TELCO'S DIGITAL PAYMENT SYSTEMS: PERCEPTIONS AND CONCERNS AMONGST HOUSEHOLDS IN ACCRA, GHANA

Research Paper

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Abstract

E-Commerce is one sector that has benefited from the technological transformation of the 3rd and 4th Industrial Revolution, with the introduction of financial technology. Mobile Money, which is powered by telecommunications companies, is one of the most popular financial technology platforms. It has become ubiquitous and is one of the leading payments platforms in many nations, especially in developing countries. This study, therefore, sought to investigate the perceptions and concerns of users of the Mobile Money platforms in Ghana. The study assessed and analyzed the views of 50 households, based in the Madina Municipality in the Greater Accra Region, using questionnaires and interviews in a qualitative approach. As expected, the study found all the participants knew the Mobile Money platform, with a majority of them indicating they use it daily for financial transactions. Again, it was found that participants preferred using the Mobile Money platform for payments, hence hardly used cash. Participants cited reasons such as convenience and accessibility for the use of the financial technology platform. However, participants expressed concerns about the security of the platforms, with the fears buttressed by rising cases of cybercrime. This meant participants had trust concerns, with regards to how secure their money is on the platform. The poor network was also seen as another issue faced by participants using the mobile money platforms. On this basis, this study suggests that telecommunications companies should work to improve the security of their corresponding platforms to win the trust of existing and future consumers and protect them from cyber fraudsters or other similar risks.

1. INTRODUCTION

The Third and Fourth Industrial Revolutions, also known as the Digital Revolutions, have been as disruptive as any of the previous industrial revolutions, producing immense transformation in the world (Chung, 2021; Schwab, 2015; Steinke et al., 2020). The technological advancement birthed by these revolutions has permeated every aspect of society more rapidly than ever imagined, causing a paradigm shift in regular lifestyles (Schwab, 2015; Ustyuzhanina et al., 2017). The Third Revolution introduced the Internet, computer technology, and automation (Sima et al., 2020; Yang & Gu, 2021). This led to the production and operation of miniature computers, notably the Personal Computer (PCs) and mobile phones (Gonçalves et al., 2021; Koloszár & Németh, 2020).

Together with the Internet, mobile phones and PCs changed the way of life of society and disrupting the traditional forms of communication and altered consumer tastes and preferences (Levin & Mamlok, 2021; Schauerte et al., 2021). The advent of the Fourth Revolution has built up the innovation of the Third, leading to widespread usage of mobile phone technology, and expanding the usage beyond regular phone calls and text messaging (Sima et al., 2020; Yang & Gu, 2021).

Today, mobile phones have become a tool for financial technology (fintech), serving as one of the rapidly growing financial transactional systems in the world (Ahmad et al., 2020; GSMA, 2021).

Known popularly as mobile money, mobile phones, powered by mobile networks produced by mobile telecommunication companies, have become ubiquitous in modern commerce and consumer behaviour (Ahmad et al., 2020; Narteh et al., 2017; Xue & Lin, 2019). The mobile money system allows users to operate a quasi-bank account on their mobile gadgets (smartphones, regular mobile phones), with fewer restrictions than what regular banks would require (Senyo et al., 2020; Talom & Tengeh, 2020; Tengeh & Talom, 2020). Through this, consumers make payments into other mobile money accounts, other fintech platforms, and even bank accounts. Due to the ease and convenience, it provides, as well as the swiftness with which transactions can take place (with relatively fewer limitations) irrespective of time, weather and location, mobile money has become the fintech platform of choice for millions of consumers across the globe.

