

Factors That Impel Individuals' To Share Knowledge

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ABSTRACT

To enhance one's understanding of knowledge sharing, this study is aimed to investigate the factors that trigger individuals' to share their knowledge. Based on the Social Exchange Theory, we proposed that trust and mutual reciprocity may influence knowledge sharing behaviour of which a research model was developed. In addition, drawing from previous studies, we added another construct i.e., perceived enjoyment to the research model. One hundred and twenty questionnaires were distributed to administrators at one public university in Malaysia. Multiple regression was employed to analyze the data. The results indicate that perceived enjoyment and trust have a significant influence on knowledge sharing. Surprisingly, the effect of mutual reciprocity was not supported. Practical implications of the findings are discussed.

Keywords: Knowledge, knowledge management, knowledge sharing, and social exchange theory (SET).

I INTRODUCTION

The current business environment has shifted tremendously from organisations investing too much into building enormous infrastructures and other material resources, to managing the intellectual resource in the organisation. Organisations now see its people and their intellectual capital as strategic resources. According to Probst *et al.*, (2000), knowledge is recognized to be the only organisational resource that increases in value. Therefore, managing it requires great effort.

Managing organisational knowledge has being generally identified as important bedrock of today's business activities. Knowledge provides a sustained competitive advantage for an organisation (Davenport and Prusak, 1998). Aside it been a source of competitive

advantage, Becerra-Fernandez *et al.*, (2004) posit that knowledge management directly or indirectly influences the performance of an organization by increasing efficiency level, effectiveness, financial value and customer satisfaction.

Knowledge management makes it possible for employees to rely on captured past experience and knowledge in conducting their current operations. This benefits the organisation by avoiding reinventing the wheel, for example reducing defects in production thereby maximising the profit. Hence, it is beneficial for organisations to invest in managing their knowledge as well as investing into material assets (Quinn, 1992). Libowitz and Chen (2001) suggest that organisation can enjoy all this benefits by harmonizing their organisational culture with knowledge management initiatives.

Knowledge management is defined as "performing the activities involved in discovering, capturing, sharing and applying knowledge so as to enhance, in a cost-effective fashion, the impact of knowledge on the units goal achievement"(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).

According to Jarvenpaa & Staples (2001) individuals are the main source of knowledge in the organisation, thus through the process of collectively sharing their experienced acquired contributes to creation of new knowledge.

Individuals are considered as a prime factor in knowledge sharing processes of which knowledge sharing is one of the critical factors in the activities of an organisation. However, most researchers have suggested that individual employees reluctantly share knowledge with one another which in a way

decreases the performance as well as the intellectual capacity of the employees in the organization (Davenport & Prusak, 1998; Haas and Hansen, 2001). Given the fact that individual employees are reluctant to share their knowledge, it is worth to investigate the factors that affect this behaviour.

Thus the purpose of this study is to investigate the influence of three individual factors namely: Mutual Reciprocity, Trust, and Perceived Enjoyment on knowledge sharing. The two constructs, trust and mutual reciprocity was drawn from the Social Exchange Theory (SET) and perceived enjoyment was derived from previous studies. Social Exchange Theory is a theory that describes exchange as part of human endeavour which deals with the analyses of cost and benefit. It posits that individuals may weigh the cost and benefit before engaging in exchange behaviour.

1.1 Knowledge

Knowledge does not lend itself to a precise definition, but many writers have made efforts to define it. According to Zack (1999) knowledge is defined as “that which comes to believe on the value on the bases of the meaningful organized accumulation of information through experience, communication or inferences”.

Becerra-Fernandez *et al.* (2004) defined knowledge as a “justified belief about a relationship among concepts relevant to that particular area”. Nonaka and Takeuchi, (1995) introduced knowledge as a justified truth or belief. Knowledge according to Davenport and Prusak, (1998) is “a fluid mixed of flamed experience, values, contextual information and expert insight”.

Most people describe 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 is however 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 & Leidner (1999), the difference between knowledge and information is not only by its context and structure but knowledge as it is dwells in the individuals mind.

1.2 Knowledge Management

Knowledge management is defined as the process of capturing, storing, sharing and using knowledge (Davenport & Prusak, 1998). Bhatt (1998) defines knowledge management as the process of creating, distributing, presenting and the applying knowledge. Knowledge management can also be described as the process of disseminating information to the right people at the right time and making good use of the knowledge resources (Holm, 2001).

In another definition, Gurteen (1998) define knowledge management as “an emerging set of organizational design and operational principles, processes, organizational structures, applications and technologies that helps knowledge workers dramatically leverage their creativity and ability to deliver business value”. Alavi & 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”.

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. This effect could only be realised only when organisations inculcate knowledge management principles into their overall corporate strategies.

