# Knowledge Sharing Initiative in Institution of Higher Learning: The Lifelong Learning Plan

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#### **Abstract**

Institutions of Higher Learning (IHL) should cultivate the practice of sharing knowledge among lecturers for the purpose of preserving knowledge. One way to keep the knowledge is through the establishment of a knowledge repository. This repository can be used by lecturers for teaching and learning, research and collaboration. However, some of IHLs do not take the initiative to form the repository. Apart from addressing the problem of missing knowledge, a study on the factors of influencing knowledge sharing which lead to the establishment of the repository such as transferred lecturer and those who are retired and furthering their study should be emphasized because there are lack of studies about it. The objective of this study is to investigate the factors of knowledge sharing practices among the lecturers in IHLs. The approach used in this study is a quantitative study and questionnaires were utilised as the main tool to collect the data. There were 147 respondents from public IHLs from Faculty of Information and Communication Technology (ICT) lecturers in the Klang Valley. This study was based on the theory of technology, organization and environment (TOE). From the analysis of this study, it has proven that ICT factors, organization and lecturers have significant relationship to knowledge-sharing practices at IHL. Apart from that, knowledge sharing practices have a significant relationship to the establishment of the repository. The results of this study can serve as a guideline to Faculty of Information and Communication Technology (ICT) at public IHL in their planning and direction regarding knowledge sharing initiatives, especially among lecturers for the purpose of forming a single repository and in preserving knowledge.

#### **Keywords:**

Factors influencing knowledge sharing, knowledge repository, organization and environment (TOE) framework, Institution of Higher Learning (IHL)

#### 1.0 Introduction

In the era of globalization, most service-oriented and business-oriented organizations use knowledge as their main source (Durcikova & Fadel, 2012). This resource is used either to make decisions, references and strategic plannings. This resulted in knowledge sharing practice among individuals seen as social phenomenon and important processes in an organization nowadays (Hooff et al. 2012). However, before knowledge become a strategic resource, organizations had in the first place to have a culture of creating, managing and sharing knowledge (Dukiü & Kozina, 2012). This knowledge could ultimately make up the knowledge repository apart from maintaining organizational resources (Aujirapongpan et al., 2010; Sulisworo, 2012). In the

context of Institution of Higher Learning (IHL) in Malaysia, knowledge is an important tool to implement the process of teaching and learning, research, collaboration and innovation and this requires knowledge sharing culture among the lecturers. However, the implementation of knowledge sharing practices in the IHL has its own challenges and needs careful planning (Sohail & Daud, 2009). Accordingly, the setting up of systematic knowledge sharing initiatives should be properly designed to ensure the effectiveness of using knowledge. In addition, this design should take into account the formation of knowledge repository through sharing activities. This repository is needed to preserve knowledge as well as to make use of it (Sulisworo, 2012). The objective of this study is to create or establish a knowledge repository through knowledge sharing practices that take into account factors influencing knowledge sharing and organizational factors in particular, TMK and lecturer. Hence, this study was carried out based on several issues in past studies on knowledge sharing in IHL. Firstly, the study of knowledge sharing in IHL has not been much explored whether at the global level (Fullwood et al., 2014) or locally (Goh & Sandhu, 2013). The previous studies showed that the factors influencing knowledge sharing in higher education usually focus on the practices in the community (Nistor et al., 2012), the prediction of intention (Rahab & Wahyuni, 2013), behavioral (Azlyn et al., 2011), practices (Ayalew et al., 2010), the learning environment (Kiran et al., 2013), ethics (Patel & Ragsdell, 2011) and cooperation in education (Li et al., 2013). There were no research which focussed on the factors influencing knowledge sharing in IHL that ultimately led to the establishment of the repository. Therefore, the study of knowledge sharing should be explored because each knowledge sharing activities varies in each organization (Nor Asmiza, 2012). This study was consistent with the suggestion by Nor Ashmiza (2012) that the study of factors affecting knowledge sharing should take into account individual factors, organization and technology.

