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Adoption of Mobile Money Services: Evidence from Tourist Enterprises in Tanzania

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Abstract

This chapter focused on analyzing determinants of mobile money adoption among SMEs in the tourism sector. Survey design was used where stratified sampling technique was used to ensure representativeness of the sample from Arusha, Dar es Salaam and Unguja. Thereafter, simple random sampling was used to draw a sample of 328 respondents. The findings of the study, based on using structural equation modeling revealed that internal pressures and facilitating conditions significance influence mobile money services adoption while external pressure were found to have insignificant contribution. This chapter concluded that facilitating conditions specifically compatibility, expertise and regulatory framework, and the internal pressure such as employee, managers and owners' pressure have a significant influence on SMEs in adopting mobile Money. This study recommended that for SMEs to effectively adopt mobile money, vendors and government must develop the mobile money and regulatory framework which fit well to SMEs daily operations.

Keywords: *Mobile Money, Tourist Enterprises, SMEs*

1.0 Introduction

Worldwide, tourism sector is regarded as one of the potential sectors in social and economic development dominated by small and medium scale enterprises. The tourism sector is a major contributor to the economy as well as in foreign exchange in both developed and developing countries including Tanzania (Ardahaey, 2011). The rapid growth of competitive market has forced the SMEs in tourism sector even in least developed countries to adjust itself in the digital era for them to compete and contribute to the economy (Nganga and Ochiri, 2018). Mobile money is evidenced as one of the suitable alternatives of ICT by most SMEs including those in the tourism sector to transform their market in a dynamic and competitive market (Peng, et al., 2013).Notably, William (2015) argued that mobile application offers considerable opportunities for large and small firms across to expand their customer base and rationalize their businesses by competing in the global economies. In Nigeria for example, the new payment instruments have not only been found to serve the purpose of consumers to make micropayments for their ordinary and micro-transactions but also are imperative for global competitiveness (Igudia, 2017). Given developing countries are powered by informal economies that traditionally have had limited access to information technologies, mobile payment system infrastructure has the potential to transform the way microenterprises conduct business (Frederick, 2014).

Economy as part of its effort to become a member of the twenty most economically developed countries in the world by the year 2020 (Igudia, 2017). To achieve this, the Nigerian government created the policy of a cashless economy in which all payments for goods and services especially in businesses have to be done electronically(ibid). Like other countries, the government of Tanzania has established the National ICT policy to create a sound environment to support SMEs' financially and in promoting the adoption of the latest technologies to promote their businesses (URT, 2017).

In spite of the benefits derived from mobile money and initiative which are done to enhance its adoption, it is well evidenced that SMEs in tourism have been slow in adopting and using mobile money services. Policies and various studies have confirmed that SMEs are slow in adopting and using mobile money services. For example, Dubihlela and Kupangwa (2016) have found and confirm

that SMEs in the developing economies have been slow in adopting and using mobile money services. In Africa, Kenneth,et al.(2012) note that small medium tourist enterprises in Kenya, have generally been slow to adopt and evaluate electronic commerce.

Tanzania like other countries, despite the fact that several initiatives have been made to enable adoption of mobile money, the adoption and usage of the mobile payment technology has been disappointing (Anthony and Mutalemwa, 2014). This was also found by Lema (2017) who advocated that the use of mobile money services by the poor in the unbanked areas where small and medium tourist enterprise are included is very low in Tanzania.

Despite the low uptake of mobile money by SMEs and their contribution in the national economy, little has been done in the literature to analyze factors influencing its adoption. Even those few studies, their results have been found with conflicting views. For example, scholars(Lwoga and Lwoga, 2017)have supported the influence of external pressures, internal pressures and facilitating conditions to have significant influence in supporting the adoption of mobile money while on the other side other scholars (Al-Somali , et al., 2011; Omotayo and Dahunsi, 2015) have found insignificant contributions of internal pressure, external pressure and facilitating conditions. Therefore, it is not clear what determinants could help in pushing the SMEs in tourism toward mobile money adoption. As argued by Igudia (2017) that no nation can compete in a global market without developing a versatile and veritable platform for competition especially in trade and commerce through electronic business and mobile commerce. To enable SMEs in tourism sector to act as a symbol of economic success for African economies, this study fills the gap by analyzing the determinants of mobile money adoption among SMEs in the tourism sector.

2. Literature Review

2.2 Theoretical Literature Review

2.2.1 Institutional theory

According to DiMaggio and Powell (1983) Institutional theory states that organizations are affected by the environment in which they operate and that this comprises both technology and the institutional environment. As argued by Oliveira and Martins (2011) that institutional theory postulates that mimetic,

coercive, and normative institutional pressures existing in an institutionalized environment may influence the organization's predisposition toward an IT-based inter organizational system.

The applicability of institutional theory in studying adoption of technology is well evidenced. For example, Nurdin,et al. (2012) found and concluded that four institutional external forces, central government, regulations, local citizens and limitation in financial resources, have strongly influenced the regency to adopt and implement electronic systems. On the other hand, Jan, et al. (2012) found that normative and mimetic pressures of institution theory significantly influence the attitude and intention of adopting electronic services.

Despite its suitability in studying the adoption of technology, yet scholars (Oliveira and Martins, 2011) have evidenced that the institutional theory has ignored the influence of tangible resources on firm adoption of technology. To address this weakness, Nurdin, et al. (2012) have advocated that institutional theory can be combine with other theories. In this chapter, institution theory combined with resource based theory to address the explanatory power of resources on adoption. Given this justification, this chapter used institutional theory to provide further analysis of the influence of external institutional pressures, internal institutional pressures and facilitating conditions on adoption of mobile money services.

