

ADVANCING BRANCHLESS BANKING TECHNOLOGY AS AN EFFECTIVE TOOL FOR FINANCIAL INCLUSION: A CASE STUDY OF ATLAS MARA BANK

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Abstract: The study sought to establish how branchless banking technology can be used as an effective tool for the success of financial inclusion strategy of a bank. A descriptive research design was used with 108 respondents from strategic management and IT staff of Atlas Mara bank and three Mobile network operators. The study established that the type of branchless banking technology the bank uses for financial inclusion were prepaid cards and mobile banking represented by all respondents. However the banks technology was not effectively utilised represented by a high percentage who indicated average usage. The results further showed that majority of respondents indicated the importance of branchless banking technology as reducing risks, costs and improves convenience and accessibility. Branchless banking services were not accessible to previously unbanked due to accessibility challenges and convenience which are limited by the banks lack of technology capacity and infrastructure. Therefore the finding concluded that there was need for the bank to engage in partnerships with Mobile network operators and agents, engage in product awareness and sensitisations; and advance product innovations to sort out the gaps in effective delivering of innovative products and achieving their financial inclusion strategy. The study contributed by providing solutions to the gap in attaining financial inclusion despite the fact that banks have rolled out branchless banking products.

Keywords: Financial Inclusion, agent based branchless banking, mobile banking, kiosk, prepaid cards.

1. INTRODUCTION

Amongst Atlas Maras' business strategies are two critical ones that it hopes to achieve: "Delivering innovative products and service to its customers, including in particular, the effective use of technology" and "contributing positively to the communities in which it operates (most notably by strengthening financial systems and increasing financial inclusion)" (atlasmara.com). This is hoped to be achieved by the banks expectations to invest in both financial and human capital in technology and will seek partnerships and alliances to order to leverage complementary competencies and supporting financial literacy by ensuring prospective customers from a young age have right training to understand and manage their financial needs and become educated consumers of financial services products (atlasmara.com).

EMCompass (2017) purports that there has been significant innovations in the provision of financial services in banks, most notably the success of branchless banking via mobile banking and mobile money transfer. The researcher believes that there is a substantial opportunity to leverage technology further, migrating from mobile money transfer to mobile banking and the provision of other value-added services. Effective use of technology creates the ability to deliver efficiently the services to existing customers, as well as increase financial inclusion and serve customers for whom financial institutions have been previously uninterested or unable to serve. By definition of the Consultative Group to assist the poor (2005) branchless banking can involve the use of technology such as payment cards or mobile phones to identify customers and record transactions electronically and in some cases to allow customers initiate transactions from their locations

away from physical bank premises. Secondly the CGAP asserts that BB can involve the use of outlets such as post offices and small retailers that act as agents for financial services providers and that enable customers to perform functions that require their physical presence such as cash handling and customer due diligence for account opening.

According to CGAP (2008) there are two models of branchless banking; bank led and non-bank led. The main difference between these two forms relates to the entity (bank or non-bank) to set the relationship with the customer and the nature of agency agreement between (bank and the non-bank) (Sultana, 2009). The similarity between the two branchless banking forms is that both models use retail agents to deliver financial services beyond traditional branches. The bank-led model offers a distinct alternative to conventional branch-based banking in that customers conduct financial transactions at a whole range of retail agents (or through mobile phone) instead of at bank branches or through bank employees. The bank develops financial products and services, but distributes them through retail agents who handle all or most customer interaction (Lyman, Ivatury and Staschen, 2006). This model may be implemented by either using correspondent arrangements or by creating a joint venture between bank and non-bank. In the non-bank led Model customers do not deal with a bank, nor do they maintain a bank account. Instead, customers deal with a non-bank firm-either a mobile network operator or prepaid card issuer and retail agents serve as the point of customer contact (Lyman, Ivatury and Staschen, 2006).

1.1 Zambia's Branchless Banking and Financial Inclusion

In Zambia, the central bank (Bank of Zambia) has been actively spearheading the agenda of financial inclusion through an agency banking model using business correspondents. Banks have partnered and continue partnering with a range of technology service providers offering and support the technology for branchless banking used by agents and institutions who serve as the corporate business correspondents. A number of companies, mobile network providers such as Airtel, Vodafone and MTN have been building up technology solutions and platforms for providing banking and financial services.

