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Mobile Money and Empowering the Lesser off Segments in Society: Mobile Accumulating Savings and Credit Association (M-ASCA) Model in Kenya

Dr. Martina Mulwa
Lecturer, School of Journalism and Mass Communication
University of Nairobi
Nairobi, Kenya.

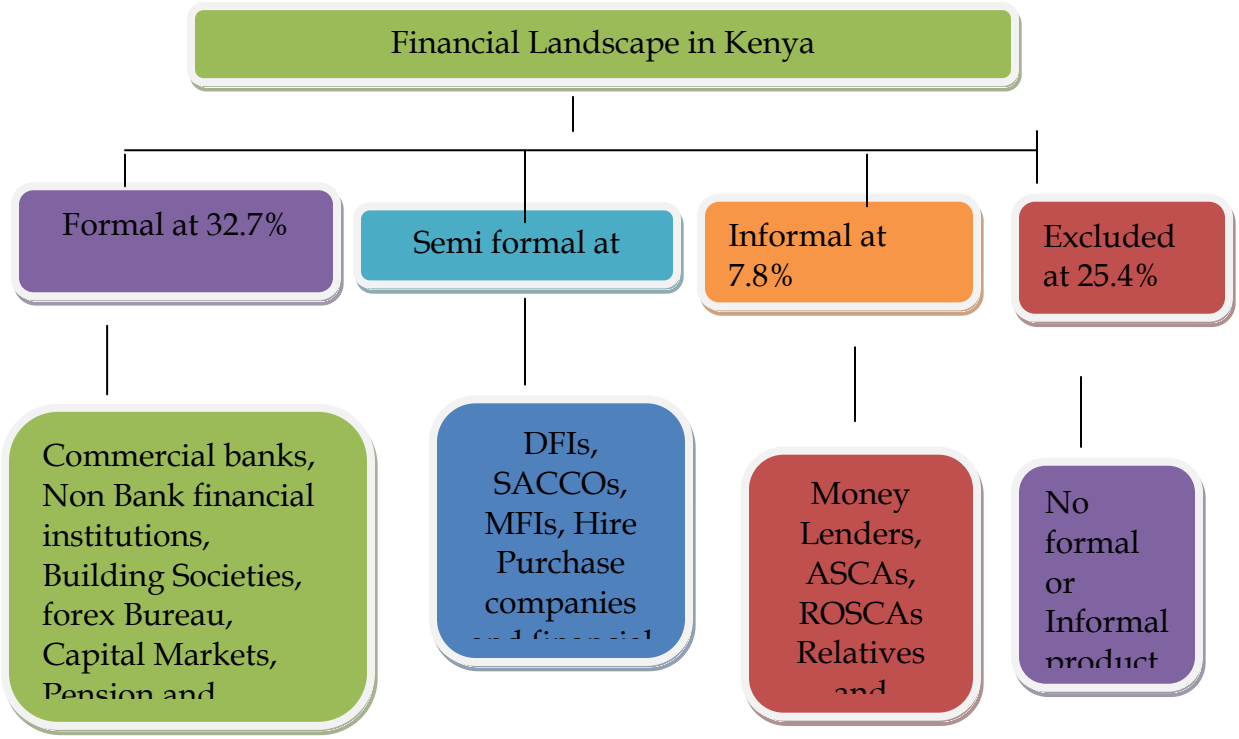
Abstract
The Kenyan informal sector is characterized by an ecosystem of self made informal savings and credit groups as well as informal money lenders that target the unbanked and marginalized populations for credit at exorbitant interest rates. Huge sums of money are intermediated through the informal models on an annual basis. However, these models have several challenges. In addition, majority of those in the groups are vulnerable groups that have no assets to enable them get affordable credit from banks. The unemployment rate in Kenya is also very high meaning that the immediate option is self employment and consequently startup capital. The demand for affordable credit and the need for a convenient savings channel calls for innovative models that nurture a saving culture as well as a sustainable social support system. M-ASCA (mobile accumulating savings and credit association application) is a new end to end mobile phone-based platform which allows anyone anywhere in the country to register on phone, save, borrow, guarantee and request to be guaranteed, repay loans and exit. Members accumulate savings from their virtual wallet little by little and borrow up to three times or more of their savings depending on group rules at affordable interest leveraging on their friends and relatives as guarantors from anywhere in the country. The platform also allows groups to manage common accounts with ease.

Key words: Lesser off segments, affordable credit, convenient savings channels, M-ASCA.

1.0 Introduction

Mobile money systems have transformed the execution of monetary transactions in Kenya. As of December 2013 (CCK, 2013) 26.1 million subscribers were active in various forms of mobile money transactions among them money transfers, mobile banking, payment systems or other forms. Consequently, populations excluded from formal financial services in Kenya have had a chance of participating, with financial service providers extending their services to the segments through agency networks whose number stood at 93,689 as of December 2013. Further mobile phone subscribers increased from 29.2 in 2012 to 31.03 in 2013 (CCK, 2013). Driving the exponential transformation is the acute lack of formal financial services particularly in rural areas, in addition mobile money products on offer have been designed to address needs that target poor and marginalized populations. For this reason, even, populations that were in urban areas but excluded from existing financial services due to unsuitable models (Mulwa & Ndati, 2013) have found mobile money systems friendly and accommodative of their specific needs. Such needs include convenience of operating hours, amounts of transactions, any time anywhere access, privacy, intermediation among others.

