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Assessing the Influence of Self-Efficacy on the Acceptance of Mobile Phone Technology within the SMEs

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Assessing the Influence of Self-Efficacy on the Acceptance of Mobile Phones - A case of Employees of SMEs

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ABSTRACT

Mobile phone technologies have proved to provide a significant transformation in performing various activities within companies, especially in the least developed regions. Mobile phones provide opportunities for employees of organisations to work at anytime and anywhere. SMEs comprise of employees who perform multitasking job roles due to their small in size and low financial capabilities and most cases, some of them work remotely from their main offices.

Self-Efficacy is a belief that the user has enough skills to use technology to perform a task at hand. This is one of the factors influencing of acceptance of technologies at the workplaces such as SMEs. However, while the majority of studies have explored the influence of self-efficacy in desktop-based computing, it is unclear on the context of mobile phone usage, especially when individuals perform their work obligations within SMEs. This study involves a survey of 459 people who work with their small businesses in Tanzania. Among others, the Mobile Phone Self-Efficacy was found to be among the factors which directly influence the Perceived Ease of Use of mobile phone technology as they perform their duties.

KEYWORDS: TAM, Mobile Phone Technology, Self-Efficacy and Technology Acceptance.

INTRODUCTION

Small and Medium-sized Enterprises (SMEs) are key to the economies of nations worldwide (Dubihlela and Omoruyi, 2013; Ghobakhloo et al., 2011; Kilangi, 2012). The importance of SMEs in the economy is well-substantiated in the literature sources. In Tanzania, for example, SMEs covers 27% of the Gross Domestic Product (GDP) and employs more than 20% of the labour force (FSDT, 2017). It is therefore essential to provide a closer look at the extent to which technologies can support the people who work in the SMEs. The researchers have also shown that more than 95% of SMEs in Tanzania comprises of less than five (5) employees (Venkatakrishan,

2014). This implies that the decisions and influence of using technologies are highly forced or controlled by individuals rather than the management of the SMEs. On the other hand, mobile phone technology is mainly used by individual people. In the context of SMEs, the individuals utilise mobile phones to conduct various activities which are essential to their businesses. For instance, the majority of retail shops are mainly conducted by a single or two people and in most cases they use mobile phones to communicate, ordering of items and for marketing purposes.

Mobile phone technology differs from desktop computing, as mobile phones can be used anywhere and at any time (R. Mushi et al., 2017). If mobile phones are owned by employees of SMEs, they can be used to accomplish their duties regardless of when and where they are located to the head offices, at remote locations or home. Similarly, employees are likely to be subjected to work using their mobile phones at any possible time and place regardless of whether it falls within the normal working duration, overnights or over the weekends. In technology acceptance perspectives, technology is regarded to be accepted by its users only if it is utilised to its fullest, voluntarily (Mushi et al., 2017). As such, some studies were performed to identify and test factors which influence users to accept technologies in various contexts (Byomire & Maiga, 2015; R. M. Mushi, 2018; Prieto et al., 2015; Yueh et al., 2015). Despite the availability of a pool of literature in technology acceptance, the majority of existing studies do not address the specific aspects of the context of this study. For instance, the model that explains factors influencing the acceptance of desktop computers is not necessarily suitable for discussing mobile phone technology due to the specific usage contexts such as its flexibility to use anywhere at any time and its operational demands such as airtime and costs of data bundles. Similarly, those designed to explain large organisations are not necessarily suitable to describe small businesses, due to more informal roles, financial capabilities and lack of specialisation among employees (Awa et al., 2012). Also, a study of Mushi et al (2018) extended TAM with the aspects of personal privacy of employees of SMEs to investigate its impact towards acceptance of mobile phone technology in the SMEs. He provides significant insights on the usage contexts of mobile phones except for other specifics such as the self-efficacy. The growing trend of using mobile phones as the main technological option in SMEs has demanded more emphasis on investigating aspects of its usage. This study extends TAM with *Self-Efficacy* to design a theoretical model before formulating the hypotheses to be tested in the survey. The rest of this paper is organised as follows: Section two provides insights into technology acceptance and adoption. Section three defines small and medium-sized enterprises in the Tanzanian context while section four provides a roadmap for developing a theoretical model of the study.

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Section five discusses the methodological aspects in conducting this research followed by section six which discusses the results of the study. Section seven concludes this article and provides potential areas for future works.

LITERATURE REVIEW

This research intends to assess if the Mobile Phone Self-Efficacy can influence employees' intention and acceptance of technology at their workplaces. The technology which is studied is mobile phones. The workplaces which are referred to in this study are SMEs. It is, therefore, important to understand the terms Technology acceptance, SMEs, mobile phones and technology acceptance theories.

MOBILE PHONE TECHNOLOGY

According to the Cambridge English Dictionary (2015), mobile technology is defined as:

"electronic equipment such as mobile phones or small computers that you can use in different places, and the technology connected with them".

