

## Relationship between Whatsapp Usage and Employee Engagement in Ministry of Communication and Multimedia Malaysia

Norliana Hashim, Noorfazlina Mohd Shahid, Muhammad Nur Fitri Razak

Department of Communication, Faculty of Modern Languages and Communication,  
Universiti Putra Malaysia, 43400 Serdang, Selangor Darul Ehsan, Malaysia  
Email: h\_norliana@upm.edu.my, fitrazak90@gmail.com, fazlina.shahid@gmail.com

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### Abstract

A successful organization needs to have productive employees. In order for the organization to get engaged with their employees, the new medium of communication has been used to share information, exchange opinions and as the best way to get closer with their employees. There is a dramatic change in the way of communication between employer and employee due to the change of the new technology. This situation has allowed the employee to use this new medium of communication to communicate information to their employee. It also has given the opportunity for the employee to share their opinion involving their works and the organization's goals to their employer. Thus, this new application might give an impact on employee engagement in an organization. Due to that, in-depth research was conducted to determine the relationship between WhatsApp usage and employee engagement in the Ministry of Communication and Multimedia Malaysia. This research presents the observation on the level of WhatsApp usage in the Ministry of Communication and Multimedia Malaysia, the understanding of the factors that influence the employee decides to use WhatsApp application, the determination on the level of employee engagement and the relationship between WhatsApp usage and employee engagement. Research findings show that the level WhatsApp of usage in the Ministry of Communication and Multimedia Malaysia is high. On the other hand, the level of employee engagement is also high. The research findings also show that perceived usefulness ( $r = .62$ ), perceived ease of use ( $r = .57$ ), social influence ( $r = .52$ ) and job relevance ( $r = .64$ ) of WhatsApp usage have positively affected employee engagement.

**Keywords:** Employee Engagement, Usage, WhatsApp

## **Introduction**

The emergence of new technologies to support communication in an organization has become vital nowadays. Instant messaging application like WhatsApp, Telegram, Line and many others are becoming popular in organizational communication. The usage of WhatsApp application especially is likely giving positive feedback when it comes to job productivity and employee engagement. Due to this, the concern of the researcher is to know the relationship between the usage of WhatsApp and employee engagement in organization.

In the contemporary information and technology era, social media, with the evolution of the global interconnectivity has gained a critical position as an information generator, holder and disseminator. Social networks that are offered on the internet have become global applications that allow people simply share text, pictures, audio and video files. Among popular applications include Facebook, Twitter, Instagram and also WhatsApp. These applications are free and inexpensive to download and use. All these applications have served in facilitating people in sharing information.

WhatsApp has been introduced in 2009 and has been increased steadily in terms of number of users all around the world. According to statistics, the number of WhatsApp users have increased up to 1.5 billion in 2017 make it the most famous texting service in the world. The Statistics also shows there are one billion daily active WhatsApp users. Meanwhile, according to The Digital Report 2017, stated that Malaysia has about 51% of WhatsApp users. Malaysians are the world's largest users of WhatsApp.

Mobile technologies are the main way of communication in organizations nowadays. Employers are rapidly initiating these technologies into the organization with the hope to engage with work-related activities regardless of time and place are increasing (Bott et al., 2010). It became easier for the employer to disseminate important information to their employees. The attraction of WhatsApp is it increase productivity, decrease costs and time to respond, improve customer service and enhance efficiency of the organization. In previous years, employees are connected with the organization and with the workplace through desktop computer accessing organizational resources from remote locations. Initially, employees are identified as telecommuters or virtual users performed work activities remotely using the tools to maintain the employee – employee relationship.

The success of an organization depends on its employees. In addition to their qualifications, the motivation of the staff and their identification with the company are decisive factors and can be promoted by the right communication strategy. A recent study from the UK indicated WhatsApp is the most widely used mobile application in the workplace, more prevalent and practical (Allaguiy, 2019) than other mobile versions of team chat apps. For WhatsApp the reasons behind its popularity are simple: it is free, easy to use and familiar to a huge audience. The phenomenon today, most the organizations will create a WhatsApp group consists the members of the organization in order to keep in touch with each other. WhatsApp is used as a medium for the employer to share information about the organization, exchange of opinion and the way for the employer to get closer with their employee. This is seen to be the best way for the employer to build teamwork among their employees. It is also the dream of the organization to have employee that is committed, feel they is important to the organization and always do the work for the betterment of the organization.

Employee engagement is very significant in an organization. It will determine the organization's efficiency, effectiveness and productivity. An organization with highly engaged employee is more focused, creative at work, care about the organization, put greater effort to meet its objectives, feel motivated and will do the best for the organization. However, employers are facing problems in getting engagement from their employees. Employees often feel that they are doing the work with the intention to get a salary. They do not have a sense of place or a feeling of belonging to the organization. Most often, employers are struggling in finding the right method to get the employee to engage with the organization. The most they can do is by doing a team building, workshop or a retreat for the employee.

According to a report of Trends in Global Employee Engagement Report 2018 from Aon, Malaysia ranks among the lowest in the Asia Pacific region in terms of employee engagement. It only shows 63% of employee engagement in Malaysia falling behind our neighbouring countries like Indonesia and the Philippines. Another 37% of employees in Malaysia can be regarded as not engaged or actively not engaged at work. This category of employee needs to be reduced in order to decrease the number of non-productive employees in Malaysia. This is to avoid unproductive employee that will cause wastage to the organization.

The evolvement of social media especially WhatsApp applications has changed way of communication today. Instead of face-to-face communication, WhatsApp has become a new medium of communication. The usage of WhatsApp application has become significant among smartphone users all around the world. The advantage of mobile technology and WhatsApp application enable communication to be done at any time and at any place. WhatsApp is one of the communication medium that are always chosen by smartphone users because they can send all kinds of messages including text, image, video, audio messages and also can form a group using this application (Noa & Taly, 2016).

However, from the observation, even though WhatsApp has been used as a medium of communication in the Ministry of Communication and Multimedia Malaysia, but the employee still reluctant to use it as a medium for discussing matters related to work. They seem love to use WhatsApp to share their life story, jokes, gossips or recipes in workplace WhatsApp group. The numbers of employees respond to the information and discussion about woks are still low. Employees' involvement in company's program for example training courses and CSR also still low even information had been broadcasted in the WhatsApp group. A report by Aberdeen Group in 2008 shows that employee engagement can improve by 18% in organizations that use social media in contrast with only 1% improvement in organizations that do not use social media (Parry & Solidoro, 2013). This shows the importance of social network usage with regard to improve employee engagement within an organization.

From many of the past research, Technology Acceptance Model are usually applied to know the user's subscription of technology and their purpose of using it. This study will focus on the user acceptance of technology and its relation to users' behaviour. Ariffin & Omar, 2018 suggested of WhatsApp usage in an organization should be focusing on work purposes as the previous study on WhatsApp usage does not focus on work purposes but also included personal purposes.

This study therefore, is to fill in the gap from previous studies and give more comprehensive explanation about the relationship between WhatsApp usage and employee engagement in an organization. The research objectives driving this research are as follows:

- i. To examine the level of WhatsApp usage among employees in the Ministry of Communication and Multimedia Malaysia.
- ii. To determine the level of employee engagement in the Ministry of Communication and Multimedia Malaysia.
- iii. To identify the relationship between WhatsApp usage and employee engagement.