According to fin access (2013) 32.2% of bankable populations were excluded from formal banking services. In an attempt to address this gap, various innovations have leveraged on the flexibility of the mobile phone to reach the unreached in Kenya and beyond. In addition, money transfer models have remained fairly stable since the inception of m-pesa in 2007, and most of the emerging models seek to ride on these services to provide solutions to a wide range of user needs. Consequently, the due to the characteristics of ICTs (i.e. flexibility, recombination and self expansion), access to excluded populations does not warrant set up of contact points, a virtual community enough to support the system providing access is possible through networks. For this reason, mobile money systems have orchestrated a paradigm shift in the way monetary transactions have traditionally been offered and have ushered in a new era; an era defining the relationship between the different time-sharing practices with their distinct material foundations (Castells 2004). This shift is characterized by decentralized operations to the point of individuals and access points independent of traditional structures and models; Operations that are governed purely by the mobile money user in execution, magnitude, who and when to perform these transactions. People in remote rural villages have found way into the traditional money systems albeit this time in a more fulfilling manner, dignified and convenient.



Adopted from Fin access survey study 2013

Figure 1: Kenya financial Sector Landscape

1.2. Problem Statement

The poor have been defined as people with inadequate income and deprived of basic needs and rights, lack access to productive assets as well as social infrastructure markets. Marginality on the other hand is seen as an involuntary position and condition of an individual or group at the margins of social, political, economic and biophysical systems preventing them from access to resources, assets, services, and restraining freedom of choice, preventing of the development of capabilities and eventually causing extreme poverty. Kenya is categorized as a very poor country with a per capita income of $ 1,700 and ranked 154th out of the 183 countries of the world. According to Kenneth Dachi (2012), 49% of Kenyans live in absolute poverty; an equivalent of Ksh 1,239/- per person per month in rural areas and Ksh 2,648/- per month in urban areas. These people have no means of meeting basic human needs and lead dehumanizing lives according to universal norms of human dignity which include starvation, lack of shelter and are likely to result to immoral activities for survival. Consequently, the unemployment rate in Kenya stands at 40% (Trading Economics, 2014) meaning that existing affordable savings services in the form of SACCOs (Savings and credit cooperative societies) are not available for these people.

Poor populations in Kenya are regarded as small holder farmers, farm laborers, unskilled and semiskilled workers, households headed by women, people with disabilities and orphaned children (Tegemeo, 2012). Yet even with this grim picture, Sub-Saharan Africa is regarded as having a thriving informal sector with numerous small businesses that require little capital injection to get them started and sustained. In addition, Prahalad (2006) is of the view that though the poor are of limited means,

taken as an aggregate constitute a viable business volume. Unfortunately, proprietors of these small ventures are continually frustrated by the legislative system and consequently the populations in these areas are excluded from essential services because of their meager resources, are sparsely populated and usually reside in rural areas that lack basic infrastructure (SIDA review, 2010). Instituted support systems to these populations will encourage entrepreneurship, bolster incomes and see living conditions improved through access to growing incomes.

The year 2015 was the designated date for achieving the Millennium Development Goals (MDGs), of which Kenya is numbered among the signatories. MDG Goal 1 calls for the Eradication of Extreme Poverty and Hunger (UNDP, 2012). Financial services are one of the priority sectors under Vision 2030. Among the key objectives under the sector is to improve access and deepening of financial services and products for a much larger number of Kenyan households and small businesses. Mobile money systems have demonstrated the capability of providing access of mainstream financial services to marginalized populations and in effect deepening financial services to the unbanked populations.

The desperate unemployment situation and the entrepreneurial needs of the Kenyan people call for outside the box solutions. This is particularly urgent considering that, high poverty rates in Kenya cannot nurture a saving culture unless an enabling environment is created. An entrepreneurial culture can only be nurtured through models that can provide affordable start up capitals to the segments. While the government of the day is alive to this concern through initiatives like the Uwezo, women and the youth funds, it is important to nurture a responsible citizenry through sustainable models of financing the entrepreneurial sector.

Currently for anyone to get financing from the formal sector conditions apply. These conditions are outside the capabilities of the irregular income earners. Furthermore, the banks require collateral for anyone to access their credit. For a long time, women and children in Kenya have been deprived of property rights meaning that they have nothing to offer in case they needed credit. However, this exclusion has forced the disadvantaged segments to turn to non-discriminative financial sources; sources that have left them worse off or have proven unreliable. Getting financing for the financially excluded is inevitable and continuing to expose them to informal services characterized by scissor interest rates is neglect from those that can enable better channels, viable channels alive to the conditions these people have found themselves in is necessary. Furthermore, according to FSD Kenya (2009), a total volume of some Kshs 65 billion (close to US$1bn) is intermediated through ROSCAs and ASCAs (the two common informal groups in Kenya) on an annual basis. Given this, there is a justification for arguing that efforts could be directed to improving the internal organization of these groups to reduce the risk of losses through this highly prevalent form of financial intermediation.