2.2.2 The Resource Based Theory (RBT)

RBT states that differential firm performance is due to firm heterogeneity (Barney, 1991). A firm owns resources that are rare, valuable, non-substitutable, and difficult to imitate will achieve sustained competitive advantage (ibid). Resource based theory emphasis is on resource possessed by the firm and its capability to utilize the resources tend to enhance SMEs adoption of mobile money for competitive advantage in tourism. The idea of resource and capability for firm success is evidenced by Matwiejczuk (2011) who found and conclude that financial capabilities and resources of the firm are key on the market success of a SMEs in tourism. However, this theory has ignored other factor other than resources. To enhance its applicability, this theory was integrated with institution theory. Resource based theory was used to provide further analysis of the influence of facilitating conditions on the mobile money adoption among SMEs.

2.3 Empirical Literature Review

2.3.1 Influence of External Institutional Pressures on Adoption of Mobile Money Services

Kenneth, et al.(2012) carried out a study on factors affecting adoption of mobile commerce among small and medium enterprises in Kenya. Using structural equation modeling the findings from tour and travel firms showed the significance influence of competitors on the adoption of electronic commerce. The findings further recommended that mobile commerce provides SMEs with new opportunities to participate in new supply chains and markets, thus competing with established channels and established market structures, hence a boost to withstand competition. On the other hand, Ramadhan, et al. (2017) conducted a study on determinants of mobile money services adoption by traders in Uganda. The findings revealed that traders may adopt mobile money services because of the influence of their business rivals (competitors) and business partners as well.

2.3.2 Influence of Internal Institutional Pressures on Adoption of Mobile Money Services

Abdullah, et al. (2013) conducted a study on technology adoption enablers among Malaysian SMEs. Findings showed that internal factors (team work, organizational structure, staff readiness and organizational culture) have significant influence. On the other hand, Padachi (2010) on their study on internet banking among SMEs in Mauritius. The results have shown that SME owner/managers have significance.

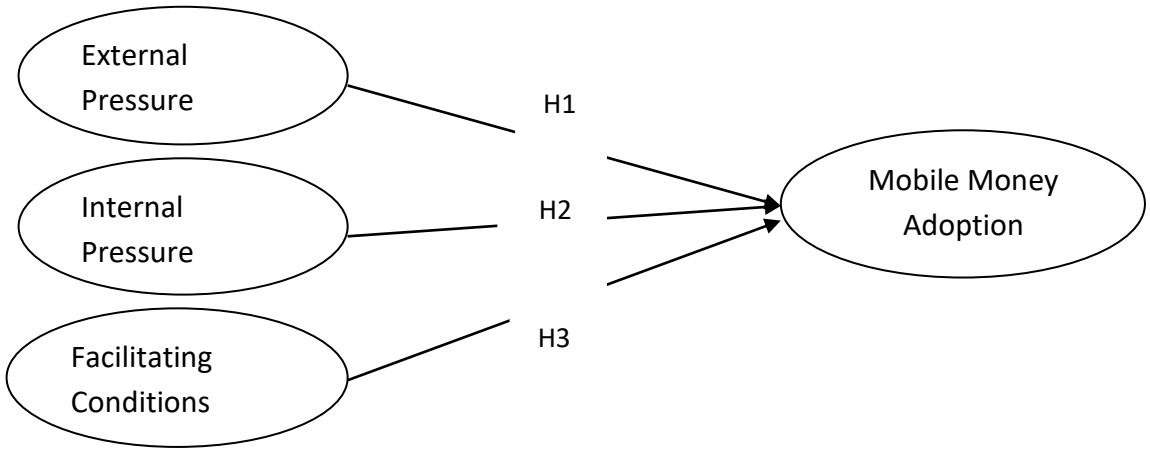
2.3.3 Influence of Facilitating Conditions on Adoption of Mobile Money Services

Peng, et al.(2013) carried out a study exploring tourist adoption of tourism mobile payment in China. The empirical results show especially strong support for the effects of perceived security, perceived compatibility, destination m-payment knowledge, and tourist susceptibility to interpersonal influence. It was recommended that system developers should provide a user-friendly interface, reinforce security mechanisms for tourism m-payment services, and design a suitable information system flow more compatible with user's work style. On the other hand, Liu and Tai (2016) carried out a study of factors affecting the Intention to Use Mobile Payment Services in Vietnam. Findings using structural

equation modeling indicated that the strong predictors of the intention to use M-payment are perceived ease of use, compatibility and mobile payment knowledge. Further the results has proved that trust of safe to use has no significant impact on usefulness, but instead has direct impact on intension to use mobile payment services. Anthony and Mutalemwa (2014) carried out a study on factors influencing the use of mobile payments in Tanzania. Analysis of the findings revealed that perceived ease of use, perceived usefulness, perceived cost, perceived mobility, perceived trust and perceived expressiveness have significant influence on mobile payment. This study was conducted on only one mobile service provider, thus it is recommended that the same study should be conducted by comparing and contrasting the factors necessary for adoption and usage of the M-payment services of all mobile service providers in Tanzania.

2.4 Conceptual Framework

This framework was composed of three independent variables namely external pressure, internal pressure and facilitating conditions and one dependent variable namely mobile money adoption as described below.



