EXTENDED TECHNOLOGY ACCEPTANCE MODEL AND CUSTOMER'S ADOPTION OF MOBILE MARKETING IN THE TELECOMMUNICATION INDUSTRYOF TANZANIA

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ABSTRACT
This study examines the factors influencing customer's adoption of mobile marketing in the telecommunications industry of Tanzania. It applied perceived usefulness (PU) and perceived ease of use (PEOU) as a major construct of the Technology Acceptance Model (TAM) and extended it with the perceived online negotiation (PON) construct in predicting the mobile marketing adoption in the Telecommunications industry of Tanzania. A survey strategy was employed in data collection, by administering structured questionnaires and collected data from five (5) municipalities in Dar es Salaam using multi-stage sampling on 406 respondents. Quantitative data were analyzed using multiple linear regression technique. Findings indicated that perceived usefulness and perceived ease of use havesignificant and positive influence on the adoption of mobile marketing. while perceived online negotiation (PON) does not influence the adoption of mobile marketing. With these findings, telecommunication companies should improve their business strategies by implementing user-friendly mobile marketing platforms and services that cater to customers' needs with minimal effort.

Keyword: Mobile marketing, Perceived usefulness, Perceived ease of use, perceived online negotiation, Technology Acceptance Model.

1. INTRODUCTION

The two-way or multi-way communication and promotion of an offer between a company and its customers through a technological mobile medium is referred to as mobile marketing. Mobile devices such as cell phones and personal digital assistants (PDAs) that can be used anywhere without being connected by wires and services that use these mobile devices are in high demand around the world. Consequently, mobile marketing has become more common, which has contributed to an increase in business productivity worldwide(Eze *et al.*, 2019, Hall, 2018 &Murillo *et al.,* 2020).Currently, a mobile marketing platform is among the modern marketing channels of distribution for enhancing business interactions and communication between customers and marketers. The emergence of advancement in mobile technology has facilitated the increase in business opportunities, and hence assist marketers and customer linkage without the consideration of time and place(Eze e*t al., 2*020).

There has been much effort in understanding the effects of customer adoption of mobile marketing in developed countries (Lamptey, 2018). However, few studies have been conducted in developing countries, particularly on the effects of perceived usefulness (PU) and perceived ease of use (PEOU) in the adoption of mobile marketing in the telecommunication industry, particularly in Tanzania. Most of the previous studies in developing countries especially in Tanzania mostly focused on mobile payment and mobile banking which are only parts of mobile marketing. In addition, research on the influence of perceived online negotiation (PON) on the telecommunications industry in developed countries as far as mobile marketing is concerned is scarce.Perceived online negotiation refers to the extent to which customers feelempowered and involved in online communication with the seller by bargaining on products and services (de Moura and Costa, 2018). According to Yuan (2003), both real-time interaction and document sharing are needed to facilitate online negotiation. That being the case mobile communication devices can be used for remote contracting and negotiation, but they aren't built for that purpose. To advance understanding of the antecedents of the concept of mobile marketing, this study builds an Integrative Adoption Model by expanding the Technology Acceptance Model (TAM) through the inclusion of perceived online negotiation (PON) as one of the PEOU antecedents for mobile marketing adoption. Inclusion of the perceived online negotiation (PON) will add to the original TAM constructs namely perceived ease of use (PEOU) and perceived usefulness to extend the Technology Acceptance Model (TAM) to test their influence on mobile marketing adoption in the telecommunication industry in Tanzania. This study responds to the insufficient contextualized adoption models and the new ways of interacting with advanced technologies that offer a wide range of mobile marketing services.

2. STUDY MODEL AND HYPOTHESES

There are various models and theories which have been used in describing the adoption of technology. These are; Theory of Planned Behavior(TPB) (Ajzen, 2002); Theory of Reasoned Action (TRA) (Khraim *et al*., 2011); Technology Organization Environment (TOE)(Pudjianto *et al*., 2011); Diffusion of innovation theory(DOI)(Rodgers, 2003); Technology Acceptance Model(TAM) (Venkatesh *et al*., 2016). Among these theories and models, TAM is the most used model (Ofori, 2019). Because it highlights better adoption behavior of consumers in using technology by indicating that effects of external variables on behavior intention (BI)are influenced by perceived usefulness (PU) and perceived ease of use (Ofori, 2019). However, TAM's limitation is that it does not consider social norms as it does the TRA theory, which considers social influence as important determinants of behavioral intention(BI) of individual's adoption behavior.TAM assumes that consumers will use the information system regardless of the social influences (Surendram, 2015). However, the impact of subjective norms on the intention of the consumers in adopting technology is inevitable (Davis, Bagozzi and Warshaw, 1989). Social norms include the influence of peers, the environmental context, cultural holdings of a particular society, lifestyles and this has an attribute on personal perception of the behavior of an individual (Geffen and Straub, 2000).