This means it comprises of the devices and technology which is involved in enabling them to work in different places. This definition is supported by Lopez-Nicolas et al. (2008), who assert that in mobile technology, the computing services and internet are accessed by mobile devices through the wireless medium. The main advantage of mobile technology is its mobility, which allows users to access computing services anywhere and at any time when compared to traditional desktop computing (Aker & Mbiti, 2010; R. Mushi et al., 2017; Sarker & Wells, 2003). The innovation has impacted positively on the lives of ordinary people more than any other technology (Agwu & Carter, 2018). Its usage has presented opportunities with different dimensions to all groups of individuals and businesses (Agwu & Carter, 2018). In mobile technology, the time and space required to access information are highly reduced (Sarker and Wells 2003). Users of mobile technology have access to the Internet and mobile applications whenever the need arises, such as when travelling, wandering and visiting (Sarker and Wells 2003; Agwu and Carter, 2018).

Mobile technology requires a reliable telecommunications infrastructure which can support technologies such as Wireless Application Protocol (WAP), Bluetooth, 3G, and General Packet Radio Service (GPRS) as well as the devices which will act as a client on the user side such as mobile phones and tablet computers (PDAs) (Agwu & Carter, 2018).

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Mobile technology is evolving quickly, replacing traditional communication methods like post office and landlines. Unlike previous mobile phones which were only used for a phone call and messaging, improvements in mobile technology have resulted in multitasking devices performing internet browsing, instant messaging and GPS navigation[1]. From the definitions as used in the previous studies, the words *'mobile technology'*, *'cellular technology'* and '*mobile phone technology'* are logically representing the technology in which mobile devices can communicate over a wireless medium. However, this study uses the term *'mobile phone technology'* to represent the rest two terms, and the term *'mobile phone'* is used to represent all the mobile devices

TECHNOLOGY ACCEPTANCE MODEL

The term technology adoption needs to be differentiated from technology acceptance since the two terms appear to be used interchangeably in similar contexts. The Concise Oxford Dictionary defines acceptance as '...consent to receive or undertake something' (Oxford, 2009, P.7). According to Van Biljon and Renaud (2008), technology acceptance is an attitude towards a technology which is influenced by various factors. This means that the decisions to accept or reject a technology are associated with some factors which surround its usage. Therefore, technology has to be assessed for all the factors which contribute to its acceptance for it to be used at its fullest. The acceptance of technologies by individuals are studied using a model which assesses uncovers the factors influencing the behaviour of users of technology as they use it (Sun et al., 2013). The causal relationships between the factors are analysed on the extent to which they influence individuals' intentions to use technology in the near future (Ajzen, 1991; Byomire & Maiga, 2015). Examples of the models which best explain the acceptance of technologies include the Theory of Reasonable Action (TRA) ((Fishbein & Ajzen, 1975), the Theory of Planned Behaviour (TPB) (Ajzen, 1991), the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003) and Technology Acceptance Model (TAM) (Davis, 1989).

Some o the previous studies in technology acceptance include that which explains the mobile acceptance among pre-service teachers: a descriptive study using TAM based model (Prieto et al., 2015). In this study, Prieto et al. (2015) performed a

[1] Mobile Technology, Its Importance, Present And Future Trends https://www.finextra.com/blogposting/14000/mobile-technology-its-importance-present-and-future-trends

descriptive analysis in analysing the relationship between factors of a model which was designed by adding two constructs:

Self-efficacy and mobile device Anxiety and explanatory variables: age gender and year of study. The population of that study comprised of all 678 students enrolled in the Primary Education Teacher Bachelor's Degree in the University of Salamanca, in its branches of Salamanca, Zamora and Ávila. They carried out the normalcy tests of Kolmogorov-Smirnov and Shapiro Wilk to perform hypotheses testing (Prieto et al., 2015). Despite its importance for the educational context, such a study demonstrated the best approach of adapting factors of TAM and extending TAM by adding new constructs (Self-Efficacy and Anxiety) in the attempt of increasing the percentage of variance explained by the resulting model. Similarly, Yueh et al. (2015) assessed the employees' acceptance of mobile technology in the workplace through a survey. They used Structural Equation Modelling (SEM) to test the theoretical model and hypotheses to understand the statistical associations among the variables. Also, Walid and Nizar (2019) used TAM to analyse the role of cognitive age in explaining mobile banking resistance among elderly people by setting cognitive age as a moderator. They involved 425 elder mobile banking non-users using Smart PLS 3 for data analysis. Also, Shankar et al (2020) examined the impact of Electronic word of mouth (eWOM) on the success of e-commerce in which the conceptual model included initial trust in m-banking as a mediator and consumer involvement in m-banking as a moderator. They conducted 1153 surveys involving Indian users of social networking websites and the results showed that the triggers, argument quality, valence, and consistency enhance intention to adopt m-banking.

