Policy Innovations to Improve Access to Financial Services in Developing Countries: Learning from Case Studies in Kenya

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Abstract

This paper examines the factors which are driving increased financial inclusion in Kenya, and poses the question whether increasing accessibility and competition will of itself be sufficient to continue to extend financial services to the very poor. The paper discusses the extent to which recent advances in the Kenyan financial system meet the Principles for Expanding Financial Access developed by a Task Force organized by the Center for Global Development.

This paper discusses four innovations in financial access undertaken in Kenya. The central idea is to present advances and assess potential shortcomings of these initiatives. The paper also examines the capability of replicating the innovations in other countries, and the extent to which the innovations meet the Principles for Expanding Financial Access. The studies include two leading innovators, Equity Bank arguably Africa's most successful microfinance focused bank, and Safaricom's M-Pesa, the world's leading mobile payments provider. Two other studies show institutional responses to an increasingly competitive and technology driven sector, the new business model of Kenya Post Office Savings Bank, and the mobile phone based microfinance institution Musoni.

Overview

Worldwide, financial access has become an increasingly important development metric, as one of the factors which can drive widespread economic development. This paper deals with Kenya's advances and challenges to improve financial inclusion. The paper is part of a series of studies conducted under the Centre for Global Development (CGD) project on Financial Access. Based on an analytical framework prepared by a CGD Task Force entitled "Policy Principles for Expanding Financial Access," the CGD project analyses and assesses the most important programs and innovations that are being implemented in a select number of countries around the developing world.

The approach taken here is to provide an overview of the Kenyan financial sector, to determine the factors that are influencing change and then to assess how these changes relate to the CGD policy principles. Four case studies have been carefully chosen to illustrate the interrelationships between the macro and mesa policy environment, the competitive environment and the actions of individual stakeholders in the financial sector. The case studies are, Equity Bank, Safaricom's M-PESA, Kenya Post Office Savings Bank and Musoni Kenya Limited.

1. Background

Kenya is a developing country with a total population of 43 million people.[2] Kenya has slightly lower than average income inequality of the countries studied, measured by the Gini Coefficient at 47.7. South Africa's Gini coefficient is 57.8, Brazil's is 55.0, Peru's is 49.6, Mexico's is 48.1, and India's is 36.8 (UNDP, 2009).

Kenya has a relatively well developed financial sector which comprises 43 commercial banks, 1 mortgage finance company, 7 Deposit Taking Microfinance companies (DTMs), some 3,500 active Savings and Credit Cooperatives (SACCOs), one postal savings bank - Kenya Post Office Savings Bank (KPOSB) 125 foreign exchange bureaus, a host of unlicensed lenders, and an Association of Microfinance Institutions (AMFI) with 56 members[3]. Despite the abundance of financial institutions, the financial sector in Kenya is highly concentrated. Four financial institutions, Equity

[2] http://data.worldbank.org/data-catalog/world-development-indicators?cid=GPD_WDI

[3] Interview with AMFI November 2012

Bank, Cooperative Bank, Kenya Post Office Savings Bank and Kenya Commercial Bank, account for two thirds of all bank accounts which numbered 14 million by mid 2012[4]. In the traditional microfinance sector, than 70% of the market is made up of Kenya Women Finance, Faulu Kenya and Jamii Bora[5]. In addition, similar high levels of concentration are seen with SACCOs.

In spite of the global recession and credit crisis, the financial sector in Kenya continues to enjoy healthy levels of growth. Assets and profits continued to grow in the five years from 2006 to 2010 as shown in the table below. Whilst this growth dipped between 2008 and 2009, this was mostly as a result of the post election violence in 2008, and the consequent slow-down in the economy rather than as a result of the international banking crisis.

Assets and Profits of the Kenyan Commercial Banking Sector in Kshs Billions

	2010	%	2009	%	2008	%	2007	%	2006
Total Assets	1,548.00	23%	1,263.00	15%	1,099.00	32%	833.00	20%	695.00
Profit before Tax	34.90	42%	24.60	3%	23.90	47%	16.30	30%	12.50

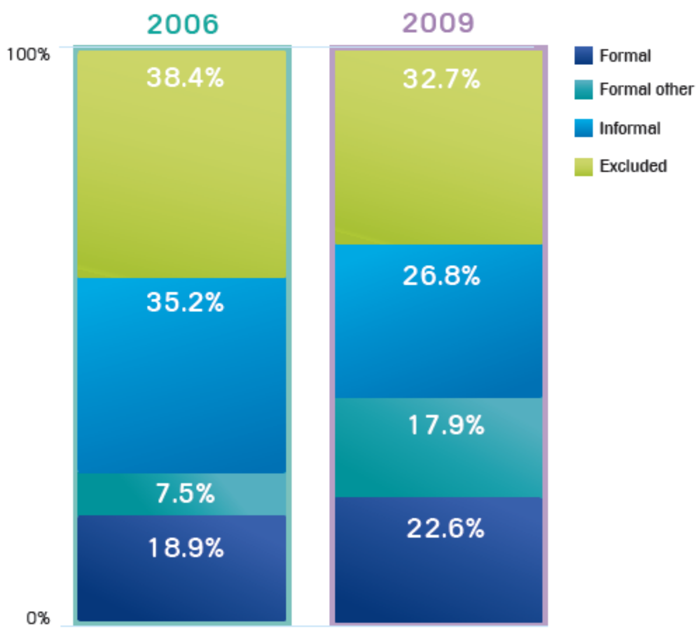
Figures: CBK Annual Reports, figures to June in each year

Facilitating financial access is a major drive behind the strengthening of the financial sector. Kenya, as well as a number of African countries, takes part in a series of financial access surveys. This is called FinAccess in Kenya[6] and FinScope in other African countries. FinAccess produces a periodic snapshot of financial access in Kenya based on a nationwide survey. To date two surveys have been conducted, the first in 2006 and the second in 2009, a third study for 2012 is currently in preparation. As shown in Graph 1, there appears to have been a notable improvement in the level of financial access. The percentage of totally excluded adults has reduced from 38.4% to 32.7%, whilst the percentage of the adult population included in the formal sector have increased from 18.9% to 22.6%.

[4] Central Bank of Kenya Supervision Reports
[5] FinAccess Survey 2009- Jamii Bora is now a regulated commercial bank
[6] The FinAccess studies are available for download from the website of the Financial Sector Deepening Programme in Kenya. www.fsdkenya.org

The survey shows the use of formal services has increased, particularly those of banks and MFIs, and the percentage of adults excluded from the banking system has significantly decreased. This pattern is partly explained by the rapid expansion of institutions focused on the mass retail sector, notably Equity Bank, and the two microfinance institutions, KWF Microfinance and Faulu Kenya.

Graph 1: Extent of Financial Access in the Adult Population: Source FinAccess Survey 2009



2. Influencing Change

Kenya ranks 5th in the Economist Intelligence Unit Global Microfinance Survey 2012[7]. It is the highest ranked African country in the survey behind countries in Latin America and immediately behind the Philippines. Kenya increased its score during the year, despite being held back by perceptions of political instability. So clearly there are factors which are driving this positive perception even if constraints still exist.

Economic Development and Devolution

Long term growth is expected to underpin continued expansion and deepening within the financial sector. Economic growth is driven by an economic master plan called Vision 2030, which sees Kenya becoming a middle income country by 2030. Priority economic sectors include tourism, agriculture, wholesale and retail trade, manufacturing, IT enabled services (previously known as business process off-shoring) and financial services.

To underpin Vision 2030, significant investments are being made in education, Kenya introduced universal primary education in 2003, and plans to introduce universal secondary education. The FinAccess 2009 survey shows a strong positive correlation between level of education and financial access. Infrastructure too, is a major focus with significant infrastructure development which should drive economic progress.

A central tenant of Vision 2030 is governance reform, and key to this is the introduction of a new constitution which sees the establishment of devolved governance. This has significant implications for the financial sector with the creation of 47 new counties, and minimum county budgets. These budgets are expected to encourage a much greater spread of branch and agency banking infrastructure, which will facilitate much greater geographic access to financial services.

A Supportive and Informed Policy Environment Committed to Financial Inclusion

The development of the financial sector too, is seen as essential to the realisation of Vision 2030. There has been and continues to be rapid and sustained development in the financial sector driven by competition but supported by changes in regulation and policy.

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[7] IFC Economist Intelligence Unit (2012)

Information to support the development of appropriate legislation and regulation is provided by the Financial Sector Deepening Programme (Kenya) – FSD-Kenya, a multi donor project. This project in association with the Central Bank of Kenya produces the FinAccess Survey which has been used as a data source throughout this report.

Legislation has been introduced to enable microfinance institutions to accept deposits (the Microfinance Act – Act No.19 of 2006), and to strengthen and regulate Kenya's deposit taking credit unions (the SACCO Societies Act – Act No.14 of 2008).

In addition to legislation, policy has been used extensively to drive changes within the financial sector, many of which support increased access to financial services. To reduce credit risk within the financial sector Credit Bureau regulations were introduced in February 2009. To date two credit bureaus have been introduced, and whilst at the moment negative reporting is common (reporting on defaulters), it is anticipated that as the system is widely adopted positive reporting (i.e. reporting on all borrowers) will be introduced. Policy makers anticipate that a reduction in credit risk will enable more competitive lower risk based pricing to be introduced, and for interest spreads to reduce. Attempts are also being made for credit information sharing to be extended to microfinance institution members of the Association of Microfinance Institutions in Kenya, though this is being constrained by differing levels of management information systems within the different institutions.

Policy and regulation have been used extensively to support the development of a diverse range of delivery channels. In 2006 the Central Bank of Kenya, the Communications Commission of Kenya and the Ministry of Finance supported the rollout of Safaricom's mobile phone based money transfer product – M-Pesa, through Safaricom as the implementing agency and not a commercial bank. This decision was to have profound implications, as it promoted a money transfer product to millions of Kenyans. A case study on M-Pesa is included in this paper. In 2010, the Central Bank of Kenya allowed regulated commercial banks to operate through third party agents[8], subject to licensing of agents. In May 2012, the Central Bank of Kenya allowed regulated deposit taking microfinance institutions to operate not only through third party agents, but to operate agencies

[8] Agency Regulations (2010)

for deposit taking within their credit offices[9]. Further innovations in payment systems are likely with new payment systems regulations in discussion draft.

Development and Diversification in Delivery Channels

Mobile network operators, and financial institutions have responded rapidly to these new powers. Between 2007 and 2012, Safaricom, has rolled out more than 40,000 mobile payment agents nationwide. Since 2010 a total of 10 banks have connected more than 10,600 bank agents[10]. However, of the banks, two banks Equity Bank and Kenya Commercial Bank have been particularly quick to introduce agency networks across Kenya, with thousands of agents respectively.

For microfinance institutions the powers granted by the Central Bank of Kenya are particularly important. Until the new powers, regulated deposit taking microfinance institutions (DTMs) could only accept deposits through their network of branches, with each branch needing to conform to expensive standards. Most regulated microfinance programmes therefore have ‘marketing offices’ through which they provide credit services, and a much smaller branch network. Under these new powers the largest microfinance programme KWF Microfinance DTM gains more than 200 potential deposit taking outlets.

Customers responded positively to local access to financial services, with more than 41 million mobile payment transactions per month, and more than 20% of Equity Banks transactions occurring through its agency network.

Microfinance institutions have also been quick to adopt mobile payments channels, usually to enable the repayment of loans. One institution Musoni Kenya, has decided to operate only through the mobile phone based channel and to make extensive use of technology in its operations. A case study on Musoni Kenya is published as part of this paper.

Competition Sees Institutions Become Highly Responsive to their Markets

Financial institutions faced with the meteoric growth of Equity Bank and M-Pesa, the rapid expansion of a number of regulated SACCOs, such as Unaitus SACCO, and the opportunities of agency banking, are seeking innovative ways to access new markets. Rural finance, supported by

[9] Guidelines on the Appointment and Operations of Third Party Agents by Deposit Taking Microfinance Institutions (2011)

[10] Central Bank of Kenya (2012a), “Developments in the Banking Sector for the Quarter Ended 30th September 2012”

donor projects such as the USAID supported FIRM project, has become the latest competitive frontier. Value chain approaches are now being used to create agricultural finance strategies in leading institutions across the financial sector. These value chain approaches have generally highlighted significant productivity gains to be made through the use of improved seed varieties, appropriate irrigation and the timely application of fertilisers. In some value chains linkages through to marketers and processors are also very important. It is anticipated that these value chain approaches will see a resurgence of investment in agriculture with moderate lending risk and a consequent increase in agricultural productivity.

For more traditional financial service providers, such as Kenya Post Office Savings Bank (KPOSB) competition has driven dramatic changes. Faced with losing its dominant position for deposits at the bottom of the pyramid to microfinance focused banks such as Equity Bank and Family Bank, KPOSB responded by automating its manual systems, offering customers a card based account in minutes, and by growing its countrywide network with additional agents. KPOSB's experience is detailed in a case study in this paper.

Change and Explaining the System

With lower cost delivery channels being introduced, increased levels of product innovation and institutional transformation of microfinance institutions and SACCOs, Kenyans now have a huge range of financial service options, and understanding the financial system has become much more challenging. This has led to the creation of a national financial education strategy, and a number of financial education programmes supported through donor programmes including the Financial Education Partnership and the MasterCard Foundation. Early results suggest there are still many different lessons to learn in how to most effectively provide financial education to Kenyans, but also suggest that there are high returns to basic education particularly to improve people's ability to budget and to save.

Looking Forward – Maintaining the Momentum

Maintaining the forward momentum that the Kenyan financial sector is experiencing is no easy task. There are many factors which need to be considered, moving forward which include, reducing the cost of financial services, promoting the use of price related information to stimulate competition, moving towards a 'cash lite' financial system which costs less to operate, innovating to serve hard to reach groups, and making connections between the semi-formal and the formal financial sector.

Moving Towards a Cash Lite System

With the financial infrastructure Kenya is building, it is possible to envisage a 'cash lite' financial system which will operate at lower cost and with much greater accessibility – thereby offering much greater levels of financial inclusion. Much of the groundwork is already in place through mobile money and agency banking.

Social payments also represent an important way to mandate financial inclusion for millions of Kenyans. Currently millions of Kenyans receive government or relief transfers through six major social payments programmes. Pilot tests by the World Food Programme through its relief programming and by FSD-Kenya on the Hunger Safety Net Programme to pay beneficiaries electronically have largely been successful. Lessons have been learned and are being accommodated in plans to scale up electronic payments. In the case of food distribution programmes for the most vulnerable electronic payments also have an advantage of decreasing the market distortions which can come from food distribution programmes.

There are several particularly challenging elements within the cash lite scenario. Firstly the fact that the most frequent spending is in very small amounts. For most Kenyans, small purchases are common – which make transaction costs associated with electronic payments disproportionately high. Secondly, the cost of depositing cash – whilst it is possible to load cash onto M-Pesa free of charge, but to transfer cash to a deposit account in a bank costs money. For financial institutions, agents need to be paid and the basis of payment is a transaction charge which mitigates against encouraging the very small value transactions which Kenyans may desire.

It is not hard to envisage potential solutions to some of these challenges. Firstly financial institutions could chose to internalise some of the costs associated with different transactions – after all the banks themselves have decreased their cost of operations through opening agencies. Secondly, over time it may be possible to introduce systems for payments which can better accommodate small value transfers – such as Near Field Communication technologies. Thirdly, there could be increased linkages between semi formal mechanisms such as savings groups and individual or group savings accounts such that one paid transfer is used on an already aggregated pool of funds which is disaggregated by the receiving institution.

Constraining Factors

The vision of financial inclusion in Kenya is very compelling, but there are constraining factors which can lead to under achievement of financial inclusion. Whilst on the surface policy and legislation is creating an environment where there is increased capacity, and greater security and soundness within the financial system the presence of large dominant players such as Equity Bank, Kenya Commercial Bank and M-Pesa on mobile payments – may lead to inefficiencies and / or monopoly effects.

Information technology is a tangible barrier to entry, most institutions have neither the institutional capacity nor the level of banking systems to compete with larger institutions who can offer thousands of points of access – and new innovative products and services.

Competition is seen to be factor which can reduce fees and charges and offer customers a better deal. However, banks have not always behaved in a way which promotes competition. According to Central Bank guidelines banking agents cannot be tied to individual financial institutions. This may be so. However, the on the ground banks have opted to paint their agents buildings in their corporate brand clearly identifying agents as their own, and in the mobile payments arena Safaricom has monitored their M-Pesa agents activities very closely.

M-Pesa too could do more to encourage financial institutions to effectively use their platform, by making it easier for financial institutions to integrate into M-Pesa. A study of more than multiple integrations into M-Pesa showed that financial institutions were struggling to integrate into M-Pesa due to the lack of an appropriate software interface – a so called Application Programmable Interface or API which would enable much higher levels of systems integration than are currently available. However, there is a competitive response with mobile payment providers such as Orange promising much higher levels of integrated services to financial institutions.

