



Factors Influencing the Adoption and Use of Mobile Money in Cameroon: Case of Mobile Money Operators and Users in Buea

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ABSTRACT

Mobile Money is an innovation that has transformed e-business in the Cameroonian context. This study examines the factors that enhance the adoption and use of mobile money in Buea, capital of the South West Region of Cameroon. The theoretical framework used is the diffusion of innovation. The qualitative approach is adopted, with 10 mobile money operators and 10 mobile money users interviewed using a structured interview protocol. Results show that participants prefer adopting and using mobile services because they are easy to use, convenient, readily accessible, and have less charges compared to the traditional banking system. Telecommunications companies should therefore, continue to consider less charges and bonuses as a strategy to increase penetration and adoption of mobile money services. Likewise, the instructions and language essential to effect Mobile Money operations like internet and airtime purchase should remain simple.

Keywords: Mobile Money, E-business, E-banking, Adoption, Cameroon

INTRODUCTION

Several factors have influenced the adoption and use of mobile money (MoMo) within Cameroon. However, very few studies have been done to understand why people adopt and use mobile money services. Mobile money is rapidly growing and it has significantly influenced financial transactions all over the world (Kithinji, 2004). Jenkins (2008) defines mobile money as money that can be accessed and used via the mobile phone. With an increasingly widespread use of mobile phones by consumers in the emerging markets, mobile money transfer is not just a trend but a great phenomenon. Maitai and Omwenga, (2016) assert that mobile money transfer services have revolutionised the way the financial services industry conducts business, empowering organisations with new business models and new ways to offer 24 hour ease of access to their customers. The ability to offer financial transactions over the mobile phone has also shaped new players in the financial services industry, such as mobile phone service providers who offer tailored services.

Mobile network operators are telecommunication entities that provide services for mobile phone subscribers (Mararo & Ngahu, 2017). The evolution of mobile money in Cameroon has been remarkable. According to Media Intelligence's tracked data on the Cameroon Remittance Market, mobile money was introduced in 2008, by Express Union. After the launch of Express Union Mobile, MTN Cameroon launched MTN Mobile Money in 2010 followed by Orange Cameroon, Orange Money in 2011. Societe Generale Cameroun (SGC) later launched Monifone in 2012 (Media Intelligence, 2020). The circumstances which prompted its launching were similar to those of most developing countries, particularly concerning the small numbers of members of the population who held bank accounts (European Investment Bank, 2016). The several mobile money operators in Cameroon offer services such as money deposits, money withdrawals, the sending and receiving of money transfers, a Visa card facility, the purchasing of insurance-related products, the transferring of funds between bank accounts and mobile money accounts, the purchasing of airtime and the payment of bills, university fees, transport tickets and school fees (Media Intelligence, 2020; Orange Cameroon, 2019; MTN Cameroon, 2019).

E-business became possible in 1991 when the internet was opened to commercial use. Since that date, thousands of businesses have taken up residence in websites (Deslie, 2003). Also known as electronic business or electronic commerce, e-business refers to any method of utilising digital information and communication technologies to support or streamline business processes; from preparation to implementation (Deslie, 2003). Driven by the widespread and understanding of the Internet's capabilities, the power of electronic commerce, and advances in wireless technologies and devices, mobile commerce (m-commerce) emerged and it is rapidly approaching the business forefront (Senn, 2000). This method of transactions refers to one type of e-payment, performed through mobile device(s) (such as mobile phones, smart phones, pads, tablets, etc.) for payments or money transfers (Vizzarri & Vatalaro, 2014). The emergence of m-commerce has brought about new sales opportunities online (Pavel and Vlad, 2016) and resorted to Mobile Payment (mPayment), a branch of m-commerce which is also emerging and refers to payments for goods, services, and bills using a mobile device through the adoption of wireless and other communication technologies (Dahlberg, Mallat, Ondrus and Zmijewska 2008). This system of payment not only provides an alternative for the diminishing use of cash (Begonha, Hoffman and Melin 2002) but eliminates traditionally cumbersome payment methods and also enables consumers to make payment anytime, anywhere (Zhang, Chen and Lee 2013).

