



Novel banking innovations being implemented in emerging economies like Zimbabwe.

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ABSTRACT

The study mainly focused on new or novel banking technologies that ICT firms providing services in an emerging market/economy like Zimbabwe. Being an emerging economy, Zimbabwe is fast embracing new banking innovations. The results are aimed at BMS in particular. Research was qualitative in nature and focused on the case of BMS alone, and therefore no generalizations can be made. However, the results and findings can still provide an insight where some results can be used by other firms wishing to learn from the case of MBS. The study used mixed research methodology, utilizing both formal and informal interviews. The management of BMS was mainly targeted because they are responsible for strategy formulation and implementation, therefore they were seized with determination the most appropriate strategies to be used to achieve their main objective of growth. Area sampling was used to demarcate 2 different geographical areas within the population in Zimbabwe .5 areas were selected based on being representative of 2 different provinces and the relative convenience to the researcher. A sample of 40 was drawn from 8 banks chosen at random and accessible at the time of conducting the research. Questions were administered via the questionnaire. The questionnaire used both open ended and closed questions. The study uncovered that the ATM is still the most popular innovation, where the economy is cash based. The conclusion was that the ATM is still very much the most popular innovation in Zimbabwe, followed by mobile banking, then the use of the POS channel coming on third. The ATM and POS make use of swipe cards whilst Mobile banking thrives on high mobile penetration rates, and the convenience to customers emanating from portability of the mobile phone used as a gadget for carrying out financial transactions. The findings also show that BMS is faced with a myriad of challenges in its quest for growth. Total market share was 79% shared between BMS and its 5 competitors. The growth strategies being pursued by BMS are not very effective, therefore, it was recommended that BMS should implement plans that are consistent with growth strategies.

Key Words: Information Systems, Digitalization; Innovation Diffusion; Digital Vortex; 4th Industrial Revolution,

Abbreviations: BAZ: Bankers Association of Zimbabwe; BMS: Banking Machine Services

Research Typology: Original Research Paper

JEL Classification: M30, M35, D30

1.1 Introduction

The banking industry is an oligopolistic market dominated by foreign banks that aim to outpace local indigenous banks in terms of innovation, technology, products and services (BOZ, 2010).

The ICT industry in Zimbabwe is also dominated by foreign players headquartered in more advanced markets, which brings in a wealth of experienced and tried and tested brands. Some operate in partnership with indigenous ICT firms and others operate as subsidiaries or branches of the foreign entities (Computer Society of Zimbabwe, 2011).

The world is fast introducing new technologies, thereby offering new and differentiated products, thereby offering more convenience to customers and clients and an upsurge in General Purpose Technologies(GPTs) that drive and increase innovations (Francis et al., 2012).

“While the essential functions performed by the organizations that make up the industry (the provision of payment services and facilitation of the allocation of economic resources over time and space) have remained relatively constant over the past decades, the structure of the industry has undergone dramatic change”: (Francis et al., 2012)

Information and Communication Technology (ICT) companies providing banking software and hardware platforms that enable banks to adopt these technologies to enhance their positions have also been on an increase and have been outpacing each other in capacity building to cope with the ever increasing demand for banking products and services in this thriving economy.

Moreover, the retail sector in Zimbabwe, having realized that cardholders tend to spend more than traditional cash-carrying customers have been under pressure to team up with the banks

and offer card accepting Point of Sale (POS) services to their customers. (Visa Global Marketing Report, 2012)

The ATM, POS and Self-Service spaces therefore represent a massive opportunity for growth and card-based transactions for the retail and banking industries in Zimbabwe. The literacy rate is quite encouraging standing at 92% and with the government policy to encourage the unbanked sector of the population to open accounts with banks and encourage savings and transfers through the formal system, ICT firms have been grappling to put in place networking and hardware infrastructure and support services in line with the government policies. (BOZ, 2011)

The focus seems to have shifted from targeting the urban population carrying multiple cards or transaction tokens to the rural community which appears to have been shunned over the years due to poor development and lack of infrastructure in their vicinity (Zanaco Annual Report, 2010).

This is so visible, to the extent that the traditional market leaders like Standard Chartered, who have been popular for targeting the high net worth clientele has suddenly shifted their focus to the middle and low income classes which present them with a broader and diverse profit base. All of a sudden, such players have been seen competing in market spaces traditionally dominated by the indigenous banks which have been perceived to be closer to the people than foreign players (The Times of Zambia, September 10, 2011).