1.3. The M-ASCA Model

The M-ASCA model is a virtual savings and credit mobile phone-based application that aims at bringing community members together in order to improve their livelihoods. The M-ASCA Platform targets every adult Kenyan irrespective of their background (youths, women, small scale business people, the unemployed, private institutions etc) interested in saving in order to access capital for investment, business start ups, old age savings or any other viable needThe platform enables users to register as

members, save from integrated virtual wallets, apply for loans, request guarantors and get guaranteed on phone, get disbursements to M-ASCA phone based accounts, check balances and exit from the system among other functionalities. The platform is impeded with an SMS communication system to encourage members to save or repay loans among other communication needs. M-ASCA deliberately recognizes groups (SACCOs, welfare and family support systems) and connects them virtually by automating the social guarantor requirements, and allows common kitties and management through confirmation by signatories. A pure electronic process allows people with irregular income to submit small amounts little by little; it also provides access to marginalized populations nurturing a saving culture as well as well as ensuring financial inclusion. It fosters transparency and streamlines the informal sector by providing affordable credit to those who do not have access to traditional financial services for their self-sustaining business activities.

1.4. Objectives

The purpose of this paper is to explain the usefulness of mobile money systems in reaching out to the lesser of segments in a beneficial way by dissecting the gaps exhibited by financial inclusion models targeting the lesser off segments and further demonstrate how the M-ASCA[i] model in Kenya fills this gap.

1.4.1. Specific objectives:

1. Analyze in detail the existing financial inclusion models targeting the poor and marginalized populations in Kenya.
2. Highlight critical areas in need of interventions for financial inclusion of the target group.
3. Demonstrate how the M-ASCA model in Kenya is designed to address the specific financial inclusion needs of the lesser off segments in society.

2.0. Literature Review

Microfinance, the provisions of financial services to the low-income households and micro and small enterprises (MSEs), provide an enormous potential to support the economic activities of the poor and thus contribute to poverty alleviation (George Omino CBK, 2005). Widespread experiences and research have shown the importance of savings and credit facilities for the poor and MSEs. This puts emphasis on the sound development of microfinance institutions as vital ingredients for investment, employment and economic growth. The potential of using institutional credit and other financial services for poverty alleviation in Kenya is quite significant. About 18 million people, or 60% of the population, are poor and mostly out of the scope of formal banking services. According to the National Micro and Small Enterprise Baseline Survey of 1999, there are close to 1.3 million MSEs employing nearly 2.3 million people or 20% of the country's total employment and contributing 18% of overall GDP and 25% of non-agricultural GDP. Despite this important contribution, only 10.4% of the MSEs receive credit and other financial services. The formal banking sector in Kenya over the years has regarded the informal sector as risky and not commercially viable.

According to the Poverty Reduction Strategy Paper (PRSP) of 1999, a large number of Kenyans derive their livelihood from the MSEs. Therefore, development of this sector represents an important means of

creating employment, promoting growth, and reducing poverty in the long-term. However, in spite of the importance of this sector, experience shows that provision and delivery of credit and other financial services to the sector by formal financial institutions, such as commercial banks have been below expectation. This means that it is difficult for the poor to climb out of poverty due to lack of finance for their productive activities. Therefore, new, innovative, and pro-poor modes of financing low-income households and MSEs based on sound operating principles need to be developed.

Mobile money has been proposed as a promising trajectory in the effort to address financial inclusion of the poor and marginalized (Mulwa and Ndeti 2013). According to Fischer (1991) technology is seen as a fundamental dimension of social structure and social change as it is defined as the use of scientific knowledge to set procedures for performance in a reproducible manner and it evolves interaction with other dimensions of society, with its own dynamics linked to the conditions of scientific discovery, technological innovation and application and diffusion in society at large. Financial exclusion is one condition the social has lived with for a long time and there has been a deliberate effort by human beings to find solutions to the problem. According to Gould, S. (1980) society is constantly seeking solutions to issues that affect their day to day activities and in the event the current status does not address these issues effectively the quest for discovery is enhanced. So, we are simply saying traditional lending methods have not been able to address the needs of the unbanked in Kenya. Segments characterized by inaccessible, unaffordable credit facilities, there is need for a revolution just like in the industrial or the agrarian. There is need for a paradigm shift in the approach to provision of financial services to these segments. Credit considerations must factor their specific financial needs in their places; accommodate cash flow patterns and repayment regimes that are flexible because their context is specific.

Institutionalized services elusive, the network society and what Castells calls the space of flows have a profound implication on the execution of services through mobile money models. Space, is an historical conjuncture and a social form that derives its meaning from the social processes that are expressed through it (Castells, 2004). Consequently historically, the only space that allowed for time-sharing was a place, that is, “a locale whose form, function, and meaning are self-contained within the boundaries of physical contiguity (e.g. the bank branch). However, the new structuring exhibited in mobile money in which the dominant social processes are reorganized and managed through flows is taking place. That is, through “purposeful, repetitive, programmable sequences of exchange and interaction between physically disjointed positions held by social actors (Castells 2004)”

The fact that two actors can be in different places but share the same time indicates that the social reality of space has been transformed bringing those actors together in time without contiguity of physical space. Since time and space are coextensive, then the new space is fundamentally different from physical space, yet connected to it because actors are physical beings (Castells, 2004). Therefore, geographical barriers do not necessarily impede activities of the space of flows.

