

Assessing Academics' Knowledge Sharing Intention in Institutions of Higher Learning

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ABSTRACT

Knowledge sharing (KS) in Institutions of Higher Learning (IHL) is a noble culture and should be fostered. IHL is the best platform for knowledge to be disseminated among academics and students. This research adapts the Theory of Planned Behavior (TPB) to determine academics' KS intention in Malaysian IHL. Partial least square SEM is used for analysis. Respondents consist of 45 academics acquired from 399 surveys. Results show that only social network is a significant factor in academics' attitude towards KS intention, while commitment and trust are not. Management support, social media towards subjective norm, and PBC are significant factors for KS intention. Subsequently, attitude and PBC are significant determinants of intention to share and subjective norm is not significant. The findings of this study enable IHL's management to identify the factors to focus on when addressing the issues pertaining to hiring academics.

Keywords: Knowledge sharing, institution of higher learning, PLS-SEM, academics

VII INTRODUCTION

Knowledge management (KM) has gained much attention from various bodies and researchers alike (Donate & Pablo, 2014). This is due to its importance in the creation, acquisition, dissemination and leveraging of available knowledge in an institution for achieving competitive edge and acquiring the intended objectives of the institution (Nicolas, 2004; Suhaimi et al. 2006).

In KM, KS could be the most important element, due to its application which makes it a valuable asset (Yu et al. 2010). In IHL, academics are the personnel who are responsible in disseminating and distributing knowledge to students and other academics. The nature in IHL is intensive in knowledge by creation in research and dissemination in publication (Fullwood et al. 2013). Teaching and performing other obligations such as research are the core duties of academics. When researchers have managed to produce significant outcomes from their study, some are reluctant to share it with other academics. Hence, this study is to determine the academics' KS intention based on the individual (i.e. commitment, social

network and trust), organizational (i.e. management support) and technological factors (i.e. social media) as the determinants for academics' KS intention.

II LITERATURE REVIEW

A. Background

This study adapts the Theory of Planned Behavior (TPB) and Social Capital Theory. TPB serves as the basis to understand academics' behavior in sharing knowledge (Roberto et al. 2014). Ajzen (1991) proposed TPB based on the explanation that human behaviors are determined by such factors which are specific in a definite context.

TPB and TRA stated that academics' intention is shaped by the attitudes and subjective norms. Attitude refers to the individual traits which conform to their specific characteristics. Subjective norm is the belief of what others might think of an individual behavior. TPB has an additional factor which is perceived behavioral control, defined as the ability of individuals to perform a behavior. It is believed that the greater the PBC, the greater the individual's intention to perform the behavior.

The second theory adapted in this study is Social Capital Theory. The theory is efficient in explaining the well-being of individuals and groups (Bassani, 2007). This theory basically explains the social interaction in a group of people, where in this study group, academics share their knowledge with one another. The relations include trust, loyalty, self-esteem and security. This study will adapt the two dimensions of social capital which are trust and social network among the academics in sharing the knowledge. The importance of these two dimensions among the academics is imperative, in order for the academic sector of the country to achieve common goals in life (Putnam, 1995).

B. Hypothesis Development

Commitment. Every organization, including IHL, requires the commitment of their employees for the well-being of overall management. Individuals who possess substantial commitment to their jobs will result in the IHL's ability to challenge and gain advantage over other competitors (Meyer & Parfyonova, 2010). Attitude depends on how much an individual is willing to commit, where the issue of commitment is given attention in the workplace. KS

can be realized when each and every one of the academics is willingly committed in disseminating knowledge in IHL. Commitment affects an employee's physical appearance in organizations where work effort, absenteeism and job turnover are directly associated with it (Joiner & Bakalis, 2006). It is therefore hypothesized that:

H1: Commitment has a positive effect on academics' attitudes toward knowledge sharing

Social network. Chow and Chan (2008) found that social network has significant effect on employees' intention to share knowledge. As a norm, those who socialize more with other people tend to exchange more ideas and activities. Relationship among academics is one of the predictors for job satisfaction thus positively affecting sharing activities (Lacy & Sheehan, 1997).

The networking among members in IHL will positively affect the attitude and subjective norm of academics towards KS. It is understandable that when the relationship between two people is good, they will feel more comfortable to share their knowledge and this will create an emotional bond among them. This is a community of practice where experts meet and share.