Secondly, without the sharing of knowledge, IHL will be at loss in the event of retirement (Babalola 2016) and displacement (Cranfield & Taylor, 2008) of lecturers which causes loss of knowledge and skills. Furthermore, new lecturers are expected to gain knowledge and skills from experienced lecturer. Thirdly, the existing studies on the establishment of repositories in IHL only focus on the aspects of the need and advantages of the repositories (Naiwen & Xin, 2012) and the needs of communication interconnected repository in IHL (Alhawary et al., 2011). There were no studies on knowledge sharing initiatives that led to the establishment of repository. The objective of this paper is knowledge sharing initiative in Public Institution of Higher Learning (IHLs) in Malaysia.

## 2.0 Literature Review

#### 2.1 Knowledge Sharing

Knowledge is defined as a combination of experience, values, information and understanding of the individual that can be uttered, summarised, written, drawn and compiled to make up experience and new knowledge (Nonaka, 2006). This knowledge can be kept in various forms such as documents, images, sound and video (Du et al., 2012). Sharing knowledge

occurs through a process of exchange of experience, expertise, events and thoughts that agreed by the giver and the receiver (Wahab et al., 2009). Sharing knowledge is also one of the activities in knowledge management (Reychav & Weisberg, 2010). In this study, sharing knowledge is referred to sharing notes, tests, quizzes and projects among lecturers in IHL.

## 2.2 Factors Influence The Knowledge Sharing

## 2.2.1 Information and Communication Technology (ICT)

ICT is one of the factors which influence knowledge sharing practices among employees in the organization. Provision of complete software and hardware infrastructure support the implementation of these practices (Hafiza & Dang, 2012). In addition, this provision could reduce barriers in sharing knowledge and it also could save time (Casimir et al., 2012). Thus, the role of ICT can encourage lecturers to share knowledge and also to support the process of knowledge sharing across geographical boundaries, functions and divisions (Phang & Foong, 2010). Knowledge Management Systems (KMS), infrastructure, and ICT management are the factors emphasized in this research.

a. Information and Communication Technology Management ICT management is part of the management aspects of an organization to achieve its vision and mission (Turban & Potter, 2007). In the context of this study, ICT management is very important in coordinating, planning, maintaining and monitoring the systems and ICT infrastructure in IHL. Hypothesis 1: ICT Management (ICTM) has a significant relationship to knowledge sharing practices (KSP) among lecturers.

b. Information and Communication Technology Management infrastructure Network, software, hardware and internet facilities are part of the ICT infrastructure that support knowledge sharing activities (Zaqout & Abbas, 2012). In this study, the role of ICT infrastructure is to provide services of hardware and software to facilitate knowledge sharing among lecturers in IHL. Hypothesis 2: ICT Infrastructure (ICTI) has a significant relationship to knowledge sharing practices (KSP) among lecturers.

#### 2.2.2 Organization

Past studies had proved that organization is one of the factors that could influence employees' behaviour towards knowledge sharing practices. Organizational factors can play an important role to cultivate knowledge sharing practices among employees (Nissen & Leweling, 2010). Apart from that, these factors can exploit knowledge resources and support the process of sharing knowledge from specialist workers to the new workers (French, 2010) and in implementing new innovation which will simplify the processes of sharing knowledge. Organizational factors in this study refer to planning and internal policies.

## a. Planning

Planning is the process of preparing a detailed document on the planned activities to achieve the objectives of the organization and to create a comprehensive strategy to coordinate and integrate the activities of the organization (Robbins & Coulter, 2013). Planning can predict expectations and use of technology enables the organization to be always in alert situation (Lee & Roth, 2009) on knowledge sharing activities among lecturers (Sohail & Daud, 2009). Planning in the context of this study is to prepare a management plan on knowledge sharing practices to promote lecturers to share knowledge among them in IHL

Hypothesis 3: Planning (PL) on knowledge sharing activities has a significant relationship to knowledge sharing practices (KSP) among lecturers.

#### b. Internal Policies

A specific and fixed plan that provides guidelines towards consistent action taken to achieve the objectives of the organization and enacted for the benefit of employees and accepted as a practice (Miah & Gammack, 2009). Internal policies can protect employees from plagiarism and also preserved knowledge (Paul, 2012). In this study, internal policies are prepared by the management as a guide and protection to the lecturers who want to share their knowledge. Hypothesis 4: Internal Policies (IP) on knowledge sharing activities have a significant relationship to knowledge sharing practices (KSP) among lecturers.