Source: Constructed by Author (2019)

3. Methods

3. 1.Research Paradigm

Saunders et al. (2012) define research paradigm as a system of beliefs and assumptions on knowledge development. Positivism paradigm was adopted. Bryman (2015) advocated that positivism paradigm is based on the assumption that the scholar produce knowledge and understand realities through theory and empirical evidence available. In this chapter, positivism was used to acquire knowledge and understands adoption of mobile money base on available theories and empirical evidences to explain the determinants of the adoption of mobile marketing among SMEs in tourism. Hence, positivism paradigm was used as it offers a chance to a researcher to use available theory and test the significant influence of determinants of adoption of mobile marketing in the tourism context.

3.2. Study Area

The study was conducted in Tanzania more specific in Arusha, Unguja and Dar es Salaam. This area has been selected because of high involvement in tourism business activities which has resulted into high number of small and medium tourist enterprises. Therefore, collecting data from this area helped in providing adequate information in understanding the adoption of mobile money among tourist enterprises in Tanzania.

3.3 Sampling Procedure

The study started by using stratification sampling technique. The main objective of starting with stratified sampling was to ensure sample representative from Arusha, Unguja and Dar es Salaam and enabled easy to administer data collection tools which led to more reliable results. After stratification of the sample, a simple random sampling was used to select respondents from each strata.

3. 4 Data Collection Techniques

Questionnaire was used in this study to collect quantitative data suitable for hypothesis testing and model validation. As argued by Gray (2009), that structured questionnaire is mostly used to capture measurable data for statistical testing of the hypothesis of the study. The coded questionnaire is attached at appendix I. On the other hand, documentary review was used in providing data interpretation, support and give evidence of field data. As it is evidenced by Gray (2009) that, social scientists use documentary research methods to

supplement and confirm on the information collected through social surveys. In this study, the documentary review served the same purpose.

3.5 Construct Validity and Reliability

Reliability was evaluated in terms of composite reliability as described in table 3.1. The composite reliabilities (CR) in table 3.1 ranged from 0.904 to 0.959, which were all above the recommended value of 0.7, suggesting adequate internal consistence (Asparouhov and Muthén, 2015).

Convergent validity and discriminate validity was assessed based on the results of the measurement model as described in table 3.1. Convergent validity was evaluated in terms of average variance extracted (AVE), which explained the variance that was measured by the construct in relation to the measurement error. Zaiţ and Bertea (2011) argued that convergent validity requires an AVE of not less than 0.5. Table 3.1 shows that all AVE values were above the recommended value of 0.5 (ranging from 0.711 to 0.887), thus demonstrating adequate convergent validity. On the other hand, discriminate validity was evaluated by comparing the AVE of each individual construct with the shared variances between this individual construct and all of the other constructs. A higher AVE than shared variance for an individual construct suggests discriminate validity (Smith, 2005). A comparison of all of the correlations and square roots of the AVEs on the diagonal in table 3.1 indicated adequate discriminate validity.

Table 3.1 Reliability and Validity

	CR	AVE	MSV	MaxR(H)	INT	EX	FC	AD
INT	0.946	0.853	0.118	0.953	**0.924**			
EX	0.904	0.711	0.064	0.989	0.211	**0.843**		
FC	0.959	0.887	0.124	1.006	0.291	0.253	**0.942**	
AD	0.938	0.793	0.124	0.962	0.343	0.037	0.352	**0.890**

4. Findings

4.1 Model Formulation and Validation

This section helps to consider if the proposed conceptual framework is indeed consistent with actual data. This is because at the beginning, the conceptual framework was developed without data it is now not clear if the construct are aligned with their underlined measure.

To ensure construct are aligned with their underlined measure factor analysis of both exploratory factor analysis and confirmatory factor analysis was used as described below.

First exploratory factor analysis with varimax rotation was conducted to assess the underlying structure for the thirty seven (37) items of the conceptual framework. In selecting factors to retain, four criteria were adopted namely eigen values, scree test (i.e., scree plot), theoretical assumption and factors that have at least three items. Yong and Pearce (2013) recommended the use of a combination of criteria to help to offsite the weakness of using one criterion.

Given this situation four factors were extracted based on those four criteria which explain 78.362 % of the cumulative variance. The four factors had Eigen values >1 attached at appendix II , in a scree test all factors above the cutoff point was retained and those below the break/cut off point were dropped. Finally, all retained factors had at least three indicators. These means that all retained factor had meet the recommendation made by Yong and Pearce (2013).

After discovering that the four factors have met the criteria and now are qualified to be retained, further analysis of indicator variables was done in order to see if this indicator really fits their underlying factor. The following criteria recommended by Yong and Pearce (2013) were adopted for retaining/dropping an item/indicator as follows:

First, all items loaded into their associated factors were retained and those loaded into more than one factor were dropped. Second, if more than two items loaded in one factor all items were retained and if less than three items loaded in one factor were all dropped. Third, all items with KMO p-value greater than 0.5 were retained and those with less than 0.5 were dropped. Fourth, all items with loading ranging from 0.5 to 0.8 were retained and those with loading less than 0.4 or above 0.8 were dropped.

As far as this chapter is concerned, the following items namely EX1,EX3,EX5, FC2,FC4, INT2,AD2 and AD5 presents a selected output of SPSS of items which were dropped to enhance model fit. On the other hand, those items that fitted well were retained as described below in Table 4.2Rotated Component Matrix[a].