The Fin Scope findings of 2009 revealed that only 37.3% of the Zambian adult populations were financially included. There were also more banked men than women then. The reasons behind this were mainly the high cost of banking with institutions, and a lack of information on how some products work. As of 2015, the report showed that 59.3% of the adult population is financially included, with more women having been included financially in the last 5 years. The age group that was targeted was between the ages of 26 to 35 years old for both years. There was also a new parameter in the Fin Scope Top Line 2015 findings this time, that being mobile money service and technology usage. There are about 1.1 million adults using mobile money for either sending or receiving money, buying airtime or paying bills. A cause for concern is that very few of them are using these mobile wallets for saving their money. The only way that mobile money can grow in Zambia is to provide awareness of the service and this has to be done effectively by the relevant mobile money provider which right now consist mainly the mobile operators (Airtel and MTN) and a few other independent companies like Zoono.

The report also showed that in 2015, compared to 2009:

- More financial inclusion happened in rural areas (42 to 70.3%) compared with urban areas (34.4 to 50.1%).
- More females were financially included (33.9 to 57.4%) compared with males (40.8 to 57.4%).
- Financial inclusion was shown to have increased mostly with people who earn regular incomes.
- There was a growth in the financial sector from the non-bank services such as mobile money, as over 1.1 million users of the various mobile money services exist in Zambia. There are also other ways people are using non-bank methods such as savings groups or '*chilimbas*' where money takes turns being circulated amongst a group of people per period of time like a week.

As of December 2017, there were 18 Digital Financial Service providers (DFS) in Zambia. In 2017, the industry saw the launch of the third DFS by an MNO, Zamtel Kwacha. The merger of BancABC and Finance Bank, as Atlas Mara, was also launched. The DFS providers in Zambia include the following: Banks/Microfinance institutions such as Atlas Mara, Barclays Bank, Ecobank, FINCA, First National Bank, Indo Zambia Bank, Investrust Bank, Standard Chartered Bank, United Bank for Africa and Zambia National Commercial Bank (better known as Zanaco); MNOs such as Airtel, Mobile Telephone Networks (MTN) and Zamtel; Third-party providers: cGrate, Spargris (Kazang), SpeedPay, Zambia Postal Services Corporation (ZamPost) and Zoono. Although the Zambian DFS market continues to be heavily dominated by first-generation products such as person-to-person transfers, airtime purchases, bill (utility) payments, bulk payments and cash-in and

cash-out transactions, the country is starting to see more use cases for second-generation products such as pay-as-you-go solar services and merchant payments (State of Digital Financial Services Market , 2017).

There was a noted increase in accounts opened for mobile products with other providers than with banks. The Annual Provider Survey (APS) compares the market share of active customer accounts by provider type in December 2016 and December 2017. In December 2017, 62% of active customer accounts were held by MNOs. From 2016 to 2017, the market share of banks slightly decreased from 39% to 34%, while third-party providers showed an increase from 0.4% to 4%. While there was a noted increase in the customer activity rate from 2016 to 2017, 83% of all registered accounts were inactive by December 2017. All the three provider types exhibited an increase in their customer activity rate between December 2016 and December 2017, however banks experienced a significantly higher customer activity rate of 49% compared to 12% by MNOs. A combination of surveys and additional data analyses of inactive customers could provide insights as to why customers remain inactive and what kind of initiatives and/or incentives providers could test to drive usage of their services (State of Digital Financial Services Market, 2017).

According to the State of Digital Financial Services Market (2017) data from the Annual Provider Survey in December 2017, customers conducted 41.5 million transactions for a total value of ZMW 30.8 billion (\$3.1 billion). Banks contributed 44% of the total volume of transactions, corresponding to 93% of the total value of transactions. This finding is in line with the reported average transaction value for banks of ZMW 1,565 (\$156) compared to ZMW 146 (\$15) for MNOs and ZMW 17 (\$2) for third-party providers. While 24% of the transactions were conducted by third-party providers, this amount only accounted for 1% of the total value of transactions in December 2017. These findings can be translated into the following:

- The low transaction value of third-party providers may have been due to the fact that many of their transactions are predominantly airtime top-ups, which are typically low in value.
- The fact that third-party providers processed 24% of transactions presents a potential case for banks and MNOs to explore super agency partnerships with third-party providers to convert over-the-counter (OTC) customers to wallet users.

Agents perform a range of functions, including registering new customers, conducting cash-in and cash-out transactions, resolving customer queries, and combating money laundering and the financing of terrorism by enforcing KYC regulations. With the right incentives, agents could be leveraged as a key channel for providers to drive increased adoption and usage of DFS by customers.

