Pro-Poor Mobile Financial Services

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Abstract

There has been significant growth and penetration of mobile financial services across the globe especially in developing countries. The poor are the target customers and beneficiaries of the mobile financial services as it provides the much needed access which formal financial service providers could not. The dominant paradigm is the conventional top-down models such as technology adoption model (TAM) and unified theory of acceptance and use of technology (UTAUT). These theoretical models are mainly based on individual factors such as perceived ease of use, perceived usefulness, perceived credibility and perceived financial cost to study access, adoption and usage of mobile financial services. These conventional top-down models are insufficient in explaining the access, adoption and continued usage of mobile financial services by the poor. The pro-poor perspective is a bottom up approach that seeks to understand the poor specific issues of pro-poor access, adoption and continued usage of mobile financial service by the poor. The pro-poor contextual factors influence the pro-poor access, community factors influence the pro-poor adoption and cultural factors influence the propoor continued usage of mobile financial services by the poor. We establish gaps in literature in the light of the pro-poor perspective and propose an alternative pro-poor conceptual model to better explain the pro-poor access, adoption and continued usage of mobile financial services among the poor. The proposed model could unearth the influence of pro-poor factors and their relationships with pro-poor access, adoption and usage of mobile financial services. Once validated the model could enrich the mobile financial services studies and will be of valuable use by researchers in the field of mobile financial services among poor.

Keywords: Mobile Financial Services, Adoption, Usage, Technology and Poverty

1. Introduction

Mobile telephones are been used for voice calls and short message services over the years. Wamuyu (2014) observed that the usage of mobile telephone has greatly increased due to development of its capacity to offer additional advanced value added services such as money transfers, internet access and managing bank accounts. Significant growth in transaction volumes is being witnessed as people no longer need to visit the bank or queue in the banking hall to perform various transactions.

There is growing evidence that access, adoption and usage of mobile financial services is rapidly increasing (Kirui, Okello, Njiraini & Nyikal, 2013). This has presented an opportunity to resolve the problem of financial exclusion by bridging the access gap. Hughes and Lonie (2007) claim that the structural weakness in formal financial industry limit the access to mobile financial services especially to the poor. Potnis (2014) stated that most commercial banks are not serving the poor due to high cost of establishing financial network, tiny profits from small savings account with small balance or small loans as they don't have the requisite collateral to secure loans.

Half of the world's population lives below the poverty line of \$2.50 a day while 80% of humanity lives on less than \$10 a day (Asli & Klapper, 2012). The increasing population of poor and the widespread of poverty is a global concern as the poor people are deprived the means to participate in gainful activities due to lack of access to financial services. The introduction of mobile financial services leads financial services access provision to all those who have a mobile phone thus significantly denting the financial exclusion.

Chung & Kwon (2009), Yang (2004), Riquelme & Rios (2010) and Yu (2012) identified various factors such as individual behavior and intentions that affect access, adoption and continued usage of mobile financial services, there are no pro-poor studies to address the pro-poor access, adoption and usage of mobile financial services by the poor.

1.1. **Mobile Financial Services**

Gencer (2011) described mobile financial services as ability to access and utilize electronic financial services using mobile device. Mobile financial services can be divided into three distinct categories of mobile banking, mobile payments and mobile money (Boyd & Jacob, 2007). Mobile banking is define as a channel used by customers through a mobile device such as mobile phone to have interactions with a bank Barnes and Corbitt (2003). Kreyer, Pousttchi and Turowski (2003) define mobile payment as processing of a payment transaction using a mobile communication technique through a mobile device such as mobile phone from initiation, authorization to payment realization. Wamuyu (2014) defines mobile money services including mobile money transfer as using a mobile phone to exchange monetary value from one mobile money transfer registered subscriber to another.

