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The Impact of Knowledge Sharing through Social Media among Academia

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Abstract. The world of research require researcher, academia and lecturers to share knowledge among them. With the invention of social media, knowledge sharing process has been more effective and easy. Previously, there were numerous researches done to investigate the effect of social media utilization for public used. There were also study that aimed to study social media effects in education sector but those study were centered around student's perspective. Less consideration is given towards academia's perspective. Therefore, this study is directed to explore other niche area on knowledge sharing environment where it will focused on the effects of social media on knowledge sharing among academia. Initially, literature review analysis was done to discover the potential factors that encourage academia to engage in social media. Ability to facilitate communication, idea generation and group establishment are the most cited reasons. Not only that, this paper will highlight the significance of performing this study. In conclusion, there is no doubt that social media do enhance and upgrading the knowledge sharing process thus assisting academia in their scholarly work.

INTRODUCTION

A Knowledge sharing can be described as a process of communication whereby two or more parties are involved in the transfer of knowledge [1]. This is a process that involves the provision of knowledge by a source, followed by the interpretation of the communication by one or more recipients. In other words, knowledge sharing can be referred as a social interaction where it consists of individual interactions and participation and when both of these important elements involved, knowledge sharing turn out to be more effective.

Nowadays knowledge is easily shared with the utilization of social media. Social media can be described as a group of Internet-based applications that based on the ideological and innovative foundations of Web 2.0 [2]. Web 2.0 is the extension of Web 1.0 where it emphasizes on its main feature of allowing the formulation and exchange of user-generated content. This new generation of web consists of variety of services such as wikis, weblogs, social networking sites (e.g. Facebook and Twitter) and hosting services (e.g. Flickr and Youtube) [3]. The utilization of social media such as wikis and social networking sites has expanded exponentially, where this advancement are ceaselessly turning out to be more coordinated into our daily lives [4].

In addition, there are many researches done previously to study the influence of social media towards knowledge sharing in specific organizations. For example, research by [5] emphasized on the creation of a specific network that could enhance the way information is shared via online Knowledge Management Systems (KMS) in healthcare industry. Besides that, research done in Nielson, a global marketing and advertising research company tried to understand how these technologies help the company to assist a knowledge sharing culture [6].

Furthermore, knowledge sharing activities are greatly influence by KMS. Recent years of research regarding KMS environment not only were view from qualitative perspective but also from quantitative perspective. For example, [7] proposed Fuzzy Multi-Criteria Decision Making (FMCDM) approach for measuring the possibility of successful Knowledge Management (KM). Apart from that, [8] measured the successful rate of knowledge sharing in Tehran Municipality ICT Organization by applying a Fuzzy Logic (FL) understanding. Another research on FL application and its efficiency in solving KM issues was study done by [9]. In his research, FL was used to model the trust level in knowledge sharing application. Findings from his study concluded that, FL was proven to be dynamic because it ability to compute output with given changes in the input variables. From this section, it can be said that research regarding knowledge sharing has gaining more attention among researchers from different and various expertise.

RESEARCH BACKGROUND

More researchers and academia come to understand the potential advantages offered by social media and are incorporating them into their job. The utilization of social media in scholarly and research works undoubtedly yield an advantage for their works. For example, in 2011, a 15-year-old Acquired Immune Deficiency Syndrome (AIDS) issue was answered in only three weeks by utilizing a new online game site that permits users to contribute in decoding complex proteins [10]. This breakthrough shows a great achievement on how social media enhanced the knowledge sharing process and help in improving research works.

[11] rightly argue that, scholars specifically are progressively embracing and adjusting these tools for utilization in their expert work. In year 2007, sites and web that are focusing for researches and academic penetrated the market. Among them are ResearchGate, Mendeley and Academia.edu. The number of the members is linearly increasing by year demonstrating a positive diffusion on social media usage by academia. For example, in 2008 there were around 150,000 members of ResearchGate and it reached to seven million members by May 2015 [12]. Other social media tools used by academia include Facebook, Twitter, Linkedin and Google Docs [13].