The rest of the article is structured as follows: 1) research background for the evolution of WhatsApp users in Malaysia. 2) literature review for keywords. 3) research methodology to investigate these questions, we set the angle from WhatsApp usage and its influence on the employees' engagement. 4) conclusion for our research that contributes to the aspect of academic and practical meaning.

This research is significant with the current development. In the advancement of the digital world today, organizations are competing with each other in order to sustain their position and also in maintaining their corporate reputation. It is important for the organization to ensure that their productivity is well observed. In order to achieve this, it involves employee engagement. This study will help to see the outcome of using WhatsApp in disseminating information about the organization and discussing matters related to work on employee engagement.

Practically this study gives understanding to the organization about WhatsApp usage involving work-related matters. It is also hope that it will help the Ministry to draft the regulations and guidelines among the employee in using the WhatsApp application, especially in work-related group.

Moreover, this study will help the organizations to find out how far WhatsApp is the right medium for communication with their employees and tools in developing the organization. It is also important to know how far the usage of this application gives good or bad consequences for the employees and the organizations.

On the other hand, this study will help future researchers to understand the significance of mobile technology and social media in improving employees' engagement.

This study will be focusing on what are the factors that drive the employees to use WhatsApp application in workplace and how it relates to the employee engagement. It will also look into the level of employee engagement in the context of WhatsApp usage.

## **Literature Review**

### *WhatsApp Application*

In recent years, social networking applications for smartphones have gained popularity and become viral. These applications such as Facebook, YouTube, Instagram, LinkedIn and WhatsApp have enabled people to connect from any location (Magro *et. al.*, 2013).

WhatsApp is free to download messenger application for smartphones. WhatsApp uses the internet to send messages, images, audio or video. The service is very similar to text short

service messaging (SMS), however, because WhatsApp uses the internet to send messages, the cost of using WhatsApp is significantly less than texting.

Moreover, WhatsApp is the earliest application founded to build a better short message alternative. Before WhatsApp usage become popular, the traditional way to communicate with SMS is one to one communication. With the advancement of WhatsApp application, it provides one to many communications by introducing group features. In contrast, one to many communications in earlier days was using desktop, website and also chatroom to share info, organization planning and also discussion (Counts, 2007).

This application has become the world's largest medium of sending text messages and very popular in South Africa, Argentina, Singapore, Hong Kong, Spain including Malaysia (Noa & Taly, 2016). The statistics have shown that Malaysia is the largest user of WhatsApp applications. The reason behind this is the number of smartphone consumers in Malaysia is about 11 million with an increase number by 10% every year (Utusan Online, 2016). The research done by Jobstreet.com stated that 54% of the respondents who took part was the employees all around Malaysia who claimed that they received command and instructions from their manager through WhatsApp even after working hours (Utusan Online, 2013).

There were findings shows that WhatsApp usage in organizations helps to improve interactions among employees (Pinto et al., 2017). WhatsApp has special characteristics where it can create in interact with groups of up to 250 participants. Usually, a manager in an organization will create a WhatsApp group and can add and remove any person in the group without the need for approval of anyone. Herero et al. (2004); Van Uden Kraan et al. (2008), found that active participation on online group lead to positive effect of people's well-being.

### **Social Media Usage in Organizations**

The internet and social network platform have become a part of how employees interact, communicate and handle business with each other (Leigh & Sherry, 2010; Schettini & Weiss, 2011). Social media in this scope include the WhatsApp application. It has been the most substantial kind of social network for different transmission that are used by the organizations. Organizations usually select the social network system that has large amount of consumers and reputation. Therefore, WhatsApp has been turned out to be one of the social media platforms for arranging and handling the means of communication in the organization.

In order for the organization to achieve their various goals, the usage of social media has been combined into the communication strategy. Firstly, it is used to increase relations within and outside the organization. Therefore, the primary function of the usage of social media in organization is to facilitate the exchange of knowledge and upgrade the understanding between the organization and their stakeholders.

Secondly, the intention of using social media is to make sure that all the information meets the intended spectators inside and outside the organization. Social media enable people to share information and knowledge online with the target of a huge amount of people, especially the youngsters (Baruah, 2012).

Lastly, social media permits interactional communication between an organization and its employees. The organization can exchange views with the employees by replying to their messages. This action can be done immediately hence make it easier for instant communication with the employees. This ability facilitates the firm to distribute information effortlessly and promptly.

However, the usage of social media in the organization will give some impact be it positive or negative impact. If we look at the quality of organizational communication, it always be decided by preciseness, authenticity, pertinence and the time consumption for the data distribution. (Marques, 2010). Therefore, when the use of social media gives impact to one or more of these elements, it will usually affect the organizational communication.

The positive impact of using social networks as medium of communication in an organization includes how fast the communication in the organization, reaching a huge number of people, enhanced accuracy and increased the significance of the information. Social media has enhanced the time consuming of organizational communication with the employees and other parties (Marques, 2010). The managers, by using social network platforms can convey information immediately to the employees in order to get their view and make a quicker decision making.

Badea (2010) indicates, the usage of social media can reach a large number of audiences. Therefore, it is easy for the manager to communicate with a large number of employee without having to call them for a meeting and deliver the intended information. The employee can receive the information regardless of where the location they were at the time the message was delivered. This also helps the organization reduce the time used for meeting just to ensure that the employee get the intended messages. The social media usage also allows the organization to acquire precise data and news by asking explanation and responses directly from the employees (Badea, 2014). This is help to ensure that the information collected is accurate.

On the other hand, social media usage in organisations still has a negative impact. Social media networks may be attacked by irresponsible people and also viruses and spyware. These problems may affect the communication process. The network also may affect the process and cause delays in transferring information. It may affect the communication in case urgent decision making need to be done.

Lastly, from the observation, it always shown that the respondents always make a joke and making fun of any information given by the manager without realizing that it will lead to the act of giving inaccurate information. This will actually damage the organizational communication through social media.

### **Perceived Usefulness of Mobile Technology**

Perceived usefulness can be regarded as how by using technology helps to improve the level of employee job execution (Rauniar et al., 2014). The perceived usefulness of mobile technology will lead to a person's intention and actual use of technology. It will influence people's actions to continue to use mobile technology in their daily life.

According to Lee et al (2015), perceived usefulness have given positive impact on the users' enjoyment in using the life insurer's App services. The customers will not experience hesitant to use the application when they find that the application gives benefit to them. This is the factor that contributes to the customers' action to keep on using the application. On the other hand, if the customers feel the application give them negative impact they will refuse to use it and will find another application that are friendlier to them.

Mobile technology has helped the organization to gain information from their employees during and beyond working hours. Employers are seemed comfortable to communicate with their employees using mobile technology because they can get information and things done instantly. According to Smith (2007), Mobile Instant Messaging (MIM) assists employees to complete their variety of work either during or after office hours or when there are out of work location. The internet and social media have become part of how organization connect, speak and run their business with each other (Leigh & Sherry, 2010).