The concept of mobile financial services was introduced to decentralize, simplify and make it accessible to users from anywhere without visiting a formal financial institution such as banks. This leads to expanding of financial services to all those who could not be able to access formal financial services. Mobile financial service products are not pro-poor for example Safaricom charges higher percentage for Mpesa withdrawals for smaller amounts at 10% for 100 shillings compared to 0.47% for 70,000 shillings (Safaricom, 2015). Similarly higher interests are charged to loans of smaller amount compared to higher amounts by the lenders despite the majority of the poor being excluded due to inability to provide collateral for loans. Mobile financial services has opportunity for resolving the problem of financial exclusion and poverty reduction as the poor majority adoption and usage of can lead to higher profitability for the providers, when cost of using it is reduced more poor will be able to use the services.

The introduction mobile financial services using mobile phones has caused excitement among development agents due to its potential to resolve some of the financial constraints of the poor namely access to finances when needed (Kirui, Okello & Nyikal, 2010). One of the reasons mobile financial services has attracted considerable attention is the expectation than it can provide affordable financial services to previously excluded poor populations (Ivatury 2006). Development of mobile financial services application is designed to alleviate poverty by increasing access of financial services to the poor (Morawczynski, 2008). Further Pulver (2009) states that the service was designed to bring economic advantages of providing people with small irregular or cyclical incomes with facility to save and transfer money. Omwansa (2009) observed that mobile financial services benefits are huge such that anyone who attempts to put regulatory barriers may be guilty of being seen as frustrating mobile financial services.

Mobile financial services in Kenya is offered by Telecommunication companies such as the MPESA service by Safaricom, ZAP service by Celtel currently trading as Airtel Money by Airtel, Yu cash service by Yu and Orange money by Orange Kenya. Mobile Money transfer was first introduced by Safaricom in 2004 in partnership with Commercial Bank of Africa and a microfinance company Faulu Kenya. The service was dubbed M-PESA standing for M(Mobile) Pesa (Money) as a micro-payment platform that uses the mobile phone and is facilitated through the airtime retail agents.

It was initially developed to issue microloans that borrowers would repay at reduced interest rate due to reduced overheads from conventional microloans. It was quickly adopted when the skilled workers began using it to send to their families in rural areas (Hughes & Lonie, 2007) and consequently M-PESA money transfer service was launched in March 2007. This was followed by Celtel's Zap service in February 2009, Yu Cash in December 2009 and Orange Money in November 2010. Most of the Banks in Kenya offer mobile financial services such as mobile banking services, mobile payment services like credit card, debit card and prepaid cards.

The pioneer mobile financial services was basic, easy and simple, it allowed use of mobile phones as a bank account and debit card for essential services of sending and receiving money. Mobile financial services have grown from the initial money transfer services to now a mature service that has grown incrementally. The Kenya commercial bank example, the general population is now able to open a bank account by dialing *522# on their phone which will interactively guide.

The user on how to open a bank account, make deposits and withdrawals and even immediately take loans. The banks have introduced their own mobile applications that allow access to existing customer bank accounts and financial transactions can be done by the customer using their phones. The introductions of MFS have changed the lives of the people leaving in Kenya especially among the poor who have only MFS as their way to financial inclusion.

1.2. Mobile Financial Services Access, Adoption and Usage

Innovation adoption has been defined as decision to utilize innovation as the only way available Rogers (1995). It is also defined as the process of accepting, utilizing technology and embedding in the daily lives of the user Renaud and Biljon (2008). There is an agreement with Rogers on the acceptance and use of the technology as the only way to perform an action. Technology adoption is also defined as set of sequencial activities from the initial technology adoption to acceptance and continued usage Karahanna (1999). Mobile financial services adoption is thus the acceptance of a new technology innovation according to the demographic and psychological characteristics of the adopter groups, technology that has not been accepted by the intended users, will not result in any sought after benefits (Karahanna, 1999).

Much of academic research is focused on examining the determinants of technology access, adoption and continued usage. Potnis (2014) observed that there are many theoretical top down perspectives that have been used to study access, adoption and continued usage such as Unified theory of acceptance and use of Technology (UTAUT) by Venkatesh, Morris and Davis (2003). In contrast to the theoretical top down approach, Potnis (2014) claim that the pro-poor perspective is a bottom up approach which does not impose or borrow any external predefined theoretical constructs.

