International Journal of Mobile Communications

ISSN online: 1741-5217 - ISSN print: 1470-949X
https://www.inderscience.com/ijmc

The influence of digital product attributes on the consumption demand for mobile money: the case of the MTN mobile money product in the Buea Municipality in Cameroon

Serge Messomo Elle, Fubin Miriam Embi

DOI: 10.1504/IJMC.2023.10048436

Article History:

Received:	10 February 2021
Accepted:	15 June 2021
Published online:	04 July 2023

The influence of digital product attributes on the consumption demand for mobile money: the case of the MTN mobile money product in the Buea Municipality in Cameroon

Serge Messomo Elle*

Department of Banking and Finance,
University of Buea,
P.O. Box 179, Buea, Cameroon
Email: messomo2011@yahoo.fr
*Corresponding author

Fubin Miriam Embi

University of Yaounde 1,
Yaoundé, Cameroon
Email: fubinmiriam@gmail.com

Abstract: Digitalisation has led to many innovations and is also perceived as an instrument of customers' satisfaction. The objective of this study was to determine the digital attributes that increase consumer demand for the mobile money (MoMo) product in the Buea Municipality. To achieve this, a questionnaire was designed and administered to users of the mobile money product of mobile telecommunication network (MTN) in the Buea Municipality in Cameroon. The digital product attributes of the MoMo were analysed according to attributes of the diffusion innovation theory. The data collected were measured descriptively and inferentially employing bar and pie charts, mean, standard deviation, and ordinary least square (OLS) regressions. The findings showed that the tangible attribute of triability and the intangible attributes of confidence and compatibility non-significantly increase the consumption of the MTN MoMo product in the Buea Municipality. On the contrary, observability and complexity attributes significantly decreased the consumer demand for the MTN MoMo product in digital factors (observability and complexity) to increase the demand for the MoMo product in the Buea Municipality in Cameroon.

Keywords: digital product attributes; mobile money; consumer demand; confidence; mobile phone; Buea Municipality; Cameroon.

Reference to this paper should be made as follows: Elle, S.E. and Embi, F.M. (2023) 'The influence of digital product attributes on the consumption demand for mobile money: the case of the MTN mobile money product in the Buea Municipality in Cameroon', *Int. J. Mobile Communications*, Vol. 22, No. 1, pp.25–47.

Biographical notes: Serge Messomo Elle is an Agrégé CAMES and an Associate Professor in Management Sciences. He teaches many courses at the undergraduate and postgraduate levels such as insurance practice and management, financial management, risk and crisis management, microfinance, bank management, strategic management and entrepreneurial finance. His core publications are 'Financial and institutional innovations in microfinance

institutions and commercial banks in Cameroon', in *International Journal of Financial Innovation in Banking*, in 2018; 'Understanding microfinance institutions and commercial banks' relationships and innovations in the cameroon environment' in *Strategic Change*, in 2017; and, 'Revisiting the theory of social capital through the financing of microentrepreneurs in Cameroon using fuzzy decision tree and QFD', in *International Journal of Entrepreneurship and Small Business*, in 2015.

Fubin Miriam Embi is a graduate of the Technical Higher Teaching of Ebolowa, University of Yaounde 1, Cameroon. She currently serves as a Higher School Teacher in The North West Region where she teaches Marketing and Business Communications.

1 Introduction

The past decade has been a crucial one especially in the telecommunications sector. This sector has experienced many innovations that have made it to become a challenger of the classical financial sector and specifically traditional banking institutions. This is attributable to the telecommunication industry's use of two competitive advantages that enabled it to outcompete the traditional banking sector in the supply of financial services. These advantages include the natural advantage and the sectorial learning.

The natural advantage relates to the characteristics of the sector that are amenable to technological innovations that often lead to new products, new materials, new processes and new tools that fuel consumer demand. Some technological equipment known to drive consumer demand include the telegraph, telephone, radio, television, computer and mobile devices. These instruments have changed not only consumer demand and the quality of lives of the users but also the scope and the activities of the industry themselves (Tumbay et al., 2019).

In terms of sectorial learning, the industry has learnt from the financial sector by capitalising both on its strengths and weaknesses. In terms of strengths, telecommunication companies copy their financial products like lending; savings and money transfer from banking institutions and adapt them to their infrastructures that are for instance internet, optical fibre, broad band and global system for mobile telecommunications (GSM). Regarding weaknesses, the telecommunication companies developed products to overcome drawbacks in the supply of financial services by banking institutions. These shortcomings are bureaucracy, centralisation, collateral requests, time, urban location, and physical distancing to mention but these. In Cameroon, telecommunication companies came up with MoMo to provide a competitive financial service product.

MoMo enables consumers to deposit, withdraw and transfer money using mobile phones. It is an innovation in product, process, and inputs and in market from telecommunication companies. This means that MoMo is a new product put in place by these companies to diversify their primary activity of providing communication services. It is an innovation in process because it makes customers to be financial agents for them. It also enables the companies to integrate many independent agents that are non-communication enterprises or individuals into the production of financial services.

MoMo inputs are from different sources including communication technology (and infrastructures) and banking technology.

MoMo has also included in financial services, customers who, in traditional banking institutions or in Microfinance Institutions, could not afford a financial account. This initiates as well as increases their financial inclusion (Demirguc-Kunt et al., 2017). In Africa, for instance, the share of adults with mobile money account exceeded 10% between 2014 and 2017 (Demirguc-Kunt et al., 2017). In Sub-Saharan Africa, this percentage is even higher than in many countries like Ivory Coast and Senegal where, it stands at 30% (Demirguc-Kunt, Klapper et al., 2017).

In Cameroon, the MoMo product is also growing faster. This can be measured at the levels of demand and supply. On the demand side, the number of accounts created between 2015 and 2016 moved from 3,816,785 in 2015 to 3,839,131 in 2016 giving a percentage change of 0.6%. Between 2013 and 2016, the percentage increase stood at 38.1% giving an average annual increase growth of 12.7% [National Credit Commission (NCC), 2017].

In terms of supply, the number of sales points has also increased from 6,111 in 2014, 25,443 in 2015 and 36,044 in 2016. In 2016, only 10454 licensed sales points were effectively operational (NCC, 2017). The emergence and fast growth of the MoMo product in Cameroon both at the supply and demand sides have increased consumers' expectations and habits in Cameroon. This is thanks to the digital attributes of MoMo ascertained by the Diffusion Innovation Theory of relative advantage, convenience, compatibility, observability and triability, and complexity that MoMo provides to customers, mostly those in the suburban and crisis zones like in the Buea Municipality. The Buea Municipality has many Telecommunication facilities and companies like Orange, Cameroon Telecommunication Company (CAMTEL), NEXTTEL and Mobile Telecommunication Network (MTN). However, only two of these companies have the MoMo product. These are Orange and MTN Companies. Some few studies like Ngange and Beng (2017), Ojong (2016), and Tengeh and Talom (2020) have investigated the influence of the MoMo product on some economic and social activities in South West, North West and Littoral regions of Cameroon. Unfortunately, these studies have not addressed the innovative factors that inspired the choice of this product by its consumers. This study intends to fill this gap within the context of the Buea Municipality.