Product pricing is an area where simple low cost pricing has been shown to have high returns, and was a key success factor in the massive growth of both Equity Bank and M-Pesa. However, whilst simplicity has been adopted for transaction based services, this is not the case for credit services. It is very challenging for credit customers to compare the total cost of credit due to the plethora of fees and charges associated with loans. These costs include the interest rate, which can be calculated on a flat or declining basis, compulsory deposits, monitoring fees, loan insurance, and for larger loans the cost of collateralising assets. Options for Kenya could include either 'Truth in Lending' provisions much like in the United States, 'Annual Percentage Rates' such as operate in the United Kingdom, or even provisions which compel institutions to carefully explain fees and charges in the clients own language such as operates in South Africa after the national credit act. Whichever approaches are taken it is likely that there will need to be a level of compulsion to disclose, as it is unlikely that financial institutions left to their own devices will operate a system of voluntary disclosure of their own.

Whilst the barrier of accessibility is being significantly reduced, it remains to be seen, the extent to which the base price of using a financial service is currently excluding poorer Kenyans from accessing financial services. Until the price is right, many poorer Kenyans will still chose to access financial services through savings groups and through other informal mechanisms. It is yet to be seen the extent to which financial innovation will be used to decrease prices, or whether innovation will simply increase margins for Kenya's financial institutions.

In the context of these significant changes in the Kenyan financial system this paper deals with financial inclusion from a number of perspectives, in section 3, Kenya's financial sector is measured against international principles of financial sector development, and sections 4 through 7 provide detailed case studies which provide more insight into the factors driving change in financial inclusion in Kenya.

3. Kenya's Financial Sector Score Card

So given the discussion above, how does Kenya score against the principles outlined by the Centre for Global Development. These principles are highlighted in the list below and are explained more fully in an annex.

Principle 1: Promoting entry of and competition between financial firms

Principle 2: Building legal and information institutions and hard infrastructure

Principle 3: Stimulating informed demand

Principle 4: Ensuring the safety and soundness of financial service providers

Principle 5: Protecting low income and small consumers against abuses by FI's

Principle 6: Ensuring usury laws if used are effective

Principle 7: Enhancing cross-regulatory agency cooperation

Principle 8: Balancing Governments role with market financial service provision

Principle 9: Using subsidies and taxes effectively and efficiently

Principle 10: Ensuring data collection, monitoring and evaluation

Overall Kenya scores relatively well, but with some significant areas for improvement.

Kenya's financial sector has relative giants in the provision of mass market retail financial services in particular Equity Bank and Safaricom. The potential exists for monopolistic behaviour. However, with the regulation and supervision of microfinance institutions and SACCOs - Kenya is developing new levels of financial service provider which has greater capacity and ability to compete. Furthermore, the recent entry of commercial banks from South Africa, or Nigeria shows that the Kenyan financial sector is in principle open to the entry of new financial service providers. Recent moves allowing banks to open bank agencies, certainly helps to balance the growth of M-Pesa, and allowing microfinance institutions to operate their marketing offices as deposit taking agents, decreases their costs of providing financial services and enables them to more effectively compete with banks (Principle 1).

The regulatory and legal infrastructure is improving too. New legislation governs deposit taking microfinance institutions, and deposit taking SACCOs – so called Front Office (FOSA) SACCO. New regulations provide for different levels of agency banking. However, the legal system itself is recognised to be a major constraint with very weak enforcement of contracts, and with a judiciary seen to be inefficient and ineffective at best (Principle 2). In terms of physical infrastructure whilst Kenya has few bank branches relative to its population the growth in ATMs, in agency banking and mobile payments suggests it is doing relatively well.

The safety and soundness of financial service providers is improving with much wider prudential regulation, but much more is required to build core capacity across a large range of different institutional players. Banks may invest in training their staff and may have large training centres in the Nairobi suburbs, but the same is less true for most microfinance institutions and SACCOs. There are a few options for staff of financial institutions to develop themselves, such as taking banking examinations, or microfinance courses at one or two universities and some limited online training, but mechanisms to encourage staff development should be pursued further. (Principle 4)

There are seven different regulatory bodies covering the financial sector. The Central Bank of Kenya, the SACCO Societies Regulatory Authority (SASRA), the Capital Markets Authority (CMA), the Retirement Benefits Authority, the Insurance Regulatory Authority, the Communications Commission of Kenya and the Competition Authority. The associated government Ministries, the Ministry of Finance, and the Ministry of Cooperatives are also important. Regulatory bodies occasionally meet collectively, for example to respond to Vision 2030, but more interaction occurs between regulators as need arises. For example there were multiple levels of interaction between the Ministry of Finance, the Communications Commission of Kenya and the Central Bank of Kenya in the development of supervision of mobile payments.

However, there are areas where more interaction may be required in the future. One is in relation to the Capital Markets Authority and the capitalisation of SACCOs. The Capital Markets Authority currently regulates any offer for shares which is offered to more than 500 people. The process defined by the Capital Markets Authority is intensive. SACCOs falling under SASRA regulation need to recapitalise so that there is a clear distinction between share capital and members savings which has not been the case historically. In a SACCO the principle of one member one vote still applies which means that the shareholder base of a SACCO is by nature very extensive – and any large SACCO calling for shares is therefore likely to breach the terms of the CMA.

The second issue is the Competition Authority and the financial sector. To date whilst there have been discussions between individual financial institutions and the Competition Authority, the Competition Authority has not taken an active role in the financial sector. Clearly for this to happen significant players such as Safaricom, Equity Bank or KCB have to visibly abuse their market position.

Historically the Kenyan Government was active directly and indirectly in the financial sector. Directly, through policies applied through KCB and public ownership of a range of different banks such as KCB, Development Bank of Kenya, National Bank of Kenya, and Consolidated Bank. However, the market share of these financial institutions relative to privately owned institutions is declining, and is not significant. Today Government influence over Kenya Commercial Bank which is publically quoted has much reduced. However, government does influence financial institutions through special projects of varying success such as the Youth Enterprise Fund, the Women's Enterprise Fund, and through projects operated through the Ministry of Finance such as the PROFIT project which is targeted at agricultural finance. The Government also owns a significant stake in Safaricom, though this stake has reduced. So a mixed but improving result for Principle 8.

In terms of data collection, monitoring and evaluation, again the picture is improving. The regulators, the Central Bank of Kenya, and the SASRA collect data on, and regulate their constituencies, public data on financial access is captured every three years through the FinAccess Survey. Collectively efforts are being made to share data through credit reference bureaux. AMFI the industry apex body for microfinance institutions has been involved in the collection of member data for the Mix Market website, and is shortly to produce an updated and extended members' directory containing wide ranging information on its membership. Comparative results of commercial banks and insurance companies are published every year in separate banking and insurance surveys, and quarterly in national newspapers.

So what improvements are required? Many improvements relate to strengthening the position of the individual consumer of financial services. Mechanisms for the transparent disclosure of pricing do not yet exist, and levels of financial awareness and education remain low, particularly among marginalised groups. Contract enforcement and the judicial system are weak, and there is no financial sector ombudsman which could play a role before matters reached the formal legal system. Some of these issues are expected to be addressed through consumer protection legislation currently before parliament. For example, the Consumer Protection Bill 2011 provides that Banks and financial institutions will have the burden to fully disclose and limit the liability of a borrower to pay charges that were not previously disclosed.

Kenyan Initiatives Towards Financial Inclusion

The remainder of this paper refers to four case studies, which have thrived in the rapidly evolving and increasingly regulated but usually liberalised Kenyan financial system.

Equity Bank: Kenya's most successful, and highly innovative mass retail financial institution, reaching over seven million customers across the group.

Safaricom's M-Pesa: The world's most successful mobile payments platform, processing more than 41 million transactions per month with over 18 million registered users.

Kenya Post Office Savings Bank: The reformulation of an established state mandated financial institution, into an efficient, customer focused institution with a highly automated savings system.

Musoni Kenya Limited: Probably the first microfinance institution to adopt mobile money in all its operations, offering the prospect of highly efficient, low cost microfinance once scale has been achieved.

Equity Bank has been chosen to illustrate how a single institution, focused on identifying and meeting the needs of its customers, and through driving increased accessibility and affordability can change a financial sector.

Safaricom's M-PESA shows how the right policy environment, combined with accessibility and affordability combines to provide financial access.

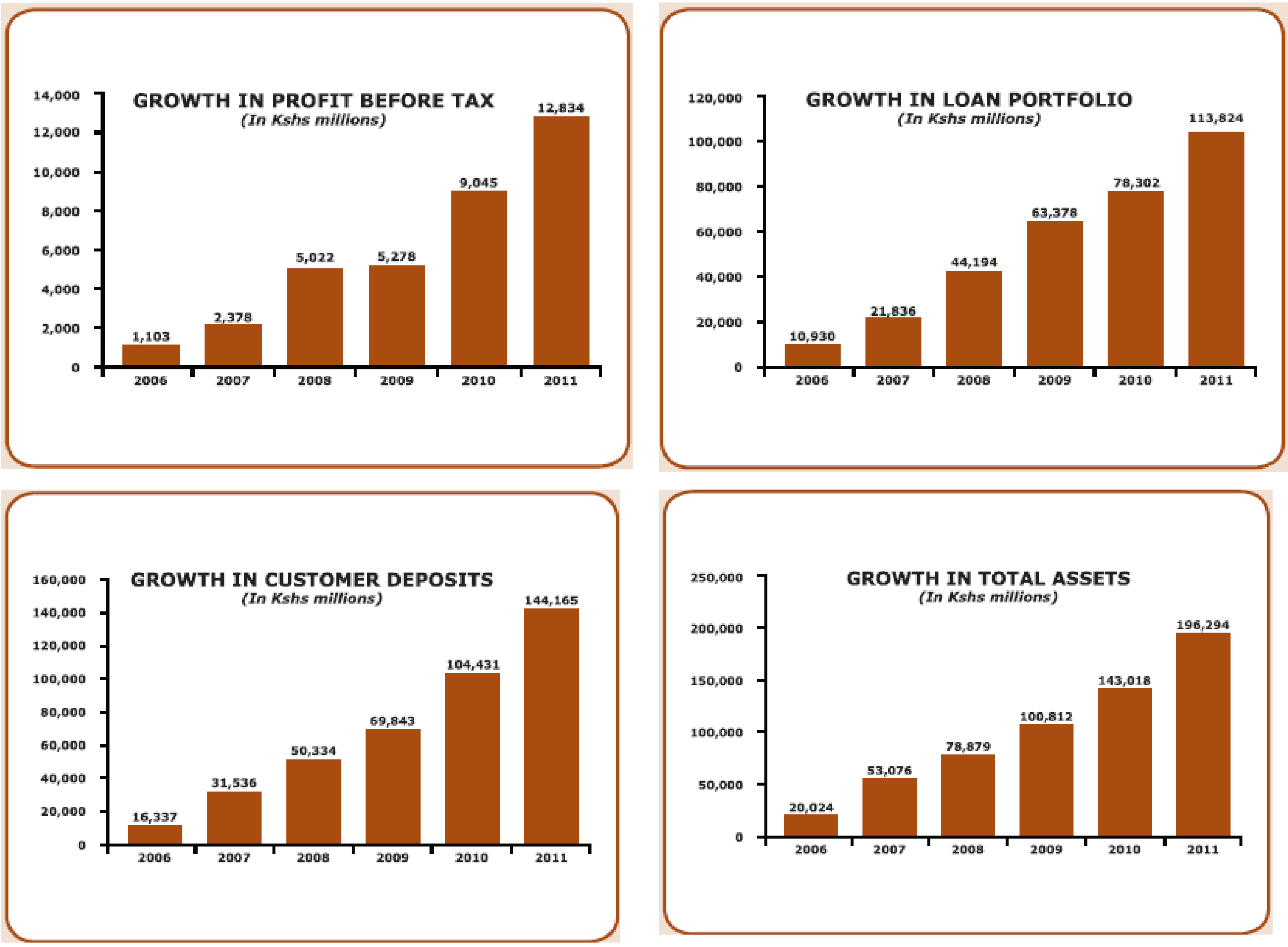
The Kenya Post Office Savings Bank demonstrates that a changing, progressive policy environment and competition is as relevant to governmental institutions providing service excellence as to the private sector.

The case of Musoni Kenya, shows the steps taken by a microfinance institution to leverage the policy, regulatory and competitive environment through technology, through linking with M-PESA.

4. Case Study: Equity Bank

Today Equity Bank is a truly remarkable financial institution. Yet in 1993, as Equity Building Society it was technically insolvent, with poor board supervision and management. Yet recognising its potential to make a valuable contribution to serving its clients, the Central Bank of Kenya allowed it to continue in operation after a capital injection and the strengthening of the management team.

As at December 2011, Equity Bank had 7.1 million customers, across the group, which operated in Kenya, Uganda, Rwanda and South Sudan[11], in total Equity held Ksh.144.1 billion in customer deposits (US$ 1.69 billion), earned profits of Ksh.12.834 billion (US$ 151 million), and held assets of Ksh.196.billion (US$.2.3 billion). It had a valuation on the Nairobi Stock Exchange of Ksh.89.792 billion (1.05 US$ billion), in October 2012. Equity Bank and its CEO James Mwangi have won international recognition and commendation. The results and growth of the bank since the mid-2000s are equally impressive.



Graph 2: Equity Bank Performance: Source: www.equitybankgroup.com

[11] Equity Bank Tanzania opened in 2012.

This study examines the reasons for this impressive growth - how Equity has created a particular relationship with its clients. It examines the gradual growth and evolution in delivery channels, and products and services, and it analyses the developments in systems and strategies to support the rapid and continuous growth in the institution. Key in understanding Equity Bank's success in reaching millions of customers, is an appreciation that Equity's growth does not hinge on a single event, or technology, or approach, rather the continuous realisation of its corporate tagline, as a "*Listening caring financial partner*", which has become increasingly difficult as the bank grows.

4.1 Success Factors in Banking the Poor

Equity Bank has a unique history, which to a great extent has contributed to its success. In 1994 Equity Building Society was a failed institution, with debts over KSh.33 million (approximately $0.5 million), it should have been closed by the regulator. However, with the conversion to shares of one its biggest depositors – simultaneously reducing liabilities and strengthening assets, it was granted a reprieve by the then Governor of the Central Bank of Kenya.

During this period, with a negative reputation, the 25 remaining staff of Equity Building Society had to struggle for their livelihoods, they had no choice but to rebuild their credibility, that of their branch and their institution. With limited funds at its disposal, Equity made a deliberate choice to move away from its roots in financing mortgages, to financing, smaller, short term loans at a higher interest rate. By the scope of its activities Equity became a microfinance institution.

However, Equity was always a microfinance institution with a difference. As a Building Society it could accept deposits; and even more importantly it was seen as a deposit taking institution by its customer base. As Equity's reputation improved it was able to grow its deposit base, and hence fund its growth.

The period 2001-3, saw Equity build its reputation as a "*listening, caring financial partner*", which has been key in extending financial services to a large client base. A series of actions were taken, which whilst not planned as a coherent whole, were motivated by a strong sense of mission within the institution. These developments can be traced to market research conducted in November 2001. At this time, the management at Equity Bank felt that the bank had a strong relationship with its clients, and that it was serving them well. Nevertheless Equity trained approximately one fifth of its staff in qualitative market research giving them the tools to listen to their clients.

Initial research with clients suggested that whilst there were many things that Equity's 100,000 clients appreciated about the institution, they felt that it was not transparent and that many of its fees and charges were difficult to justify.

Armed with this information, Equity's management took bold decisions and in February 2002, re-launched its products with a simpler pricing strategy. There were now no monthly fees, no fees for deposits, no account opening fees, no minimum opening balance. Fees for services were reduced in number, extraneous charges like photocopying fees were removed.

To address customer concerns relating to transparency not only were annual financial statements displayed in banking halls, as mandated by the Central Bank, but Equity placed price lists in its banking halls so that customers could see what they were being charged. This meant that customers felt that branch staff were being fair inasmuch as they were clearly following policy.

Increased transparency and fairer pricing, had a direct impact on sales of accounts, within two months of changes being introduced new accounts being opened in the building society increased from 20-30 per day to 200-300 per day, a ten-fold increase.

Equity continued to build its reputation in many different ways. It had a rating conducted by Planet Rating, and obtained the highest rating of any microfinance institution rated by Planet Rating at that time. It publicised its success amongst its clients. In May 2002, Equity conducted further research on customer perceptions of the institution, then it wrote to its clients and said – this is what you told us, this is what we have done, this is what we could not do, and this is why we couldn't do it. Equity's letter was printed on high quality paper, in colour and was signed by a Director. By this time, Equity Building Society was developing a reputation as an institution that clearly treated people well, regardless of financial or social status. Once again accounts being opened increased, this time to 8,000 new accounts per month.