1.3. Poverty and Mobile Financial Services

Poverty is categorized into absolute poverty and relative poverty, the Copenhagen Declaration defined absolute poverty as the condition of severe lack of basic needs. Todaro (2000) defined relative poverty as the minimum social, political, cultural and economic goods needed to maintain an acceptable way of life in a particular society. Poverty is economically referred to as a circumstance of lack of wealth, material goods and resources, socially described as state of social exclusion, dependency and in ability to live a normal life in a society (Adongo, 2006). Poor is those who lack ability to accumulate assets and create wealth thus lack of money is an indication of poverty and not the cause.

The poor are not homogenous group as it consist of indigenous people, herders, farmers, fishermen, pastoralist and artisan but their common element is lack of access to relevant information and knowledge services which lead to poverty (Bhavnani, Chiu, Janakiram & Silarszky, 2008). Poverty may be reduced by financial inclusion, which plays important role of enabling the poor to borrow, save, smooth consumption and insure against vulnerabilities (Asli & Klapper, 2012). Therefore poverty alleviation is a strategy used to increase the ability of the poor to accumulate assets, which can be achieved by educating the masses and increasing financial services (Adongo, 2006).

Asli and Klapper (2012) observe that a large fraction of the poor population lack access to basic financial services. Thus restricting the ability of the poor to engage in economic activities aimed at curbing poverty (Dupas & Robinson, 2009). The poor people in developing countries are predicted to be more likely than rich to use mobile financial services as they have less option to access formal financial services (Ivantuary & Mas, 2008).

2. Pro-Poor Mobile Financial Services Theories

This section is a review of the relevant theories the research area, it covers technology acceptance model which is the founding adoption theory, the unified theory of acceptance and technology use which is a combination of eight adoption models and is the most comprehensive model for ICT adoption, social capital theory, poverty theories and pro-poor perspectives.

2.1. The Unified Theory of Acceptance and Use of Technology (UTAUT)

Introduced by Venkatesh et al. (2003) it is said to be the most comprehensive information system adoption theory as it includes factors in eight previous information technology adoption theories. It has factors such as effort expectancy, facilitating conditions, performance expectancy and social influence.

Effort expectancy is explained as the degree of ease associated with the use of technology and performance expectancy is the degree to which individuals believe that using technology will help them improve their performance. Facilitating conditions refers to the degree individual believe that technical or organizational infrastructure exist to support use of technology and social influence refers to the degree of individuals perception that others believe the individual should use technology.

UTAUT model (Venkatesh et al., 2003) introduced moderating factors such as experience, gender, age and voluntariness of use from the perspective of social psychology. The moderating factors were introduced to help address the problems of inconsistency and the weak power of explanation of the previous models as well as give explanations on the differences in behavior of different groups of people.

The model is stronger to all other competing models (Venkatesh et al. 2003; Venkatesh & Zhang 2010), but only a little UTAUT-based research exist particularly compared huge TAM/TPB-based research (Yu, 2012). However in the study of factors affecting individuals to adopt mobile banking Yu (2012) extended the UTAUT Model to add the factors perceived credibility, perceived financial cost and perceived self-efficacy in their study. This theory is relevant to the study as it provides indicators adopted in the conceptual framework, performance and effort expectancy as part of community factors, social influence part of the cultural factors, facilitating condition part of contextual factors.

2.2. **Social Capital Theory**

Social capital theory was first introduced by Hanifan (1916), Conventional wisdom "it is not what you know, it is who you know" (Woolcock & Narayan, 2000). They observed that one's family, friends and associates constitute an important asset that can be leveraged for material gain, called upon in a crisis or enjoyed for its own sake. Communities that are endowed with a diverse stock of social networks are in better position to confront poverty and vulnerability, resolve disputes, and/or take advantage of new opportunities (Narayan 1996).