#### 2.2.3 Lecturer

Lecturer formed the majority of the staff in IHL and served to teach. Excellence and competitiveness of IHL is measured by the quality of lecturers in academic learning and teaching, supervision and involvement in collaboration and research. Thus, lecturers need knowledge as a source of reference for their responsibilities which is partly available from the repository (Kiran et al., 2013). Accordingly, lecturers have practice knowledge sharing culture (Azlyn et al., 2011). The focus in this research are on organizational culture and communication culture among lecturers.

## a. Organizational Culture

Organizational culture is an organizational environment that shows the pattern of individual's behaviour which can influence the process of sharing of ideas and knowledge (Nor Ashmiza, 2012). Activities in the organizational culture of knowledge sharing are conferences, discussions, meetings and questions and answers. Thus, the lecturers community should create an organization culture to promote knowledge sharing activities (Lee & Roth, 2009). In this study, organizational culture refers to the roles and responsibilities of lecturers to create an environment of knowledge sharing culture among the lecturers.

Hypothesis 5: Organization cultural (OC) has a significant relationship to knowledge sharing practices (KSP) among lecturers

#### b. Communication

Individual communication is able create a social networking in the workplace, thus leading to knowledge sharing practices (Smith & Rupp, 2002). The

communication process involves two parties, the giver and the receiver (Zuliana & Khalib, 2008). In this study, the communication refers to the ability of the lecturers to start and create an effective communication which can lead to knowledge sharing practices among them.

Hypothesis 6: Communication (CO) has a significant relationship to knowledge sharing practices (KSP) among lecturers

## 2.3 Knowledge Repository

Knowledge repository is a warehouse for storing knowledge that can be used as a strategic resource (Naiwen & Xin, 2012; Sulisworo 2012). Organizations, especially IHL should develope knowledge repositories to encourage knowledge-sharing practices among the lecturers who have limited or who have variety of knowledge (Busaidi et al., 2010). The repository can gather knowledge from the lecturers (Beatrice et al., 2010) through knowledge sharing initiatives (Pidun & Felden, 2013). The resource knowledge can be accessed and reused for the purpose of learning, teaching, research and publication (Du et al. 2012). At the same time, the establishment of repositories require support from the management especially for the coordinating and managing purpose. It is aimed to ensure the organization is willing to face current challenges, particularly changes in the administration and organisational direction (Kim, 2011).

Hypothesis 7: The knowledge sharing practices (KSP) among lecturers have significant relationship towards the establishment of the knowledge repository (EKR).

## 2.4 Knowledge Sharing in Institution of Higher Learning

IHLs are centres of knowledge that can excel through the existence of knowledge sharing initiative, especially among lecturers (Sulisworo, 2012) which take the form of discussions, conferences or publications. However, the knowledge sharing initiative might not materialize if the culture of sharing is not instilled (Cheng et al., 2008). Hence, the management of IHLs need to plan the knowledge sharing initiative in order to encourage the practice. At the same time, the initiative has to be in parallel with the mission of the IHLs in ways such as increasing the performance, increasing competitiveness and improving educational services (Kumar & Raduan, 2012) and fulfilling the industry's peripheral needs (Zwain et al., 2012). Besides that, the knowledge sharing initiative can also overcome the problem of lost knowledge due to retirement (Azlyn et al., 2011) and transfer (Cranfield & Taylor, 2008; Goh & Sandhu, 2013) of lecturers, besides supporting the formation of the repository. Earlier studies on knowledge sharing in IHLs had studied factors that influenced, impeded and contributed towards the knowledge sharing initiative. As mentioned in section II there are several studies on factors that influence knowledge sharing practice. The factors that have been studied are organizational culture, the role of leaders and utilization of ICT (Wahab et al., 2009) and attitude, trust and rewards (Ayalew et al., 2010). Whereas, the value of knowledge, knowledge ownership, abuse of knowledge, perception, ethics, commercial, social influence and the facilitating role was studied by Patel & Ragsdell (2011); profile, leadership, culture, structure, utilizing ICT, infrastructure and knowledge management system by Agarwal et al. (2012)