In the recent past, the company decided to venture into external markets, and at the invitation of some of the major players in the Zimbabwean banking industry, Banking Machine Services (BMS) is a South African headquartered company which set up offices in Zimbabwe in mid-2009. BMS is classified as a Small and Medium Enterprise (SME), and currently has a staff complement of twelve in Zimbabwe.

In Zimbabwe, BMS operates from four points of presence, in Eastgate and Westgate in Harare. The main office in Harare supports the other regional offices and reports directly to the headquarters in South Africa (BMS Company Profile, 2012).

As an emerging market in terms of ATMs and the ICT industry in general, Zimbabwe presents BMS with a wide range of opportunities and challenges for growth. As the banks in Zimbabwe adopt the latest banking technologies, they do not only look at the ATM as the only self-service channel for profitability, but explore other options existing in this space (BAZ, 2011).

A customer-centric organization, BMS is driven by the desire to innovate and keep ahead of competitors, but at the same time delivering superior value to its customers, BMS has focused on establishing themselves in the past two and a half years of operation in Zimbabwe. However, their growth figures have not been very impressive, but recognizing the opportunities and threats posed by competitors, the company now intends to drive towards growth and increasing their market share and visibility on the Zimbabwean market (BMS Annual Report, 2011).

The dilemma that faces BMS currently is that despite the growth in the number of new banking technologies being implemented in Zimbabwe, coupled with the apparent expansion in the ICT industry, they have not really achieved any meaningful growth in the market. BMS remain one of the vendors currently servicing banks like ZB Bank Zimbabwe Limited and CBZ Bank, where they have built good collaborative relations and emerged as the preferred solution provider for their ATM network in both cases. (Zimswitch)

Moreover, competition is on the increase from new and existing players, who appear eager to take on the opportunities in the market and are attracted by the growth prospects in the economy.

In order to achieve this growth, the company acknowledges that it has to formulate and implement sound strategies that will ensure they are relevant and profitable as an ICT SME operating in an emerging economy, where the ICT sector has been credited for driving the overall economic growth (BAZ, 2012).

The company was therefore studied , and this article seeks to develop an insight into how new banking technology innovations may be embraced in an emerging economy that is fast adopting new banking technologies.

Literature Review

Innovations in the banking industry world over are during growth and rapid change, with markets also changing due to increased competition. The current state of the ICT businesses providing services therefore requires constant scrutiny to shape effective plans and take advantage of the changes to allow the business to grow (Wang & Ahmed, 2007). Marketing, operations, human resources, and finance areas need the appraising all the time to ensure they are aligned with the overall growth plans of organizations (Eisenhardt and Martin, 2000).

Several reviews on past researches on similar topics often seem to suggest that there are empirical complexities which make planning for growth a tricky area of study when considering specific industries (Eisenhardt and Martin, 2000).According to Ansoff (1957), an organization has four alternative choices to decide from when planning for their marketing and growth. The choices are continue selling existing products to the existing markets, extend and selling existing products to new markets, developing new products for the existing markets and developing new products for new markets.

Kim and Mauborgne (2005) assert that from their findings on the study of high growth firms over five years, they noted that the major difference was in the companies' fundamental, implicit assumptions about strategy. Moreover, the customers may not even be familiar with the product or its technological foundations (Kelinci, 2010).The original matrix by Ansoff consisted of 4 different cells, based on the premise that the customers were familiar with the

product categories being offered, even though they may not have been familiar with the organization offering the products (Adebanjo and Kehoe, 2001). For high-tech products, the marketers face a mission to first familiarize themselves with the product, before educating the customer to build proper product knowledge to generate sales (Kelinci, 2010).

Armstrong and Green (1996) assert that competitor-oriented objectives that are commonly pursued by organizations and promoted by academics do promote growth of their market shares, but do not always lead to profitability, contrary to common belief. Oxendfeldt (1958), cited by Armstrong and Green (1996) also argued for the case against pursuing business as a warfare, using competitor-oriented objectives. here is therefore no obvious elastic relationship between market share and profitability (Armstrong and Collopy,1996). In pursuing growth, firms therefore need not get obsessed and focus too much on market share as their primary objective, but rather coupling competitor-focused objectives with profitability objectives should emerge the ideal main objective (Slywotzky et al 2001).