The Buea Municipality is suitable for this study because it is urban, hosts a vibrant MTN branch and is exposed to many innovations in telecommunication industry. Because of the innovations in this industry the inhabitants in this municipality are able to overcome their daily financial, technological and social challenges. An example of such innovation is the MoMo product. According to Miles and Snow (1978), innovations are constantly being carried out by prospector companies like MTN which have a dominant position in the Telecommunication industry in Cameroon (NCC, 2017). MoMo by MTN can have particular attributes as digital products justifying the attraction to it by customers according to the Diffusion Innovation Theory. These digital attributes of MoMo in the Buea Municipality can influence and match demand specificities of fear, curiosity, availability and economic benefits of MoMo for those in the Buea Municipality. Thus, based on the above, we then posed the main research question for this study as follows: What are the effects of digital attributes on consumer demand of the MTN MoMo product in the Buea Municipality in Cameroon?

The attributes of the MoMo product can be studied in terms of those that are tangible and intangible. We adopted this approach to generate our specific questions as follows:

- What are the effects of tangible digital attributes on the consumer demand of the MoMo product in the Buea Municipality in Cameroon?
- What are the effects of intangible digital attributes on the consumer demand of the MoMo product in the Buea Municipality in Cameroon?
- What is the influence of the association of tangible and intangible attributes on the consumer demand of the MoMo product in the Buea Municipality in Cameroon?

The objective of this study was therefore to account for the effects of the MoMo product on consumer demand in the Buea Municipality in Cameroon. This work is relevant in that it highlights the features of a digital product like MTN MoMo and how its tangible and intangible attributes improve its consumer demand. The study adopted the explanatory approach through the ordinary least square regression to measure the nature of digital money attributes following the diffusion theory to explain the demand for the MTN MoMo product in the Buea Municipality. The data for analyses were collected from 228 consumers of MTN MoMo of this Municipality. Overall, the findings revealed that the digital attributes of complexity and observability related to the diffusion theory significantly decrease the consumption of the MTN MoMo product in the Buea Municipality. This study has two empirical contributions. The first is that the diffusion innovation theory constructs are not relevant for the consumption of the MoMo product in the Buea Municipality. Second, both tangible and intangible digital attributes increase and decrease the demand for the MoMo product in the Buea Municipality. The rest of the sections of this study are Section 2 which features a review of the literature and of the hypothesis developed in this study, while Section 3 presents the methodology and Section 4 presents and discusses the findings. Section 5 concludes the study.

2 Aspects of literature and hypotheses development

This section covers four elements. These include the telecommunication ecosystem in Cameroon, some regulations in telecommunication industry in Cameroon, the characteristics of a digital product and the hypotheses development.

2.1 Telecommunication ecosystem in Cameroon

Cameroons telecommunications sector has many players, each of which plays a key role in its development. The key players are the Ministry of Posts and Telecommunications (MINPOSTEL), The National Agency for Information and Communication Technology (ANTIC), National Centre for Development of Computer Science (CENADI), Telecommunication Regulatory Board (ART), Cameroon Telecommunication Company (CAMTEL), Mobile Telephone Network (MTN), Orange Company, NEXTTEL and users of the services provided by the various mobile telephone companies. Their missions and roles are presented on Tables 1 and 2.

Table 1 Missions and roles of key players in the Cameroon's telecommunication ecosystem

Organ	*Strategy and regulatory missions*	*Creation*
Ministry of post and telecommunications (MINPOSTEL)	• Develop and implement government's policy on Telecommunication and ICT • Maintain ICT Infrastructure • Coordination the activities of telecommunications in Cameroon • Devise policies	1958
National agency for information and communication technology (ANTIC)	• Promote and monitor government's actions • Regulate electronic security activities. • Certify (Application and specification) ICT tools	2002
National centre for development of computer science (CENADI)	• Advisory services of Computer Science to Cameroon Government • Develop tools of support of Computer Science and Information for Cameroon Government Technology adoption, development and deployment	1988
Telecommunication regulatory board (ART)	• Legislation • Regulation Monitoring of activities of telecommunication operators and users • Allocate assets	1998

Source: From Etoundi et al. (2016)

Table 1 shows that the telecommunication ecosystem in Cameroon is diversified. It has regulators, suppliers, and subcontractors that interact between them in order to provide to consumers, new products with new attributes. The task of suppliers is to generate new products to meet the new needs of the demand while the function of regulators is to supervise the suppliers in order to ensure the innovations in the products do not infringe on consumers' rights, the rights of the government as well as those of competitors. Table 2 shows the missions of key suppliers of telecommunication services in Cameroon.

Table 2 overviews the roles and missions of the key suppliers of telecommunication products in Cameroon along with their dates of creation. According to Table 3, most companies operating in Cameroon were created in 1998. This can be explained by the adoption of policies relating to technology of information and communication (TIC) by the Cameroon Government in the early 1990s. Some of these policies were free-tax duties of import of telecommunication devices in Cameroon, training and financial assistance to investors in telecommunication industry and free tax creation to creators of telecommunication enterprises. These facilities boosted the spread in populations, knowledge and the entrepreneurship in the telecommunication system in Cameroon.

2.2 The regulations of the telecommunications sector in Cameroon

Many laws contributed to the development and expansion of telecommunication systems in Cameroon. The laws reflected the diverse nature of the sector and its stakeholders and components. Some of these key laws are laws related to the creation and modification of the umbrella and domestic authority which is the Ministry of Posts and Telecommunications. The adjustments of these laws dating from the creation of this ministry in 1958 have been a great incentive in the development of the telecommunication industry in Cameroon.

Table 2 Missions and roles of key suppliers in Cameroon's telecommunication industry

Organisation	*Strategy and regulatory missions*	*Creation*
MTN Cameroon	• It has as mission of offering Cameroonians simple, innovative and accessible solutions to meet their communication needs	15th February 2000
Orange Cameroon	• Accelerate the digital transformation of Cameroons economy and society which is in particular as evident in their support for innovative programs like Orange FAB, challenge innovation and social innovation prize • Fight against the gender divide and the employment of women in particular via deployment of 'digital homes' where women and girls are trained on digital technologies	1999
NEXTTEL	• Connect every Cameroonian to the rest of the world by making mobile technology and services, as well as high speed internet connection affordable and accessible • Lead in mobile technology and digital deployment in Cameroon	September, 2014
CAMTEL	• Develop robust, extended and resilient wideband telecommunication infrastructure. • Offer converged, high quality, fixed and mobile services at the lowest prices. • Fully meet the needs of CEMAC households, enterprises and national institutions. • Place the commitment and value of their employees at the Centre of their Human resource policy.	8 September 1998
YOMEE	• M-Services value creator enriching our communities • Disrupt thinking, Win Mindsets, promoting African Communities	1998
SWECOM	• Provide Electronic Communication and HD Digital Cable TV solutions using optic fibre networking • Lead in the distribution of wireless communication services	1998