The highpoint of the initial brand-building campaign came when the building society celebrated its 20th anniversary in August 2004. Along with endorsements from the finance minister, and other politicians Equity published a 12 page supplement in the Daily Nation Newspaper, six pages about the institution and six pages of endorsements. Once again accounts opened increased, this time to 14,000 new accounts per month.

Equity continued to look for ways to build its reputation at the same time as it built financial strength. In 2002 it became the first investee of Africap, a South African investment fund. Not only did this provide capital for expansion, but it provided an opportunity for Equity to promote its international credibility given the international backers of the Africap fund.

Marketing: During the period of 2001-4, Equity had an under-developed centralised marketing function. It had few marketing professionals, and made limited use of media for traditional advertising and promotion. The focus of the institution at the national level was on public relations, and brand building.

Instead of centralised marketing activities, marketing was focused at the branch level, and was highly developed along the lines of personal selling. Here again, Equity showed remarkable insight into its customer base, and the importance of treating customers with respect regardless of status. Two examples show this well. In 2003 Equity opened a branch in Nyeri, prior to the launch of the branch it sent branch managers from all its other branches, so that they could canvas the local community and inform them of the building society and its services. In this process business people and local communities were treated with tremendous respect. Equity's Nyeri branch broke all records and broke even on an operating costs basis, only five months after opening. In 2006/7, a Mombasa branch manager visited a local hotel, and carefully explained the benefits of Equity's products and services to the 400 staff of the hotel. More than half the hotel staff shifted their accounts to Equity, from a competing bank. The competing bank responded by sending low level sales staff to the hotel to talk to staff on an individual basis, few shifted their accounts back. Clearly demonstrating respect for customers is key.

4.2 Extending Delivery Channels – Driving Efficiency

An essential element to any mass market institution is the development of delivery channels that reach out to a large number of clients at an appropriate cost. Equity has managed this in multiple ways, firstly through increasing the efficiency of branch operations, secondly, through designing branches for volume operations, thirdly, through developing supportive infrastructure like ATMs, POS devices, mobile branches, fourthly, and more recently, through developing alternate channels, like full mobile phone banking and agency banking. The first two factors of increasing efficiency of branch operations and designing the branches to promote volume are considered below.

Increasing Efficiency: There can be few financial institutions which can boast of having multiple branches with over 100,000 customers per branch. However, this is the case with Equity with many branches in Nairobi and in the Central Province exceeding this total. Even accounting for inevitable dormant accounts, this is an impressive record. This has only been possible because Equity has mass appeal, was designed for volume operations and has driven efficiency levels through the use of technology.

In August 2004 Equity acquired a new banking system, Finacle from Infosys, to upgrade their old system, Banker's Realm. Finacle had proven its worth as a volume based solution in India providing a backbone to some of India's largest banks, such as ICICI with over 33 million customers and 400 branches. At the time with 250,000 customers, and a balance sheet of US$50 million, to spend $10 million on information technology was a huge leap of faith, which many of Equity's competitors simply could not understand. This move was explained by James Mwangi, at the time, that after an evaluation of available systems, Equity needed to have a system which would be able to support it into the medium term.

Once Equity made this decision, which took foresight and faith, it displayed a further admirable quality, its willingness to invest in the future to get the job done to a high standard and quickly. It migrated core banking operations to the new system in five months. To do this Equity employed a team of fifty staff members working in two ten hour shifts, six days per week. It is not only through systems that Equity has improved efficiency, it has also done so through streamlining its processes and procedures. Once again, this was performed comprehensively through a team of 30 people working as a team over several months. This process has been repeated whenever required, for example before conversion from a building society to a commercial bank.

Designing efficient infrastructure: Equity quickly learned that it had to design its branches for volume operations. This had multiple implications. Equity had to fully staff branches, and empower staff to handle all normal queries. This meant significant investment in training and orientation, whilst on the job training was used, it was used to back up orientation and refresher training, rather than a substitute for professional training.

To handle volume, Equity had to draw as many queries and transactions away from the frontline tellers as possible. Drawing transactions away from tellers meant that Equity established enquiries desks, customer service desks, account opening desks, and in larger branches had a staff member walking the branch to ensure that as far as possible people with queries, were drawn away from queues. Queue management systems were put in place, to ensure that no one person's transaction could prevent the queue from moving.

To further ensure prompt service opening hours were extended, with Equity opening half an hour earlier and closing an hour later than had been the norm, and opening on every Saturday morning too. If required branches were expanded. So for example, when Equity's Thika branch grew, Equity opened a new banking hall above the existing one, and then a third banking hall above the second. Equity's branches were designed with partitioning, which meant that if the banking hall need to be redesigned, this could be done relatively easily, for example, moving the credit department to accommodate more tellers.

Equity also understood early in its development, that it could benefit from providing services highly tailored towards those running informal businesses. In its business banking concept, those prepared to hold slightly higher balances can be served through dedicated tellers, and can perform their transactions in private. Designing for different segments, is important in promoting widespread access, as it encourages larger balances, or accounts that transact more frequently which can cross subsidise access for poorer people.

4.21 ATMs

However, as fast as Equity was expanding the size of its branches, and indeed expanding its footprint of branches, Equity still needed to draw more transactions away from its banking halls. The new banking system, Finacle, and a switch, enabled Equity to invest in ATM machines.

Today, Equity has an ATM network far larger than that of any of its competitors with over 500 ATMs and millions of card holders. Equity's initial rollout of ATM cards was far from smooth, as it experienced around six months of teething troubles, as card production and delivery failed to keep up with the massive demand created from its customer base. However, processes stabilised under the experienced hand of its then General Manager - Alternative Channels, Samuel Kamiti.

Equity streamlined its card issuing process to include training customers in their first use of the ATM machine. It also encouraged all new account holders to open their account with an ATM card; and considerably simplified its ATM card application process.

To accommodate the growing volume of transactions and to manage ATM costs, Equity started with branch based ATMs, but quickly moved to ATM banking halls based in key locations around Nairobi. These ATM halls were designed to have one staff member, security, and up to ten ATMs operating at any one time, of which one or two ATMs could accept deposits. Equity quickly moved to a position where more than 70% of customer withdrawals were being made through ATMs.

4.22 Mobile Branches

Between 2001 and 2003 Equity rolled out the mobile branch concept, with support from the United Kingdom's Department of International Development (DFID), under the Financial Deepening Challenge Fund. The mobile branch is a four wheel drive vehicle manned by two staff, accompanied by security. If required these units could use solar panels to provide electricity to laptops running the banking system, which could be linked to the vehicles home branch.

The concept was to use these vehicles to provide services to satellite towns around a home branch, for half a day, to a day per week in a particular location. Although services could be provided from the mobile branch itself, it was more usual for services to be provided from simple rented accommodation, which could provide much greater levels of comfort for customers, particularly during inclement weather.

At its peak mobile branches provided services to over 120 villages, and mobile branches were reported to be serving 40,000 new customers. To cover costs of providing the service Equity Bank charged an additional premium for withdrawal transactions. Initially the service was profitable. However, after a spate of robberies on cash in transit vehicles, the Central Bank of Kenya required additional security to accompany cash in transit. These costs have affected the viability of the service. Furthermore, the mobile branch concept has to a certain extent been superseded by

Equity's rapid branch expansion, and more particularly the advent of mobile phone and agency banking described below.

Mobile branches, however, were not universally popular, in part due to the additional fees charged. This was particularly the case for certain groups of users who had to make relatively small transactions frequently, including pensioners and smallholder tea farmers.

4.23 Agency Banking

Under agency banking guidelines published by the CBK in 2010, financial institutions are allowed, under strict conditions to operate agencies through third parties. This approach has been used in Brazil with great success, where shopkeepers operate bank accounts for millions of customers.

Equity's market position, and its desire to serve progressively more rural locations, made agency banking particularly attractive. Whilst Equity has a wide range of delivery channels, not everyone wants to conduct their banking transactions electronically, and these channels, due to cost, cannot be made available everywhere. The initial rollout of agencies began in December 2010. By December 2011, the rollout of agency banking had been successful and the number of agents grew from 875 at the beginning of the year to 3,339 by the end of the year[12]. Agents accounted for 20% of all cash transactions of the bank.

The challenge for Equity Bank, now is to develop the supporting infrastructure that it will require to manage its 20,000 envisaged agencies. As reported in the East African newspaper agents "*will be trained and provided with the necessary technology to handle all banking transactions — withdrawals, deposits, loans, account opening and advances, among other things*".

Many of the initial agents will also be used to support the rollout of Equity's M-Kesho mobile banking product, though Equity plans to expand significantly beyond this. According to the Managing Director Dr. James Mwangi, the development "*will also increase efficiency of the mobile money transfer business, because it allows withdrawals and deposits from MPesa, M-Kesho, Iko-Pesa and Yu-cash, the cell phone bank accounts networked with Equity Bank*"

[12] Equity Bank Annual Report 2011, www.equitybankgroup.com

4.24 M-Kesho Mobile Phone Banking

For several years Equity Bank had offered an SMS based platform (Easy 24/7) through which customers could obtain information about their accounts, and handle some account transactions. However, Equity Bank lacked a fully operational mobile banking account. The solution was to collaborate with Safaricom to launch the M-KESHO platform

M-KESHO is a co-branded Safaricom-Equity Bank, mobile banking product offering:

- Savings account with low deposit requirements
- Interest on savings (currently 0.5-3%)
- Emergency credit (payable in 30 days – Ksh.1,000-5,000)
- Personal accident cover (upgradeable to personal insurance cover after one year)
- No cost to deposit.
- No ledger fees.
- Zero minimum balance, no maximum balance.
- No requirement for an Equity Bank account, but can interface with an Equity Bank account.
- Account opening at branches or designated M-Pesa agents.
- Balance enquiry and mini statements at Ksh.5 each.

M-KESHO is integrated into the M-Pesa menu or is accessible through Equity Bank’s own mobile banking service. Customers can deposit and withdraw money from their M-KESHO account by transferring value to/from their M-Pesa account, which they can cash in or cash out from at any M-Pesa outlet, or through a link to an Equity Bank account. Deposits onto M-KESHO are free to the customer, whereas withdrawals incur Ksh.30 to Equity Bank plus the normal Ksh. 25 cash out fee payable to Safaricom. M-Pesa’s minimum and maximum transaction amounts (Ksh.100-140,000) apply.

Account opening is relatively simple but has to happen either at Equity Branches or at designated and approved agents. Customers bring their ID, plus a copy and two photographs (at agent locations their picture will be taken on the spot with a digital camera). Customers complete a short and simple application. Within three months of offering the service, more than 800,000 M-KESHO accounts had been opened, though usage is lower than expected.

4.3 Using Technology to Support Channel Development

Equity is using technology to support its channel development and its branches in ways that are much less obvious to customers, but these innovations are no less important than the direct expansion of delivery channels. For example, Equity has introduced loan tracking and management systems, which enable branches and collection departments to improve the management of their portfolios, through careful tracking of the loan recovery process. A second example would be the introduction of call centres, and the software to manage customer enquiries. Improving customer support mechanisms is a prerequisite for the development and expansion of channels, especially where channel development involve third parties acting on behalf of the bank.

A significant development for Equity will be increased automation of salary advances. By volume, salary advances are one of Equity's most popular loans. Whilst advances are quick to process, they are also easier to automate as they are based on limited entitlements based on regularly paid salaries. Equity has started to offer salary advances alongside its M-KESHO product.

4.4 Other Critical Factors

A key distinguishing characteristic of Equity Bank is its management ethos. It fundamentally trusts in its market. It believes with its understanding of its customer base, that it can develop innovations which are designed to improve access, and that its customers will use these innovations. It knows that it has no choice but to continuously develop mechanisms to remove transactions from its banking halls, if it is to continue to grow its customer base on its existing branch infrastructure. Equity is therefore, prepared to invest heavily in new innovations, which are based on "maximising opportunity", rather than "managing cost". Of course, there still needs to be a strong business case for the investment to be made.

A further success factor for Equity Bank has been its willingness to develop a range of products and services which are tailored for particular communities, this approach started with the introduction of loans designed for tea farmers, in Equity's Central province homeland. This ethos, continues to date with the development and testing of products designed for pastoralist farmers, including index based weather insurance products, currently under development. Such products are seen as vital for the sustainability and appeal of branches in the more sparsely populated North Eastern Kenya. Equity has also developed a large group based lending program for customers less able to use its traditional banking services.

Equity has its product failures too, its initial launch of its cash flow based individual loan, 'Biashara Imara' was flawed and it had to re-pilot the product in different branches. Other products, such as commitment savings products, can be highly popular with clients, but require significant sales time to carefully explain the product to potential clients.

4.5 Looking Forward – Financial Education

Despite Equity's rapid expansion and evident success, only 19% of Kenya's bankable population is being reached by formal sector institutions (FinAccess 2010). The expansion of delivery channels and customer contact points that Equity has provided indicates that, for the majority of Equity's target market, simple physical access may no longer be the binding constraint that it used to be.

Financial education and awareness has been identified as a new challenge, which if addressed, will continue to build Equity's reputation as a listening and caring financial partner, but in a way which can be scaled. In partnership with the MasterCard Foundation, Equity Bank is developing a financial education program designed to train 619,500 people in nine areas of financial services. Financial education is to be focused on Youth and Women markets perceived to be less well covered by financial services.

The approach being undertaken by Equity is to design and tailor financial education based around combining international experience with local baseline information.

Through the Equity Group Foundation, on a MasterCard Foundation funded project, financial education training is being delivered to 619,500 Kenyan's across major areas of financial management including, savings, budgeting, debt management, and banking services. A trainer of trainers approach is being used to deliver training in ways most appropriate to Equity's diverse client base. Reviews of the programme indicate that carefully developed and targeted education programmes can have moderate, positive impact, suggesting that there are real needs which can be addressed through financial education.

4.6 Challenges

Expanding access to financial services, at a rate unequalled by other institutions, implies an ability to expand operations whilst maintaining service levels, and critically maintaining an institutional culture which continues to place clients at the centre of business. This has been, and continues to be one of the most difficult challenges for Equity Bank. As staff cadres have grown the institutional culture which is partly derived from Equity's response to its earlier failure as a financial institution, becomes diluted. Furthermore, maintaining quality in recruitment becomes ever more challenging as the size of recruitment batches increases.

How has Equity responded? In multiple ways: firstly through an emphasis on training and the application of professional principles. Secondly, by encouraging staff members to undertake professional training by repaying course and examination fees after successful completion of courses. Thirdly through the intake of staff based on education scholarships to the most successful students in school examinations. Fourthly, by considerably moderating the expansion in its branch network, and focusing on the development of alternative channels, so that there is slowdown in the growth of frontline staff.

4.7 Ability to Replicate Equity

Replicating Equity Bank is only partly about developing delivery channels which work for the mass market. A study entitled "*The Market-led Revolution of Equity Bank*" (Wright and Cracknell 2008), identified the following key lessons behind the significant growth of the bank

Lesson 1: Commitment to Customer Focus
Lesson 2: Harnessing the Market led Approach, Word of Mouth and Public Relations to Stimulate Growth
Lesson 3: Developing and Maintaining Corporate Culture
Lesson 4: Optimising Corporate Governance
Lesson 5: Management of Donor Inputs
Lesson 6: Commitment to Remaining a Broad Based Bank
Lesson 7: Human Resource Management

The study has focused mainly on Equity's customer focus, its market led approach, and its commitment to remaining a broad based bank in terms of the continuous development of its delivery channels. However, all seven lessons are vital along with Equity's ability to manage its corporate strategy. Understanding the context of Equity Bank is important too, Equity grew in a country context which was highly conducive to its operations. As a failing institution, Equity Building

Society benefited from a transitory regulatory vacuum with the lack of a Building Society regulator; as a growing institution, Equity Bank benefited from competitors that did not recognize the value of its approach. However, once Equity was able to refine its business model and introduce its new delivery channels and ATMs, it was able to expand its operations extremely quickly before the fragmented commercial banking industry could respond with competive offerings.

Given the importance of the competitive context, it is unlikely that others would be able to precisely replicate the experience of Equity Bank. However, of the many lessons indicated, several should be restated as of particular importance in any attempt to replicate Equity's success. The first is Equity's commitment to its customers. Equity have consistently followed a market responsive approach which involved high levels of contact with its customers, this was especially the case between 2002 and 2006 with frequent market research and customer service monitoring. The second lesson is Equity's delivery channels, systems and processes and how it manages its commitment to its customers. It manages to service millions of customers through its existing branch network, driving high levels of efficiency by drawing transactions away from the banking hall towards the use of ATMs, POS, mobile branches, M-Banking and agency banking. The last lesson is leadership. Equity has been led by a strong and capable management team and board which has evolved as the institution has expanded. However, despite having an extremely capable team, a common perception is that the direction of Equity significantly depends on one individual, the Managing Director, James Mwangi.

4.8 Equity Bank in light of the CGD Task Force Principles

The experience of Equity Bank shows that this institution meets some of the Principles for improving financial Access proposed by the CGD Task Force on Financial Inclusion (See the Annex) while it still faces challenges in complying with some other principles.