Table 4.1 Rotated Component Matrix[a]

ITEMS	Component			
	EXTERNAL PRESSURE	FACILITATING CONDITIONS	INTERNAL PRESSURE	ADOPTION
EX2	.898			
EX5	.867			
EX8	.807			
EX6	.794			
EX7	.777			
FC5		.917		
FC3		.890		
FC6		.887		
FC7		.677		
FC1		.660		
INT5			.914	
INT3			.910	
INT1			.897	
INT4			.892	
AD4				.924
AD1				.888
AD3				.878
AD6				.870
Eigen values	6.408	3.321	2.413	1.964
% of Variance	19.982	19.905	19.593	18.882

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

After exploratory factor analysis, the next step was to perform confirmatory factor analysis to account for measurement error which was not addressed in exploratory factor analysis as described in detail below.

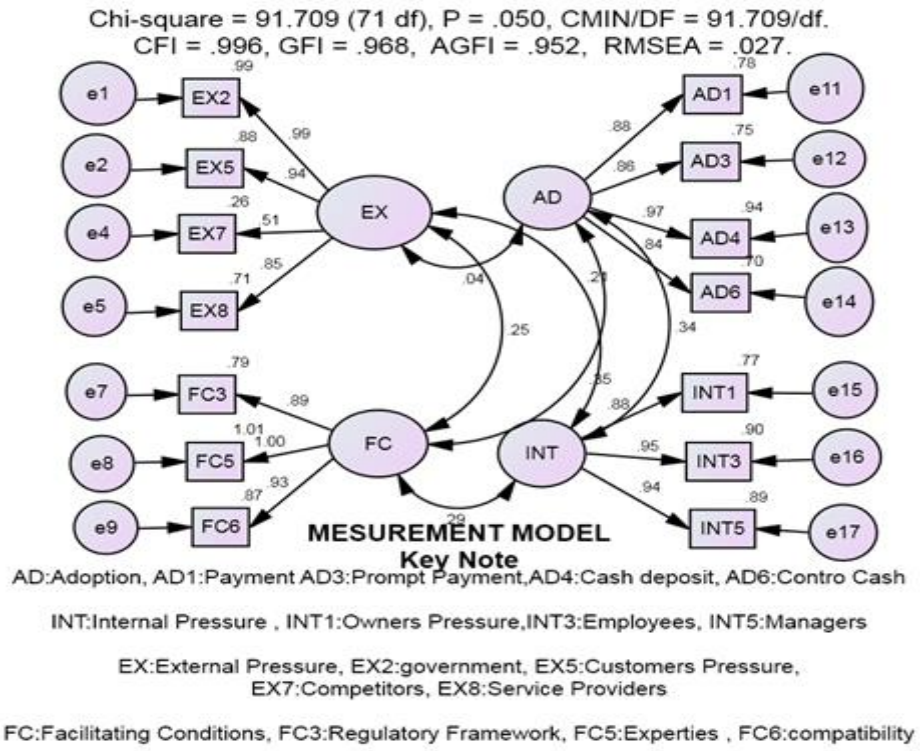
To carry out confirmatory factor analysis, the measurement model was developed based on the factors from exploratory model to test for measurement error. The following criteria were used to guide the model refinement process to achieve a better model fit as recommended by Byrne (2010) who asserts that a Standardised regression weights (S.R.W) values should be above 0.5, the value of GFI, AGFI and CFI >0.9 and RAMSEA <0.08. Therefore to enhance model

fitness, an item with modification indexes that reveal high covariance between measurement errors accompanied by high regression weights between these construct errors were dropped.

After initial run of the Amos 20 the model performed poorly and refinement process of the model was done by removing the following items namely EX6, FC1, FC7 and INT4 which had high modification index to improve the model.

After the deletion of those items performed poor, a re-run of CFA using Amos 20 reveled a GFI =.952, AGFI=968, CFI = .996, and RMSEA = .027. All items retained had standardized regression weights (S.R.W) values cut of 0.45 or greater the accepted fit, hence falling within the acceptance framework this means that the selected observed variable used fit the model as describe in figure 4.1 Measurement Model.

