Factors Influencing Whatsapp Usage in Education Management Among Indian Lecturers at Malaysian Public Universities

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ABSTRACT: This study reviews the factors associated with using WhatsApp in education management among Indian lecturers in Malaysian public universities. This study aims to determine the level of WhatsApp usage among Indian lecturers in the aspect of educational management in Malaysian public universities. The second goal is to determine the level of factors that influence WhatsApp usage. This study uses a quantitative approach based on a survey design. The study population consisted of Indian lecturers from Malaysian public universities. A total of 292 young lecturers were randomly selected as a sample for this study. Descriptive statistics were used to analyze the data in this study. This study's data was analyzed using the Statistical Package for Social Science (SPSS) program. The results of the study show that the mean for the level of WhatsApp usage in education management at public universities is 5.47 (standard deviation: 0.965). The level of the factors of using WhatsApp shows that all four factors are at a high level, namely performance expectations with a mean value of 5.47 (standard deviation 0.890), effort expectations with a mean value of 5.58 (standard deviation 0.935), social influence with a mean value of 5.05 (standard deviation 0.872), and convenience conditions with a mean value of 5.46 (standard deviation 0.932). In conclusion, most public university lecturers use WhatsApp for education management. Performance expectancy, effort expectancy, social influence, and facilitating conditions are the dominant factors in using WhatsApp among public university lecturers. The result is expected to give policymakers guidance on how to effectively use social media in education management at the university.

Keywords: WhatsApp, factors, Indian lecturers, educational management, public university

INTRODUCTION

Nowadays, communication has evolved to the point that various social media platforms facilitate the process. Social media means a network built to launch social interaction and two-way communication (Normazaini, Tengah, & Wawarah, 2018). The distribution or sharing of information from one party to another has become very easy with social media (Azul, Ekhwan, & Ali, 2019).

WhatsApp has become a famous social media platform in the world (Odili & Ngozi, 2021; WhatsApp, 2019). More than 180 countries use WhatsApp around the world (Lin, 2020). In Malaysia, WhatsApp is also the main choice of users (Subramanian, 2017). Following the trend of the WhatsApp application in Malaysia, this application is increasingly used in public and private organizations (Mariana & Putri 2017). Safwan and Norazan (2019) stated that the variety of functions in WhatsApp caused it to become increasingly popular. Among its functions are sending information in the form of text, pictures, audio, video, files, or documents; making audio and video calls; sending audio messages; sharing location; and so on (Jailobaev et al., 2021) at a low cost (Chaputula et al., 2020).

WhatsApp plays an important role among lecturers in the management of education in universities. Normazaini et al. (2018) stated that university lecturers use WhatsApp in matters related to educational management in universities. There are many previous studies on the use of WhatsApp, but studies on the use of WhatsApp in educational management are very limited (Balasundran et al., 2021). Based on the phenomenon, the researchers want to study more deeply "what is the level of WhatsApp usage among Indian lecturers in the aspect of educational management in Malaysian public universities?" and "what is the level of factors that influence the use of WhatsApp in the aspect of educational management in Malaysian public universities?". In this study, researchers will attempt to answer all questions.

PROBLEM STATEMENT

Social media, especially WhatsApp, has been recognized as an indispensable platform for communication (Bhanot, 2012). The use of social media in higher education institutes in the future is a certainty. Therefore, most public universities have issued policies and guidelines for the use of social media in their institutions (Universiti Malaya, 2016; Universiti Kebangsaan Malaysia, 2015; Universiti Teknologi Mara, 2016; Universiti Sains Islam Malaysia, 2020; Universiti Teknologi Malaysia, 2021). Lecturers use WhatsApp to conduct meetings Ariffin, 2020). However, university lecturers are passive in using social media in education (Georgios, Efrosyni, & Ioannis, 2018).

