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Social Media Technologies' influence of Mobile Learning for Undergraduate Students in Malaysia

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Abstract--- *In the 21st Century, Social media Technologies (SMTs) help the people in educational field. SMTs are widely used in Higher Learning Institutions (HLIs) to improve the students' learning. However, there is a lack of research on this study in Malaysian HLIs. Previously, a paper on building the bridge between HLIs and SMTs through mobile learning in Malaysia has been published. Thus, this study offers a review to assess the knowledge of existing university digital resources and SMTs facilities which contribute to tacit and explicit knowledge sharing among ICT students in HLIs. It also identifies the impacts of SMTs in HLIs on both students and educators. This study is also unique in that it highlights how SMTs can be effectively connected to Mobile learning to support and enhance the Final year students' learning in terms of contributing to tacit and explicit knowledge creation. By convenience sampling, 180 students and 32 academicians participated in the questionnaires, from 2 Malaysian private universities and 1 public university. The data was piloted before the final data collection step was carried out in December 2018. The study makes a valuable contribution, given that the SMTs positively and significantly relate to the students' success in Malaysian HLIs.*

Keywords--- *Higher Learning Institution, Social Media Technologies, Mobile Learning.*

I. INTRODUCTION

Innovative teaching practice in Higher Learning Institution (HLIs) is one of the significant methods to develop the educational quality for the HLIs' students. With the developments in learning technologies, information is growing swiftly [1]. One of the effectual ways is to use technology such as Social Media Technologies (SMTs) to support the learning system. Currently, we are dealing with Generation Y and Z. Students from Generation Y are called digital natives because they are use with digital surroundings. Besides that, Information Technology affects how they live [2, 12]. Generation Y prefer to involve, shares, find and use the content on SMTs. Anyone born after 2002 referred as Generation Z. This population will be growing up with SMTs, smart phones and applications [2]. This will force the society to become more dependent on technology. So, in order to manage the students from Generation Z, HLIs need to master the tools of SMTs for a successful teaching and learning environment.

II. LITERATURE REVIEW

In this digital era, the students are very benefited by having access to mobile devices and digital content without much boundary [11]. The biggest challenge the academicians in HLIs is to motivate their students to gain the knowledge and play an active role in their learning [4]. Academicians play a very important role for the success of implementation SMTs in HLIs [8]. It is important to have innovative teaching among the students in HLIs as it will

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support the student to achieve their goals in a better way and to face the challenges in this 21st century [7]. Social media technologies (SMTs) refer to a group of Internet based application where content are created and exchanged [9].

Generally, SMTs is the digital platforms where the users can create, share, and interact with information and the other user with the support of online collaborative spaces such as Facebook, Twitter, WhatsApp messenger and Skype. The incorporation of mobile devices in the educational field develops the structure of more resourceful environments for the learning environment [5]. The collaboration between SMTs and HLIs is important as the learning with the support of SMTs and mobile will engage the students and will surely encourage learning anywhere at any time among the students in the HLIs. As highlighted in the previous study, Students who are engaged with SMTs in HLIs feel that they are emotionally connected with their friends who are in the group. This will help the students especially those group of students who have problems with face-to-face discussion [6]. This will also reduce their anxiety in asking questions not only to their peers but also their academicians. Besides that, it will help the students in the SMTs to have a better relationship which directly help their studies.

Although there are many advantages of adopting SMTs in HLI with the help of mobile, but there are many challenges. One of the major challenges that was shown in the previous study is that, most of the senior academicians are slow in adopting SMTs as an educational tool in in their teaching.

Although some studies show that there are a group of lecturers are adopting to SMTs in their teaching, but a big number of them are in an experimental stage of implementation [10]. This was supported by another study that, age, gender and seniority influence the academicians' use of SMTs in HLIs [13]. This was clearly written in the paper that those academicians below the age of 35 use SMTs more compared to the senior academicians who are used to their traditional teaching method. As we are aware, inadequate network capacity can provide a negative impact on students' performance towards SMTs and mobile learning. The network limitation could lead to interruptions and frustration. Since most HLIs were not built originally to deal with large numbers of mobile devices, it is important to have an adequate technical infrastructure for m-learning at HLIs in Malaysia.

III. METHODOLOGY

Firstly, the study went through a concrete review of the literature. The study methodically explored only the relevant database sources from Web of Science. In addition to that, Google Scholar was used to find more information on the discussed topic. The literature reviews were also extracted from the academic databases. Some of the search words and phrases are Social Media Technologies, HLIs and SMTs in HLIs.

The study focused on papers published since year 2010 until 2019. The next stage after gathering the literature on SMTs and HLIs is to distribute the questionnaire to the respondents. The undertaken study was using descriptive methods. It used a quantitative survey method to identify the respondents' knowledge of SMTs facilities which contribute to tacit and explicit knowledge sharing among students in HLIs. It also discovers the impacts of SMTs in HLIs on both students and academicians. It also highlights how SMTs can be effectively connected to Mobile learning to support and enhance the students' learning in terms of contributing to tacit and explicit knowledge creation. The questionnaires were distributed randomly to 210 students and 32 academicians from both the public

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and private university. However, only 180 students' questionnaires were valid. This was carried out by directly approaching those who were in the university common areas. Before each survey was carried out, respondents were given a briefing on the purpose of the survey being conducted. The content in the questionnaire instrument was evaluated by experts.

