



# Enabling Mobile Money Policies in Kenya Fostering a Digital Financial Revolution

BRIAN MUTHIORA  
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## Mobile Money for the Unbanked

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The GSMA's Mobile Money for the Unbanked (MMU) programme works to accelerate the growth of commercially viable mobile money services to achieve greater financial inclusion.

For more information visit [www.gsma.com/mmu](http://www.gsma.com/mmu)

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## Foreword

The innovative use of mobile phone technology to drive financial inclusion in Kenya has been widely acclaimed around the world. This case study is a useful addition to the body of literature on what has driven this success story. More importantly, it provides an update of the current state of Kenya's mobile phone financial services terrain and teases out the possible future direction of mobile phone financial services. In Kenya, we are now agreed that it can be described as a digital financial revolution.

The Central Bank of Kenya (CBK) has been an integral part of this success, given Kenya's aspirations laid out in the country's blueprint for development, Vision 2030. Vision 2030 envisages a deeper and broader financial sector that contributes to improving the livelihoods of the majority of Kenyans, finances the growth of businesses, and funds the ambitious and transformative flagship projects underpinning the Vision. Traditional models of financial services have not been transformative; only 18% of adult Kenyans were served by formal financial services before 2006.

The introduction of mobile phone technology and its proliferation after 2000 provided a suitable platform for Kenya to leapfrog access to financial services. The current success story of mobile phone financial services is testimony to this. CBK's role has been to provide an enabling legal and regulatory environment. This has been based on a deep understanding of the business models, the risks they pose, and the appropriate risk mitigants.

The outcomes of an enabling legal and regulatory framework, investment by dynamic private sector players, and adaptive and receptive consumers have been transformative. Access to formal financial services has increased from 26% of Kenya's bankable population in 2006 to 67% in 2013. Mobile phone financial services have played a key role in this. What began as money transfer services has now become a platform with a menu of financial services that includes money transfers, payments of goods and services, savings, credit, insurance, pensions, and even capital market products.

Much more remains to be done, as 25% of Kenya's bankable population still cannot access any form of financial services. Moreover, there is still room to enhance the usage and quality of financial services. Mobile phone technology holds the key to drawing more Kenyans into the financial services net. More effort now needs to be focused on how to bring down the costs of financial services and improving the consumer experience in accessing financial services. This will require continued and deeper public-private partnerships, the development of robust consumer protection and financial education frameworks, and the development of products based on a deep understanding of consumer behaviour, needs, and dynamics. The recently released Financial Diaries 2014 study in Kenya is a good starting point.

As mobile phone financial services move to the next phase in Kenya, CBK will continue to play its part in providing an enabling legal and regulatory framework. The operationalization of the National Payment Systems (NPS) Act and gazettelement of NPS Regulations in August 2014 provides a firm basis for new innovations in mobile phone financial services and the deepening of national and regional payment systems. With its enhanced role, CBK will work with market players to enhance competition, reduce transaction costs, promote market-led interoperability, and scale up consumer protection. Indeed, Kenya is now uniquely positioned to move from a 'cash-lite' to 'cashless' vision as mobile phone financial services transition to digital financial services.

With both the Government and private sector working towards digital financial platforms, Kenya is certainly on a secure path to being a cashless economy. CBK will continue to promote this transformation, which will deliver lower cost financial services conveniently and efficiently to the vast majority of Kenyans.