and estimated effort and estimated performance by Nistor et al. (2012). Meanwhile, Rahab & Wahyumi (2013) had studied the psychological factors, organizational climate, combination and communication. Fullwood et al. (2013) went on to study rewards, autonomy, institutions, leadership and the technology platform, while Li et al. (2013) had studied motivation, convenience in sharing and types of knowledge. Studies on factors that impeded knowledge sharing initiatives had focused on practices (Jain et al. 2015; Sohail & Daud, 2009). Factors that impeded the knowledge sharing initiative included trust, lack of time, experience, rewards, culture, activities, working environment, communication and application (Jain et al., 2015) besides types of knowledge, motivation, chances and culture (Sohail & Daud, 2009).

Meanwhile, Alwi, Bakar & Hamid (2008) had studied factors that contributed to the knowledge sharing initiative, such as knowledge sharing practices that include organizations, culture, technology and communications. Past research had also grouped these factors as the above into three categories, which are technology, organization and individual. The study that focused on individuals was carried out by Nistor et al. (2012) and Li et al. (2013); while organization and technology was studied by Wahab et al. (2009) and Alwi et al. (2008); individuals and organizations by Ayalew et al. (2010) and Patel & Ragsdell (2011). Studies that had focused on all three factors (individuals, organizations and technology) were carried out by Jain et al. (2007); Alhammad, Faori & Husan (2009); Agarwal et al. (2012); Rahab & Wahyuni (2013) and Fullwood et al. (2013).

However, there was no specific study focused towards one factor that had influenced the knowledge sharing initiative among lecturers in IHLs, which finally lead towards the formation of knowledge repository. Hence, studies on knowledge sharing need to be explored further because each initiative differs in its focus (Ismail, 2012). Forming the repository is important as a long-term strategic source (Naiwen & Xin, 2012) in tandem with the status of IHLs as a warehouse of knowledge (Cheng et al., 2008; Sohail & Daud, 2009).

#### 3.0 Theoretical Framework

The theoretical framework used to develop the conceptual framework in this study is the technology, organization and environment (TOE) framework which was introduced by Tornatzky and Fleischer in 1990 and adapted from the 'Theory of Organizational Contingencies'. The TOE framework is suitable for use in research based on organizations (Arpaci, Yardimci & Ozkan, 2012) and performance indicators (Savita, Dominic & Ramayah, 2012). This framework has three contexts: technology, organizational and environmental (Awa, Harcourt & Emecheta, 2012; Angeles, 2013). The technology context includes infrastructure, processes, technics and the latest ICT expertise (Tornatzky & Fleischer, 1990; Pan, 2005) that emphasises on making decisions related to ICT (Tung & Lai, 2013). While the organizational context includes size, scope, centralization, official function, management structure, quality of human resources, decision-making methods, communication, intentions, planning and structure (Tornatzky & Fleischer, 1990; Lippert & Ph, 2006) that leans towards organizational characteristics (Arpaci et al., 2012). In addition, the environmental context comprises firms, suppliers,

employees, customers, competitors and government agencies (Tornatzky & Fleischer, 1990).

## 4.0 Knowledge Sharing Conceptual Framework

Analysis on past models and knowledge-sharing frameworks has found that the framework emphasises two factors. First, there is a need to develop repository, and second, the different factors that influence knowledge sharing initiatives. Both these factors are the basis for developing the conceptual framework in this paper according to the approach used by Ismail (2010); Yassin et al. (2011). The approach to the conceptual framework development is shown in figure 1.1. The inputs that actually represent the factors that influence knowledge sharing are ICT, organization (IHLs) and lecturers. Meanwhile, the process represents the knowledge-sharing activities and the output represents repository formation.



**Figure 1.1:** The Framework Development Approach Source Ismail (2010) and Yassin (2013)

The TOE framework is chosen to base the development of the conceptual framework since it suits the factors that will be studied. This is because the factors that influence knowledge sharing (inputs), which are technology (ICT), organization (IHLs) and environment (lecturers) are indeed congruent with the TOE framework. Also research by Liu (2008); Lee et al. (2009) had used the environmental context to portray individuals. In the context of this study, lecturers represent the individuals. The TOE framework is also used to study the information system and knowledge management.