TAM considers that individuals can plan using technology without either an intrinsic or extrinsic influence which might not always be the case due to the differences in context among individuals or organizations. There are important factors that can influence consumer's adoption of

technology which are either psychological or physical. Among these include the social-economic environments, culture, and the consumer's level of understanding of the technology (Ajibade, 2018). This means that, when there is a new technology in the market, it is not definite that consumers have information on product perceived usefulness and ease of use (Ajibade, 2018; Davis, Bagozzi, and Warshaw, 1989). This entails that consumers do not necessarily have positive perceptions towards the usefulness and ease of use of the new product of technology in the market. This connotes that, understanding human behavior through empirical settings is not plausible in all moments as it is posited by TAM (Abjibade, 2018). In addition, consumers buying from traditional stores prefer suppliers who offer them room to negotiate better prices and terms. It is estimated that 66% of shoppers attempt to negotiate for a better price when shopping (Gillison*et al.* 2014). Therefore, this draws the need to understand the customer's perceived online negotiation (PON), asan important additional construct totest technology adoption particularly the mobile marketing adoption in Tanzania. Results from this study will provide insight for companies to add features that shall make mobile marketing customers feel empowered through bargaining while purchasing online. Subsequently, this may result in more customer adoption of mobile marketing. Accordingly, this was the reason for extending the TAM theory by adding the new construct of perceived online negotiation (PON) as part of the objectives of this study. However, behavior intention (BI) under TAM was dropped as previous studies suggest that behavioral intention does not necessarily lead to the actual use of the system (Ajibade, 2018; Bagozzi, 2007; Taylor and Todd, 1995).

TAM which was first coined by Davis(1986) contained PU, PEPOU, and attitude as determinants of actual usage.However (Davis and Venkatesh, 1996; Ren, 2019) further removed attitude and concluded that the perceived usefulness (PU) and perceived ease of use (PEOU) have a direct influence on behavior intention (BI), as Ren (2019) argued further that, subjective norms manipulation affects only behavior intention (BI) and not attitude; and concluded that an attitude can remain the same to an individual, regardless of the adoption and innovation process in new information technology. For those reasons, therefore attitude was also not included under this study as part of the study under TAM constructs. In the current study, we revealed that there is a need of still using TAM by extending it with the construct of perceived online negotiation (PON) to increase the explanatory power of the model, in predicting the adoption of mobile marketing in the telecommunication industry in Tanzania.

Basing on the Technology Acceptance Model (TAM) by Davis and Venkatesh (1996), the theoretical framework was developed, with the assumption that perceived usefulness, perceived ease of use, and perceived online negotiation has direct effects on the adoption of mobile marketing in the Telecommunication industry in Tanzania (Davis, 1986; Davis *et al.,* 1989; Venkatesh and Davis, 1996)
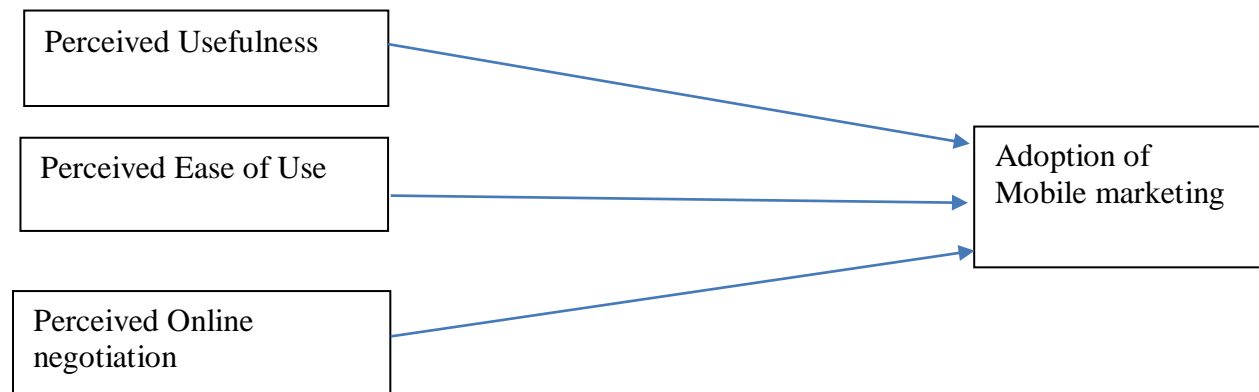
Fig 1: Conceptual Framework