**Professor Njuguna Ndung'u**  
Governor, Central Bank of Kenya

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# THE KENYAN JOURNEY TO DIGITAL FINANCIAL INCLUSION

## ACTIVE MOBILE MONEY CUSTOMERS

(30 DAY ACTIVE, MAR 2014)

# 12.5M



## MOBILE MONEY TRANSACTIONS IN VOLUME

(MAR 2014)

# 73.9M



## MOBILE MONEY TRANSACTIONS IN VALUE

(KSHS/MONTH (MAR 2014))

# 192.6BN



OUTREACH

POLICY

MARKET DEVELOPMENT

2.5 MILLION: THE NUMBER OF DEPOSIT ACCOUNTS IN KENYA

18.9% BANKED ADULT POPULATION

5.4 MILLION: THE VOLUME OF MOBILE MONEY THROUGHPUT

1.3 MILLION REGISTERED MOBILE MONEY ACCOUNTS

6,104 MOBILE MONEY AGENTS ACROSS KENYA

5.1 MILLION REGISTERED MOBILE MONEY ACCOUNTS

FINACCESS 2009 SURVEY RESULTS RELEASED: 39.9% ADULTS USE M-PESA TO TRANSFER MONEY

8.9 MILLION REGISTERED MOBILE MONEY ACCOUNTS

16.4 MILLION REGISTERED MOBILE MONEY ACCOUNTS

KES 1.17 TRILLION: THE VALUE OF MOBILE MONEY THROUGHPUT

19.2 MILLION REGISTERED MOBILE MONEY ACCOUNTS

21.1 MILLION REGISTERED MOBILE MONEY ACCOUNTS

FINACCESS 2013 SURVEY RESULTS RELEASED: 66.7% OF ADULTS HAVE ACCESS TO FINANCIAL SERVICES

MOBILE MONEY THROUGHPUT VALUE EQUALS 6.59% OF TOTAL NPS THROUGHPUT VALUE

25.3 MILLION REGISTERED MOBILE MONEY ACCOUNTS

116,196 MOBILE MONEY AGENTS AS AT MARCH 2014

26.2 MILLION REGISTERED MOBILE MONEY ACCOUNTS (MARCH 2014)

SAFARICOM APPROACHES CBK WITH REQUEST FOR AUTHORISATION OF M-PESA PILOT AS A MICROFINANCE REPAYMENT TOOL

M-PESA PILOT FINISHES

M-PESA CHANGES TO MONEY TRANSFER INSTEAD OF MICROFINANCE. AUTHORISATION FOR MONEY TRANSFER SOUGHT FROM CBK

DETAILED RESPONSE PROVIDED TO CBK. LEGAL OPINION DISTINGUISHES M-PESA SERVICE FROM BANKING BUSINESS

NATIONAL TREASURY AND CBK RELEASE AUDIT FINDINGS AND GIVE M-PESA A CLEAN BILL OF HEALTH

VAT EXEMPTED ON ALL FINANCIAL SERVICES, INCLUDING MOBILE MONEY TRANSFER

FINANCE ACT, 2009 INTRODUCES CHANGES TO THE BANKING ACT TO ALLOW AGENT BANKING

CBK RELEASES AGENT BANKING GUIDELINES

NATIONAL PAYMENT SYSTEMS (NPS) ACT PASSED BY PARLIAMENT

ANTI MONEY LAUNDERING REGULATIONS ISSUED, BREATHING LIFE TO THE FINANCIAL REPORTING CENTRE

10% EXCISE DUTY ON FEES CHARGED ON FINANCIAL SERVICES INTRODUCED

CBK HOLDS FINAL PUBLIC CONSULTATION ON THE DRAFT NPS REGULATIONS

NPS ACT COMMENCEMENT DATE ANNOUNCED

NPS REGULATIONS ISSUED (AUGUST 2014)

CENTRAL BANK OF KENYA GOES LIVE WITH RTGS

CBK REQUESTS FOR FURTHER INFORMATION

SAFARICOM PROVIDES DETAILED RISK MITIGATION

CBK ISSUES 'NO OBJECTION' FOR THE LAUNCH OF M-PESA

ACTING MINISTER FOR FINANCE ORDERS AUDIT ON M-PESA AMID PRESSURE FROM KENYA BANKERS ASSOCIATION

SAFARICOM AUTHORISED TO RECEIVE INWARD INTERNATIONAL REMITTANCES VIA WESTERN UNION, ALLOWING M-PESA CUSTOMERS TO RECEIVE REMITTANCES DIRECT TO THEIR M-PESA ACCOUNTS