Trust and reciprocity are salient constructs in all conceptualization of social capital (Hawe & Shiell, 2000) as they arise from the relationships or association among the members of the community or groups. Wilson (1996) observed that poor is not being a member of or actively excluded from certain social networks and institution that could be used to secure good jobs and decent housing. Thus poverty has implications on the ability of the poor to adopt and continue using mobile financial services. Through the use of their social capital the poor have been able to overcome access challenges by borrowing a mobile phones from members of their communities. This theory is relevant as it explains how the communities relate to each other and it can be deduced from this that if the community adopt and use mobile financial services, members of the community will also be significantly influenced to adopt and use mobile financial services.

2.3. **Theories of Poverty**

Poverty theories are categorized into cultural and structural theories of poverty (Elish, 1973). Cultural theories explain that it is the traits of the poor such as behavioral, attitudinal and valuation patterns that prevents them from being socially mobile. In contrast the structural theories explain poverty in terms of the condition they live in such poor health, poor education and unemployment. Both cultural and structural theorist believe that cyclic nature of poverty forms the poverty syndrome leading to successive generations of same family remain poor.

The cultural theorists argue that the poverty cycle can be interrupted by directly attacking the behaviors and values that support the poverty syndrome. On the other hand structural theorist assume that change of employment, education, health and housing market is required to eliminate the poverty syndrome. The need to identify, locate, extract, convert and consume resource for survival is the main challenge for human beings which can be overcome by use of technology to do these better, faster and more economically (Lotter, 2007).

The poor lack financial, material resources as well as the opportunities to convert the resources they possess into a value creating activity (McNamara, 2003). Therefore pro-poor change can occur through pro-poor innovations that address the needs of the poor to enable the poor to convert their resources and opportunities to create value and reduce poverty (McNamara, 2003). This theory is relevant as it puts forth the definition of the poor people and aims to establish the issues that affect the poor people, some of these issues will lead us to the factors that are important to the poor and thus affect their access, adoption and continued usage of mobile financial services.

2.4. The Pro-Poor Perspective

The pro-poor access, adoption and usage of mobile financial services is dependent on the poor, the circumstance they are in and their ability to comfortably use mobile phones which has mobile financial services as value added services. Pro-poor perspective is a bottom up approach which is not influenced by mobile operators, government agencies or other stakeholders rather by contextual factors, community factors and cultural factors.

Potnis (2014) proposed the pro-poor perspective and identified contextual factors, community factors and cultural factors as the main pro-poor factors that influence the pro-poor access, adoption and continued usage of mobile financial services. Context is critical dimension of pro-poor perspective as it is about the environment that the study takes place leading to contextual factors. The community is described as group of people with similar needs and values McMillan and Chavis, (1986). Culture is defined as the collective programming of the mind that differentiates the groups of people from their other (Hofstede, 1980).

2.4.1. Pro-poor Access and Adoption

Pro-poor access is a preliminary requirement for adoption of mobile financial services, it can be adopted by the poor if they can access it and mobile phone is an essential tool in providing access among the poor. This access is provided by combination of pro-poor political good will, favorable financial laws, banking regulations and provision of the required technology infrastructure. The availability of access will then bring into focus the pro-poor community and cultural factors that could influence adoption of mobile financial services among the poor. Pro-poor adoption is directly dependent on pro-poor access as without access there would be no opportunity for the poor to adopt mobile financial services. The pro-poor access and adoption could be explored further to establish the relationship between them and the influence pro-poor access have on pro-poor adoption.

2.4.2. Pro-poor Adoption and Continued Usage

Pro-poor adoption serves as the pre-requisite for continued usage of mobile financial services. The ability of the poor to overcome the adoption challenges will significantly influence how they continue to use mobile financial services, depending on the community and cultural factors. It is possible that successful adoption could lead to higher levels of continued usage thus the relationship between pro-poor adoption and pro-poor continued usage. The influence of adoption over continued usage could be explored to determine the extent of the influence and the relationships between adoption and continued usage in the context of the pro-poor perspective.

