theory, arguing that individual learning is influenced by the environment. The environment denotes the people and the structures in the organization. The theory emphasize that individuals' abilities depend on the combination of these triadic factors i.e, behaviour, environment and personal goals. It postulates that the combination of these three factors breed to a formulation of a certain outcome and expectation that lead to a decision (Bandura, 1989). These allude to the fact that individuals consider a combination of factors that are personal, social and environmental to make decisions on either to exhibit certain behaviour or not.

The social cognitive theory argues that the mind of an individual is an active tool which guides one's steps towards formulating expectations, abilities and outcomes (Bandura, 1989).In the context of knowledge management this theory may indicate that if individuals

are not sure of their capabilities and the outcome of the knowledge they are supposed to share, they may not share it. This shows that individuals should have confidence before they share them. If they feel incapacitated they will not share, however individuals may still share knowledge when their expectation of the outcome is high.

According to Bandura (1997) self efficacy is the judgments of one capability to organize certain behaviour. Those individuals formulate their self efficacy based on their environment, personal, goals and the social network they find themselves in. Hence one may formulate a degree of self efficacy depending on the expectation of the outcomes. People may develop higher self-efficacy to exchange their knowledge when there is cooperation within the environment and the social network that they found themselves in.

Altruism may have a linkage with Social Cognitive Theory, in that certain individuals may give out something freely without expecting any returns. However, in actual sense somewhere in the process of giving they may gain a psychological advantage over the receiver. In support of this, Honeycutt, (1981) suggests that an altruistic person gains a kind of control over the recipients. The psychological control is what motivate them to give. From a psychological point of view, an altruistic behaviour of giving out something without expecting any return is personal. An altruistic individual's act upon their personal goals or feelings to undertake certain action of which social cognitive theory argues that individuals ability to exhibit certain behaviour is based on the triadic factors, which highlights personal goals as a factor. Therefore, altruism and social cognitive theory may have a relationship since both concepts seem to argue that individuals' intentions may be based on their personal goals or feelings.

2.2 Propositions

2.2.1 Self Efficacy

According to Bandura (1997)" self efficacy is people's judgments of their capabilities to organize and execute courses of action". It concerns not with the skills one has but with judgments of what one can do with whatever skills one possesses. Self efficacy deals with individuals self evaluation on towards their capabilities for certain action or behaviour and the effort needed to overcome any obstacles in exhibiting such behaviour.

According to Endres et al., (2007) the act of individuals making judgement on their capabilities gives an insight into how people make decisions on sharing their personal knowledge. Bandura (1997) postulates that, self-efficacy determines the willingness of a person to perform certain activities. In a conceptual study, Endres et al (2007) suggests that individuals environment contribute to the formulation of self-efficacy which leads to knowledge sharing. We believe that individuals with a higher self efficacy may share their knowledge and past experience more willingly than individuals with low self efficacy because individuals with higher self efficacy would formulate a positive judgement on their capabilities which would motivate them to share their knowledge. A study conducted by Cabrera and Cabrera (2002) support the notion that self efficacy may influence knowledge sharing. Thus the first hypothesis is proposed.

Hypothesis 1: *Self efficacy has a positive effect on knowledge sharing behaviour.*

2. 2.2 Altruism

Altruism can be denoted as a behaviour that costs an individual and benefits the other person. People donate something to other people without thinking of any returns when showing altruistic behaviour. Altruism is a costly activity that profits others (Chattopadhyay, 1999). Normally, some individuals may share their experience and knowledge with others without thinking of the benefit he or she may gain from it. From the definitions above, it can be seen that individuals in an organisation may share their knowledge freely without thinking of any benefits attached. We postulate that individuals with higher altruism may easily share their knowledge than individual with low altruism. In her study, Lin (2002) found that, females have high altruism than males and so they tend to share knowledge more than men. This leads to the next hypothesis.

Hypothesis 2: *Altruism has a positive effect on knowledge sharing behaviour*

2.2.3 Trust

Trust is defined as the act of becoming vulnerable to other people based on the positive assumption of the result of their action (Gambetta, 2000; Reigilsberger et al., 2003). With trust people tend to risk, with the expectation that the other partner would not use it to harm them (Gefen et al., 2003). Dyer and Singh (1998) suggest that trust is the most efficient technique that enhances knowledge sharing in the organization. Nahapiet and Goshal (1998) and (Molm, 2003) suggest trust has a positive relationship with knowledge sharing. Trust is the centre force of every relationship in the organizations (Fox, 1974). We feel that individuals are motivated to share their knowledge when they recognized the recipients to be honest, trustworthy, and reliable. Higher trust will make individuals not to think of any future negative consequences and will share their knowledge. The last hypothesis is proposed.

Hypothesis 3: Trust has a positive effect on knowledge sharing.

The diagram below (Figure 1), shows the three hypotheses in a research model. In the model, the dependent variable is knowledge sharing and the independent variables are: self efficacy, trust and altruism.