This new space, the space of flows, does not replace the geographical space; rather, by selectively connecting places to one another, it changes their functional logic and social dynamics. For Castells, the emergence of the space of flows signifies, the entrance into a new era defining the relationship between the different time-sharing practices with their distinct material foundations. Networked services are

available to users anytime and anywhere making it possible for the marginalized, previously ignored viable population access formal financial services, not leaving their geographical places but sharing the space from their places.

2.1. Existing Micro Finance Models

The un-employed in Kenya are in dire need of startup capital as demonstrated by robust activities recorded by the informal money lenders. The fact that Kenyans have been borrowing and the informal sector is thriving is reason enough to initiate a secure affordable model for the deserving segment. Safe the government initiatives of Uwezo, women and youth funds which need to be supplemented, various models particularly MFIs that lend money to groups of people in the informal sector have proven unfriendly due to their risk mitigating strategies[ii]. The models force members to contribute money on the spot for defaulters, their interest rates are high and repayment is on a particular date, all members must converge and contribute to raise a common banking slip. For those that have adopted the mobile money payment system, they still retain high interest rates. Furthermore, due diligence is usually carried out at the borrowers home by listing household items and only giving a minimum value as the resell value in case the borrower defaults (Mulwa and Ndeti 2013). For this reason, one could have escalated contributions but because they lack collateral they are un-able to access loans that could be of significant assistance to them compared to the amount of contributions held. The MFI model across board in Kenya is both humiliating and intimidating confirmed by several women who have been members of various MFI, their reservations of ever joining such groups again is evident. Besides these models still rely on setting up branches in their areas of operation; meaning that their reach just like that of the banks is limited. The formal financial sector constituting banks is inaccessible as the bank network is limited (CBK 2008), and collateral key to any credit. Collateral the lesser off do not have.

Two significant informal financial services dominating the informal sector are the Rotating Savings and Credit Associations (ROSCA also known as merry go round) and Accumulating Savings and Credit Associations (ASCAs) (FSD Kenya 2009)). These are similar to each other in the sense that they are both voluntary and independent groups with their own rules and no outside organization with control over them. They both have regular meetings where members contribute a standard figure to a common kitty. The central difference between ASCAs and ROSCAs is that each time a ROSCA group meets and savings are collected, and the contributions for that sitting is immediately redistributed to one or several members of the groups without interest. ASCAs on the other hand lend the contributions done in a sitting to willing borrowers with interest. The interest paid on the loans is then accumulated in the group fund. At the end of the year ASCA members often divide part of the profits (from interest payment) to the members.

A study by Anderson and Baland (2002) and Anderson, Baland and Moene (2004) claim that their findings from the slums of Nairobi support the hypothesis that ROSCA members are interested in saving towards an indivisible good like school fees, rent and clothing. Anderson Anderson, Baland and Moene (2004) also found that ROSCA groups faced two main problems. Members either did not pay their contributions regularly or they stopped contributing after they had received their lump sum of money.

ASCAs on the other hand initiated regular meetings (Anderson (2004[iii]). From the first meeting onwards, each member saved a minimum monthly amount of a specific amount e.g. Kshs 100. Members were allowed to save more if they wished. After a specified period, members were able to access loans at interests ranging from 10% for short term loans to 2.5% for long term loans.

According to FSD (2009) members were found to prefer flexible repayments as opposed to weekly repayments that are common in MFIs. Members also liked the flexible savings especially the fact that the repayment of the principal could be rolled over if necessary (an aspect borrowed in the mobile money product m-shwari in Kenya). In this respect the members preferred the ASCA products to ROSCA products where the member received the lump sum at a certain time regardless of whether there was need at the time. Members valued the ability to re-negotiate the loan terms. Renegotiating loan terms with banks and MFIs is normally very difficult. Members also valued the financial return that they received in the form of bonuses from the group. In ASCA groups the interest rates that members payed stayed in the group and were partially repaid back to the members in the form of bonuses. The retained accumulated interest also increased the size of the loan fund enabling the members to take bigger loans.
However, the two models had several challenges (Johnson et. al (2002) for 1999 and 2001; DFS for 2007). which our model seeks to mitigate, 1) Costs consisting of erroneous charges, low interest on savings and high interest rates 2) Convenience in that sometimes branches closed, were offered better services elsewhere, time and effort to attend meetings, time and effort to do transactions and institutions were far away 3) risk /trust in that they feared losing money through fraud and theft and paying for defaulters 5) communication in that they were not treated well and 6) management challenges as well as powerful individuals taking advantage of members. This is because in most of the groups many people were illiterate and even for the literate understanding the financial status of the group from the bookkeeping records was often difficult. These challenges could easily be mitigated through the mobile money system.