From a competitive standpoint Equity Bank presents challenges to regulators (Principle 1). On one hand, the performance of Equity Bank is lauded. As an institution, in the opinion of the author, it has been more successful in introducing inclusive financial systems than any other commercial bank in Kenya. On the other hand, Equity Bank has a dominant market position, which could be abused. From a current regulatory perspective, Equity does not attract attention; firstly, because the relevant antitrust legislation is drawn up on the basis of the total size of the balance sheet rather than the number of accounts; secondly. Equity is careful to offer its customers competitive pricing, generally at or below levels offered in the rest of the banking sector. Thirdly, Equity Bank, astutely manages its relationships, and ensures that it maintains an excellent relationship with decision makers. A key strategy is ensuring that Equity is seen to behave responsibility and to visibly contribute to the betterment of Kenya through its Corporate Social Responsibility.

While adoption of new technologies such as mobile phone and agency banking may significantly lower the cost for institutions, and enable competition - Equity Bank has moved quickly to consolidate its leadership position in these very areas with the creation of M-KESHO and its rapid application of the agency banking model.

Clearly Equity has created the infrastructure to support access through its expansive branch network, ATMs, its merchant POS, its link with Safaricom on M-KESHO, and its agency outlets (Principle 3). Furthermore, the presence of Equity's expanded hard infrastructure has been extremely important in providing liquidity as super agents to Safaricom's M-Pesa product.

Equity's relative transparency has been a significant factor driving the growth of the institution (Principle 2). This was evidenced several times during Equity's history. For example, as far back as 2002, Equity re-priced its products and services, removing extraneous fees and charges, and put up price lists in its banking halls. The result was an influx of customers. Equity like other institutions publishes results quarterly in national newspapers, reports to the CBK and Microfinance Information Exchange (MIX) and took part in MF Transparency's survey. It does all it is mandated to do and more. Equity Bank also partly finances and supports the FinAccess Survey, which provides high level data on financial access. However, true transparency and comparability can only come through efforts on an industry-wide basis which will require action from the Central Bank of Kenya.

Moreover, and also in line with CGD Principle 3, Equity Bank has contributed to the gradually increasing financial knowledge of the Kenyan population in several ways. First, and most importantly, through offering financial services to millions of Kenyans. Second, through deliberate efforts to sponsor financial awareness, through different media, through radio talk shows, and more recently through the launch of a financial education initiative with the MasterCard Foundation which seeks to reach 690,000 Equity and non Equity Bank customers.

Coming from the background of a failed institution, Equity has endeavoured to persuade its customers that it is a safe financial institution (Principle 4). This has been achieved through continuous feedback and public relations as demonstrated, and through external ratings, reported profits and heavy injections of capital. Equity has also indirectly contributed to the gradually increasing professionalism of the sector, as some of its staff leaves Equity to take up more senior positions in other financial institutions.

4.9 Equity Bank's Influence on the Financial Sector

As late as 2005 Equity Bank's expansion was dismissed by some industry experts. Writing in Think Business' Banking Survey, a staff writer wrote that Equity should not seek to take on its much larger rival commercial banks, but rather should seek alliances within the cooperative sector. This was a notable misjudgement as in 2010, no bank failed to take Equity seriously. In fact Equity can be seen to have multiple impacts on the financial sector.

Equity has influenced banks to move into the mass retail sector. A significant and gradually growing number of banks are gradually moving into the mass retail banking sector. This includes giants such as Barclays Bank Kenya, as well as mid ranking but aggressive banks, such as Diamond Trust Bank. This decision may have been influenced by a number of factors, including high levels of competition with the traditional corporate and high net worth sector, but it has also most likely been influenced by the high price-earnings ratio of Equity Bank, high levels of profits and efficiency and Equity's very low cost of deposits. However, Equity Bank has arguably increased the barriers to entry for financial institutions trying to enter the Kenyan financial sector through widespread introduction of technology based platforms. Equity Bank's 500 ATMs, M-KESHO, and its point of sale devices, make it very expensive for other banks with fewer customers to respond with a credible offering of their own.

Through increased efficiencies, scale economies and through its institutional vision and mission, Equity Bank has moved further into the arid and semi arid areas of Kenya than most other non-government related financial institutions, opening branches in Lodwar, Marsabit, Moyale, Mandera, Wajir, and Garissa. With these moves Equity Bank has brought quality financial access to much more remote areas; and challenged other national institutions. At the same time, Equity has forced the closure of less efficient financial institutions. Less efficient financial institutions have found it very difficult to compete with Equity Bank, in particular Equity Bank is said to have had a profound impact on the SACCO sector, with many SACCO members moving their accounts to Equity Bank.

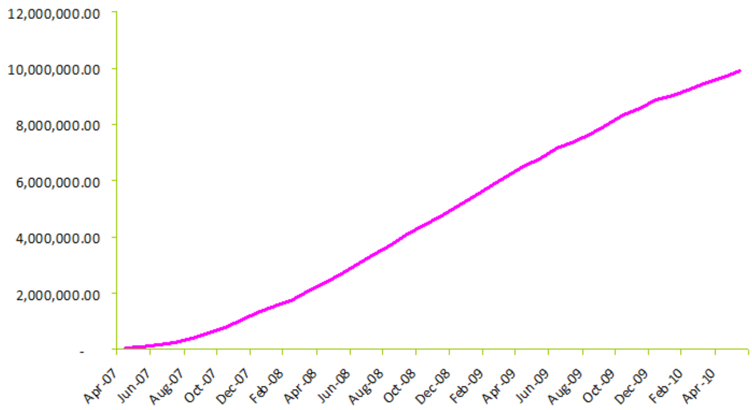
Equity has made it easier for most people to open bank accounts, through reducing account opening requirements and minimum balances across the sector as financial institutions have to match Equity Bank's terms to be able to compete. This can be seen in a new business model being introduced by KPOSB, and in significantly reduced opening requirements in direct competitors such as Family Bank.

Equity Bank has become a '*price maker'*, inasmuch as financial institutions wanting to compete with Equity have to be cognizant of their relative prices. It has changed the business model of at least one of its direct competitors. At the same time Equity Bank's market share makes it unlikely that Equity will be subjected to a price war.

Equity Bank has demonstrated both in Kenya and beyond, the power of matching market responsive processes with technology, systems and word of mouth. Few have been able to recreate the Equity Bank's market responsive formula, but all banks are interested in learning more. There has been an increase in the pace of innovation and change in Kenyan banking appears to be extremely fast. Financial institutions are moving to new high end banking systems, which provide them with the ability to compete in a fast changing environment. Infosys, Flexcube, Craft Silicon, Equinox, Terminos and others all have a client base (and most have support offices) in Kenya. Equity Bank was the first to market its partnership m-banking product M-Kesho with Safaricom, within weeks, similar products were available in Postbank, Kenya Commercial Bank (KCB), Cooperative Bank, Family Bank, NIC Bank etc.

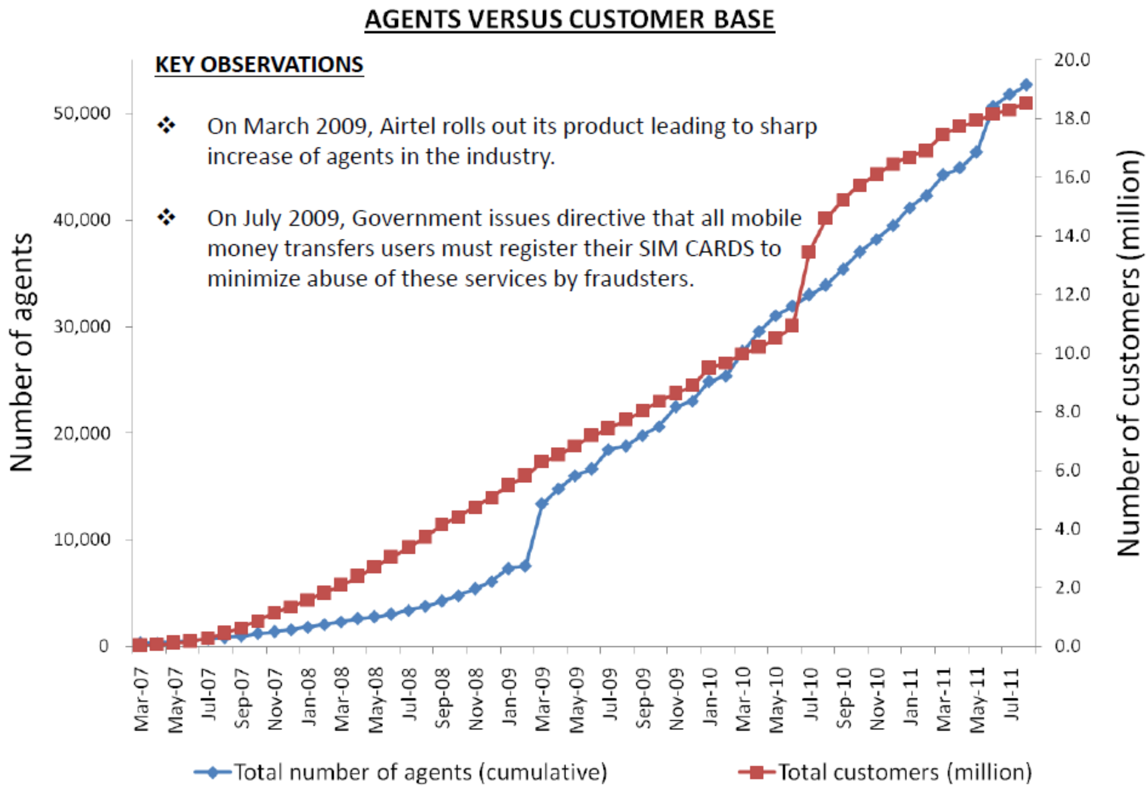
5. Case Study: Safaricom's M-Pesa

M-Pesa is a money transfer product operated by Safaricom, the largest mobile network operator (MNO) in Kenya. M-Pesa operates on a system maintained by Vodafone UK, which owns a 60% share in Safaricom. M-Pesa's registered users are able to transfer money to any Kenyan mobile phone number, and to deposit and withdraw through over 40,000 agents countrywide. The success of M-Pesa is startling. It has gained over 18 million registered users since its inception in 2007.

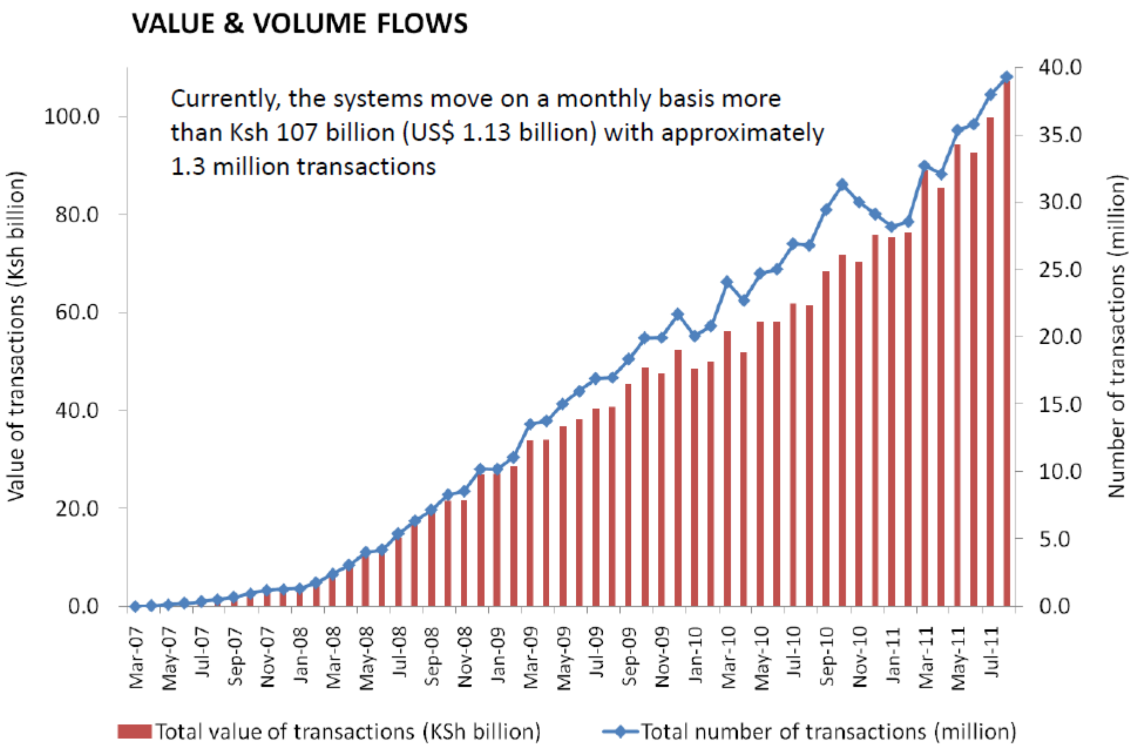


Graph 3: Growth of Safaricom's M-Pesa: Source: Safaricom M-Pesa presentation (unpublished)

The following two diagrams, from a presentation of the Central Bank of Kenya to the Mobile Money Workshop in Malawi in November 2011 show the entire mobile payments space in Kenya which includes four Mobile Network Operators and two aggregators, the first showing the growth of agencies relative to customers, and the second showing values and volume flows.



Graph 4: Mobile Agents and Customers in Kenya, Central Bank of Kenya (2011)



Graph 5: Values and volumes of mobile payments in Kenya, Central Bank of Kenya(2011)

The value of these flows is not desegregated by provider, but the Central Bank of Kenya Annual Report 2011 suggests that M-PESA's market share is approximately 65% of agents and customer base. Safaricom's M-Pesa product is in a class of its own. No other m-payments solution, worldwide, even M-Pesa in other countries, has recorded these results. G-Cash and SMART the two highly successful m-payment products in the Philippines, a country with twice the population of Kenya, have only around one million registered users each. So the fundamental question is why has Safaricom's M-Pesa succeeded so well?

5.1 The M-Pesa Product

The initial M-Pesa product has gradually expanded to become an increasingly comprehensive payments gateway. As at August 2010, Safaricom's M-Pesa product has the following features.

- Enables 'cash in' and 'cash out' from 40,000 agent outlets countrywide
- Facilitates person to person (P2P) transfer to any network – to August 2010, over Ksh.525 billion had been transferred (US$7.5 billion)
- Enables airtime top up – top up your phone anywhere
- Facilitates personal to business (P2B) bill payment through over 350 Pay-Bill partners
- Provides ATM withdrawals offering anytime access to larger withdrawals at over 650 connected ATMs countrywide
- Facilitates salary payments from business
- MFI partnerships to handle loan repayments
- Social payments through partnerships with Oxfam, Concern Worldwide and other NGOs.
- International money transfer to the UK
- Partnerships with leading Kenyan banks to offer M-Pesa access to bank accounts

When a customer wants to deposit cash say Ksh.500 onto their M-Pesa account she makes a payment of Ksh.500 to an agent. The agent, then has Ksh.500 cash, and gives out Ksh.500 in electronic money. The customer's M-Pesa account is credited with Ksh.500 and the agent's M-Pesa account is debited with Ksh.500. An agent can keep on accepting deposits in this way until their balance of electronic money is exhausted. Withdrawals work the same way – except on this occasion the agent gives out cash, and receives e-money. In addition, the customer is charged an additional fee by Safaricom for processing the withdrawal.

Customer balances are retained in float accounts held at various Kenyan banks. This money is held on trust and Safaricom cannot have a beneficial interest in this money. In this way M-Pesa is classed as a money transfer product and not a banking service.

5.2 Success Factors in Electronic Banking for the Poor

In a paper entitled *Electronic Banking for the Poor – Potential, Panacea and Pitfalls* (2004), the author identified four dimensions of electronic banking for the poor, these are as follows:

i. The customer value proposition – the compelling factor, that some refer to as a pain point, that moves users from a product which is easy to understand, and free to use "cash" to a product which is both more expensive, and more difficult to understand.

ii. Multiple business cases – a mobile banking product requires multiple commercial partnerships. The mobile network operator, agents, financial institutions, systems providers and integrators, security specialists. Ensuring that each partner benefits financially from the solution, especially when the likely performance of the solution is uncertain, is challenging, but vital.

iii. Retail environment – mobile banking relies upon agents to provide points of access. These agents should be used to handling large volumes of cash, which they are willing to convert into electronic money.

iv. Regulatory environment – what is the attitude of regulators towards electronic payments? Will the regulator be conservative and wish to preserve the current system within the bounds of conventional banking, and current mechanisms for managing risk? Alternately, will the regulator be transformational, and try to create a system, with appropriate but different mechanisms for managing risk, which have the potential to bank the unbanked?

In examining Safaricom's M-Pesa, it will be seen how these four factors, and others, come together and provide the circumstances for transformational growth.