Many users, including educators, have been scared off by WhatsApp's new update conditions and have switched to other social media platforms (WABetaInfo, 2020). Furthermore, some organizations often rely on traditional technology communication tools, such as email and telephone, to communicate with superiors and colleagues (Archer-Brown & Kietzmann, 2018).

In addition, although WhatsApp is often used as a communication tool, it has not yet been accepted as a medium for big things, which still require face-to-face discussions (Normazaini et al., 2018). There are government departments that have made WhatsApp a communication channel (Mariany, 2016). It caused complaints among civil servants who claimed that the WhatsApp application affected the quality of their family time and rest time (Mariany, 2016). Although WhatsApp has become a well-known communication medium, there are also some people among lecturers who still consider the information conveyed through print and electronic media as formal and official information (Normazaini et al., 2018).

WhatsApp is a simpler and easier-to-use communication application for all ages and backgrounds (Martina, Hendro, & Indra, 2020). However, it was found that studies on the use of WhatsApp in

educational management among public university lecturers were very poorly conducted (Balasundran et al., 2021). Therefore, this study examines the factors associated with using WhatsApp in the management of education among Indian lecturers in Malaysian public universities.

RESEARCH OBJECTIVE

The main objectives of this study are:

i.   Determine the level of WhatsApp usage among Indian lecturers in Malaysian public universities in terms of educational management
ii. Determine the levels of factors (performance expectancy, effort expectancy, social influence, and facilitating conditions) influencing WhatsApp to use in the context of educational management in Malaysian public universities.

LITERATURE REVIEW

Use of WhatsApp in official organizations

The WhatsApp application is used in education management in public universities to convey data, conduct research, give instructions, get input identified with activities and work progress, facilitate work, coordinate work, and participate in decision-making processes involving small matters (Normazaini et al., 2018). Visagi (2021) found that WhatsApp allows two-way communication to occur without much effort among employees, owners, and managers of the organization.

Internet-based applications such as WhatsApp have become a fundamental part of internal communication strategies in every organization (Castello & Ros, 2012). Cho et al. (2017) stated that WhatsApp allows managers to express their opinions about an organization and its practices easily.

The use of WhatsApp has become the main medium of communication in organizations because users can communicate quickly, get information, and get feedback quickly (Jaka, 2021; Normazaini et al., 2018). However, the emergence of conflicts among organizations such as the choice of less polite or formal words, the use of emojis, or inaccurate expressions when communicating in WhatsApp groups (Vusparatih, 2018).

Performance expectations

Performance expectancy is defined as the extent to which a person believes that the use of information systems can help them achieve gains in work performance (Venkatesh et al., 2003). Hu, Laxman, Lee, and Kerry (2020) studied the factors that influence academics to use mobile phones from the perspective of UTAUT and found that performance expectancy is one of the main factors in the use of mobile phones. Normazaini et al. (2018) discovered that the use of WhatsApp as a formal communication tool in organizations has a negative impact on performance expectancy per job.

In addition, Zulhanif and Roslinda (2019) surveyed students' performance expectations towards the use of WhatsApp in Additional Mathematics learning and found that the level of students' performance expectations was high towards the use of WhatsApp. Performance expectancy plays an important role in the acceptance of communication technology among farmers (Fahmi et al., 2016).

It can be concluded that performance expectancy is an important factor in determining the organization's acceptance of an information system. Lecturers who have high-performance expectations and who believe that the use of WhatsApp will benefit them tend to accept WhatsApp in educational management at universities.

Effort expectancy

Effort expectancy refers to the user's belief in the level of convenience of an information system (Venkatesh et al., 2003). Rahayu (2019) found the effort expectancy factor to be a predictor of success in the use of the Computer Network Monitoring System (SPRK) because all the ICT teachers who were respondents to the study had experience using instant messaging applications.

According to the findings of Khairah @ Asma'a and Faizal (2017), the level of convenience in using Mobile Instant Messaging (MIM) is high. The majority of lecturers stated that the MIM application was easy to use and helped them become more proficient.