1.3 Knowledge Sharing

Knowledge sharing is the keystone of knowledge management. Perhaps it is the most important aspect of knowledge management (Gupta *et al.*, 2000). Chen (2001) defined knowledge sharing as the means to create knowledge which contributes to the increase in

employees' performance and harnessing innovation. Knowledge sharing is defined as a deliberate act that makes knowledge reusable by other people through knowledge transfer (Lee & Al-Hawamdeh, 2002). Knowledge sharing can also be defined as the act of exchanging ideas through deliberations to create new knowledge (Hislop, 2002). Hooff and De Ridder (2004) denote knowledge sharing as the process of giving and receiving knowledge.

Organizations can choose to invest all their resources into knowledge management, however, when employees are not participating in sharing their knowledge among themselves within the organization, then the knowledge management efforts become a failure. In addition, when knowledge is not shared in the organization then the benefits of knowledge will not be actualized.

II THEORETICAL BACKGROUND AND PROPOSITIONS

2.1 Social Exchange Theory, Mutual Reciprocity and Trust

Social exchange theory (SET) is one of the theories used in explaining knowledge sharing behaviour. The central tenet of the social exchange theory is that people make social decisions based on perceived costs and benefits. This assumption affirms that human being evaluate all social relationships to determine the benefits they will obtain out of such relationship (Homans, 1958; Blau, 1964). The benefit of this behaviour is normally intangible and based on the expectation of the future outcomes. The theory also postulates that exchange is part of individuals behaviour, perhaps individuals may not involve in certain activities unless they view the outcomes as being positive (Homans, 1958).

In actual sense whenever one is deciding to involve in a process of exchange or knowledge sharing activities, the donor assumes a confirmation of positive returns before exhibiting the action. Here it is not a commodity exchange form where there is an agreement; but there can be just a mental assumption of the positive outcome.

According to Bock *et al.* (2005), social exchange theory is normally used as a

theoretical background for knowledge sharing concept. The theory supports that individuals may develop their knowledge sharing behaviour based on the future expectations, meaning that individuals will not share when they perceive activities as mere costs, but may intend to share when positive returns are expected. In this study, trust, mutual reciprocity and perceived enjoyment are conceptualised as the perceived benefits that could help trigger individual's willingness to share their knowledge.

2.2 Propositions

2.2.1 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). Dyer and Singh (1998) argue that trust is the most efficient technique that enhances knowledge sharing within the organization. Whenever there is trust within individuals in an organization there is a tendency of higher cooperation (Molm, 2003). Trust is the foundation of every relationship within the organization (Fox, 1974). Nahapiet & Goshal (1998) posit that trust increases the level of cooperation in every relationship.

We feel that people will be 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 first hypothesis is proposed.

Proposition 1: *There is a positive relationship between trust and knowledge sharing behaviour.*

2.2.2 Mutual Reciprocity

In this study, mutual reciprocity is referred to as the act of pursuing an exchange in the flair of fairness or pursuing the process of exchange in an expectance of positive outcome. Blau (1964) defined reciprocity as "actions that are contingent on rewarding reactions from others and that cease when these expected reactions are not forthcoming". According to Thibaut & Kelley (1978), individuals involved in virtual teams would share their knowledge when they perceive a commensurate behaviour from the other partners. A study by Chiu *et al* (2006),

shows that reciprocity has a positive significant relationship to the quantity of knowledge sharing. Blau (1964) posits that reciprocity influences individual level of trust which in turns affects the individual behaviour or intention to share knowledge.

According to Davenport & Prusak (1998), mutual reciprocity is one of the key promoters of knowledge sharing under a market platform where everything is considered as either cost or benefit. In that context, the donor of the knowledge will decide whether the recipient possesses the potential of giving back a positive outcome. This suggests that people tend to weigh others' capabilities before they exhibit certain behaviour. They intend not to lose in any endeavour so they will not share their knowledge to someone who has nothing to offer. This leads to the next hypothesis.

Proposition 2: *Mutual Reciprocity has a positive relationship with knowledge sharing.*

2.2.3 Perceived Enjoyment

In this study, perceived enjoyment is defined as the pleasure one gain as an outcome of exhibiting certain behaviour. Perceived enjoyment was derived from altruism which is defined as helping others without expecting anything from them. It was suggested that even though people may not expect anything in return of their aid, they may be intrinsically motivated and that feeling is what drive them to help others.

People render help to other people due to the pleasure they get from helping them (Kankanhalli *et al.*, 2005; Davenport and Prusak, 2008). According to Kollock (1999), individuals share their knowledge to help others because they see sharing their knowledge to help others towards a challenging job is interesting and gives them joy. Wasko and Faraj (2000) found that individuals in the electronic networks are intrinsically motivated to disseminate their knowledge to others because they obtain pleasure in doing that.

We feel that people who receive enjoyment from helping others will share their knowledge. This leads us to the last hypothesis:

Proposition 3: *Perceived enjoyment has a positive relationship with knowledge sharing behaviour.*

The diagram below (Figure 1), depicts the three hypotheses in a research model. In the model, the dependent variable is knowledge sharing and the independent variables are: trust, mutual reciprocity and perceived enjoyment.