5.3 Evolution and testing of M-Pesa

Although functionally M-Pesa is similar to many other mobile payment products, M-Pesa evolved gradually and through careful market research. The initial pilot test was co-funded as part of a Public Private Challenge Fund from the Department for International Development (DFID), the UK donor agency. During this phase, Safaricom, Vodafone, the Commercial Bank of Africa, Faulu Kenya, a Kenyan microfinance program, FSD-Kenya, and *MicroSave*, collaborated to pilot test M-Pesa.

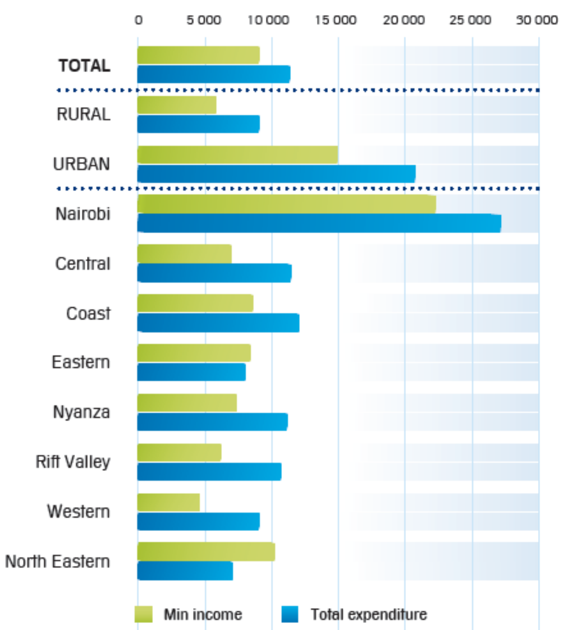
The pilot testing period was important for many reasons. Firstly, it demonstrated the need for a simple solution, which could be understood by all; simple menus were made available in English and Swahili, enabling basic transactions.

Secondly, the pilot test enabled Safaricom to appreciate the key issues which would need to be understood by its staff, agents, and users. This allowed Safaricom to develop appropriate training materials for their agent network. Thirdly, the pilot test demonstrated that it would take time for the product to be adopted through microfinance programs, as they had to introduce significant modifications in their procedures and internal controls to successfully adopt the system. Fourthly, the pilot test highlighted issues which would become critical to manage during rollout – cash management, and internal controls. Lastly, it provided time for Safaricom's senior management to 'buy in' to the solution, and to become its most ardent supporters.

5.4 The Customer Value Proposition – Send Money Home

The first key to Safaricom's success is deeply rooted in the socio-economic fabric of Kenya. Kenya is undergoing rapid urbanisation, far more quickly than many other African countries. It is common for families to split, with parents retired in cheaper rural areas and sons and daughters living and working in urban centres. With an under developed pension infrastructure most families support their older relatives. This they do by sending money home, often through a monthly transfer.

The logic for this behaviour is clear simply by examining Graph 6 on the left. It is much more expensive (usually 100% more expensive) to live in urban areas, compared to rural. As a result many pensioners live in rural areas on small plots of family land which are used to grow food. Other expenses are managed by relatives remitting funds. Hence the need for local money transfers, and the key marketing message "*Send money home*."



Graph 6: Estimated minimum income compared with expenditure levels by province: Source FinAccess 2009

The second step in understanding why this value proposition was so compelling, is to examine the money transfer options that were open to most Kenyans. A *MicroSave* study (Kabuccho et al.2003), noted: "*for small amounts, the fee as percentage of amount sent can be higher than 35% due to the high minimum fees charged for every transfer*", neither were informal mechanisms for money transfer trusted, "*individuals carrying money on themselves or sending drivers and conductors are susceptible to highway robberies and thefts while money sent through friends and relatives is sometimes misused and at times never reaches its destination*."

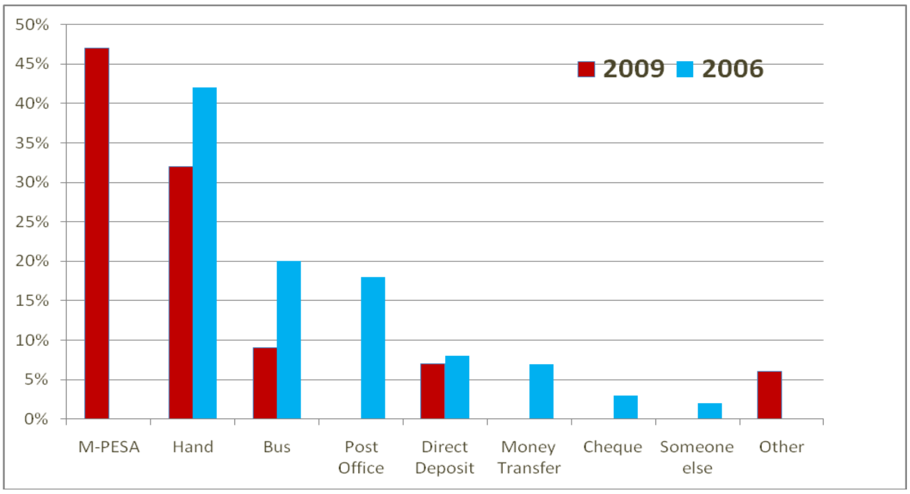
So it can be seen that Safaricom's M-Pesa service created a compelling value proposition at launch. However, the value proposition to clients (and the business case to Safaricom) is expanding over time:

Time	Phase	Functionality
2005-6:	Pilot Phase	Initially for MFI loan repayment
2007:	National Launch	Branded as a money transfer service
2008-10	Expansion of Functionality	International money transfer, pay bill, bulk payments, M-Kesho, merchant payments
2010+	Further Innovations	Customer driven innovations

Source: Safaricom Presentation – Vaughan 2010 (unpublished)

Of other functions, enabling customers to purchase airtime using their electronic money has been particularly important. This has been much easier to achieve than in other countries due to relatively low commission income paid to agents for over the counter airtime sales. For the wealthier community too, the bill payment options are increasingly important. Bulk payments are made through M-PESA not least of which is for the payment of Safaricom's own dividends.

However, it was, and still is, this compelling initial customer value proposition which has driven volume within the M-Pesa solution. This can be seen by comparing the impact of M-Pesa on the use of different money transfer mechanisms, using data from the 2006 and 2009 FinAccess Surveys.



Graph 7: Usage of different domestic remittance mechanisms Source: FinAccess 2009

In these surveys it can be seen that M-Pesa has significantly reduced the transfers made by hand, through the bus network, through direct deposits. It has largely eliminated the post office as means for domestic transfers. The growth in “*other*” referred to in the graph mostly represents other mobile money transfer mechanisms such as Zain’s Zap and Essar’s Yu-Cash.

Customer Acceptance: A key factor in the acceptance of M-Pesa has been the consistent experience delivered to customers. This has been maintained in a number of ways. Firstly, the same core training team has been used since inception with the assistance of a marketing company, called Top Image, which ensures the consistent application of the M-Pesa brand.

Removing Adoption Barriers: Safaricom, like Equity Bank, has removed as many adoption barriers as possible as reported in Mas et al. (2010). Safaricom has made it free to register for the service, free to deposit and have required no minimum balances to be maintained.

5.5 Agents and the Agent Business Case

For most agents M-Pesa is not of itself a complete business opportunity, rather, M-Pesa is an incremental business for Safaricom’s agents, alongside airtime, and phone sales. However, agents are a vital part of the M-Pesa solution. In addition to facilitating “*cash in*” and “*cash out*” transactions M-Pesa agents perform a number of extremely valuable functions:

Customer Education: Agents are usually the first line of customer service, and especially during rollout they were extremely important in educating customers on how to use the solution, particularly during initial customer transactions.

Compliance with Anti Money Laundering (AML) and Know Your Customer (KYC): Agents have to register customers in accordance with KYC regulations. This has been made easier for agents recently due to a compulsory registration process for all telephone numbers, mandated by the Communications Commission of Kenya, and the presence of a National Identity Card.

Compliance with Safaricom Business Standards and Branding Guidelines: Agents are expected to comply with Safaricom business standards and branding and are regularly monitored to ensure that standards are maintained.

Safaricom was very careful to develop a scalable model for its M-Pesa distribution channel. Safaricom was able to ensure a compelling business case to its agents in a number of ways. It pays agents both sign up commissions and transaction commissions. It backed up these commissions with heavy marketing and promotion to encourage usage. For sign up commissions Safaricom pays agents Ksh.40 for each new customer, and for each transaction Safaricom pays an agent, whether this is a withdrawal or a deposit. This meant that during the take-off phase for the solution agents were compensated more for signup commissions, whilst in the growth phase, there are increasingly compensated by transaction commissions, a simple and compelling business case.

5.6 Safaricom's Business Case

Mobile payments present a significantly different business case for a dominant Mobile Network Operator (MNO) such as Safaricom, than for a retail bank. This is an under-recognised success factor. For an MNO income is largely determined as a product of Revenue Per User often shortened to RPU, and the size of the active customer base. A key initial motivation for Safaricom was to add value to their customers and thereby to reduce customer churn. Over time, and with growth in the functionality and use of the solution, Safaricom's business case has further improved.

Safaricom, like other mobile money operators, offers its services through its agent network. However, in its relationships with its mobile phone network Safaricom had multiple advantages:

i. *Multiple agent outlets*: Safaricom was able to sign agreements with chains of agents. Dealing with agents with multiple outlets had several advantages. Agents could manage liquidity between different outlets, through the electronic exchange of electronic money floats. The number of direct relationships was reduced, greatly assisting training and information transfer. Safaricom was able to achieve scale in its agent network much more quickly.

ii. *Existing banking system*: M-Pesa benefited from a rapidly expanding banking system, which could provide liquidity to agents.

iii. *Strong existing relationships*: Safaricom already had a strong relationship with its agent networks, who provided airtime, and support services to its huge customer base.

M-Pesa's business case continues to improve as businesses find value in the solution - more than 350 different institutions now use M-Pesa's bill payment functionality to receive payments from their customers. This includes financial institutions accepting loan payments, utility bill payments, insurance and pension payments.

5.7 The Role of the Regulator[13]

The Central Bank of Kenya took an active role in facilitating and permitting the growth of M-Pesa, by allowing M-Pesa to be operated by a Mobile Network Operator and not by a financial institution. In reaching this decision the key questions were: i. Legal status: W as M-Pesa a banking business or not? ii. Money Laundering: Could the system be used illicitly for money laundering? and iii. Operational risk: What risks could arise from the use of new technology?

Firstly, legal opinion determined that the M-Pesa product was not a banking business. There was no credit risk involved, as agents and customers exchanged electronic value and money at par, based on agents maintaining floats with Safaricom. Customer funds were not lent in the pursuit of other business, and there was no interest paid on customer deposits. Moreover, funds were held at all times in a commercial bank, in a trust account, to which Safaricom had no beneficial interest.

[13] This section draws on a case study from the Alliance for Financial Inclusion – "Enabling mobile transfer – The Central Bank of Kenya's treatment of M-Pesa".

Secondly, M-Pesa passed security testing. Consult Hyperion, the specialist technology company building the M-Pesa system, tested the entire platform, including end-to-end encryption of the SIM card functionality, hardware security modules, and security embedded within business procedures. Reporting systems were tested to ensure that there was a full audit trail.

Thirdly, operational risk appeared low. Feedback from customer surveys showed that customers were overwhelmingly positive about the solution, despite cases of dropped transactions, and occasional cases of attempted fraud at the agent level.

In regulating M-Pesa the CBK had very limited precedence to draw upon as mobile banking was a relatively new phenomenon. As M-Pesa became increasingly successful, the regulator had to respond to criticism from the commercial banking sector that it had allowed Safaricom to offer financial services, which should be offered through regulated banks. A further criticism that was levelled, with justification, was that Safaricom was allowed to use agents to conduct business, when this was denied to regulated financial institutions.

Under criticism from the banks, the CBK undertook an audit of M-Pesa in December 2008 to consider the experience they had had so far. It was noted during this audit that Safaricom was not competing directly with commercial banks, as there was limited financial access through the commercial bank network, whilst many more had access to a phone.

The CBK noted in the audit that the CBK and the Treasury had refined legal and regulatory measures aimed at payment system legislation and that the Kenya Communications Act expanded the functions of the Communications Commission of Kenya in relation to electronic transactions. However, there was a need for further regulatory clarity, both in terms of providing a long term regulatory framework for mobile banking and to facilitate agent banking. To this end, regulations addressing e-payments, agency guidelines and money laundering were introduced during 2010.

5.8 M-Pesa Implementation Challenges

There have been challenges as M-Pesa has grown and developed. The success of the M-Pesa team has been in identifying the challenges and responding appropriately. The challenges addressed have included things such as sending payments to wrong numbers, providing adequate customer service, liquidity management, agent fraud and partner integration.

Initially there were service problems with dropped transactions particularly during the early months of the solution. A common reason for this happening was because customers sent funds to the wrong phone number. This risk was exacerbated by the design of M-Pesa. M-Pesa uses an application loaded onto the SIM Card, a so called SIM toolkit. This enables the service to be used on almost any mobile phone. However, the disadvantage as that it did not integrate into the customer's telephone address book. At first Safaricom minimised the risk of customers sending to wrong numbers by including a confirmation screen showing the number the transaction was being sent to. Despite this, erroneous transactions remained one of the most common customer service related tasks. In response, Safaricom recently started offering SIM upgrades to customers, which enables customers to obtain numbers directly from their telephone address book. Another problem is that Safaricom's M-Pesa customer service function has been stretched with customers not able to get through to the helpdesk. Safaricom responded by expanding the M-Pesa team, which in 2011 stood at around 350 staff members. The nature of customer issues has gradually changed too, as the customer base has become more familiar with the M-Pesa service.

Surveys of agents in rural areas showed some agents in the early months of the solution charged additional fees for their liquidity. M-Pesa has responded to this challenge by improving liquidity management and adding to delivery channels. Safaricom created a super-agent structure, enabling agents (and customers) to transact at commercial banks; they enabled customers to withdraw from linked ATM machines and insisted that agents have more than one outlet, and so could transfer e-money to each other as required. Due to the role played by agents in assisting customers, it is relatively common for agents to perform transactions for individual customers. In this process some agents have come to learn customer Personal Identification Numbers (PINs), and in the process to defraud customers. However, with a clear audit trail, and Safaricom visibly pursuing errant agents, this practice is not considered to be widespread.

Although M-Pesa has more than 350 different businesses using its bill payment function – for many of Safaricom's business clients, using M-Pesa involves considerable manual back office activities, and reconciliations. This is because there is currently very limited (if any) integration with clients' systems. For example, let's assume that a client of a bank repays a loan through M-Pesa, but gives the wrong account number in making the transfer; in this case the item would be posted to a suspense account within the accounts of the business client. Depending on the nature of the mistake made in the transfer it can take days for a correct posting to be made. A small minority of clients, such as the microfinance company Musoni Kenya, have developed a software (so called middleware), which can detect and correct for common mistakes, others, such as SMEP use their middleware to reject transactions which fail to match valid customer accounts.

These failings have caused M-Pesa business clients to call for Safaricom to develop an Application Programming Interface (API), which can be used to assist clients to manage their customers' transactions more easily and to reduce the transaction failure rate. Without action being taken either by business clients or Safaricom or both, business users, discussing M-Pesa with *MicroSave* are often not heavily promoting the use of M-Pesa for payments.

Others in the mobile payments industry, namely Airtel (Airtel Money), Essar (Yu Cash) and Orange (Orange Money) have gone further and have called upon the Prime Minister to promote the creation of a national mobile payments switch, to facilitate m-payments, between different providers and their customers[14].

5.9 Business Users and the Adoption of M-Pesa

Whilst M-Pesa has become an essential tool for individual Kenyan's, it has not been taken up so quickly for either person to business use, or business to business use. A recent study by FSD Kenya[15], tried to understand why this was the case. Its findings are relevant for the extension of mobile payments worldwide. The study found that for formal businesses paper, and established payment mechanisms were still the normal practice. Often a business did not have appropriate payment procedures to facilitate payment by phone – and even where payments were made, no receipt could be generated from the telephone.

For finance departments M-Pesa was particularly troublesome due to a lack of IT integration, and the fact that M-Pesa payments can take up to four days to be reflected on the business bank account. Secondly, businesses fear fraud through mobile payments, either through the generation of fraudulent SMS messages which purport to show a payment being made, and secondly through transaction reversals, where a genuine transaction is made, but is fraudulently reversed by customers.

[14] Business Daily 2nd March 2011.

[15] "FSD Insights Issue 4 – Why Doesn't Every Kenyan Business have a Mobile Money Account?"

For M-Pesa to succeed for formal business users, M-Pesa will need to respond to business concerns, provide the audit trail businesses require, revise its reversal procedures, and offer improved business integration with an application programmable interface. For their part businesses will need to adjust their own internal procedures to adapt to a mobile payments environment.

5.10 Current Challenges to Safaricom

There are current challenges which pose a threat to Safaricom's M-Pesa, which perhaps partly explain the wider commercial value of partnerships such as M-KESHO. They are price wars between telecom providers, increasing m-payments competition, and number portability. These are discussed below.