Statistics indicate that the mobile money adoption rate has escalated beyond initial projections, with many more people signing on to various mobile money platforms around the world (GSMA, 2021). The number of registered mobile money accounts worldwide grew by 13%, leaving the total number at 1.2 billion registered users, with daily active users reaching 300 million (GSMA, 2021). Similarly, the volume of mobile money transactions worldwide grew by 15%, with a total transaction value of $767 billion, growing by 22%. These growth rates were attributed to more flexible “Know Your Customer” (KYC) processes and requirements (GSMA, 2021). In Africa, the total of mobile money registered users grew by 12%, while active accounts grew by 18%. This implies the continent’s registered accounts by the end of 2020 were 562 million, while active accounts stood at 161 million (GSMA, 2021). West Africa is the mobile money hub on the continent, with over 19o million active users (increased by 19% compared to the year 2019), and 47 million active users (increased by 23% compared to the year 2019) (GSMA, 2021). Overall, the region’s transactions were valued at $178 billion, making it the highest on the continent (GSMA, 2021).

In Ghana, mobile money, popularly called MoMo (Aboagye & Anong, 2020a; Ankilu, 2021), is operated by all the mobile telecommunications networks (MTN Mobile Money, AirtelTigo Money, and Vodafone Cash) in the country except Glo Mobile. The Bank of Ghana reports that as of April 2021, MoMo had generated GH¢83.8 billion, which is over twice what was attained at the same time in 2020 (Ankilu, 2021). This indicates a monumental growth in the usage of MoMo platforms in Ghana. This rise is linked to the COVID-19 Pandemic, which made mobile money payments and transfers highly functional for shopping and remittances. It is reported that overall active MoMo users stand at 17.2 million, with about $100 million (GH¢572 billion) as of December 2020 (Ankilu, 2021).

With the ever-increasing adoption and usage of MoMo in the West African sub-region, this study looks at the perceptions of concerns of users/consumers in Ghana on the MoMo service provided by the telecommunications companies.

1.2 Background

It is estimated that only 24% of adults in transitioning countries have some form of transactional experience with formal banking systems, possessing various accounts with formal financial institutions (Aboagye & Anong, 2020). For the majority of people in countries like Ghana, Nigeria, Tanzania, Kenya, and Sierra Leone, formal banking activities like savings and access to credit remain a mirage. This is partially due to cultural differences, living standards in such countries but also to a lack of confidence in financial institutions. This implies that financial exclusion is a problem in SSA, as financial inclusion seems unattainable. Studies have identified several factors that make financial exclusion high in SSA, notably, geographical factors (location of banks), cumbersome account sign-on processes, gender, and age (Aboagye & Anong, 2020).

The advent of MoMo is however a big step towards financial inclusion (Aboagye & Anong, 2020b; Agyekum et al., 2016; Ahmad et al., 2020).

This is why we shall use the case of Momo as a good illustrative example of the financial inclusion of consumers through mobile money platforms for payments.

Indeed, available statistics provide evidence that MoMo is reducing the ‘unbanked’ population by addressing the constraints which impede formal banking adoption. While the interest of consumers remains the goal of telecommunication network operators, scholarly work has hardly paid attention to the views of households on the nature of services being offered and other concerns which may exist. Studies on MoMo in recent times, for instance, have focused on its adoption by SMEs (Tengeh & Talom, 2020), influence on consumer behaviour (Xue & Lin, 2019), financial inclusion, and development (Ahmad et al., 2020; Senyo et al., 2020). However, being the prime users of MoMo and targets of the telecommunications companies, limited literature on the firsthand perceptions and concerns households on MoMo leaves a gap worthy of exploitation.

On this score, this study has the following objectives:

- To ascertain the perceptions of households on the impact of mobile money
- To assess the determinants of households’ adoption and usage of mobile money
- To examine concerns of households on the adoption of mobile money

2. Literature review

2.1 Concept of Digital Payment

Payment can be defined as the transfer of money or value from one individual or entity to another (Fonté, 2013). Digital payment is therefore defined as a financial transaction through digital mobility technologies by the way of handled devices, using or not mobile telecommunication networks (Raharja et al. 2020). Although these transactions are not necessarily related to financial institutions or banks, they are also branded as digital financial transactions, (Diniz, de Albuquerque, & Cernev, 2011). According to Fonte (2013), numerous services given by nonfinancial institutions are dis-intermediating the old banking system and developing the potential for major shifts in how people conduct their daily purchases and interact with their money.