2.1 Effect of Perceived Usefulness

Perceived usefulness (PU) is the major construct of the Technology Acceptance Model (Davis, 1989). That consumers can prefer a product, when they perceive that, the product is useful in solving their problems, which in turn reinforces consumer's intention to adopt the products or services (Kim *et al.,* 2010). Many studies have indicated the use of perceived usefulness (PU) and perceived ease of use (PEOU) as major components of technology adoption.

Various studies have shown significant effects on PU and adoption of mobile marketing (Abdinoo and Mbamba, 2017; Hamza and Shah,2014; Mehra*et al.,*2020; Murillo *et al.,*2020; Olubumni,2018). We therefore, suggest the following hypothesis;

H_{1a}: Perceived usefulness has a significant and positive influence on consumers' adoption of mobile marketing in the telecommunication industry

2.1.1 Effect of Perceived Ease of Use (PEOU)

Perceived ease of use (PEOU) refers to how aperson feels in using the technology that is; the amount of effort needed in consuming a technology (Venkatesh *et al.*, 2016). Previous studies have indicated significant effects of PEOU on the adoption of mobile marketing (Chille, *et al.* 2021a; Chille, *et al.* 2021b; Chitungo and Munongo,2013;Hamza and Shah,2014; Kim *et al.,* 2010; Said *et al.*, 2019; Tobbins and Kuwornu, 2011;Wamuyu, 2014)

In Tanzania, Lema (2017) indicated that Perceived ease of use (PEOU) does not influence the adoption of mobile financial services for the unbanked population. However, Lwoga and Lwoga (2017) indicated that PEOU influences mobile payment.Neverthless, Lubua and Semlambo (2017) indicated PEOU influences mobile payment in Small and Medium Enterprises (SMEs). We therefore put forth the following hypothesis:

H_{2a}: Perceived ease of use has a significant and positive influence on consumers' adoption of mobile marketing in the telecommunication industry

2.1.2 Effect of Perceived Online Negotiation (PON)

Consumers in developing countries negotiate on most of the products they need to buy and use, and it is assumed that negotiation is an important element of buying (Gillison*et al.,* 2014). This calls for a need for mobile products in developing countries to have enough negotiation room

that can reinforce adoption (de Moura and Costa, 2018). However, there are scanty studies that have visualized the effects of customer's perceivedonline negotiation on the adoption of mobile marketing in developing countries. Therefore, the following hypothesis was formulated:

H_{3a}: Perceived online negotiation has a significant and positive influence on consumers' adoption of mobile marketing in the telecommunication industry

3. METHODOLOGY

3.1 Population and sample

The study was undertaken in the city of Dares salaam, comprising 406 respondents. Customers of three telecommunication companies, Vodacom, Airtel, and MIC (T) Limited (Tigo), in the five municipalities made up the population. The study was undertaken using primary data using a structured questionnaire of which 440 were deported and 406 successfully returned, representing a 92.3% response rate. The questionnaires had mainly three sections, which were demographic information of respondents, adoption of mobile marketing (AMM), perceived usefulness (PU), perceived ease of use (PEOU), and perceived online negotiation (PON). The study area was chosen due to its notable contribution to the country's Gross Domestic Product (GDP), which accounts for 30%in 2018 (Tanzania invest, 2018). Multistage sampling was applied in the selection of respondents who use mobile gadgets. A cross-section research design was used; which involves collecting data at one point in time.