The facilities available for mobile money services can either spur customers to adopt or not to adopt this technology. Bradford (2001) stated that the theory of perceived attributes is based on the notion that individuals will adopt an innovation if they perceive the innovation to add value, easy to use and compatible with their existing infrastructures. According to Lemuria and Belanger (2005), perceived relative advantage, perceived image, and perceived compatibility are significant elements of adoption. It is suggested that relative advantage, compatibility, and ease of use are the most relevant constructs to adoption decision. According to Maitai and Omwenga (2016) factors that influence the adoption of mobile money transfer strategy in telecommunication industry in Kenya include: quality service, affordability, convenience, accessibility and security. Tian and Dong (2013) investigated the theoretical constructs involved in the acceptance of innovation especially mPayment services. A research model was built based on Technology Acceptance Model (TAM), Theory of Planned Behaviour (TPB) and

Innovation Diffusion of Theory (IDT). The outcome showed that perceived usefulness, personal innovations and compatibility have a direct influence on users' attitude while opportunity cost and perceived risks have direct negative effects on the acceptance of the service. Lema's (2017) study on factors influencing the adoption of mobile financial services in the unbanked population in the Chamwino district of Tanzania, revealed that perceived usefulness, perceived cost and social influence had a significant influence on the adoption of mobile financial services. Perceived ease of use, perceived risk and perceived trust were found to have an insignificant influence on the adoption of mobile financial services. Hence, it is imperative for this study to investigate factors that influence the adoption and use of mobile money in Cameroon by providing answers to the following questions:

1. What are the benefits of mobile money business on Cameroonians?
2. What factors influence the adoption and use of Mobile Money in Cameroon?

THEORETICAL FRAMEWORK

The theoretical framework for this study is rooted in the first element of the Diffusion of Innovations theory (1995), the innovation. Rogers (1995) diffusion model included four elements: the innovation, communication channels, time and the social system. Rogers (ibid) asserts that there exist five perceived characteristics of innovation that explain the rate at which innovations are adopted, to include: relative advantage, compatibility, complexity, trialability and observability. Relative advantage is the "degree to which an innovation is perceived as better than the idea it supersedes" (Rogers, 1995, p. 15). Innovations such as mobile money services are adopted faster if users perceive them to be better than what they currently have. The degree of relative advantage may be measured in economic terms, but social prestige, convenience, and satisfaction are also important factors. Rogers asserts that consumers' adoption of certain products depends on product characteristics and the degree to which the product is perceived as being better than the practice it supersedes. Therefore, the adoption of mobile money services will depend on consumers' expected gains or losses from the service. Compatibility is the "degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters (Rogers, 1995, p. 15). Innovations that are consistent with social system values and norms will be adopted at faster rates than those that are incompatible with existing values and norms. According to Rogers (1995), complexity is the degree to which an innovation is perceived as difficult to understand and use. Some innovations are readily understood by most members of a social system; others are more complicated and will be adopted more slowly. Rogers (ibid) defined trialability as "the degree to which an innovation may be experimented on a limited basis" (p. 16). New ideas that can be tried on the instalment plan will generally be adopted more quickly than innovations that are not divisible. Finally, Rogers (1995) asserts that "observability" (p.16) is the degree to which the results of an innovation are visible to others. The easier it is for individuals to see the results of an innovation, the more likely they are to adopt it. In view, mobile money services in Cameroon will have a greater propensity of been adopted and used if they have a greater relative advantage, compatibility, trialability observability and less complexity.