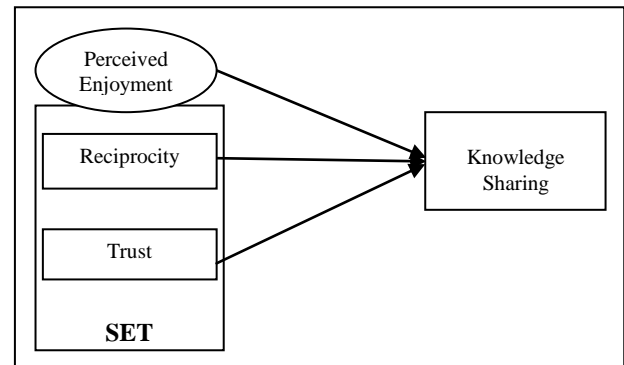


Figure 1: Research Model

3.0 METHODOLOGY

3.1 The Respondents

The respondents for this research were non-academic officers in a Malaysian public University. 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 mostly leaders in their departments who need to share their knowledge and experience. As posited by Nonaka and Takeuchi (1995), managers play a central role in knowledge sharing and creation practice.

Two hundred questionnaires were distributed to the respondents. One hundred twenty five questionnaires (62.5%) were returned to the researchers which were used for the data analysis.

3.2 Instrumentation and Measurement

A questionnaire was used as an instrument 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, reciprocity, perceived enjoyment and knowledge sharing

ranging from strongly agree to strongly disagree.

In this study, knowledge sharing was conceptualized as the extent to which one exchange and communicates experience, information, knowledge to other people within the 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). Mutual reciprocity was conceptualized as present sharing of knowledge will lead to meet request for future knowledge. Perceived enjoyment was conceptualized as the perception that individuals received an enjoyment in sharing knowledge. The items used in measuring mutual reciprocity and perceived enjoyment were adapted from Kankanhalli *et al.* (2005). Finally, the scale used to measure trust was developed by the researchers.

Table 2 Multiple Regression Results

Model	R	R Square	Adjusted R Square	Std Error of the Estimation
1	.459	.211	.192	.39571

VI DATA ANALYSIS AND RESULTS

Statistics of the respondents' demographic profile indicate 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 reliability factorability of the items. The results indicate that the Kaiser Meyer-Okin value was 0.829 which is higher than the recommended minimum of 0.6 (Kaiser, 1974). Bartlett's test of sphericity (Barlett, 1954) was significant indicating a good factorability of

the correlation matrix. As illustrated in Table 1, all the items loaded well on their factors.

Table 1. Rotational component matrix

Items	1	2	3	4
KS1	.605			
KS2	.861			
KS3	.880			
KS4	.863			
KS5	.762			
RS6		.807		
RS7		.880		
RS8		.900		
RS9		.881		
RS10		.885		
TR20			.832	
TR21			.878	
TR22			.798	
TR23			.890	
TR24			.708	
PE25				.844
PE26				.925
PE27				.893
PE28				.899

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

The Multiple regression was employed to analysis the data. Table 2 shows the regression results. The results show R² value of 21.1%, indicating that the three factors namely trust, reciprocity and perceived enjoyment explain 45.9% of the variance of knowledge sharing.

The results from the coefficient table indicate that trust has a positive significant influence on knowledge sharing with a p-value of 0.004. Hence, supports Proposition 1. In addition, the results show that perceived enjoyment has a significant influence on knowledge sharing with a p-value of 0.003. Thus, supports Proposition 3. However, the effect of mutual reciprocity on knowledge sharing was not supported. This unsupported relationship is similar to the results of Chiu *et al.* (2006) and Wasko & Faraj (2005) who found that mutual reciprocity does not influence knowledge sharing behavior.

V. 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, two constructs i.e., trust and perceived enjoyment was found to significantly influence knowledge sharing.

Table 3. ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	5.071	3	1.690	10.064	0.000
Residual	18947	121			
Total	24.018	11241	0.157		

Table 4. Coefficients

	Variables	Beta	Sig	T
Individual factors	Trust	0.244	0.004	2.963
	Reciprocity	0.151	0.083	1.742
	Perceived Enjoyment	0.263	0.003	3.051

In addition, from the practical view or professional context, the respondents are the top officers in their respective departments who are supposed to ethically and professionally oblige to share their experience, knowledge, skills or techniques to co-workers in order to improve productivity. Hence, they may not expect any benefit from their subordinate or colleagues in sharing knowledge.

This study has supported that individual factors has an influence on knowledge sharing behaviour. As Nonaka and Takeuchi (1995) indicated that organisations would not succeed in creating knowledge without individuals since individuals are considered as being key elements in knowledge management.

Trust, having a significant influence on knowledge sharing implies that managers should build a trustworthy organisational culture or environment where employees will feel secured when sharing their knowledge. On perceived enjoyment, managers should provide a positive environment that would encourage employees to share their knowledge.

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