The review of the previous studies has shown that the acceptance of technology is mostly studied through surveys in quantitative research. While the researchers have covered various aspects. However, there is a lack of studies which provide insights on the mobile phone self-efficacy on its acceptance. Self Efficacy is a belief of users of a technology that they can use it effectively to perform their intended activities and that the technology itself is capable of being utilised to do so (R. Mushi et al., 2018; Venkatesh & Bala, 2008). This is necessary essentially since there has been an influx of more sophisticated mobile devices which are capable of assisting users in performing several activities. Taking into account that there is no demand of high-level educations when employing people in small businesses, there is a great possibility of the existence of people with exposure to current mobile phones (smartphones) to the extent of believing in themselves on their capacity to use them effectively. Therefore, through this study, mobile phone Self-efficacy is analysed for its influence towards acceptance of mobile phone technology amongst the people who work with small businesses.

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SMALL AND MEDIUM-SIZED COMPANIES

The existing literature includes various definitions of SMEs, and most of these definitions of concepts are available in business commerce, development and economics literature (Mutula, and Van Brakel, 2006). These definitions differ from country to country. For example, The Organization for Economic Co-operation and Development (OECD) definition is based on employment figures, and it defines SME as have less than 500 employees (OECD, 2004). In Britain, SMEs are enterprises which have an annual turnover of £2 million or less with fewer than 200 paid employees, In Australia, SMEs are defined as enterprises with between five and 199 employees (Migiro, 2006). The European Union defines a micro-business as a company with less than ten employees and annual turnover, and balance sheet total not exceeding €2 million. In the Tanzanian context, The Tanzania Small Industries Development Organisation (SIDO) recognises SMEs as companies having employees less than 100 and working capital less than or equal to $444.4k. Also, the Tanzania Revenue Authority (TRA) defines a small business as the one whose annual taxable turnover is less than TZS 40 Million (USD 22,500). As such, while the definition of SMEs is contestable, in the context of this study, the SMEs define as any company which has working capital of less than $444,400 and employees less or equal to 99 people.

Hourali *et al.* (2008) assessed how best the SMEs can benefit from the use of IT in their operations by differentiating them from large organisations on ICT adoption. They assert that although both SMEs and large companies have advantages in innovation adoption, they differ on the realised advantages. They argue that large companies have material advantages, due to their greater capacity to support research and development as compared to SMEs. On the other hand, SMEs have behavioural advantages that stem from their greater flexibility and ability to adapt to changes in the market. In that regard, the usage of mobile phones can fit to support the roles of people working within the SMEs.

The use of individual-level technology acceptance model to in studying SMEs is based on three main reasons. Firstly, the lack of financial power of SMEs means only a few of them can have the budget to posses sophisticated computerised systems. As a result, employees of SMEs opts to use the existing mobile phones for employees to perform or to support the activities. Secondly, the fact that SMEs tend to employ generalists rather than specialists indicates a lack of specialisation at work. Under such circumstances, mobile phone technology is the best suitable option compared to the other form of ICT because they can support a broad range of activities. Also, is the size of the SMEs as compared to large companies is an

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important issue since SMEs are comprised of only a small number of employees who perform a broad range of activities or job roles.

This tends to increase the monopoly on using technology within the SMEs in which only a few people can make important or key decisions on behalf of a company. This monopoly nature tends to favour the usage of mobile phone technology, ahead of the rest when it comes to performing the activities of the SMEs.

MOBILE PHONE TECHNOLOGY

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Mobile technology requires a reliable telecommunications infrastructure which can support technologies such as Wireless Application Protocol (WAP), Bluetooth, 3G, and General Packet Radio Service (GPRS) as well as the devices which will act as a client on the user side such as mobile phones and tablet computers (PDAs) (Agwu & Carter, 2018). Mobile technology is evolving quickly, replacing traditional communication methods like post office and landlines. Unlike previous mobile phones which were only used for a phone call and messaging, improvements in mobile technology have resulted in multitasking devices performing internet browsing, instant messaging and GPS navigation. From the definitions in the previous studies, the words 'mobile technology', 'cellular technology' and 'mobile

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phone technology' are logically representing the technology in which mobile devices can communicate over a wireless medium.

However, this study uses the term 'mobile phone technology' to represent the rest two terms, and the term 'mobile phone' is used to represent all the mobile devices.

Mobile phones are used to accomplish some activities in businesses. One of the recent studies which highlight various uses of mobile phones in Tanzanian SMEs is that of Venkatakrishnan (2014) which involved a survey to identify how different functionalities of mobile phones can be applied to benefit SMEs in Tanzania. He found that voice calls are the most critical mobile service in SMEs, accounting for 71% of business purposes, followed by mobile money services, which accounted for up to 25%. Mobile phones are used by Tanzanian SMEs to accomplish several business purposes, although there are several functionalities in mobile phones. Therefore it is essential to identify critical uses which are specific to the context of Tanzanian SMEs. In Tanzania, SMEs have shown very high ratings in making payments (44%) and placing an order (42.7%) as the main activities performed using mobile phones. Other business-related purposes include searching for suppliers, tracking the transport of goods and preliminary negotiations (Venkatakrishnan, 2014). Similarly, mobile phones have proved to benefit Tanzanian SMEs in some ways. The key benefits which were shown to be the most significant by 90.7% of SMEs are a lessening of travel frequency, the early arrival of supplies/goods and reduction of travel costs (Venkatakrishnan, 2014).