The questionnaire was pilot tested in one of the private universities. Two different sets of questionnaires were developed for both the students and academicians. For the students' questionnaire, there were three parts. The first section is on demographic information, which consist of 4 questions. The second part consists of three questions on their knowledge in existing SMTs facilities. All questions were close-end typed. The last part of the questionnaire consists of 30 questions which utilized the Five-Points Likert scale, which range from 1 "Strongly Disagree" to 5 "Strongly Agree". On the other hand, for the academicians' questionnaires, there were four parts. The first part is on demographic information, which consist of 4 questions. The second part consists of three questions on their knowledge in existing SMTs facilities in their university. All questions were close-end typed. The third part consists of 10 questions which utilized three-points Likert scale ranging from 1 "most used" to 3 "least used". The last part of the questionnaire consists of 28 questions which utilized five-points Likert scale ranging from "Strongly Disagree" (1) to "Strongly Agree" (5).

IV. RESULTS AND FINDINGS

Respondents' Demography

A total of 36 academicians was randomly chosen from both the Public and Private Universities participated in the questionnaires. Based on the study, 21.9% were male respondents and 78.1% were female respondents. 93.8% of the respondents fall in the age group of 30 and above and only 6.2% of the respondents fall in the age category of 24 to 29. 37.5% of the respondents are teaching in a public University and 62.5% of the respondents are teaching in Private Universities in Malaysia. 87.5% of them are Malaysian citizen.

A total of 180 students from HLIs was randomly chosen from both the Public and Private Universities to participate in the questionnaires. Based on the findings, 51.7% were male respondents and 48.3% were female respondents. 100% of the respondents fall in the age group of 18 to 23. 65.6% of the respondents are studying in a public University and 34.4% of the respondents are studying in Private Universities in Malaysia. 78.3% of them are Malaysian citizen and the rest are non-Malaysians.

Knowledge in Existing SMTs Facilities

When the respondents were asked about their existing knowledge of SMTs facilities in their Universities, 65.6% of the academicians agreed that they are using SMTs as a tool to support their teaching for students in their university. However, 96.1% of the students agreed that they are using SMT as a tool to support their studies in their university. 59.4% of the academicians and 89.4% of the students mentioned that they prefer to use the WhatsApp messenger to communicate with their peers or lecturers to discuss on their studies in their university. Only 6.3% of the academicians and 6.7% of the students use Facebook. 100% of the respondents agreed that they are using the

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Learning Management System (LMS) in their University using different platforms. However, only 65.6% of the academicians and 90.6% are using mobile devices to connect and work on SMTs.

Usage of SMTs in their Daily Activities

The academicians were asked on their usability of SMTs in their daily activities. 65.6% of the academicians responded that, they are using SMT for social purpose such as communicating with their friends and families and reconnecting with people. Only 12.5% of the academicians agreed that they are mostly using SMT for academic purpose, such as teaching assistants and sharing updated information about their coursework. However, 84.4% of the respondent shared that they are mostly using SMTs for recreational purpose, such as playing games, looking at pictures and videos and searching people of interest. In addition, the academicians were asked on how they use SMTs to support in their academic activities. Only 25% of responded that they are using SMT to monitor the assignment task given to their students, 40.6% for announcement purpose, 30.6% for sharing the class rescheduling purpose, 15.6% for task or schedule negotiation with their students, 37.5% for discussing on exam issues and exam updates, 21.9% for resource materials such as searching or sharing information and finally 59.4% are using SMTs for other activities such as for entertainment purpose, communication and other information updates.

SMTs Usage and how it could be Connected to Mobile Learning

Although not a huge group of lecturers was using mobile devices to connect to their students with SMTs, but 78.2% of the academicians and 86.1% students agreed that M-learning will support the teaching activities. 81.2% of the academicians and 90% of the students agreed that SMTs could be effectively connected to mobile learning to support and enhance the students' learning. 72.2% of the academicians and 92.8% students added that SMT on mobile learning will encourage them to use more often than accessing SMTs with a desktop or laptop computer. 81.3% of the academicians and 81.7% of students agreed that m-learning helps to facilitate the transfer and retention of knowledge. 81.3% of academicians and 94.4% of students agreed that m-learning provide flexibility to communicate with academicians and peers. 65.6% of academicians and 94.5% of students also agreed that m-learning provides a more flexible education environment for the academicians and students. 72.2% of academicians and 91.7% of the students strongly highlighted that m-learning help the students to organize their learning in a better way. 78.1% of academicians and 83.4% of students mentioned that m-learning will increase the task completion rates. Besides the completion rate, 81.2% of academicians and 85.5% of the students agreed that m-learning will minimize the students' anxiety and increase their confidence level among their students. Overall, 86.3% of academicians and 92.6% of the students agreed that m-learning will promote motivation in their HLIs environment.