In the context of this study, the information system is in the form of the repository while knowledge management represents the knowledge sharing initiative. The conceptual framework development is shown in Figure 1.2. The details factors are shown ICT, Organization (IHLs) and lecture as the above.

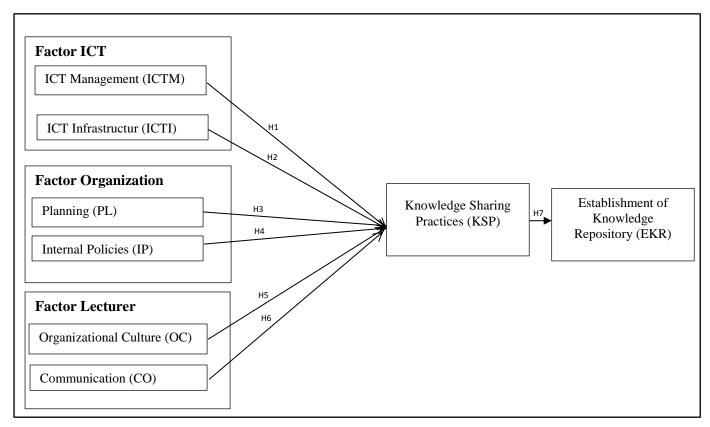


Figure 1.2: The Knowledge Sharing Conceptual Framework in IHLs

#### 5.0 Methodology

This study uses a quantitative approach as it is more appropriate for researchers to understand and explain certain phenomenon (Creswell 2009). Quantitative approach is also suitable to find out the relationship between variables. It also can explain the issue of knowledge sharing in IHL. Quantitative approach is investigative in nature, and it has a detailed technique in collecting data. The respondents of this study consisted of 147 lecturers from the Faculty of Information Technology and Communication in 4 universities in the Klang Valley, namely National University Malaysia (UKM), University of Malaya (UM), University of Putra Malaysia (UPM) and University of Technology Mara (UITM). Respondents were lecturers from grades 41 to JUSA C. Questionnaire were chosen as an instrument because according to Sekaran & Bougie (2013) questionnaire technique is an effective data collection mechanisms and it also help the researchers to know the requirement and variables measurement. The data collected is the latest, flexible and can be used to test the multiple hypotheses. Lazarsfeld Scheme technique was used to developed questionnaire (Katz & Paul 1996). The main function of Lazersfeld scheme is used to develop concepts in the conceptual framework. Basically this scheme involves four levels, namely shadow concept, specification of concepts, selection of indicators and index construction (Lazarsfeld, 1955) and this scheme began with abstract concepts to the real concepts. The validity of the questionnaire is reviewed by expertise in knowledge sharing in IHL. The pilot study was carried out in order to test the consistency of the construct items. The study has revealed that the

reliability of the questionnaire is consistent and it has a value between 0.8-0.9 based on Cronbach's Alpha. The questionnaire was divided into two structures, namely close and open. The close questionnaire is followed by specific answers, whereas open questions enable the respondents to give comment (Sekaran & Bougie, 2013). The questionnaire consists of 8 parts, namely A – H, and these 8 parts were divided into 2 sections. Part A is about Demographic Profile and Part B to Part F focussed on variables to test the hypotheses. Likert Scale of 5 were use to measure all items in part B to part I, starting from a scale 1 (Strongly Disagree) to scale 5 (Strongly Agree). Likert scale was chosen because it has several advantages such as easy to manage, items were easily answered by respondents and data collected has high reliability level compared to other scales (Chua, 2009). The data was analysed using SPSS version 21.