MATERIAL AND METHODS

The researchers wanted to get a deeper appreciation of factors influencing the adoption and use of Mobile Money amongst research participants; hence, adopted a qualitative design for this study as it focused on the lived experiences of the participants in their natural settings; it

recognised the participants as knowers in their own lived experiences (Van Manen, 1997; Creswell, 1994). The purposive sampling technique was used in the recruitment of 20 participants' who are basically mobile money operators (10) and mobile money users (10) in Buea, capital of South West Region of Cameroon. This sampling method permitted the researchers to select individuals whose experiences were useful for the purpose of the study (Cohen, Manion and Morrison, 2007). Two interview protocols (structured) were designed in the English language, one for the Mobile Money operators and the other for Mobile Money users. A recorder was also used to record information and as a supporting method to the interviews. The interviews were employed to ensure that the same general areas of information are collected from each participant (Turner, 2010). Data was analysed using manual thematic analysis which according to Braun and Clarke (2006) is a method for identifying, analysing and reporting patterns (themes) within data. This method allowed the researcher to appropriately scrutinise the participants' point of view (Creswell, 1994).

ETHICAL CONSIDERATIONS

There was great protection of the participants' identity and dignity and participants had the right to withdraw from the study at any point, (Orb, Elsenhauer & Wynaden, 2000, Banister 2007; Hammersley & Traianou 2012). The researchers' ensured anonymity by assuming pseudonyms (non-revealing of participants' real names and business names) and this did not give away the identity of the participants (Hammersley and Traianou, 2012).

RESULTS AND DISCUSSIONS

Section I: Benefits of Mobile Money Business

This section focuses on the benefits of mobile money business on the mobile money operators and users.

Benefits of MoMo Business from MoMo Operators Perspective**Table 1: Thematic Analysis of the Benefits of MoMo Business to MoMo Operators**

Themes/Code	Theme/code Description	Grounding/frequency	Quotations
Source of living	Main means of daily survival of MoMo operators	5	"I do mobile money services because it is part of my living which I depend on" "I operate it to earn a living"
Profit maximisation/ Financial sustainability	MoMo operators source of income and means of business turnover and savings	10	"Mobile Money helps me to plough back profit, hence, increase capital" "The first aim of operating mobile money is to generate profit" "Profit maximisation and some sort of saving" "Thanks to mobile money, people can save their money in a transparent way, it helps me to save" "My per-capita income is encouraging; that is to say I'm now independent whereas before, when I was idle, I could not sustain myself financially"
Curbs unemployment	MoMo business is a source of self employment for MoMo operators	4	"Helps to ease unemployment" "I do mobile money because it helps me to earn a living"
Practice skills learnt in school	MoMo business is a medium of self capacity building and professionalisation	2	"As an entrepreneur and being a business oriented person, I thought it wise to implement my knowledge and skills learnt into practice" "I am an entrepreneur by profession and operating in a mobile money service is primarily to demonstrate my skills"

Mobile money operators derive varied benefits from their operations with the services offered via this business. The researchers were interested to know the exact benefits MoMo operators derive from doing MoMo business. Benefits highlighted vary from: source of living and employment, financial sustainability and investment (fast income, profit, means of savings) as well as practice skills learnt in school. One of the respondents noted that:

"I operate mobile money services as a means of living..." (Interview with Participant 3, July 2020).

Participants further highlighted key characteristics of the MoMo business that make it unique and profitable including: It is fast and efficient, time friendly, accessible, reliable, and easy to operate. Mobile money business also benefits its operators as it serves as an easy means of employment. This business also helps operators to become managers of their businesses

serving as a bridge to experiencing skills they learnt while in school. Participants view this business as one which creates a trust worthy relationship between the operators and the customers:

"I build trust as well as greater bond with my customers; MoMo business creates easy employment and empowers me as a self-made manager..." (Interview with Participant 5, July 2020).

The researchers also sought to understand if MoMo operators are convenient with mobile money services. They found that MoMo operators were convenient with the mobile money service due to: the benefits offered, the ease of using the services of mobile money, its reliability, fastness, cheaper charges per transactions compared to banks, its accessibility over time and space as well as easy instructions required to complete transactions.

"It is because of the benefits and ease of use, 85% reliable and fast, huge transactions are limited, cheaper rates, available at all times..." (Interview with Participant 8, July 2020)

"Steps are straight-forward, depends on the individual's reasoning abilities" (Interview with Participant 2, July 2020)

"Questions are straight forward, instructions are easy to follow" (Interview with Participant 10, July 2020).

