

FINANCIAL INCLUSION IN AFRICA THROUGH MOBILE MONEY SERVICES: A SWOT ANALYSIS OF MOBILE MONEY SERVICES: EVIDENCE FROM BUKAVU IN DR CONGO

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Abstract

Financial inclusion has been proved as a strategy to fight poverty. Africa is a continent where the poverty rate is high and the financial sector is not developed. The continent needs more financial innovation and an increase of financial access to fight these problems. Mobile money, a mobile based financial service has been including more and more people in the financial system and the sector is growing. A lot of studies grew interest in this new financial service but none studied the system strategically. This study uses the strategic approach SWOT, completed by TOW's matrix to ascertain the current status and the future of Mobile money services. The results revealed several strengths and significant opportunities for the system as well as its weaknesses and threats. Several strategies are proposed afterward.

Keywords: *Mobile Money, SWOT Analysis, Financial Inclusion, Africa*

1. Introduction

According to data from the Findex survey of the World Bank, financial inclusion in Sub-Saharan Africa increased significantly from 23% in 2011 to 43% in 2017.

The rate of financial inclusion in Africa is low compared to the other continents (Zins and Weill, 2016).

The region-wise examination of financial inclusion by region index prove that the northern African nations have the highest financial inclusion rate, the east African nations follow which are among the poorest economies in the world (Sankaramuthukumar and Alamelu, no date). Providing more people with access to financial services is considered as a way to alleviate poverty as well as boosting economies (Owen and Pereira, 2018).

The increasing use of mobile phones and Internet is significantly impacting financial inclusion through different services offered (Evans, 2018) (Gosavi, 2015).

The use of mobile phones to provide financial services in Africa has become a way of enabling unbanked people to access financial services (Alfred, Maureen and Were, 2017). Mobile phone has become an instrument that allows users to access financial transactions through a system called M-Pesa (Munyegera and Matsumoto, 2016).

With the use of mobile phone based technology, in the past 10 years mobile money has provided a safe and fast peer-to-peer money transfer transactions, saving facilities as well as cash payment systems to people who did not have access to financial services before (Lepoutre and Oguntoye, 2018).

M-Pesa is a mobile money service with its first success in Kenya. After its success several private and public actors copied its business model across Africa (Lepoutre and Oguntoye, 2018).

Without any doubt, mobile banking is an instrument in boosting economies to allow the unbanked to access financial services (Mwangi and Brown, 2015).

Providing financial services through mobile phones is considered as the missing channel by development economists whose access to payments, credits and savings using this new technology is an opportunity for people previously difficult to serve to access financial services (Suárez, 2016).

Mobile money services are increasing and expanding in countries, however the literature did not sufficiently provide a full strategic analysis of mobile money services. This study sought to fill this information gap by assessing the current status and future of mobile money in a strategic approach.

Objective of the research: This study intends to carry out the strategic analysis SWOT of Mobile money services in Africa, to ascertain its viability and to propose solutions to strengthen it. The paper is organized as follows: Section 1 present the introduction, Section 2 present the literature review, Section 3 present data and methods, the results and findings of the study are presented in Section 4 and finally Section 5 conclude the paper.

2. Literature Review

2.1 Definition and Origin of Mobile Money Services

Mobile money is a mobile phone based technology that provides financial transactions in a safer and quicker way across a vast geographical space (Gosavi, 2018).

It's not easy to appreciate evolution of retail electronic payments systems. For approximately 50 years, most of the industrialized countries have been using plastic credit cards and other payment tools. Back in 1900 most people used cheques, cash, bank drafts, store credit recorded in a paper ledger as well as a merchant's memory for their payments. Mobile money came out from the past 50 years of looking for a value chain in the payment transactions: developing new payment systems to promote 'efficiencies' as well as to produce revenue through different transaction fees. (Mas and Radcliffe, 2010) cited by (Maurer and Maurer, 2012).

Safaricom in Kenya is the pioneer of Mobile money services in Africa with the introduction of M-Pesa.

