

## **The Antecedents of Knowledge Sharing: A Case Study of a Financial Institution in Malaysia**

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**Abstract:** Knowledge sharing is one of the key factors for a successful knowledge management implementation in an organization. Knowledge sharing in organization usually focus on supporting the sharing of knowledge between their employees. In Malaysia, many organizations have claimed that they have transformed itself as a knowledge-based organization. However, studies on knowledge management in Malaysia are limited and often merely describe its existence, transformation and how it is related to competitiveness, organizational factors and employee attitudes. This study aims to report the findings on the factors influencing the knowledge sharing in a financial institution that is known for its knowledge management initiatives. Through survey research strategy involving 125 respondents, four variables, namely; trust, communication between staff, information system and organization structure were found to be significant factors that influence the knowledge sharing. The results of this study could be used as a tool to identify the factors that need to be addressed by the management so as to improve the knowledge sharing among the staff.

**Key words:** Knowledge sharing, financial institution, knowledge-based organization, management, Malaysia

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### **INTRODUCTION**

Knowledge management has become a critical need for an organization to survive in the knowledge-based economy transition. According to Knock and McQueen (1997), the most important factors that ultimately define the competitiveness of an organization is its ability to acquire, evaluate, store and use knowledge and information. As an element in the study of knowledge management, knowledge sharing needs to aim in improving the efficiencies, reliability and access to knowledge and also helps in encouraging and building an effective learning organization. Even though, the practice of knowledge sharing is being employed in many disciplines including social sciences, knowledge sharing is actually a personal interest of an individual. Thus, prompting people to share their knowledge is the key challenge in cultivating knowledge sharing practices. Some still hold on to the aged saying “knowledge is power” without realizing that in this decade, “sharing knowledge is power”. While sharing in some organizations could already be a culture, other organizations may still need to provide an effective

platforms including by using proper tools and technology to transfer the knowledge and innovation in the organization. Other than this, studies on knowledge management in Malaysia are limited and often merely describe on how it is related to competitiveness, organizational factors and employee attitudes (Narayanan *et al.*, 2003). Likewise, there are also few studies being conducted on knowledge management practices within financial institutions or in the banking sectors. Most of the studies focused more on the implementation of knowledge management systems and knowledge sharing capability (Singh *et al.*, 2008; Lee and Nasaruddin, 2008). Aiming in conducting a study in a financial institution, this study adapted Al-Alawi *et al.* (2007) study where the researchers had identified five critical success factors of the knowledge sharing, namely; trust, communication between staff, information system, reward system and organization structure. While, this study had significantly increased our knowledge and understanding on knowledge sharing practices, it is applicable in the context of Bahrain only. Therefore, the researchers believe that further study need to be conducted to explore the applicability of the identified

factors in Malaysia context. To this effect, this case study reports the findings of the study which was carried out to investigate the factors that influence the knowledge sharing practices in a financial institution in Malaysia. The results of this study could be used as a tool by the managerial personnel in addressing some of the critical success factors to improve the organizations' knowledge sharing practices.

## **Literature review**

**Overview of knowledge sharing:** Knowledge sharing is an important component of knowledge management as it helps in codifying the repository of available knowledge in an organization and increasing over time. Hogel *et al.* (2003) define knowledge sharing as a social interaction culture which involves the exchange of employee knowledge, experiences and skills through the whole department or organization. It comprises a set of shared understandings associated in providing the employees' access to relevant information and building and using knowledge networks within organizations. According to Dodge (2001), knowledge sharing is an activity of exchanging information among people, members of a family, a community or an organization. Meanwhile, Awad and Ghaziri (2004) identify knowledge sharing as a process of transferring human knowledge about a process or a procedure to others in the organization, ability and willingness of people to exchange specialized experience with others for the common good of the organization. Some researchers reflected similarities in defining the knowledge sharing as an effort of individual in conducting interactions among each other in an organization. Rivera-Vazquez *et al.* (2009) describe knowledge sharing as the process where individuals communally exchange both tacit and explicit knowledge and mutually create a new knowledge. According to the researchers, this process is considered critical in the process of translating an individual knowledge into the organizational knowledge. Handzic and Agahari (2004) perceive knowledge sharing as the process of transferring knowledge from one individual or group to another within the organization. This is similar to Issa and Haddad (2007) definition where knowledge sharing assumes a relationship between at least two parties, the owner and the recipient of the knowledge. The owner of that knowledge shares it through the process of externalization whereas the recipient internalizes it. In the context of the study, the definitions of knowledge sharing by Hogel *et al.* (2003) and Awad and Ghaziri (2004) will be adopted as both describe knowledge sharing in an organizational context.