Source: Adapted from Etoundi et al. (2016)

The other laws that brought in a great impetus to telecommunication advancement in Cameroon are the Laws of the early 1990 relating to the liberalisation of the economy of Cameroon. These laws led to the design and publication of Law No. 98/014 of 14th July, 1998 related to the liberalisation of the telecommunication sector in Cameroon. These laws boosted the private initiatives leading to the creation of many small and medium sized companies in Telecommunication ecosystem in Cameroon like Yoomee and SWECOM LTD as well as to the privatisation of the CAMTEL MOBILE, the creation of NEXTTEL, MTN and Orange Cameroon. The other laws that influence the Telecommunication industry in Cameroon are:

There are many laws supporting the evolution of the telecommunication Industry in Cameroon like the 1998 law on competition in internal markets, the 2001 Law on the prescription of minimum services in communication sector, the 2010 Law relating to electronic commerce, the 2010 law relating to the cyber security and the cyber criminality in Cameroon, the 2011 Law on consumer protection, the law creating the ART in 1998 and the law number 98/198 of 8th September and the 1998 law creating CAMTEL. The dynamism of the telecommunication industry in Cameroon led to the creation of new digital products like MoMo currently supplied by only two companies, MTN and Orange Cameroon. Table 3 shows the trend of MoMo in Cameroon between 2014 and 2016.

Table 3 Trend in MoMo demand between 2014 and 2016

Items	*2013*	*2014*	*% change from 2013–2104*	*2015*	*% change from 2014–2015*	*2016*	*% change from 2015–2016*
Number of created accounts	2,779,780	3,636,736	24	3,816,785	5	3,839,131	1
Number of active accounts	1,446,032	1,744,896	17	2,187,470	20	1,451,326	–51
Number of sales points created	6,950	6,111	–14	25,443	76	36,044	29
Number of active sales points operating	2,071	4,564	55	12,340	63	10,454	–18
Annual value of transactions (MCFA)	32,866	77,726	58	211,299	63	870,011	76
Number of annual transactions	2,299,946	6,621,054	65	19,026,923	65	8.4E+07	77
Annual lending value of mobile money accounts (MCFA)	1,179	3,467	66	4,656	26	22,354	79

Source: Computed from the National Credit Committee (2016)

Table 3 shows that between 2014 and 2016, there have been increases and decreases in MoMo activities. For instance, the number of sales points created decreased between 2014 and 2015. This was also the case for the number of sales points operating between 2015 and 2016. Meanwhile, increases were obtained in the number of accounts created between 2014 and 2015 and between 2015 and 2016. This difference in performance can be associated to many attributes related to MoMo.

2.3 Mobile money: a digital product with many attributes

MoMo is a digital product. According to Choi et al. (2003), a digital product is a knowledge-based product that can be digitised and transferred over a digital network. This implies that MoMo is a knowledge-based good manufactured within digitalised systems and networks. This gives MoMo some specificities and characteristics associated with digital products. These include intangible digital attributes [dependence on individual preference, intrinsic values, externalities and cumulative (utility)] and tangible attributes (indestructibility, transmutability, and reproducibility). Dependence on individual preference refers to the choice that each consumer makes about the digital product. This choice reflects the information and the use consumers make of it. This use varies among consumers and makes customers expectation to be individual and not collective. This then creates individual preference requiring product customisation based on consumer types that MoMo can provide thanks to the different uses and values associated with it (MoMo).

Intrinsic values of digital products give to digital products a per se value resourced as exclusivity in consumption. In other words, with MoMo, for instance, each consumption is unique and generates some value per se and utility to the consumer. The utility is cumulative and lasts over time. This is true with MoMo because its data or information can be used in future transactions to increase the accumulated value and satisfaction of MoMo customers. Digital products also grant access to the services to many people thereby generating many positive externalities. In this case, digital products are seen as network products. This characteristic is identified in MoMo and enables many people to have access to a variety of financial services by opening their MoMo accounts (Demirguc -Kant et al; 2017). Tangible digital product attributes also apply to MoMo.

The tangible attribute of indestructibility means that the quality of a digital product does not degrade no matter how long or how often it is used (Choi et al., 2003). This implies that for MoMo, it will continue to exist over time in so far as there are mobile phones and electronic money (money digitalised).

Transmutability refers to the fact that the context of digital products can be changed instantly (Choi et al., 2003). This is also applied to MoMo because its content can be adapted to individual customers using their passwords and names. The reproducibility characteristic means that the digit products' nature can be reproduced, stored and transferred at ease. This applies to MoMo which is supplied by communication companies with different marketing strategies and organisational cultures. These characteristics of a digital MoMo product can increase its consumer demand.

2.4 Digital innovation attributes increase the consumer demand for MoMo and hypotheses development

Many theories like the diffusion of innovation theory and the consumer innovativeness theory show that there are particular innovative attributes that make consumers to adopt innovative products. The diffusion innovation theory was setup by Rogers (1962). The theory explains how, why and at what rate new ideas and technology expand. The theory is also associated with the reduction of uncertainty in the adoption of an innovation. Rogers (2003) therefore setup five innovative attributes that contribute to reduce an uncertainty in using an innovation. They include relative advantage, compatibility, complexity, triability and observability. They can also apply to digital innovations as they are full of uncertainty and very sensitive.

Relative advantage refers to the degree to which an innovation is perceived to be better than the existing product. Meanwhile, compatibility relates to the degree to which an innovation matches the consumer or user's existing values, beliefs, experience and needs. On its part, complexity is the degree to which an innovation is perceived to be difficult to understand and use. Triability is the facility that an innovation offers for its trial and experiments. Finally, observability refers to the degree of visibility of an innovation to others. This theory is used in this study to provide the digital attributes that motivate the demand for MoMo by Consumers in the Buea Municipality. The key limits of this theory are that it does not explicitly state the sector or the domain of activity that facilitates the effective adoption of the innovation puts in place by consumers and does not foster the participatory approach (MacVaugh and Schiavone, 2010). This makes it exigent to shed light on the notion of consumer innovativeness.

Consumer innovativeness refers to the adoption of a new product by consumers. This adoption is influenced by trait factors related to genetic traits like curiosity, ambition and reasonableness (Morton et al., 2016) leading individuals to like new products against old ones and also by situational factors such as the environment. Consumer innovativeness is associated with the theory of consumer behaviour. This theory studies how people make decisions when they purchase. In line with consumer innovativeness, this implies that for the consumer to purchase a new product, he must first adopt it. Therefore, the demand for MTN MoMo and its purchase by customers in Buea Municipality are based on its adoption by its consumers. Consumer innovativeness constructs are henceforth used in this study to justify the demand for the MTN MoMo product in the Buea Municipality while the diffusion innovation theory serves to determine the digital attributes suitable to explain this demand. In this study, the demand for MoMo reflects the economic benefits got by consumers from using the MoMo product while the digital product attributes employed in this study are Rogers (2003)'s characteristics of innovative products. They are chosen because they incentivise the consumption of innovative products like MoMo and mitigate uncertainty and doubtfulness related to the demand for digital products. The attributes of the diffusion innovation theory following their definitions can be aligned to the digital product attributes on Table 4. Their matching is evidenced by the justifications.