DEVELOPMENT OF THEORETICAL MODEL

This study extends the Technology Acceptance Model (TAM) (Davis, 1989). TAM identified the factors that facilitate the integration of technologies into an organisation, to discover why users accept or reject technology. The development of TAM was based on adopting the concepts of the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975), a more generalised theory, which explain specific contexts (Lindsay et al., 2011). In social psychology, TRA has been used to explain why people perform a particular behaviour in situations of 'reasoned action' through identifications of causal relationships which exist between beliefs, attitudes, intentions and behaviour (Kwon & Chidambaram, 2000; Pedersen, 2005). TAM theorises that when users are given a piece of technology, there are several factors which influence their decisions on how and when they will use such technology (Davis, 1989; Yueh et al., 2015).

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TAM explains the acceptance of technology by two key perceived attributes or measures: *Perceived Usefulness* (PU) and *Perceived Ease of Use* (PEU). According to Davis (1989), PU is whether the technology will enhance the user's job performance whereas PEU relates to what extent using the system will be free from effort. The integrity of original TAM has been tested through several empirical studies, which extends the model to different settings, providing consistency and good re-test reliability and confirming its validity (Lindsay et al., 2011; Venkatesh & Davis, 2000).

In TAM, *Perceived Usefulness* (PU) of the technology and *Perceived Ease of Use* (PEU) have been found to influence the *Behavioural Intention* (BI) in using technologies in the use of mobile phone technology in maternal healthcare (Chen et al., 2009; S. H. Kim, 2008; Prieto et al., 2015). PEU influences PU because PEU indirectly tends to influence the intention to adopt technology and finally it's Usage. However, PU failed to influence BI in the study on the employee acceptance of integrating mobile commerce in their workplaces (Gribbins et al., 2003). Based on such previously tested hypotheses. Therefore, the following hypotheses are posited in this study:

H1a: Perceived Ease of Use (PEU) of mobile phone technology will positively influence the employees' Perceived Usefulness (PU)
H1b: Perceived Ease of Use (PEU) of mobile phones will positively influence the employee's Behaviour Intention (BI)
H1c: Perceived Usefulness (PU) of mobile phones will positively influence the employee's Behaviour Intention (BI)
H1d: Employees' Behavioural Intention (BI) of using mobile phones on will influence its actual Usage (U)

Computer *Self-Efficacy* refers to the extent to which a person believes that he or she can perform a specific task/job using the computer (Compeau & Higgins, 1995). The concept of *Computer Self-Efficacy* was meant to represent the perceptions towards a desktop computer system (Venkatesh, 2000). However, *Self-Efficacy* is the term which can be applied to a mobile phone technology perspective. Therefore, this study considers Computer *Self-Efficacy* in the form of *Mobile Phone Self-Efficacy* (MSE). In this case, *Mobile Phone Self-Efficacy* is defined as a degree to which an individual believes that he or she can perform a specific task/job using the mobile phone. This becomes more significant in the applications of mobile phones which require knowledge over and above necessary calls and text SMS. For example, the employees of a car rental SME are likely to face difficulties in using some of the functionalities of mobile phones such as internet-based services in particular.

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Previously, *Mobile Phone Self-Efficacy* was found to positively influence teacher's acceptance of mobile phones in pre-school learning (Prieto et al., 2015). In another case, *Mobile Phone Self-Efficacy* was found to have a direct effect on *Perceived Ease of Use* in mobile learning (Wang et al., 2009). According to Mushi (2020), the mobile phones in Tanzanian SMEs are mostly used to perform tasks such as communications, marketing, accessing bank mobile money services and sharing of information with customers and peers. A closer look at these services shows that they require the user's self-confidence to accomplish. Otherwise, they could be perceived as complex, and eventually, the tasks would not be performed. In connection to that, this study hypothesised that:

H2a: The Perceived Mobile Phone Self-Efficacy (MSE) will positively influence the employee Perceived Ease of Use (PEU) of mobile phone technology.

The theoretical framework was then constructed in the form of a model seen in Figure 1.