**Previous studies on knowledge sharing:** Some of the models and the frameworks in the previous studies (Aulawi *et al.*, 2009; Chatzoglou and Vraimaki, 2009; Zahra and Mohammad, 2010) are mainly derived from the Theory of Planned Behaviour (TPB) (Ajzen, 1991). The TPB Model was further reconstructed by Aulawi *et al.* (2009), Chatzoglou and Vraimaki (2009) and Zahra and Mohammad (2010) by adding supplementary factors such as anticipated reciprocal relationships and expected extrinsic rewards which determine the attitude toward knowledge sharing behavior. Similar factors were identified in Gupta and Govindarajan (2000) organizational culture framework in their attempt to investigate the critical success factors of knowledge sharing in the context of organizational culture. With regard to this framework, Al-Alawi *et al.* (2007) chose the foremost factors that influence the success of knowledge sharing and organizational culture. These factors are trust, communication between staff, reward system, information system and organization structure.

**Trust:** Mayer *et al.* (1995) define trust as the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustier, irrespective of the ability to monitor or control that other party. Fukuyama (1995) views trust as the expectation that arises within a community of regular, honest and cooperative behavior based on commonly shared norms on the part of the members of the community. Fukuyama (1995) looks in to trust as it is culturally rooted where typical sharing is being held within groups with familiar individuals and dependable. This is apparently contradicted to Mayer *et al.* (1995)'s statements that define trust based on the relationship between individuals. However, both definitions emphasized on confidence in others future actions. Based on the survey conducted on trust effects on knowledge sharing and individual evaluation on the trust worthiness of others when seeking knowledge, Levin and Cross (2004) emphasize on benevolence-based trust and competence-based trust which act as the strategies in the knowledge sharing process. Levin and Cross (2004) describe competence-based trust as relationship in which an individual believes that another person is knowledgeable about a given subject area and benevolence-based trust depicts as individual will not intentionally harm another when given the opportunity to do so. Hence, we understand that trust is important in establishing and maintaining knowledge sharing process in a community or organization. The more time spend in building the trust among the employees, the easier it will be in communicating ideas and knowledge. Thus, this study hypothesized:

**H<sub>1</sub>:** There is a positive relationship between trust among colleagues and knowledge sharing in the organization.

**Communication between staff:** In knowledge sharing context, Usoro *et al.* (2007) perceive communication as a process that involves the provision of knowledge by a source, followed by the interpretation of the communication by one or more recipients where the output of this communication is the creation of new knowledge. The process of interpretation can be conducted smoothly by ensuring that shared or common language is being established among the recipients. According to Alwi *et al.* (2009), communication is also a de factor to knowledge sharing. By initiating an open door communication policy between employees, teams and also throughout an entire organization, it will construct a trust culture (Filipczak, 1997). Meanwhile, Levin mentions that shared language such as using similar jargon or terminology can increases trust within informal network. This will create a firmer relationship and deeper understanding among one another's communication. Levin and Cross (2004) also identify that trustworthy source of knowledge will ensure more frequent and rich communication. According to them, communication that is conducted frequently with richness of the communication medium will endorse benevolence and competence based trust. Levin and Cross (2004) also stress that collaborative communication encourages people to share to someone that express willingness to listen and in return also share their knowledge. To this effect, this study hypothesized:

**H<sub>2</sub>:** There is a positive relationship between communication (between staff) and knowledge sharing in the organization.