Consumer demand in this study takes the meaning of consumer usage and benefits of the MTN MoMo product. Many studies have shown that tangible digital product attributes of observability, relative advantage and triability have a positive relationship with consumer demand or usage of the digital product. Examples of these studies are Rogers (2003) and Al-Jabri and Sohail (2012). The latter used primary data collected

from 330 actual mobile banking users and 166 potential banking users in three main cities of Saudi Arabia, namely Jeddah, Riyadh and Dhahran-Kobar-Dammam and made use of a questionnaire. The data were analysed using ordinary least square regressions. The findings showed that as far as tangible innovative attributes are concerned, relative advantage and observability were significant while trialability was not. Al-Jabri and Sohail's study was on mobile banking which is a digital product different from MoMo. This difference in the nature of products makes us to assert that Rogers (2003)'s innovative tangible attributes can have an effect on the consumption of the MTN MoMo product different from the one on mobile banking shown by the study of Al-Jabri and Sohail (2012). It is for this reason that we developed research Hypothesis 1 as follows:

H1 Relative advantage, observability and Trialability increase the demand for the MTN MoMo product in the Buea Municipality.

Table 4 Diffusion innovation theory matching digital product attributes

Types of digital attributes	*Diffusion innovation theory attributes*	*Matching digital product attributes*	*Justifications*
Tangible digital attributes	Observability	Indestructibility	Observability enables to create durability in the digital product (MoMo) over time
	Relative advantage	Transmutability	Relative advantage shows a change in the innovative product (MoMo) compared to the existing product (Classical money products).
	Triability	Reproducibility	Triability enables to repeat a digital product in order to convince consumers to demand regularly for it. This is the case MoMo
Intangible digital attributes	Compatibility	Dependence on individual preference	Compatibility enables the consumers to appraise the digital product (MoMo) according to their preferences
	Complexity	Intrinsic value/externalities values	Complexity is a subjective value or perception which is used by customers to appraise an intrinsic value or externality value of a digital product (MoMo) depending on their skills and Knowledge
	Confidence	Cumulative utility	Confidence offers to the consumers a cumulative utility needed for them to continue consuming the innovative product (MoMo) over time

Contrary to H1, other studies have shown that intangible digital attributes like compatibility, less complexity and confidence increase consumers' demand for digital products. Examples of these studies are Rogers (2003) and Lin (2011). Lin (2011) used a survey study made up of 368 participants. His variables of analyses were perceived relative advantage, ease of use, compatibility, benevolence, perceived competence and

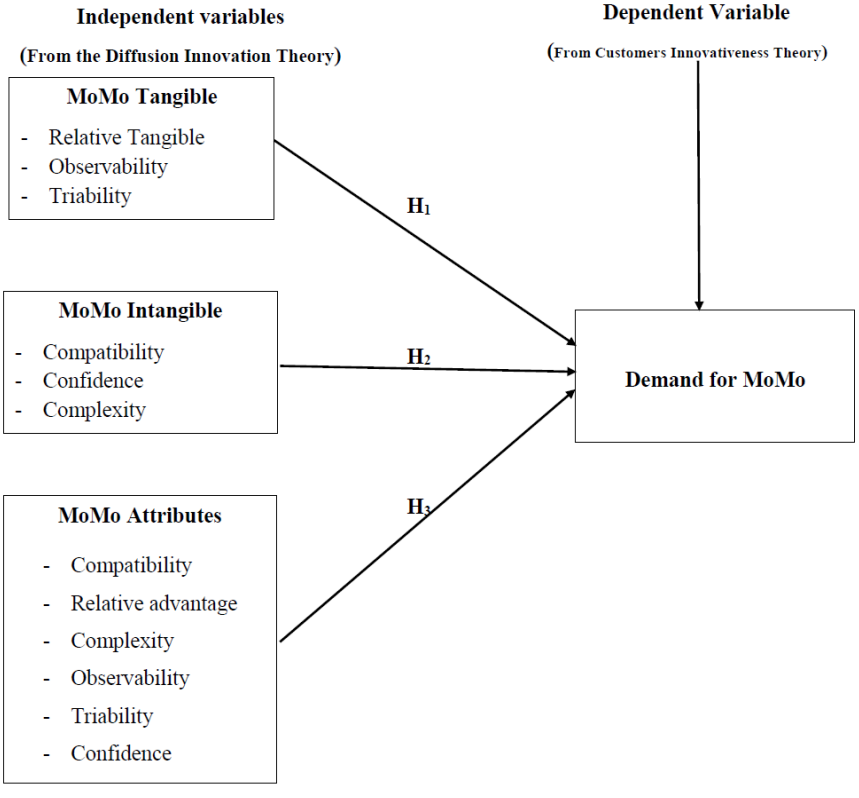
integrity. This study used a structural equation model approach to investigate the research model. In line with the intangible innovative attributes chosen to study, compatibility was significant. This study also focuses on mobile banking which is different from the MTN MoMo product in this study and also uses constructs different from the ones adopted from those used in the current study. For this reason, we chose other intangible attributes varying from the ones of Lin (2011) to assess the demand for the MTN MoMo product in the Buea Municipality. Thus, the following Hypothesis 2 was posed:

H2 Compatibility, less complexity and confidence increase consumers' demand for the MTN MoMo product in the Buea Municipality.

Both tangible and intangible attributes of digital products like MoMo can affect consumers' usage of the MTN MoMo product, following the concept of consumer innovativeness (Al-Jundi, 2019). This led us to generate the third hypothesis for this study as follows:

H3 Relative advantage, observability, trialability, compatibility, less complexity and confidence significantly affect consumers' demand for the MTN MoMo product in the Buea Municipality.

Figure 1 Theoretical design independent variable from the diffusion innovation theory)



2.5 Theoretical foundation of the conceptual model

The hypotheses above are supported by two elements that are the diffusion innovation theory and the concept of consumer innovativeness. Rogers (2003) in his study came up with factors suitable to affect the adoption and use of innovations like MTN MoMo. We chose these variables as independent variables of Figure 1. Rogers' model has five attributes. We added a sixth variable to this model to be in line with the study of Lin and Wang (2006) which stresses that confidence or trust is very important in the domain of technology like MoMo and enables to reduce consumer's uncertainty (Rogers, 2003). This therefore justifies the choice of the variable confidence in the model of Figure 1.

The second element that is at the source of the theoretical model of this study is the consumer innovativeness. According to Raskovic et al. (2016), it is viewed as a tendency to buy new products rather following familiar consumption patterns. This shows that consumer innovativeness relates to demand for innovation in product. MoMo is an innovation in digital finance. It has many benefits and economic advantages that attract innovative consumers. Some of these ones are payment of bills, reception of money, withdrawal of funds and reception of financial information, deposits of funds and opening of bank accounts (Tengeh and Talom, 2020). This study chose this perspective because it is practical and inclusive. Figure 1 is stated.