An organization today commonly uses WhatsApp application as a means of communication. People in the organization use WhatsApp regardless of their position and their rank. Usage of WhatsApp application in organization assists to enhance communications among employees (Pinto et al., 2017). Perceived usefulness of WhatsApp usage in an organization as medium of communication also has given a positive impact towards job performance of employees.

#### **Perceived Ease of Use of WhatsApp Usage**

When people feel effortless when using an application that is what can be regarded as perceived ease of use (Venkatesh & Davis, 2000). The ease of use of technology, directly and indirectly, affect the intention of a user to utilize it (Salman et al., 2014). With the wide usage of WhatsApp applications in organization, employees are expecting the application to be friendly and easy to be used to help them to execute their work better. The technology assists the employees to transfer information faster. Exchange of views and decisions can be done at any time and anywhere (Day A. et al., 2012).

The traditional ways of communication usually have a limitation of participants. WhatsApp permits one to many communications. It assists in collecting data from more than one person at the same time (Soliman & Salim, 2014). On the other hand, information can be shared speedily by using WhatsApp (Devi & Tevera, 2014).

#### **Social Influence and Job Relevance Predicts Mobile Technology Usage Acceptance**

Social influence plays an important factor in adopting new technology. The earlier research which investigated the role of social influence in using e-commerce and email has found the direct effect on consumption (Fang, 1998). Recently, social influence is said to have shaped the individual's act of acquisition of mobile phone services (Lee, Murphy & Swilley, 2009).

People surround us like peers, superiors usually influence us on how to behave. The adoption of new technology which involves connectivity among peers people usually depends on peer to peer communication, social norms and things that are already existed before. Hanson et al., (2011), stated that the objective to use social media is strongly connected with the feeling of support from a team member, supervisor and organization to use these tools. The influence of members is one of the most prominent elements that affect users in joining social network

services (Lin & Lu, 2015). With the development of mobile technology, the usage of it in the workplace is related to how people see the technology as relevant to their job. The characteristics on an individual's job will usually determine on how they behave towards new technology (Kim & Garrison, 2009).

### **Employee Engagement**

Employees who are devoted in their work and dedicated to their organizations give companies crucial competitive advantages including higher productivity and lower employee turnover. Thus, it is not surprising that organizations of all sizes and types have invested substantially in policies and practices that foster engagement in their workforces.

It is shown from earlier studies it is hard to find an accurate definition of employee engagement. However, according to Kahn (1990), employee engagement is the confining of organization members to their work task; in engagement, people apply and voice out themselves physically, cognitively and emotionally during task execution. Employees' beliefs about the organization, the leaders and the working environment are the cognitive features of employee engagement. On the other hand, the emotional aspect involves the feeling of the employees about the earlier three factors and whether they have good or bad approaches toward the organization and its leaders. Meanwhile, the physical energies applied by the employee to perform their duties are the physical aspect of employee engagement. Thus, according to Kahn (1990), engagement means when someone is occupying and executing an organizational duty, he/she must be psychologically as well as physically present.

Most often employee engagement has been identified as an emotional and mental obligation to the organization (Baumruk, 2004; Richman, 2006; Shaw, 2005) or the quantity of discretionary attempts demonstrated by employees in their work (Frank *et al*, 2004). Although it is recognized and agreed that employee engagement is a multi-faceted construct, as previously suggested by Kahn (1990); Truss *et al* (2006) define employee engagement simply as an attachment for job, a psychological state which involves the three dimensions of engagement discussed by (Kahn, 1990).

Kahn (1990) has explored several disciplines to obtain further insight of the varying levels of engagement individuals showed towards their responsibilities. It was found that psychologists (Freud, 1922), sociologists (Goffman, 1961; Merton, 1957) and group theorists (Slater, 1966; Smith & Berg 1987) had all acknowledged the view that people are naturally reluctant to be members of the groups or any systems. As a consequence, they try to secure themselves from both seclusion and involvement by interchangeably distancing themselves from and facing their groups (Kahn, 1990). Terms Kahn (1990) explains that people while performing their job performances will usually take in or withdraw their common conducts. All these terms incorporate with the motivation theories from the preceding thoughts that people need to express themselves and be an independent worker in their career lives naturally (Alderfer, 1972; Maslow 1954).

According to an interesting finding by Clark and Roberts (2010), stated the differences between organizational engagement and commitment. He found that engagement not only involves a person's manner, but it is also the level to which a person is alert and aware about their task and engrossed in the execution of their role. While employee commitment refers



to the manners and connection with the organization. In addition, while organizational citizenship behaviour involves voluntary and informal behaviours that can help co-workers and the organization, the focus of engagement is one's formal role performance rather than purely extra-role and voluntary behaviour.

According to May *et al* (2004) engagement is most closely associated with the constructs of job involvement and flow. Job involvement is defined as a cognitive or belief state of psychological identification (Kanungo, 1982). This differs from engagement in that it is concerned more with how the individual employs him/her self during the performance of his/her job. Furthermore, whilst the focus of job involvement is on cognitions, engagement, according to most definitions, also encompasses emotions and behaviours.

Practitioners and academics tend to agree that the consequences of employee engagement are positive (Clark & Roberts, 2010). There is a general belief that there is a connection between employee engagement and business results. The Gallup Organization (2004) stated that customer loyalty, business growth and profitability are the vital links between employee's engagement. The International Survey Research (ISR) team has similarly found positive evidence that organizations can only achieve every opportunity through engaging with their employees and customers emotionally.

In an extension of the Gallup findings, Ott (2007) cites Gallup research, which found that the organization that has a higher level of employee engagement will produce higher business earnings. It is stated that when the organizations have more than four engaged employees for every one actively disengaged, they will experience 2.6 times more growth in business earnings than organizations with a ratio of slightly less than one engaged worker for every one actively disengaged employee.

According to Gallup (2002) engaged employees, not engaged employees, and actively disengaged employees are three types of people that exist in the workplace. People who constantly endeavour to excellently deliver within their task are the engaged employees. In contrast, not engaged employees emphasise the work that is expressed to them rather than thinking about the need to fulfil the goals of the organization. They only do what they are asked to do. Meanwhile, actively disengaged employees are the threatening individuals who not only do not carry out well but also give bad influence to the excellent people in the organization.

Six management functions emerged in order of importance as critical determinants of executive's engagement according to Joshi and Sodhi (2011), namely, job content (autonomy, challenging opportunities for learning), compensation/monetary benefits (attractive salary vis-a-vis qualifications and responsibility, adequate compensation for the work and intra-organization parity), work-life balance (appreciative of personal needs, able to spend time with family), top-management employee relations (approachability of top management, their values and ethical conduct, equality in treatment, respecting the views of subordinates, providing an environment of working together), scope for advancement and career growth (well-designed policy, adequate opportunities for career growth and advancement, clearly laid down career growth paths; implementation of the promotion policy in a fair and

transparent manner, help to the employees in achieving growth) and team orientation/team work (importance, cooperation in inter- and intra-department teams).

### Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) is often used to explain the user acceptance on technology and information system (Lu, Yu, Liu & Yao, 2003). Davis (1989), introduced the idea of TAM to explain the user acceptance on computer technology based on clear justification of the theory. The development of TAM was inspired from the Theory of Reasonable Action (TRA) (Fishbein and Ajzen, 1975).