Moreover, compared to other social networking sites, Facebook in particular is gaining more attention and has been quite famous in the academic field [14]. Social networking sites can be defined as an online service that allows its user to create a public profile where this profile is view by other users made through invitation by the administrator. The user-friendly interface and variation of Facebook features (i.e. user's profile, news feed, friends list, boards of discussion, interaction engagement through like, comment and share option, Facebook page, Facebook group and etc.) make it a suitable platform in building a stable community of knowledge sharing environment [15].

From all of the statements stated earlier, it can be concluded that social media indeed bring an impact towards academia and scholars profession. As we know, academia is the one who hold the key for the success growth and development of knowledge in a country. However, policies on Information and Communication Technology (ICT) in Malaysia education are made within the scope towards student's performance. One of the policy stated that ICT for all students, meaning to reduce the digital gap between schools with ICT as its key enabler in communication. There are no specific policies or rules that targeted Malaysian academia to utilize social media for knowledge sharing purposes. Hence, further research need to be done to explore knowledge sharing behavior among Malaysian academia in order to contribute to the understanding of social media effectiveness.

RESEARCH PROBLEM

The choice to share knowledge via social media can be recognized as a voluntarily behavior where this behavior is governed by the factors that encourage the implementation of this behavior. Despite numerous advantages that can be gained from sharing knowledge, not everybody is willing to share their knowledge actively with others because of specific circumstances. In some cases, people are hesitant to share knowledge because insecurity feeling [16]. Furthermore, there are limited studies done to investigate how academia make a used of social media for knowledge sharing purpose and even fewer focused on Malaysian academia. Most of previous researches, centered on the

importance of social media to students [14][17][18][19]. There were studies done previously on academia, however most of it aimed to explore the application of social media for teaching purposes [20][21]. Therefore, this study will extend the research regarding social media utilization by focusing towards academia perspectives on how they use it for the purposes of knowledge sharing, what are the factors that encourage them to engage in this behavior (i.e. knowledge sharing through social media) and how can we determine the successful implementation of this behavior.

RESEARCH QUESTIONS AND RESEARCH OBJECTIVES

The main research question for this study is how importance social media utilization for knowledge sharing purposes among academia. Along with this main question, there are two specific research questions that need to be answered.

- What are the success factors that encourage knowledge sharing through social media among academia?
- What are the significance of performing this study ?

Generally, the main objective of this study is to investigate knowledge sharing culture among academia through social media. In order to achieve the main objective, there are several specific objectives that need to be accomplished:

- To identify successful factors that encourage knowledge sharing through social media among academia.
- To investigate the significance of this study?

KNOWLEDGE SHARING VIA SOCIAL MEDIA

Past research by [22] indicates that knowledge sharing can be characterized as a methodology in which diverse units, groups and people can impart their experience to one another. Previously, face-to face meetings and discussion in groups are among the most influential platform used to share knowledge. Nowadays through social media, people are easily connected to each other thus enhancing the knowledge sharing process. Blogs, forums and social networking sites are example on diverse applications of social media. [13] said that, the implementation of social media made it possible to have an informal conversation where individual get to explore unasked questions with people from different expertise. Furthermore, by means of social media individual get to seek an explanation of current issues, discovering motivation for future ventures and learning the impact of past tragedy. Utilization of social media brings an impact to various sectors such as in industry sector, health center and including educational sector. For example, [23] found that the presentation of social media into the working environment has critical outcomes for knowledge sharing establishment within organizations. Besides, studied done by [24] found, that senior staff and scientists have been portrayed by a few studies as being the most continuous and early adopters of online networking and systems administration. Next, the literature review is focused on the social media utilization of Facebook in educational sector.