FINANCE ACT, 2009 INTRODUCES CHANGES TO THE BANKING ACT TO ALLOW AGENT BANKING

PROCEEDS OF CRIME & ANTI MONEY LAUNDERING ACT PASSED MAKING MOBILE MONEY OPERATORS 'REPORTING INSTITUTIONS' UNDER THE ACT

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CBK HOLDS FINAL PUBLIC CONSULTATION ON THE DRAFT NPS REGULATIONS

NPS ACT COMMENCEMENT DATE ANNOUNCED

NPS REGULATIONS ISSUED (AUGUST 2014)

M-PESA PILOT STARTS IN THIKA, NORTH EAST OF NAIROBI

CBK REQUESTS DETAILED RESPONSE TO QUERIES ON M-PESA'S LEGAL STRUCTURE

SAFARICOM PROVIDES DETAILED RISK MITIGATION

CBK ISSUES 'NO OBJECTION' FOR THE LAUNCH OF M-PESA

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NPS ACT COMMENCEMENT DATE ANNOUNCED

NPS REGULATIONS ISSUED (AUGUST 2014)

M-PESA FACILITATES BILL PAYMENTS AND BULK SALARY PAYMENTS

CUSTOMERS CAN ACCESS M-PESA SERVICES AT POSTBANK BRANCHES

M-PESA, KENYA'S FIRST MOBILE MONEY PLATFORM IS LAUNCHED BY SAFARICOM

M-PESA FACILITATES BILL PAYMENTS AND BULK SALARY PAYMENTS

CUSTOMERS CAN ACCESS M-PESA SERVICES AT POSTBANK BRANCHES

M-PESA, KENYA'S FIRST MOBILE MONEY PLATFORM IS LAUNCHED BY SAFARICOM

SMEP, AN MFI, ALLOWS ITS CUSTOMERS TO MAKE REPAYMENT VIA M-PESA

KILIMO SALAMA INSURANCE PILOT LAUNCHED BY SYNGENTA FOUNDATION, UAP INSURANCE AND SAFARICOM. ALLOWS KENYAN FARMERS TO INSURE AGAINST CROP FAILURE, WITH PREMIUMS PAID VIA M-PESA

SAFARICOM PARTNERS WITH KENYA POWER TO ALLOW CUSTOMERS TO PAY ELECTRICITY BILLS VIA M-PESA

GRUNDFOS LIFELINK PARTNERS WITH M-PESA TO ALLOW RURAL HOUSEHOLDS TO PAY FOR SAFE WATER VIA M-PESA

M-KESHO, AN EQUITY BANK ACCOUNT THAT IS ACCESSED THROUGH THE M-PESA MENU IS LAUNCHED

ORANGE (TELEKOM KENYA) LAUNCHES 'IKO PESA' IN PARTNERSHIP WITH EQUITY BANK

ZAIN KENYA (CELTEL KENYA LTD) LAUNCHES 'ZAP'

YUMOBILE (ESSAR TELECOM) LAUNCHES YUCASH

LIPA KARO, A SCHOOL FEES PAYMENT SERVICE VIA M-PESA ANNOUNCED BY SAFARICOM

1&M BANK AND SAFARICOM LAUNCH A PRE-PAID VISA CREDIT CARD THAT CAN BE LOADED VIA M-PESA

YUCASH LAUNCHES CARDLESS ATM WITHDRAWAL SERVICE AT ALL EQUITY ATMS

AIRTEL OFFERS 'PAYONLINE', THE WORLD'S FIRST VIRTUAL PAYMENT CARD THAT ALLOWS AIRTEL MONEY SUBSCRIBERS IN KENYA TO BUY PRODUCTS ONLINE (PARTNERSHIP BETWEEN AIRTEL, MASTERCARD AND STANDARD CHARTERED BANK)