2.4.3. Contextual Factors

Social informatics examines common conceptions of and expectations for ICT, by providing contextual evidence (Sanfillippo & Fichman, 2014). Hence, context is a critical dimension of the pro-poor perspective for examining the social informatics phenomenon of mobile financial services. The contextual factors are the means to providing pro-poor access of mobile financial services to the poor as without access the question of adoption or continued usage will not arise. Bhavani, et al.(2008) Identified technology infrastructure constraints(undeveloped due high cost of last mile connectivity, intermittent and unreliable of power if any and low priority of ICT investments due to more pressing needs). Potnis (2014) found underdeveloped technology infrastructure as the biggest contextual challenge of mobile financial services as there is less developed formal banking infrastructure, fewer branches, automated teller machines and low internet penetration.

Potnis (2014) proposed pro-poor contextual factors to measure contextual challenges such as, the technological infrastructure (supply of electricity, mobile network coverage and signal strength), Types of government policies (regulation for mobile network providers, Know your customer policies and % of foreign direct investment allowed in telecom and banking sector), Technology standards (communication standards and protocols like 3G and 4G) and banking policies (ratio of rural and urban bank branches).

2.4.3.1. Contextual Factors and Pro-poor Access

The pro-poor perspectives have the contextual factors such as technology infrastructure, government policy, banking policy and technology standards that influence the provision of pro-poor access to the poor (Potnis, 2014) who the formal financial services providers were unable or unwilling to provide financial services due to the profit and/or policy constraints. Pro-poor access can be provided once there is a pro-poor commitment by the government agencies, banking institutions and mobile telecommunication operators to invest in setting up technology infrastructure, formulate laws and regulations that will ensure that the market players have and will continue investing in provision of financial services access to the poor.

The pro-poor perspective contextual factors may be adopted to study the influence of contextual factors on propoor access provision and the factors could be used to measure the relationship between contextual factors and pro-poor access provision.

2.4.4. Community Factors

McMillan and Chavis (1986) stated that community is formed when people who share values together and foster believe that joining together they are better able to satisfy their similar needs, priories and goals. Mas and Kumar (2008) stated that mobile financial services is a powerful opportunity for poor communities for provision of financial service but with practical challenges in its adoption and usage.

Bhavani, et al. (2008) Identified poor population constraints (such as low level of functional literacy, low awareness, no or basic computer literacy, low disposable income, constant struggle for survival, poor health, poor living conditions, remoteness and low population density) as the main community factors that influence the adoption of mobile financial services. Yu (2012) found that individual intention to adopt is influenced by social influence, perceived financial cost, performance expectancy, and perceived credibility. Potnis (2014) stated mobile financial services adoption by poor communities is affected community factors (such as perceived ease of use, level of literacy, ability to read English and level of financial literacy).

2.4.4.1. Community Factors and Pro-poor Adoption

The pro-poor perspectives have community factors such as perceived ease of use, the level of literacy, and the perceived financial cost (Potnis, 2014) that influence the pro-poor adoption of mobile financial services among the poor. Pro-poor adoption is dependent on the ability of the poor to use a mobile phone to access mobile financial services which is dependent on their levels of literacy and their ability to sustain the cost of using financial services. The perception of the poor that mobile financial services are expensive or complex could lower the levels of adoption, thus there is a relationship between community factors and pro-poor adoption. The propoor perspective community factors could be adopted to study the influence of community factors on pro-poor adoption and factors could be used to measure the relationship between community factors and pro-poor adoption of mobile financial services.

2.4.4.2. Community Factors and Pro-poor Continued Usage

The pro-poor community factors such as perceived ease of use, the level of literacy, and the perceived financial cost (Potnis, 2014) could influence continued usage of mobile financial services. Pro-poor continued usage of mobile financial services is dependent on the ability of the poor pay for the cost of usage as well as their perception of ease of use which could be as a result of their literacy levels. The pro-poor perspective community factors could be adopted to study the influence of community factors on pro-poor continued usage and factors could be used to measure the relationship between community factors and pro-poor continued usage of mobile financial services.

2.4.5. Cultural Factors

Culture being a complex construct, Hofstede (1980) stated that cultural beliefs, practices and values differentiates one group from another. Culture is also described as shared beliefs, practices and values among the people in a community or society which influences the attitudes and behaviors of the members of the society (Straub, Loch, Evaristo, Karahanna & Srite, 2002).