M-Pesa is a money transfer service using text messages that allows users to send, deposit, and withdraw money with their mobile phones. A bank account is not needed to carry out the different transactions, which they could perform at any Mobile money provider agent's place of activity. Enrollment and deposits are free of charges while other transactions are charged to make the system affordable for every user.

This system was the first program using that business model in Kenya and did not face competition for almost two years after its creation.

The idea behind M-Pesa was created by Vodafone in the United Kingdom to enhance financial inclusion and provide financial services to the "unbanked." Safaricom launched a pilot program in 2005 and 2006 with less than 500 users in the region of Nairobi (Sarit M., Charlotte S.r, 2017b)

Several authors got interest in mobile money services: use of mobile money based on the gender (Ngumbu and Mulu-mutuku, 2018), mobile money and development (Meniago and Asongu, 2018), (Meniago and Asongu, 2018), intention and adoption of mobile money (Osei-assibey and Osei-assibey, 2015), attitude towards using m-money (Chauhan, 2015), user continuance intention towards M-pesa (Parijat U., Saeed J., 2016) (Osah O.Mickael K., 2017) mobile money and productivity (Gosavi, 2018),...

In line with our research problem, we present below some studies on the growing of mobile financial services and mobile money.

2.2. Growing of Mobile Financial Services & Mobile Money

Omigie, Zo, Rho, & Ciganek, (2017) pointed out that mobile financial service market is expanding and is replacing traditional financial services. It is important therefore to deeper understand the underlying service value that determines customer choice behavior to use mobile financial for market success and sustainability. Their study results are relevant for attracting prospective users and give insights for managers to attain and sustain competitiveness in the mobile financial services market.

Mutsonziwa (2016) find out that mobile money in the SADC (Southern Africa Development community) region is significantly increasing financial inclusion. While some people are benefiting mobile money services, it is crucial to point out that there are people who do not have access to services from formal financial system. Poverty is a main explanatory factor for not using mobile money services. Mutsonziwa & Maposa (2016) revealed that mobile money in Zimbabwe came out at the good moment and users are now enabled to access financial services in an efficient, reliable, secure and cost effective manner.

3. Data and Methods

3.1. Data collection

We used questionnaires and interview as data collection instruments. 100 people who are using mobile money services were interviewed within the city of Bukavu and the choice of the person to interview was random. They filled the questionnaires themselves or with the help of the interviewer.

3.2. Analysis of Data approach

Having regard to the gaps in the literature, the objective of this paper is to conduct and report the findings of a SWOT analysis of Mobile money services in DRC. The acronym SWOT represents Strengths, Weaknesses, Opportunities, and Threats (Azubuike et al., 2018). We carried out a SWOT analysis to analyze the positive and negative factors as well as internal and external factors that might have affected the growth of mobile money use in DRC. This method has been used by many authors in their studies. A SWOT analysis (also called SWOT matrix) is a structured planning method used to examine the strengths, weaknesses, opportunities, and threats associated with a project, a firm or any other business activity (Shi, 2016). Piercy, Giles, Piercy, & Giles (1998) argued that SWOT analysis is the most used practical analytical tool for strategic planning by executives and consultants.

4. Results and Discussion

This section presents the different outcomes from our study in line with our research objectives. The characteristics of our respondents, the SWOT matrix as well as the TOWs matrix are presented in this section.

4.1. Characteristics of respondents

4.1.1. Demographic characteristics

Table 4.1.

<i>Variables</i>		<i>Frequency</i>	<i>Percentage</i>
Marital status	Married	30	30%
	Single	59	59%
	Divorced	11	11%
	Total	100	100%
Education	Primary school	3	3%
	High school	22	22%
	University	75	75%
	Total	100	100%
Sex	Male	68	68%
	Female	32	32%
	Total	100	100%

Figure 1 The table below shows that 30% of the people surveyed were married while 59% were single.

The majority 75% hold a university degree, while 22% hold only a high school Degree. The male was 68%, while the female was 32%.