A critical comparison of M-ASCA and MFIs, ROSCAs and ASCAs is that M-ASCA addresses four key issues that have been a barrier to the sustenance of financial institutions that rely on social collateral as their risk mitigating strategy: 1) the recovery system for defaulters 2) trust and social guarantors 3) increased borrowing capacity 3) growth of savings. While ROSCAs are limited in growth since no interest is charged, the ASCA Model has the potential to fill the financial inclusion gap if innovative solutions were pursued. A streamlined execution process and management of the model could ensure a sustainable source of credit for the Small and Medium sector in Kenya compared to the other Informal micro finance formations.

2.3. Micro Finance and Mobile Banking

While the M-ASCA is cognizant of the fact that various micro finance models in Kenya are using mobile banking in innovative ways, their use has been limited to a few links within the microfinance business process, namely on loan repayments, loan disbursements, and savings mobilization. The M-ASCA model aims at reaching the unreached honorably, delimiting shortcomings associated with trust, simplifying operations and increasing efficiency; essentially automating the whole savings and credit

process and creating virtual groups of people known to each other, those who trust and have a connection beyond the savings and credit group they may find themselves in.

A GSM report 2014 revealed that Kenya was a global leader in Mobile Money business holding 1/3rd of worlds 61% mobile phone money accounts. Consequently, according to a CGAP (2013) report, MFIs that are successfully leveraging m-banking tend to be in countries where an m-banking service is already widely used. In such markets, MFI customers may even expect or demand their MFI to offer m-banking as a repayment option. The benefits of m-banking services to MFIs largely depend on the success of the existing m-banking service itself. In markets where m-banking is strong, MFIs and their customers can more easily benefit. However, concerns raised in the (CGAP, 2013) report included questions on how the transition to mobile money would affect group dynamics and repayment rates, how management information system reconciliation would occur, and how customers and staff would adjust to new payment options. These concerns need not be a stumbling block to the transition considering that these reservations constitute some of the challenges facing the informal sector.

The M-ACSA product mitigates to a great extent challenges cited in the MFI models or the informal sector. Because of the mobile phone-based registration, geographical boundaries are blurred and a friend, relative or colleague anywhere in the country can offer that support needed in M-ASCA, interest rates are minimal because there are no meetings, officers attending meetings and funds are mobilized through member contributions. The product design allows members of a group to save as individuals and also as a group. The design also has two savings platforms which allow members to lock savings and borrow at M-ASCA rates or to save into a temporary account where they mobilize funds and are able to either push to the loans savings account or to simply withdraw to a bank account of choice or send to a member's virtual account. In the temporary account members can dictate interest of funds disbursed to members as members can repay disbursed amounts to the temporary account. Signatories of the common kitty are notified any time transactions are initiated. Consequently, because of its semi formal nature legal and related additional costs are significantly reduced.

Once a mobile banking model is considered, CGAP (2013) recommends going the m-banking route from the beginning to avoid the costs and challenges of change management and to ensure that the investment in m-banking replaces other costs, rather than adding to the parallel costs of cash. In addition, a system-based reconciliation of accounts would address settlement concerns adequately. The M-ASCA system is designed to perform customer due diligence, and credit decision-making. The embedded SMS communication system mitigates the face to face interaction requirement and further keeps members informed of their obligations. Besides, the M-ASCA system is easily subscribed to the credit reference bureau in Kenya to discourage deliberate defaulting.

Inconvenience, one of the challenges cited in the FSD Kenya (2009) study in regard to existing channels due to the need for physical presence in meetings is easily mitigated as customers value the time and cost of incurred in accessing branches and are better served by m-banking options or agents compared to branch proximity even though some of the m-banking options are tariff based. M-ASCA further adopts an anytime anywhere payment system. One of the reasons given for a poor saving culture by the bottom of the pyramid populations (Fredrik, B., and Martin P. 2009) is that there are many competing needs and

the proximity to a saving channel determines whether a saving is done or not. The alluded thinking here is that people would like to save money but the more the one stays with money the more other competing needs take centre stage. Understanding lesser off segments and designing appropriate financial inclusion channels that take into consideration the characteristics, capabilities and needs of these people will go a long way in providing a permanent solution to a rather disturbing scenario; M-ASCA is in this mode.

The aim of M-ASCA is to extend affordable credit to the financially excluded through an electronic member's savings and credit association, nature a saving and borrowing culture and encourage entrepreneurship for self-sustenance, empowerment and self-employment. The model dignifies and empowers the lesser off segments in society through a credit and loan facility that unleashes their potential through active participation, freedom associated with convenience and transparency occasioned by real-time update of transactions (m-asca, 2015).

3.0. Specifics of the M-ASCA Model

M-ASCA targets those excluded from formal financial services and henceforth exposed to the informal financial sector characterized by exorbitant interest rates for credit and poor management of group activities.

The targeted segments engage in small businesses, with equally small margins of profit as a result of saturation of similar activities and limited capacity for alternatives. In M-ASCA members access credit at affordable interest as the model uses members pool their own resources together.