The aim of the development of TAM is to be used as the foundation to discover the effect of external variables on internal beliefs, attitudes and intentions (Lu et al., 2003). Two main constructs in the basic TAM that are related to internal beliefs are Perceived Usefulness (PU) and Perceived Ease of Use (PEU) which the users look forward to use of the technology and system to be easy and uncomplicated (Davis, 1989).

The basic TAM with flexible concept introduced by Davis et al, 1989 later was improved with Venkatesh et al., 1996 as shown in Figure 1. TAM will be used by the researcher as the theoretical framework in this study.

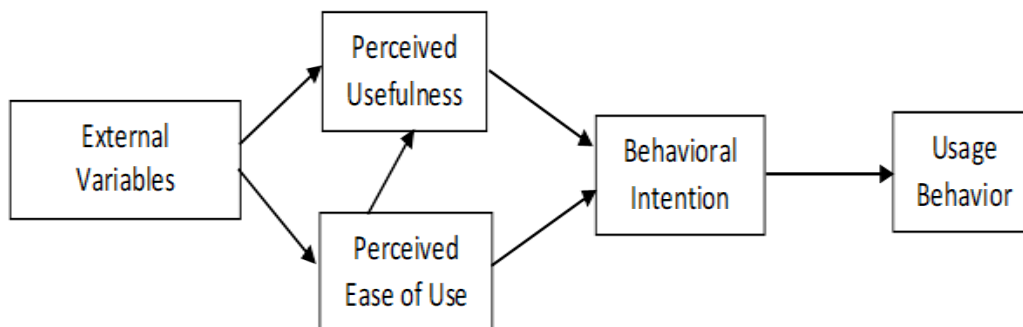


Figure 1: Technology Acceptance Model (TAM) (Venkatesh and Davis, 1996)

Based on the TAM adaptation, the research framework for this study was illustrated below.

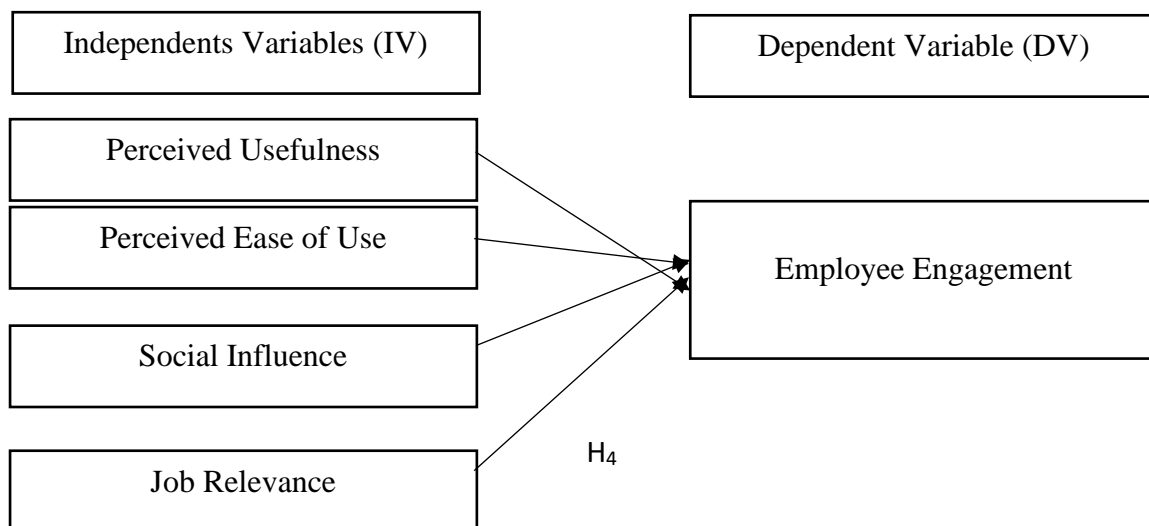


Figure 2: Research framework of this study. Adapted from Venkatesh and Davis, 1996.

### Methodology

This study is conducted based on a random sampling technique. Random sampling is where the chance of every person in a population being selected is equivalent. Therefore, 253 respondents from 22 divisions were picked to obtain representatives that will further lead to the finding that will be presenting the population of the Ministry of Communication and Multimedia Malaysia. The instrument used in this study is mainly a questionnaire. A structured questionnaire is used as the research instrument to obtain primary data so the researcher can get respondents and to facilitate the coding process (Trueman, 2004).

The questionnaires have been distributed to 253 respondents from Ministry of Communication and Multimedia Malaysia. The questionnaire has three (3) sections which comprises of 44 questions in total. The questions comprise of respondent's demography and WhatsApp profile, factors of WhatsApp usage acceptance and employee engagement. It contains both nominal data and ordinal data and Likert Scale that measures respondent's input on their level of agreement. The section is divided and named as such:

Section	Item	Number of Questions
A	Demography and WhatsApp Profile	12
B	Factors of WhatsApp Usage Acceptance I. Perceived Usefulness II. Perceived Ease of Use III. Social Influence IV. Job Relevance	5 5 5 5
C	Level of Employee Engagement	12
<b>Total</b>		<b>44</b>

A questionnaire with close-ended questions using the seven-point Likert Scale (1 to 7 from strongly disagree to strongly agree) were administered to collect data in this research.

The validity of the instrument is to ensure the ability of a scale to measure the projected concept in a particular study (Salkind, 2009). After the questionnaire are ready a pilot test was conducted in order to determine the validity of the instruments. 30 respondents from the Ministry of Communication and Multimedia Malaysia were chosen to answer the questionnaire based on the objectives of this research.

### Analysis Methods

Every data obtained are very important in this study. An analysis was done from the data that have been collected from the questionnaire. The first thing that the researcher do after collecting the data was do the data coding and key in the data in the SPSS. Then the data checking and data cleaning were done to execute the normality test.

The data were analysed by applying descriptive analysis based on the demography to get the min, mod, standard deviation and percentage. The researcher then does the inferential analysis to test the hypothesis by using independent Pearson's Correlation Coefficient Analysis.

### Results

#### *Validity and Reliability Test*

Before the responses from the respondents were analysed, the validity and reliability of the data need to be tested again. Cronbach's Alpha will be used as has been in done in pilot test to determine the credibility of the questions given and the responds received.

The minimum value for Cronbach's Alpha is .70. According to Tavakol & Dennick. 2011, Cronbach's Alpha is an important concept in assessing questionnaire to ensure the validity and reliability of the data interpretation. The Cronbach's Alpha value for the research finding is as stated in Table 2 below:

Table 2

*Cronbach's Alpha value for the Research Variables (n=253)*

Variables	Item	Cronbach's $\alpha$ value
Perceived Usefulness	5	.917
Perceived Ease of Use	5	.889
Social Influence	5	.924
Job Relevance	5	.891
Employee Engagement	12	.972

Based on the result, the Cronbach's Alpha value for "Perceived Usefulness", "Perceived Ease of Use", "Social Influence", "Job Relevance", and "Employee Engagement" is more than .70, suggesting that the items in all variables are reliable.

### Demographic Profile

This section will discuss about the data analysis based on the respondents' demographic profile of this research. It will show the analysis about the gender, age, marital status, ethnic and level of education.