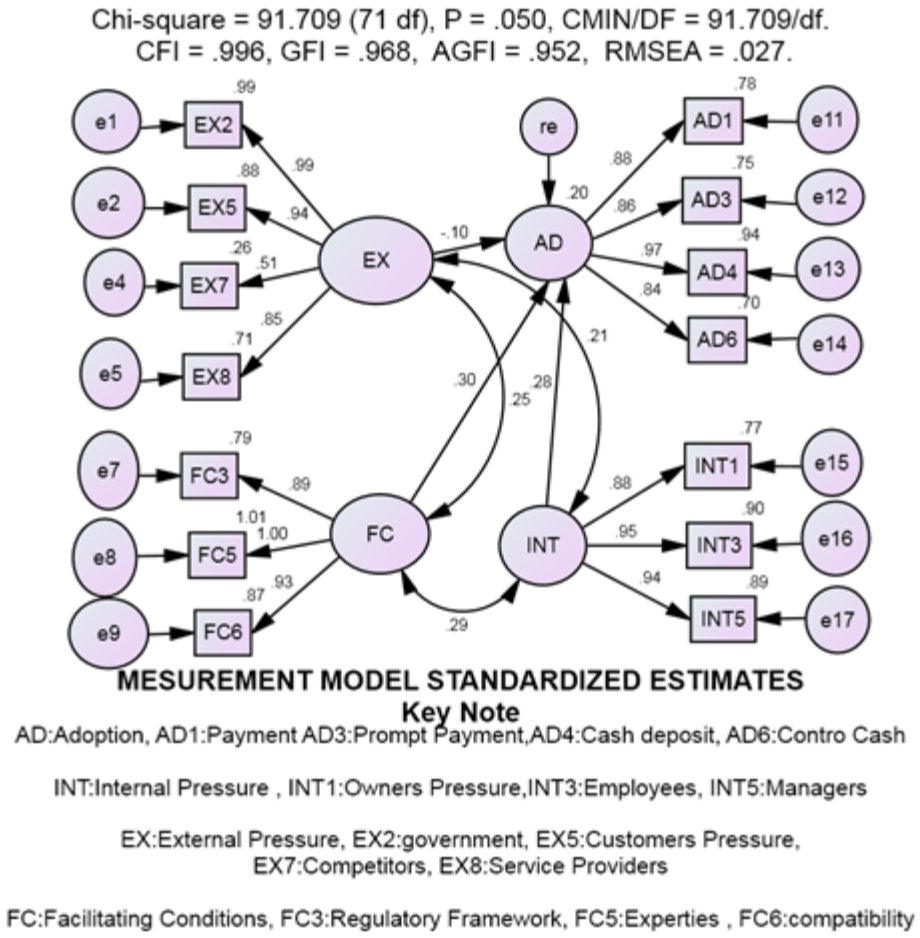
Figure 4.1 Measurement Model



Having established the model fit and all hypothesis of the relationship between observed and unobserved variable have agreed in the measurement model. The next step was to move to a structural model to test the existence of relationship in the model. The basic structural model which hypothesized the relationship between external pressure, internal pressure and facilitating conditions on

mobile money adoption was analyzed. The results of the analysis of the basic structural model using AMOS version 20 are diagrammed in Figure 4.2 below.

Figure 4.2 Measurement Model



From figure 4.2 all model fit index had a good fit (GFI=0.968, AGFI=0.952,CFI=0.996, RAMSEA=0.027) as suggested by Byrne (2010). Having established a model fit which indicate a good fit using indices, the path coefficient and hypothesis testing was evaluated as elaborated in the next section using this model.

4.2 Path Analysis and Coefficients

4.2.1Influence of External Institutional Pressures on Adoption of Mobile Money Services

The first postulated relationship of this study hypothesized a positive and strong significant relationship between external pressures and SMEs adoption of mobile money services in tourism as stated below.

H1: External Pressures (EX) have significant and positive influence on adoption of mobile money services among SMEs in tourism.

External Pressures were measured using four measurement namely government (EX2), Customers Pressures(EX5),Competitors (EX7) and Service Provider (EX8).

In order to test this hypothesis, the results from structural model in figure 4.2 above were used to determine the positive and significant influence of external pressure on SMEs adoption of mobile money as illustrated below in Table 4.2.

Table 4.2 External Pressure Path Coefficient

	Estimate	S.E.	C.R.	P	S.R.W	REMARKS
AD <--- EX	-.093	.047	-1.969	.049	-0.097	REJECTED
EX2 <--- EX	1.081	.037	29.221	***	0.994	
EX5 <--- EX	1.061	.040	26.814	***	0.937	
EX7 <--- EX	.652	.059	11.013	***	0.514	
EX8 <--- EX	1.000				0.848	

The results of the standardized path coefficients (γ) in Table 4.2 above yield standardized regression weights of -0.096 which indicate a weak negative relationship between external pressures and SMEs in adoption of mobile money services. Chin (1998) has postulated that a standardized paths coefficient (γ) should be at least 0.2 in order to be considered significant and meaningful for discussion. In our case, the standardized path coefficient of -0.096 which is below the recommended value to be considered for meaningfully discussions.

This means that external pressures are not positively associated with SMEs adoption of mobile money services.

Further analysis of the significant influence of external pressures on adoption of mobile money in Table 4.2 above has yield a critical ration of -1.969 and *p* =0.049. As argued by Hox and Bechger (2014) a relationship which has yield a critical ratio greater than 1.96 and p-value less than 0.05 is considered significant. Based on the findings in the current study the influence of external pressure on SMEs adoption of mobile money was found to be insignificant.

4.2.2 Influence of Internal Institutional Pressures on Adoption of Mobile Money Services

The second postulated relationship in this study hypothesized a positive and strong significant relationship between internal institutional pressures and SMEs adoption of mobile money services as stated below.

H1: Internal Institutional Pressures (INT) have a positive and significant influence on SMEs adoption (AD) of mobile money services.

Internal Institutional Pressures were measured using for measurement namely Owners Pressures(INT1), Employees(INT3) and Managers (INT5).

For testing the stated hypothesis, the results from structural model in figure 4.2 above was used in order to determine the positive and significant influence of Internal Institutional Pressures on SMEs adoption of mobile money as illustrated below in Table 4.3.

Table 4.3 Internal Institutional Pressures Path Coefficient

	Estimate	S.E.	C.R.	P	SRW	REMARKS
AD <--- INT	.230	.043	5.381	***	0.277	Accepted
INT1 <--- INT	.968	.033	29.031	***	0.879	
INT3 <--- INT	.997	.028	35.862	***	0.946	
INT5 <--- INT	1.000				0.944	

The path leading from *INT* to AD in Table 4.4 is used to examine the relationship between Internal Institutional Pressures and SMEs adoption of mobile money services. A positive path coefficient (γ = .277) using standardized estimate results in Table 4.3 above indicates that Internal Institutional Pressures are positively related to SMEs adoption of mobile money services. This concurs with Chin (1998) and Hoe (2008) who argue that a standardized paths coefficient (γ) should be at least 0.2 in order to be considered significant and meaningful for discussion. The results thus in the current study confirm a strong positive relationship between Internal Institutional Pressures and SMEs adoption of mobile money services.