Financial institutions put in these efforts in order to deliver new opportunities that foster the growth and the retention of their customer bases in a competitive environment (NCR, 2011).According to the Diebold (2001), FIs continually benefit from transaction migration to the technological space provided by self-service channels by enabling tellers to focus on multiple tasks, and therefore freeing up more time for revenue generation opportunities.Slawsky (2012) notes that the ATM has become a universally embraced technology, which emerging markets, especially on the African continent are taking up at amazing speeds. Various studies have attempted to predict the growth potential of the ATM distribution network and there seems to be consensus that the growth is not about to slow down, but rather may accelerate if the hurdles like funding and networking are overcome (Edwards, 2011). Progress is being made in those areas too, and progressively, FIs around the world, working with other stakeholders, are finding ways to overcome the challenges that exist in those areas.

With the above, the literature review fails to uncover the major challenges of that ICT companies face in pursuing growth strategies in emerging markets, with specific reference to Zimbabwe and BMS in particular. The information collected also does not bring out how the specific organizations in such high growth markets can innovate for growth especially when targeting a niche market like the self-service banking industry.

Methodology

This study applied mixed research methodology in form of formal and informal interviews. This was meant to develop and address probing questions from the individuals and targeted interviewees. This was appropriate for application in a natural and non-controlled environment, and for the structuring of data analysis after the collection (Wright, 1995). The study was most relevant to the Financial Institutions in Zimbabwe and the ICTs providing services in the self-service channels. It therefore targeted all the major banks in Zimbabwe, including BancABC, Barclays, Standard Chartered, ZB Bank, Ecobank and Access Bank, and their customers. The study also targeted BMS management responsible for strategy formulation and implementation as the main objective was to determine the appropriate strategies they must use to achieve their business objective of growing utilizing the most recent new banking innovations. For the purpose of studying the customer sample, area sampling was used to demarcate 2 different geographical areas within the population in Zimbabwe. The 5 areas were selected based on being representatives of 2 different provinces and the convenience to the researcher. BMS has points of presence in all the 2 areas selected and so the researcher could easily access the samples from the offices in Harare's Eastgate and Westgate were therefore selected. A probability sample was then picked systematically, using random techniques, which gave an equal opportunity for selection to all the members within the sub-groups. Using systematic sampling, every 10th adult person passing through randomly selected places on different mid-week days were selected, with the first person selected randomly. For the purpose of studying the customer sample, the size was therefore limited to 50 customers per each geographical area, selected using the sampling method described above. Using a confidence level of 95%, and a confidence interval of 4.38%, the sample size for bank customers = 500. For practical reasons, the sample size for the BMS employees was set to 20, as this represented the total number of people involved in strategy formulation and implementation. However, based on unofficial information from the BAZ employees, the key participating banks in the retail sector was given as 22. Therefore, a sample of 40 was drawn from 8 banks chosen at random and accessible as at the time of conducting the research. Skip, Branching and Ranking questions were also administered via the questionnaire to help the respondents to quickly respond appropriately without being confused by what the exactly the questions required. The questionnaire used a mixture of open-ended and closed questions. Closed questions ensured that the actual information being sought could be obtained and therefore provided the respondents on how to answer them. Hence the choice to use questionnaires was consistent with the purpose of this

study. The decision to use interviews was inspired by the assertions made by Pound et al. (1995), that interviews have a very high response rate and also allow the researcher to observe the attitude of the interviews and make the necessary inferences. In order to boost reliability and validity, the researcher used Lipp (2004) method of pilot testing, assistance and observation.

Results and Interpretation

This section presents the field research findings using the instruments discussed in the previous chapter. These instruments include descriptions, bar graphs, pie charts and tables. The chapter also presents the analysis and interpretation of the research findings, using data collected from bank employees, bank customers and BMS employees.

The response rate from bank customers was quite encouraging, considering that the targeted subjects were people picked whilst walking on the streets, who could have easily not afforded the researcher time to complete the questionnaire. Response rate was 80%. The interviews with BMS employees were internal and were even more successful, yielding a response rate of 90%, as the researcher shared a working relationship with the subjects and the questions were of interest to the business. The interviews with bank employees were also very successful, despite the subjects being busy. It was made easy by the fact that some of them were conducted in an informal set up and in a relaxed atmosphere. The interviewer took advantage of his personal connections within the banks to achieve an encouraging response rate of 85%.