These findings corroborate with Tian and Dong (2013), Zhang et al., (2013) assertion that perceived usefulness, personal innovations, compatibility, accessibility have a direct influence on users' attitude towards the adoption of mPayment services.

Challenges MoMo Operators face in MoMo Business

Notwithstanding, MoMo operators highlighted some challenges they face while using mobile money transactions for business:

"No security..., mistakes are very risky and have financial repercussions..." (Interview with Participant 2, 10 July 2020)

In dealing with some of the challenges, one participant noted that he discusses the challenges he faces with his business colleagues or friends in order to seek solutions:

"My colleagues, my friends – I encourage them to use mobile money because of its benefits; I discuss issues of losses with others so we can avoid losses incurred, to gather and gain experience; discuss insecurity issues, fraud, to create awareness and encourage efficiency" (Interview with Participant 2, 10, 8 July 2020).

Section II: Factors that influence the adoption and use of Mobile Money**Table 2: Factors that influence the adoption and use of Mobile Money base on MoMo Users**

Themes	Themes/code Description	Grounding /frequency	Quotations
Ease of use	Services are easy to understand and operate	7	"It is easy to use" "Easy for money transfer and withdrawal" "For monetary transactions and airtime purchase"
Accessibility	MoMo kiosks and services are omnipresent and can be accessed at all times	4	"It is easily accessible even at certain hours of the day" "Mobile Money kiosks and operators are located almost everywhere" "It saves time"
Security/Savings	MoMo is a safe means of keeping and managing money	3	"Secured way to handle money" "To keep money"

The above table confirms that mobile money is mostly adopted because it is easy to use (Rogers, 1995; Bradford, 2001; Lemuria & Belanger, 2005). This is a key characteristic of the innovation process. However, this finding does not correlate with Lena's (2017) findings which stated that perceived ease of use, perceived risk and perceived trust have an insignificant influence on the adoption of mobile financial services. As soon as members of the public notice that an innovation is stress-free, they tend to easily adopt it. Findings also reveal that Money is easily accessible even at odd hours, and at the user's convenience. In addition, research participants note that the service is omnipresent, saves time, is secure, and encourages them to save money. With all these factors therefore, mobile money users find it easy to adopt Mobile Money as a modern way to handle financial transactions as purported by Rogers, 1995; Bradford, 2001; Lemuria & Belanger, 2005.

Economic Benefits of MoMo to Users**Table 3: MoMo Users view of Economic benefits of Mobile Money**

Themes	Themes/code Description	Grounding /frequency	Quotations
Less charges	MoMo transactions are cost effective	7	"Charges on transactions are less expensive than with formal banking services"
Bonus	MoMo provide extra benefits when customers utilise their services	5	"I am given bonus when I purchase airtime" "Each time I buy airtime from my Momo, I am rewarded double the amount I buy"
Convenience	MoMo provides easy access to cash	5	"I can use my money anytime I want"
Safety	MoMo services are safe to transact	4	"My money is secure"

Four key themes are derived from participants' views on the economic benefits of Mobile Money: less charges, bonuses, convenience, and safety. Considering that Mobile Money is easily accessible to users, telecommunications companies have designed marketing strategies, like bonuses, which prompt users to exploit their services making Mobile Money easily adoptable, thereby spreading easily via the social system. This is supported by "relative advantage" view of Rogers (1995) diffusion of innovation theory, which explains that when participants are satisfied by an innovation, they easily adopt it. In addition, and contrary to what most banks do, participants in this research have attested that Mobile Money operations require lesser charges. This can be seen as a point of strength as consumers are likely to lean towards Mobile Money than banks which are usually procedural, time consuming, and with relatively more charges. Convenience and safety are also highlighted (Zhang et al. 2013).

