Knowledge sharing behavior of the students: comparative study of LUMS and COMSATS

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Abstract:

The objective of this study is to analyze the knowledge sharing behavior among students during their studies and what are the factors that are necessary for learning through knowledge sharing. The comparison is done b/w the students of Comsats and Lums. A structured Five point Likert-scale questionnaire was used for soliciting the responses of the students of both the universities. Then quantitative techniques were used for data analysis through SPSS 16 to observe the impacts/effects of the variables developed in the questionnaire to investigate the student's learning through the knowledge sharing behavior. The sample of 224 students was taken from two universities Comsats and Lums.74 respondents were from Lums and 150 from Comsats. Results demonstrate that following factors influence the learning process through knowledge sharing behavior among the students of both the universities which are: trust, willingness to share, motivation, perceptions about knowledge sharing and learning through knowledge sharing among the students. Results also show that there is a positive direct relation between willingness to share and trust and then willingness to share is positively linked with motivation ,perception and learning through knowledge sharing. This study also reveals that there are 3 factors (motivation perception and willingness to share) that enhance learning through knowledge sharing.

Key Words:

 Trust, Perceptions about knowledge sharing, Willingness to Share, motivation and Learning through Knowledge Sharing Behavior.

Literature review

For past few years knowledge management has turn out to be an important apprehension. Knowledge sharing can be declared as a command to persuade exchange of knowledge and its

designing in the societies to distinguish their competitive edge, intelligence or intellectual wealth (Liebowitz, 2001). Knowledge sharing is mostly contingent upon the actions of the individual, trust on fellows, perceptions about the results of knowledge sharing, absorption capacity and learning behavior. There are many factors that affect knowledge sharing e.g individual experiences, interpersonal relationship among individuals, thoughts of individuals and their motivation level. These factors can not be ignored while studying knowledge sharing behavior because they also play an important role in knowledge sharing .(Clegg, 2007).

Knowledge flow is a task comprised on the following elements i.e. knowledge stock's value of the essential unit, motivational nature of the spring unit, persistence and prosperity of communication guide, eagerness and character of the end unit and intentional unit's absorptive capacity (Govindarajan, 2000).

The analysis recommended that pathetic ties led to more precious information than the strapping ties. Because the individuals with strapping ties, know the same community, thoughts and concepts so have the similar knowledge. While the people with pathetic ties, know the different inhabitants, thoughts and concepts. They have link with different areas of social networks so have different knowledge. Therefore weak ties are more beneficial than the strong ties because of the different point of views of knowledge and information. So the key to effective knowledge sharing or transferring, are that there need to be trusted ties whether theses are strong or weak ties (Lewicki and Bunker 1995). The study of (Argote et al., 1995) also states that the fit between chracteristics of knowledge, habits of workers and type of associations between work groups are decisive for knowledge sharing.

(McEvily et al., 2003) argues that the trust level affects the level of knowledge sharing. Trust within a work group refers to the extent to which group members trust each other. People trust others considering that these others will behave in a particular way (Mayer et al., 1995). There are multiple definitions of trust; however, there are two essential issues: firstly, trust is associated with peril and vagueness; and secondly, trust is about accepting susceptibility (Mayer et al, 1995).

In the words of (Luhmann, 1988) trust can be seen as a instrument that allows people to assess whether or not to expose them to a position where the potential damage may recompense the benefit. To trust someone means that there is a condition of vagueness in which there is also an element of apparent risk; and there are various sources of capable to be wounded that may be 'at risk', for example, status, self-worth, monetary assets etc. (Newell et al, 2002). Trust can be defined as "the extent to which one is willing to attribute good intentions and have resilience in the words and proceedings of other people"(Cook & Wall, 1980). There is a need for developing mutual trust in order to enable people to work together more efficiently (Mayer et al., 1995). Due to trust people can exchange information. (Szulanski et al, 2004, Carley, 1991,Tsai & Ghoshal, 1998). Trust facilitates decision making by simplifying information gathering and interpretation (McEvily et al., 2003). Economically spoken, trust enables communication among people and

across organizations and can reduce operational cost   (Williamson, 1985). Trust is an important and necessary element for raising a solid knowledge base in work groups that enables interaction and knowledge sharing. Research shows evidence that trust enhances overall knowledge exchange (Tsai & Ghoshal, 1998). Additionally, trust increase the probability that knowledge shared is adequately understood (Mayer et al., 1995).