It has been pointed out by Bertolotti (1984) that culture mainly influences technology acceptance through its beliefs and values leading to social influence where if members who share same culture can influence other members within that culture to continue using the mobile financial services. Potnis (2014) stated that user behavior in adoption is influenced by the pre-existing social cultural practices. He identified examples of the cultural factors such as men's influence on women, the type of the culture (individualism vs collectivism), women tendency to avoid risk and cultural roles expected to be played by men and women.

2.4.5.1. Cultural Factors and Pro-poor Adoption

The pro-poor perspectives have cultural factors such as social influence, gender influence and the type of culture (Potnis, 2014) that could impact the pro-poor adoption of mobile financial services among the poor. Pro-poor adoption is dependent on the social-cultural influence of the poor, if there exist a positive social influence and favorable cultural practices adoption could be higher as opposed to negative social-cultural influence on adoption.

The dependency of adoption on social, cultural and gender influence makes the relationship between cultural factor and pro-poor adoption important. The pro-poor perspective cultural factors could be adopted to study the influence of community factors on pro-poor adoption and factors could be used to measure the relationship between cultural factors and pro-poor adoption of mobile financial services.

2.4.5.2. Cultural Factors and Pro-poor Continued Usage

The pro-poor community factors such as social influence, gender influence and the type of culture (Potnis, 2014) that could determine the continued usage of mobile financial services. The continued usage would be dependent on cultural factors such as social influence, gender influence and the type of culture to continue using mobile financial services. The relationship between cultural factors and Pro-poor continued usage of mobile financial services by the poor. The pro-poor perspective cultural factors could be adopted to study the influence of cultural factors on pro-poor continued usage, the cultural factors could be used to measure the relationship between cultural factors and pro-poor continued usage of mobile financial services.

2.5. Mobile Financial Services Empirical Studies

Integrating TAM, TPB and ITD Puschel, Mazzon & Hernandez (2010) found that Intention to use mobile banking is significantly impacted by subjective norm, attitude and perceived behavioral control. Attitude is significantly impacted by perceived ease of use, compatibility, visibility and relative advantage and perceived behavioral control is significantly impacted by facilitating condition and self-efficacy.

Yu (2012) found that individual intention to adopt mobile banking is influenced by perceived financial cost, performance expectancy, social influence and perceived credibility while behavior is affected by intention and facilitating conditions. The perceived financial cost and performance expectancy influence on the behavioral intention is moderated by gender (performance expectancy high in old respondents and effort of social influence was significantly amplified in young respondents, yet performance expectancy and perceived financial cost were more crucial to men) while the effects of facilitating condition and perceived self-efficacy on actual adoption behavior.

Bhavnani, et al. (2008) observed that the rural poor populations characteristic are not conducive for ICT adoption, they identified constraints that excludes the poor from ICT innovations. Institutional environmental constraints (lack of local content in local language, lack of skilled human resource to develop applications and service end user and lack institutional mechanism that is well-developed and functioning to implement policies and regulation), The rural infrastructure constraint (undeveloped due high cost of last mile connectivity, intermittent and unreliable of power if any and low priority of ICT investments due to more pressing needs), Rural poor population constraints (barriers such as low level of functional literacy, low awareness, no or basic computer literacy, low disposable income, constant struggle for survival, Poor health, poor living conditions, remoteness and low population density) and Rural poverty reduction strategies constraints(ICT not well integrated in rural poverty reduction strategies).

Potnis (2014) In study of pro-poor perspective identified the following pro-poor cultural factors which include pre-existing social cultural practices, male dominated societies, women tendency to avoid risk, type of culture (individualism vs collectivism) and expected roles to be carried out by men and women. He further noted the following pro-poor community factors which are illiteracy, lack of familiarity with foreign language e.g. English and lack of familiarity used with jargons used in banking and finally pro-poor contextual factors such as technology infrastructure, types of government policies, technology standards, and banking policies as the main pro-poor factors that influence the access, adoption and usage of mobile banking.