H2: Social networks have a positive effect on academics' knowledge sharing

Trust. Trust has been the most researched dimension in KS (Wang & Noe, 2010). Having trust among academics would enable the motivation to work as a team to achieve common goals and vision. Healthy relationship among academics can be fostered with trust. Commitment, cooperation and relationship among academics will not be realized with the absence of trust (Jolaei et al. 2014). When an individual perceives a matter as private and confidential, he or she would not share it unless there is trust among colleagues. To ensure effectiveness of KS, academics must have trust to avoid jeopardizing their position and status in IHL due to misuse of knowledge they shared. The next hypothesis is presented as:

H3: Trust has a positive effect on academics' intention toward knowledge sharing

Management support. Support from the top management has substantial effect on academics' KS. In the context of KS, management support is the direct participation of management in IHL programs and activities. Academics have to understand the KS practices and the activities to ensure voluntary participation (Kang et al. 2008). It is important to get academics to understand that the management supports their actions for KS, as this will encourage and convince academics to share their knowledge and

expertise (Tan & Md. Noor, 2013). Hence, hypothesis 4 is as follows:

H4: Management support has a positive effect on academics' subjective norm towards knowledge sharing

Social media. Academics must keep up with the current technology available in the world, especially social media. KS in the current setting would be better realized with the utilization of social media. Social media can ensure that information and knowledge can be disseminated effortlessly (Osatuyi, 2013). The communication and networking among academics inside and outside the university as well as with students can be upgraded by using social media. Academics must find ways and learn how to adapt with the recent tools and technology to ensure effective KS activities. Therefore, the next hypothesis is presented as:

H5: Social media use has a positive effect on academics' perceived behavioral control toward knowledge sharing

Attitude toward KS. Attitude is known as the degree of evaluation of an individual favor towards a behavior (Ajzen, 1991). Attitude has established as an important determinant of organizational behavior intention. Academics having a favorable attitude towards sharing would be freely sharing their knowledge with other colleagues. The next hypothesis is posited as:

H6: The extent of favorable attitude towards knowledge sharing has a positive effect on academics' intention to share knowledge

Subjective norm. Subjective norm plays an important role in academics' intention to share. It is the perception of other people such as colleagues and top management to the academics whether they should share their knowledge or not. It depends on the normative belief, which is the belief of what others might think of their sharing behavior (Lai, Chen, & Chang, 2014). The social subjective norm will induce and provide greater tendency to share (Goh & Sandhu, 2013). The following hypothesis is derived:

H7: The extent of favorable subjective norm toward knowledge sharing has a positive effect on academics' intention to share knowledge

Perceived behavioral control. Based on TPB, intention depends on effort needed to perform the behavior, either it is difficult or not (Ajzen & Madden, 1986). When the KS activities are deemed to be low in effort, academics would see it as an effortless, thus creating more chances for it to happen. Manstead and van Eekelen (1998) have

proved in their study that PBC is a strong factor for behavior. It is therefore hypothesized that:

H8: The level of perceived behavioral control has a positive effect on academics' intention to share knowledge

VIII METHODOLOGY

A. Sampling And Data Collection

This study uses quota sampling method to three subgroups of professors, associate professors and senior lecturers. Portion of quota was divided equally among the three subgroup of (i.e. professor, associate professor, senior lecturers) to 30:40:40. All of the respondents are from public IHL.

B. Measurement

Items used in this study are adapted from previously validated study. Commitment is adapted from Allen and Meyer (1990), social network is from Kim and Lee (2006), trust is from Mcallister (1995), Management support from Sveiby and Simons (2002), social media is from Thong et al. (2002), attitude, subjective norm and intention comes from Bock et al. (2005) while perceived behavioral control is adapted from Wu and Chen (2005).

All items are measured using 7 point likert scale, ranging from 1=strongly disagree to 7=strongly agree. 7 point scale is used in this study due to its accuracy in measuring the respondents true evaluation (Finstad, 2010). According to Cox (1980), 7 point scale is the most suitable for an electronically-distributed survey, which is the methodology of this study. All respondents answered through email which was sent through a period of one month. Furthermore, 7 point scale would cover all necessary information on theory and metric approaches in acquiring the item optimal response.

IX RESULT AND DATA ANALYSIS

A. Analysis Method

This study uses partial least square structural equation modeling PLS-SEM. Smart PLS Version 2.0. PLSEM has several advantages compared to other software. (1) it automatically performs variable selection (2) diverse in its tasks such as classification, transcription factors modeling and survival analysis (3) statistically efficient and (4) fast computational process (Boulesteix & Strimmer 2006)

B. Descriptive Statistics

Descriptive statistic shows that 45 respondents are from the post of senior lecturer, associate professor and professor. In terms of gender, it is evenly distributed with 22 male and 23 female academics. Malay academics make up the highest percentage of

75.6 % with Chinese, Indian and others at 8.9 %, 4.4 % and 11.1% respectively. All of the respondents have at least PhD qualification except for one with Masters degree. The experience of working in academia range from 1-5 years with 5 respondents until 26 years and above with 11.1%.

