

CONTRIBUTIONS OF MOBILE PAYMENTS IN THE GROWTH OF MICRO BUSINESS A CASE OF M-PESA IN MAUA TOWN, KENYA

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Abstract

Mobile payments are one of the most recent emerging technologies that have enhanced financial inclusion through creation of decentralized financial supply chains. Mobile payment is a method of payment through the use of mobile phones. As a result, majority of the micro business operators in Kenya have embraced its use in their daily business operations and are registered users of M-Pesa. Although, this has become a convenient way of doing business, there are few studies that have been done to find out the impact of using these mobile payments and their contributions on the success and growth of micro businesses in various parts of the country. In the wake of the 21st century, the research field has pointed out on scarce research activities in the telecommunications mobile industry. The findings indicated that mobile payment technology has contributed on the growth of micro business. The first research question on the perceived usefulness has identified the relationship between the mobile payment services and the micro business holders. The findings indicate the benefits of M-Pesa

service has greatly influenced the business performance and growth among the micro business holders. In regards to the second study question on the actual usage of mobile payment technology it has been established that the mobile payment technology has become a very important tool in business transaction. Sending and receiving money, cash withdrawals, pay bills and money transfers are some of the services a micro business holder cannot do without. Satisfaction is the ultimate goal of consuming and a measure of success among others. The study recommended that there is need to reduce the service charges imposed on the M-Payment services in order to reduce high costs incurred on M-Payment transactions e.g. charges on sending, withdrawals.

Keywords: Contribution, Mobile Payments, Growth of Micro Business, M-Pesa

INTRODUCTION

Mobile payments are one of the most recent emerging technologies that have enhanced financial inclusion through creation of decentralized financial supply chains. Mobile payment is a method of payment through the use of mobile phones. The use of mobile phones has been the most recent development in Kenya and has revolutionised how business is conducted among the micro business holders. The terms micro-business and micro-enterprise have the same meaning. The term micro-enterprise refers to different entities and sectors depending on the country. In Australia, it refers to a business with a single owner-operator, having up to 20 employees (Munoz, J.M, 2010).

In developing countries, like Kenya, Micro-enterprises refer to small businesses employing 10 people or less and have a capital asset. Internationally, most micro-enterprises are family business employing one or two persons. Micro-enterprises are said to add value to a country's economy by creating jobs, enhancing income, strengthening purchasing power, lowering costs and adding business conveniences. All business holders have ambitions for their business to expand and grow to realize huge profits and benefits. They grab any arising opportunity and cultivate it in their business with a mind to prosper and grow to greater heights. Emergence of several business practices has led to various innovative strategic measures and approaches embraced by small and micro business holders. Micro business holders are always alert on new technologies arising in the market and ready to embrace change. This is made possible due to their entrepreneurship's ability and their aggressiveness. Entrepreneurship is the greatest tool to climb up the growth ladder and serves as both an intrinsic and extrinsic motivation towards growth in micro-business. During the last few decades the phenomenon of entrepreneurship has gained unprecedented importance on a world wide scale due to being

regarded as a sustainable source of new employment, innovation and economic growth (Morales, Gualdron and Roig, 2005).

Entrepreneurship and innovation are of fundamental importance to our economy as they spur economic growth and wealth creation (Barringer and Ireland, 2008). According to the World Bank (2006), “firms that use ICT grow faster, invest more, and are more productive and profitable than those that do not.” Currently, Kenya is suffering high rate of unemployment and increase in poverty index and therefore, there is need to boost and speed up the growth of small and micro-business that forms the backbone of the Nation. The study recognizes the role played by ICT in the growth of the country’s economy. Micro-business holders have adopted the use of mobile payment technology in their operations due to its perceived usefulness and reliability. This mode of payment has been found useful to both the banked and the unbanked users. Unbanked refers to those people who operate in cash due to lack of formal bank accounts. This limits their ability to take out loans, maintain savings, or make remote payments, and these constraints can inhibit their economic opportunities (Medhi, Ratan and Toyama, 2009; Donner, 2007).

Statement of the problem

The M-Pesa mobile money transfer system has been very useful to the country’s economic growth. M-Pesa service enables subscribers to use their mobile phones to carry out transactions. Such as pay for goods and services, pay bills, send to and receive money from friends and family, withdraw cash for their use, top up their own airtime accounts or top up someone else account and manage their own accounts. The use of mobile payment technology requires basic knowledge to operate. As a result, majority of the micro business operators in Kenya have embraced its use in their daily business operations and are registered users of M-Pesa.