The Communications Commission of Kenya has enforced a reduction in interchange fees between MNOs, making it much cheaper for mobile users to call between networks. Zain now owned by India's Airtel, Kenya's second largest MNO responded to this opportunity by launching a price war to gain market share from Safaricom. To date the price war has reduced fees by more than fifty percent. This, in turn has enforced an effective reduction in airtime commission earned by agents – as airtime lasts longer. Over time this may reduce the number of viable Safaricom agents.

The m-payments solutions of competing mobile network operators such as Airtel's ZAP are gradually becoming more attractive to customers with an expansion in both customer base and their agent networks. Orange Money has taken a different approach and has decided to capitalise on M-Pesa's low level of systems integration with its partners, and instead integrates its systems very tightly to provide much higher levels of usability for its user's products and services.

5.11 Ability to Replicate M-Pesa

Safaricom is recognised, as the world's most successful mobile payments solution, in part this has been through the ideal environment that Kenya has offered for the development of m-payments. This has been explicitly recognised in the latest studies of M-Pesa, such as that by Mass and Radcliffe (2010). Factors which appear particularly important to recognise can be grouped around Kenya country factors, product appropriateness, a strong agency business case, liquidity management and the dominance of Safaricom.

i. *Kenya country factors*: Favourable market conditions with a strong unmet demand for domestic remittances and the poor quality of existing alternatives. A supportive regulator enabling M-Pesa to be mobile network operator led.

ii. *Product appropriateness*: A simple to use product, with an easy to use user interface, transparent pricing, and a simple marketing message. A carefully designed product – with low barriers to adoption, free to register and free to deposit.

iii. *Agent business case*: A strong incremental business case for agents to sign on to M-Pesa due to relatively low airtime commissions.

iv. *Liquidity management*: A banking infrastructure to provide liquidity management, and careful liquidity management through agent networks.

v. *Dominance*: A dominant mobile operator, able to promote aggressively and get to scale quickly through a delivery channel which was scalable in line with the growth in customer numbers.

5.12 M-Pesa and the CGD Task Force Principles

Safaricom's M-Pesa meets most of the CGD Task Force principles:

It will be difficult for MNO led solutions to become direct competitors of M-Pesa in the short term. However, this is not because of market imperfections or competitive barriers, but because of the innovative practices developed by Safaricom in a very short period of time. Thus, it cannot argued that M-Pesa violates CGD Principle 1. No other MNO has Safaricom's subscriber base or agent outreach. Furthermore, Safaricom has made efforts to ensure that it has similar, though not identical, payment solution as M-KESHO with other leading banks, including KCB, Barclays, and Family Bank. The huge advantage that Safaricom has over banks through the use of its agents has been reduced slightly through the rollout of agency banking. However, in one area Safaricom may have made it much more difficult for others to gain market share. Safaricom has effectively set a standard price for cash transactions through agents: to make a deposit is free and to withdraw is Ksh.25. Others seeking to use agents may have to factor in relatively high per transaction fees in order to attract agents.

M-Pesa's agent infrastructure is extensive, more than 40,000 agents (Principle 2). The advent and growth of M-Pesa was one factor which encouraged the CBK to develop agency banking guidelines, which enable financial institutions to offer services through agents.

M-Pesa has the distinct advantage of uniform, simple price structures, which both create informed demand and protect customers against abuses (Principle 3 and Principle 5). In a recent survey trust in agents has increased from 65% at inception to 95% today.

When M-Pesa's managers are asked about fraud and security on the system they respond by talking through the audit trails available, the online monitoring, and the system based security (Principle 4). This point is backed up by the Head of Payments at the Central Bank of Kenya, who argues that electronic payments provide much greater transparency for regulators of the transactions that are being performed than cash.

A 'smart' subsidy was applied to the development of M-Pesa, though this subsidy was not through the Government. Vodafone applied for and obtained partial funding for the development of M-Pesa through DFIDs Financial Sector Deepening Challenge fund. This funding enabled Safaricom to pilot test their solution with the assistance of Faulu Kenya and *MicroSave*, and to learn key lessons before the solution was rolled out to the wider Kenyan market.

Safaricom's M-Pesa clearly showed how different government ministries and regulators could cooperate, (Principle 7), a level of cooperation which continues to date, throughout the development of financial sector policy.

At the level of Safaricom, data is available on every transaction. Furthermore, there was an extensive audit of M-Pesa in 2008 to respond to concerns within the financial sector on the safety and security of the solution. Outside the CBK micro-level data is not available, as indeed it is not from individual banks. However, unlike the banking sector as a whole, M-Pesa and its success are extensively studied by academics and policy makers.

6. Case Study: Kenya Post Office Savings Bank

Kenya Post Office Savings Bank (KPOSB), trading as Postbank, has operated continuously since 1910. For most of its history it operated as a division of the postal service provider the East Africa Post & Telecommunication Company. The company's savings services were always regarded as financial services, reporting to the Ministry of Finance and not the Ministry of Communication where the rest of the postal services were reporting to. In 1978, the Kenya Post Office Savings Bank Act created Postbank as an autonomous banking institution, governed under the Ministry of Finance. Throughout its history, Postbank was an early and important contributor to financial inclusion, through providing a range of products and services targeted towards all Kenyans. Postbank offered Kenyan's a truly nationwide financial institution through an agency relationship with the postal service provider and today with the Postal Corporation of Kenya (PCK), clearly justifying its tag line "*at your service countrywide*"

Postbank served its customers through a range of long established products and services. The Passbook Savings Account was by far the most important product in the bank, which enabled customers to deposit and withdraw through Postbank's network of branches and throughout its agency network on the presentation of a customer's identity card and passbook. Other products were introduced over time, which included Save as You Earn (SAYE) a contractual savings account, Premium Bonds which offered customers the potential to earn prizes rather than receive interest. Fixed deposits and the Premium Savings product offered higher rates of interest, and payroll processing enabled employers to pay salaries to staff.

Throughout the 1980s and 1990s, Postbank's account processing was largely manual, though manual records which were entered onto a central database on a core banking system. Manual record keeping created a huge burden on Postbank, in terms of maintaining and reconciling customer accounts, adding interest, audit, and in managing agency relationships and cash-flows. Postbank devoted a large workforce to facilitate the reconciliation of manual passbook balances.

Postbank Agency: After the creation of Postbank, the links between Postbank and the PCK remained very strong, and agreements were signed to enable Postbank customers to continue to receive services at PCK outlets throughout Kenya. However, this agency relationship had its own challenges such as restrictions on the amount which could be withdrawn and the notice period required for larger withdrawals and low levels of liquidity. Furthermore, research within Postbank showed that customers often made many small deposit transactions through the agency network all of which attracted a transaction based service charge payable to the agent and a need for manual reconciliation at the Head Office.

6.1 Catalyst for Change

The case for change within Postbank was growing, but nevertheless change required a catalyst. This came through loss of customers to competing institutions in an increasingly dynamic market in Kenya. The period from 2001-2006 saw a major shift in the perceptions of financial institutions to the mass market. Banks which hitherto had relied upon high treasury bill rates to finance operations, started to grow their branch networks, and invest heavily in electronic and later mobile phone based delivery channels.

Competition was particularly intense from banks such as Equity, which operated squarely in the same market segment as Postbank, which were able to offer customers a far more compelling customer value proposition. Through these banks customers were able to obtain transaction fee based services, throughout most of Kenya, through an increasingly wide range of delivery channels. The initial response from Postbank was the *Bidii* Savings Account.

Bidii Savings Account: The *Bidii* Savings Account, introduced with assistance from *MicroSave* was a first step to full computerisation, the *Bidii* account offered computerised services, initially based within single branches. A key achievement of the product was that it reduced customer service times by half. The product was priced competitively, reducing operating costs for customers by up to 60%. However, whilst *Bidii* was a significant step for Postbank, greater change was required.

By 2004/2005 Postbank management was coming to the realisation that the rapid loss of customers to competing institutions threatened the very existence of the bank, fundamental change was required. As Nyambura Koigi, the Managing Director noted, "*Everybody saw the danger signs*."

However, change in the context of a governmental institution is particularly challenging and no less so for Postbank. In order to respond to competition Postbank realised that it needed nothing less than to implement wholesale change. It needed to modernise its delivery channels and create more dynamic online agency arrangements, it needed to replicate the service culture started by *Bidii* across the bank. It needed to refresh its image, its branding, its marketing and its products. High levels of bureaucracy and manual operations needed to be replaced by system based decision making.

One of the most intractable challenges, however, was the need to radically change the cost structure of the bank, and in particular to remove the manual operations and the inherent bureaucracy a manual systems calls for, in order to enhance efficiency. This change required reducing the headcount of the bank.

Postbank required a clear actionable plan. Through support from FSD-Kenya, Genesis Analytics a South African consultancy practice was commissioned to plan the change. The initial strategy review prepared by Genesis Analytics concluded that, "*there is a widespread scepticism in KPOSB on the internal capacity to implement change. This scepticism no doubt arises from a lack of implementation and project management skills, weakness in change management and leadership capacity and some hostility to change"*.

Even though there was recognition of the need for change, there was resistance and uncertainty, two particular fears were expressed by staff, the fear of redundancy and the fear of moving away from the Passbook Savings Account, which had achieved almost iconic status with Postbank "*the passbook is the mother of the bank – we cannot kill her*". Clearly fear had to be managed.

Postbank required an ambitious vision for the future. What was this vision to be? What elements were required?

i. Postbank needed electronic systems which could respond to a rapidly changing environment. Manual systems made Postbank very slow to respond;
ii. Postbank needed card based systems which could integrate into national delivery mechanisms, such as the ATM networks of Pesapoint and KenSwitch;
iii. Postbank needed systems which could enable highly efficient operations to be provided to a semi- literate, often elderly client base, which hitherto had been used to the transparency of a passbook based system;
iv. Postbank needed not only to match the offerings of competing institutions it needed to be better; and

v. Postbank needed to revitalise its agency relationships so that once again it could refresh the claim “*at your service countrywide*”

6.2 Three Years On – Revolutionising Postbank Renewing its Mandate for Access

Postbank started on the institutional change process with the assistance of a plan from Genesis Analytics, and technical assistance from a consultancy company CCI. This process was made easier through existing plans in progress to upgrade banking systems and to network branches. By 2007 Postbank was well advanced in networking its branches, the core banking system had bedded down and staffwere now confident in maintaining the system.

Over the last few years Postbank has moved to become a highly relevant Savings Bank, through introducing multiple innovations, which in 2010 saw it winning an ICT award for its paperless banking system. The move to a fully electronic environment was accomplished in stages.

1. Business Process Re-engineering
2. Launch of ATMs on the KenSwitch interbank ATM network (in 2006)
3. Fully networking branches onto the core banking system (completed in 2007)
4. Implementation of Postilian switch and in-house card production (completed May 2008)
5. De-coupling from KenSwitch and moving ATMs onto a Postbank switch (completed June 2008)
6. Activating POS terminals in all branches (completed October 2008)
7. Initiation of bill payment, pre-paid top-up and other services through the POS network
8. Introduction of new agency relationships

At the heart of Postbank’s automation is its branch based POS system; a system that has the capacity to handle as many as 400 transactions per day per front line staff, levels of efficiency unparalleled within the Kenyan banking sector. Processes have been streamlined and automated, delays have been eliminated; nowhere is this clearer than in the account opening process.

Today Postbank customers can open an account quickly and easily, and can walk away from the branch with an activated card based account within minutes. Postbank realised that the traditional issuance of debit cards, even in competing institutions, customised with names and photographs, added significantly to delays in card issuance and account activation. Instead Postbank issues cards on the spot, and simply has to control for the separate issuance of cards and PIN numbers. Account opening formalities are further simplified through taking photographs on site, eliminating the requirement for customers to return to the branch bringing passport sized photographs.

Postbank's branch based POS system enables fast service, the teller inserts the card in the POS device, and the customer authorises the transaction with their PIN number. Not only does this approach considerably reduce the key strokes required by tellers to process transactions, but it facilitates transactions for semi literate customers, who simply have to remember to bring their card, and to recall their PIN number.

A critical success factor in Postbank's strategy was to ensure that its systems could be used with other systems operating in Kenya. Postbank had neither the financial strength, nor the growing customer base to create a massive infrastructure of its own ATMs. Yet it was imperative that Postbank was able to counter the level of accessibility offered by the large commercial banks. The solution was to link to Kenya's growing ATM networks. ATMs operated through the interbank switch KenSwitch and the independent ATM operator PayNet, which operates the PesaPoint ATM network. Though this strategy Postbank customers can obtain cash through more than 688 ATMs throughout Kenya.

ATM strategies, however, need to be carefully thought through, as while operating through shared ATMs can dramatically increase accessibility for customers, it also introduces interchange fees payable to the network provider and the owner of the ATMs. Postbank realised this, and has therefore, placed its own ATMs strategically within its own major branches. Initial results were very positive with a rapid increase in the number of transactions being processed through Postbank's own systems.

6.3 Partnerships for Scale and Scope

Postbank's strategy of introducing interoperability to its systems has provided considerable impetus to partnerships which can be used to increase footprint and offer much improved services to customers. It has also significantly increased the Postbank's ability to respond quickly to competition within the market. Interoperability started with linking to Kenya's growing ATM networks. However, other initiatives included:

- Becoming an agent for M-Pesa;
- Re-evaluating the relationship with PCK; and

- Launching its own agency network.

Becoming an Agent for M-PESA: Currently Postbank is an agent for M-Pesa and a substantial amount of business is spent selling M-Pesa's value for customers and non-customers alike. As an agent, Postbank is able to provide M-Pesa services to the public. Safaricom and M-Pesa represent a very important strategic relationship. Not only does the M-Pesa business provide an important revenue stream, but Safaricom is the key to many of the niggling connectivity issues that beset the core banking system.

Re-evaluating the Relationship with the Traditional Agent. The ability of Postbank to create new relationships and new partnerships has placed into focus Postbank's relationship with PCK and its long standing agency relationship. PCK clearly represents synergies with Postbank, especially given that Postbank's own POS devices could easily work throughout the widespread PCK network. However, some of the old challenges remain in particular liquidity management.

In 2012 PCK still operates manual systems (although it has recently introduced electronic systems in half of its agencies), and largely serves the declining base of passbook savings accounts. Analysis (Wright and Mugwang'a, 2009) suggests that as Postbank established its own branch network, and moved customers onto cards, the percentage of business transacted through the postal outlets has declined perhaps to as little as 10% of the total number and volume of transactions. The intention should be to strengthen this business partnership in order to enhance financial inclusion.

Agency networks: In association with the World Savings Bank Institute (WSBI) Postbank is launching a network of agents. Agents operate a float account through which to transact. The bank's standard (which are relatively small) fees are charged to the client for withdrawal transactions, but deposits are free. Fees to agents are paid per transaction whether deposit or withdrawal.

The ideal Postbank agent must have good liquidity. However, in smaller communities finding agents creates challenges as financial institutions and mobile network operators offering financial services are all attracted to the same limited number of merchants. Whilst the guidelines for agency banking are clear that there can be no exclusivity of agents, however, a specific agent may have insufficient liquidity to service multiple e- and m-banking solutions, especially as transaction limits have increased.

6.4 Results to Date

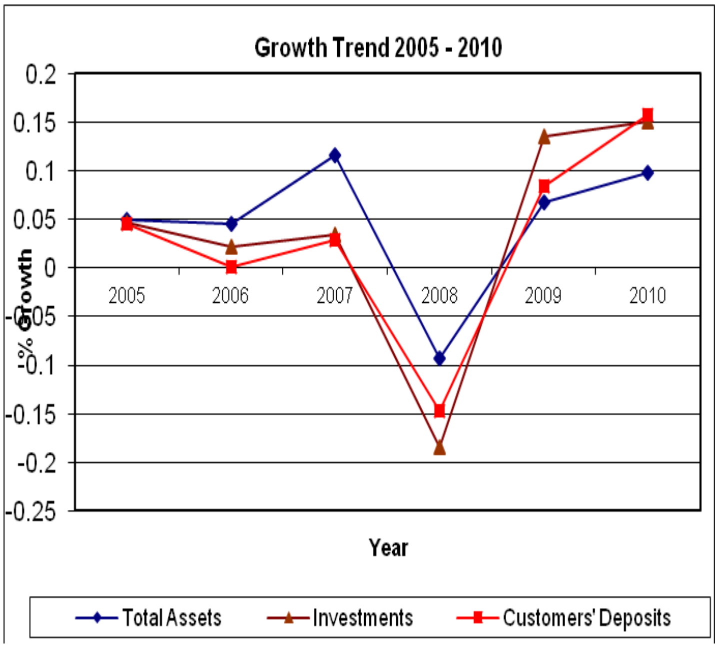
Enhanced Customer Value Proposition: The customer value proposition offered by Postbank has dramatically improved. Transaction times have reduced from 10-15 minutes under passbook operations, to typically less than 1 minute for card based operations. Fees have reduced to Ksh.50 for over the counter transactions and Ksh.30 for ATM transactions. Account opening is simple and easy, card issuance is among the quickest in the industry. Every branch has at least one customer relationship officer to assist those in the banking hall.