3 Elements of methodology

The methodology presents the variables of the study, the sample technique, and the instruments of data collection and analyses and the model specifications.

3.1 Research design

The research design developed in this study is explanatory. It combines two sets of variables, the explained and the explanatory variables, to assess their relationship, employing ordinary least square regressions. The digital attributes are explanatory variables while the demand for MTN MoMo in Buea Municipality is the explained variable. This research design was chosen because it eases the prediction of the digital attributes that influence the demand for the MTN MoMo product in the Buea Municipality. This method is in line with the knowledge produced by management sciences which can be descriptive, explanative or predictive.

3.2 Types of variables used and their measurements

The variables of this study are of two types that are independent and dependent. The independent variables take the meaning of attributes in this study. They are chosen from the characteristics of diffusion innovation theory (Rogers, 2003) that are suitable for increasing the demand for MoMo. Therefore, in line with Rogers' study, we adopt two sets of attributes taken as independent variables that are tangible (relative advantage, triability and observability) and intangible attributes that are (confidence, compatibility, complexity). The dependent variable is consumer demand. It is perceived in this study as the economic benefits that accrue from the demand for MoMo product. This is shown on Table 5.

Table 5 Variables and their measures

Nature of the variables	*Variables*	*Sub-variables*	*Measures*	*Supported authors*
Independent variables	MTN MoMo product attributes	Relative advantage (X1)	Immediacy, convenience and affordability	Lin (2011)
		Triability (X2)	Experimentation, comfort and minimisation of fear	Rogers (2003) and Agarwal and Prasad (1998)
		Observability (X3)	Visibility and accessibility to MTN MoMo services	Rogers (2003) and Moore and Benbasat (1991)
		Compatibility (X4)	Consistency with MoMo users' styles and habits and experience; Conformance with MoMo user's life style	Chen et al. (2004) and Rogers (2003)
		Complexity (X5)	Ease to use, time spent and frustration	Gu et al. (2009), Luarn and Lin (2005) and Al-Jabri and Sohail (2012)
		Confidence (X6)	Trust, constant use and satisfaction of MTN MoMo users	Lin and Wang (2006) and Bolen and Ozen (2020)
Dependent variable	Consumer demand (Y)	/	Perceived economic value benefits by MTN MoMo customers: MoMo Deposits, MoMo Withdrawals of funds, MoMo payments and MoMo Accessibility to economic, political and social Information	Al-Jundi (2019) and Rogers (2003)

The modalities for the quantification of chosen measures and answers of respondents are in Likert scale. The respondents were expected to tick the responses provided on a Linkert scale rated from 1 to 5; 1 = strongly disagree (SD), 2 = disagree (D), 3 = undecided (U), 4 = agree (A) and 5 = strongly agree (SA). Each respondent was expected to select only one of these responses by ticking.

3.3 Method and instruments of data collection

The data in this study are primary and were collected from consumers of the MTN MoMo product in the municipality of Buea. Buea is the capital of the South West Region in the English zone of Cameroon. Its main settlements are Bokwango, Molyko, Muea, Bokwango, Soppo, Small Soppo, Sampit, Mile 16, Bokwai. Its residents come from different regions of Cameroon and abroad. Buea is not only a very fast-growing demographic Municipality, but it is also economically and socially viable. Economically, many companies operating in Cameroon have subsidiaries in this municipality. This is the case with enterprises in the banking and the telecommunications industries. For instance, of the 16 commercial banks found in Cameroon, seven have subsidiaries in Buea. All the four telecommunication companies carrying out activities in Cameroon equally have branches in Buea.

The population of the study is MoMo users in the Buea Municipality in the South West Region of Cameroon. Any MTN MoMo customer in the Buea Municipality available was suitable to yield information related to the digital product attributes identified above. In general, many MTN MoMo customers exist in the Buea Municipality because it is a dominant telecommunication company in the municipality which has an anglo-saxon organisational identity and culture akin to that of a majority of those who reside in the Buea Municipality. This closeness in culture compared with its counterpart Orange Company makes most of the residents in Buea to choose MTN products and specifically MTN MoMo for their mobile money transactions. The following statistics sustain the analysis above.

MTN is the leader of the telecommunication industry market in Cameroon in terms of the market share. In 2018, MTN controlled 42.62% of the Cameroon telecommunication market share against 38.45% for Orange, 15.56% for Nextel and 3.37% for CAMTEL. In addition, MTN has a faster and a higher penetration in Cameroon, especially in the English zones, than the other Mobile Phone companies operating in Cameroon. Also, though MTN, Orange and Express Union are the three companies supplying a Mobile Money Product in Cameroon, MTN is still the leader. The sampling technique used for this study was the convenient sampling technique where data were collected from available users of MTN MoMo for one week in the premises of the MTN branch in Molyko, a university neighbourhood in the Buea Municipality.

The final sample size from the convenient sampling technique was 228 respondents. The questionnaire was used to collect the data. The questionnaire was chosen for this study because it can easily be quantified, and offers a quick way to get results. In addition, it is practical, and provides a room for comparability. The consumers were expected to fill only what they could appraise as new attributes in the MTN MoMo product suitable to influence their demand for the MoMo product. Each of these questionnaires was made up of a list of questions relating to the objectives of the study and the hypotheses to be verified. Each of these questionnaires was divided into sections, Section one contained questions on tangible and intangible digital attributes (independent variables) and section two dwelled on information related to consumers' demand for MoMo (dependent variable).

3.4 Method and instruments of data analyses

The instruments associated with data analyses are descriptive statistics and inferential statistics. With the descriptive analyses, bar charts, pie charts, frequency distribution tables, percentages, mean and standard deviation were used. This method made it possible to present the data in a way that anyone can easily understand.

Econometric analyses were also carried out and used ordinary least square regressions at 1%, 5% and 10% levels of significance. The econometric model is significant when the p-value is less than 1%, 5% and 10%. We expect these models to be significant. This is because our observations of the Cameroon's mobile money market reveals increase in financial and institutional innovations as a result of increases in competition.

The regression technique of estimation used for this study focused on determining the effect of the digital product attributes (tangible and intangible) on the consumer demand for MoMo. This model was selected due to the fact that the regression analysis is a quantitative method which is used when the study involves modelling and analysing several variables, where the relationship includes a dependent variable and one or more

independent variables. The regression model basically specifies the relation of dependent variable (Y) to a function of independent variables (X_1, X_2, X_3, X_4, X_5, X_6) and unknown variables (μ). The above is represented in the following equations:

$$Y = f\left(X_1, X_2, X_3, X_4, X_5, X_6, \mu\right) \tag{1}$$

The regression equation can be used to predict the value of Y if the values of X_1, X_2, X_3, X_4, X_5, X_6 are given, and both these sets of variables; dependent and independent variables and their measures for analysis of data from the sample size of 228 respondents are clearly identified. The formula for the ordinary least square regression equation adopted following equation (1) is:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + \mu \tag{2}$$

The t-test, F-test, the R square, and the adjusted R square were used as validation techniques. The R square runs from 0 to 1.

