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Knowledge Sharing Practices in Academics

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***Abstract*— Knowledge sharing is considered as the foundation of learning and research at colleges and universities. In the context of higher education, knowledge sharing is the process of exchanging and acquiring knowledge that is needed through informal and formal channels technical facilities.**

This systematic literature review explained knowledge sharing practice both by university and student. In this systematic Literature Review, will identify and analyze what common practices of knowledge sharing on academic purpose from each research from 2007 until 2017.

Keywords—knowledge sharing, student, academics, practices

I. INTRODUCTION

Rapid advancement in information technology has revolutionized the business organizations by introducing new methods of learning and sharing knowledge. Knowledge has become an important asset for business organizations in creating and sustaining competitive advantage. It is also widely recognized to be a critical component for any individual or organization to succeed in an increasingly demanding competitive environment.

Knowledge sharing has gained a lot of interest as organizations have come to appreciate its positive impact on organizational effectiveness and competitive advantage. Unsurprisingly, then, much research has been undertaken at the organizational level in the business sector and lessons have subsequently emerged. However, knowledge sharing is not only of interest and value to commercial organizations; lessons about knowledge sharing can be learned from, and subsequent benefits gained in, other sectors; one such sector is higher education.

Every paper explained different knowledge sharing practice both by university and student. In this systematic Literature Review, will identify and analyze what common practices of knowledge sharing on academic purpose from each research from 2007 until 2019s.

This paper is organized as follows, in section 2, describes details of conducting this SLR. the result are discussed in section 3 and conclusions are provided in section 4.

II. METHODOLOGY

Systematic literature review is a method to identify, evaluate and interpreting all study variables relevant to a specific research question, and an interesting phenomenon [9]. Systematic literature review aimed to present a fair evaluation of the research topic, using the methodology that is reliable, accurate, and auditable [10].

This systematic literature review used kitchenham method, and divided into 3 main process, Planning, Conductiong review, and Reports.

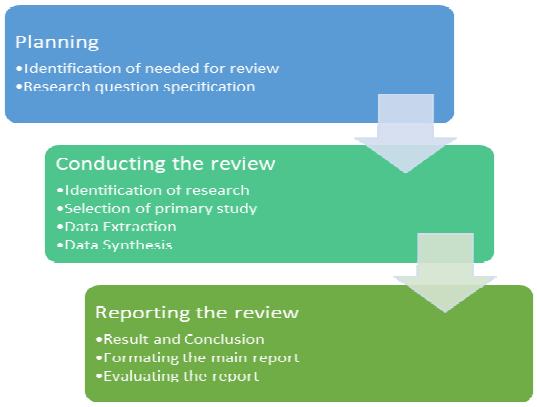

Figure 1. Systematic Literature Review Method

A. Planning

Planning Process has two steps, Identification of the need for the review ad Specifying the research question.

1. Identification of the need for the review

2. Research Question

Table 1. Research Question

Research Question	Description of Objective
RQ1. What is the common practices of knowledge sharing among student?	To find out and understanding various and common practices of knowledge sharing in academic purposes.

B. Conducting the Review

This process divided into five steps, which are identification of research, selection of primary studies, study quality assessment, data extraction, and data synthesis.

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1. Identification of Research

The papers used in this SLR were identified by searching electronic databases, mostly from from Science direct, IEEE, Springer link, and PreQuest. The studies were from 2010 until 2017. To search relevant studies, it must have specific keywords. The best keyword for this SLR is: "Knowledge AND sharing AND student OR Academic". The Boolean operator AND used to link two search strings together that contain two or more concepts, and the Boolean operator OR used to include alternative search terms [8].

2. Primary Studies Selection

Search result of electronic database returned 111320 results. The result filtered by reading the title and abstract. Selection process used 3 parameters, which are: (1) Papers have relevant title; (2) Papers has relevant abstract and introduction; (3) paper has process of the experiments; (4) papers have the analysis result.

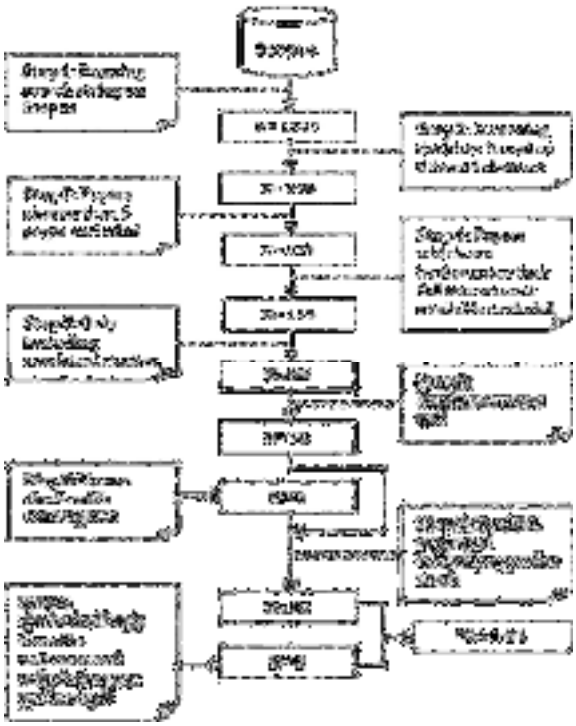

Figure 2 Study selection steps

Table 3. Collected Paper

Electronic Database	Number of Publications identified relevant to the research question
IEEE	6
PreQuest	1
Science Direct	18

The selected papers must have the criteria of this systematic literature review to obtain complete result. The table below is about Inclusion that should inclusion and exclusion that should not Criteria.