MOBILE PAY LTD LAUNCHES 'TANGAZA PESA' THE ONLY MOBILE MONEY SERVICE THAT CAN SEND CASH ACROSS ALL NETWORKS

AIRTEL, HAVING ACQUIRED CELTEL KENYA, RELAUNCHES ZAP AS 'AIRTEL MONEY'

CARE, EQUITY AND ORANGE LAUNCH A GROUP SAVINGS PRODUCT

YUCASH AND COOPERATIVE (CO-OP) BANK PARTNER TO ENABLE YUCASH CUSTOMERS TO TRANSFER FUNDS TO CO-OP BANK VIA YUCASH

SAFARICOM PARTNERS WITH KOPO KOPO, THE FIRST BUY GOODS AGGREGATOR

CO-OP BANK ALLOWS ITS CUSTOMERS TO DEPOSIT AND WITHDRAW MONEY FROM THEIR BANK ACCOUNTS USING AIRTEL MONEY

AIRTEL MONEY AND FAULU KENYA DEPOSIT TAKING MICROFINANCE LAUNCH 'KOPA CHAPAA' ALLOWING AIRTEL MONEY CUSTOMERS TO BORROW SHORT TERM LOANS

YUCASH CUSTOMERS CAN USE POSTBANK BRANCHES TO REGISTER, DEPOSIT AND WITHDRAW FUNDS FROM YUCASH ACCOUNTS

M-SHWARI LAUNCHED AS A PARTNERSHIP OF COMMERCIAL BANK OF AFRICA (CBA) AND SAFARICOM ALLOWING M-PESA CUSTOMERS TO EARN INTEREST ON SAVINGS AND BORROW MICROLOANS

SAFARICOM RELAUNCHES MERCHANT PAYMENT SERVICE AS 'LIPA NA M-PESA'

AIRTEL LAUNCHES 'BIMA MKONONI' A LIFE INSURANCE PRODUCT UNDERWRITTEN BY PAN AFRICA LIFE INSURANCE COMPANY AND ACCESSED VIA MOBILE

SAFARICOM LAUNCHES 'LIPA NA M-PESA ONLINE' ALLOWING CUSTOMERS TO PAY FOR GOODS AND SERVICES FROM ONLINE MERCHANTS

AIRTEL PARTNERS WITH VISA AND CHASE BANK TO PROVIDE AIRTEL MONEY CUSTOMERS IN KENYA WITH A NEW AIRTEL MONEY VISA CARD

AIRTEL LAUNCHES 'AKIBA MKONONI' A VIRTUAL SAVINGS ACCOUNT HELD BY UBA BANK KENYA AND ACCESSED THROUGH THE AIRTEL MONEY MENU

3 MOBILE VIRTUAL NETWORKS (MVNOs) ARE LICENSED INCLUDING FINSERVE AFRICA (EQUITY BANK), MOBILE PAY LIMITED (TANGAZA PESA) AND ZIONCELL MOBILE (MOBILE DECISIONING)