3.5 Models specification and justification of expected signs of variables

The choice of variables and their signs was based on a review of studies presented on Table 2. For Model 1, the tangible variables were derived from the definitions and studies of Rogers (2003) and Al-Jabri and Sohail (2012) who showed that triability, relative advantage and observability are the physical evidence that positively influence consumers to adopt a new product or a digital innovation. Hence, we expect a positive relationship between consumer demand (CD) and each of the chosen tangible variables namely triability, relative advantage and observability.

Model 1 Consumer demand of MoMo and tangible attributes

$$CD = X0 + X1TRIA + X2RELA + X3OBSE + \mu \tag{3}$$

where CD = consumer demand for MoMo, $TRIA$ = triability, $RELA$ = relative advantage, $OBSE$ = observability and μ = error term.

Model 2 Consumer demand for MoMo product and intangible attributes

The choice of variables of Model 2 issues from studies presented on Table 2. The studies showed that compatibility and confidence positively influence the adoption of an innovative product like the MTN MoMo product. This is the reverse for complexity. Thus, the nature of empirical signs expected from the multivariate regression equation (4) is given as follows:

$$CD = \alpha 0 + \alpha 1COMP + \alpha 2COMX + \alpha 3CONF + \mu \tag{4}$$

where $COMP$ = compatibility, $COMX$ = complexity, $CONF$ = confidence and μ = error term.

Model 3 Consumer demand for MoMo and digital attributes

Model 3 originates from Hypothesis 3 of this study and it uses the chosen variables of Hypotheses 1 and 2. Hypothesis 3 is supported by the consumer behaviour theory and the

concept of consumer innovativeness which show that consumer demand for products or services has many factors; tangible and intangible that can simultaneously explain the use and adoption of a new product, most specially a digital product. The expected signs of the relationships between consumer demand for MoMo and the chosen digital attributes of MoMo are positive relationships except for the relationship between consumer demand for MoMo and complexity. Thus, model (3) equation is expressed as follows:

$$CD = \beta 0 + \beta 1TRIA + \beta 2RELA + \beta 3OBSE + \beta 4COMP - \beta 5COMX + \beta 6CONF + \mu \quad (5)$$

4 Presentation and discussion of results

4.1 Results

4.1.1 Descriptive results

The descriptive analysis is focuses on the demographic information of the respondents. The concern is to review the percentage or average respondent that falls within the gender, age educational level, the time distribution and location of MTN MoMo demand in the Buea Municipality. Table 6 therefore presents the frequency distribution of time usage of MTN MoMo, the location of their users in the Buea Municipality and their levels of education.

Table 6 presents some demographic elements of respondents studied. The Table shows that most questionnaire respondents have been using MTN MoMo for between 2 and 4 years and most of them stay in the Molyko neighbourhood. Most of them also have undergraduate university level of education. These findings can be explained by the fact that the MTN branch headquarters is located in Molyko where the University is equally found. University students use the MTN MoMo product to pay their school fees and receive money from their parents for their food, rent and monthly allowance. In addition, Molyko is a fast-growing locality in the Buea Municipality that has many small, small and medium sized enterprises that use MTN MoMo (Ngange and Beng, 2017). Figure 2 presents the age of users of MTN MoMo in the Buea Municipality.

Figure 2 Age distribution (see online version for colours)

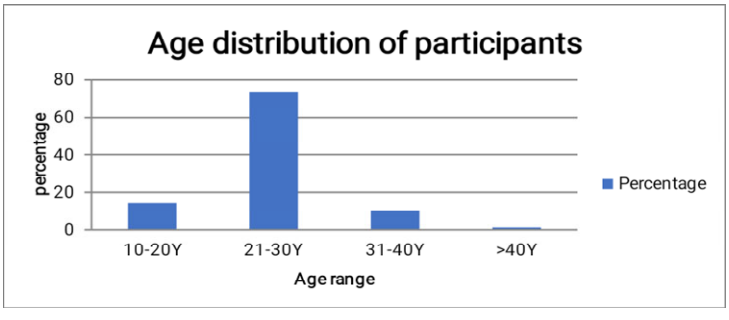


Figure 3 indicates that the number of female respondents is as much as that of male participants that is 114 respondents for each gender. This is in fact an unprecedented and surprising gender distribution result but actually a good attribute of gender equality in research. This is because equal distribution in gender participation is of great research

quality since it helps to mitigate and eliminate gender bias in the analysis. This finding shows that in the sample studied, women at the same level like men, use MoMo for their economic and social transactions. Both sexes recognise the importance of MTN MoMo for their day-to-day transactions in the Buea Municipality. This can be justified by an increase of the level of education of women and their high level of involvement in entrepreneurial activities in the Buea Municipality. Figure 2 presents the age distribution of users of MTN MoMo in the Buea Municipality.

Table 6 Frequency distribution

Demographics	*Frequency*	*Percentage (%)*
Time usage of MTN MoMo		
< 1 year	12	5.3
2–4 years	132	57.8
4–8 years	59	26
> 8 years	25	10.9
Total	228	100
Location of users of MTN MoMo in Buea		
Bokwango	25	10.96
Molyko	100	43.8
Muea	14	6.1
Small Soppo	40	17.5
Sampit	30	13.1
Mile 16	12	5.3
Bokwai	7	3.24
Total	228	100
Education		
Primary		
Secondary	69	30.3
Undergraduate university	103	45.2
Postgraduate university	10	4.4
Others	46	20.1
Total	228	100

Figure 3 Gender distribution (see online version for colours)

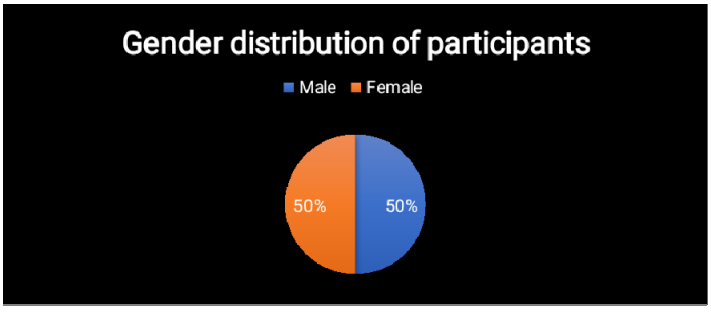


Figure 3 reveals that the equality in the gender distribution of participants is absent in the age distribution. More than 70% of the respondent users of MoMo studied in Buea Municipality are between 21–30 years old. The study was designed to equally capture the views of the adolescents who constitute 18% of the participants. Less than 2% of the users studied are above 40 years old. All these descriptive findings presented above need to be assessed in order to determine which factors of innovative and digital attributes from the Diffusion Innovation Theory influence the characteristics of users of MTN MoMo studied in Buea Municipality. The descriptive findings above are shown in the inferential findings below.