Table 3

*Respondents Demographic Profile (n=253)*

	Frequency	Percentage (%)
<b>Gender</b>		
Male	99	39.1
Female	154	60.9
<b>Age</b>		
18 – 20	1	0.4
21 – 30	48	19
31 – 40	140	55.3
41 – 50	50	19.8
51 – 60	14	5.5
M: 31.11		
SD: 7.84		
<b>Marital status</b>		
Single	62	24.5
Married	180	17.1
Divorced	11	4.3
<b>Ethnic</b>		
Malay	218	86.2
Chinese	4	1.6
Indian	6	2.4
Others	25	9.9
<b>Level of Education</b>		
SPM	49	19.4
STPM/Diploma/Advance Diploma/Pre-U	83	32.8
Bachelor Degree	90	35.6
Master	31	12.3

Table 3 shows that the genders of the respondents in this study are consist of 39.1% of male and 60.9% female. More than half of the respondents are female. If we see the phenomena today, majority of the employee of public sector are female. This is because the competition at the entry level in government sector is very high and it is also known that female have better academic achievement and they are majority of the students in the university (Yusoff & Azman, 2017).

The age of the respondents involved in this study range from 18 to 60 years old. This is based on the entrance age into the service and the age of pension. They are divided into 5 groups. Based on the research 55.3% of the respondents' age are from 31 - 40 years old. 19.8% of the respondents are from 41 – 50 years old. It follows by 19% of the respondents' age from 21 – 30 years old. 5.5% of the respondents are 51 to 60 years old and only 0.4% of the respondents are from 18 to 20 years old.

24.5% of the respondents are single, 17.1% are married and 4.3% are divorced. Based on the table above, majority of the respondents are Malay which consists of 86.2%, Chinese 1.6%, Indian 2.4% and others 9.9%. As we can see majority of the respondents are Malay because based on the data from Public Service Department, majority of the public servant are Malay

indicates the reason why majority of the respondents are Malay. This data also is in line with the division of ethnic in Malaysia done by Department of Statistics Malaysia

Levels of education of the respondents are range from SPM to PhD. 35.6% of the respondents hold a degree. 32.8% of the respondents have at least STPM / Diploma / Advance Diploma / Pre-U qualification. On the other hand, 19.4% of the respondents have SPM and 12.3% have Master Degree.

### WhatsApp Profile of the Respondents

Table 4

*Respondents WhatsApp Profile (n=253)*

	Frequency	Percentage (%)
WhatsApp user for		
Less than a year	4	1.6
More than a year	7	2.8
More than two years	242	95.7
WhatsApp usage (duration in hours) perday		
Less than 0.5 hour	8	3.2
Between 0.5 to 1.0 hour	18	7.1
Between 1 to 2 hour	36	14.2
Between 2 to 3 hour	38	15.0
More than 3 hour	153	60.5
Join any WhatsApp group		
Yes	253	100
Number of WhatsApp group joined		
Two	1	0.4
Three	2	0.8
Four	5	2.0
Five & more	245	96.8
Join any WhatsApp group of friends		
Yes	253	100
Join any WhatsApp group of Co-workers / colleagues		
Yes	252	99.6
No	1	0.4
Join any WhatsApp group consist of your Co-workers / Colleagues, Head of Unit and Head of Department		
Yes	247	97.6
No	6	2.4

Based on Table 4 above, it shows the WhatsApp profile of the employees in the Ministry of Communication and Multimedia Malaysia. More than half (i.e. 95.7%) of the respondents have used WhatsApp for more than two years. 2.8% of the respondents have used WhatsApp for more than a year and the amount of the respondents who have used WhatsApp for less than a year is only 1.6%. It shows that the usage of WhatsApp has been widely used after its introduction in 2011.

There is a difference in terms of duration in hours per day of WhatsApp usage of the respondents. The majority (i.e. 60.5%) of the respondents spend more than 3 hours per day on WhatsApp. 15% of the respondents spend between 2 to 3 hours per day on WhatsApp and 14.2% of the respondents spend between 1 to 2 hours per day on WhatsApp. On the other hand, 7.1% of the respondents spend 0.5 to 1 hour per day on WhatsApp and only 3.2% of the respondents spend less than 0.5 hour per day on WhatsApp.

All of the respondents (i.e. 100%) stated that they have joined the WhatsApp group. Almost all (i.e. 96.8%) respondents joined more than five WhatsApp groups. 2% of the respondents stated that they joined four WhatsApp groups, 0.8% joined three WhatsApp groups and 0.4% joined only two WhatsApp groups.

In addition, the WhatsApp groups function to allow participants to actively take part in chat. The group permits the participants to contribute information such as text, video, image, as well as voice notes (Church & Oliveira, 2013). Different types of groups have different types of characteristics and influence on how close and attach the participants to certain groups. All respondents stated that they joined WhatsApp group with their friends. The majority of the respondents (i.e. 99.6%) joined a group of co-workers/colleagues and only 0.4% of the respondents did not join group of co-workers/colleagues. Moreover, 97.6% of the respondents joined the WhatsApp group consists of Co-workers / Colleagues, Head of Unit and Head of Department and the other 2.4% did not join.

There is no information on why some of the respondents did not want to join the group but it is assumed that they maybe uncomfortable being in the group with their co-workers, Head of Unit and Head of Department.

### Normality Test

Table 5

#### *Normality Test Result for the Research Variables*

Variables	Skewness	Kurtosis
Perceived Usefulness	-.81	1.51
Perceived Ease of Use	-.96	1.37
Social Influence	-.57	.04
Job Relevance	-.45	-.63
Employee Engagement	-1.08	1.79

Based on the result, the variables for "Perceived Usefulness", "Perceived Ease of Use", "Social Influence", "Job Relevance", and "Employee Engagement" are all normally distributed as the value of skewness and kurtosis is within the range of  $\pm 1.96$ .

### Factors of WhatsApp Usage Acceptance

This section focused on the factors that influence the acceptance of WhatsApp usage among employees in the Ministry of Communication and Multimedia Malaysia. The purpose of this questionnaire is to answer the first objective of this research i.e. the level of WhatsApp usage among employees in the Ministry of Communication and Multimedia Malaysia.

The respondents are required to indicate their level of agreement or disagreement with the statements. The items were rated using a 7 Likert – scale that range from 1= strongly disagree to 7 = strongly agree. The factors of WhatsApp usage acceptance were divided into four factors consist of perceived usefulness, perceived ease of use, social influence and job relevance. The findings of each constructs were discussed below.