Trust is an important factor for increasing and maintaining associations between the members within and across work groups. Trust inside the workplace begets collaboration (Morgan & Hunt, 1994). The empirical research of (Malhotra and Galletta, 2003) is based on the theories of Kelman and of Deci and Ryan. According to which they defined the various types of incentive in a health care institute through an tool. They paying attention not only to the general motivation to share knowledge, but also to the motivation to use a knowledge management system (KM System). They used the two models as dealing with two separate phenomena, as Kelman adopt the expression 'commitment' and Deci the expression 'motivation'. They therefore analyzed and did not reveal the affiliation of two types of data, although taken from the same individuals.

 Kelman-type data exposed through factor investigation that the acquiescence items form particular factor. The authors commented that, compliance motivation is the consequence of the maximizing the encouragement. So the danger is there that employees adopt tactics to get many credits, instead of tactics to share their experiences. Some theories stated their results to describe the relationship between willingness to share and knowledge sharing.

1. **Social Capital Theory**

Idea of social capital emerged from region of sociology. In Jacobs' research, he defined social capital as the association of strong, crosscutting personal relationships developed over time that provide the base of trust, collaboration, and cooperative action in such society . The social capital concepts are consisting of associations and the assets that might be mobilized through that associations. (Nahapiet & Ghoshal, 1998) used social capital to explain organization learning in 1998.They explained social capital as the sum of real and possible resources entrenched within and consequent from the association of relationships possessed by an individual or social body.

2. **Habitual Domains**

Habitual Domain was initially projected by (Yu, 1995), he acknowledged that that every person has a distinctive nature   resulting from his or her ways of judgment, remembrance, judging, acting, and handling problem, which steadily stabilized with in a certain domain over a period of time. Such collected works of way of thinking, memory, judging, etc. together with its organization, interaction and dynamics, is called Habitual Domain. He further defined that Habitual Domain consist of four elements:

1. Potential Domain (PD): the set of thoughts and actions that can potentially be activated,

2. Actual Domain (AD): the set of thoughts and actions that are actually activated,

3. Activation Probabilities (AP): the probabilities that thoughts   and actions in Potential domain also belong to Actual domain.

From above discussion results that behavior habits or thoughts influence an individual on academic performance as well as human perception management. so a positive thought creates a positive relation among individuals that lead towards knowledge sharing behavior.

(Darr & Kurtzberg, 2000) acknowledged that knowledge sharing is a process that people gain different information by learning other's experience. By sharing information or knowledge organization can increase their work efficiency in terms of cost productivity or profitability, Meanwhile, by sharing knowledge, organizations can continually enhance work efficiency. Despite of its benefit, it is difficult to share knowledge efficiently and effectively in companies due to different thoughts or habits of members   of companies. As knowledge sharing is considered a resource for an organization, there are several hindrances that persuade workers on sharing knowledge as follows

Aspect of knowledge power: employees of an organization donot want to share knowledge because they consider knowledge as a source of power for them and they are not willing to share knowledge due to their perception i.e. it affects their status.

Aspect of employees' cognition: (Davenport & Prusak, 1998). categorize seven barriers: lack of trust; difference in cultures, understanding of words, and frames of reference; lack of time and meeting places; status and rewards going to knowledge owners; lack of absorptive capacity in recipients; belief that knowledge is the privilege of particular groups; the "not-invented-here" syndrome; and prejudice for mistakes.
The work of (Wasko and Faraj, 2000) exposed that knowledge sharing mainly occurs when individuals are fascinated to access the association, go through from the questions, choose those questions to which they can respond, and take the time, make practice, devise answer and post an answer.

 By reviewing previous studies about knowledge sharing, individual motivations including reputation and enjoy helping. (Pinder, 1998) defines work-motivation as 'a combination of vigorous forces that commence both within as well as beyond an individual's being, to start work related actions and to conclude its organization, mode, concentration and duration'. The idea of 'intention' has the same meaning as that of motivation. plunder and incentives are also associated with motivation. Rewards and incentives motivate the employees to work with more concentration.