M-ASCA mobile money enables the organization to serve its members in the entire country, breaking infrastructural and other logistical barriers as well as geographical limitations, and by minimizing the costs of operations such as cutting down on agents and facilities being set up all over the country. This does away with over reliance on agents and enables members to directly access services via their phones. People make use of their existing networks from any part of the country enabling virtual associations.

The model is deliberately designed to eliminate wasting crucial time for members in meetings at the expense of working choosing to empower them to take charge of the management of their financial affairs. The model also avoids tying members to a circle of friends and anyone anywhere can be an M-ASCA member and a guarantor can be anyone in any part of the country. It encourages people to know each other and socialize from wherever they are.

The model is in cognizance of the fact that convenience is critical in nurturing the saving culture of lesser off segments. Though there is a viable economic ecosystem at the base of the pyramid, saving is one among many competing needs, hence the need to avail opportunities for saving close to sources of income and as conveniently as possible. Supported by the m-pesa and equitel network of outlets, the design puts into consideration the fact that people in the informal sector may not have regular income but access some money anyway, it is necessary to tap this resource at the earliest opportunity. The M-ASCA model allows members to save any amount; as little as Ksh 50, which the system can accept anytime and as many times as one wishes in a day. It also allows them to repay loan installments bit by bit anytime within the month as long as by the end of the month the whole installment has been paid.

M-ASCA recognizes the different social support structures in the country and factors in group saving, where members of a family or an organized group like chamas[iv] come together and save into a common kitty here referred to as "super guarantor". Members of the group get guaranteed from the common kitty, and any money leaving the common kitty (super guarantor) must be confirmed by the signatories. The system also helps in mobilizing savings either through the temporary account or the loan savings account.

Members are encouraged to repay or increase their savings through tailored or programmed messages. The platform is also used to educate members of benefits or repaying loans and saving.
This is made possible by the USSD (unstructured supplementary service data) based platform for lower end phones and an app for smart phones. The design is considerate of the heterogeneous demographics and hence simplified to make it easy to use, enabling members to follow a step by step procedure that allows them to navigate services offered by the associations.