Table 6

*Perceived Usefulness (n = 253)*

No.	Statements	Mean	S.D.
1.	I found that WhatsApp is useful in my work-related communication	6.09	0.99
2.	The use of WhatsApp increased my productivity	5.66	1.14
3.	The use of WhatsApp did effectively improve my job performance	5.65	1.11
4.	Interaction via WhatsApp helped me to become a better employee	5.63	1.17
5.	Interaction via WhatsApp helped me to increase my confidence	5.37	1.34

Table 6 shows the findings from the respondents regarding perceived usefulness as factor of their WhatsApp usage acceptance. The highest mean score is (M = 6.09, S.D. = 0.99) which indicates that WhatsApp application is useful in employees' work-related communication. The result also shows that with the use of WhatsApp it helps to increase the productivity of the employee which the mean and standard deviation for this item are (M = 5.66, S.D. = 1.44) It is then follow by the (M = 5.65, S.D. = 1.11) which suggests that with the WhatsApp usage it helps to effectively improved the employees' job performance. As for the interaction using WhatsApp helps the respondents to become a better employee the mean and standard deviation are (M = 5.63, S.D. = 1.17). Lastly the lowest mean score for perceived usefulness is (M = 5.37, S.D. = 1.34) indicates that the respondents feel that WhatsApp does not really helps the employee to increase their confidence.



Table 7

*Perceived Ease of Use (n = 253)*

No.	Statements	Mean	S.D.
1.	WhatsApp is easy to be used	6.47	0.72
2.	Using WhatsApp favored faster knowledge sharing	6.34	0.77
3.	It is easy for me to discover information via WhatsApp	6.03	0.97
4.	WhatsApp is convenient for me	6.23	0.81
5.	WhatsApp allows me to engage with the workplace at any time and any place	6.19	0.87

The result in Table 7 above shows the respondents indication about perceived ease of use as a factor of their acceptance of WhatsApp usage. The highest mean score is for item number one (M = 6.47, S.D. = 0.72) which tells a strong indication that the respondents agree that WhatsApp application is easy to be used. The next mean score (M = 6.34, S.D. = 0.77) stipulates that the usage of WhatsApp assist the employee to advocate faster knowledge sharing.

On the other hand, the respondents feel convenient when they are using WhatsApp. The mean score for this statement is (M = 6.23, S.D. = 0.81). Next mean score is (M = 6.19, S.D. = 0.87) shows that the usage of WhatsApp application permits the respondents to keep in touch with the workplace whenever and wherever they are needed. Lastly the lowest score is (M = 6.03, S.D. = 0.97) where the respondents experience the WhatsApp usage helps to ease the respondents to discover information.

Table 8

*Social Influence (n = 253)*

No.	Statements	Mean	S.D.
1.	People who are important to me think that I should participate in WhatsApp	5.92	0.96
2.	People who influence my behavior encourage me to participate in WhatsApp	5.58	1.12
3.	My close friend think I should opt to WhatsApp	5.74	0.99
4.	My co-workers / colleagues think I should opt to WhatsApp	5.76	0.99
5.	My superior think I should opt to WhatsApp	5.76	0.95

Table 8 shows the result for respondents' opinion on social influence as a factor of WhatsApp usage acceptance. The highest mean score for this construct is ( $M = 5.92$ ,  $S.D. = 0.96$ ). It indicates that the employee accepts the usage of WhatsApp in the workplace because people who are important to them expect them to participate in WhatsApp.

Next, there are two items which have the same mean score ( $M = 5.76$ ,  $S.D. = 0.99$ ) and ( $M = 5.76$ ,  $S.D. = 0.95$ ). The first mean score shows that the respondents' co-workers and colleagues have influenced them to use WhatsApp and their superior also believes that they should use WhatsApp in the workplace.

The mean score for the respondents that agree that their close friends think that should use WhatsApp is ( $M = 5.74$ ,  $S.D. = 0.99$ ). On the other hand, the lowest mean score for this factor is ( $M = 5.58$ ,  $S.D. = 1.12$ ) suggests that most of the respondents do not undergo that people that influence their behaviour have motivated them to use WhatsApp.

Table 9

*Job Relevance (n = 253)*

No.	Statements	Mean	S.D.
1.	In my job, usage of WhatsApp is important	6.18	0.85
2.	Using WhatsApp is relevant to my work	6.13	0.89
3.	It would be difficult to do my job without WhatsApp	5.63	1.28
4.	I think WhatsApp could facilitate my job processes	5.93	0.10
5.	It is necessary for those who join my organization to be familiar with WhatsApp	6.11	0.84

Table 9 shows the findings on respondents' point of view about job relevance to indicate their WhatsApp usage acceptance. The highest mean score for this construct is ( $M = 6.18$ ,  $S.D. = 0.85$ ) which indicates that the employees are in the agreement that in their job, WhatsApp usage is important. Then, the employees are in the opinion that WhatsApp usage is relevant to their work. The mean score for this item is ( $M = 6.13$ ,  $S.D. = 0.89$ ). The mean score for the necessity for those who join the organization to be familiar with WhatsApp is ( $M = 6.11$ ,  $S.D. = 0.84$ ). Moreover, the mean score ( $M = 5.93$ ,  $S.D. = 0.10$ ) indicates that the employees think that the WhatsApp usage can facilitate their job processes. Lastly the lowest mean score for this construct is ( $M = 5.63$ ,  $S.D. = 1.28$ ) shows that the employees feel that there will be difficulties to do their job without WhatsApp.

### Level of WhatsApp Usage among Employees

To know the level of WhatsApp usage among the employees, this research focus on the factors derive from Technology Acceptance Model that are perceived usefulness, perceived ease of use, social influence and job relevance. In order to determine the level of WhatsApp usage among employee, we need to compare the mean score of each construct as stated in the table below.

Table 10

#### *WhatsApp Usage Acceptance Construction*

No.	Construct	No. of Item	Mean	S.D.
1.	Perceived Usefulness	5	5.68	0.10
2.	Perceived Ease of Use	5	6.25	0.69
3.	Social Influence	5	5.75	0.88
4.	Job Relevance	5	6.00	0.82

Table 10 shows that perceived ease of use is the most influential factor in WhatsApp usage acceptance among employees with calculated mean of 6.25. To determine the level of WhatsApp usage among employees, each statement from each section is scored between 1 and 7. Total score for each respondent will be divided into levels as stated in table below. Lowest score and highest score for level of WhatsApp usage is 20 and 140 respectively.

Table 11

#### *Level of WhatsApp Usage*

Level	Score
Low	20 - 59
Medium	60 - 99
High	100 - 140

Table 12

#### *Level of WhatsApp Usage among Employees (n = 253)*

Level of WhatsApp Usage	Frequency	Percentage (%)
Low	0	0
Medium	23	9.1
High	230	90.9

Table 12 presents the level of WhatsApp usage among employee in Ministry of Communication and Multimedia Malaysia is high with 90.9 % or 230 respondents. 9.1 % or 23 of the respondents is in the medium level of usage of WhatsApp and none of the respondent is in the low level. This indicates that WhatsApp usage is a significant form of communication in the Ministry to swap and circulate information not only for personal purposes but also work purposes.

Bukaliya, Rupande and Region (2013), in their research stated that WhatsApp has become a popular communication application because of its easiness of usage and access via smartphone. It can be seen in this study as well where perceived ease of use has become the most influential factor in WhatsApp usage.

In this study, social influence with the mean of 5.75 is the third elements of WhatsApp usage. This demonstrates that social influence imparted user to the acceptance of WhatsApp usage. This has been indicated in the research by Venkatesh and Davis (2000). Moreover, as stated in Church and Olivera (2013), the main cause of accepting WhatsApp application is social influence. This is supported by Bukaliya, Rupande and Region (2013), which stipulated that after being motivated by their friends, user usually attach with WhatsApp whenever and wherever they are with their smartphone.