Figure 1. The theoretical model of the research (author)
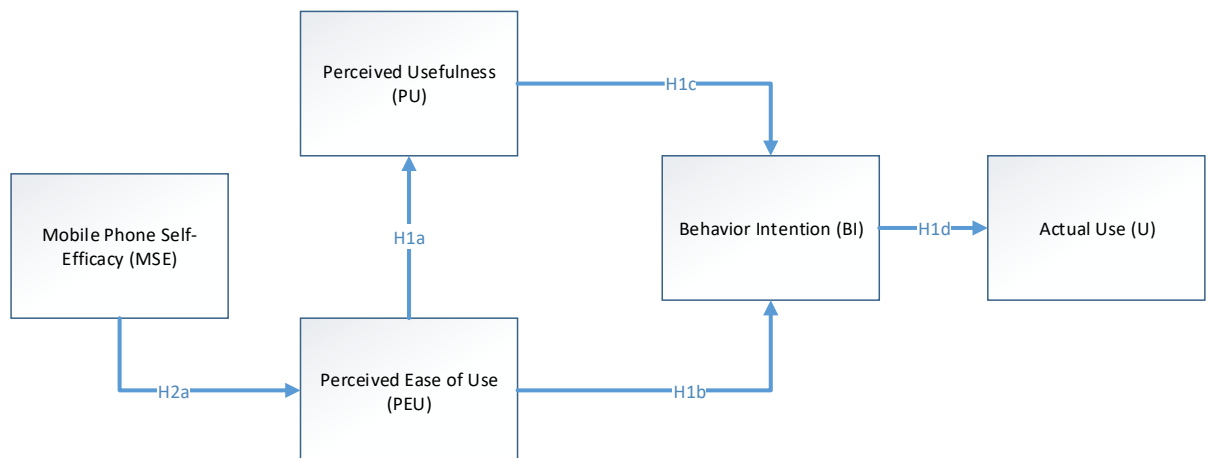
METHODOLOGY AND DATA COLLECTION

The survey used Structured Equation Modelling (SEM), which is among the leading approaches for qualitative data analysis according to Awang (2015). The software used to perform the analysis was the Analysis of Moment Structures (AMOS) (Kim, 2001). The questionnaires were translated from English to Kiswahili through

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linguistic experts because Kiswahili is a native language for Tanzanians. The reliability of the questionnaire was tested during the pilot study by using Cronbach alpha, as per Burgess (2001). The criteria for acceptable levels of alpha are 0.8, and higher is considered good, any value above 0.7 is satisfactory, and it is unacceptable if it is less than 0.5 (Loewenthal, 2001). The missing data were assessed using Missing Completely at Random (MCAR), as per Rubin (1976). Outliers were assessed by viewing a Squared Mahalanobis Distance (D^2)

which shows the distance of each element from the centroid (Cook, 1977). The severity of the extent of such outliers was assessed by using Cooks Distance (Cook 1977). In this approach, outliers are considered to have a significant bias effect on the predictors if Cook's distance value happens to be greater than 1.0 (Cook, 1977). The multivariate normality of the datasets was assessed by checking the kurtosis, which describes the deviation of variances and covariance from the centroid (DeCarlo, 1997). The kurtosis values which were mainly considered to conclude that if a variable is not normal, it should be not greater than 3 and the critical ration should not be greater than 5. In this study, the absolute fit was assessed using Chi-square (x^2), incremental fit through Confirmatory Fit Index (CFI), and the parsimonious fit was assessed by Chi-square/df (x^2/df). Correlation refers to how close two variables are to having a linear relationship with each other (Arbuckle, 2013). For each factor to explain a unique concept, they are allowed to correlate but with the only maximum of 0.8 (Hair et al., 1998). Unidimensionality assesses if each item measures only one construct in a model (Awang, 2015). According to Awang (2015), unidimensionality is attained when each of the items has the factor loading of value greater than 0.5. Construct reliability was measured using Cronbach's alpha (Tavakol & Dennick, 2011). Model fitness was assessed by three main categories of metrics: absolute fit, incremental fit and parsimonious fit (Awang, 2015; Hooper et al., 2008).

The survey questionnaire was designed into two parts, whereas the first part aimed to capture the perceptions of respondents concerning their use of mobile phones in the workplace. This consisted of five (5) constructs consisting of a total of 24 questions formulated using Likert scales (Albaum, 1997; Likert, 1932) in which respondents ticked the 5 point range from "strongly disagree" to "strongly agree". Likert scales were developed by Likert (1932) for measuring the attitudes by asking people to respond to the series of statements about a topic, in terms of the extent to which they agree with them, and so tapping into the cognitive and affective components of attitudes. The second part of the questionnaire captured the demographic information of the respondents. This included age, gender, education level as well as the type and size of SME in which the respondent works. This information was collected to find out whether the respondents represented a true

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population. The SMEs which deal with public transport was easily accessed in their stationery locations (for example the turning point of bus routes). Other SMEs such as bars, restaurants, and hotels were accessed in their offices. The questionnaires were printed, and the researcher and his assistant walked into the location and explained the aim of the study before asking for their voluntary participation in the survey. For those who agreed to participate, they were given a chance to ask for elaborations if and when they faced difficulties. The data were collected in three parts of Tanzania mainly Dar es Salaam, Kilimanjaro and Zanzibar.

RESULTS AND DISCUSSIONS

The pooled construct measurement model is as seen in Figure 2. This is a diagram that shows the extent to which all the measurement items represent their corresponding factors in a dataset (Awang,2015).