A seven-point Likert scale was used as the measurement scale, with 1 indicating "strongly disagree" and 7 "strongly agree". Perceived usefulness (PU) was measured by 5 items, which were adapted from Davis (1989) and Kim*et al.,* (2010); Perceived ease of use (PEOU) was measured using five items, adapted from Venkatesh *et al.,* (2012) and Gao*et al.,* (2011).Perceived online negotiation was measured using7 items adapted from Gao*et al.,* (2011) and Kim *et al.,* (2010); whereas Adoption of Mobile Marketing (AMM) was measured using7 items adopted from (Davis; 1989; Duzevi*et al.,* (2016)

4. DATA ANALYSIS

4.1 Demographic characteristics of Respondents

The sample characteristics under the study composed of customers of the three telecommunications companies where employees accounted (128) 31.5% of the respondents, business persons accounted (89) 21.9% of the respondents and customers working in the informal sectors which were retailers of consumers and industrial products accounted 96 (23.6%) and 93(22.9%) were students from tertiary education in Dar es salaam, as indicated in Table 4.1.

4.1.2 Results from Reliability test

A reliability test was conducted if the available observed variables measure the latent variablesi.e internal consistency (Saunders *et al.,* 2012). In this case, Cronbach's alpha coefficient was used in measuring the reliability of the research instruments. The results on the reliability of Cronbach's alpha ranged from 0.905 to 0.921 implying that the values were above 0.7 which is the minimum cut-off point; suggesting that the questionnaire was reliable in measuring the studied constructs (Saunders *et al.,* 2012). Table 1shows the reliability results.

To assess if items measured the same construct, exploratory factor analysis (EFA) was

conducted. In testing the adequacy of the sample, Kaiser Mayer Olkin (KMO) and Bartlett's Test for Sphericity (BTS) results were tested. Usually, KMO should be greater than 0.6, and BTS values should be significant to indicate that data is suitable for factor analysis (Basto and Pereira, 2012). Since BTS had a significant value of less than 0.001 and KMO had a value above 0.8, we conclude that the data was suitable for factor analysis.

Table 1: Reliability, Kaiser Mayer Olkin and Sampling Adequacy

Construct	Reliability Cronbach's alpha	No. of items	KMO	BTS (P-Value)
Adoption of Mobile Marketing	0.921	7	0.890	<0.001
Perceived Usefulness (PU	0.920	5		
Perceived Ease of Use (PEOU)	0.905	5		
Perceived Customer's Online negotiation (PON)	0.915	7		

Source: Fieldwork, (2020)

4.1.3 Results from Factor Analysis

Exploratory analysis was done to identify if all variables in each categorynamelyadoption of mobile marketing (AMM), Perceived online negotiation (PON) perceived usefulness (PU), and perceived ease of use (PEOU) represented the latent variable of AMM, PON, PUand PEOU.Considering the extraction and rotation methods done and the intercorrelation between variables as well as eigenvalues and factor loadings, the analysis realized that only one component was extracted. This was evidenced by the use of the Scree plot, which had one component at its elbow point for each latent variable. The solution was not rotated (No rotated component matrix) as only one component was formed. The determinants (% of variance) were 5.513 (67.901), 6.281(66.484), 123 (76.741), 2.958(75.875) and 3.06(72.415) for the AMM, PON. PU and PEOU respectively. For each latent variable, the contribution from observable variables varied.

According to Basto and Pereira (2012), for items that measure similar outcomes to have similarities, factor loading should have a cutoff point of above 0.3. Such that the item with a factor loading above 0.3 was retained for analysis. As indicated in table 2, factor loading had a value above 0.3 which is the cut-off point, suggesting that the items were reliable for the studied phenomenon.

Table 2: Distribution of Factor loadings for AMM, PON, PU and PEU

PU variables Extraction Sum of Squared Loadings: Total = 9.585, % of variance = 75.875		PEU variables Extraction Sum of Squared Loadings: Total = 8.584, % of variance = 72.415	
Variable	**Factor loadings**	**Variable**	**Factor loadings**
PU2	0.893	PEU3	0.879
PU4	0.890	PEU4	0.855
PU3	0.875	PEU1	0.845
PU1	0.862	PEU5	0.838
PON variables **Extraction Sum of Squared Loadings:** Total = 11.879, % of variance = 66.484			
Variable		**Factor loadings**	
PON3		0.861	
PON1		0.854	
PON4		0.835	
PON2		0.801	
PON5		0.787	
PON7		0.780	
PON6		0.770	
AMM variables **Extraction Sum of Squared Loadings:** Total = 11.697, % of variance = 67.901			
Variable		**Factor loadings**	
AMM7		0.842	
AMM1		0.837	
AMM6		0.836	
AMM3		0.831	
AMM2		0.819	
AMM4		0.800	
AMM5		0.794	

Source; Field work, 2020

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

Only one component was extracted per each construct from its related variables.