### Level of Employee Engagement in the Organization

In this section, this study analysed the level of employee engagement in order to answer the second research question.

Table 13

#### *Employee Engagement (n = 253)*

No.	Statements	Mean	S.D.
1.	With WhatsApp, I have a best friend at work	5.26	1.60
2.	With WhatsApp, I know what is expected of me at work	5.59	1.29
3.	With WhatsApp, my opinions seem to count	5.38	1.35
4.	With WhatsApp, I have opportunity to do what I do best every day (at work)	5.40	1.36
5.	With WhatsApp, my supervisor / line manager/ team leader or someone at work seems to care about me as a person	5.36	1.42

6.	With WhatsApp, I have opportunities at to learn and grow	5.45	1.35
7.	With WhatsApp, someone at work has talk to me about my progress	5.38	1.33
8.	With WhatsApp, there is someone at work who encourages my development	5.39	1.29
9.	With WhatsApp, I have the materials and equipment I need to do my work right	5.46	1.25
10.	With WhatsApp, I have received recognition or praise for doing good works	5.39	1.34
11.	With WhatsApp, my associates or fellow employee are committed to do quality work	5.46	1.31
12.	With WhatsApp, I know the mission or purpose of my company makes me feel my job is important	5.48	1.28

Table 13 above, shows the mean and standard deviation for the dependent variable research instrument. For employee engagement there are twelve questions. All these twelve statements are to observe main need in the ministry, to examine the employee contribution to the ministry being acknowledged and seen. These statements were adopted from Gallup International Q12 which have been widely used for studies on employee engagement.

The highest mean is calculated at (M = 5.59, S.D. = 1.29) which indicates that the respondents know what is expected from them at work with the usage of WhatsApp. Next the mean score (M = 5.48, S.D. = 1.28) indicates that with the usage of WhatsApp, the respondents know the mission or purpose of their company and it leads to their feeling that their job is important. In addition, mean calculated at (M = 5.46, S.D. = 1.25) shows that with WhatsApp usage, the respondents have the materials and equipment they need to do their work right. Then, the respondents feel that with WhatsApp, their associates or fellow employee are committed to do quality work. The mean score for this statement is (M = 5.46, S.D. = 1.31).

The mean score (M = 5.45, S.D. = 1.35) conveys that the respondents have opportunities to learn and grow at their workplace by using WhatsApp. The respondents also are in the opinion that with WhatsApp usage they have the opportunity to do the best for their work every day (M = 5.40, S.D. = 1.36). They also in view that WhatsApp have been used by someone at their workplace to encourage their development. This statement has the mean score of (M = 5.39, S.D. = 1.29).

Moreover, the respondents expressed that with WhatsApp they received recognition and praise for doing good works. It is assumed that their superior will give them recognition and praise when they successfully completed their job through WhatsApp group. Mean score for this statement is calculated at (M = 5.39, S.D. = 1.34). Mean score (M = 5.38, S.D. = 1.33) indicates that with WhatsApp, the respondents have someone to talk about their progress at the workplace.

On the other hand, mean score calculated at (M = 5.38, S.D. = 1.35) shows that the respondents' opinion seems to count with WhatsApp usage. The respondents feel that with the usage of WhatsApp their supervisor / line manager / team leader or someone at their workplace care about them as a person. Mean score for this statement is (M = 5.36, S.D. = 1.42). Lastly, the lowest mean score calculated at (M = 5.26, S.D. = 1.60) indicates that WhatsApp usage does not really helping the respondents to have best friend at work. It is assumed that the WhatsApp usage is only for work purposes not for personal purposes. To ascertain the level of employee engagement, each statement is scored between 1 and 7. Total score for each respondent will be divided into level as stated in Table 14 below. Lowest score and highest score for employee engagement are 12 and 84 respectively.

Table 14

*Level of Employee Engagement*

Level	Score
Low	12 - 35
Medium	36 – 59
High	60 - 84

Table 15

*Level of Employee Engagement in the Organization (n = 253)*

Level of WhatsApp Usage	Frequency	Percentage (%)
Low engagement	10	4.0
Medium engagement	54	21.3
High engagement	189	74.7

Table 15 above outlined the level of employee engagement in the Ministry of Communication and Multimedia Malaysia. It is indicated 74.7% or 189 respondents are in high level engagement, 21.3% or 54 respondents are in medium level engagement and 4% or 10 respondents are in low-level engagement. This result is contradicted to the report by Gallup which stated that the number of highly engaged employees in an organization is low based on the research done in 142 countries. The reasons for the low level of engagement are because of high turnover, retrenchment exercise and reorganization.

However, this does not happen in this study. It is assumed that the factor of a high level of employee engagement in the Ministry of Communication and Multimedia Malaysia is because this organization is a government body. Government servants usually feel comfortable to be in the same organization for the long term because they feel that they have known the nature of the organization well. There is also no issue of turnover in the Ministry.

In this study, the outline is not the same as Gallup's report. The level of employee engagement is high at 74.7%.

### Relationship between WhatsApp usage and Employee Engagement

This section will discuss the relationship between WhatsApp usage and employee engagement. This is also to answer the third research question in this study. There are four hypotheses that analysed as stated below.

H<sub>1</sub>: Perceived usefulness of WhatsApp usage will positively affect employee engagement.

H<sub>2</sub>: Perceived ease of use of WhatsApp usage will positively affect employee engagement.

H<sub>3</sub>: Social influence of WhatsApp usage will positively affect employee engagement.

H<sub>4</sub>: Job relevance of WhatsApp usage will positively affect employee engagement.

A Pearson correlation coefficient was calculated to determine the relationship between the WhatsApp usage variables and employee engagement. The result is indicated in Table 16 below.

Table 16  
*Pearson Correlation Test Result*

	1	2	3	4	5
1. Perceived usefulness					
Pearson Correlation	1	.714**	.592**	.637**	.624**
Sig. (2-tailed)		.000	.000	.000	.000
2. Perceived ease of use					
Pearson Correlation		1	.599**	.665**	.572**
Sig. (2-tailed)			.000	.000	.000
3. Social influence					
Pearson Correlation			1	.577**	.519**
Sig. (2-tailed)				.000	.000
4. Job relevance					
Pearson Correlation				1	.639**
Sig. (2-tailed)					.000
5. Employee engagement					
Pearson Correlation					1
Sig. (2-tailed)					

\*\* . Correlation is significant at the 0.01 level (2-tailed)

Table 16 shows the result for Pearson Correlation and Coefficient to test the hypotheses as stated earlier. It indicates that there is a positive correlation between perceived usefulness and employee engagement ( $r = .62$ ,  $p = .000$ ). The result suggests that there is a relationship between perceived usefulness and employee engagement. The strength of the correlation is medium. Therefore,  $H_1$ : perceived usefulness of WhatsApp usage will positively affect employee engagement is accepted.

There is a positive correlation between perceived ease of use and employee engagement ( $r = .57$ ,  $p = .000$ ). The result indicates that there is a relationship between perceived ease of use and employee engagement. The strength of the correlation is medium. Therefore,  $H_2$ : perceived ease of use of WhatsApp usage will positively affect employee engagement is accepted.