SOCIAL MEDIA IN PROMOTING ACADEMIA

As online social media quickly get to be more standard, various studies have been directed on how general society utilized these advancements. However, there is still insufficient exploration into how academia is utilizing these technologies [25]. To overcome this problem, many works have been done to utilize social media for academic purpose. These efforts include introducing the social media tools that are beneficial for scholarly work. [13], cited that Facebook, Twitter, Academia.edu, LinkedIn, Google Docs, SildeShare and Skype are some example of tools used by academia that help them in their expert work. Apart from that, there are a number of committed insightful blogging dedicated for scholarly purpose, for example, <http://scienceblogs.com> and <http://scientificblogging.com> [26]. Through this blog, researcher does not just examine current research, developing initiatives, and analyzing scientific news, however, regularly likewise post personal stories about researchers beginning their field work, or giving tips to new specialists. With the participation of new scholars, these sites are successful in forming a group of researchers, thus rouses further joint effort and associations between companions. Because of the developing

prominence of academic blogging, a conference has been shaped, the Science Blogging Conference of which the last meeting pulled in very nearly 200 delegates [27][28].

DISCUSSION AND CONCLUSION

Through literature review analysis, there are several factors agreed by the authors regarding the factors that initiate knowledge sharing through social media among academia.

- Facilitate Communication

Ability to facilitate communication was the most common cited reason that influenced the utilization of social media among academia [27][29][30]. Through social media, they can easily connect and communicate internationally with other scholars. As we know, the world of research requires massive communication for knowledge understanding. This scenario probably acts as force for them to indulge in social media utilization.

- Generating ideas

Furthermore, other successful factor of knowledge sharing behavior is its potentiality in cultivating and generating ideas [11][31]. For example in Facebook group, the users are having a direct interaction among each others. Through this interaction, the possibility to spark an idea from a discussion of a certain topic is high. Following this, it will help the academia to have an up to date on current research and issues [13]. This can make sure that scholars are staying in the right track and keeping up with the newest research.

- Self- promotion

Moreover, social media also heed the academia needs for self-promotion [32]. These tools provide an opportunity for academia to share their research work and professional opinion [33][34]. Twitter and Facebook for example, can be used to highlight some statement and issues from the paper that they publicized. By doing so, people will get to recognize them and appreciate their works. Eventually, academia will have the chance to maintain and upgrading their professional image [35].

- Discover tenure or funding

Another personal factor that successfully encourages knowledge sharing through social media is, it assists academia to discover tenure or funding [34]. Through Facebook or any other social media tools, information is easily spread and capture by wide amount of audience. Lately, most of educational institutions have their own Facebook group. They discussed various topics including job opening and research funding. Since the search of funding is a non-stop occupation, it will be a wise decision to advertise the news or demand through social media.

- Group establishment

Nowadays social media serve as the easiest platform for group establishment. [24] and [30] said that social media possess the ability to form a network of scholars with similar interest and research area. It also helps academia to strengthen ties that have already established within them. Through this group, they can explore unasked question in a less formal way [25][31].

- Convenience tool for journal publication

Not only that, traditional way of publishing in paper publication is shifted to modern way that is by using online scholarly journals [31]. The benefits of these online journals include an easy access of reading material and also abundant information dissemination for the scholars.

Next discussion is on how can this paper contribute or what is the significance of performing this study. This study can help academia to:

- i. Highlights the importance of social media utilization for knowledge sharing purposes among Malaysian academia by exploring the factors that initiate this behaviour.
- ii. Provide an understanding on the relevance of using social media as knowledge sharing tools Increase their understanding on the relevance of using social media as knowledge sharing tools thus maximizing the usage of technology provided.

- iii. Not just that, this study can give a review to the application designer to turn out with more innovative and engaging social media application that suits academia needs.
- iv. Provide a suggestion to policy makers to come out with policy that considering the importance of ICT on academia and scholars.

SUGGESTION FOR FUTURE RESEARCH

Research done previously to assess knowledge sharing capability through Facebook was made intuitively. Past study by [36][37] aimed to study the pattern of knowledge shared among academia through Facebook by viewing the number of like, comment and share. Findings from this research are based on an intuitive model. Therefore, this study will go deeper on designing the measurement model that can assess the level of successful knowledge sharing through social media. To do so, some of the selected theories has been reviewed. Among them is Fuzzy Logic. Fuzzy Logic is an extension of logic uniquely intended for representing knowledge and human thinking in such a way, that it is manageable to operate by a computer. Thus, the application of Fuzzy Logic in this future study not only expected to develop the measurement level of successful knowledge sharing through Facebook but also enhance the qualitative findings done previously.

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