These are some of the characteristics that make Mobile Money unique – its mobility, ease of use, accessibility- has many functions (airtime purchase, internet purchase, money transactions), no queues, fast, instant, and confidential. One respondent noted:

"To me, it is the best thing that has happened to money transactions recently..."
(Participant 15, July 2020).

In addition, participants were equally asked to specify if they attach any values to Mobile Money. Participants identified values such as reliability, alertness and self control over money as key values that make Mobile Money unique. The responses were as follows:

"I rely on it, I trust it, especially MTN" (participant 17, July 2020);

"I keep huge amounts of money in it and it makes me more aware of all messages that go in and out of my phone" (participant 12, 14, 19, July 2020);

"With Mobile Money, I exercise some level of control over my money" (participant 11, 20, July 2020).

The control over money is dependent on the fact that money is not handy and MoMo users need to visit a kiosk in order for transactions to be done to obtain cash and this process reduces one anxiety and use of money.

Pavel and Vlad (2016) attest that m-commerce has brought about new sales opportunities online and according to Begonha et al., (2002); Dahlberg et al., (2008) through the Mobile Payment (mpayment), which is a branch of m-commerce, many transactions are possible without cash to cash flow. Findings of this study further substantiate this assertion as participants provided varied responses when asked if Mobile Money is an innovation easily accepted in the Cameroonian society:

"It is a digital world. Such services are needed in Cameroon to ease and enhance commerce..." (Participant 12, July 2020);

"Many have created Mobile Money accounts and many are still subscribing to it..." (Participant 19, July 2020);

"I think so. Majority of people use it because of its relative convenience..." (Participant 19, July 2020);

"It is very accessible ((Participant 13, 18, July 2020);

"It is the most flexible for now... (Participant 14, July 2020);

"People do not like waiting in lines; it is fast and cheap..." (Participant 16, July 2020);

It makes it easy for people in any part of the country to do money transactions in times of emergency... (Participant 17, July 2020).

On the question of whether Mobile Money is difficult to understand and use, participants gave mixed responses as follows:

"Yes, it is to some people – age, language, and technology wise ..." (Participant 11, July 2020);

"It can be difficult for people who do not know how to read" (Participant 16, July 2020);

"No, because there are leads/guides" (Participant 13, July 2020);

"I master the steps and policies involved in its operation" (Participant 14, July 2020);

"Does not require too many procedures" (Participant 18, July 2020);

"I use it with relative ease. Even the instructions given for any transactions to be effected are very easy to follow" (Participant 20, July 2020).

As part of the diffusion process, participants were asked to state whether they discuss mobile money issues with others. The responses were mixed, positive or negative as presented below:

"No, Yes. I do as need arise" (Participant 12, July 2020);

"I beg money through Mobile Money from family members" (Participant 13, July 2020);

"I discuss with those who have difficulties in using it" (Participant 14, July 2020);

"I discuss in times I have issues like forgotten password or missing money from my account" (Participants 17 and 18, July 2020);

"I discuss with my siblings, family, and friends with whom I share issues regarding Momo daily. We discuss about credit, money transfer, and Internet bundles" (Participants 15, 20, July 2020).

From these responses, it is evident that the more Mobile Money users discuss issues related to Mobile Money, the more the innovation is likely to spread within members of a given social system (Rogers, 1995).

CONCLUSION

This study concludes that mobile money is a beneficial service and its adoption and penetration by operators and users within Buea is commendable due to its relative advantages (easy to use, less charges, saves time, no queues, guarantees safety), compatibility with operators and uses values, less complex to adopt as well as offers a variety of services for its users. Telecommunications companies should therefore, continue to consider 'less charge' and bonuses as a strategy to increase penetration and adoption of mobile money services. Likewise, the instructions and language essential to effect Mobile Money operations like internet and

airtime purchase should remain simple. This research has shown that longer and cumbersome procedures in Mobile Money applications are likely to turn off users, thereby limiting the spread of the innovation. However, with the major challenge encountered from using the mobile money services like financial scam, it is therefore, recommended that mobile money security should be reinforced and immediate security alerts sent to operators and users when security threats arise.

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