**Reward system:** According to Dodge (2001), reward and recognition are key elements in encouraging knowledge sharing in organization. In sharing information, people expect benefits in return for their efforts in sharing their knowledge. Dodge (2001) proposes that organization must be aware with this and come out with reward system to recognize employees' efforts in knowledge sharing activities. Correspondingly, Lee and Yang (2000) also find that rewards are needed in attempt to encourage knowledge sharing. Individuals feel motivated to share their knowledge if an organization will reward them for their effort. Sharing similar opinion as Lee and Yang (2000) and Low and Mohammed state that giving reward based on the people efforts are crucial in retaining the knowledge workers. Employees realize that reward system will help in developing their potential as exchange to their diligent contributions to the organization. Furthermore, Dubinsky believes that

organization must also reward on teamwork and collaboration effort by groups. He says that collaboration effort where minds and talent are put together to produce effective and dynamic solutions. Therefore, organization should grant reward to the whole team rather than give credit to one individual in the team. In a different context, Suhaimee suggest that in promoting the knowledge sharing culture among employees in Malaysian Public Institution of Higher Education, the Ministry of Higher Education can allocate a special budget as incentives for those who are active in knowledge sharing session which could includes annual bonus and holiday trip. Accordingly, it is hypothesized:

**H<sub>3</sub>:** There is a positive relationship between the existence of reward system and knowledge sharing in the organization.

**Information system:** Information system as well as other technologies could help in capturing and organize knowledge and also information. Bollinger and Smith (2001) state that technology will facilitate in collaboration among individual to discuss ideas as well as problems. The type of knowledge that needs to be captured will determine the technology that need to be used. For instance, sharing information can be supported by an expert system as it is a practical tool for disseminating knowledge (Michalisin *et al.*, 1997). Low and Mohammed propose that an organization that wants to cultivate their knowledge sharing need to emphasize on structuring their technology and also tools. Some of the tools proposed by them are mail, telephone, internet, e-mail, video conferencing and also telephone conferencing. However, according to Low and Mohammed, people need to be motivated to use the tools. McCampbell, as stated in Low and Mohammed believes that Information Technology (IT) provide a platform for storage and access to information and also facilitate communication. Elliot and O'Dell (1999) share the similar opinion as McCampbell where they mention that as internet and also intranet are accessible to everyone; it can be used to assist in communication and exchange of ideas. This in turn will enhance the knowledge sharing activities. In this connection, it is hypothesized:

**H<sub>4</sub>:** There is a positive relationship between the existence of information system, tools, technology and knowledge sharing in the organization.

**Organization structure:** Knowledge is considered as a critical resource for organizations. Drucker (1999) mentioned that today's work revolves around knowledge work. Knowledge workers in an organization can actively

participate in the process of decision-making. Arad *et al.* (1997) states that employees have the liberty to participate in their organizational decision making process in solving problems. Employees that have authority in conducting their work will tend to learn and share more effectively. However, there are certain boundaries on the employees' authorization. Gareth (2004) has similar opinion with Arad *et al.* (1997) where he conveys that empowerment is the process of giving employees at all levels in an organization's hierarchy the authority to make important decisions and to be responsible for their outcomes. Decision making can also bring people together and make the organization culture grow stronger (McDermott and O'Dell, 2001). Other than employee authorization, information flow also may give impact to an organizational structure. Tukiainen (2001) states that effectual information flow extend from an effective communication. Both sender and the receiver will be responsible in developing successful communication which tolerate the flow of information throughout the organization' levels. Therefore, an internal network is needed to facilitate a robust information flow. It does not have to be a complicated high tech network but rather only a dominant collaboration of minds a cross the organization. Furthermore, Eisenhart (2001) expresses that organization must also understand that knowledge sharing cannot be done in isolation but rather in a collaborative team effort environment. An organization structure should be built in a way that can expand the knowledge sharing and its initiatives, especially through teamwork among the employees. McDermott and O'Dell (2001) state that core values such as good technical work in an organization is usually establish by minority groups of employees that work together with other groups by sharing ideas and experiences. Formation of groups will exercise technical analysis together, discuss on decision making and also criticize on other technical work. McDermott and O'Dell (2001) believe that this will sculpture a sturdy shared belief between the group members. Based on this finding, this study hypothesized:

**H<sub>5</sub>:** There is a positive relationship between certain aspects of organization structure (participative decision making, ease of information flow and cross-functional teams) and knowledge sharing in the organization.