A number of studies (Stegman et al. 2005; Claessens 2006; UNDP 2007) have claimed that applying technology effectively will play a significant role in improving poor people's bank access, taking financial services in a sustainable way too far and underserved locations. There is a tremendous opportunity for banking technology to connect lower-income citizens at reduced costs and bring millions of consumers to the formal financial marketplace through electronic channels (Weissbourd 2002). Therefore, the researcher decided to undertake a study on the incorporation of branchless banking technology as an effective tool to achieve success towards the bank's business strategy on financial inclusion through strengthening financial systems. Atlas Mara is managing to deliver their branchless banking services with the use of available technology. However this hasn't enabled those previously excluded/under banked especially those in the rural regions to conduct transactions from remote locations and hence increasing the process of financial inclusion. This poses a negative effective on its advancement of its strategy of contributing positively to the communities in which it operates in through strengthening of financial systems and financial inclusion. Despite all the technological advancements the bank has not been able to leverage this technology and reach the vast portion of the population due to lack of infrastructure. This is another obstacle in attaining its strategy of delivering innovative products and service to its customers, including in particular, the effective use of technology. Therefore from the above reasons this research was guided by the objectives below to fill in the gaps mentioned noted.

The primary objective of the research was to establish how branchless banking technology can be used as an effective tool in the success of financial inclusion strategy of the bank. To achieve the main objective we had secondary objectives as follows

- i. To determine the branchless banking technology the bank is using towards financial inclusion.
- ii. To establish the role of branchless banking technology in the strategy of financial inclusion at Atlas Mara Zambia.
- iii. To establish strategies of enhancing branchless banking technology as an effective tool towards the success of financial inclusion Strategy of Atlas Mara.

2. RESEARCH DESIGN AND METHODOLOGY

The study followed a descriptive design which involved collection of information by administering a questionnaires to a sample of individuals who were selected by way of purposive sampling. A single case study was chosen to establish how branchless banking technology can be used as an effective tool in the success of financial inclusion strategy of Atlas Mara bank. The interview questionnaire was established as the main method of collecting information on the case study.

This study applied the interpretivist paradigm to the collection, analysis and interpretation of data. This is the most appropriate research paradigm resulting from the alignment between the nature of the study's subject matter, objectives, approach and techniques with the paradigm's foundation and principles (Klein and Myers, 1999, p.72). The study's open-ended research questions, approach to data collection and need for context based on multiple subjective perspectives conflicts with positivist beliefs in empiricism and hypotheses. (Henning et al., 2004).

3. RESULTS AND DISCUSSION

Majority of the respondents were from mobile network operators accounting for 52% of the respondents, this was because a huge percentage of the target population was those in the mobile network operator business with a minority from the banking business a single bank. 60% of respondents are the individuals with less than 5 years' work experience.

Branchless banking Information Technology and suitability

All the respondents 100% rate indicated that the bank has branchless banking technology it is using because the respondents were from departments that manage and plan the technology for the bank and thus knew that the technology is being used by the organization. Mobile banking technology and prepaid cards technology are being used because that's the branchless banking technology the bank is using to provide its services without the use of branches. The bank products being provided through this platforms are cash withdraw services because it enables users to withdraw cash from any of their ATMs without use of a card via E-wallets; payment of utilities and cash transfers because it enables the user to pay for electricity, water, TV (DSTV,GoTV) and talk time. However 100% indicated that cash deposits loan repayments and account opening cannot be accessed through this technology because the current branchless banking technology does not enable the user to so except through the bank account.

Whether this branchless banking technology is suitable for financial inclusion or not, majority, 95% of respondents indicated that it is suitable because they stated that the technology can be used to provide access to various financial services offered by the bank and has features that makes it easy to be accessed away from the bank premises, while the minority 5% indicated that it is not suitable because they stated that it only accessible by customers who were the urban areas where there is internet access.