4.1.2. Economic characteristics

Table 4.2.

<i>Variables</i>		<i>Frequency</i>	<i>Percentage</i>
Employment status	Employed	8	8%
	Self employment	29	29%
	Unemployed	15	15%
	Student	48	48%
	Total	100	100%
Monthly income	0 to 100\$	58	58%
	101 to 250\$	18	18%
	251\$ to 500\$	15	15%
	501 tp 1000\$	5	5%
	1000\$ and more	4	4%
	Total	100	100%

The figure shows that 66% of people interviewed were employed and 15% unemployed, 48% were student. Most of people in our sample are earning less than 100\$ per month. This is because mobile money is mostly used by low income people.

Table 4.3.

<i>Variables</i>	<i>Frequency</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>
Numbers of years as user	100	1	5	2,27
Amount of transaction	100	1	200	19,73
Amount of savings	100	1	500	34,06

This table shows that the average years of use of mobile money services is 2.27, this indicates that the services money is a new service in the area. The Maximum of transactions is valued to 200 us Dollar, this prove that until now mobile money service is used mostly for transactions with limited amount and small transactions.

4.2. Usage of Mobile Money Services

Table 4.4.

<i>Variables</i>		<i>Frequency</i>	<i>Percentage</i>
Mobile Money services provider	Airtel Money	67	50%
	Orange Money	16	16%
	M-Pesa	17	34%
	Total	100	100%
Mobile money transaction used mostly	Money transfer	30	30%
	Deposit/ Savings/withdrawls	44	44%
	Purchase of goods and services	8	8%
	Buying airtime	18	18%
	Total	100	100%

Raison of using mobile money	Speed in use	25	25%
	Its accessibility	39	39%
	Its Low cost	11	11%
	More easy to use	17	17%
	Get discount and bonus	8	8%
	Total	100	100%
Owning a bank account	Yes	53	35%
	No	47	65%
	Total	100	100%

Mobile money providers operating in Bukavu are Airtel money, M-Pesa, Orange Money respectively for 50%, 34%, and 16%. Airtel Money is the service which is mostly used in Bukavu town. People use mobile money services mostly for savings followed by money transfert, purchase airtime and last purchase goods/services. Okello et al., (2018) Find out that savings and withdrawls transactions are leading financial services transacted through mobile money in Uganda; while Narteh, Mahmoud, & Amoh (2017) find out that in Ghana money transfert via mobile money is the most used service.

Most of people use mobile money services for its accessibility. Many people interviewed own also a bank account, this show that they are using mobile money not to substitute bank services, but to complete them.

4.3. Swot Matrix Analysis

The responses from interviews were compiled to get the matrix below.

Table 4.5.

<i>Variables</i>		<i>Frequency</i>	<i>Percentage</i>
Strenghts	Speed services	33	33%
	Low cost of transaction	12	12%
	Availability	36	36%
	Accessibility	15	15%
	Total	100	100%

Most people interviewed (36%) find that it is easy to use mobile money services anytime and anywhere using their mobile phones. The transaction reflects directly in the phone of customers. The availability of the service anywhere is also relevant for customers and the service can be used anywhere depending of the availability of the network. Some customers consider also the service as cheap.

Weaknesses	Difficulty of access	22	22%
	High transaction cost	28	28%
	Liquidity problems	17	17%
	Lack of information	33	33%
	Total	100	100%

According to 33% of our respondents the first weakness of mobile money is the lack of information for non-users. Most of people are not enough informed about mobile money services.

Our respondents argued that the service is expensive. The charge for sending money or withdrawal money is expensive. In some areas it's difficult to access mobile money services, especially deposits and withdrawal due to the long-distance needed to cover in order to reach an agent of mobile money services for that particular purpose. The problem of liquidity is also relevant due to the fact that a customer who needs to deposit or withdraw money have to visit many agents sometimes because the first agent doesn't have enough money in his account or enough cash to deliver.

Table 4.6.