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

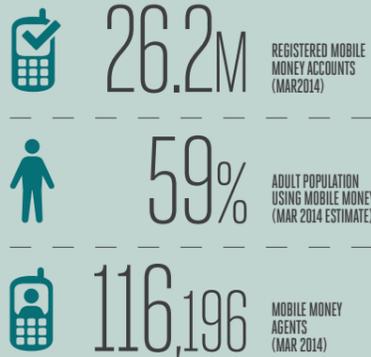
SOURCE: FINACCESS NATIONAL SURVEY 2013

SOURCE: FSP MAPS, KENYA

SOURCE: FII KENYA 2013, BASE N=2023

SOURCE: CBK, 2013

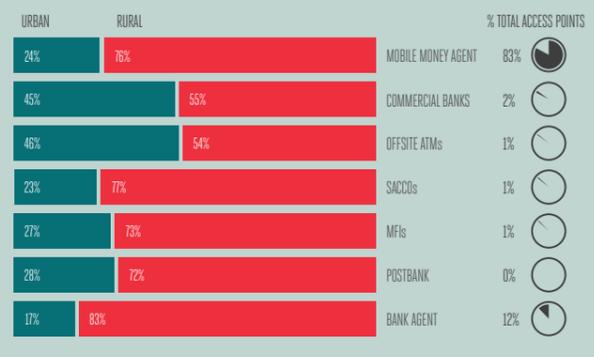
### MOBILE MONEY AT A GLANCE



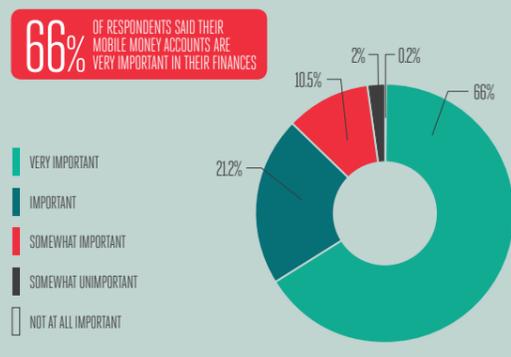
### FINANCIAL ACCESS BY YEAR



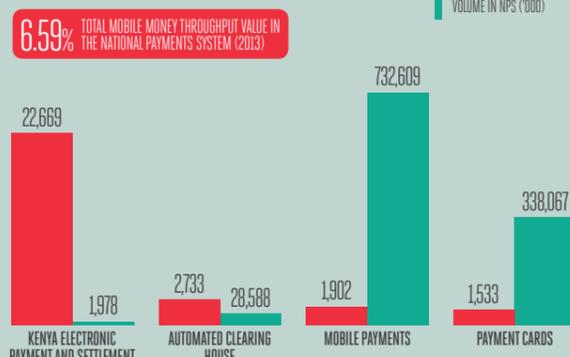
### FINANCIAL ACCESS POINTS - BY TYPE AND LOCATION



### HOW IMPORTANT IS MOBILE MONEY?



### KENYA PAYMENT SYSTEMS STATISTICS



AUTHORS: SIMONE DI CASTRI, LARA GIOVANI AND BRIAN MUTHIORA - SEPTEMBER 2014. SOURCES: FINACCESS NATIONAL SURVEY 2006, 2009 AND 2013, FSD-KENYA; ENABLING MOBILE MONEY TRANSFER: THE CENTRAL BANK OF KENYA'S TREATMENT OF M-PESA, AFI CASE STUDY; MOBILE PAYMENTS DATA, CENTRAL BANK OF KENYA, APRIL 2013; M-PESA TIMELINE, SAFARICOM; MEASURING FINANCIAL INCLUSION: THE GLOBAL INDEX DATABASE, WORLD BANK; BILL & MELINDA GATES FOUNDATION - FSP MAPS; INTERMEDIA FINANCIAL INCLUSION INSIGHTS; ADDITIONAL DATA AND INFORMATION FROM PRESS RELEASES, BLOGS, PROVIDERS' WEBSITES, AND THE CENTRAL BANK OF KENYA.