Role of Branchless Banking Technology in Financial Inclusion

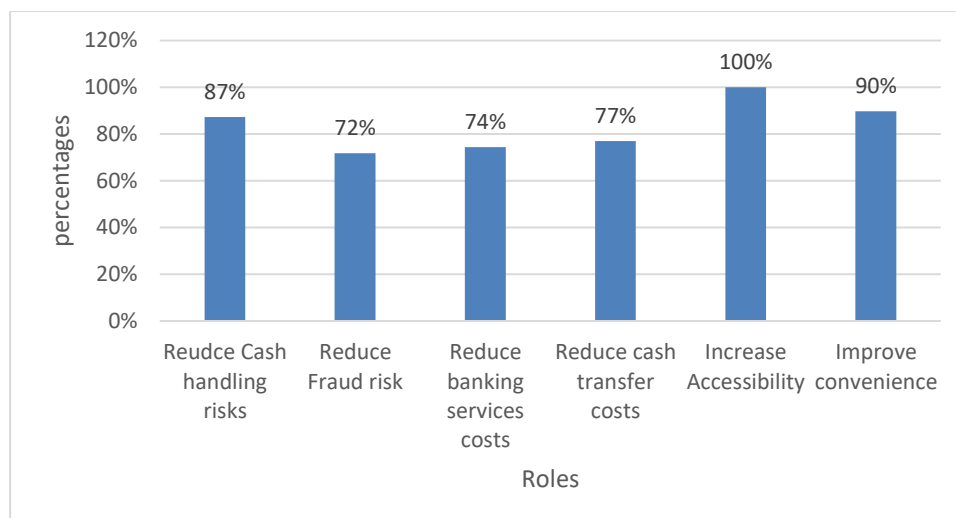


Fig. 1: Roles of branchless banking in financial inclusion.

Figure 1 shows that the study solicited to know the role of branchless banking technology in the bank's financial inclusion

The respondents indicated that the role of this technology in financial inclusion is to reduce risk and cost, and improve accessibility and convenience for customers.

Risk

87% of the respondents indicated that it reduces cash handling risk, because branchless banking technology reduces the frequency of physical handling of cash during transactions and also provides ultimately remove the possibility of loss that can be incurred through physical handling. 72% indicated that it reduces fraud risk because the customer is fully involved and the customer has control of the gadget and processes that minimizes loss due to frauds (scams).

Cost Reduction

The respondents indicated that the technology reduces cost of distance, opportunity cost time for the customer and bank services costs. This can be seen from the results as follows: 74% respondents indicated reduction of costs related to banking services because technology eliminates most administrative costs that in turn reduces cost of service provision and customers will share the costs through access of gadgets. 77% respondents indicated that the technology reduces cash transfer cost because no paper work and distance is involved in remittance of funds, everything is centralized in the digital system thus making cash transfer cheaper than traditional cash transfer methods. Gardeva & Rhynea, (2011) in a survey report on Opportunities and Obstacles to Financial Inclusion observes that, Product cost-structures and branching costs were ranked 7th and 12th respectively viewed as significant obstacles to financial inclusion, especially by providers, high branching costs in rural areas are associated with poor physical infrastructure – roads, electricity, etc. – that branchless banking is able to leapfrog.

Further literature supports this. Through the use of existing delivery channels such as mobile communication channels, the cost of providing banking services is substantially lowered, making it easier for individuals to access banking facilities in an environment they are familiar with. The poor gain convenient access to financial services in their own communities and financial institutions reach a vast new customer segment. (Chaia, 2010).

Improves accessibility and convenience

100% of the respondents indicated that the technology improves accessibility to bank services for the customer this is because the technology eliminates long distance barriers between the customer location and the location of the physical branch and also makes it easy to have access without assistance bank personnel. In addition 90 % of the respondents indicated that the technology improves convenience for the customer because it gives the customer the ability access banking services any were anytime they want to do so.

Strategies of enhancing Branchless Banking as an effective tool towards financial inclusion

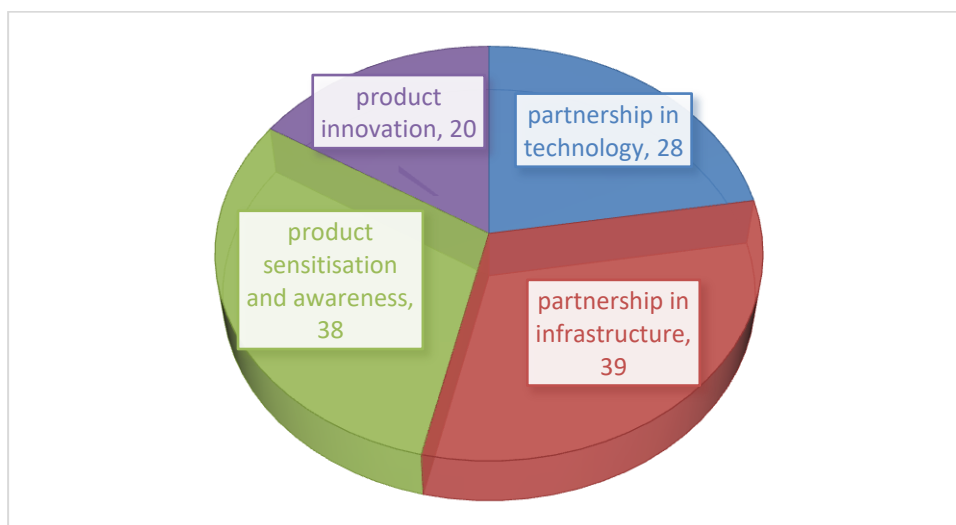


Fig. 2: Strategies of enhancing branchless banking.