Figure 2. Pooled Construct Measurement Model (author)

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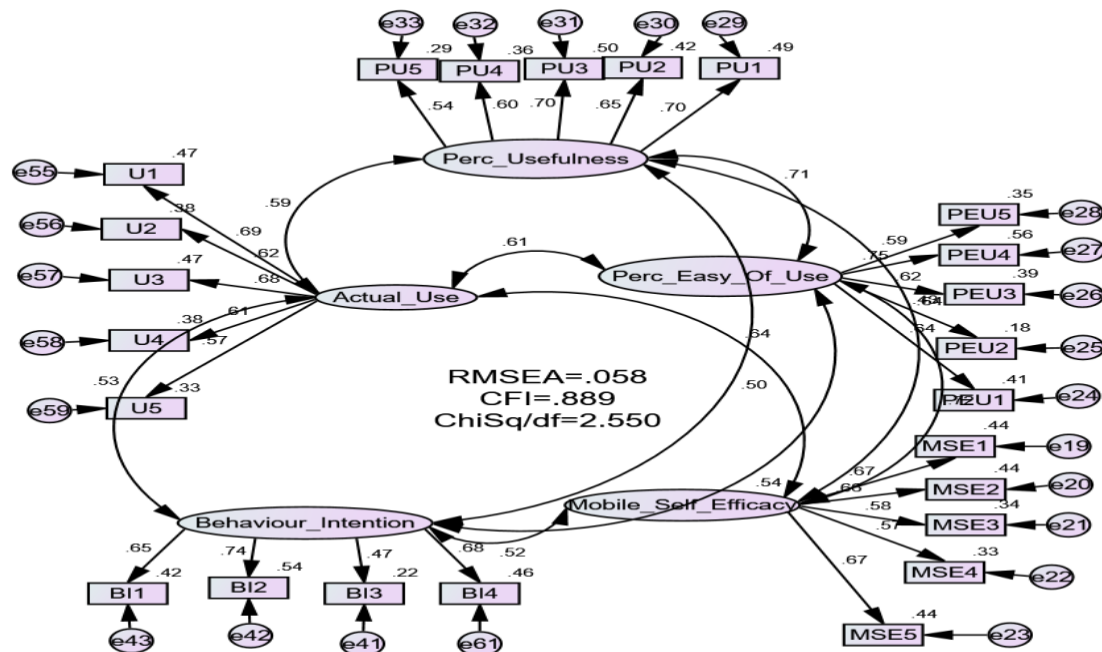
The attempt to achieve unidimensionality, validity and improving the model fitness improvethe pooled construct measurement model to a confirmed model seen in Figure3.

The unidimensionality was attained by adjusting the modification indices and removing the measurement items having factor loading values less than 0.5 (50%). The model fitness indices and their minimum threshold values are indicated in Table 2 and the confirmed measurement model is as seen in Figure 3. The value of Cronbach's Alpha was 0.817 which is above the minimum threshold value (0.6). This means that the theoretical model is reliable enough to be able to produce meaningful results. The results on the Common Method Variance are seen in Table 3 after extracting the total variance extracted where it can be seen that the 47% of the results are explaining the constructs only. Since this is less than 50%, the results are considered to have not been affected by CMV.

Table 2. The model fitness indices (Author)

Model fit parameter	RMSEA	CFI	ChiSq/df
Required value	<0.08	>0.90	<3.00
Before modifications	0.058	0.889	2.250
After modification	0.041	0.949	1.783

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Figure 3. A confirmed model of the study (Author)
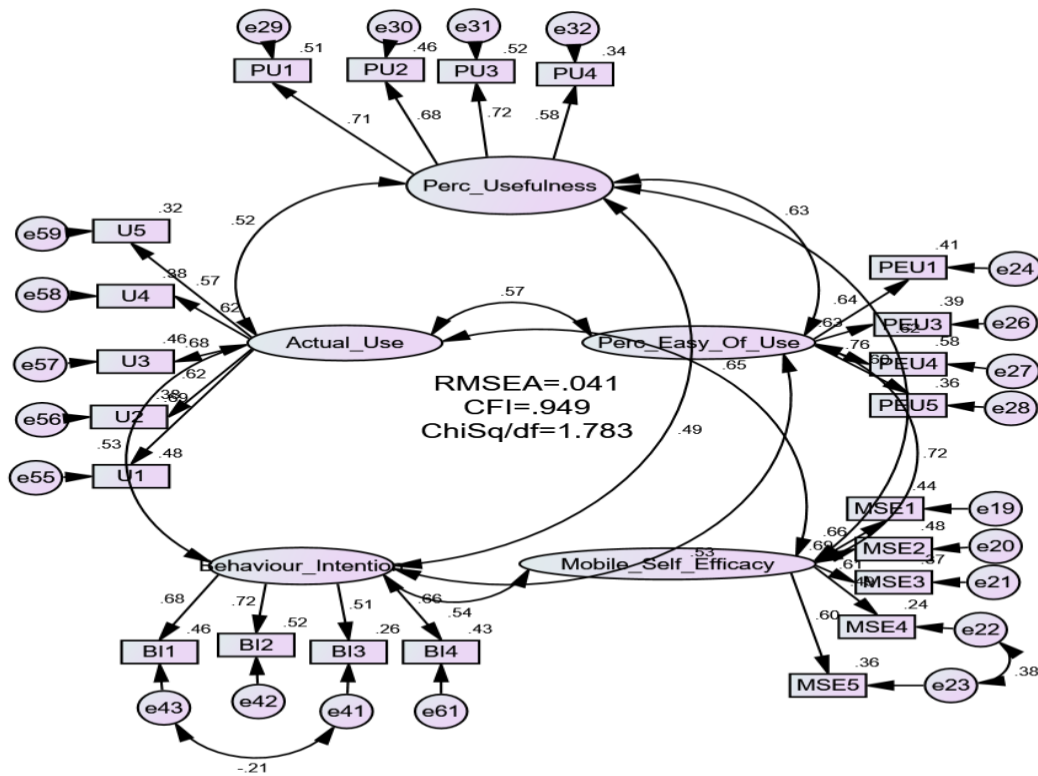
Table 3. The total variance extracted