C. Measurement Model

The measurement model is the first part of PLS-SEM. It elaborates the measurement of the latent variables or the construct that is applied. Measurement model addressed the items reliability and validity, involving each of the construct in the model. The model would facilitate researchers to investigate the validities of the convergent and discriminant of the items and construct respectively (Chin, 2010).

The convergent validity of all the items indicates that they are loaded highly on their construct indicating the convergent validity. The AVE and composite reliability (CR) are the indication of reliability. The value must exceed the threshold value of 0.50 and 0.70 respectively (Chin, 2010; Fornell & Larcker, 1981; Hair et al. 2014). The value obtained as shown in table 2, the AVE range from 0.6083 to 0.8281 and the CR range from 0.8602 to 0.96 which can be said that all the items level of reliability is met.

For discriminant validity, using Fornell and Larcker (1981) criterion, it is found that all items load on the assigned constructs compared with other construct as indicated by the square root of the AVE (Gefen, et al, 2000). This value is shown diagonally in table 1 where the square root of the AVE is higher than other correlation values of other variables indicating satisfactory discriminant validity of this study.

Table 1. Discriminant Validity

	AT	CO	IN	MS	PC	SM	SN	SU	TR
AT	0.874								
CO	0.468	0.843							
IN	0.638	0.341	0.881						
MS	0.349	0.823	0.398	0.884					
PC	0.572	0.454	0.837	0.485	0.910				
SM	0.469	0.359	0.449	0.326	0.627	0.830			
SN	0.572	0.712	0.36	0.559	0.502	0.542	0.779		
SU	0.666	0.426	0.645	0.514	0.622	0.294	0.398	0.781	
TR	0.399	0.670	0.370	0.537	0.489	0.38	0.692	0.254	0.872

AT=attitude, CO=commitment, IN=intention, MS=management support, PB=perceived behavioral control, SM=social media, SN= Social network, TR= Trust

D. Structural Model

The second stage is PLSSEM analysis, which is done by checking its structural model. Bootstrapping procedure with 5000 samples was tested to determine the path coefficient and hypothesis. Figure 2 depicts the structural model of the study.

Results show that attitude and perceived behavior control (H6 and H8) are significantly associated with knowledge sharing intention, while subjective norm (H7) does not. Furthermore, regarding determinants of attitude, only social network (H2) have found to be statistically significant, and commitment (H1) and trust (H3) does not. Management support (H4) and social media use (H5) on the other hand are found to be significant.

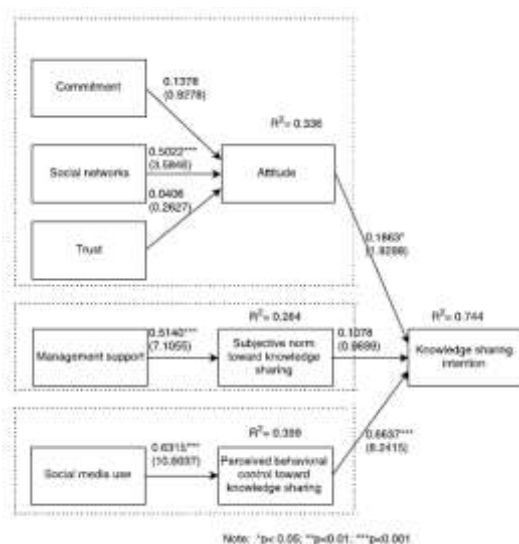


Figure 2. Structural Model

X DISCUSSION

This study is meant to examine the factors which might influence academics KS intention in IHL. It is found that among the three predictor of academics intention to share knowledge, only attitude and perceived behavioral control have significant effects, but not on subjective norms. Meanwhile, among the three determinants of attitude toward KS, only social network has a vital impact, but commitment and trust do not. Even though subjective norm does not significantly affect intention, management support has significant effects. Social media as predicted has significant effect on perceived behavioral control.

Determinants of attitudes towards KS intention have found that only social network had significant impact on KS intention, while commitment and trust does not significantly affect KS intention. This can be explained by the fact that academics do have numerous social networks inside and outside IHL. The more connections they made, the more opportunities to be involved in areas they are experts

in and specific consultation project under academics in the same area of knowledge. This is supported by studies from Jolaei et al. (2014) which found that social networks had significant impact on intention. Commitment had no significant impact because this study is based on public IHL, where most public IHL does not have rigorous requirement for academics to fulfill certain requirements compared to private IHL, which include sharing knowledge. Trust also had no significant effect on academics attitude. This is supported by studies from Jolaei et al. (2014), Kim & Ju, (2008) and Chin et al. (2014). Academics tend to be individualistic in nature and do not mingle among themselves which resulted in trust being not significant.