Fig. 2. shows number of management staff from the bank who mentioned strategies the bank should adopt to make branchless banking effective. Out of all the 39 respondents, Product innovation 20 respondents, partnership in technology 28, product sensitisation and awareness 38 and partnerships in infrastructure 39 .

The majority of respondents from the bank indicated that there is need to create partnerships with other players in technology such as MNOs and other organizations and individuals as agents that can be useful in the banks technology for financial inclusion. According to Kienzle and Klimiuk (2015), Digital financial services help expand the reach of formal services through agents. In their earlier study in women accessing financial services it was discovered they needed an interface to support he services. The research indicated that there was need for product innovations and product awareness and sensitisations. It required cooperation between multiple partners who are MNOs and banks and vendors as an extension whose platforms are often incompatible.

Mobile Network Operators

The study solicited responses from Mobile Network operators. The representation was as follows: The majority 62% representation of the sample came from MTN because they provided most feedback as compared to the other MNOs AIRTEL at 24% and ZAMTEL at 14%. According to Du (2019), Mobile network operators (MNOs) including Airtel, MTN, and Vodacom are championing mobile money financial services in Southern Africa. Kavir Bhoola, head of strategy for Market Area Middle East and Africa at Ericsson, explained to Linda why MNOs have a strategic advantage in mobile money compared to banks and third parties: he explained that MNOs have a higher existing subscriber base which enabled them to quickly reach a large market and mobile money as a product has synergies with the telecommunications platform and established network that MNOs already have.

4. CONCLUSION

The main aim of the study was to establish how branchless banking technology can be used as an effective tool in the success of financial inclusion strategy of the bank Atlas Mara. The study was conducted in Lusaka town, Zambia. The target population involved strategic management staff from Atlas Mara Zambia headquarters and three potential agents MNOs operating in Zambia with staff from Atlas Mara Zambia headquarters IT and banking departments and the three potential agents MNOs namely Airtel, MTN and Zamtel management and IT staff sampled as respondents.

From the research findings and the responses given, the study found out that the technology platform the bank is using for financial inclusion were prepaid cards and mobile banking. The study revealed that the bank offered limited services (cash with draw, bill payments, transfer of funds and utility payments) via branchless banking platform and focused on the urban users. However, in order to advance branchless banking as an effective tool Atlas Mara should introduce services such as cash deposits, loan repayments and account opening which are a key for point of contact with a customer; and also improve focus on the rural clients.

The study also concludes that the role of branchless banking in financial inclusion is risk reduction (it reduces risks such as cash handling risks for customers) in other words this improves the physical security of customers in places that are remote and dangerous, cost reduction is another role that branchless banking play in financial inclusion it reduces cash transfer costs and financial service access costs. The study also observed that branchless banking improves accessibility to financial services offered by the bank and improves convenience.

Finally, the study concludes that in order to advance branchless banking as an effective tool in financial inclusion Atlas Mara should undertake public sensitizations to increase awareness of the branchless banking to attract more clients and improve usage, the bank should partner with Mobile Network Operators who already have wide presence in terms of kiosks and technological infrastructure to support banks and lastly advance product innovations.

5. RECOMMENDATIONS

Product development

The bank should invest in branchless banking technology interface that is simpler for less literate users rather than pre-empting which products or features to add before assessing the customers' needs or suitability of products for achieving banks strategy. The team in product design should include services that will encourage the poor to adopt branchless banking facilities such as access of credit, interest and insurance.

Awareness and sensitisation

The government should continue embracing education for sustainability. Players in this field particularly MNOs should invest in provision of financial literacy to their agents and the public at large on any new development in Mobile banking.

Availability and accessibility of Mobile banking services.

The advantage that Mobile Banking accessibility has fewer barriers compared to formal banks should be taken into consideration, the target should be to develop MNO infrastructure particularly in the rural areas. The stakeholders should take the available opportunity following installation of Optical fibre which has further brought revolution to the communication industry. This gives more opportunity to the unbanked to have access to mobile networks which are drivers for mobile banking.

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