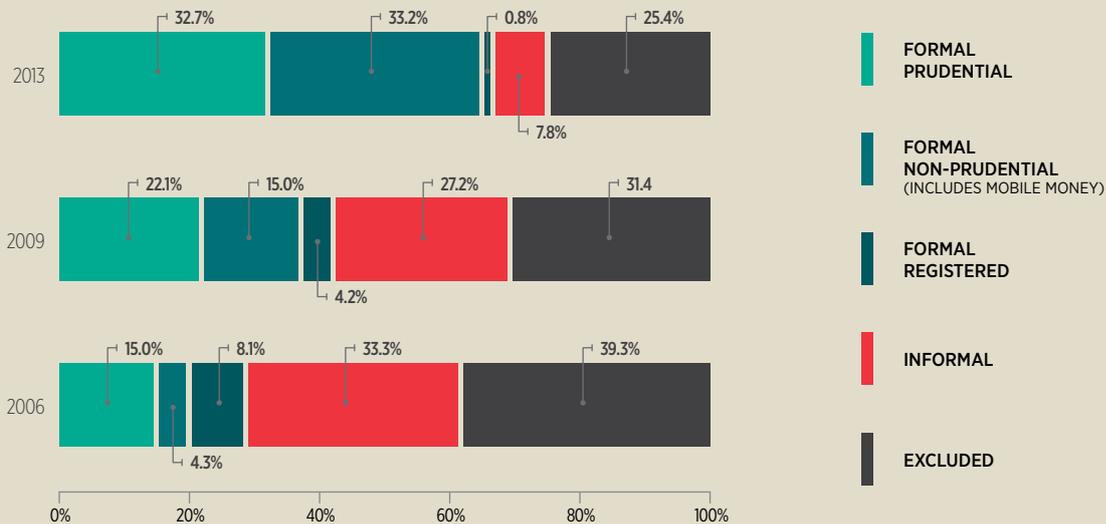
# Introduction

Many of the products conventionally offered by banks and even by microfinance institutions in Africa are ill-adapted to poor customers' needs. By moving beyond what is generally established, modern technology offers some possibilities for leapfrogging some of the obstacles placed by slow-adjusting infrastructures and other African environmental challenges.

**Stephen Mwaura Nduati**  
Head of National Payments, Central Bank of Kenya<sup>1</sup>

In the span of just seven years, Kenya's financial services landscape has been dramatically altered. In 2006, only 26.4% of adults in the country had access to formal financial services, but by 2013, this had more than doubled to 66.7% (see Figure 1). Today, more people are sending and receiving money, opening bank accounts, and applying for loans than ever before.

FIGURE 1  
**ACCESS TO FINANCIAL SERVICES IN KENYA BY YEAR<sup>2</sup>**



» THERE HAS BEEN AN INCREASE IN FORMAL PRUDENTIAL FINANCIAL INCLUSION OF **10.6%** FROM 2009 TO 2013 COMPARED WITH A **7.1%** INCREASE BETWEEN 2006 AND 2009.

» THE DECREASE IN THE PROPORTION OF PEOPLE EXCLUDED BETWEEN 2006 AND 2013 WAS **6.0%**, COMPARED WITH A **7.9%** DECREASE BETWEEN 2006 AND 2009.

» THE PROPORTION OF PEOPLE RELYING SOLELY ON INFORMATION TYPES OF FINANCIAL SERVICES HAS BEEN STEADILY DECREASING.

1. Stephen Mwaura Nduati (2011), "Enhancing Financial Inclusion through Technological Innovations", The Fletcher School, Tufts University, Leadership Program for Financial Inclusion, Policy Memoranda 2011, available at <http://fletcher.tufts.edu/CEME/-/media/Fletcher/Microsites/CEME/pubs/papers/MEMOS%20Final.pdf>  
 2. Financial Sector Deepening Trust Kenya, FinAccess 2013 Survey, Fig. 3.3, p. 13 available at [http://www.fsdkenya.org/finaccess/documents/13-10-31\\_FinAccess\\_2013\\_Report.pdf](http://www.fsdkenya.org/finaccess/documents/13-10-31_FinAccess_2013_Report.pdf)

**What has been driving this change?** In Kenya, broad access to financial services has been made possible by mobile network operators (MNOs) leveraging their technology, ubiquitous distribution networks, and partnerships with banks to deliver mobile financial services to unbanked and underserved segments of the population. Mobile money has enabled anyone in Kenya with access to a mobile phone to perform basic financial transactions without having to use a bank account or rely on riskier, less efficient methods like delivering cash in person (see Figure 2).