Figure1- Research Model
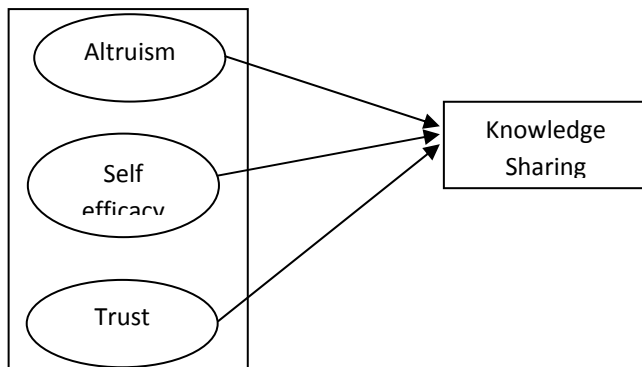
3. Methodology

3.1 The Respondents

The respondents for this research were non-academic employees or officers at one public university in Malaysia. This constitutes Deputy Registrars, Assistant Registrars, Bursars, Senior Bursars, Engineers and others. They were chosen because of the role they play in planning, coordinating and steering the affairs of their respective department and they are managers in their departments who need to share their knowledge and experience.

3.2 Instrumentation and Measurement

Questionnaire was used to collect the data. The questionnaire consists of part A and part B. Part A solicits the biodata of the respondent, which includes: age, gender, tenure, level of education and position. Part B consists of 19 Likert scale questions that measure the independent variables and the dependent variable i.e., trust, altruism, self efficacy and knowledge sharing ranging from strongly agree to strongly disagree.

In this study, knowledge sharing was conceptualized as the extent to which one exchanges and communicates experience, information, knowledge to other people in an organization either in the form of tacit or explicit. The items used to measure the dependent construct i.e., knowledge sharing was adapted from Bock et al. (2005) and Lee (2001). Self efficacy was conceptualized as individuals' level of confidence will affect their decision to share knowledge. Altruism was conceptualized as the act of individuals sharing their knowledge without expecting anything in return. The items used in measuring self efficacy and altruism were adapted and modified from Kankanhalli et al. (2005). Finally, the scale used to measure trust was developed by the researchers.

4. Data Analysis And Results

Statistics of the respondents' demographic profile indicate that majority of them were male representing 56 percent of the total respondents. Majority of the respondents were in the 26 to 30 years old range. About forty-one percent of them were Assistant Registrar, 29 percent were Deputy Registrar and 21 percent were other positions such as Senior Librarians, Quantity Surveyors and Engineers. Regarding to the academic qualification, 96 percent were Degree holders and 4 percent were Masters Degree Holders. Finally, on the length of service, about 25 percent have served 1-2 years, 30 percent 2-3 years, 30 percent 4-6 years and 15 percent 7 years and above.

A principal component analyses with a varimax rotation was conducted to ascertain the validity of the items. The results indicate that the Kaiser Meyer-Oklin value was 0.829 which is higher than the recommended minimum of 0.6 (Kaiser, 1974). Bartlett's test of sphericity was significant indicating a good factorability of the correlation matrix. As illustrated in Table 1, all the items loaded well on their factors.

Table1- Rotated Component Matrix

Items	1	2	3	4
KS1	.629			
KS2	.843			
KS3	.838			
KS4	.840			
KS5	.742			
SE1		.832		
SE2		.875		
SE3		.882		
SE4		.878		
SE5		.705		
TR1			.829	
TR2			.875	
TR3			.788	
TR4			.890	
TR5			.699	
AL1				.800
AL2				.868
AL3				.823
AL4				.729

Notes: Only loading>0.4 are shown; Extraction method: Principal Components Analysis; Rotation Method: Varimax with Kaiser Normalization.

Multiple regression was run. The Tables show the regression results.

Table 2: Multiple Regression Results

Model	R	R Square	Adjusted R Square	Std Error of the Estimation
1	0.587	0.345	0.328	0.36067

Table 3: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig
Regression Residual	8.278 18947	3 121	2.759	21.212	0.000
Total	24.018	124	0.179		

Table 4: Coefficients

	Variables	Beta	Sig	T
Individual factors	Altruism	0.529	0.000	6.638
	Trust	0.187	0.016	2.433
	Self efficacy	0.055	0.481	0.706

5. Discussion, Conclusion and Implications

This study proposed a conceptual theoretical model of which a hypothesis was deduced and tested. From the results of the regression analysis shown in Table 4, two constructs i.e., altruism and trust were found to significantly influence knowledge sharing.

Interestingly, the results show that self efficacy was not significant in influencing individuals' knowledge sharing behavior. This might be explained by the fact that this study was conducted in a one public university in Malaysia where knowledge is seen as individuals' source of power or resource. Therefore an individual with a higher efficacy may decide not to share his/her knowledge since is considered as a source of power. Hence, their behavior on whether to share or not may not be influenced by their confidence level.

This study shows that the process of knowledge sharing is influenced by individual factors. As Nonaka and Tekeuchi (1995) indicated that organisations would not succeed in creating knowledge without individuals since individuals are considered the key elements in knowledge management.

Trust, showing a significant influence on knowledge sharing implies that managers should build a trustworthy organisational environment where employees will feel tenable when sharing their knowledge. On perceived altruism mangers should provide a positive and a collaborative environment that would motivate employee to share their knowledge.

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