Impact of SMTs in Education

Since students spend lots of their time participating in SMTs' activities, many students are blaming SMTs for their overall decrease in academic performance in their HLIs. However, based on the data gathered from the academicians, only 34.4% of the respondents agreed that students do not use SMT for their educational use, but to waste their time. 88.8% of the respondents added that, SMTs provides flexible timing for students to interact with academicians to clear their doubts and 86.9% added that SMTs helps students to get their feedback immediately than waiting for their following classes to clear their doubts. Since many academicians nowadays are busy with their

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research, it is very difficult for the students to find their lecturers in their room. Keeping this in mind, 88.9% of the academicians agreed that SMTs will help them to reach their students with no trouble, even if they are outside their HLIs. This will surely increase the relationship between the academicians and students. Besides that, it gives the flexibility to the students to clear their doubts with their lecturers. 81.3% agreed that SMTs will help academicians to provide instant suggestions for posts as they have the flexibility checking their phone anytime and anywhere. 81.3% of them agreed that SMTs offers additional help and guide their students who need their help. SMTs also engage students in discussion and monitor their performance. So, besides helping the students, SMTs also help the academicians to keep track of the students' performance to enrich their learning experience. This was agreed with 78.1% of the respondents. 90.6% of them agreed that SMTs will help them to keep track of their students' performance to enrich their learning experience as the academicians may connect to their students any time. SMTs among academicians and students will also be more active as we could send notifications on updating activities which encourages collaborative learning. It also could encourage online discussion among students outside their classrooms. 88.8% mentioned that SMTs encourages and engage the weak students in discussion and 83.3% said SMTs will draw the students' attention and motivate their participation. Besides that, 86.1% mentioned that SMTs increases the quality of interaction among the students and academicians. This will encourage collaborative learning not only among the students, but it improves the collaboration between students and academicians. SMT improves students' construction of the understandings and promote student interaction and creativity. SMT encourages critical thinking. 91.6% agreed that, SMT helps to shift passive learners to active learners. This will be achieved due to the informal discussion with the academicians. 81.3% agreed that SMT helps students to deepen their view, approach and perception of their content and 81.3% said SMT offers much informal way of communication which will strength the relationship between students and lead to a stronger classroom community virtually.

Based on the data gathered from the students, 90.6% engage in academic discussions on SMTs and this has improved my academic performance, 92.6% make use of SMT to disseminate knowledge to their classmate and 85.3% make use of SMTs to disseminate knowledge to my lecturer. However, only 78.8% agreed that they solely rely on information gotten from SMT to do my assignment without referring to other sources. This shows that the students willing to work extra besides the information they receive through their SMT support. 93.3% agreed that the usage of SMT in their assessment has helped them to improve their overall grades for their modules. Besides that, 91.1% respondents also added that, engaging in SMT increases their rate of understanding and it also has increased my interest in the subject matter. In addition to that, 96.6% agreed that SMT enables them to take on a more active role in my learning process rather than physically attending classes. 79.4% of the respondents feel satisfied with SMT in regards to the quality of their learning process and most of them feel satisfied with the content available in SMT for learning. Only 41.7% of the students highlighted that there is no improvement in their grades since they became engaged into these social networking sites. Another positive feedback that was gathered through this questionnaire is that, only 28.8% agreed that they are addicted to online social networks affects my academic life negatively. They also agreed that SMTs provides flexible timing for students to interact with academicians to clear their doubts. 92.8% agreed that all the HLIs should encourage their academicians to use SMTs in their teaching. However, only 35.6% highlighted that, their lecturers made it compulsory to use SMT in his/her module,

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but 43.3% of their lecturers are encouraging them to use SMT in their studies. 96.6% of the students agreed that academicians age affects the use of SMTs in their studies.

V. CONCLUSION

With the number of students who are comfortable with SMTs support mobile learning, HLIs starting to realize that they need to stand out amongst the crowd, both online and offline. We recognize the numerous benefits and opportunities that a SMTs presence offer in HLIs among the students. The study revealed that SMTs plays an important role as a learning technology among the Malaysian HLIs' students. Its vigilant use promotes opportunities of virtual interactions among HLIs students and with their academicians. They are also getting the benefits of instant access to the latest, multiple and reliable and students' preferred sources of learning. From the results, we could conclude that the students are ready to accept SMTs in their educational environment. Students were knowledgeable about the SMTs. They heavily depended on computers and mobile phones in their daily activities. However, despite the conveniences and the utility of the SMTs, findings revealed a lack of academicians' contribution in HLIs need to be improved. This study also recommends that students should be taught how to balance their academic work with their mobile SMTs. These will help them from wasting their time on the SMTs at the expense of their studies.

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