It can be concluded that performance expectancy is an important factor in determining the use of a technology system. Based on the findings of the previous study, it can be said that lecturers who have a high effort expectancy, which means that they believe that WhatsApp is very easy to use, will continue to use WhatsApp in the management of education at the university.

Social influence

Social influence is defined as the extent to which a person considers a system important to others and believes that they need to use a new information system (Venkatesh et al., 2003). Khairah @ Asma'a and Faizal (2017) found in their study that lecturers who have significant influence have a large effect on their motivation in making decisions to use instant messaging (IM) applications. Nursyazana and Norziah (2021), who studied the effects of using cashless transactions among Malaysian consumers, found that social influence is one of the factors in the use of cashless payment systems.

In addition to social influence, individuals and organizations influence individuals to accept the use of ICT to complete their tasks (Muliyati & Said, 2020). Pradana, Fitra, and Priyambadha (2018), who reviewed the role of social influence in evaluating the acceptance of e-learning technology, found that social influence is one of the main factors in student acceptance of e-learning technology.

It can be concluded that social influence is a significant factor in determining how a technology system is used. Based on the findings of previous studies, it can be said that social influence may have an impact on the use of WhatsApp in educational management at universities.

Facilitating conditions

Facilitating conditions mean the extent to which individuals believe that the organization and technical infrastructure exist to support the use of information systems (Venkatesh et al., 2003). A study by Nursyazana and Norziah (2021), who studied the factors in the use of cashless payment systems, found that facilitating conditions are the factors that most influence the use of cashless payment systems in Malaysia.

Facilitating conditions factors influence the use of the Document Workflow Management System (DWMS) (Ayaz & Yanartas, 2020). Hu et al. (2020) found in their study that facilitating conditions are one of the factors that influence user behavior toward the use of mobile technology. Facilitating conditions have become one of the main factors in the use of m-learning, especially through IM applications among lecturers.

It can be concluded that facilitating conditions are also an important factor in determining the use of a technology system. Based on the findings of previous studies, it can be said that the factor of facilitating conditions makes it important to study the use of WhatsApp in educational management at universities.

CONCEPTUAL FRAMEWORK

The framework of this study was built based on the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003). UTAUT combines eight theories, namely the Technology Acceptance Model (TAM), Theory of Reasoned Action (TRA), Innovation Diffusion Theory (IDT), Motivational Model, Theory of Planned Behavior (TPB), combined model of TAM, and TPB, PC Utilization and Social Cognitive Model Theory (SCT). According to the UTAUT model, there are four direct variables namely performance expectancy, effort expectancy, social influence, and facilitating conditions to determine technology use behavior (Baru et al., 2014).
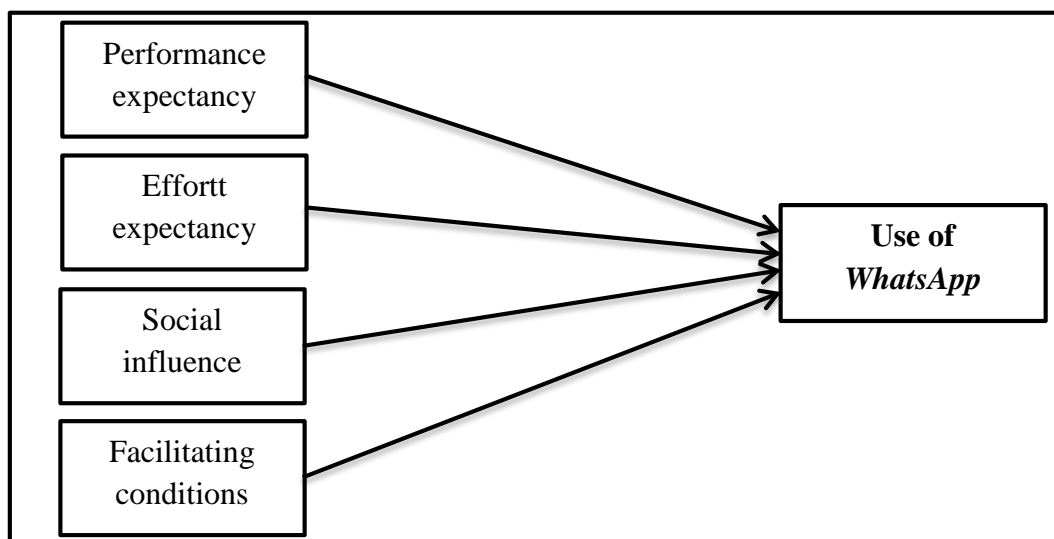