The solution was not rotated (No rotated component matrix)

Results from Correlation Analysis

Correlation analysis was undertaken to establish the relation between the variables. According to Senthilnathan (2019) correlations ranges from +-0.00 to +-0.30 show little correlation, +-0.30 to+-0.50 shows low correlation, +-0,50 to +-0.70 moderate, -+0.70 to +-0.90 high and -+0.90 to 1.00 extremely high correlation. Multicollinearity is possible in the model when $r>=+-0.9$(Senthilnathan, 2019).The correlation in Table 3 indicates that the correlation between independent variables and dependent variables ranges from r= 0.568 to r= 0.707 at p<0.01, which suggests all independent variables havea significant relationship with the adoption of mobile marketing (AMM).

Table 3: Inter- Correlation among Variables (N=406)

Variable	AMM	PU	PEOU	PON
AMM	1	0.692**	0.568**	0.696**
PU	0.692**	1	0.707**	0.703**
PEOU	0.568**	0.707**	1	0.656**
PON	0.696	0.703**	0.788**	1
N	406	406	406	406

**Correlation is significant at the 0.01 level (2-tailed); Source; Fieldwork, (2020)

5.2 Results from Multiple Linear Regression Analysis

Multiple linear regression analysis was undertaken to test the hypothesis of the studied objectives. As indicated in table 4, the fitness of the model indicated an F-statistic value of 186.04 which was significant at p<0.001. This is an indication that the model fitted the studied data that all variables explained substantially the adoption of mobile marketing. The coefficient of determination (R squared) was 0.699, and the adjusted R squared was 0.696, which implies that the independent variables included in the study were responsible for 70% of the variance in the dependent variable i.e. the adoption of mobile marketing.

Additionally, model residuals were independent as the Durbin Watson statistic was closer to 2. The data obtained had a value less than 1. Hence no evidence of outliers was found. According to Daoud (2018)for the absence of multicollinearity, the Variance Inflation Factor(VIF) shouldrange between 1 and 5 whilethe tolerance value should range between 0 to 1. These indicate the absence of multicollinearity on the model as indicated in table 4.

Table 4: Overall Linear Regression Assumptions and Model Summary

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig (P).	95.0% Confidence Interval for B		Correlation on		
	B	Std. Error	Beta			Lower Bound	Upper Bound	Partial	Tolerance	VIF
PU	0.792	0.030	0.357	6.784	<0.001	0.253	0.46	0.321	0.272	3.681
PEOU	0.768	0.056	.0.19	3.31	0.001	0.077	0.303	0.163	0.229	4.376
PON	0.696	0.696	0.056	1.104	0. 270	-0.044	0.156	0.055	0.29	3.449
R	0.795	R squared	Adjusted R	Std error of estimate	Dublin Watson	F	Sign (P-value)			
		0.699	0.696	0..55	1.783	186.04	(<0.001))			

Source; Fieldwork, 2020

5.2.1 Effect of Perceived Usefulness (PU) on AMM
Findings in table 4 indicate that Perceived usefulness (PU) has positive and significant effects on the adoption of mobile marketing as there was a significant positive association as one unit increase in PU resulted in a 0.36 (95% CI: 0.253, 0.46) increase in AMM at p<0.001. Therefore, the alternative hypothesis, that perceived usefulness significantly influences the adoption of mobile marketing is supported and the null hypothesis is rejected.

5.2.2 Effect of Perceived Ease of Use (PEOU) on AMM
The findings intable 4 indicate that Perceived ease of use (PEOU) has positive and significant effects on the adoption of mobile marketing resulted in 0.19(95% CI; 0.077, 0.303) at p=0.001. Therefore, the alternative hypothesis is supported, that Perceived ease of use (PEOU) significantly influence the adoption of mobile marketing is supported, while the null hypothesis is rejected

5.2.3 **Effect of Perceived online (PON) on AMM**
The findings from Table 4 indicate that Perceived online negotiation (PON) has non-significant effects on the adoption of mobile marketing as it resulted in 0.056(95% CI; -0.044, 0.156) at P=0. 270. Therefore, the alternative hypothesis is rejected, and the null hypothesis is supported that Perceived online negotiation (PON) does not significantly influence the adoption of mobile marketing.