FIGURE 2  
**PERCEPTIONS OF DIFFERENT REMITTANCE METHODS BEFORE AND AFTER LAUNCH OF M-PESA<sup>3</sup>**



3. Financial Sector Deepening Trust Kenya, Financial inclusion in Kenya, survey results and analysis from FinAccess 2009 Survey, Table 7, p. 158 available at [http://www.fsdkenya.org/finaccess/documents/11-06-27\\_finaccess\\_09\\_results\\_analysis.pdf](http://www.fsdkenya.org/finaccess/documents/11-06-27_finaccess_09_results_analysis.pdf)

Mobile money users can make peer-to-peer (P2P) transfers, bill payments, and merchant payments, as well as receive social disbursements and international remittances. With 26.2 million mobile money accounts and 12.5 million active mobile money users, Kenya now has one of the highest mobile money penetration rates anywhere in the world.

This remarkable growth in financial access can be traced back to 2007, when non-bank providers began offering mobile money products and services,<sup>4</sup> and the Central Bank of Kenya (CBK) adopted a progressive ‘test and learn’ approach to regulation. Rapid customer uptake followed, due in large part to a ubiquitous distribution network at the grassroots level, trusted brands, and relatively low-cost transactions (compared to existing money transfer methods).<sup>5</sup> The Bill & Melinda Gates Foundation’s FSP Maps data, compiled in 2012 and 2013, shows that there has been a dramatic increase in financial services access points driven largely by mobile money agent outlets (see Figure 3).

# 59%

OF ADULTS IN KENYA ARE ACTIVELY USING MOBILE MONEY PRODUCTS AND SERVICES ON A 30-DAY BASIS

The role of the CBK in creating an enabling regulatory environment for mobile money cannot be overstated. By providing incentives for service providers to invest<sup>6</sup> and avoiding overly prescriptive or burdensome requirements, Kenya’s central bank has managed to encourage innovation and growth while preserving the stability and soundness of the financial sector. The result: 59% of adults in Kenya are actively using mobile money products and services on a 30-day basis.<sup>7</sup>

The impact of mobile money has been felt across Kenya’s financial services industry and in the broader digital ecosystem as well. Mobile money has been an ‘on-ramp’ for Kenyans to use additional financial services, such as deposit accounts, and has helped to improve the financial capability of previously underserved segments of the population. The traditional financial services industry has also played an important role: more than 20 banks are now interconnected with mobile money services, and at least one bank has obtained a mobile virtual network operator (MVNO) licence to offer low-cost mobile banking services.<sup>8</sup>

As Kenya’s mobile money market evolves, the CBK continues to anticipate and address challenges as they arise, and has recently formulated a regulatory framework to guide market conduct and consumer protection. The National Payment System (NPS) Regulations<sup>9</sup> issued in 2014 have codified many of the regulatory practices developed since the introduction of mobile money in 2007, when the regulator articulated a prudential framework that laid out requirements in ‘letters of no objection’ to mobile operators. The NPS Regulations also address emerging market conduct and ecosystem issues, such as competition, interoperability, consumer protection, and governance.

4. The FinAccess Survey classifies mobile money in the ‘formal non-prudential category’ of institutions “which are subject to non-prudential oversight by regulatory agencies or government departments/ ministries with focused legislation”. This segment has grown 121% since 2009 and 672% since 2006.

5. Ignacio Mas and Amolo Ng’weno (2009), “Three keys to M-PESA’s success: Branding, channel management and pricing,” Bill & Melinda Gates Foundation, available at <http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2012/03/keystompesassuccess4jan69.pdf>