Mohan and Potnis (2015) studied mobile banking for the poor without mobile phones in the lenses of People component (customers, human agents, banks), process component (register customer, train the human agents and service customers) and Technology component (type of technology, ability to work with low bandwidth, fraud detection alert, security standard). They found that high cost of mobile phone, low literacy levels, poor technology infrastructure hamper use of mobile banking. They also pointed out that the poor face multitude of financial, technological, human-computer-interaction-related and psychological barriers for using mobile banking services. Technology barriers to mobile banking such as Authentication of poor customers, Hardware issues for the mobile devices, Security issues related to mobile devices of human agents, Security risk for customer data stored on smart card and multilingual requirement for user interface of the human agents' mobile phone.

2.6. Conceptual Framework

The conceptual framework shows the pro-poor factors and their relationships to pro-poor access, pro-poor adoption and pro-poor continued usage of mobile financial services in the figure below. The contextual factors determine pro-poor access, without which adoption will not take place, pro-poor adoption is influenced by cultural and community factors which leads to continued usage of mobile financial services.

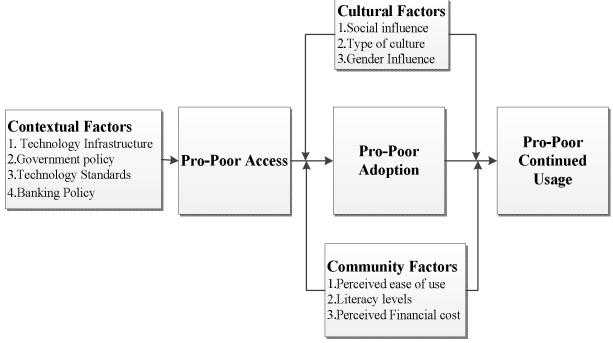


Figure 1: The proposed conceptual framework

3. Conclusion

Mobile financial services are being widely adopted and its usage in day to day business activities is increasing. There are many studies Chung & Kwon (2009), Yang (2004), Riquelme & Rios (2010) and Yu (2012) that have been undertaken to understand the mobile financial services phenomenon in the light of access, adoption and continued usage. The dominant paradigm has been the top down approach which mainly investigates the individual factors promoting or inhibiting access, adoption and continued usage of mobile financial services. The dominant paradigm may not be sufficient to explain the pro-poor perspectives as it focused only on the individual factors that influence the access, adoption and usage of mobile financial services.

The bottom up approach is proposed by Potnis (2014) that seeks to address the pro-poor perspectives that consider the factors that are important to the poor bringing them into focus where the dominant paradigm has not yet addressed. Pro-poor perspective study of influence of pro-poor factors such as context, community and culture on pro-poor access, adoption and continued usage of mobile financial services among the poor (Potnis, 2014) will unearth the salient factors that influence the pro-poor access, adoption and continued usage of mobile financial services by the poor.

There many gaps in the pro-poor perspective, we propose an alternative conceptual model that can better address the pro-poor perspectives of pro-poor access, adoption and continued usage of mobile financial services. We explore the pro-poor factors from the contextual factors that will ensure access is granted to the poor, then the community and cultural factors that will influence pro-poor adoption and the continued usage of mobile financial services.

This could explain the phenomenon adoption of mobile financial services among the poor as well as reveal the influence by the pro-poor factors and their relationships with pro-poor access, adoption and usage of mobile financial services. Future studies could contribute to validating the factors that have been proposed by other scholars as well as revealing new factors that influence adoption and unearth the pro-poor barriers to adoption of mobile financial services.

The outcome pro-poor perspective study has implications for mobile financial services providers, government agencies, regulators and banks in coming up with pro-poor solutions for a pro-poor approach to providing pro-poor access, increasing pro-poor adoption and ensure pro-poor continued usage of mobile financial services by the poor. This can be achieved by pro-poor investments such as the last mile connectivity to resolve the contextual challenges, formulation of pro-poor policies and laws that will address contextual, community and cultural challenges. Develop pro-poor go-to-market strategies that will be key on addressing the community and cultural challenges to ensure that adoption and continuous usage of mobile financial services is increased.

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