6. DISCUSSION

The findings have shown the significance of the adoption of mobile marketing in the telecommunication industry, about the effects of perceived usefulness, perceived ease of use, and perceived online negotiation on mobile marketing adoption. Mobile service providers and

researchers should keep on emphasizing the need of having mobile marketing products that can be perceived as useful and easy to use by customers. It should be noted that customers in the telecommunication industry need to increase their business productivity, enhance business transactions, assist customer's business planning when they are using mobile marketing platforms, and thus can bring many customers benefits.

The findings are consistent with the studies done by (Abdinoo and Mbamba, 2017; Hamza and Shah, 2014; Mehra *et al*., 2020; Olubunmi, 2018), which their results showed that perceived usefulness is significant in influencing mobile marketing adoption. In theoretical understanding, these findings give important knowledge on the important factors in customer's adoption of mobile marketing products in the telecommunication industry in Tanzania, particularly the importance of perceived usefulness as the important determinants of consumers' adoption of mobile marketing products and services. However, the findings are consistent with the technology acceptance model (TAM), that PU influences consumer's adoption of technology.

Findings on perceived ease of use indicatesignificant effects on the adoption of mobile marketing in the telecommunication industry in Tanzania. These results are consistent with the study done by (Chitungo and Munongo, 2013; Hamza and Shah,2014; Kim *et al.,* 2010, Said *et al*., 2019) as well as Tobbins and Kuwornu(2011) that PEOU significantly influences the adoption of mobile marketing. This implies that customers will determine to use the mobile marketing products when they feel that, the need of having mobile marketing platforms will improve their performances of their business, therefore mobile marketing platforms should be easy to use on both hardware and software components.

The findings are not consistent with the study done by (Chinomona and Sandala, 2013 in South Africa; Hu *et al.,* 2019 in China; Kocukusta*et al., 2015*) in Hongkong, which found insignificant relationships between perceived ease of use with mobile marketing adoption. These could be attributed to the contextual factors, that customer's preferences and adoption of mobile marketing products are attributed with the culture, environmental factors, lifestyles, and demand patterns (Wamuyu, 2014). The important findings of this study entail that mobile marketing strategies by mobile marketing service providers needs to ascertain the demographic differences of their customers, before designing and selling their mobile marketing products and services in the market.

In theoretical understanding, these findings give out the important factors in customer's adoption of mobile marketing products, particularly the importance of perceived ease of use as the important determinants of consumers' adoption of mobile marketing products and services in the telecommunication industry in Tanzania. The findings are consistent with the technology acceptance model (TAM) that PEOU influences consumer's adoption of technology.

The study has adopted the Technology Acceptance Model by the use of two main constructs which are perceived usefulness and perceived ease of use in the context of assessing the factors influencing customer's adoption of mobile marketing in the telecommunication industry in Tanzania. However, the study extended the TAM and included perceived online negotiation

(PON) which also have indicated that perceived online negotiation does not influence customer's adoption of mobile marketing in the telecommunication industry in Tanzania. This could be attributed to the fact that most customers are not accustomed to the concept of negotiation through marketing platforms, for despite that physical negotiation in each business is the order of the day in developing countries, particularly in Tanzania (World Bank, 2020).However, this finding should be treated as inconclusive as further study would be needed on the significance of perceived online negotiation in the theoretical undertakings of the study, due to the paucity of studies on the construct and its empirical significance in business in developing countries.

7 THEORETICAL AND PRACTICAL IMPLICATIONS

The findings of this study have made up the following theoretical and practical implications for future use. In theoretical contribution, the constructs of TAM which are perceived usefulness and perceived ease of use have been indicated to be the parsimonious predictor of the adoption of mobile marketing in the Telecommunication industry in Tanzania. The model under this study has extended the Technology Acceptance Model (TAM) with an additional construct of perceived online negotiation (PON) as the combined model, the combined model has indicated high explanatory power as the predictor of adoption of mobile marketing in the telecommunication industry in Tanzania. The combined model therefore can be used in other studies in assessing the factors influencing the adoption of mobile marketing in developing countries, particularly in the African context.