The theory of Maslow (1968) is one of the examples of such theories. It identifies individual desire or needs, which are classified into five: physiological needs, need for security, need for

belongingness, need for recognition, status and power and need for self-actualization. The theory further contains a chain of command opinion: the succeeding needs can only be starting place of motivation when previous needs are fulfilled.

Several theories make a distinction between intrinsic and extrinsic benefits. Herzberg   (1966) illustrious between motivators and hygiene factors. Herzberg affirmed from his studies focusing on performance motivation that in satisfaction theories all the factors do not have the same function: some factors really determines attitude, others function may be said as kind of hurdle. Herzberg found the difference between motivation factors and hygiene factors for work motivation. "Factors contribute in motivation but also lead to dissatisfaction".

According to Herzberg, Motivators are, accountability, enjoyment, operational self-determination, promotional opportunities and challenges of work.. Example of hygiene factors are attractive salary, high class interpersonal affairs. (Ryan & Deci, 2000) stated many practical findings in relation to the difference between intrinsic and extrinsic incentive. They   formulated the Theory of Self determination (SDT), in which they declared that intrinsic motivation is the most powerful form of motivation. They showed that in most of the cases people who are intrinsically motivated persevere longer, bear challenges fruitfully, and disclose more events than those who are extrinsically motivated.

Finally the work of (Bock and Kim, 2002) is based on different theoretical viewpoints   and they arrived at more or less the same results. They explicitly premeditated reasons for knowledge sharing and establish the results from their field review of 467 employees in four large organizations and showed that anticipated mutual associations and imaginary personal involvement to the institute were the main determinants of the individual's behavior towards sharing of knowledge. As expected, positive attitudes towards knowledge sharing lead towards a positive target to knowledge sharing behavior. So we can say that knowledge sharing beahavior depends upon habits of individuals.

Expectancy Value theories have been validated in many pragmatic studies (Vroom, 1964). The basic view of these theories is that the aim to act in a certain way depends not only on the significance of certain benefits, but also on the conviction that these actions, e.g. knowledge sharing, will lead towards positive results. Thus real activities of people is then a function of what they actually want, what they can do and what the surroundings allow them to do.

There is an extension in the unique model through pragmatic researches. One of the famous example of   model is the Theory of Reasoned Action (TRA) and its descendant, the Theory of Planned Behavior (TPB) (Ajzen, 1991). According to these theories, people's intention is not only based on all kinds of thinking about various aspects of their behavior or attitude but also influence by social pressure..

Research Methodology:

The sample of 224 students was taken from different departments of the Comsats and Lums University Lahore, Pakistan, pursuing any course of study at various levels of study, i.e. below 14 years, above 14 but below 16 and above 16 years. Multistage sampling consisting of major four main study domains i.e. Commerce, Applied sciences, Basic sciences and Social sciences has been conducted for this survey. A Five point Likert-scale survey was employed for soliciting the responses i.e. 1 (strongly disagree), 2 (disagree), 3 (natural), 4 (agree) and 5 (strongly agree). Then quantitative techniques were used for data investigation through SPSS 16 and a research model is planned to view the impacts of Trust, Perception about Knowledge Sharing, motivation and Willingness to Share on Learning Practices among students.

Table 1:-correlation matrix (Comsats)

		trust	willingness	perseption	motivation	learning
trust	Pearson Correlation	1	.156	.104	-.044	.069
	Sig. (2-tailed)		.056	.204	.596	.403
	N	150	150	150	150	150
willingness	Pearson Correlation	.156	1	.207[*]	.177[*]	.327[**]
	Sig. (2-tailed)	.056		.011	.030	.000
	N	150	150	150	150	150
perseption	Pearson Correlation	.104	.207[*]	1	.102	.275[**]
	Sig. (2-tailed)	.204	.011		.216	.001
	N	150	150	150	150	150
motivation	Pearson Correlation	-.044	.177[*]	.102	1	.461[**]
	Sig. (2-tailed)	.596	.030	.216		.000
	N	150	150	150	150	150
learning	Pearson Correlation	.069	.327[**]	.275[**]	.461[**]	1
	Sig. (2-tailed)	.403	.000	.001	.000	
	N	150	150	150	150	150

**. Correlation is significant at the 0.01 level (2-tailed).

Table 1:- is correlation matrix, which reveals the following analysis. There is positive correlation between trust (dependent variable) and willingness to share showing the value of .156, and both variables are significant at 5 % level of significance. The above table also shows that there is positive correlation between (willingness to share (dependent variable) and perception, motivation and learning showing the values of 0.207, 0.177 and 0.327. and variable

(perception and motivation) are significant at 5% level of significance and learning at 1% level of significance.