Apart from standardized coefficient, further analysis was done using critical ratio and p-value to determine the significant influence of Internal Institutional Pressures on SMEs adoption of mobile money services. In this study the findings yielded a critical values (C.R = 5.381) which is (greater than 1.96) and significance level of p-value=0.00. The results concur with Hox and Bechger (2014) who argued that a relationship which has yield a critical ration greater than 1.96 and p-value less than 0.05 is considered significant.

4.2.3Influence of Facilitating Conditions on Adoption of Mobile Money Services

The third postulated relationship of this study hypothesized a positive and strong significant relationship between facilitating conditions and SMEs adoption of mobile money services as stated below.

H3: Facilitating Conditions (FC) have significant and positive influence on adoption of mobile money services among SMEs.

Facilitating Conditions (FC) were measured using measurement namely Regulatory Framework (FC3), Expertise (FC5) and Compatibility (FC6).

In order to test this hypothesis, the results from structural model in figure 4.2 above was run in order to determine the positive and significant influence of facilitating conditions on SMEs adoption of mobile money as illustrated below in Table 4.4.

Table 4.4 Facilitating Conditions Path Coefficient

			Estimate	S.E.	C.R.	P	S.R.W	REMARKS
AD	<---	FC	.293	.050	5.808	***	0.296	ACCEPTED
FC3	<---	FC	.947	.031	30.505	***	0.887	
FC5	<---	FC	1.012	.022	46.364	***	1.003	
FC6	<---	FC	1.000				0.932	

The path leading from *FC* to AD in Table 4.4 is used to examine the relationship between facilitating conditions and SMEs adoption of mobile money services. A positive path coefficient (γ = .296) using standardized estimate results in Table 4.15 above indicates that Facilitating Conditions are positively related to SMEs adoption of mobile money services. This concurs with Chin (1998) and Hoe (2008) who argue that a standardized paths coefficient (γ) should be at least 0.2 in order to be considered significant and meaningful for discussion. The results thus in the current study confirm a strong positive relationship between facilitating conditions and SMEs adoption of mobile money services.

Apart from standardized coefficient, further analysis was done using critical ratio and p-value to determine the significant influence of facilitating conditions on SMEs adoption of mobile money services. In this study the findings yielded a critical values(C.R = 5.381) which is (greater than 1.96) and significance level of p=0.00.The results concur with Hox and Bechger (2014) who argued that a relationship which has yield a critical ration greater than 1.96 and p-value less than 0.05 is considered significant.

5. Discussion of the findings

5.1 Influence of External Institutional Pressures on Adoption of Mobile Money Services

The chapter considered whether external pressures could have significant influence on SMEs adoption of mobile money services in tourism sector. Based on that background, the current study hypothesized that external pressures have a positive and significant influence on SMEs adoption of mobile money services in the tourism sector. The empirical results in the findings on the above hypothesis has yielded standardized coefficient estimate (γ) of .203, critical ration (C.R) of -1.969 and significant p-value of .049 which indicate week negative correlation and insignificant relationship. These insignificant finding have concur with the findings of previous studies (Alam and Noor , 2009; Al-Somali , et al., 2011; Omotayo and Dahunsi, 2015). Notably example in Alam and Noor (2009) external pressures are found to be insignificant in determining adoption among SMEs in Malaysia. On the other hand Al-Somali , et al.(2011) found and concluded that external pressures does not impact adoption of latest technology among firms in Saudi Arabian. These findings imply that context does not affect the outcome of the finding as the finding of the current study has appeared to be similar from studies conducted from different context findings.

While these findings support the findings of the current study on the insignificant influence of external pressures, but their insignificant value is explained by different measures. For example in Al-Somali, et al.(2011) the insignificant level of external pressure is explained by the fact that customers pressures were found to have little effect on the adoption due to little education in Saudi Arabian firms. These findings concur with the argument made by Chirchir and Simiyu (2016) who argued that for customer to push SMEs to adopt mobile banking there should be a programme on customer education on the usefulness of integrating m-banking options like saving, credit/debit alerts, bill payments and financial services like share trading. In related study, Omotayo and Dahunsi (2015) explained the insignificant of external pressures was due to low explanatory power of IS vendors' support. In the current study the insignificant influence is explained by low explanatory power of government pressure, customers pressures, competitors and service provider. This implies that in the current study, government pressure, customers pressures, competitors and service provider are not the only influence of SMEs

adoption of mobile money services in tourism but there might be other measures for pushing SMEs adoption of mobile money services.

In unrelated perspective, some previous studies (Otieno and Kahonge, 2014; Igudia, 2017) have found a significant influence of external pressure which is contrary to the current study. For example Riyadh, et al.(2009) found and concluded that the adoption of mobile banking among SMEs in developing countries and in Botswana is influenced by external forces. On the other hand Igudia (2017) found competitive pressures and government interventions to have a strong external pressure for adoption of electronic payment systems by SMEs in Nigeria. This implies that findings from different countries in developing countries are affected by contextual different. In addition, the findings imply that despite the fact that the current study did not support the influence of external pressure, some of previous study are still acknowledging the significant influence of external pressure on mobile money adoption.