Mobile banking seems to be an option that banks also prefer as the figure indicates that 70% of the interviewees were offered this service when signing up. Coupled with the high percentage in internet banking offers and other alternative digital channels, this result suggests that banks are valuing the alternative banking channels more than, thereby promoting their usage from the time the customer relationship is signed up.

Results show that 48% of the interviewees use their mobile phone for transacting somehow. Of the respondents who do not use their mobile phone, only 12% seem not to have an interest in using the channel. 26% have handsets that cannot to the channel, whilst 14% are deprived because their respective banks do not offer the service. This suggests that the percentage of

mobile banking users could have been higher if all the banks offered the service and all handsets had the capability to perform such transactions. This could be due to the high mobile penetration rate in the market.

Results demonstrate the popularity of the frequency of usage of the alternative banking channels. For customers who prefer transacting at the branches, 80% of them only visit the branch once in a month, suggesting that the visit could be an important one, and possibly imposed by circumstances. The ATM channel still records high popularity and the results show that 48% use the ATM more than 3 times in a month. Online banking and mobile banking also record 70% usage in once-off transactions, meaning that customers still use the channels but not as frequently as the ATM. This suggests that the demand for cash on the market is substantial.

The results suggest that 45% of the banks are seeing the value in VAS and have already put in place plans for their implementation, whilst 20% have already integrated VAS into their current channels. A significant proportion, of 35% though, is not doing anything, suggesting that these are not an immediate priority for them

56% of the respondents have implemented some new technology of some sort, while only 2% at the other end of the spectrum still use legacy systems, older than 10 years. 34 percent have implemented systems in the past 2-5 years, whereas 8% have done the same in the past 5-9 years.

47% of the banks plan to grow their channels. Security enhancements come in second at 36%, suggesting that the banks may be concerned that threats in the industry may result in significant losses. The results also seem to suggest that the banks are prepared to incur heavy operational costs during the planned growth, as only 2% aim to reduce these operational costs. Improvement of functionality does not appear to be a major concern as well, with only 15% appearing to prioritize such enhancements.

The findings presented in figure 10 above suggest that BMS comes in second in terms of market share, at 21%. Necor, in first position, however, have more than double the market share at 48%. This suggests that Necor still enjoys control of the market and all the remaining players competing with BMS are chasing up to catch up. These results show dominance by three major competitors in the market, suggesting that a lot of work still needs to be done by BMS. Newtech has a market share of 18%, suggesting that they are also a major threat to BMS. Proxy and other vendors share the remainder of the market share, suggesting that the banks are not really considering the size of the organization before engaging them.

The results suggest that BMS has only been able to achieve a 6% growth in market share in almost four years. The major change was recorded between 2009 and 2010 when the market share rose from 15% to 19%, otherwise it has almost been stagnant since then, rising by about one percentage point per year.



Discussion of Findings

The research findings from the customer questionnaire suggest that the bank customers are knowledgeable on the new banking innovations and they are prepared to sign up for use of self-service channels. This could be due to the convenience the channels provide and the non-availability of bank branches in the remote parts of the country. A significant proportion of the customers with bank accounts are underbanked as proved by the study, with about 48% only having one bank account. The findings also suggest that the banks in the market are not yet offering enough in terms of alternatives. Customers still want more than what the banks are currently providing. The findings are consistent with the assumption that emerging economies are taking up new banking innovations and adopting them rapidly.

The findings from the bank employees suggest that banks are working hard and probably see a profit opportunity in self-service channels. This is evidenced by the percentage of banks that are currently working on self-service projects and the number of recent installations of core self-service systems. The banks generally want to grow their self-service channel

offerings to make more profits and offer customers more convenient ways of transacting. The findings also suggest that banks are facing challenges for which they seek to engage vendors who are the experts on the self-service channels to assist them achieve their corporate and business level strategies. The findings show that the banks consider certain key competencies and factors when selecting vendors to provide them the services, with the majority valuing the footprint covered by the vendors on the market as the most important characteristic. This finding is significant for the case of BMS who may respond to these characteristics sought by providing them and working closely with the banks.

Furthermore, it appears that BMS faces a wide range of challenges in achieving growth. The challenges identified by the research suggest that BMS did not adequately research the foreign market prior to entry. All the other challenges seem to stem from this major one, which means that they are still trying to understand the major market dynamics. This is consistent with marketing literature which suggests that market research efforts should result in an understanding of the market before a business ventures into doing business in the market. Market research would have uncovered the important environmental attributes that would have allowed BMS to plan for any likely challenges and come up with appropriate strategies to deal with them.