Although, this has become a convenient way of doing business, there are few studies that have been done to find out the impact of using these mobile payments and their contributions on the success and growth of micro businesses in various parts of the country. In the wake of the 21st century, the research field has pointed out on scarce research activities in the telecommunications mobile industry.

Aker and Mbiti (2010) revealed that the available studies necessarily focus on specific sectors, countries and examples. Mbogo (2011) concedes that most of the studies in mobile technology were conducted in developed countries and may not reflect the impact on the success and growth of different business environments and in particular the micro businesses in a developing country like Kenya. The researcher investigated on how the actual usage of the

mobile phone services, particularly mobile-payment, has influenced the growth of micro-business. The study provides insight into the investment in this mobile payment technology by the micro-business operators and gives propositions for future research in this area. Many businesses in Maua Town are accessible to this technology and have embraced it, especially the small and micro- business in running their daily financial transactions. The study has researched on the contributions of mobile payment on the growth of micro businesses.

Specific objectives

- i. To evaluate the contributions of perceived usefulness of mobile payments technology on the growth of micro-business in Maua town, in Meru county.
- ii. To determine ways in which actual usage of mobile payments technology on business performance contributes on the growth of the micro-business in Maua town, Meru County.

Research questions

- i. To what extent does the perceived usefulness of mobile payments technology contribute on the growth of micro-business?
- ii. How does the actual usage of mobile payment technology contribute on the growth of micro-business?

Significance of the study

Robust economic growth cannot be achieved without putting in place well focused programmes to reduce poverty through empowering the people by increasing their access of factors of productions, especially credit and technology. The mobile payment as a recent technology in financial transactions has contributed greatly to the growth of banking sector which in turn have empowered many micro-businesses through credit facilities as a result of building high degree of efficiency in the banking sector. Therefore, the study was formulated to find out how the mobile payment has contributed to the growth of micro businesses.

LITERATURE REVIEW

Disruptive Innovation Model

Innovative activity has become the key driver of growth and it is evident that countries that create and adopt new technologies which generate innovation grow faster than those that do not. The same case applies to businesses. Businesses whether small, micro or large has no choice but to either innovate or adopt new technologies, if there is need for them to survive. A

number of studies have addressed a number of questions, such as why firms should innovate, what forces drive innovation, and which factors hinder it. Barnett and Schumpeter define innovation as the carrying out of new combinations. Mobile payment is a recent technology; however, the micro-business holders have adopted it in conducting their business because of certain reasons. Innovation can be viewed as an essential tool or component of commercial entrepreneurship. Therefore, it can be defined as all the scientific, technological, organization, financial and commercial activities necessary to create implement and market new or improved products or processes (OECD, 1999). Mobile payment is viewed as an easier form of cash delivery, affordable, personal and can be used anywhere and at anytime (Anurag, Tyagi and Raddi, 2009). Disruptive innovations offer 'good enough' performance and new benefits like simplicity, convenience or low prices. They appeal to customers or potential customers who may be looking for something different. This model provides benefits to the customer such as reduced cost, convenient, easier and simpler ways to get business operations done, increase customer satisfaction and offer simple solutions that meet the tastes and preferences of customers and stay ahead of competition. The support the government of Kenya is providing to the micro business provides a conducive environment for them to embrace mobile technology to boost their businesses. Moreover, the Kenyan government's policy is to promote and support innovation (Kimenyi and Ndung'u, 2009). Technology is being used by businesses today to enhance growth and competitiveness (Anyasi and Otubu, 2009). Mobile technology is at an advancing process such that mobile service providers are working hard to come up with innovations to meet customer needs and those that will adopt the new innovations in the technology will be able to maintain existing customers and attract new markets. Micro-business holders embrace this fast-changing technology and facilitate their business to grow.