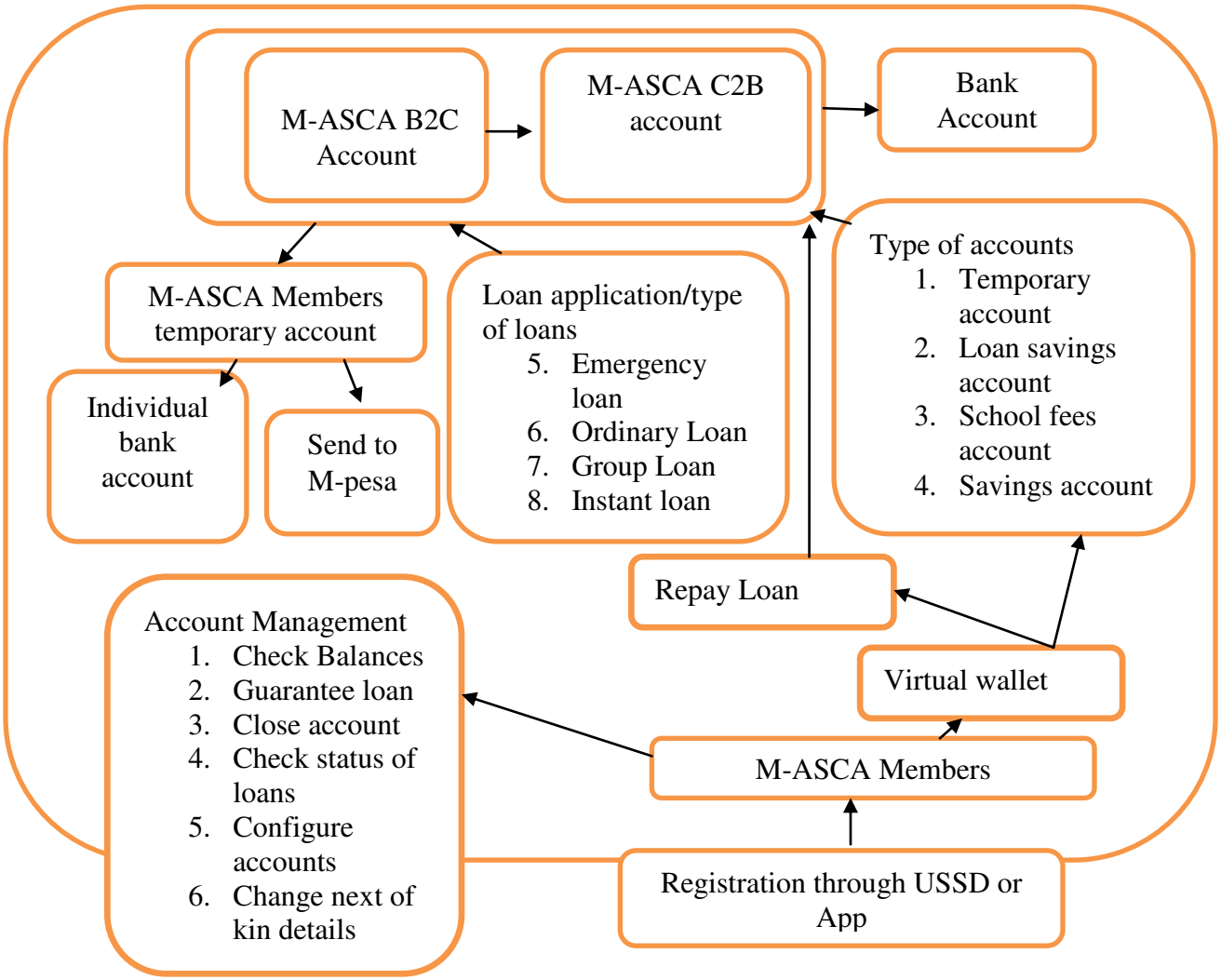


Figure 2: The M-ASCA processes

M-ASCA members dial the USSD code or access the M-ASCA app from their phone to register and access the m-asca platform by using an auto generated PIN after registration. On the menu there are six modules: 1. Savings – where members save to various accounts from their virtual wallets. 2. Send to m-pesa and 3. Send to bank- members send money from the temporary account to their virtual wallet or request for the funds to be transferred to the bank account already configured via the system. Money in the temporary account is either a disbursement from the m-asca association or just a temporary saving by the member. The savings account and school fees accounts are lockable and are withdrawable accounts done after a regular interval programmed by the member. 3. Loans- members can apply for the different types of loans, repay loans, check status of loans or guarantee loans. In loan application the member enters the amount to borrow, duration and then telephone numbers of guarantors while in guarantee loan the guarantor gets the request by the borrower and chooses either to accept or decline the request. 5. Enquiries – the member can check balances and get statements of all savings accounts while 6. Under my account the member can change pin, configure bank account details or next of kin details and send text or call customer care. All payments go to the C2B (customer to business) account while all disbursements are done from the B2C (business to customer) account. Money in the customer to business account can be moved to the association's bank account.

3.1. Advantages of M-ASCA

Registration of members is electronic, this escalates uptake as documentation required from the target segments sometimes becomes a barrier to uptake of these services.

Flexible repayment terms will give members peace of mind to concentrate on making businesses profitable and in effect ease of payments as well as value for credit. The mobile based Guarantor system encourages recruitment of friends and relatives forming a network of people known to one another from anywhere in the country supporting one another from anywhere mitigating issues of trust that hinder people from guaranteeing strangers. These virtual networks help in incorporating majority of the unbanked populations into the formal system and consequently ripping the benefits as well as scaling the product. The model is affordable, interest rates are low and model is considerate to the hardships Kenyans go through. Kenyans get value for saving. Discriminated populations in terms of un employment, women and youth for lack of collateral enjoy credit with themselves as the guarantors. The product has the potential of creating a unified Kenya as the guarantor system is universal anyone anywhere is capable of guaranteeing the other. Membership does not need to seize when one relocates or is away from friends. One can create new friends and entice new friends to join from wherever they relocate to. As a result, Kenya becomes one community united by M-ASCA.

4. Conclusion

The analysis has clearly demonstrated the importance of the informal financial service sector. Through the informal financial sector 35% of the population, who would otherwise be excluded, have access to financial services. Informal groups also serve poorer clients compared to semi-formal and formal service providers as well as many small-scale farmers that SACCOs may not be interested in serving.

There is justification for a consulted effort to engage directly with informal groups in a bid to improve their operations in ways that will deliver higher quality services to some of the poorest people who currently lack access. Engaging with informal groups has clearly been demonstrated to be problematic. This analysis further illuminates that these groups face many challenges, in terms of payments, management and governance of the groups, mismanagement of funds and theft. Approaches to working with these groups must therefore consider how to deal with this tension and allow for this negotiability by enabling groups to serve their member's needs effectively and respond to emergencies. Working with groups on the basis of their own savings alleviates the need for rigid external performance assessment but may be done in ways that improve their transparency and accountability and hence effectiveness for users. Given their importance in overall access and the evidence of how much savings they mobilize, it is appropriate to consider how their services might be improved, especially in the light that many of these groups are not well organized.

The M-ASCA model comes in handy to streamline the management of the operations of the service through the strategic partnerships that would address the challenges cited by designing a universal savings and credit product that goes beyond to address barriers of socio-demographic factors of age, geographical location, education and gender. The M-ASCA model is also appropriate as it does not fall under the regulations governing deposit taking Micro finance Institutions whose capital and other set up requirements are far beyond the capability of members and incompatible with the simplistic cost cutting measures the M-ASCA model adopts to ensure access. According to the Micro Finance Amendment Act (2013) informally constituted MFIs like Rotating Savings and Credit Associations (ROSCAs), club pools, financial services associations (FSAs) or Accumulating Savings and Credit Associations (ASCAs) should not be supervised by an external agency of the Government. Donors, commercial banks, and government agencies from which they obtain funds or that support them should carry out due diligence and make informed decisions about them.