2.1.2. Mobile Money in Ghana

Mobile money is defined as an electronic payment system that allows the transaction of money from an electronic account accessible through ordinary mobile phones (Hope et al., 2012). Ndiwalana et al. (2011) also added that mobile money is money stored on a device using the subscriber identity module (SIM) as an identifier contrary to the account number used by banks.

Mobile Money businesses have started to transform the traditional manners of how business has been conducted, especially concerning money transactions (Ayeebor, 2016). People are nowadays walking with their funds digitally. The business of mobile money was first introduced in Ghana in 2009 and four (4) out of the current six (6) telecommunications companies are operating mobile money (Quist, 2016). However, it has to be précised that money transactions done through mobile phones are especially used by physical persons, small and medium companies while the usage remains quite low by big companies.

2.1.3. Types of Mobile Money

They are three types of mobile money services: mobile payments, mobile banking, and mobile transfers (Parikh M. et al. 2013)

Mobile Banking: this is used by financial institutions that consider mobile banking as an additional medium to their existing services.

Mobile Transfers: this refers to peer-to-peer transfer and can be done locally or internationally.

Mobile Payments: this involves person-to-business payments using mobile phones.

In some countries, especially in EU, the mobile phones are also used for indirect payments, for

example, to pay for the parking place, motorway tolls or some services sending SMS which is a trigger to charge the credit card.

Investment in necessary infrastructure however limits the implementation of each of here above

types of mobile money, the national regulation of each country, GDPR requirements and

the costs and fees of providers of such services.

2.1.4 Benefits of Mobile Money

Mobile money has a plethora of benefits to the country as whole as it helps in achieving a cashless economy (Abbey, 2016); it also benefits the telecommunication companies as well as the end-users. Following are some advantages that subscribers enjoy:

Financial inclusion: it becomes a means of saving or payment for individuals who do not have a registered bank account.

Accessibility: subscribers enjoy convenience through the intervention of mobile money because they now have instant access to their money any day and anytime, wherever they are without having to move to the bank (Oluniyi, 2009).

Ease to use: Mustapha (2016) added that Mobile money has made it easier for people staying in the urban areas to send money to their friends and is relatively located in rural zones.

Flexibility: mobile money offers the ability to purchase airtime, to pay bills, goods and services pay salaries, and even those who do not own a mobile money account can send and receive money through the agents (Appiah-Danquah, 2014).

2.1.5 Challenges associated with the adoption of mobile money

The major challenge that faces subscribers in the adoption of mobile money is the security issue due to cyber criminality (Shiels, 2009).

Using contactless possibilities facilitate for sure the usage of mobile money for users. The implementation, however, depends on central banks and national regulation regarding especially the PIN limits, safety issues, GDPR and other legal issues.

M-commerce is facing many obstacles all around the world. Firstly there is a lack of standards on an international level, the investment in infrastructure is still high and in man countries, there are speed issues. In many countries, consumers are convinced that mobile payments are too complicated.

One of the biggest challenges is that mobile money providers must sell the system to both the sellers and consumers simultaneously. Providers must make the system, profitable. To do this they have to find a way to convince the sellers to build infrastructure which would persuade enough consumers to adopt mobile money.

The second big challenge is to have a network of agents having sufficient money to serve the users who decide to do the all money withdrawing, especially the larger sums of money.

Thirdly, the challenge is also the lack of information. This problem occurs especially in the rural communities where users have many concerns, mainly security concerns, customer identification concerns, data protection problems, the speed of transactions, and the level of regulation of the service providers.

There is also a problem of reliance on GSM Network. In many countries, the GSM netwrork is still not well developed and is facing many technical issues, especially the coverage and speed of the network. In some countries there is a full or limited political Interference which makes all more difficult.