**Research framework:** Figure 1 illustrates the conceptual framework used in this study which was adapted from Gupta and Govindarajan (2000) research framework. However, similar to Al-Alawi *et al.* (2007)'s study, this study focus on trust, communication between staff,

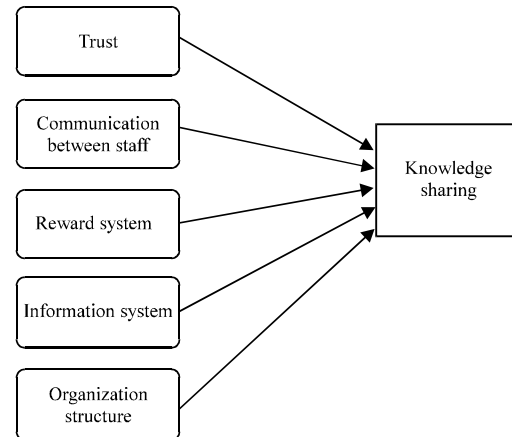


Fig. 1: Research framework

reward system, information system and organization structure which have been constructed to govern the study direction. These factors were identified as the foremost factors that influenced the knowledge sharing based on Gupta and Govindarajan (2000) and also in Al-Alawi *et al.* (2007) studies. Furthermore, the five factors are also valid to be identified as the critical success factors for knowledge sharing as it already had been assessed by Al-Alawi *et al.* (2007) in various organizations in Bahrain's public and private sectors.

## MATERIALS AND METHODS

This study applied the survey research strategy for collecting the research data. The selection of this research method is based upon the needs in fulfilling the study's objectives, the nature of the chosen case organization and also the primary hypothesis of the study. Moreover, according to Babbie (1990), survey is also conducted with the purpose of generalizing of the chosen sample in representing the whole population. Questionnaire was constructed as the instrument in collecting the data. Instead of developing a new instrument, the questionnaire used in this study was adapted from Al-Alawi *et al.* (2007). This is accordance to Sekaran suggestion on adopting a validated and reliable measure in order to avoid the troublesome in developing a new measure. However, some items in the measures of the original questionnaire such as the numbers of items were amended according to the suitability of the case organization. The extent of agreement was measured through Likert scale assessment ranging from 1 for strongly disagree to 5 for strongly agree. The population of the study was among employees of a Financial Institution Headquarter in Kuala Lumpur. Renowned as the knowledge-based organization,

the financial institution has implemented the knowledge management initiatives and several knowledge sharing activities had been carried out continuously until today. A total of 200 questionnaires were distributed by hand to targeted respondents in the financial institution. A representative was appointed at the financial institution to distribute and collect the questionnaires. The questionnaires were distributed accordingly to different level of positions including clerical officer and above level, senior executive and above level and also deputy director and above level. The respondents were given 1 week to complete and return the questionnaire. However due to festival holidays and other unavoidable setbacks, the questionnaires were return back gradually in a month time. A total of 125 completed questionnaires were returned, giving a response rate of 62.5%.

## RESULTS

**Reliability analysis:** Cronbach's alpha was used to test the reliability of each variable in the instruments. Based on Nunnally (1967), it was decided that the minimum level of an acceptable level of reliability coefficient should not be <0.5 (Table 1). Moreover to ensure the credibility and validity of the instrument, the questionnaire had gone through the pre-testing and pilot testing phases before the actual data collection process.

**Demographic profiles of respondents:** Table 2 shows the demographic profile of the respondents. Out of 125 respondents, 65.6% were female and the remaining 34.4% were male. Regarding the respondent's age, 45.6% of the respondents are between the ages of 25-35 years old while only 4% are >50 years. In term of highest education level, majority of the respondents have Bachelor's degree which represented 46.4% of the overall percentage and 25.6% have Master's degree. Only 1.6% of the respondents have PhD. Furthermore, regarding the respondent's current position in the organization, the highest percentage which is 69.6% indicated that they were currently Senior Executive and above meanwhile the lowest was 1.6% indicated that they were Deputy Director and above. Majority of the respondents, i.e., 29.6% also indicated that they have worked between 11-20 years in the financial institution.