<i>Variables</i>		<i>Frequency</i>	<i>Percentage</i>
<i>Opportunities</i>	Quick growth	16	16%
	Easy adoption	16	16%
	Possibility of diversification	27	27%
	Change of attitude/mentality	41	41%
	Total	100	100%

The first opportunity of mobile money services is the change of customer's attitudes according to our respondents (41%). People have understood the advantage of the service and have adopted it easily. Our respondents argued that the mobile money services are growing, people adopt it easily and accounts are easily created, hence there is a huge potential for the market to grow.

They explained that mobile money services providers can diversify the activity and add other services like loans, payment methods...

<i>Threats</i>	exchange rate Instability	21	21,0
	Network disturbance	39	39,0
	Cyber attack	19	19,0
	Bankrupt of financial institutions	21	21,0
	Total	100	100%

According to 39% of our respondents, disturbance of the network could lead people to abandon the service. It happens to not access airtime balance check for a while when there is a network disturbance. Respondents are expecting the same risk for their mobile money accounts. The instability of the exchange rate could discourage people to use mobile money services especially the account in national currency. People fear cyber-attack and are expecting risks related to cyber-attack for mobile money services, they are not very sure about the security of the system. It happens in the past for some network operators to go bankrupt or to be sold in the region. Using financial services based on a network operators sound very secured for customers.

4.4 TOWS Matrix

With regards to the SWOT matrix, it's relevant to propose some strategies to make the mobile money services more efficient. TOWS matrix is used to ascertain the different strategies.

According to Suhana M., Sedigheh M.i, Suhaiza Z.i, (2017) the matrix could be used by managers and consultants to examine the situation and develop key strategies as well as actions to undertake. The dimensions of TOWS matrix are shown as below:

- S-O (Strengths-opportunities): Give key strategies that could maximize the strengths by taking advantage of external opportunities.
- W-O (weaknesses-Opportunities): Give key strategies to overcome weaknesses by taking advantage of external opportunities.
- S-T (Strength-Threats): Give key strategies to enhance strengths through decreasing the impact of external threat.

- W-T (Weaknesses-Threats): Give key strategies with the objective of reducing internal weaknesses and external threats.

Table 4.7.

<i>SO strategies</i>
Mobile money services providers should take advantage of the growing of the sector to improve the accessibility and availability of the service through the facilitation of creation of more agents' offices/access point. The service should also diversify in order to increase the access for more people to financial services via mobile money.
<i>ST strategies</i>
Mobile money services providers should make sure there is no network disturbance in order to guarantee speed services.
<i>WO strategies</i>
Mobile money services providers should take advantage of the growing of the sector to reduce the difficulty in accessing the service as well as the transaction cost. The change of attitudes should help the mobile money service providers to advertise more about their services in order to get more subscribers/customers.
<i>WT strategies</i>
Mobile money services should improve their risk management (technical, cyber and finance) and make sure there is no problem of liquidity in the agent's offices/points.

5. Conclusion

It has been proved that financial access can help to fight poverty. Africa is facing problems of poverty and mobile money is a tool of financial inclusion. Understanding the current status and analyzing the future of mobile money services strategically is relevant. This study used the strategical analysis tool SWOT to achieve its objective.

Our main findings can be summarized as follow. Mobile money services have strengths and weaknesses as well as opportunities and threats. To begin with, the answers of our respondents compiled shown consistently that the mobile money services strengths are the speed of services, the low cost of transaction, the availability of the service, the accessibility of the service Those strengths are dealing with the following weaknesses: the difficulty of access to the service in some areas, the high transaction cost, the problems of liquidity for agents and the lack of information for non-users. Secondly the opportunity of the service are the growing sector of mobile money services, the facility to adopt the service, the possibility for diversification as well as the change of customers attitude

In the future, the following facts could threaten the mobile money services: The exchange rate instability, the network disturbance, the risk of cyber-attack, and the risk of bankrupt from the service provider.

Several strategies were proposed through a TOWs analysis among others the creation of more agent offices/access point, advertisement, and the creation of risk management positions within services providers' organization.

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