Table 3. Inclusion and Exclusion

Inclusion	Exclusion
Papers about knowledge sharing in academics	Duplicate papers
Papers about implementation of knowledge sharing in academics	Incomplete papers
Papers that can answer the research question	Papers that not in English/Bahasa
Studies reporting empirical research using methods such as case study, survey, and experiment.	Bias literature and unpublished article

From primary study selection process, there are 9 papers that will be extracted to get the data for analysis so that can answer the research question.

3. Data Extraction

The data extraction aims to identify the relevant information that should extracted from each of the papers in order to answer the research question. The selected papers will be read and understand to obtain and extract important and relevant data that support the SLR about Knowledge Sharing Practices Among Students.

4. Data Synthesis

Each extracted data will be summarized and assessed about the research question. The synthesize could help to create the conclusion of this SLR about Knowledge Sharing Practices Among Students.

III. RESEARCH RESULT

A. Significant Journal Publication

In this literature review, 9 primary studies that analyze the common knowledge sharing practices are included. A short overview of the distribution studies over the years is shown in figure 2. the distribution studies over the years.

Table 4. Percentage of Publication in each database.

Electronic Database	Number of Publications identified relevant to the research question
IEEE	2
Science Direct	7

B. Knowledge Sharing Practice

Table 5. Knowledge Sharing Practices from each paper

Paper	Knowledge sharing practice
Mustafa I.M. Eid,	The result of the study implies

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Ibrahim M. Al-Jabri "Social networking, knowledge sharing, and student learning: The case of university students"	that the use of Social Networking Service (SNS) for chatting and online forum or discussion for file sharing are common among university student and positively affects knowledge sharing and student learning.
B. J. Krämer, M. Klebl, and A. Zobel, "Sharing educational knowledge and best practices in edu-sharing,"	the study presented a comprehensive e-learning portal called Edu-sharing and methodological foundations that allow educators to relate reusable content with codified best practices in teaching and learning.
Mohammed A. Balubaid, "Using Web 2.0 Technology to Enhance Knowledge Sharing in an Academic Department"	The study shows that 70 % of the students prefer to use facebook as the best platform for sharing an information and knowledge.
C. S. C. Asterhan and E. Bouton, "Teenage peer-to-peer knowledge sharing through social network sites in secondary schools,"	The combined findings from the two studies presented here reveal a more balanced picture: In contrast to the argument that SNS activity consists of mere socializing and entertainment which comes at the expense of academic involvement, we found that teenagers have adopted SNS technology for academic purposes as well.
S. Moghavvemi, M. Sharabati, T. Paramanathan, and N. M. Rahin, "The impact of perceived enjoyment, perceived reciprocal benefits and knowledge power on students' knowledge sharing through Facebook,"	examine the usability of a Facebook, to share knowledge within a specific learning context, and therefore present considerations for educators to enhance and alter their respective practices.
K. W. Chu, C. M. Capio, J. C. W. van Aalst, and E. W. L. Cheng, "Evaluating the use of a social media tool for collaborative group writing of secondary school students in Hong Kong,"	The findings showed that most of the students participated in this study shared learning related knowledge through social software tools especially the social network sites.
H. Adenan, "Communication Technology on Academician' s Knowledge Sharing Behavior at Private University,"	Private university students prefer face-to-face interactions compared to their counterparts in public universities. Public university students are keen to use online chat, and to some extent, e-mail. This may indicate that the bond between the private university students is stronger where a lot of face-to-face interactions occur during their academic pursuit.
C. Chin Wei, C. Siong Choy, G. Geok Chew, and Y. Yee Yen, "Knowledge sharing patterns of undergraduate students,"	The authors contend that the most equitable way to proceed with group work is for educators to make multiple allocation methods available and then allow individual students to choose the method that they feel is most appropriate to their needs. It is contended that this returns a degree of ownership to students, and provides the best possible opportunity for students to work with like-minded colleagues to pursue their own aims and fulfil their individual needs through their group work experiences.
Kelly Mills, Elizabeth Bonsignore, Tamara Clegg, June Ahn, Jason Yip, Daniel Pauw, Lautaro Cabrera, Kenna Hernly, Caroline Pitt "Connecting Children's scientific funds of knowledge shared on social Media to science concepts"	The research findings suggest that Social Media Sharing can facilitate the students for discuss and share valuable knowledge, both science or non-science knowledge among them.

C. Data Synthesis

From the result, there are 9 kind of knowledge sharing practices that can be use in Academics. In this stage, those knowledge sharing practices reduced into 3 knowledge sharing practices based on similar meaning, and similar context. Every practices is

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supported by the concept within and across the studies.

Table 6. Knowledge Sharing Practices

No	Knowledge Sharing Practices
1	Social Network Services / Social Media
2	E-learning
3.	Face to Face Interaction (during class or group work)

IV. CONCLUSION

The systematic literature review used Kitchenham method, and consist of three main process, which are Planning the review, conducting the review, and report the review. The paper collected about 25 studies from year 2010 until 2019.

The results of the study imply that the use of SNS or Social Media for discussion and sharing information is becoming common among university students, and this positively affects knowledge sharing and impact student learning. In addition, the study found that the major SNS tools used by students in order of preference are WhatsApp, YouTube, and Facebook.

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