Disruptive innovations include continued improvements of business processes and operations, coming up with new products or services that are simple, and enhance customer satisfaction. Disruptive innovations are an opportunity and not a threat. Mobile payment technology is a product of this disruptive innovation. This technology through the mobile phones can be used to withdraw money from bank accounts, check account balances, pay bills such as electricity, water and buy goods and services, mobile phone airtime top up and money transfers (Mari, 2003; Porteous, 2006; Porteous, 2007; Anyasi and Otubu, 2009. Maimbo; Strychacz, and Saranga, 2010; Aker and Mbiti, 2010; Saleem and Rashid, 2011; Porteous and Neville, 2006; Cheah, Teo, Sim, Oon and Tan, 2011). Mobile payment technology innovation has brought financial life to the 'unbanked' who operated in cash due to lack of formal bank accounts. This limit their ability to take out loans, maintain savings, or make remote payments, and these

constraints can inhibit their economic opportunities (Medhi, Ratan and Toyama, 2009; Donner, 2007).

Mobile-banking, a product of mobile payment technology has become a solution into the problems of the unbanked society. Mobile banking is an effective approach in reaching millions of unbanked households, especially those in rural areas with very little investments. Research has shown that access to financial services, and indeed overall financial development, is crucial to economic growth and poverty reduction (Kimenyi and Ndung'u, 2009).

A broad range of financial services including credit, savings, investment, money transfers and insurance can make a difference for the poor (FSD Kenya, Annual Report, 2009). Accessibility to financial services has immensely contributed to the growth of micro-business. The micro-enterprises gain efficiency and close proximity to financial infrastructures. The small business holders are able to save, bank and make withdrawals and build progressive financial statements that can be considered by banks and micro-institutions and avail funds to them in form of loans. A study conducted by Kahora and Arunga in the year 2007 found that sole proprietors and small enterprise businesses reaped more benefits by using the mobile payments as they could make savings or access many customers and do more services than before. Accessibility of financial services, accessibility of customers and accessibility of mobile phones since they are cheap makes the micro-enterprises achieve more in their business undertakings. This technology has given birth to a new revolution where banking has been simplified and is reaching a wider population of mobile phone users. The users also include the less privileged who had earlier no access to actual bank accounts in the formal banks (Dovi, 2008). However, the main idea behind the emergence of this technology was to facilitate money transfers via mobile phones and create financial awareness to the poorer populations in developing countries, who either had no access to formal banks or could not afford to have a bank account due to expensive rates levied by the banks (Mwangi and Njuguna, 2009). The innovations brought liberalization in the cost effectiveness of money transfer. Prior to introduction of M-pesa (m-payment), individuals used a mixture of informal and formal channels such as large buses e.g. Akamba bus company. These channels underwent processes that were more expensive in comparison to the current M-pesa mode of money transfer. Anuragi, Tyagi and Raddi (2009) describe this mode as an easier form of cash delivery, affordable and cheap to creditors and suppliers. The costs associated with the sending of money using the mobile payment services is also very low as compared to those from the commercial banks and other money transferring companies (Omwansa, 2009). The cost of the mobile payment services should be low than those of the banks and affordable to the micro-enterprises. Micro-enterprises have chosen this technology and the decision to choose has not yet proved them

wrong. The micro-enterprises meet financial obligations in time and therefore either increase their sales or earn more profits. The mobile service provider's strategy has focused more on innovations that has created utility in business processes. Since the inception of M-pesa on March, 2007, the Safaricom mobile service provider has been very innovative to meet the customer demands and increase productivity in business sectors.

Perceived usefulness

Perceived usefulness refers to the degree to which a person believes that using a particular system would enhance his/her job performance (Davis, 1989). The perceived usefulness can be conceived as the benefits derived on the usage of mobile technology. These benefits affect the performance of business positively and therefore are very important contributors of business growth. Some of these perceived usefulness are easy accessibility, convenience and security, speed and low cost

Easy accessibility

Pagan (2004) states that accessibility (Ability to reach goods and services) is one of the main advantages of mobile payment services. Small and micro-businesses are among the greatest beneficiaries of using mobile payment, particularly the M-pesa. The accessibility of this technology has led to this growth of micro enterprises due to the benefits reaped from the service. Kahora and Arunga (2007) argue that sole proprietors and small businesses reaped more benefits by using mobile payment as they could make savings or access many customers and do more services than before. The M-pesa has several advantages that speed up the growth of micro businesses. M-pesa agents are spread throughout the country more than the bank and therefore majority of the people are accessible to mobile payment services. As at 31st March, 2009, there were 8650 M-pesa agents spread through the country offering the mobile payments services (Annual report, 2008/2009).