Another problem can also be the taxation. In some countries there is no taxation at all on mobile money services while in other countries there is a continuous imposing of new taxes on the mobile money services which makes the implementation and management much more difficult due to break even and high operational costs.

Finally, the general challenge associated with the adoption of mobile money is the inadequate IT infrastructure, limited skills in ICT for many users and inappropriate and obsolete technology combined with lack of skills on modern technology.

However, such listed challenges are in down trend as new technologies evolve and existing ones establish their credibility.

2.1.6 Theories

Technology acceptance model (TAM)

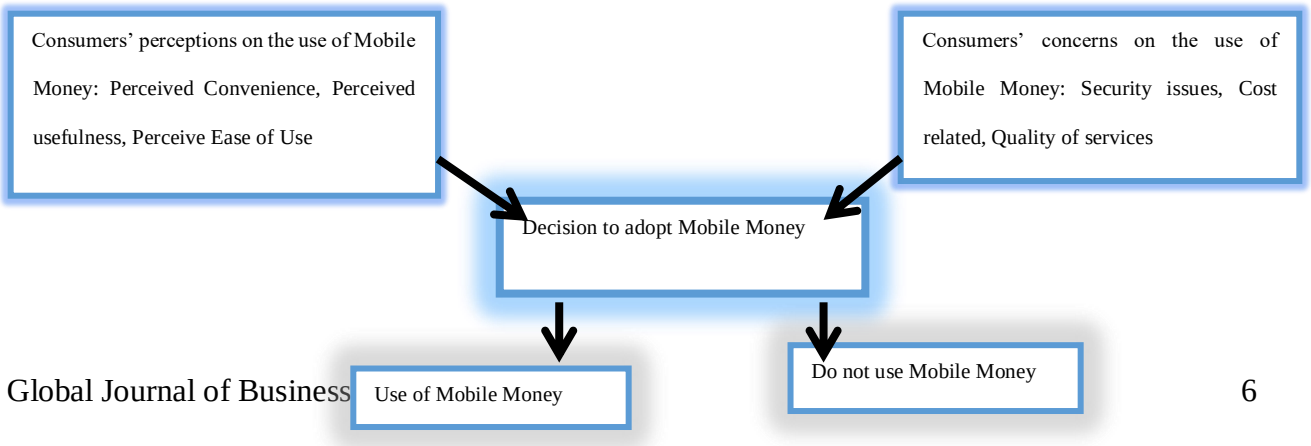
This theory is very popular and most frequently used in Information Systems and mobile Banking (Lai, 2017). TAM model helps in understanding the behaviour and intention to adopt mobile banking (Kazi, 2013). This model is useful for this paper as it seeks to understand the determinants that affect the adoption of mobile money services. Odoyo et al. (2016) explain that the lack of information is one of the major challenge facing the users from utilizing mobile phone money services, especially in the rural communities.

2.2 Empirical review

Tina (2017) conducted an empirical study to understand the factors that influence the use of mobile money in Ghana. Data were collected from 50 participants and the results demonstrated that poor network was a major concern to respondents as they could not assess their money when needed.

Samia (2018) conducted qualitative research to explore mobile money usage in Ghana. The research was conducted on 25 respondents and the results showed that users use mobile money due to its convenience in sending and receiving the money to family and friends.

2.3 Conceptual framework



3. Research Methodology

The study used both quantitative and qualitative approaches to address the research problem. Almalki (2016) argues that qualitative and quantitative methods complement each other and the combination provides a better understanding of the phenomenon (Creswell and Plano, 2011). The research design is a guideline used to direct and coordinate the processes of the research so that to ensure that the aims of the study draw a meaningful conclusion. The study used a cross-sectional design to examine the perceptions and concerns of Ghanaians on the use of Mobile Money.