Increased Accessibility: As well as enhancing the customer value proposition, Postbank has been able to increase the availability of its services. Customers can withdraw at more than 688 ATMs; or can transact at an increased number of branches. Postbank has been able to increase its own branch network to 93 branches.

Improved Cost Ratios: Postbank has increased the core customer value proposition, and increased accessibility at the same time as significantly reducing headcount. Head count was reduced through a number of strategies, which included natural attrition and a voluntary redundancy strategy. Whilst this strategy took longer than envisaged, a total reduction in head count of more than 300 people, predominantly in head office support functions, has been achieved.

Restoring growth: The changes introduced by Postbank restored positive growth to the institution.

Graph 10 (right) shows the impact of the changes. With competition, growth rates slowed down in 2005-6, becoming steeply negative in 2008 due to post-election violence in Kenya that year resulting in savers depending more on their savings.



Graph 10: Growth trends within Postbank

Postbank launched the new electronic banking initiatives in 2008, reflected in a sharp improvement in 2009, in all performance indicators, assets, investments, and customer deposits. Continued strengthening was seen in 2010, particularly in relation to customer deposits.

Culture change: The consultants assisting in the transformation process noted that as they worked there was a gradual change in the culture of the bank. The team from CCI was able to drive performance through example; the CCI Project Manager noted that when he first arrived in Postbank, staff members on the project left the building at 5pm on the dot, leaving him alone. But by the end the project everyone was staying for as long as was necessary to complete the work on hand.

6.5 Ongoing Challenges

Two ongoing challenges are consistently mentioned when discussing the future of Postbank. Whilst the continuous evolution of systems and procedures has given Postbank one of the most advanced deposit taking systems in Kenya – Postbank still struggles to drive large volumes of new business. This is attributed to difficulties related to marketing and Postbank's current inability to lend.

Marketing: A significant challenge for Postbank is to become more aggressive in marketing. This has to be achieved through multiple strategies which include:

- Market penetration: to recover previous clients lost to the competition;
- Product modification: to sell Cash Xpress-based solutions to companies seeking options for paying salaries through the bank;
- Geographic expansion: through new branches, and other agency-based systems;
- New product development: to drive the payment of utility bills and mobile airtime through the system;
- Segment invasion: as it seeks to sell Cash Xpress to the employed and others that previously eschewed the bank for fear of its quality of services; and
- Product diversification: to sell innovative products to new market segments.

The relatively low profitability of the bank makes it difficult for Postbank to maintain highly visible marketing in the media, or to provide significant support for branch based marketing.

Conversion to a commercial bank: It is possible that Postbank will be allowed to become a full commercial bank. This offers significant advantages to Postbank, but there are also costs and caveats. From a practical point of view, Postbank will be able to offer cheque accounts and will be able to lend. This will remove the disadvantages inherent in Postbank's current product offering.

However, conversion to a commercial bank also brings potential costs, in terms of regulatory compliance as Postbank would now be supervised by the CBK. Firstly, all of Postbank's branches would need to reach the required standard for deposit taking, including expensive strong rooms. Secondly, Postbank would need to be able to meet CBK's tough reporting requirements, thirdly, Postbank would need to manage the challenge of offering credit based products and services, lastly conversion to a commercial bank would require Postbank to diversify its shareholder base, and to have investors with the ability to invest capital from time to time.

6.6 Ability to Replicate Postbank

Amongst Postal Savings Banks in Africa relatively few have innovated around their delivery channels to the extent of Postbank. Few have addressed their image, brand, marketing positioning, culture and staffing and developed a new model for their business in the way that Kenya Post Office Savings Bank has. This is not to say that there have not been changes, rather it is the extent of change in Postbank which is important to note.

It is possible to replicate the successes that Postbank has had so far. However, there would be significant financial implications in doing so. Postbank was very fortunate in that it had partial support for its change management process, from FSD-Kenya. It should also be recognised that Postbank had a very significant urgency behind their change management - the future relevance of the institution. Other Postal Savings Banks may not have the same degree of motivation.

6.7 Postbank and the CGD Task Force Principles

Postbank remains important for competition in mass retail banking – as it has a large point of presence in Kenya, offering its clients access to financial services through its 93 branches and 688 ATMs and a large number of agencies, – and offering an impressive array of partnerships (Principle 1 and Principle 3). From an international context it clearly demonstrates that government owned institutions (Principle 8), can provide effective and efficient services. However, the lengthy transformation experience of Postbank points to the difficulties inherent in changing a publically owned financial institution, particularly in relation to the areas of culture change and staffing.

Postbank is a prominent partner of the World Savings Bank Institute (WSBI) the representative body of postal savings institutions. The revitalisation of Postbank in the midst of stiff competition demonstrates that with the right motivations and support that Postal Savings Banks can remain relevant to the needs of their clients. It is a clear example of successful reform, in spite of historic and current challenges within the institution.

The fact that Postbank is likely to move from supervision by the Treasury to supervision by the Central Bank of Kenya is an important example of inter-ministry cooperation (Principle 7), and should also impose much greater discipline on the bank, which should increase the soundness of the bank, after a period of adjustment. (Principle 4).

7. Case Study: Musoni Kenya

Musoni Kenya, which started its loan operations in April 2010, is probably the first microfinance program to be *designed* around the use of the mobile phone as its principle repayment channel. To date, other microfinance programs, or banks, have used mobile payments as an additive channel. Are the advantages of *designing* operations around mobile payments going to be transformational, or will Musoni Kenya just be an interesting experiment, only possible in Kenya? This short case study begins to explore this point.

Musoni seeks to deliver the best financial services to the lower end of the market, and to become a model of efficiency and good business practices. Musoni aims to become a global institution and to be established in three countries within the first five years of operations. As a financial institution it seeks to design flexible products, through market research, that meet client needs, and have seamless and efficient data handling and analysis through the use of mobile payments. Musoni states that its clients include micro-entrepreneurs at the starting end of the market, aged between 18 and 70. It has a special focus on youth between 21 and 35 years. Clients are targeted with modest credit needs of between €50 and €350. Plans exist to grow with successful clients over time to provide loans of a maximum of €2,000.

So why use the mobile phone as the principle repayment channel? Mobile money transfer systems are hugely popular in Kenya, with Safaricom now reporting over 12 million M-PESA customers, and competing offerings by Airtel and Essar. Whilst more than 50 percent of East Africans have access to mobile phones, and there is 90 percent mobile network coverage, there is relatively few East African's with access to formal banking services. Only 27 percent of Kenyans, 21 percent of Ugandans and 11 percent of Tanzanians have access to formal banking services.

7.1 Is Musoni Different?

Musoni's products are relatively standard, especially given the start-up nature of the institution. The three products are a) Nawiri Loan: with flexible loan amounts between Ksh.5,000 and Ksh.35,000 for first loan; and flexible repayment period of 12 or 24 weeks; b) Stawi Loan: for small businesses; loan amounts between Ksh.75,000 and Ksh.125,000 for first cycle; repayment period of 12 months with grace period of 2, 3 or 4 weeks and c) Wepesi Loan: an emergency loan available only to existing customers; loan amount is between Ksh. 1,000 and Ksh.10,000; to be repaid at the end of two weeks in one instalment; no interest fee but 10% upfront fee has to be paid.

Musoni's differentiation is that its automation reduces the clients time involved in the repayment process, from more than 8 hours to between 3-6 hours per month. Automation of the repayment process, and the centralisation of much of the operations function, allows Musoni Kenya to focus on managing growth. These points are explored in more depth below.

7.2 Performance

Musoni started operations in April 2010. It has two branches in operation, with a third due to be commissioned. After the pilot test completed Musoni had 5,000 clients. To place this achievement in perspective there are very many microfinance institutions and SACCOs in Kenya which have been in operation for many years, are yet to reach 5,000 clients.

Musoni expects to grow through adding one new branch every three months, as well as through growth within each branch. Musoni already serves over 8,000 clients, which means that in just over two years Musoni, although smaller than respected and established institutions such as SMEP, is significantly larger than institutions such as Opportunity Kenya. Projections for Musoni group show that Musoni expects to break even by 2013 and to make a significant return on equity by 2014. This is despite opening operations in two new countries, Uganda and Tanzania. Musoni plans to grow to reach 225,000 clients within five years (in three countries), realising economies of scale.

7.3 Client Benefits of Using M-Pesa

Clients can repay their loans at their own convenience, both in terms of time and location. Groups no longer have to meet close to a bank branch where they would otherwise bank the repayments. This means that clients can meet closer to their businesses, and reduce the time spent on getting to meetings. This can be especially important in rural areas.

More time can be spent by the loan officers in building a relationship with clients, as the time spent on receiving and recording payments is much reduced. The only payments received during the meeting are from clients who have not managed to make their payment by phone.

Record keeping is very fast: In many microfinance programs it can take several days or longer to recognise receipts from clients as loan repayments are received through the banking system. Reconciliation of receipts to group records, can also take considerable time with a large number of payments in suspense. In the case of Musoni payments are recognised on the day they are made. Reports can be produced on a group by group or officer by officer basis, so that when a loan officer visits a group he knows precisely who has paid and who has not.

7.4 Institutional Benefits of Designing Around M-Pesa

When customers make payments to Musoni these are received first onto Musoni's own m-banking middleware. Transactions are processed, batched and then forwarded to M-Pesa periodically. Musoni m-banking software, or more accurately middleware, has been able to produce significant innovations which allow Musoni to innovate around typical client repayment behaviour. For example, clients are able to make payments on behalf of other group members through sending a short code in addition to the other group members' telephone number to Musoni. Musoni's middleware then interprets this message and processes the intended transaction.

Occasionally transactions are generated which cannot be processed automatically. This could result from the use of an incorrect short code, or referring to another member's phone number which does not exist, or Musoni clients changing their phone number or sending payments from a phone which is not linked to the customer account. Such transactions are held in suspense and cleared manually. Transactions which require intervention run at around 7-8%, however, the number of transactions requiring intervention is reducing, and automated routines for validating transactions are being developed.

In some cases, policies have been made to reduce the potential for errors. This includes a requirement that clients give one week's notice of a change in telephone number. This reduces reconciliation issues, and reduces the potential for fraud.

Many financial institutions are now using the M-Pesa platform to process repayments. Equity Bank has M-KESHO, Family Bank has Pesa Pap, both of Kenya's largest microfinance institutions KWF Microfinance and Faulu Kenya DTM Limited use M-Pesa for collections. So what is different? What makes Musoni special? Significantly, Musoni has been designed around M-Pesa and how M-Pesa works. This means that Musoni's systems integrate well with M-Pesa and as a result relatively few transactions are rejected or require manual intervention.

7.5 Musoni's Organisational Structure

Musoni is designed to operate through multiple companies, a holding / service company in Holland and a separate company in each country of operation. The service company handles funding, information technology and control, leaving the country programs to concentrate on clients and rolling out support infrastructure. The service company and country program sign an agreement where the country program pays for support in proportion to its outstanding portfolio. Musoni claims this methodology will deliver much greater efficiency, which can be passed on to clients in the form of highly competitive interest rates, and to shareholders in appropriate returns.

Is Musoni's organisational structure delivering efficiency? Certainly the Kenya head office function is very small. The service centre in Holland is also small. At the field officer level, relatively short group meetings and up to date information on non payments, has allowed Musoni to drive greater efficiency. The Musoni model estimates that after one year in operation a loan officer should be able to reach 600 clients. However, this will only be possible if Musoni moves from weekly to bi-weekly group meetings. Currently bi-weekly meetings are being tested and are likely to be introduced.

This anticipated level of loan officer efficiency is highly unusual. Reaching the target of 600 clients depends not only on bi-weekly meetings, but will depend on the ability of the loan officer to maintain the quality of his/her portfolio. Pressures on the portfolio are likely to increase as more and more group cycle through larger and larger loan sizes.

7.6 What Do Clients Think?

Overall clients of Musoni are very happy with operational factors, in particular the speed of disbursement which takes between 6-72 hours from loan approval, and the convenience of making payments whenever they wish. They also appreciate the fact that funds are paid directly to Musoni and bypass group officials.

However, focus group discussions carried out by *MicroSave* indicate that there are concerns that payments via M-Pesa at the weekend do not reflect on customer accounts until Tuesday, which affects groups meeting on Monday. Cashing out loans is challenging for clients, because many Safaricom agents struggle to payout more than Ksh.5,000 – 10,000 per client, forcing clients to withdraw from several agents, resulting in high transaction charges.

Fortunately, it may be possible for Musoni to design around some of these issues, as Musoni expands its operations, to post transactions over the weekend, for example, or to recommend Super Agents to clients through which they would be able to withdraw higher amounts. Clearly, although clients are very happy with Musoni overall, there are operational factors which Musoni should research further and respond to.

7.7 Transformation to a Deposit Taking Microfinance Institution

Musoni intends to become a Deposit Taking Microfinance Institution. Musoni is currently moving through the regulatory process to obtain its license. A key element of this process has been introducing new shareholders into Musoni, namely, KfW the German development bank, the Grameen Foundation, and CARE's Access Africa Fund. A new highly experienced CEO has been recruited, alongside a manager to specifically guide the transformation process.

The new shareholders bring with them the ability for Musoni to access technical assistance and advice and to fast track a number of projects. Projects currently in operation include the Field and Branch efficiency project which uses tablet devices to increase the amount of information available to field staff, and digitises paper forms previously used, and the introduction of a web portal to automate some back office functions. [16]

For loans, the major delivery channel will be through mobile payments. This approach will allow Musoni to retain relatively low cost offices and thereby retain a cost advantage over competitors. However, Musoni may need to develop a mechanism for disbursing larger loans off the M-PESA channel given the limitations imposed by the maximum transfer / withdrawal on M-PESA.

There will be significant challenges for Musoni moving forward, in accepting deposits. This is because Musoni's existing client base are already established M-Pesa users. Musoni's own customers can save relatively high balances using M-Pesa without Musoni, as long as they are prepared to hold money on their M-Pesa account and receive no interest.

[16] Musoni Newsletter October 2012

If customers start to save at Musoni, then if they are saving using M-Pesa themselves, they will have to transfer funds to their Musoni account. Deposits on M-Pesa are free, whilst transfers between M-Pesa users are charged. Therefore, it is cheaper for customers to save on their M-Pesa account for savings rather than in their Musoni account.

So what options does Musoni have? Some of the most obvious points suggest themselves. Clearly Musoni can still offer fixed deposits and contractual savings, where the contractual savings amount is relatively higher, and can to some extent use its efficiency and lower cost base to offer an attractive interest rate to its customer base. Given that Musoni has its own middleware, Musoni can also adapt its existing loan repayment mechanism, so that a portion of a loan payment is diverted into a savings account. This would enable smaller contractual savings to be collected. Although it is unusual in East Africa Musoni could have savings officers who collect cash, much as daily savings collectors – or susu collectors do in West Africa.

Having a reliable interface with M-Pesa also offers a significant potential strategic advantage to Musoni, in that it has the ability to become a reliable salary processor for the low income market. Through M-Pesa it is already possible to withdraw cash not only through agents, but also through ATMs. The product would have to be carefully packaged, and would probably again need to offer returns to depositors, but this would have the advantage that the salary transfer could be paid for by the employer. Customers on such as a salary product would then not be restricted to holding relatively smaller amounts on their M-Pesa account.

So savings products for Musoni will need to be thought through very carefully, and packaged appropriately for the market or the market segment. Careful market research to ascertain likely customer responses and a pilot testing process will also be required.

7.8 Driving Down Costs

Ultimately Musoni’s lasting impact and contribution to microfinance, in Kenya and beyond, will be whether using its model it can drive down operating costs, and thereafter reduce costs for their customers. Whilst Musoni has a very efficient delivery mechanism, it has relatively high centralised costs – in terms of management and investment in systems and technology, which require scale efficiencies in order to drive down average costs.

Musoni have identified a range of key areas where transactions costs can be reduced – on the applicants side a loan application can be made by SMS, the question then being how to assess the credit worthiness of the applicant – Musoni anticipate that a combination of IT and credit scoring will provide the answer.[17] Credit scoring algorithms use socio-economic, business demographic, financial data and loan characteristics to generate a score which estimates the probability of default. The challenge is going to be to obtain relevant data. Data sources are expected to include the use of mobile services by the potential borrower and his payment behaviour on these services, more data would come from the applicant themselves, potentially using a smart phone application to record the data.

As a further step towards driving scorecards, Musoni Kenya is working with AMFI the Kenyan microfinance network, to create a credit bureau for microfinance institutions, it has produced a Credit Information Sharing Report that it anticipates will be used by Musoni Kenya to pilot the first microfinance credit bureau in Kenya[18].