4.1.2 Inferential results

The inferential findings are based on empirical models explained in the methodology. This section starts with the Model 1 related to tangible digital attributes and demand for the MTN MoMo product.

Table 7 shows that, the model studied is not significant under the ANOVA test. This means that the combination of digital attributes identified and associated with MoMo do not significantly influence its demand in the Buea Municipality in Cameroon.

Table 7 Influence of tangible digital attributes on demand for MoMo

Independent variables	*Unstandardised coefficients*	*Standardised coefficient*	*t*	*Sig.*	*VIF*
Constant	4.061***		13.416	0.000	
Triability	0.047	0.056	0.839	0.402	1.024
Relative advantage	–0.058	–0.089	–1.337	0.183	1.017
Observability	–0.085*	–0.115	–1.733	0.084	1.020
ANOVA F- test	1.948				
F (P value)	0.123				
R square	0.025				
Adjusted R square	0.012				
Observations	228				

Model 1 Tangible digital attributes and demand for MoMo

$$CD = X0 + X1TRIA + X2RELA + X3OBSE + \mu$$

where CD = consumer demand for MoMo, $TRIA$ = triability, $RELA$ = relative advantage, $OBSE$ = observability and μ = error term.

Model 2 Intangible digital attributes and the demand for MoMo

$$CD = \alpha 0 + \alpha 1COMP + \alpha 2COMX + \alpha 3CONF + \mu$$

where $COMP$ = compatibility, $COMX$ = complexity, $CONF$ = confidence and μ = error term.

Table 8 shows that, the model studied is significant under the ANOVA test. The adjusted R square is 5.1%, which means that more than 5% of variation in consumers'

demand for MoMo is explained by the chosen independent variables of intangible digital attributes of the MTN MoMo product.

Table 8 Influence of tangible digital attributes on the demand for MoMo

Independent variables	*Unstandardised coefficient*	*Standardised coefficients*	*t*	*Sig.*	*VIF*
Constant	3.913***		12.740	0.000	
Compatibility	0.667	0.96	1.441	0.151	1.063
Complexity	–0.162***	–0.222***	–3.414	0.001	1.010
Confidence	0.048	0.063	0.946	0.345	1.054
F value	5.025				
P- value	0.002				
R square	0.063				
Adjusted R square	0.051				
Observations	228				

Also, in Table 8, beta expresses the relative importance of each individual variable in standardised terms. Evidently, all the intangible digital attributes studied do not significantly increase the consumer demand for MoMo in the Buea Municipality in Cameroon. However, compatibility, confidence and consumer demand for MoMo have a positive relationship in the Buea Municipality.

Model 3 Digital attributes and consumer demand for the MTN MoMo product

$$CD = \beta 0 + + \beta 1TRIA + \beta 2RELA + \beta 3OBSE + \beta 4COMP + \beta 5COMX + \beta 6CONF + \mu$$

Table 9 Descriptive statistics backed up by inferential results

Variables	*N*	*Minimum*	*Maximum*	*Mean*	*Std. deviation*
CD	228	1	5	3.76	0.941
TRIA	228	1	5	3.86	1.121
RELA	228	1	5	3.01	1.433
OBSE	228	1	5	3.58	1.283
COMP	228	1	5	3.52	1.342
CONF	228	1	5	3.05	1.241
COMX	228	1	5	3.28	1.286

Table 9 shows that triability (TRIA) is the variable that has the highest mean while relative advantage has the lowest mean. In terms of standard deviation, consumer demand (CD) for the MTN MoMo product has the lowest standard deviation while relative advantage (RELA) has the highest. This shows that CD fluctuates less in line with its mean indicating that the consumer demand for the MTN MoMo product in the Buea Municipality is quite stable and the users of this digital product in this municipality have the same characteristics. The finding about RELA here shows that this variable's perception varies from one customer of MTN MoMo to another in the Buea municipality. Hence, the variable has less chances of significantly affecting the decision of MTN

MoMo users in the Buea Municipality as seen in the inferential findings of Model 3 in Table 10.

Table 10 The influence of digital attributes on the demand for the MTN MoMo product

Independent variables	*Unstandardised coefficients*	*Standardised coefficients*	*t*	*Sig.*	*VIF*
Constant	4.372		10.012		
Triability	0.038	0.045	0.670	0.504	1.096
Relative advantage	–0.036	–0.055	–0.814	0.416	1.117
Observability	–0.102*	–0.139*	–1.913	0.057	1.277
Compatibility	0.020	0.028	0.380	0.705	1.347
Complexity	–0.166***	–0.227***	–3.499	0.001	1.017
Confidence	0.064	0.084	1.196	0.233	1.197
ANOVA F-test	3.297				
P-value	0.004				
R square	0.082				
Adjusted R square	0.057				
Observations	228				

Table 10 shows that, the model studied is significant under the ANOVA test. The adjusted R square is 5.7%, which means that more than 5% of variation in the consumer demand for MoMo is explained by the chosen independent variables of digital product attributes in the Buea Municipality. Moreover, observability and complexity variables have coefficients that are statistically and significantly different from zero (the p-value for the regression coefficient is less than 0.10), meaning that, they are significant predictors of consumer demand for the MTN MoMo product in the Buea Municipality.

Also, in Table 6, Beta expresses the relative importance of each individual variable in standardised terms. According to this, triability, compatibility and confidence do not significantly increase the consumption of the MTN MoMo product in the Buea Municipality while observability and complexity significantly decrease it and relative advantage on its part, non-significantly decreases it.

4.2 Discussion of results

The study shows that only complexity (Tables 8 and 10) and observability (Table 7) are significant. They decrease significantly the demand for the MTN MoMo product in the Buea Municipality. The findings regarding complexity align with the expected results presented by the literature while this is not the case for observability. Other digital attributes are not significant. A number of reasons can explain these findings. First, consumers of the MTN MoMo product in the Buea Municipality are not innate consumer innovators. They have more of the characteristics of laggards. Also, Buea Municipality is not a business town like its neighbouring municipalities of Douala and Limbe. Its fast growth and development are traceable to an increase in households and individuals instead of businesses. Typically, businesses are risk takers while households are risk averters. The attributes of diffusion theory (triability, compatibility and less complexity) increase the consumption of the MTN MoMo product in the Buea Municipality, but they

were not significant. This can be explained by the fact that the MTN MoMo product is a digital product associated with individual use, so its importance to a customer can only be appraised individually and not collectively and its choice by customers depend on individual factors that affect individual consumption like the purchasing power, the environment of the consumer, the perception of the usefulness of MoMo and its ease of use. These findings of less complexity and compatibility with the users' preferences are in line with the theory of technology acceptance model (TAM) THEORY (Davis et al., 1989), which states that the perception of usefulness and the perception of ease of use increase the usage of an innovation and hence of a digital product like the MTN MoMo product in the Buea Municipality.