Despite some previous studies discussed above are supporting the influence of external pressures on adoption of mobile money which is contrary to the current findings, but their possible explanation differs from one study to another. Notably Aziz and Jamali (2013) have explained the significant influence of external pressure is due to the pressure from buyer/supplier pressure, support from technology vendors and competitors while Otieno and Kahonge (2014) reveals a significant influence of competitors and customers to explain the significant influence of external pressures on adoption of mobile technology among restaurants, tours and travel enterprises in Kenya. These findings are similar to the argument made by Kabanda and Brown (2015) who argued that for conducive adoption of E-Commerce in tourism context in Tanzania there must be business relationships with ICT foreign companies and the use of mobile technology for interactive and transactive purposes with consumers and suppliers. While the current study findings illuminate on the fact that external pressures are not the basis for SMEs to adopt mobile money services in context of Tanzania, it also shows that in other context in developing countries external pressures are rewarding.

5.2 Influence of Internal Institutional Pressures on Adoption of Mobile Money Services

The drive for this study was to establish how Internal Institutional Pressures are related to tourist firms adoption of mobile money services. According to Ali, et al. (2015) internal institutional pressures are the pressures arising within an organization and have significant impact on pushing firms to adopt new innovations. They add that, these internal pressures include firm size, employee pressure, technological knowledge and organization structure. In the current study, it was hypothesized that internal institutional pressures are positively and significantly related to SMEs adoption of mobile money services. The research models identify owners pressures, employees and managers pressures to explain the internal institutional pressures that influences SMEs to adopt mobile money services. In evaluating the sought relationship, the results have yielded a standardized path coefficient (γ) of0.277, critical ration (C.R) of 5.381 and significant value (p) of 0.00. The results indicate that Internal institutional pressures are positively and significantly related to SMEs adoption of mobile money services in tourism sector. These findings have collaborated with the findings from previous studies (Alshamaila and Papagiannidis, 2012; Lim, et al., 2014).

While these studies were found to be similar to the current study but they differ in explaining the significant influence of internal institutional pressures. Notably example Lim, et al.(2014) they found that management support and organization readiness are internal pressure pushing the adoption among SMEs in Malaysia. On the other hand, Alshamaila and Papagiannidis (2012) found internal organization pressure namely firm size, top management support and prior experience have significant influence in the north east of England. In Africa context Kabanda and Brown (2015) found and concluded that top management support have great influence among organization attributes to influence the use of mobile technology among SMEs in Tanzania. These findings imply that different attributes of internal pressures are rewarding in number of developing countries but tend to vary due to contextual different.

In unrelated perspective, previously studies by Damanpour (1988) and Zailani, et al. (2009) found insignificant relationship between organizational characteristics and SMEs adoption of mobile money services. For example, Damanpour (1988) explained that the insignificance of the internal pressures is contributed by some of the firm with flat organization structure and centralized decision making which rest the adoption of innovation decision on top

managers who are not innovative. This implies that the firms with decentralized organizational structure tend to spread the adoption of innovation decision on the hand of many stakeholder of whom some are innovator that have a power to push the innovation decision.

On the other hand, Zailani, et al. (2009) explains that the insignificant of internal pressures is due to firms with low knowledge of e-business. This implies that firms with greater innovative knowledge tend to adopt innovation more rapidly compared with firms deficient in innovation knowledge. This implication is in line with Ali, et al. (2015) who argued that knowledge sources of e-business are one of the significant variables that determine the adoption of e-business. Therefore, a point of departure from this study is that SMEs already have knowledge of operating mobile devices and the nature of their services allowed them to use mobile money services.

5.3 Influence of Facilitating Conditions on Adoption of Mobile Money Services

The drive for this study was mainly to establish how facilitating conditions are related to SMEs adoption of mobile money services in tourism. In attending to this inquiry, reviewed literature, connect the findings in the past study to the metrics used in evaluating the sought relationship. In the current study, the research models identify regulatory framework, expertise and compatibility to explain the facilitating conditions that influences SMEs to adopt mobile money services. In evaluating the sought relationship, the results have yielded a standardized path coefficient (γ) of 0.296, critical ration (C.R) of 5.808 and significant value (p) of 0.00. The results indicated that facilitating conditions are positively and significantly related to SMEs adoption of mobile money services in tourism sector.

The findings corroborate what Mwai (2016) who found that facilitating conditions are among the important facilitators in the adoption of mobile money services among business firms. On the other hand the findings are in line with Tornatzky and Fleischer (1990) who notes significant influence of facilitating conditions toward enterprises adoption of mobile banking. They add that, facilitating conditions have attributes that include perceived benefits and perceived regulatory support which when combined significantly influence enterprises to adopt mobile banking. This implies that when SMEs are exposed

to the facilitators which are friendly to mobile money services, automatically they are pushed by facilitators toward mobile money adoption.

Previous studies, by Setiowati, et al. (2015) and Wilson, et al. (2008) found a significant relationship between facilitating conditions and SMEs adoption of mobile money services. While this study shares some similar findings (i.e. the link between facilitating conditions such as customers, competitors, with innovation adoption) the results differ in some of the measured variables. Wilson, et al. (2008) found and report the significant influence of facilitating conditions namely regulatory framework, availability of external consultancy and customer demand, while in the current study the external consultancy were not supported. The findings of the current study show that only three of these facilitating conditions namely regulatory framework, expertise and compatibility contribute towards SMEs adoption of mobile money services.