Table 2:- Correlation matrix (LUMS)

		trust	willing	Perception	motivation	learning
trust	Pearson Correlation	1	.409**	.148	.295*	.135
	Sig. (2-tailed)		.000	.207	.011	.2
	N	74	74	74	74	74
willing	Pearson Correlation	.409**	1	.436**	.288*	.340**
	Sig. (2-tailed)	.000		.000	.013	.003
	N	74	74	74	74	74
perception	Pearson Correlation	.148	.436**	1	.293*	.340**
	Sig. (2-tailed)	.207	.000		.011	.003
	N	74	74	74	74	74
motivation	Pearson Correlation	.295*	.288*	.293*	1	.304**
	Sig. (2-tailed)	.011	.013	.011		.008
	N	74	74	74	74	74
learning	Pearson Correlation	.135	.340**	.340**	.304**	1
	Sig. (2-tailed)	.251	.003	.003	.008	
	N	74	74	74	74	74

*. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 2 is correlation matrix of (LUMS), which reveals the following analysis. There is positive correlation between trust (dependent variable) and willingness to share showing the value of .409, and both variables are significant at 1% level of significance. The above table also shows that there is positive correlation between (willingness to share (dependent variable) and perception, motivation and learning showing the values of 0.436, 0.288 and 0.340, and variable (perception and learning) are significant at 1% level of significance and motivation at 5% level of significance.

Table 3:-

One-Sample Statistics(comsats)

	N	Mean	Std. Deviation	Std. Error Mean
trust	150	3.0183	.59858	.04887
willing	150	3.2400	.64238	.05245
perception	150	3.1480	.53667	.04382
motivation	150	4.0533	.77751	.06348
learning	150	3.8213	.65953	.05385

Table 3, shows that one-sample statistics of each variable, this test shows the trend of variable towards a likert scale trust, willingness to share, and perception values are above 3& motivation is above 4 that indicates variables approaches towards strongly agree (5) meaning there by over respondents responses also indicates that there is a direct relationship b/w these variables and learning through knowledge sharing.

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Table 4:-

One-Sample Statistics(Lums)

	N	Mean	Std. Deviation	Std. Error Mean
trust	74	2.8682	.67263	.07819
willingness	74	3.1892	.38108	.04430
perception	74	3.3081	.37772	.04391
motivation	74	3.1486	.58362	.06784
learning	74	2.9595	.55094	.06405