The micro business operators go to the bank less often and spend more time running their business. This can enhance efficiency and effectiveness of the business since more time is saved and allocated to the running of the business. This type of technology has given birth to a new revolution where banking has been simplified and is reaching a wider population of mobile phone users .The users also include the less privileged who had earlier no access to actual bank accounts in the formal bank (Dovi,2008).

Nevertheless, many unbanked Kenyans can now receive or send money wherever they are in the country (Omwansa, 2009) .Therefore, through mobile payment technology the micro business operators are able to reach goods and services on time, access funds on time and do

the business transactions instantly and inexpensively due to easy accessibility .This can be perceived as a subset of perceived usefulness and according to previous studies, influences the growth of business positively. The study aimed at investigating the contributions of mobile payment to the growth of micro business in Kenya.

RESEARCH METHODOLOGY

Both descriptive and explorative research design was used in this case study .This is because the study would acquire a lot of information through description and exploratory. The population of study comprised of small business entrepreneurs in Maua Town. The population size was 400 micro and small business entrepreneurs which largely comprised of owners of supermarkets, pharmacies, restaurants, electronic shops, barbing and hair dressing salons, hawkers, small shops, mama Mboga, Bodaboda operators, open air markets and Jua Kali sectors. The study adopted the stratified random sampling technique. The method entails grouping respondents into strata on the bases of common characteristics. After grouping, the simple random techniques sampling technique is then applied to select the required sample size. Using the standard values and formula provided above a sample of at least 192 small business owners was preferred as a representative. The study used questionnaires (to capture quantitative data) and in-depth interviews (for collection of qualitative data) as main tools for collecting data. The selection of the tools was guided by the nature of the study, the available time and objectives of the study. Verified data from the questionnaires was analyzed through descriptive and inferential statistics. The study used both quantitative and qualitative approaches in processing and analyzing the data. Analysis has be done using frequencies, percentages and inferential statistics aided by statistical package for social sciences and the data has been properly analyzed and represented using tables and graphs.

RESULTS AND DISCUSSION

Perceived usefulness of M-Pesa payment

Benefits attached to the mobile payments are key to the usage and adoption of the technology that has revolutionalized the way business is conducted both in the developed and developing countries like Kenya. The researcher sought to establish usefulness of the mobile – technology and therefore the study came up with the following evidence as relates to the usefulness of the M-Pesa payments.

Therefore, perceived usefulness of mobile payment contributes to the growth of micro-business. Mobile payment technology is a recent, modern technology whose benefits associated with it are unique and market drivers.

Easy accessibility

On the accessibility bigger percentage of the respondents are of the opinion that M-Pesa services are very accessible to their premises as shown below.

Table 1: Accessibility

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| Valid very | 111 | 74.0 | 74.0 | 74.0 |
| Fairly | 20 | 13.3 | 13.3 | 87.03 |
| Not | 19 | 12.7 | 12.7 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

According to the study, majority of the micro-business holders in Maua own cell phones and this contributes to easy accessibility of M-Pesa services since more than 90% of the cell phones owners are M-Pesa registered users as indicated by table 2 below.

Table 2: M-Pesa registered users

| | Frequency | percentage |
|-----------|-----------|------------|
| Valid Yes | 142 | 94.67 |
| No | 8 | 5.33 |
| total | 150 | 100 |

The use of the M- Pesa services is also attributable to the fact that majority of the respondents are confident with making payments through M- Pesa since there is communication by calling before a transaction is done. This is exhibited by the table 3 below.

Table 3: Calling

| | Frequency | Percent | Valid percent | Cumulative percent |
|-----------|-----------|---------|---------------|--------------------|
| Valid yes | 131 | 87.3 | 87.3 | 87.3 |
| No | 19 | 12.7 | 12.7 | 100.0 |
| total | 150 | 100.0 | 100.0 | |

Though not in totality, people running businesses and have mobile phones use them to make calls to both customers and suppliers as shown by the table 3 above. Sellers make calls before sending money to creditors and suppliers to confirm either the number or the amount. Therefore, it is clear that calling has greatly enhanced and improved communication among

business agents. Micro business has embraced this service in the quest of making payments by M-Pesa with all the confidence it deserves in service delivery. Calling, according to respondents greatly influences sending money because before or after sending one has to call to confirm. Therefore, possession of a phone alone is a key factor to mobile payment and has boosted the morale of accessibility. Accessibility in actual sense means the ability to reach people. It is one of the main benefits of the mobile payment services (Pagan, 2004).