Figure 1. Conceptual framework of the study. Adapted from the UTAUT model (Venkatesh et al., 2003)

RESEARCH METHODOLOGY

This section is discussed as follows.

Research design

The design of this study is a survey study. This study is in a quantitative form, which corresponds to the needs and requirements of the research question to know something precisely. The researcher used the SPSS version 20 program to analyze the data.

Population and Sampling

The population of this study consists of Indian lecturers from Malaysian public universities. A total of 1215 Indian lecturers from 20 public universities became the population in this study. Based on Krejcie & Morgan's (1970) sampling table, a total of 292 lecturers were the respondents to this study. The selection of 292 respondents was done using the random sampling method. Simple random sampling is sampling in which each person in a population has an equal chance of being selected as a sample. (Hua, 2016).

Study Instrument

The instrument used in this study is a web-based questionnaire. Researchers have adapted the researcher's questionnaire instrument first to adapt to the use of WhatsApp among Indian lecturers from the aspect of educational management in Malaysian public universities. Table 1 shows the content and number of study instruments based on instrument sources.

Table 1 *Contents of Study Instruments Based on Instrument Sources*

Construct/Dimensional Variables	Number of items	Source	Scale
SECTION A	**9**		
SECTION B			
Performance expectancy	**22**		
Perception of Usability (Davis, 1989)	6		
Extrinsic Motivation (Davis, 1992)	3	Venkatesh et al. (2003)	Seven point Likert scale
Job fit (Thompson, 1991)	4		
Relative Advantage (Moore & Benbasat, 1999)	3		
Expected Results (Compeau & Higgins, 1995)	6		
SECTION C			
Effort expectancy	**8**	Venkatesh et al. (2003)	Seven point Likert scale
Perception of Ease of Use (Davis, 1989)	4		
Ease of use (Moore & Benbasat, 1999)	4		
SECTION D			
Social influence	**11**		
Subjective Norms (Ajzen, 1991; Davis, 1989)	3	Venkatesh et al. (2003)	Seven point Likert scale
Social Factors (Thompson, 1991)	5		
Image (Moore & Benbasat, 1999)	3		
SECTION E			
Facilitating conditions	**11**		
Perception of Behavioral Control (Ajzen, 1991; Taylor & Todd 1995)	4	Venkatesh et al. (2003)	Seven point Likert scale
Easy Conditions (Thompson, 1991)	4		
Compatibility (Moore & Benbasat, 1999)	3		
SECTION F			
Niat Tingkah Laku	**11**		
Attitudes to Behaviors	4	Venkatesh et al. (2003)	Seven point Likert scale
Intrinsic Motivation	3		
Affects Use	4		
SECTION G			
Use of WhatsApp	**17**		
Application usage	5	Venkatesh et al. (2003)	Seven point Likert scale
End-user satisfaction	5		
Desire or frequency of use	7		
Total items	**80**		

Validity and Reliability

In this study, the researcher conducted a pilot study on 100 Indian lecturers who were not involved as actual study respondents. Cronbach's Alpha value obtained through a pilot study is 0.896. A pilot study proved that the items used in this research instrument have a high level of reliability.