## 6.0 Data Analysis And Results

## 6.1 Demographic Statistics

| Item                         | Frequency | Percentage |
|------------------------------|-----------|------------|
| Gander                       |           |            |
| Male                         | 67        | 45.6%      |
| Female                       | 80        | 54.4%      |
| Age                          |           |            |
| 25 -30                       | 9         | 6.1%       |
| 31 - 40                      | 74        | 50.3%      |
| 41 - 50                      | 53        | 36.1%      |
| 51 - 60                      | 11        | 7.5%       |
| Academic                     |           |            |
| PhD                          | 80        | 54.4%      |
| Master                       | 66        | 44.9%      |
| Bachelor                     | 1         | 0.7%       |
| <b>Institution of Higher</b> |           |            |
| Learning                     |           |            |
| UKM                          | 24        | 16.3%      |
| UM                           | 32        | 21.8%      |
| UPM                          | 36        | 24.5%      |
| UiTM                         | 55        | 37.4%      |
| Length of Service            |           |            |
| 1-10                         | 54        | 50.3%      |
| 11- 20                       | 68        | 46.3%      |
| 21- 30                       | 21        | 14.3%      |
| 31-40                        | 4         | 2.7%       |

**Table 1.1:** Demografic respondent

Demographic profile of respondents consisted of the location of IHL, gender, qualifications, grade, academic qualifications and length of service. The

respondents were 80 (54.4%) female lecturers and 67 (45.6%) male lecturers. In terms of ages, the number of lecturers who were 26 to 30 years was 9 (6.1%), 74 (50.3%) were between 31 and 40 years while the number of lecturers aged between 41 to 50 was 53 (36.1%). Only 11 (7.5%) lecturers were between the age of 51 to 60 years. The detailed Descriptive Statistics is shown in table 1.1.

## 6.2 Result of Testing The Normality Data Distribution and Reliability Values

|           | Norma    | lity Data | Reliability    |                  |  |
|-----------|----------|-----------|----------------|------------------|--|
| Construct | Skewness | Kurtosis  | Number of item | Cronbach's alpha |  |
| MICT      | -0.359   | -0.165    | 4              | 0.93             |  |
| IICT      | -0.413   | 0.203     | 4              | 0.89             |  |
| PL        | -0.405   | 0.320     | 3              | 0.91             |  |
| IP        | -0.137   | -0.826    | 4              | 0.74             |  |
| OC        | -0.180   | -0.825    | 4              | 0.89             |  |
| СО        | -0.081   | -0.933    | 4              | 0.78             |  |
| KSP       | -0.098   | -0.759    | 4              | 0.89             |  |
| EKR       | -0.442   | -0.195    | 4              | 0.88             |  |

**Table 1.2:** Data distribution and reliability

The normal distribution of the data should have skewness and kurtosis values between -1 and +1 (Hair et al. 2014). Therefore, the distribution of data in this study which were valued between -0.081 to 0.933 were classified as normal. Reliability tests were conducted to measure the consistency of the items for each construct (Hair et al. 2014). The analysis showed that all constructs have acceptable reliability from 0.74 to 0.93. According to Nunnaly (1978) and Pallant (2001), the value of Cronbach alpha coefficients above 0.7 is reliable and acceptable. This showed that all the assessment criteria and the items in the questionnaire can be applied. Table 1.2 shows the cronbach alpha, skewness and kurtosis for each construct.

## 6.3 Mean and Standard Deviation (SD)

| Construct | Mean | Std. Deviation |
|-----------|------|----------------|
| MICT      | 4.05 | 0.69           |
| IICT      | 3.89 | 0.70           |
| PL        | 4.18 | 0.65           |
| IP        | 4.02 | 0.56           |
| OC        | 4.13 | 0.61           |
| CO        | 4.07 | 0.52           |
| KSP       | 4.13 | 0.58           |
| ER        | 4.11 | 0.64           |

**Table 1.3:** Mean & Standard Deviation (SD)

As mention earlier this study used Likert Scale. The scale was ranged from 1 (Strongly Disagree) to 5 (Strongly Agree) to determine the constructs. Based on 147 respondents, the mean value were in the range of 3.89 to 4.18 which

is in the scale of agree and strongly agree, while the standard deviation was from 0.52 to 0.70. Table 1.3 shows the mean and standard deviation.