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.893	57.853	57.853	2.383	47.667	47.667
2	.658	13.159	71.012			
3	.543	10.853	81.865			
4	.496	9.922	91.787			
5	.411	8.213	100.000			

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Table 4: Correlation statistics

Factor	Perc_Ease_of_Use	Perc_Usefulnss	Behavr_Intention	Mob_Self_Effcy	Act_Usge
Perc_Ease_of_Use	1				
Perc_Usefulnss	.583**	1			
Behavr_Intention	.404**	.418**	1		
Mob_Self_Effcy	.535**	.501**	.396**	1	
Act_Usge	.507**	.474**	.396**	.494**	1

The correlation statistics are seen in the correlation matrix table seen in Table 4. It can be seen in the correlation matrix table in Table 4, none of the correlation values was greater than 0.8. Therefore, the correlation between the factors of this study was within the acceptable ranges where the highest correlation is between *Perceived Usefulness* and *Perceived Ease of Use* (0.583) and the lowest correlation is between *Actual Use* and *Behaviour Intention* and *Mobile Self-Efficacy* and *Behaviour Intention*.

The structural model of the study is as seen in Figure 5. It is a version of a theoretical model drawn in AMOS software for analysis purpose after the model has been confirmed. It can be seen that the fit indices of the structural model are within the acceptable threshold values. In this case, the path analysis results can be accessed for further discussions. As seen in Table 4, some relationships were significant while others were not. A relationship is considered to be significant if the P-value is less than 0.05 (***P<0.05) (Awang, 2015). In that case, all the relationships were found to be statistically significant.

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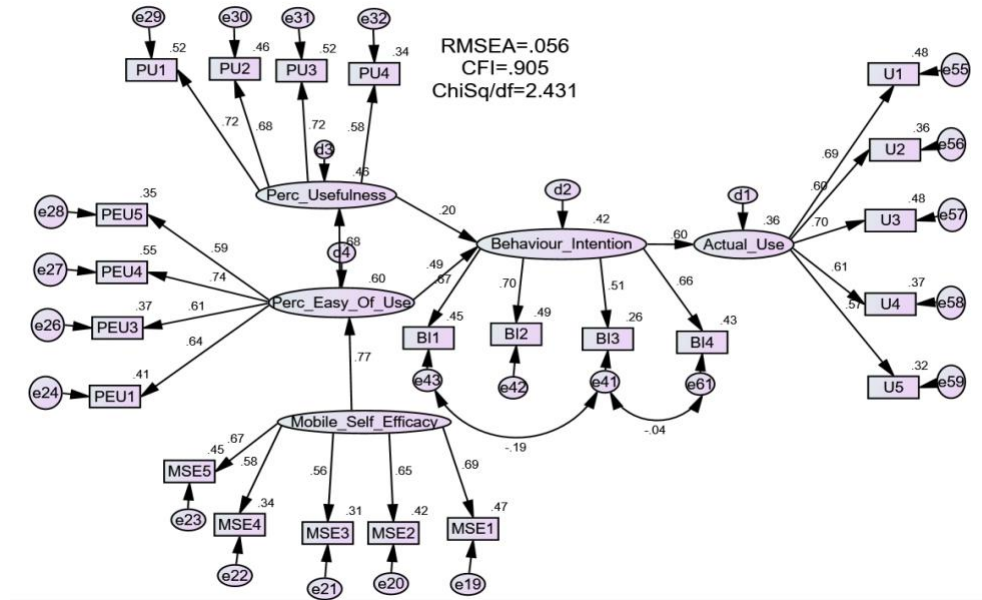**Figure 5. A structural analysis diagram of the study (author)**