In addition it uncovered the competition that BMS is dealing with in the market. Interestingly, there is a dominant player, which suggests that he used to enjoy a monopoly. The monopoly could have been due to the fact that this is a locally founded organization that has been a traditional major supplier to the banks, dealing in a much diversified portfolio. The market share for BMS suggests rivalry with Necor. It is possible that Necor has been busy raising the barriers whilst BMS has been pursuing growth. The findings appear to suggest that all the major competitors have resale agreements with the major global manufacturers and are diversified. This could mean that their relationships with customers are based not only on one product or service, but several. Such customer-supplier relationships seem to be perpetuated by the level of trust that develops when you deal in more than one area. The service may not be good, but the fact that the supplier probably deals with more than one department or division in the customer organization means that they are most likely valued as an important supplier.

The findings suggest that BMS' strategies lack clarity and are inconsistent with the desire to grow. BMS has been trying to grow, but at the same time make huge profits from a fairly new venture in an emerging market. This is inconsistent with the marketing rule of thumb that in pursuing growth, profits may have to be sacrifices as the organization should invest heavily around production capacity. The general assumption could have been to literally transfer their success from the home market by employing the same strategies in a foreign market. Again, this is inconsistent with international marketing literature, which calls for a different approach in a different market, as environmental factors would require a different approach and competencies. The differences in the more mature South African market and the younger Zimbabwean market should have provided guidance to BMS' strategists to deploy different approaches and solutions in the latter market.

Again, the research also uncovers the areas where the banks and their customers desire to too change in insofar as the self-service channels are concerned. The findings suggest that the banks are reliant on suppliers to provide direction and services that the want to outsource. This could be out of the realization that banks do not have any internal expertise and competencies to deploy these new innovations that drive self-service digital channels. In outsourcing, the majority of banks see value and so the onus is on the suppliers to allow their strategies to be guided by the needs of these customers. The findings also suggest that the self-service channel is becoming a very important customer touch point that requires more attention than before. The findings from the banks suggest that they have unfulfilled needs for which they need solutions. These needs range from new innovations to upgrades to strategic partnerships. This suggests that the vendors or service suppliers can tap into these opportunities and strategically address them.

Conclusion

The study uncovered that the ATM is still very much the most popular innovation in Zimbabwe, where the economy is still very much cash-based. Mobile banking is also very popular with most people now accessing banking services via their mobile phones and a significant proportion still taking up the service. The use of the POS channel is also growing, meaning that, of the three top innovations being taken up, two of them, being ATM and POS are card driven and the other one (Mobile Banking) is being driven by the high mobile penetration rates and the convenience customers enjoy in using their portable mobile phones to transact. Even though Internet Banking is quite popular, the major hindrance appears to be

connectivity issues and so usage is still comparatively low in the market. The Financial Institutions appear to have recognized alternative banking channels as a high profit area and are working on various projects, which are likely to usher in the other innovations in the near future, like deposit-taking ATMs, Cash Recycling ATMs, Kiosks and all the other innovations described in the earlier chapters. The main innovation being taken up in emerging economies seem to have the buzz word “convenience” around them from a customer’s perspective and “profits” from the FI’s perspective. BMS has failed to grow during the period under review due to the use of wrong business strategies and a lack of understanding on the direction the industry is moving towards. Zimbabwe as an emerging economy is moving in a direction consistent with other emerging economies. Banking innovations are being adopted at a rate that can result in growth that can transcend other industries and impact of the progression of the economy and society at large. Customers lack knowledge and expertise in self-service channels, and their core business is banking.

Aggressive marketing campaigns and customer education on new products and innovations is therefore required from all service providers, including BMS. The implementation of the appropriate and sound growth strategies for ICTs servicing banks adopting the self-service channel should consider the trust element and the confidence that supplying reputable global brands brings with it. In order to grow, ICTs need to implement effective strategies for growth and respond to customer needs proactively. BMS should carry out a SWOT analysis to understand their strengths, weaknesses, the opportunities that exist in the market and the threats to their business goals. BMS should carry out an extensive market research to help them understand the market dynamics in Zimbabwe. This will help them craft appropriate and effective marketing plans for the attainment of their business goals. BMS should implement the market penetration and diversification growth strategies, breaking their focus from ATMs but to other self-service channels in order to tap into the opportunities that they present. To effectively plan for this, BMS could use the results of analyzing this study to model a strategic marketing plan.

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