On accessibility, 74% of the respondents are of the opinion that M-pesa services are very accessible to micro business. This is also facilitated by the fact that majority of the micro business holders in Maua own cell phones and more than 90% of the cell phone owners are M-pesa registered users as indicated by the table. They argued that M-pesa services are available at anytime and can be used anywhere. The research indicates that M-pesa services are very accessible to micro business holders' premises as reflected in the descriptive statistics. The findings concur with the previous researchers that are Anurag, Tgagi and Raddi (2009) who viewed mobile payment as an easier form of cash delivery, affordable, personal and can be used anywhere and at anytime. This is an important useful service to the running of micro business. The extent at which the perceived accessibility contributes on the growth of micro business is realized in the sense that the cell phone and the services provided by the mobile service provider are products of technology. Technology is being used by business today to enhance growth and competitiveness (Anyasi and Otubu, 2009). Accessibility of the mobile payment service starts with the ownership of the cell phone. According to my findings the micro business operator who owns mobile phone increases by one, the business grows by 0.195 as indicated. This explains how accessibility of mobile payment facilitates the growth of micro business. Mobile phone has been regarded as a more accessible and less expensive means to close the digital divide (Wade, 2004). The findings concur with Pagan (2004) who states that accessibility is one of the main advantages of mobile payment services. Therefore, the findings respond to the research question at what extent does the perceived usefulness of mobile payment contribute to the growth of micro business. Perceived usefulness is the driving desire towards embracing technology and using it to perform the business intended for. The M-Pesa services are very useful to micro business operations and have influenced business performance. The influence has an impact on micro business growth. The table below shows the influence of M-Pesa on micro business.

The second research question was to determine ways in which actual usage of mobile payment on business performance contributes on the growth of micro-business in Maua town, Meru County. The frequency of using M-pesa services has a great effect on the business performance. Micro-business holder's adoption of mobile payment is an interpretation of using

the mobile payment services on the daily running of their business. The study records that over 90% are registered users of mobile payment in Maua. This is an indication that the M-Pesa services are friendly to the micro- business operators. According to the studies done by Pagan (2004) most people describe the mobile payment as user friendly, he also suggested that it is the usability, usefulness, ease of service operation and speed that people considered as bringing efficiency in the use of mobile payment services. According to my interpretation, the technology becomes real when it is tried. The findings indicate that majority of micro-business operators send and receive money via M-Pesa services.

SUMMARY AND CONCLUSIONS

The first study question was focusing at the extent at which the perceived usefulness of mobile payments contribute on the growth of micro-business. The research findings indicate that majority of the respondents reaped a lot of benefits from the mobile payment such as accessibility, safety and securities, satisfaction, speed and convenience. The respondents agreed that these benefits boosted the growth of business and enhanced business performance in terms of service delivery.

The second study question discussed on how the actual usage of mobile payment technology contributes on the growth of micro-business. According to the findings the respondents were on the opinion that the M-Payment technology has boosted the performance of micro-business in Maua town. The respondents agreed that they highly depend on M-Pesa on sending and receiving money and this has greatly boosted their business performance thus easier buying and selling of products and services. The results indicate that micro-business people in Maua use mobile payment service in money transfer, making payments and mobile banking that has improved efficiency in micro-business performance.

The findings from the research conducted indicate that mobile payment technology has contributed on the growth of micro business. The first research question on the perceived usefulness has identified the relationship between the mobile payment services and the micro business holders. The findings indicate the benefits of M-Pesa service has greatly influenced the business performance and growth among the micro business holders. In regards to the second study question on the actual usage of mobile payment technology it has been established that the mobile payment technology has become a very important tool in business transaction. Sending and receiving money, cash withdrawals, pay bills and money transfers are some of the services a micro business holder cannot do without. Satisfaction is the ultimate goal of consuming and a measure of success among others.

RECOMMENDATIONS

According to the study findings, the researcher has found it appropriate to make the following recommendations to the mobile service provider.

- 1) There is need to reduce the service charges imposed on the M-Payment services in order to reduce high costs incurred on M-Payment transactions e.g. charges on sending, withdrawals and pay bills services.
- 2) The service provider to come up with a solution to network failures and seek ways of decongesting the network so as to allow efficient delivery of services.

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