Going by the second finding, observability and relative advantage have a negative relationship with consumer demand for MoMo because these attributes refer to consumers' collective perception of consumption of a new product like the MTN MoMo. The fact that these factors might involve many consumers' perception of MoMo may justify the inverse relationships between these attributes and consumers' demand for the MTN MoMo product. When a factor requires the decision of many consumers, it converges in the same direction because of the availability of many substitutes and differences in choices.

The findings on the digital attributes and the consumer demand for Mobile Money in the Buea Municipality as mentioned above reveal that observability and complexity have an inverse significant relationship with the demand for the MTN MoMo product in the Buea Municipality. These findings can also be explained by the fact that mobile phones are now easily accessible to many individuals unlike was the case in the 80s and 90s.

The findings of this study deviate from those by Demirguc-Kunt et al. (2017) who reported that the mobile phone is one of the key elements boosting MoMo usage and financial inclusion in the world and more specifically in Sub-Saharan Africa. The difference in findings between this study and the one of Demirguc-Kunt et al's study (2017) might be that Demirguc-Kunt et al's study (2017) was longitudinal and based on many countries while this study is in one country's region dominated by a socio-political crisis.

5 Conclusions

Digital product attributes have been considered a great incentive for consumers. This study used MoMo attributes to assess their influence on customers' demand. To achieve this, data were collected from 228 users of the MTN MoMo product in the Buea Municipality. The data were analysed through bar and pie charts, mean, standard deviations, and ordinary least square regressions.

The key findings are that the digital product attributes identified do not significantly increase the consumption of the MTN MoMo in Buea Municipality in Cameroon. These findings do not align with the diffusion innovation theory which states that relative advantage and observability increase consumers' adoption of a new product or a digital product like the MTN MoMo product in this study. The results on other attributes of complexity, compatibility and triability are in tendem with the diffusion innovation theory. Meanwhile, the fact that the attributes of MoMo contradict with the diffusion innovation theory might be justified by the environment or context of this study. Therefore, we recommend the integration of the environmental or context as variables in

the diffusion innovation theory. In addition, we suggest that this study should be extended to the whole Cameroon using the same adopted variables and improving also on the quality of instruments of data analyses and measurement. These might lead to findings better than the ones of this study.

References

Agarwal, R. and Prasad, J. (1998) 'Aconceptual and operational definitionof personal innovativeness in the domain of information technology', *Information Systems Research*, Vol. 9, No. 2, pp.204–215.

Al-Jabri, M.I. and Sohail, S.M. (2012) 'Mobile banking adoption: applicationof diffusion of innovation theory', *Journal of Electronic Commerce Research,* Vol. 13, No. 4, pp.379–391.

Al-Jundi, S. (2019) 'Dataset of new product purchase intentions', *Mendeley Data*, Vol. 1, doi:10.17632/MWJMX8FP6T.1.

Bolen, C.M. and Ozen, U. (2020) 'Understanding the factors affecting consumer's continuance intention in mobile shopping: the case of private shopping clubs', *International Journal of Mobile Communications*, Vol. 18, No. 1, pp.101.

Chen, L., Gillenson, M. and Sherrell, D. (2004) 'Consumer acceptance of virtual stores: a theoretical model and critical success factors for virtual stores', *ACM SIGMIS Database*, Vol. 35, No. 2, pp.8–31.

Choi, Stahl and Whinston (2003) 'characteristics of digital products in *The Economics of Electronic Commerce*, pp.1–22.

Davis, D.F., Bagozzi, P.R. and Warshaw, P.R. (1989) 'User acceptance of computer technology: a comparison of two theoretical models', *Journal of Management Sciences*, Vol. 35, No. 8, pp.982–1003.

Demirguc-Kunt, A., Klapper, L., Singer, D., Ansar, S. and Hess, J. (2017) '*The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution,* World Bank, Washington.

Etoundi, R.S., Onana, M.S., Olle, O.D. and Eteme, A.A. (2016) 'Development of the digital economy in cameroon: challenges and perspectives', *The Electronic Journal of Information Systems in Developing Countries*, Vol. 76, No. 1, pp.1–24.

Gu, J.C., Lee, S.C. and Suh, Y.H. (2009) 'Determinants of behavioral intention to mobile banking', *Expert Systems with Applications*, Vol. 36, No. 9, pp.11605–11616.

Lin, H. (2011) 'An emperical investigation of mobile banking adoption: the effects of innovation attributes and knowledge-based trust', *International Journal of Information Management*, Vol. 31, No. 3, pp.252–260.

Lin, H-H. and Wang, Y-S. (2006) 'An examination of the determinants of customer loyalty in mobile commerce c ontexts', *Journalof Information and Management*, Vol. 43, No. 3, pp.271–282.

Luarn, P. and Lin, H-H. (2005) 'Toward an understanding of the behavioral intention to use mobile banking', *Computers in Human Behavior*, Vol. 21, No. 6, pp.873–891.

MacVaugh, J. and Schiavone, F. (2010) 'Limits to the diffusion innovation: a literature review and integrative model', *European Journal of Innovation Management*, Vol. 13, pp.197–221.

Miles, R.C. and Snow, C.C. (1978) '*Organizational Strategy, Structure and Process,* Mc-Graw-Hill, New York.

Moore, G.C. and Benbasat, I. (1991) 'Develpment of an instrument to measure the perceptions of adopting an informationtechnology innovation', *Information System Research*, Vol. 2, No. 3, pp.192–222.

Morton, C., Anable, J. and Nelson, J.D. (2016) 'Exploring consumer preferences towards electric vehicles:the influence of consumer innovativeness', *Research in Transportation Business and Management*, March, Vol. 18, pp.18–28.

National Credit Commission (NCC) (2017) *Census on The Pricing of Services of Credit Establishments and Microfinance Institutions 2017*, Yaounde, NCC.

Ngange, K.L. and Beng, P. (2017) 'Use of mobile phones for economic development in Cameroon', *Advances in Journalism and Communication*, Vol. 5, No. 2, pp.145–161.

Ojong, N. (2016) 'Remittances, mobile phones and informality: insights from Cameroon', *A frican Journal of Science, Technology, Innovation and Development*, Vol. 8, No. 3, pp.299–308.

Raskovic, M., Ding, Z., Skare, V., Dosen, O.D. and Zabkar, V. (2016) 'Comparing consumer innovativeness and ethnocentricism of young adult consumers', *Journal of Business Research*, Vol. 69, No. 9, pp.3682–3686.

Rogers, E.M. (1962) *Diffusion of Innovations,* 1st ed., Free Press of Grencoe, New York, USA.

Rogers, E.M. (2003) *Diffusion of Innovations*, 5th ed., Free Press, New York, USA.

Tengeh, R.K. and Talom, F.S. (2020) 'Mobile money as a sustainable altenative for smes in less developed financial markets', *Journal of Open Innovation, Technology, Market and Complexity*, Vol. 6, No. 4, pp.1–21.

Tumbay, Z., Boltayeva, A., Zhovabayeva, Z., Aliyeva, B. and Santimbetova, A. (2019) 'Modern application of marketing in the telelecommunication industry', *E35 Web of Conferences*, Vol. 135, No. 04024, pp.1–8.