3.1 Research settings

A research population is an aggregate of all entities selected for a specific study and share homogenous characteristics Creswell (2012). The population of this study includes the household of La-Nkwantanang-Madina Municipality located in the Greater Accra and the population size is 111,926 inhabitants (Composite For La Nkwantanang – Madina Municipal, 2020).

The sample size determines the portion of the population be used in the study (Elfil & Negida, 2017). In total, 50 persons participated in the quantitative and qualitative field research.

The respondents were selected using a convenience sampling technique. This technique ensures that the participants are selected easily and less expensively (Taherdoost, 2016) and it also allows the researcher to collect data through quantitative and qualitative techniques (Etikan, Musa, & Alkassim, 2016).

3.2 Data collection and analysis

The main instruments used for data collection were questionnaires (for quantitative aspect) and face to face interviews (qualitative aspect).

The questionnaires were divided into two sections; the first section collected data on the socio-demographic aspect of the respondents and the other section collected data related to the objectives of the study. Questionnaires were numbered to avoid duplication and then responses were coded. The codes were fed into SPSS for analysis, which produced outcomes in the form of descriptive statistics presented in tables.

As for the qualitative data, the recorded data were manually transcribed, coded, and finally analyzed thematically.

Dannels et al. (2018) argue that the researcher must know the following ethical issues: honesty and trust, privacy, informant consent, harm and risk, confidentiality, and anonymity. All respondents provided their consent to participate in the research study. The researcher ensured that all procedures were followed regarding the potential bias issues. The total number of participants who were engaged via questionnaires were 50 individuals. Three of these also engaged in in-depth interviews as well. Creswell (2007) suggests that up to five participants are enough in qualitative interviews to reach data saturation.

4. Results

The results are presented based on demographics, qualitative and quantitative analysis and results presented below.

4.1 Demographics

Table 4.1

Variable	Category	Frequency (N)	Percent (%)
Gender	Male	24	48
	Female	26	52
	Total	50	100
Age	18-27	6	12
	28-37	9	18
	38-47	17	34
	48-54	12	25
	Above 58	6	11
	Total	50	100
Educational level of Participants	Bachelor's Degree	22	43
	Master's Degree	11	23
	PhD	7	14
	Others	10	20
	Total	50	100

Field Data, 2021

Based on the above table, the females represented 52% of the population under study and males were 48%. Also, it is observed that the majority of respondents (34%) belonged to the age range of 38-47 years. 12% of the respondents were in between 18-27 years; 18% fell between 28-37 years. 25% were in the range of 47-58 years and the remaining were above 58 years. Among the participants, 43% were Bachelor's degree holders, 23% were had completed their Master's degree, and 14%, PhD holders. The remaining 20% are of Other educational backgrounds.

4.2 Section B: Qualitative Research

In this section, we present our qualitative study research results.

Table 4.2 Code Book of the Original and Emerging Themes

Conceptual Theme	Description	Initial Themes	Emerging Themes
Perceived Convenience	fitting in well with a person's needs, activities, and plans	. Easy to access	• Appropriate for petty transactions. Save time • Can be used everywhere, anytime, by anyone • Easy to carry along
Perceived usefulness	the practical benefits of the use of mobile money	. Day to day petit transactions	• Useful for paying bills • Buying credit • Receiving money
Perceived Ease of Use	Is the level or situation where users believe that using mobile money does not require any effort (free of effort)	. User-friendly platform	• No need for particular skills or competencies
Security issues	Security associated with keeping money in the e-wallet	. Fraudulent activities . Safer than walking around with cash	• Scammers • Fraudulent text messages • Loss of money • Stealing of passwords
Cost related	Costs involved in the maintenance of the e-wallet and the transaction the different transaction	• Cost of sending money • Cost of withdrawing money	• Reasonable costs
Quality of services	Participants recount the quality of the service offered and the quality of the network	• Poor services • Network	
Contribution to performance	How usage of digital payment platforms contributes to Telcos' overall performance	• High Customers' retention • Increment of market share • Consistent complaints from some users	• Increment of Profit margin