In the theoretical underpinning of the study, the perceived usefulness and perceived ease of use construct as part of Technology Acceptance Model (TAM) constructs have been indicated to be the predictor of customer's adoption of mobile marketing in the telecommunication industry in Tanzania. This study has revealed that customers perceive positive adoption on mobile marketing platforms and accept mobile marketing platforms, that are easier to use and useful. That consumers assess the mobile marketing products depending on how the system is easy to use and useful, that indicates that customers will always use aproduct provided they are sure on enhancing their production, business transactions, notwithstanding that the mobile marketing platforms system are easy and affordable to use. Therefore, the study has validated the utility of the technology acceptance model (TAM) in the telecommunication industry in Tanzania.

According to (Babbie, 1998; Zhou *et al.,* 2017; Venkatesh and Bala, 2008) theoretical contributions look for comprehensiveness and parsimoniousness. Comprehensiveness dictates the need of using all constructs in the theory, while parsimonious underscores the need for reduction of some constructs with less significance. Therefore, this study has added an understanding of the customers' perceptions on the adoption of mobile marketing in the telecommunication industry in Tanzania products by using few variables which results in high explanatory power of the model, that the combined model has indicated high explained variance on the adoption of mobile marketing by using few constructs.

The study also contributed to the factors that have no influence on mobile marketing adoption in the telecommunication industry in Tanzania by identifying that the perceived online negotiation

(PON) do not influence the adoption of mobile marketing in the telecommunication industry in Tanzania. This implies that further study is needed in studying the effects of perceived online negotiation on the adoption of mobile marketing in the telecommunication industry in Tanzania

Telecommunication service providers and researchers need to understand what are the customers' benefits from mobile marketing products. It should be understood that, customers seek useful and ease of use of the products or services, as an important component of customers benefits, on which service providers and mobile marketing stakeholders should need to improve their marketing and business strategies, by further understanding the marketing environment, as this has been indicated on this study that consumers perceived usefulness and ease of use of the mobile marketing products by assessing on what the mobile marketing platforms are performing to them, and what they expect on the performance of the mobile marketing platforms. This will imply that mobile service providers and stakeholders need to improve the performance of their mobile marketing systems and programs over time, by conducting regular customer's needs and getting feedbacks. This will assist in enhancing adoption and revenue growth in the telecommunication industry.

Improvement on policies guiding the telecommunication sector and mobile services in terms of tax, levies, and duties by the government will enhance more demands by the customers and that will have direct effects on the increase on mobile marketing adoption of products and services. However, the telecommunication sector and its relevant stakeholders need also to improve on the mobile marketing infrastructure in terms of technology and mobile marketing services system designing and delivery, by designing mobile marketing products that are user-friendly and easy to use by customers. This could further enhance much adoption of mobile marketing products, which would have spillover benefits to the mobile service providers, stakeholders, and the government at large.

8. CONCLUSIONS AND RECOMMENDATIONS

The study included the two major constructs of TAM which are perceived usefulness (PU) and Perceived ease of use (PEOU) and extended the Technology Acceptance Model with an additional construct of perceived online negotiation (PEOU) which was regarded as the determinant of perceived ease of use (PEOU).

The findings of this study conform with the Technology Acceptance Model (TAM) on assessing the effects of perceived usefulness, perceived ease of use on the adoption of mobile marketing in Tanzania, which has indicated positive influence on the adoption of mobile marketing in the telecommunication industry in Tanzania. Therefore, this study has validated the Technology Acceptance Model (TAM) to be useful in the Tanzania context. Therefore, mobile service providers and telecommunication business stakeholders need to design and develop mobile marketing products that are easy and useful from the consumers 'perspectives. This can be attained by involving holistic marketing approaches in their organization,through the involvement of various departments and units in ensuring that there is an increase in attaining customer's adoption of mobile marketing products.Regular customer feedback through

marketing research will enhance much mobile marketing adoption and thus better business growth.

There are a lot of factors which has not been undertaken in this study, therefore further studies regarding the factors influencing the adoption of mobile marketing in Tanzania by extending the technology acceptance model (TAM), needs to be done, with the fact that the study was done only in one region out of the 26 regions of Tanzania, that the sample may sometimes not be the actual representation of the entire population regarding mobile marketing adoption in the telecommunication industry in Tanzania. However, this study was limited to perceived ease of use (PEOU), perceived usefulness (PU), and perceived online negotiation (PON). Further study may include other factors such as perceived enjoyment, perceived risks, attitude, compatibility, system characteristics, andbehavioural intention in understanding the factors influencing the customer's adoption of mobile marketing in the telecommunication industry in Tanzania.

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