## **6.4 Testing The Hypothesis**

|      | ICTM   | ICTI   | PL     | IP     | OC     | CO     | KSP    | EKR |
|------|--------|--------|--------|--------|--------|--------|--------|-----|
| ICTM | 1      |        |        |        |        |        |        |     |
| ICTI | .654** | 1      |        |        |        |        |        |     |
| PL   | .681** | .622** | 1      |        |        |        |        |     |
| IP   | .654** | .742** | .628** | 1      |        |        |        |     |
| ОС   | .625** | .593** | .791** | .639** | 1      |        |        |     |
| СО   | .673** | .712** | .715** | .753** | .714** | 1      |        |     |
| KSP  | .598** | .528** | .774** | .664** | .754** | .792** | 1      |     |
| EKR  | .798** | .676** | .783** | .673** | .710** | .708** | .699** | 1   |

<sup>\*\*</sup>p<0.01, \*p<0.05 :Note: All one-tailed correlations

**Table 1.4:** Correlation Analysis

Correlation analysis is used to find out the relationship between constructs and hypotheses. According to Hair et al. (2014), the correlation value greater than 0.90 should always be examined and if many of the correlations were above 0.80, there is a problem with the variables. The result of analysis showed that there were no constructs that have the correlation value exceeding 0.8. The highest correlation value is 0.798 and the lowest was 0.528. Table 1.5 shows that all constructs have significant correlation. The hypotheses related to ICT factors, namely ICT management (ICTM) and ICT infrastructure (ICTI) had shown significant correlation to knowledge sharing practices (KSP) among university lecturers These findings are consistent with Bartolini & Stefanelli (2011). Similarly, the constructs related to organization factors, namely planning (PL) and internal policies (IP), there were significant correlation relationships to knowledge sharing practice (KSP) among lecturers. Meanwhile, on the lecturers factors, represented the construct of organizational culture (OC) and communication (CO) has a significant correlation to knowledge sharing practices (KSP). This finding is consistent with the study Islam et al. (2011), Alawi et al. (2007) and Cheng et al. (2011). The study had proved that the construct on knowledge sharing practices have a significant correlation relationship to the establishment of knowledge repository (EKR). The claim made by Khalifa et al. was right as evident from the findings of the study where the establishment of repository has a significant relationship with the knowledge sharing practices. The result of correlation analysis of the study is shown in Table 1.4

| Hypothesis | Constructs | Pearson<br>product-moment<br>correlation | Correlation Value |
|------------|------------|--|-------------------|
| H1         | ICTM →KSP  | 0.598**                                  | Strong            |
| H2         | IICT →KSP  | 0.528**                                  | Strong            |
| Н3         | PL →KSP    | 0.774**                                  | Strong            |
| H4         | IP→KSP     | 0.664**                                  | Strong            |
| H5         | OC →KSP    | 0.754**                                  | Strong            |
| Н6         | CO→KSP     | 0.792**                                  | Strong            |
| H7         | KSP→ER     | 0.699**                                  | Strong            |

**Table 1.5:** Hypotheses Testing For The Research

According to Cohen (1988), the strength levels of correlation are indicated as low (0.10/-0.10 to 0.29/-0.29), moderate (0.3/-0.3 to 0.49/-0.49) and high (0.5/-0.5) to 1/-1) Table 1.5 shows the strength levels for each linear relationship among constructs. Based on the guidelines, all the hypotheses have high value of correlation.

#### 7.0 Conclusion

Studies had shown that the lecturers from Faculty of Information and Communication Technology (ICT) at public IHLs practice knowledge sharing activities among them. However, these activities do not have specific guidelines administered by the university. Hence, management in public IHLs from Faculty of Information and Communication Technology (ICT) IHL should plan systematically and state clearly their objectives and directions. This planning should consider three main factors: technological, organizational and lecturer. Hypotheses testing showed that these three factors have significant relationship to the knowledge sharing practice with the correlation between 0.528-0.798. The correlation value has proven that there was a moderate and powerful relationship between independent variables and the dependent variables. In addition, there is a strong need to establish repositories resulting from knowledge sharing practices among the lecturers. The establishment of repository is important to uphold knowledge. Therefore, it can be used by lecturers for teaching and learning, researching and collaborating. Hence, future research should be emphasized on the use of knowledge repository which is already established.

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