Objective 1: To ascertain the perceptions of households on the usage of mobile money

Perceived Convenience

Almost all the respondents perceived the use of mobile money to be convenient for their daily transactions. To some participants, the use of mobile money is appropriate for petty daily transactions and to other respondents, the use of mobile money saves time and it can be used anytime, anywhere and by anyone with a mobile device

"*I use mobile for my day to day transactions as it is convenient for my daily transactions. I don't need to walk to a bank and join a long queue to be able to send or receive money. I can do any transaction from the comfort of my house or at work. I can also easily send money to the family leaving in the remote areas even though they don't have bank accounts"*(Respondent 6)

Another respondent also said:

"*I think mobile money is convenient in terms of saving time and quickly send money. Yesterday, for instance, I had to urgently send money to my mother for her needs. I was able to perform the transaction without leaving the office. It did not require me to step out from the office to be able to do the transaction"* (Respondent 11)

This was also added:

"*I believe the use of mobile is convenient as I am able to use it anytime, anywhere. Not only it helps me save the time that will be required if I had to go through banks. With my e-wallet, I am not generally worried to run out of cash when I am out because I can use it as backup or quickly withdraw cash at any closed agency.* (Respondent 27)

Perceived usefulness

The usefulness of the mobile is the practical benefit that people get from the use of mobile money. The study participants provided insight on the usefulness they perceived about the use of mobile money. The majority of the participants asserted that mobile money is useful for their day to day transactions. It came out that mobile money is useful in paying bills, buying credits, and sending and receive money.

According to one respondent:

"*Concerning mobile, I believe it is very useful for my everyday transaction. For instance, that is what I use to pay my light and water bill, to send money to my parent leaving in the village without going through a third party because they don't have bank accounts.* (Respondent 1)

A different respondent added:

"*I like mobile money because with it I can easily buy credit or data for my phone, no matter the time. Also, I use it to pay my bills including my rent, light bill, water bill. I use it to send and*

receive money to my family and friends and also for my different online purchases" (Respondent 33).

Perceived Ease of Use

The study probes to examine to which extent users believe that using mobile money does not require any effort. It was observed that most of the majority of the participants argued that mobile money is user friendly. Users do not require special skills or qualifications to be able to use the platform. Anyone who can read and manipulate a phone can use a mobile money platform.

In the view of one respondent, she believes that:

"*Mobile money is very easy to use. You must just know the code required by your telecommunication company and you are set to go*" (Respondent 35)

Another respondent added:

"*You don't need any qualification or special training to use mobile money. Just ensured that your number is registered with the Telco's company and you know the mobile money code. The process to send money, buy data or credit, or withdrawal is very simple".* (Respondent7).

Objective 2: To examine concerns of households on the adoption of mobile money

Security issues

The study investigated the security issues associated with the use of mobile money. The results have shown that the views are shared because while some respondents are worried about losing their money due to fraudulent activities, others do not.

According to the following respondent:

"I don't keep a lot of money on my mobile money account because I am afraid of scammers. The other friend of mine got her account emptied because of these fraudsters. They have malicious strategies to get your account details and empty your account. That's why I keep just enough in the mobile money account for my small expenditures and I use banks for saving and major transactions" (Respondent 8).

Different respondents like the one below perceived mobile money to physical cash in terms of security.

"As for me, I prefer to have my money in an e-wallet. It prevents my money to get lost or stolen. In the worse scenario, if I lose my phone or forget my password, I will walk to my network agency and take back my sim card or reset my password." (Respondent 33)

Cost related

Concerning the cost-related issues, the research demonstrated that the majority of the respondents agreed that the cost associated with the maintenance and different transaction of mobile money is relatively low.