This research instrument was reviewed by nine experts consisting of university lecturers who specialize in the fields of ICT and educational management to obtain content validity. To ensure face validity, the researcher has consulted two lecturers from the language department.

Data Collection Procedures

This study uses the technique of collecting information through a web-based questionnaire. Before starting the study, the researcher first obtains approval from the Human Research Ethics Committee, a letter of approval for research outside the university, and a letter of student approval. Then, email all permission letters to the registrar unit of each public university to obtain permission to conduct research at their university. After getting permission from the university registrar unit, the researcher sent a questionnaire in the form of a Google Form via email to each study sample.

Data Analysis Procedures

Descriptive statistical analysis was used to analyze the data in this study. The data obtained through the questionnaire (Google Form) was analyzed using SPSS version 20. Frequency and percentage statistics were used to explain the demographic information of the respondents. Descriptive statistical data were analyzed using frequency, mean value, percentage, and standard deviation.

RESEARCH FINDINGS AND DISCUSSION

This section is discussed as follows.

Demographic Information

The findings of the study found that, of the total number of study respondents, a total of 132 people (45.2%) were male lecturers, while 160 people (54.8%) were female lecturers. As for the age of the respondents, the majority of lecturers, 151 (51.7%), are between 36 and 45 years old. In terms of experience as a lecturer, it was found that most of the lecturers, a total of 152 (52.1%) lecturers, had experience as a lecturer between 1 and 10 years. Furthermore, it was discovered that the majority of lecturers (141 in total) have experience using WhatsApp between the ages of 10 and 13 years old.

The Level of WhatsApp Use in Public University Education Management

WhatsApp is used to deliver messages to all parties and is an ideal internal communication platform (Visagie, 2021). This coincides with the results of this study, which found that the majority of lecturers, 277 (94.5%) Indian lecturers, were at a high level, 14 (4.8%) Indian lecturers had a moderate level, and only two (0.7%) Indian lecturers were at a low level on the use of WhatsApp in the management of education in public universities. Overall, from the aspect of using WhatsApp, it can be interpreted that Indian lecturers always (almost every day during working hours) use WhatsApp in the management of education in their universities. The overall frequency and percentage of WhatsApp usage levels are shown in table 2.

Table 2. *Frequency and overall percentage of WhatsApp usage levels*

Mean Value	Frequency	Percent	Level
< 2.33	2	0.7%	Low
2.34 - 3.66	14	4.8%	Moderate
> 3.67	277	94.5%	Height

Level of WhatsApp Usage Factors

Performance expectancy level

According to Fahmi et al. (2016), the use of WhatsApp in particular is heavily influenced by the performance expectancy component (Zulhanif and Roslinda, 2019). This is consistent with this study's findings, which revealed that the majority of respondents, 285 (97.6%) Indian lecturers, were at a high level, 7 (2.4%) Indian lecturers were at a moderate level, and no Indian lecturers were at a low level in terms of the performance expectancy factors of lecturers in using WhatsApp for education management in Malaysian public universities. Overall, based on performance expectations, it is deduced that Indian lecturers think WhatsApp's use will significantly increase the efficiency of information sharing in university education management. The overall frequency and percentage of performance expectancy levels are shown in table 3.

Table 3 *Frequency and overall percentage of performance expectancy level*

Mean Value	Frequency	Percent	Level
< 2.33	0	0%	Low
2.34 - 3.66	7	2.4%	Moderate
> 3.67	285	97.6%	Height

Effort expectancy level

Communication technology adoption is significantly influenced by the effort expectancy element (Khairah @ Asma'a & Faizal, 2017; Fahmi et al., 2016; Hasanah, 2015). This is consistent with this study's findings, which showed that 281 (96.2%) Indian lecturers in Malaysian public universities were expected to exert high levels of effort, 11 (3.8%) Indian lecturers were expected to exert moderate levels of effort, and none of the Indian lecturers were expected to exert low levels of effort. Overall, it can be concluded that Indian professors have a strong belief that using WhatsApp for university education management is relatively simple to implement. This conclusion can be drawn from the effort expectation element. The frequency and percentage of the overall level of effort expectancy are shown in table 4.