Table 4, shows that one-sample statistics of each variable, this test shows the trend of variable towards a likert scale, trust is near to 3, willingness to share, perception and motivation values are above 3, that indicates variables approaches towards strongly agree (5) meaning there by over respondents responses also indicates that there is a direct relationship b/w these variables and learning through knowledge sharing.
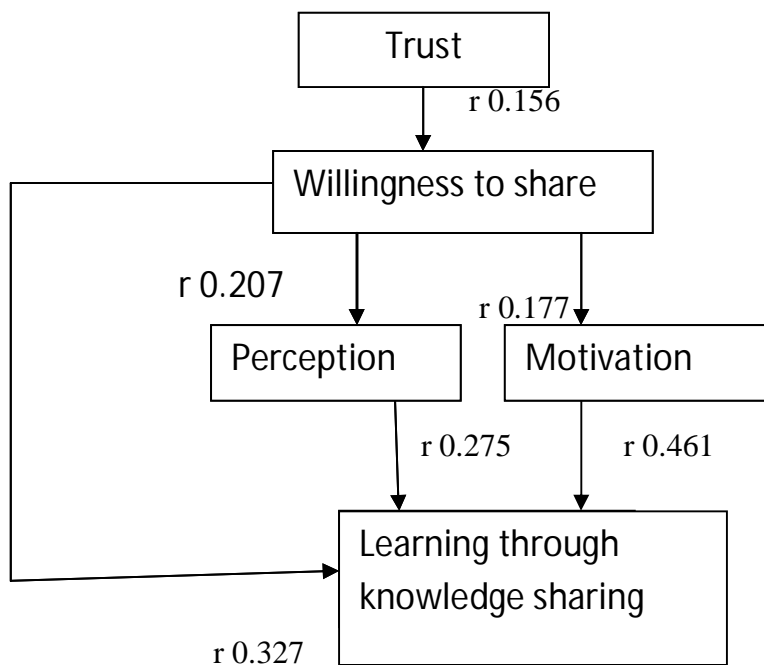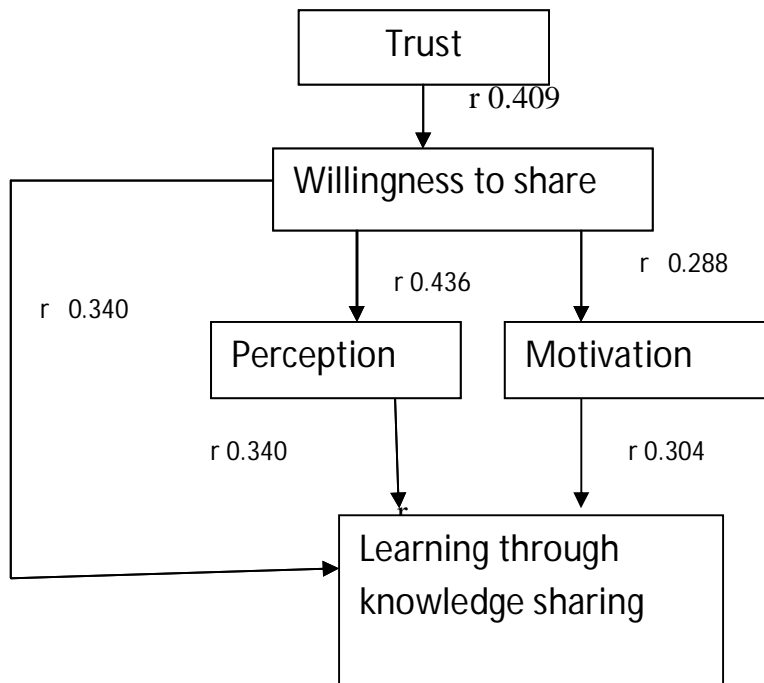
Research model for comsats:-

Research model for Lums:-

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                        ┌──────────────────┐
                        │      Trust       │
                        └──────────────────┘
                                 │  r 0.409
                                 ▼
        ┌────────────────────────────────────────┐
        │          Willingness to share           │
        └────────────────────────────────────────┘
        │              │                    │
        │              │ r 0.436       r 0.288│
   r 0.340             ▼                    ▼
        │      ┌──────────────┐     ┌──────────────┐
        │      │  Perception  │     │  Motivation  │
        │      └──────────────┘     └──────────────┘
        │              │                    │
        │         r 0.340              r 0.304
        │              ▼                    ▼
        │      ┌──────────────────────────────────┐
        └─────▶│       Learning through           │
               │       knowledge sharing          │
               └──────────────────────────────────┘
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Findings and Recommendations:-

It is anecdotal that, in broad-spectrum, the scholars of Comsats and Lums have a positive approach toward knowledge sharing. Factors like: perceptions about knowledge sharing, trust, willingness to share and motivation are the central determinants of one's knowledge sharing behavior and learning depends upon knowledge sharing. In addition, the majority of the respondents are of the view that sharing knowledge adds to the perception.

It is remarkable to observe from the finding that the students are less willing to share with their competitors and in the days of exams. Commonly, students share their knowledge when they have a factor of trust. When there is trusts then they are willing to share knowledge they are motivated for enrichment of knowledge. Although, the knowledge sharing practices among the

students are satisfactory yet, there should be a proper innovative mechanism for the purpose of exchange of knowledge within the study departments and within the whole university.

University management can play its crucial role in rising the patterns and humanizing the excellence of the knowledge to be shared. There should be a realistic environment where students can easily share their knowledge.

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