According to this respondent:

"*I think the cost of transaction affordable. The highest transaction cost that can be involved is 1%. Most the transaction such as sending money, buying data is free."* (Respondent 29)

However, this respondent is not with the way the telecommunication taxes the transactions:

"*I don't like the way I am charge per transaction. I would have preferred that a fixed amount is set monthly for the user as it is done with banks and ATM cards"* (Respondent 13)

Quality of services

Concerning the quality of the services, most of the respondents complained about the poor network.

This participant responded that:

"*Most often, we experience network issues. You will struggle to send or receive money. This is annoying when it is for an emergency."* (Respondent 18)

Another respondent in the same sense:

"*They must improve their service. The other day, I went shopping at Melcom Mall. I did not carry any physical cash with me as I was planning to buy through my mobile money. Unfortunately, when I was at the counter, I could not pay for my items because of poor service"* (Respondents 25).

Objective 3: To assess the contribution of the households' digital payment usage on Telcos' performance

The study sought to ascertain how households' usage of digital payments on the Telcos' operations and performance. Participants' views depicted that the usage of digital payments has contributed to the popularity of the telcos, helped in customer retention and enhanced their brand images.

One respondent indicated that:

"*Myself, and many others use Telcos based on the overall value they produce. I have many SIM cards; but I use the one which provides most value. Since I'm always transferring and receiving*

cash, I prefer to stick to the one which always offers that convenience in payments" (Respondent 15)

According to another respondent:

"*I think the only reason people are using particular networks is because of the mobile money. Once the Telco has a digital payment platform and wider coverage, it becomes peoples' main network, and of course they will be buying airtime, making the Telcos more money"* (Respondent 2)

Another respondent asserted that:

"*As an employee, I use my company mobile money services and I also recommend it to friends and family. Most of the people around me use it because of its convenience and usefulness."* (Respondent 6)

4.3 Section C. Quantitative Research

Table 4.4

The perceptions of households on the impact of mobile money					
Statements	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
I am familiar with the use of Mobile Money	0%	0%	1%	59%	40%
I use mobile money for my finacial transactions	5%	9%	10%	42%	34%
I will probably never have a need to use mobile money services on my network	40%	47%	9%	3%	1%
I prefer mobile money transactions to cash purchase	7%	11%	14%	33%	35%
I prefer mobile money transactions to banks	19%	21%	8%	26%	26%
I believe mobile money service integration into a network, motivates subscribers	6%	8%	11%	45%	30%

Field Data, 2021

The study revealed that almost all the respondents (99%) were aware of the existence of mobile money in Accra. Only 1% of the respondents were neutral on the statement.

From the study, we also observe that 76% of the participants use mobile money for their various purchases. 10% of the respondents remained indifferent to the statement and 14% are not using mobile money for their different transactions.

To the statement to know if the respondents will never use the money for their transactions, only 4% agreed to the statement. 87% disagreed and 9% of the respondents were neutral.

The study also showed that the majority of the respondents (68%) prefer mobile money to physical cash transactions. 14% of the respondents remain indifferent to the statement and 18% disagree with the statement.

When trying to compare the preferences of respondents between mobile money and banks transactions, the responses were almost even. 40% of the respondents prefer banks while 52% have chosen mobile money.

Table 4.5

The determinants of households' adoption and usage of mobile money					
Statements	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
Mobile Money it is very accessible	9%	12%	8%	41%	30%
The use of mobile money is more convenient to me in paying bills, buying airtimes, transfering money, and checking balance	2%	3%	6%	39%	50%
Mobile money helps me to control my expenditures	18%	32%	13%	23%	14%
I use Mobile money because it user-friendly and accessible	4%	6%	10%	46%	34%
The Cost of Maintaining Mobile account is high	36%	27%	9%	16%	12%

Field Data, 2021

The research demonstrated that the majority of respondents (71%) believed that mobile money is very accessible. 8% were indifferent to the statement and 21% disagreed with the statement.

The study also revealed that the majority of respondents (89%) agreed with the fact is mobile money is convenient in paying their bills. 5% were against the statements and 6% were neutral.