The mobile money payment system in Kenya has proven to be a reliable and sound method of tracking funds and providing the accountability required in the management of public funds (Alliance for Financial Inclusion, 2010). The M-ASCA model is thus a reliable model capable of overcoming the challenges encountered in the operations of various informal Micro Finance Institutions effectively transforming the lives of over 16 million Kenyans who depend on the Informal financial sector for credit.

REFERENCES

Alliance for Financial Inclusion (AFI) (2010). *Enabling Mobile Money transfer. The Central Bank of Kenya's Treatment of M-pesa*. Available at http://www.gsma.com/mobilefor development/wp-content/uploads/2013/09/enablingmobilemneytransfer92.pdf.

Anderson, Siwan , Jean Marie Baland and Karl Ove Moene (2004). *Enforcement and Organizational Design in Informal Savings Groups.* Washington DC: Bureau for Research In Economic analysis and Development.

Anderson, Siwan and Jean Marie Baland (2002). The Economies of ROSCAs and Intrahousehold Resource Allocation. *The quarterly Journal of Economics*. 963-995

Castells, M. (2004). *The Network Society. A Cross-cultural Perspective*: Edward Edgar publishing.

CBK (2008). *CBK Regulations*. Available at http://centralbank.go.ke/downloads/acts/regulations/draft_agentbankingproposal.pdf

CBK (2010). *Guidelines on Agent Banking CBK/PG/15*. Available at. http://centralbank.go.ke/downloads/bsd/GUIDELINES/ON/AGENT/BANKING/CBK/2015.pdf

CCK (2014). *Quarterly sector Statistics Report, Second Quarter of the Financial Year 2013/2914 (Oct-DEC 2013). A*vailable at www.cck.go.ke/

CCK. (2012). *Statistics Sector Report 2011/2012* Available at www.cck.go.ke/rsc/statistics/SECTOR_REPORT_Q1-1011.pdf

CGAP (2013). Micro finance and mobile banking: Burring lines. Available at www.cgap.org.

Dr. Martina Mulwa & Dr. Ndeti Ndati (2013). Network Logic And The Stabilization Of Mobile Banking Products A Case Study Of Selected Mobile Banking Products In Kenya. *International Journal of Innovative Research & Development*. www.ijird.com August, 2013 Vol 2 Issue 8

Fredrik, B., and Martin P. (2009). *Assessing Factors Influencing the Diffusion of Mobile Banking in South Africa*: a case study on the Company Wizzit. School of Business Economics and Law, Gothenburg University.

FSD Kenya (2009). The Role of Informal Financial Groups in Extending Access in Kenya. Available at www. Fsdkenya.org

FinAccess National Survey (2013). *Profiling Developments in Financial Access and Usage inKenya*. Available at www. fsdkenya.org-/fin access 13 _results_analysis.pdf.

Gem Argwings-Kodhek (2004). *Feast and Famine. Financial Services for Rural Kenya.* Tegemeo Institute of Agricultural Policy and Development. Available at www.learningace.com/doc/

George Omino (CBK) (2005). *Regulation and supervision of Microfinance Institutions in Kenya.* Available at www. Cgap.org.

Johnson,S, Nthenya R. Mule. R Hickson and W Mwangi. (2002). Managed ASCA Model-Innovation in Kenyas Microfinance Industry. *Small Enterprise development* 13(8): 55-66

Kenneth Dachi (2012). *Arresting income inequality in Kenya and perspectives for the wider East Africa*. Available at http: www.farewell.consultants.com/index/ 1

Prahalad, C.K. (2006). *The fortune at the Bottom of the Pyramid*. Pearson Education, Inc. Wharton School Publishing, Upper Saddle River, NJ07458.

Kenya Gazette Supplement (2013). *The Microfinance (Amendment) Act 2013*. Available http://kenyalaw.org/kl/fileadmin/pdfdownloads/AmendmentActs/2013/Microfinace_Amendment_Act_2013.pdf.

Safaricom Agent Manual (2009).

Sida Review (2010). *The Innovative Use of Mobile Phones in East Africa*. Available at http://www.textochange.org/sites/default/files/newsfiles.sr2010-12_sida_hellstorm.pdf.

Tegemeo, (2012). *Rural Incomes Inequality dynamics in Kenya*. Available at http://www/tegemeo.org/documents/work/Tegemeo-WP30-rural-incomes-inewuality-poverty-dynamics-in-Kenya.pdf

Trading Economics (2014). *Kenya unemployment rate*. Available at www.tradingeconomics.com/keya/unemployment /rate

UNDP (2013). *The Millennium Development Goals Report 2013.* Available at http://www.undp/org/library page/mdg/the-milleneum-development-goals-report-2013/

[i] [i] The M-ASCA model is a virtual savings and credit model by Dr. Martina Mutheu, and a copyright of the University of Nairobi (LT 12740) issued by the copyright board of Kenya dated 26th August 2015 and a registered trademark by Kenya Industrial Property Institute (KIPI) dated July 2014.

[ii] The Grameen model 1 left many people discouraged , the mitigating measures against risk were dehumanizing. This was a case study reported in the FSD Kenya 2009 report

[iii] This was a case study reported in the FSD Kenya 2009 report

[iv] Groups of likeminded people that come together and save money mainly to empower themselves economically