Academics' attitude would seem to be one of the most contributors to KS initiatives with path coefficient of 0.1863. This comes from academics individual factor which the authority has to keep concerned. Academics which have positive attitude would have more tendencies to share knowledge. The finding is consistent with previous studies that found attitude as significant factor for KS intention (Akhavan et al. 2015; Jolaei et al., 2014; Ramayah et al. 2013).

Social media use among academics has shown to significantly affect PBC, acquiring among the highest path coefficient. Previous studies support the significant effect of social media on academics intention towards KS (Bhagwatwar et al. 2013). It can be deduced that academics do follow the trends in the current changes in social media and technology advancement. This is crucial because social media is the current up-to-date tool for academics to share what they know and also gain new knowledge from other experts worldwide that corresponds to their field of knowledge

Perceived behavior control has the strongest influence toward KS intention with $\beta = 0.6637$. Since academics have control over their behavior, it is within expectation that PBC would significantly affect academics intention. Academics are intellectual group of individuals where their locus of control are gripped with abilities and skill where qualms of sharing knowledge would not be an issue.

Management support also as expected does give significant result on academics' intention. The result shows that perception received from top management by encouraging KS to academics has positively influence academics to willingly share knowledge. This is supported by previous studies proving that management has significant effect on knowledge sharing intention (Lin, 2007).

Surprisingly, subjective norm was found to be insignificant toward KS intention in this study. It can

be inferred that subjective norm was not an important factor in determining academics intention to share. Impression of academics on management support does not shape academics intention towards KS. It may possibly be because of the nature of academics profession where they seldom meet with the management of IHL which includes vice chancellor, dean and also head of department.

A. Theoretical Implications

On a theoretical note, this study has several implications and inferences. Firstly, this study proposed an integrative model consisting of social psychological factor of individual academics (commitment, social network and trust), organizational factor of management support and technological factor of social media use in the context of Malaysian IHL. It is found that PBC has the most significant impact on academics intention to share knowledge. The ability to control and the perceiving of oneself to be able to withhold to a certain behavior impacts directly on academics' intention. This is the self-belief that builds up by the system that corresponds to their use of social media. Academics that are able to use social media would be more inclined to share compared to those who are not.

This study integrates TPB and SCT to determine academics' KS intention in the context of public IHL in Malaysia. This study has linked the two theories to relate between the exogenous and endogenous variables which have contributed to the current body of knowledge.

B. Practical Implications

This study suggests several practical implications especially to the IHL top management. Suggestions from the results of this study are to establish a platform to identify which of the three factors of individual, organization and technological that has significant effect KS intention among academics in IHL. Hiring new academics can be costly to IHL where the government has to spend millions of taxpayers' money on experts in academia. Therefore, in some developing countries, contract teachers are hired to fill in the vacant position left by the permanent staff (Chudgar et al. 2014). If these academics are hired and are reluctant to share knowledge, the monetary amount spent is wasted.

Secondly, practical implications from this study are the relationship among academics attitude towards KS. Taking the result of this study, social network was found to be the most significant factor for academics to share. This can be taken into serious consideration by top management into how to manage academics social networking as a means to promote and enhance KS in IHL.

The findings also suggest that management support plays an important role in influencing academics intention to share. Top management has to fill in the boots of academics, the challenges and plight of fulfilling the annual appraisal requirement, especially in research IHL. Management also has to find ways and solutions to encourage academics on the enjoyment and the practical benefits when they share their knowledge. This can be done by setting up KS rubrics as an annual performance index. This has not been done in Malaysian IHL context, based on the knowledge of the authors. Management should also be open to criticism, and accept the shortage of the system in the education system.

XI CONCLUSION

This study has managed to determine the factors for academics KS intention. TPB and SCT are integrated in this study to contribute to the body of knowledge. Academics' KS intention are dependent on several factors of individual (commitment, social network and trust), organizational (management support) and technological factor (social media use). PLS-SEM was the method used to analyze the research hypothesis in this study. The results show that for attitude of academics, only social network is significant, while commitment and trust are not. Management support and social media towards subjective norm and PBC respectively are significant factor for intention to share. Subsequently, attitude and PBC are significant determinants of intention to share and surprisingly subjective norm is not significant. This study is done on public IHL only and has a low sample size of 45 respondents. This study low sample size is adequate, due to its preliminary nature of pilot study, which according to Hertzog (2008), a general guidelines that a pilot study should at least obtain 10% of the sample for a full study.

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