Table 1: Reliability analysis of study variables

| Variables                   | No. of items | Cronbach's alpha |
|-----------------------------|--------------|------------------|
| Knowledge sharing           | 2            | 0.716            |
| Trust                       | 7            | 0.646            |
| Communication between staff | 3            | 0.684            |
| Reward system               | 3            | 0.703            |
| Information system          | 3            | 0.776            |
| Organization structure      | 2            | 0.647            |

**Correlation analysis:** The correlation analysis indicates the strength and direction of the relationship between the dependent variable and the independent variables. Correlation coefficient determines to what extent that two variables correlated with each other (Ruane, 2005). The results as illustrated in Table 3 showed that the values based on the Pearson correlation coefficient are between 0.059 and 0.440. According to Wong and Hiew (2005), the correlation coefficient value with a strong relationship must be between 0.5 and 1.0. The correlation between reward system and knowledge sharing practice has a value of 0.059. This further indicated that there are no significant relationship between reward system and knowledge sharing practice. Therefore, it was concluded that there is a positive and significant relationship exist between knowledge sharing practice and the variables namely trust, communication between staff, information system and organization structure in the financial institution.

**Regression analysis:** Both correlation and linear regression can be used to investigate the relationship of quantitative variables (Bewick *et al.*, 2003). While, correlation is used to measure the strength of relationship between variables, regression advances correlation by adding prediction capabilities. The results of the regression analysis had further revealed the level of influence of the Independent Variables (IV) on the Dependent Variable (DV) as shown in Table 4. It is unveiled that the values of  $R^2$  are between 0.003 and 0.194.  $R^2 = 0.194$  signified that Communication Between Staff (CBS) single-handedly explained 19.4% of the variation in Knowledge Sharing (KS);  $R^2 = 0.119$  implied that Information System (IS) individually explained 11.9% of the variations in knowledge sharing and so on. However,  $R^2 = 0.003$  denoted that Reward System (RS) singly explained 0.3% of the variation in knowledge sharing.

Table 2: Demographic profiles of respondents

| Profiles                             | Items                      | Frequency | Percentage |
|--------------------------------------|----------------------------|-----------|------------|
| Gender                               | Male                       | 43        | 34.4       |
|                                      | Female                     | 82        | 65.6       |
| Age (years)                          | <25                        | 12        | 9.6        |
|                                      | 25-35                      | 57        | 45.6       |
|                                      | 36-45                      | 31        | 24.8       |
|                                      | 46-50                      | 20        | 16.0       |
|                                      | >50                        | 5         | 4.0        |
|                                      |                            |           |            |
| Highest education level              | High school                | 15        | 12.0       |
|                                      | Diploma                    | 18        | 14.4       |
|                                      | Bachelor's degree          | 58        | 46.4       |
|                                      | Master's degree            | 32        | 25.6       |
|                                      | PhD.                       | 2         | 1.6        |
| Current position in the organization | Deputy Director and above  | 2         | 1.6        |
|                                      | Senior Executive and above | 87        | 69.6       |
|                                      | Clerical Officer and above | 33        | 26.4       |
|                                      | Other                      | 3         | 2.4        |
| Years of work experience             | 1-5 years                  | 32        | 25.6       |
|                                      | 6-10 years                 | 32        | 25.6       |
|                                      | 11-20 years                | 37        | 29.6       |
|                                      | >20 years                  | 24        | 19.2       |

Table 3: Correlation analysis amongst study variables

| Variables                         | KS      | T       | CBS     | IS      | RS      | OS |
|-----------------------------------|---------|---------|---------|---------|---------|----|
| Knowledge Sharing (KS)            | 1       |         |         |         |         |    |
| Trust (T)                         | 0.296** | 1       |         |         |         |    |
| Communication Between Staff (CBS) | 0.440** | 0.482** | 1       |         |         |    |
| Information System (IS)           | 0.344** | 0.390** | 0.584** | 1       |         |    |
| Reward System (RS)                | 0.059   | 0.243** | 0.215*  | 0.357** | 1       |    |
| Organization Structure (OS)       | 0.318** | 0.408** | 0.428** | 0.410** | 0.478** | 1  |

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

Table 4: Summary of regression analysis

| IV  | DV | r/β                | R <sup>2</sup> | Adjusted R <sup>2</sup> | F      | t     | p-values |
|-----|----|--------------------|----------------|-------------------------|--------|-------|----------|
| T   | KS | 0.296 <sup>a</sup> | 0.088          | 0.080                   | 11.799 | 3.435 | 0.001    |
| CBS | KS | 0.440 <sup>a</sup> | 0.194          | 0.187                   | 29.576 | 5.438 | 0.000    |
| IS  | KS | 0.344 <sup>a</sup> | 0.119          | 0.111                   | 16.561 | 4.069 | 0.000    |
| RS  | KS | 0.059 <sup>a</sup> | 0.003          | -0.005                  | 0.430  | 0.656 | 0.513    |
| OS  | KS | 0.318 <sup>a</sup> | 0.101          | 0.094                   | 13.810 | 3.716 | 0.000    |