As for the correlation between social influence and employee engagement, there is a positive correlation ( $r = .52$ ,  $p = .000$ ). The result shows that there is a relationship between social influence and employee engagement. The strength of the correlation is medium. Therefore,  $H_3$ : social influence of WhatsApp usage will positively affect employee engagement is accepted.

Lastly, there is a positive relationship between job relevance and employee engagement ( $r = .64$ ,  $p = .000$ ). It shows that there is a relationship between job relevance and employee engagement. The strength of the correlation is medium. Therefore,  $H_4$ : job relevance of WhatsApp usage will positively affect employee engagement is accepted.

### **Discussion**

The main focus in this chapter is the discussion that include summary of the research, conclusion, recommendation and implication and suggestion for further research. Summary of the research is the research synopsis that has been done to determine the relationship between WhatsApp usage and employee engagement in Ministry of Communication and Multimedia Malaysia.

For the conclusion, the researcher shared the findings of the data analysis that have been conducted. Meanwhile, the researcher sharing their thoughts on the recommendations from the analysis of the findings. It includes the recommendations on practical and also the policy that involve the ministry and the central agencies as well. Lastly, the researcher has given the suggestion for further research to fill the gap in this research.

This research started with the problem of having engagement among employees in the Ministry of Communication and Multimedia Malaysia. With the emergence of the new technology of communication, it is hope that the information can be disseminated as fast as possible and employee is hoping to be committed with their work. WhatsApp is the latest communication application that has been introduced and widely used by smartphone users. It allows users to communicate to many people at the same time. It also allows sharing of documents, videos as well as pictures.



With this feature, it is hope that the WhatsApp application can be used as a medium of communication in an organization to replace face to face communication which helps to reduce time consuming. However, it was found those employees are still reluctant to use WhatsApp as a medium of communication in matters related to work. From the observation, they love to use WhatsApp for the matter regarding their social life. Therefore, this research was conducted to determine is there any relationship between WhatsApp usage and employee engagement. The researcher wants to know how far WhatsApp usage can enhance employee engagement in the organization.

In this study, the researcher distributed a questionnaire through Google Form to the employees of the Ministry of Communication and Multimedia Malaysia that are focusing on the factors on the WhatsApp usage acceptance. The respondents were chosen from a different background from various departments via random sampling technique to avoid biases and to make sure that this research is relevant.

The research has conducted this study from 2 different perspectives using the same method that is a questionnaire. Firstly, the researcher examined the four factors that influence WhatsApp usage acceptance. 253 respondents from the Ministry have answered the questionnaire. 20 questions were asked regarding these factors. These questions were asked to determine what the elements were causing the respondents to use the WhatsApp application and also to know the level of WhatsApp usage in the Ministry.

Next, to determine the level of employee engagement in the Ministry, 12 questions pertaining employee engagement were asked to 253 respondents. In the end, the researcher conducted an analysis on whether there is a relationship between four factors of WhatsApp usage acceptance and employee engagement in the Ministry.

This study has fulfilled the research objectives and has answered the research questions as well. The test on the hypotheses that have been laid down also have been done to make sure of the validity.

The first research objective is to determine the level of WhatsApp usage among employees in the Ministry of Communication and Multimedia Malaysia. The study found that the level of WhatsApp usage among employees in the organization is high at 90.9% when most of the respondents were using the application with the factors that have been laid down in the Technology Acceptance Model. This shows that the employees regardless of their position feel that the usage of WhatsApp is important in their workplace because of its usefulness, easiness, the norms in the organization and also the relevancy of the usage with their job.

Employee engagement is a wide aspect and uneasy to gripe. There are many studies that have been performed to see the way to establish employee engagement in an organization. A good design of communication is among all factors that influence employee engagement. Efficacious communication may help to strengthen the feeling of engagement. This study has concluded that employee engagement in the Ministry is high at 74.7%. This result is contradicted to a study by Omar, 2018 which stated that the level of employee engagement in the telecommunication organization is low even though the organization is using WhatsApp as medium of communication.

The high usage of WhatsApp led to the increase of employee engagement. It is assumed that if some attempt to encourage the WhatsApp usage by the superior like head of department it may help to escalate the level of employee engagement in the organization higher.

As for the relationship between employee engagement and WhatsApp usage, all four hypotheses discussed are accepted. It shows that there is a relationship between WhatsApp usage and employee engagement in the Ministry of Communication and Multimedia Malaysia. This result determined the third objective of this study. This is supported by the research done by Omar, 2018 which highlighted the correlation between WhatsApp usage and employee engagement.

Perceived usefulness, perceived ease of use, social influence and job relevance of WhatsApp usage will positively affect employee engagement.

This research shows that perceived usefulness gives a positive impact on employee engagement. This is because WhatsApp is really useful in work related communication. The employee can easily communicate with the employees about work-related matter. The usage of WhatsApp also helps the employee to feel confident, improve their job performance to become a better employee.

On the other hand, WhatsApp usage is easy to be used. An employee at different levels of age may use this application because it is user friendly. It helps the employee to disseminate quick knowledge sharing and allows communicating with the workplace at any time and any place. These factors give a positive impact on employee engagement in the organization.

Moreover, social influence also has a positive impact on employee engagement. The employee feels that when people around them are using WhatsApp they also have to opt to do so. In the workplace when the employee found that their co-workers and superiors are using the application, so they feel that also need to use the application. When their superior is likely to communicate with WhatsApp the employee feel that they are also encourage to the same application.

Job relevance of WhatsApp usage will positively affect employee engagement. The researcher found that the usage of WhatsApp is important for the employees to do their job. They feel that it is relevant to their work. It would cause difficulties for them to their job without using the application and it would help to facilitate their job processes.

WhatsApp application without any hesitancy has shifted the means people communicate nowadays. Many previous studies have proven this. One thing for sure, WhatsApp is the most popular MIM application and the number of users is increasing compare to other application. The purpose of this study is to determine the relationship between WhatsApp usage and employee engagement. Through this study, the researcher looked into the reality of the polemic of the emergence of WhatsApp application as a medium of communication in an organization to replace the face-to-face communication.

This study is administered with the Ministry of Communication and Multimedia Malaysia, Putrajaya hence it cannot be used to represent the usage of WhatsApp and employee

engagement of public sector as a whole. In many types of research that have been observed, it was found that Technology Acceptance Model (TAM) has frequently describe an important part of the difference in usage intentions and behaviour (Venkatesh, Davis & College, 2000). However, there are many other factors that influence the usage of technology or specifically in this research WhatsApp usage that has not been studied. The option for smartphones (for example iPhone, Samsung, Huawei or any other brands) and choice of the internet such as WIFI or Mobile Broadband are not part of this study. On the other hand, a comparative study between other types of MIM applications is not included in this study. The WhatsApp usage acceptance could be distinct if the comparative study is conducted. Examples of other types of MIM applications similar to WhatsApp are Line, WeChat, Facebook Messenger and Telegram. The acceptance of these applications might be different based on their different interface.

Specific research on the usage of WhatsApp at the workplace like changing particulars with co-workers and superiors may show the different results of WhatsApp usage acceptance as a medium of communication in the organization.

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