7.9 Unanswered Questions

Considerable thought has been applied by the Musoni management teams in the Netherlands and in Kenya in the development and design of their solution. As a loan payment platform it has been well developed and initial results are very promising. However, as a platform for a deposit taking institution the Musoni model remains to be tested and refined. There are a number of additional questions which Musoni will answer especially as it moves to open in other markets, these are summarised below:

Ability to replicate: Clearly Musoni works very well in a market such as Kenya where trust in M-Pesa is very high and where Musoni has carefully designed its model around the m-payments platform. It may prove more difficult in markets where trust in mobile banking is less well developed, or where there are high levels of illiteracy, or where potential customers do not have a mobile phone. Additional efficiencies are also possible in some markets, such as Kenya where customers have to formally register with the mobile network operator, thereby allowing Musoni to more easily satisfy Know Your Customer requirements.

[17] The Cost Conundrum in micro lending: The loan officers. Musoni Presentation
[18] Musoni Newsletter October 2012

Pricing models: M-Pesa has a certain pricing model which influences the development and design of Musoni's products. This is not within the control of Musoni. How will Musoni be affected under different pricing models, or if the mobile network operator increases its charges?

Bank-led models: Safaricom is in a minority in that its payment platform is led by a mobile network operator, in most countries, mobile payments sit within the banking system. In Uganda for example, mobile payments are products of different banks. MTN's mobile payment platform in Uganda is a product of Stanbic Bank, operated by MTN. Will there be any strategic issues for Musoni in essentially sharing information on clients with a potential competitor?

Network dominance: In Kenya M-Pesa is the dominant mobile payments platform. In other countries the market is more evenly split between different providers. This will mean that Musoni will need to integrate its platform with multiple different providers. Musoni are confident in their ability to do this, as they already have the technical capacity to receive payments on Airtel's Zap product.

More practically however, Musoni will find that its products will share many the advantages and disadvantages of the particular m-payments platforms; for example, whilst Safaricom may have 40,000 agents in Kenya, other solutions are likely to have far fewer agents.

Costs of becoming regulated: Clearly Musoni appears to be demonstrating that it can run an efficient loan program. However, it is not yet clear whether Musoni will be able to retain the same lean structure when it becomes a licensed deposit taking institution. A licensed deposit taking institution has considerable additional reporting, financial management and audit requirements. Much will depend on Musoni's success in finding innovative ways to attract deposits from its customers – who by default already have access to a flexible savings mechanism.

7.10 Ability to Replicate Musoni

Musoni has gone further to integrate its client repayments into the M-Pesa platform than almost any other financial institution in Kenya. Almost all other financial institutions simply use the pay-bill function of M-Pesa to receive payments from customers, but then have to manually re-route payments to the right customer account. Musoni's middleware makes it more difficult for other institutions to replicate Musoni. However, it also shows clearly the necessity to take time to design around the mobile banking platform.

Clearly, however, with the careful design of the Musoni platform with the back office processing operating in the Netherlands, Musoni has designed itself for its own replication, in different markets.

7.11 Musoni and the CGD Principles

Musoni will take time to demonstrate whether it meets the CGD principles. As the first microfinance institution to be designed entirely around M-Pesa, its opportunities and challenges are likely to be defined by the opportunities and challenges of M-Pesa itself.

However, in addressing the unanswered questions noted above, Musoni will produce a large number of lessons on how mobile payments can be integrated into the operations of financial institutions, and in doing so it is likely to have an impact out of proportion to the size of the institution. Should Musoni be able to reach appreciable scale, at low cost it may unlock financial services to even more clients, not only through its own expansion, but through its demonstration impact on other microfinance programs.

Annex

Policy Principles for Expanding Financial Access

(Summary of a report by the Center for Global Development Task Force)

Despite the rapid growth in finance worldwide over the past quarter-century—which was interrupted by the global financial crisis—many low-income households and small firms remain excluded from access to many financial services, especially in developing countries. While traditionally seen by many financial-service providers (FSPs) as less attractive customers, a growing number of mainstream FSPs have joined microfinance firms in extending the range of their service provision, and important advances have been made in expanding access. At a time of increased focus on financial-sector policy and of regulatory tightening, it is important not to lose sight of the goal of increasing the access to appropriate financial services essential to the escape from poverty and the achievement of firm growth. It is in this spirit that the Center for Global Development proposes 10 principles for financial-sector policymakers—including national authorities, donors, private-sector participants, international financial institutions, and others—on the facilitation, regulation, and direct provision of financial services.

I. INSTITUTIONAL INFRASTRUCTURE FOR PROMOTING ACCESS

Principle 1: Promoting entry of and competition among financial firms

Policy should encourage competitive provision of financial services to customers such as low- and middle-income households and small firms. Policy should favor entry of qualified suppliers that are likely to improve the quality and price of services to such customers (in a manner consistent with financial stability and consumer protection). Competition policy should empower the active investigation of anticompetitive behavior.

Principle 2: Building legal and information institutions and hard infrastructure

Policymakers should work with market participants to eliminate barriers and identify gaps in the institutional infrastructure relevant to small-scale supply. This includes ensuring that payments and collateral systems and hard infrastructure elements for retail transactions are available and have a low unit cost. In particular, collateral and information infrastructures need modern supportive legislation and regulations. The state has a central role in ensuring the availability and maintenance of much of this infrastructure. (Where appropriate, the public sector can provide administrative and financial support to help create such infrastructures.)

Principle 3: Stimulating informed demand

As a complement to other consumer protection activities, policymakers should facilitate education and confidence-building measures among those currently excluded by coordinating, setting standards and curricula, and possibly cofunding private efforts. Financial-service providers play a crucial role in fostering informed consumers, among others, by making information available in a manner suitable to small-scale clients.

II. REGULATION OF FINANCIAL-SERVICE PROVIDERS (FSPs) AND FINANCIAL SERVICES

Principle 4: Ensuring the safety and soundness of financial-service providers

The rules and procedures for prudential regulation of financial-service providers should be carefully designed for consistency with financial-service provision at a small scale. In particular, regulation should be assessed for its impact on access and should reflect the risks faced by low-income households and small firms. Prudential regulation need not be restricted to deposit takers. To avoid regulatory arbitrage undermining sustainable access, consistent protection should drive cross-agency regulatory harmonization.

Principle 5: Protecting low-income and small customers against abuses by FSPs

Low-income and small customers need regulatory protection against abuses by service providers. FSPs should be subject to legislation designed to ensure that they do not sell customers products that are unsuitable for their needs. Market conduct and other regulations in this area (including anti-money laundering and combating the financing of terrorism, AMF/CFT) need to minimize compliance costs while retaining effectiveness.

Principle 6: Ensuring usury laws, if used, are effective

Regulated ceilings on interest rates have often proved to be an ineffective or even counterproductive measure against predatory lending and have often tended to work against increasing access. Where such ceilings are retained, they should be pitched at realistic levels in relation to FSP costs in each market segment and adjusted over time, in line with movements in the wholesale cost of funds.

Principle 7: Enhancing cross-regulatory agency cooperation

Where regulation of financial firms or services is split, agencies should cooperate in policy/regulatory development and supervisory practices to ensure consistent standards of consumer protection, especially of activities related to low-income households and small firms. Even if some FSPs are not covered directly by a regulator, policymakers should ensure that access-related issues relating to those FSPs are not neglected.

III. DIRECT POLICIES USING PUBLIC RESOURCES

Principle 8: Balancing government's role with market financial-service provision

The design of any direct government interventions should seek to respect the commercial market logic as much as possible—especially in regard to cost-effectiveness— and avoid damaging distortions to market functioning.

To facilitate maximum scale through leverage of private capital and initiative, the design of policies and interventions to increase access should avoid stifling private provision.

Some forms of direct government involvement in financial-service provision may be justifiable—for example, when it is otherwise difficult to overcome market failures or to deal with incompleteness of private market provision. Generally such problems require only temporary and catalytic interventions, and they should be explicitly time-bound.

There need to be safeguards at state firms against political interference, especially where credit is being extended. Governance of such firms should be transparent to the public, modeled on best practices for non-government owned firms. Any noncommercial objectives of such firms should be publicly known, quantified, and costed.

All policies for improving access should have clear and measurable objectives and their effectiveness should be quantitatively monitored with transparent public reporting.

Principle 9: Using subsidies and taxes effectively and efficiently

While some permanent element of subsidy can in some cases be necessary to foster access, the design of subsidies should, where possible, be time-bound and aimed at making institutions and access self-financing and sustainable.

All forms of subsidies and policy costs should as far as possible be accounted for and be itemized clearly in the national budget. Any government-provided or -directed credit or other (implicit or explicit) subsidy should be free of political influence, particularly in the credit underwriting process. The taxation of financial services should be access-friendly.

Principle 10: Ensuring data collection, monitoring, and evaluation

Governments should ensure collection of sufficient data to

- allow for the determination of the gaps in access to financial services that will facilitate private-sector solutions;

- provide accountability of public policy for monitoring and evaluation of the effectiveness of pro-access policies; and,

- help build a better, research-based understanding of what works in relation to access.

References

Accenture Development Partners (2010), "*Automation of SACCOs: Assessment of Potential Solutions*", FSD-Kenya, Nairobi

Alliance for Financial Inclusion (2010), "*The 2010 AFI Survey Report on Financial Inclusion Policy in Developing Countries*"

Bankable Frontier Associates LLC (2010), "*Regulation and Supervision of Bank Channels – Policy Options for Kenya*", FSD-Kenya, Nairobi

Bankable Frontier Associates LLC (2010), "*Enabling Mobile Money Transfer – The Central Bank of Kenya's Treatment of M-PESA*", Alliance for Financial Inclusion

Beck Thorsten, Robert Cull, Michael Fuchs, Jared Getenga, Peter Gatere, John Randa, and Mircea Trandafir, (2010) *"Banking Sector Stability, Efficiency, and Outreach in Kenya",* World Bank

Camner Gunnar, Caroline Pulver and Emil Sjöblom (2010), "*What makes a Successful Mobile Money Implementation? Learnings from M-PESA in Kenya and Tanzania*" GSMA

CDS and Oxford Policy Management (2010), "*FSD Kenya Impact Assessment: Summary Report*", FSD-Kenya

CGD Task Force on Access to Financial Services, S. Claessens, P. Honohan and L. Rojas-Suárez, co-chairs (2009); "*Policy Principles for Expanding Financial Access*", Washington: Center for Global Development.

Central Bank of Kenya (2012a), "*Developments in the Banking Sector for the Quarter Ended 30th September 2012*", Central Bank of Kenya, Nairobi

Central Bank of Kenya (2012b), "*Bank Supervision Report 2011*", Central Bank of Kenya, Nairobi

Central Bank of Kenya (2011), "*Mobile Financial Services – Kenyan Experience Presented At The Mobile Money Consultative Workshop, Lilongwe, Malawi*" (Unpublished)

Central Bank of Kenya (2010), "*Bank Supervision Report 2009*", Central Bank of Kenya, Nairobi

Central Bank of Kenya (2010), "*Guideline on Agent Banking – CBK/PG/15*", Central Bank of Kenya, Nairobi

Central Bank of Kenya (2009), "*Bank Supervision Report 2008*", Central Bank of Kenya, Nairobi

Central Bank of Kenya (2008), "*Bank Supervision Report 2007*", Central Bank of Kenya, Nairobi

Central Bank of Kenya (2008), "*Survey on Bank Charges and Lending Rates*", Central Bank of Kenya, Nairobi

Central Bank of Kenya (2007), "*Bank Supervision Report 2006*", Central Bank of Kenya, Nairobi

CGAP (2009), "*Poor People Using Mobile Financial Services: Observations on Customer Usage and Impact from M-PESA*", CGAP, Washington.

Claessens, Stijn, Thomas Glaessner and Daniela Kligebiel (2001) "*Financial Sector Discussion Paper No.7 – Efinance in Emerging Markets: Is Leapfrogging Possible?*", World Bank

Cracknell, David (2004), "*Electronic Banking for the Poor - Panacea, Potential and Pitfalls*", *MicroSave*, Nairobi

Equity Bank (2012) "*Equity Bank Annual Report 2011*", published on www.equitybankgroup.com

Equity Bank (2010) *Equity Bank Group Investor Briefing – June 2010*, published on www.equitybank.co.ke

Equity Bank (2011) *Equity Bank Group Investor Briefing – December 2010* published on www.equitybank.co.ke

FSD-Kenya (2012a), "FSD Insights Issue 4 – "*Why doesn't every Kenyan business have a mobile money account?*", FSD-Kenya, Nairobi

FSD-Kenya (2012b), "FSD Reviews – Driving Change Through Technology: The Postbank Example", FSD-Kenya, Nairobi

FSD-Kenya (2009), "*FinAccess National Survey 2009 Dynamics of Kenya's Changing Financial Landscape*", FSD-Kenya, Nairobi

FSD-Kenya (2010), "*Annual Report 2009*", FSD-Kenya, Nairobi

Government of the Republic of Kenya (2007), "*Kenya Vision 2030: The Popular Version*", Government of the Republic of Kenya, Nairobi

Government of the Republic of Kenya (2008), "*Kenya Vision 2030: Sector Plan for Financial Services 2008-2012*

Government of the Republic of Kenya and Oxford Policy Management (2011), "Kenya: *A Comprehensive Financial Sector Reform and Development (CFSRD) Strategy. Technical Notes for Inception Report"*. Unpublished.

Government of the Republic of Kenya and Oxford Policy Management (2011), "*Kenya: A Comprehensive Financial Sector Reform and Development (CFSRD) Strategy. Inception Report*". Unpublished.

Hass, Sherri, Megan G. Plyler and Geeta Nagarajan (2010), "*Outreach of M-PESA System in Kenya: Emerging Trends*", Iris Centre, University of Maryland

Hassan, Naheed, Richard Ketley and Tom Oyier, Genesis Analytics (Pvt) Ltd, (2009) "*Definition of a Standard Measure for Consumer Interest Rates in Kenya: A Scoping Study*", FSD-Kenya

IFC / Economist Intelligence Unit "*Global Microscope on the Microfinance Business Environment 2012*", EIU.

Johnson, Susan and Max Nino-Zarazua, CDS, University of Bath (2008), "*Financial Exclusion in Kenya: An Analysis of Financial Service Use*", FSD-Kenya, Nairobi

Kabbucho, Kamau Cerstin Sander and Peter Mukwana (2003), "*Money Transfer Systems: The Practice and Potential for Products in Kenya*", *MicroSave*, Nairobi

Kenya Bankers Association (2010) "*The Credit Providers Association Roadmap 2010-15*"

Mantilla, Jose E, Peter M Mwangi and Jennifer W Kibaara (2009), "*Costs of Collateral in Kenya: Opportunities for Reform*", FSD Kenya, Nairobi

Mas, Ignacio, and Dan Radcliffe (2010), "*Mobile Payments go Viral: M-PESA in Kenya*" Bill & Melinda Gates Foundation

Mas, Ignacio and Amolo Ng'weno (2010), "*Three keys to M-PESA's success: Branding, Channel Management and Pricing*" (unpublished)

Microfinaza (2010), "*FinAccess Supply Side Survey 2010*", FSD-Kenya, Nairobi

MIX and CGAP (2010), "*Sub-Saharan Africa 2009 Microfinance Analysis and Benchmarking Report*"

Mobile Money Africa (2011), "*Kenyan banks facing mid-life crisis*" http://mobilemoneyafrica.com/?p=3072

Mwangi, James (2010), "*CEO's Presentation –The Market led Revolution of Equity Bank*", Equity Bank, Nairobi (unpublished)

Postbank, (2010) "*The Postbank Story – A Century of Wealth Creation Through Savings"*, Postbank, Nairobi

Roe Alan, and Steve Peachy, Oxford Policy Management (2008) "*Understanding the Banking Sector – Strengthening Information and Analysis in Kenya*", FSD-Kenya, Nairobi

UNDP (2009), "Human Development Report 2009, Overcoming barriers: Human Mobility and Development"

Vaughan, Pauline (2010), "*Presentation to the Applied Microfinance Institute*", Safaricom (unpublished)

Waweru, Nelson M. and Victor M Kalani (2009) "*Commercial Banking Crises in Kenya: Causes and Remedies*" African Journal of Accounting, Economics, Finance and Banking Research Vol. 4. No. 4. 2009

World Bank (20..), "*An Assessment of the Investment Climate in Kenya*", World Bank, Washington.

World Bank (20..), "*Summary of An Assessment of the Investment Climate in Kenya*", World Bank, Washington.

World Bank (2010), World Development Indictors database.

Wright, Graham A.N. and David Cracknell (2008), "*The Market led Revolution of Equity Bank*", *MicroSave*, Nairobi

Wright, Graham A.N. and Trevor Mugwang'a (2010), "Kenya Post Office Savings Bank's Implementation of the New Business Model", *MicroSave* Nairobi (unpublished)

Women's World Banking (WWB) (2008) "*Diagnostic in Action: Microfinance In Africa*", WWB, Washington DC