Table 5. The regression analysis results

Regression Weights			Estimate	S.E.	P	Label
Perc_Easy_Of_Use	<---	Mobile_Self_Efficacy	0.697	0.071	***	H2a
Perc_Usefulness	<---	Perc_Easy_Of_Use	0.841	0.092	***	H1a
Behaviour_Intention	<---	Perc_Easy_Of_Use	0.427	0.08	***	H1b
Behaviour_Intention	<---	Perc_Usefulness	0.132	0.058	0.023	H1c
Actual_Use	<---	Behaviour_Intention	0.833	0.121	***	H1d

S.E. STANDARD ERROR, *** p<0.05

This study hypothesised that *Perceived Ease of Use* had a direct influence on the *Perceived Usefulness* of mobile phone technology amongst employees. This was also supported by some studies in the context of acceptance of mobile phone technologies on other focus areas (Byomire & Maiga, 2015; Yueh et al., 2015). The results of this study in Table 5 show that *H1a* was statistically significant. That

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means this hypothesis is supported. This study, therefore, suggests that the more an employee perceived that mobile phones were easy to use, the more they perceived that they were useful to them.

The Direct Influence of Perceived Usefulness on Behavior Intention (H1c)

The relationship between *Perceived Usefulness* and *Behaviour Intention* in the Tanzanian SMEs was also accepted as seen in Table 5, where the hypothesis *H1c* was found to be statistically significant. This suggests that the perception of the usefulness of mobile phone technology in their activities influences their intention to use it in future. This observation is in contrary with the study on the employee acceptance of integrating mobile commerce in their workplaces in which *Perceived Usefulness* did not have a significant influence on their *Behaviour Intention* (Gribbins et al., 2003; S. H. Kim, 2008; Prieto et al., 2015).

Other findings which have also supported this hypothesis that *Perceived Usefulness* has a positive and significant relationship with *Behaviour Intention* in different contexts of mobile phone usage (S. H. Kim, 2008; Prieto et al., 2015). Kim (2008) assessed the acceptance of mobile wireless and smartphones technology acceptance with individuals, in a typical voluntary situation in which users are free to decide to use or not use the technology. In those circumstances, the *Behaviour Intention* is focused on using mobile phones for only personal uses in the future, unlike in this study where it focuses on using mobile phones in performing work obligations within SMEs.

The Direct Influence of Perceived Ease of Use on Behaviour Intention (H1b)

This study posited that whenever an employee thought that mobile phone technology was easy to use, their intention of using them in the near future would also be influenced. The results of this study supported this, as seen in Table 5, where hypothesis *H1b* was found to be statistically significant.

The results of this study are in line with the context of acceptance of smartphones (Chen et al., 2009) and employees acceptance of mobile commerce (Gribbins et al., 2003). This implies that if employees of SMEs perceive that it is easy to use mobile phones, then it will be useful in their work.

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The Direct Influence of Mobile Phone Self-Efficacy on the Perceived Ease of Use (H2a)

It was hypothesised that when users believe that they can use their mobile phones confidently and they are sure that its use can accomplish what they want to do, it will influence their perception concerning its ease of use.

Referring to Table 5, hypothesis *H2a* was statistically significant. Therefore, this study supports this relationship.

This outcome is in line with the study which showed that *Mobile Phone Self-Efficacy* positively influence teacher's acceptance of mobile phones in pre-school learning (Prieto et al., 2015), and another one which shows that *Self-Efficacy* had a direct effect on *Perceived Ease of Use* in the logistics industry (Chen et al., 2009).

In general, the results regarding this hypothesis could be attributed to the fact that it is difficult to feel the ease use of technology unless one has the confidence in using it. Even though the majority of employees in SMEs were not technology savvy, usage of the mobile phone was still very popular, and they had full confidence in using mobile phones for the few activities they could perform with it. Their confidence was driven by the experience of using, and this made them believe that mobile phones were easy to use in performing their work obligations.

Direct Influence of Behaviour Intention on Actual Usage (H1d)

This study hypothesised that, whenever employees intend to use mobile phone technology to perform SMEs activities, they would use it. This was based on the literature which posits that an intention to use technology influences its actual usage in several contexts (Byomire & Maiga, 2015; Davis, 1989; Kwon & Chidambaram, 2000; Venkatesh & Davis, 2000). Therefore the results were reviewed to validate the concept.

The results in Table 5 show that the hypothesis *H1d* was supported by this study. There was a statistically significant relationship between *Behavioural Intention* and *Actual Usage* of mobile phone technology in SMEs. This implied that, if employees intended to use mobile phones in performing their activities within the SME in which they work, they would use them effectively.

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CONCLUSION

This article discussed the influence of *Mobile Phone Self-Efficacy* on the acceptance of mobile phone technology in SMEs. The research was conducted by extending the TAM with another actor which investigates the aspects related to the extent to which employees of SME perceive that they are capable of using mobile phones and are sure that they can accomplish their duties with such technology. The research results have shown that all the proposed hypotheses were supported. In that case, employees of SMEs have to be equipped with necessary skills which will boost their confidence to use mobile phones confidently or work. Further research may focus on other perspectives of using mobile phone technology like enjoyable features and the impact of the essence of prestige from the family, friends and peers to the acceptance of mobile phone technologies.

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