Table 5: Summary of hypothesis test findings

| Factors                     | Hypotheses   | Status   |
|-----------------------------|--|----------|
| Trust                       | H <sub>1</sub> : There is a positive relationship between trust among colleagues and knowledge sharing in the organization   | Accepted |
| Communication between staff | H <sub>2</sub> : There is a positive relationship between communication (between staff) and knowledge sharing in the organization  | Accepted |
| Reward system               | H <sub>3</sub> : There is a positive relationship between the existence of reward system and knowledge sharing in the organization   | Rejected |
| Information system          | H <sub>4</sub> : There is a positive relationship between the existence of information system, tools, technology and knowledge sharing in the organization   | Accepted |
| Organization structure      | H <sub>5</sub> : There is a positive relationship between certain aspects of organization structure (participative decision making, ease of information flow and cross-functional teams) and knowledge sharing in the organization | Accepted |

Furthermore, with the recorded p-value of 0.513 which is >0.05, reward system was found not to be a significant predictor of knowledge sharing. Hence, Trust (T), communication between staff, information system and Organization Structure (OS) are to be influential in predicting the knowledge sharing.

## DISCUSSION

The main aim for this study is to identify the antecedents or factors of knowledge sharing. Based from the literatures review, 5 factors had been identified which are the foremost factors that influenced the success of knowledge sharing practice. The factors are trust, communication between staff, reward system, information systems and organization structure. However, the findings from data analysis revealed that the factors with significant relationship with knowledge sharing in the financial institution are trust, communication between staff, information systems and organization structure; excluding the reward system. The summary of the hypothesis testing are shown in Table 5.

Based on the findings, communication between staff has the highest significant level compared to other factors. On the other hand, trust received the lowest significant level among other factors. According to Smith and Rupp (2002), communication is a building component to develop trust which in turn promotes the

knowledge sharing. Looking at this situation, communication in the organization may not be sufficient to persuade trust among the employees. The results from this study also showed similar conditions as in the previous studies where reward system was also found not having any significant relationship with knowledge sharing (Lin, 2007; Aulawi *et al.*, 2009; Zahra and Mohammad, 2010). According to Zahra and Mohammad (2010), reward system is rejected when organization does not provide an effective reward system to encourage the sharing effort or the employees do not perceive the reward system as reliant. Choosing the suitable reward system is imperative as there is a situation where the employees considered non-monetary rewards to be more significant. Therefore, reward system need to be established or revised if existed in the financial institution. Top management must understand the importance and the outcome of implementing reward system in encouraging the knowledge sharing initiatives.

## CONCLUSION

This study had been conducted to report the applicability of the identified factors influencing the knowledge sharing in the context of a financial institution in Malaysia. To govern the study direction, an empirical based framework consisting on trust, communication between staff, reward system, information system and

organization structure have been adapted from previous studies. The findings from this study have highlighted important findings that may influence the knowledge sharing. Firstly, the independent variables that influences the knowledge sharing practice the most are communication between staff and followed by information system, organization structure and lastly trust. Secondly, reward system evidently does not have significance relationship with knowledge sharing in the context of the financial institution. Moreover, upon the validation of the research framework, the major factors that contributes to knowledge sharing need to be highlighted in the case organization to nurture their knowledge sharing.

### LIMITATIONS

As for the limitations in this study, the findings are treated cautiously as factor analysis was not conducted due to limited numbers of respondents (<150 respondents). Factor analysis is supposed to enable researcher to organize the data to a much smaller number of factors. Due to time constraints, this study also emphasize on only 5 factors that influence knowledge sharing. Apparently there are also other factors that could be relevant as indicated in the literatures.

### RECOMMENDATIONS

To compensate the limitation of this study, future studies are propose to involve >150 samples in order to conduct the factor analysis and obtain better patterns in the study findings. In addition, conducting a mixed methods study could provide more concrete support on the identified factors of knowledge sharing through justification of findings from both methods.

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