To the question of assessing if the mobile money helped the respondents in controlling their expenditures, the majority of respondents (50%) disagreed with the statement, 13% were neutral and 37% agreed with the statement.

The research also concluded that 80% of the respondents agreed that mobile money is user-friendly. 10% disagreed with the statement and also 10% were indifferent.

Concerning the cost related to the adoption of mobile money, the majority 63% believed that it is not high. 28% confirmed the contrary and the remaining 9% were neutral.

Table 4.6

The concerns of households on the adoption of mobile money					
Statements	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
I am concerned about the safety of my Mobile Money account due to Fraud	8%	12%	10%	25%	45%
The telecoms companies must improve the mobile money service	15%	19%	9%	37%	20%
Poor mobile network connections act as a barrier to the use of the services	21%	19%	7%	28%	25%
I fully trust the mobile money service	18%	25%	11%	24%	22%
I am concerned with the fees attached to the mobile money transaction	34%	30%	8%	12%	16%

Field Data, 2021

Concerning the safety related to mobile money, (70%) were concerned about the security due to fraud. 20% are not worried about the security issues and 10% were neutral.

The study also showed that 57% of the respondents believed the mobile money service requires improvement such as customer education, trust establishments among digital agents and customers, the ease of constraining regulations between banks, authorities of mobile money and the customers; 9% were neutral and the remaining 24% did not share the same view.

We observed that poor mobile network was a concern to respondents as 53% agreed that it was a barrier, 7% were indifferent and 40% disagreed with the statement.

5. Discussion of findings

The study revealed that every participant was familiar with the use of mobile money in Accra. The majority used it for their daily financial transaction. The research also revealed that respondents preferred the use of mobile money to physical cash transactions and also to banks transactions probably due to its convenience. These findings mirror findings in the GSMA report, as well as studies by Samia (2018) and Abbey (2016).

The research demonstrated the determinants of households' adoption and usages of mobile money are: its accessibility, its convenience, and relatively low cost attached to the transactions. Samia (2018) agreed with this when her study concluded that the major factor influencing the consumers' decision to adopt mobile money is its convenience.

The greatest concern about the adoption of mobile is the insecurity caused by cybercrimes. Therefore, trust in the security of the Mobile money platform was a key concern of respondents', a finding consistent with Tina (2017). However, most of the respondents did not see mobile money adoption as costly.

5.1 Significance of the study.

This study aims to add to the discussion of the perception and concerns of Telcos' digital payment systems among households in Accra, Ghana. The research will inspire other research areas on the impact and the potential of Telcos' digital payment in Ghana. It will also be useful for future researchers such as students, policymakers, and institutions.

To the academia: will be useful as a point of reference in the academic industry. It can be used as a foundation for further research on the perception of Telcos' digital payment and also to assess the importance of mobile money platforms as an efficient tool in the financial inclusion of consumers

To organizations: this paper will also be useful for the telecom industry as well as any other organizations on the perception of Ghanaians on digital payment. It can serve organizations as a guide to formulate strategies on the adoption of digital payment and the expected benefits and challenges associated with it.

To policymakers: it will provide significant information to policymakers to guide in the formulation of policies concerning mobile money.

6. Conclusions and Recommendations

The adoption of mobile money service offers a plethora of advantages to consumers as well as business owners. However, the challenges related to it such as security issues, poor network, national regulation, GDPR and data protection problems, legal issues, taxation, the huge investment in infrastructure, ability to pay users by agents, the lack of information on the system, customer identification issues, reliance on GSM Network (the coverage and speed), and other technical and political issues which all affect its performance.

Telecommunication services must implement systems that will protect their subscribers from cybercriminals and other tax, financial, legal and technical issues and also they must improve their network services. However, even if challenges exist it can be noticed in Ghana and other countries in the world that there is an uptrend in mobile services usage as new technologies evolve and existing ones establish their credibility.

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