Table 4 Frequency and overall percentage of effort expectancy level

Mean Value	Frequency	Percent	Level
< 2.33	0	0%	Low
2.34 - 3.66	11	3.8%	Moderate
> 3.67	281	96.2%	Height

Social influence level

The motivation of respondents to adopt information technology is greatly influenced by those who have a significant influence over them (Muliyati & Said, 2020; Pradana et al., 2018; Khairah @ Asma'a & Faizal, 2017; Fahmi et al., 2016). This is consistent with this study's findings, which showed that, in terms of the social factors influencing the use of WhatsApp in Malaysian public university education management, 273 (93.5%) Indian lecturers were at a high level, 14 (4.8%) Indian lecturers were at a moderate level, and 5 (1.7%) Indian lecturers were at a low level. Overall, it can be

concluded that the Indian lecturers consider that the use of WhatsApp in the education management of Malaysian universities has a significant effect on social influence. The frequency and percentage of the overall level of social influence are shown in table 5.

Table 5 *Frequency and percentage of the overall level of social influence*

Mean Value	Frequency	Percent	Level
< 2.33	5	1.7%	Low
2.34 - 3.66	14	4.8%	Moderate
> 3.67	273	93.5%	Height

Facilitating conditions level

Facilitating conditions currently contribute to how users will behave when using a new technology system (Nursyazana & Norziah, 2021; Ayaz & Yanartas, 2020; Hu et al., 2020; Ruziah, 2017). This is consistent with the study's findings, which showed that a total of 282 (96.6%) Indian lecturers were at a high level, 9 (3.1%) Indian lecturers were at a moderate level, and 1 (0.3%) Indian lecturer was at a low level in terms of the factors that facilitate lecturers' use of WhatsApp for education management in Malaysian public universities. Overall, it can be deduced from the issue of facilitating conditions that Indian lecturers believe that the organization and technical infrastructure strongly support the use of WhatsApp in Malaysian university education management. The frequency and percentage of the overall level of social influence are shown in table 6.

Table 6 *Frequency and percentage of the overall level of facilitating conditions*

Mean Value	Frequency	Percent	Level
< 2.33	1	0.3%	Low
2.34 - 3.66	9	3.1%	Moderate
> 3.67	282	96.6%	Height

CONCLUSION

Social media application development is a phenomenon whose significance cannot be downplayed. Applications for social media, particularly WhatsApp, are growing more and more prevalent and are used in most facets of human life, whether in formal or informal situations. The university's education management is another area in which the WhatsApp application is crucial. Therefore, the university must be prepared to move forward with the creation of this social media application, whether it is the administration or the lecturers.

This study has determined the factors that can affect how WhatsApp is used for education management in public universities. These elements motivate lecturers to adopt WhatsApp for educational management at universities.

This study has made some important discoveries on ICT skill development through social media, which is now a popular trend in the twenty-first century. However, there are some recommendations for further study that can be made. The efficiency of using WhatsApp in educational management at private universities, learning via the WhatsApp application, and the amount of educator acceptance of the WhatsApp application may all be studied in the future. It is also possible to research managers' or administrators' use of WhatsApp. Future studies can also analyze the advantages and disadvantages of WhatsApp use among university lecturers in terms of educational management at universities.

As a result of this research, it is possible to conclude that Indian lecturers at Malaysian public universities are using WhatsApp in university education management. The majority of Indian lecturers concur that using WhatsApp for education management can increase productivity

(performance expectancy), is simple to use (effort expectancy), is supported by friends and managers (social influence) and is supported by university infrastructure (facilitating conditions).

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