While the current study findings illuminate on the fact that facilitating conditions are the bases for SMEs adoption of mobile money services, it also shows that not all elements of the facilitating conditions are pushing SMEs to adopt mobile money. For example, Setiowati, et al. (2015) found among three facilitating conditions, only competitive pressure and institutional intervention were determinants that influence ICT adoption in SMEs, whereas market turbulence shows no significant contribution toward the adoption of ICT. This implies that despite the significant influence of facilitating conditions on SMEs adoption of mobile money services not all attributes that build up the facilitating conditions can have a significant influence on SMEs. Further, the significant influence of the facilitating conditions depends on the degree of those facilitators which reflect a particular environment.

6. Recommendations for Africa

This section presents the policy and practical implications of the study drawn from the findings, discussion and conclusions.

6.1 Recommendation to Policy Makers

The study finds and concludes that the facilitating conditions have potential contributions to push SMEs in tourism sector to adopt mobile money services. In each case expertise, compatibility and regulatory framework are of an overriding influence on firm adoption of mobile money services. Moreover, regulatory framework, expertise and compatibility have principal influence for tourist firm to adopt mobile money services as they are significant and source of adoption respectively.

These call for policies that create conducive operating environment, encouraging small firm use of mobile money services and embrace on an entrepreneurial culture that leads to greater understanding of opportunities offered by mobile money services. The policy should address availability of expertise and should be given priority as they pave the way for better use of mobile money resources and thus augment the internal capabilities of firms. On the other hand, policy and public interventions that emphasize both the skills and mobile infrastructure are important. Small firms should be facilitated through better policy interventions that enhance learning and knowledge sharing on opportunities offered by mobile money and its impact on their business. Additionally, SMEs should be encouraged and assisted to embrace more mobile money adoption behavior through proper policy guidelines. In line with this, small firms should, in a way, be encouraged to share business and mobile money knowledge, experience and skills among themselves to increase their expertise. In that way, even conservative firm's performance could transcend.

The current study has also found that the regulatory framework is significant in promoting SMEs adoption of mobile money services. This call for the government policies tailored to secure users of mobile money and improve the adoption of mobile money services should be developed to encouraging SMEs and their value chain the use of mobile money. The policy may address the issue of reducing cost associated with registration, importation of infrastructure and addressing security issue that could protect the users of a mobile money services. The government may develop a policy that encourages firms to adopt innovation by developing policies which are beneficial to the organization.

Moreover, the study demonstrates that internal pressures are significant in pushing tourist enterprise to uptake mobile money services. This organization readiness is clarified as a bundle of resources and that the same resource endowments are shaped by both mobile money infrastructure available and the knowledge possessed by firm about mobile money services. It is thus important to call for the policy to foster mechanisms and interventions which help SMEs to understand their internal environments and how they can use mobile money services to enhance and be more efficient in terms of its operations. It is even more important, for policy interventions which are on sectored basis to address and ensure that appropriate knowledge and infrastructure are made available to SMEs on the most important aspects of mobile money services that are demanded from the market in which they compete. This makes it easy and possible for SMEs to align their mobile money use to meet these demands. With such interventions, it is possible for SMEs to adopt mobile money that give them a competitive edge even at a global marketplace.

In this study, it was found and posited that the influence of organization readiness through mobile money infrastructure at the firm level and the extended mobile money infrastructure from the external vendors are crucial to adoption of mobile money services. Governments in developing countries have to intervene primarily by improvising policy guidelines which ensure that providers of such services offer quality and reliable services fit for SMEs. For instance mobile money services such as money transfer and withdraw that are tailored to meet the needs of small firms are imperative and improve mobile money services fitness to tourist firms business operation. While national policies and strategies have put a lot of emphasis on the use of ICT for SMEs in general, the current study suggests that the development of the National policy should address mobile money services adoption at the national level and at firm level is imperative for proper deployment and adoption of mobile money services. Similarly, mobile regulatory framework and compatibility should be given priority as they pave the way for better use of mobile money resources and thus augment the internal capabilities of firms. Therefore, the study argues for national policies that address mobile money services issues at the national and at the firm-level both of which underscore enterprising culture as necessary for firm adoption of mobile money services.

This strong link indicates that both policies and strategies enhance mobile money adoption and are crucial and heavily impact the adoption of mobile money services by SMEs locally and in the global market arena.

6.3.3 Managerial and Practical Implication

At managerial level, the owner-managers are the ones who derive the equation that leads to SMEs adoption of mobile money services. In this regard, a resources endowment of the firms is mainly a subject that is defined by owner-managers. In this case, it is implied that owners should strive to better understand the specific business activities they run and manage and thus align the mobile money resource acquisitions and deployment to meet and fit the activities. More importantly, they should strive to gain more knowledge that gives them the ability to coordinate and influence cost effective mobile money services applications. In a situation where the owner lacks the necessary industry knowledge and experience, the best option is to develop by training or hiring people with such skills. Additionally, they are to understand the various mobile money vendor options and once sourcing options are in order, managers could differentiate through strong networks and contacts which influence the availability of the technical mobile money support from the vendor as well as reliable services.

An empirical result from the current study has evidenced the significant influence of compatibility of mobile money services. This means that, financial institutions should select the appropriate mobile technology topology which fit well with SMEs operation in tourism sector. Other studies have found that infrastructure availability is the main factors that speed up the adoption of the mobile money services among SMEs. The current study has added to the body of knowledge by appreciating the significant influence of available infrastructure when they are compatible with a firm's daily operations. This has created a major contribution to vendor to look on the mobile money services which fit well to tourism and SMEs in general.

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