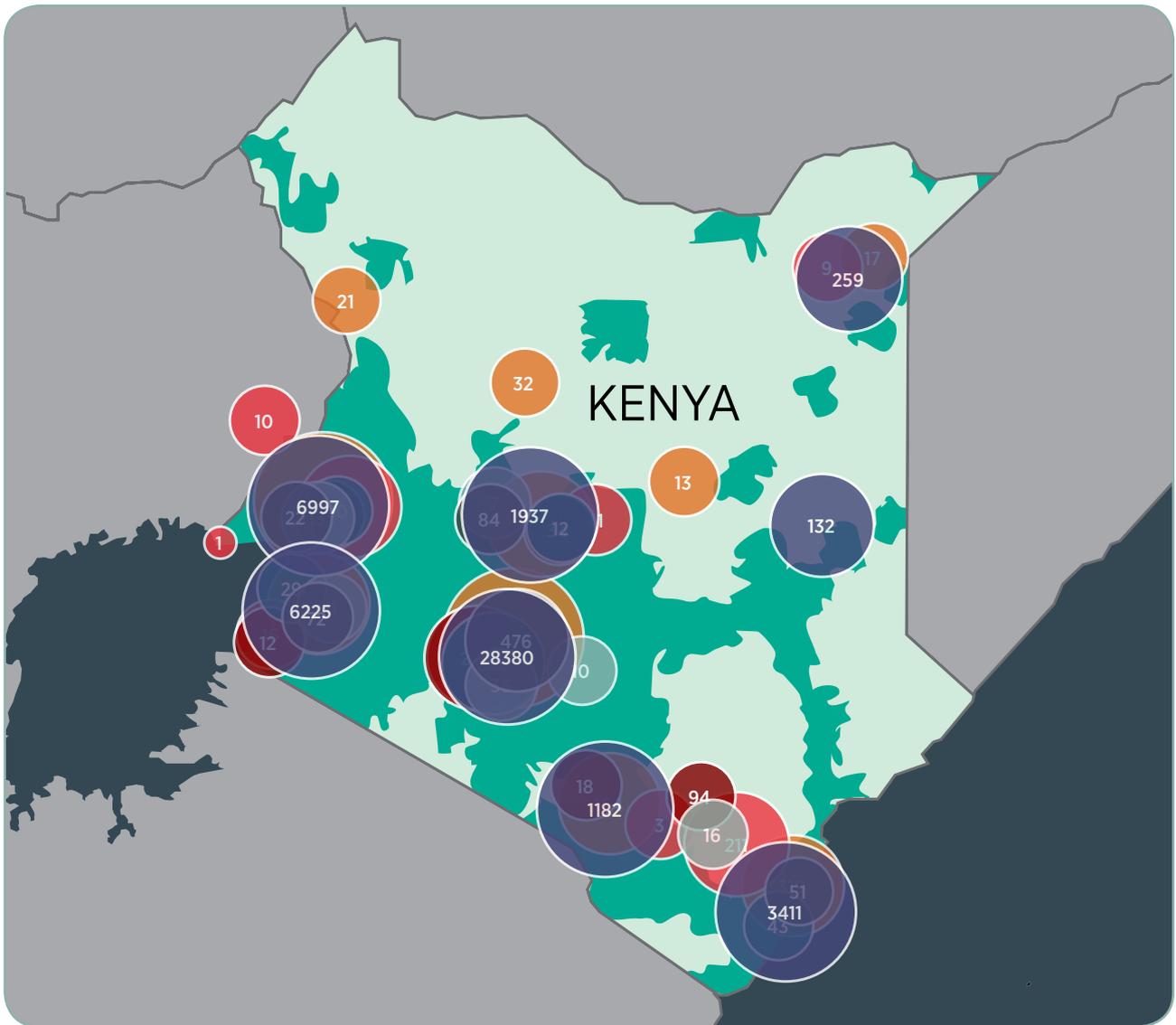
6. See also Simone di Castri (2013), “Mobile Money: Enabling Regulatory Solutions”, GSMA, available at <http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU-Enabling-Regulatory-Solutions-di-Castri-2013.pdf>

7. Simone di Castri, Lara Gidvani and Brian Muthiora (2014), “The Kenyan Journey to Digital Financial Inclusion” (infographic), GSMA, available at [http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/09/MMU\\_2014\\_Kenya-Pathway\\_Infographic\\_Web.pdf](http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/09/MMU_2014_Kenya-Pathway_Infographic_Web.pdf)

8. See infra, section VI.

9. National Payment Systems Regulations, 2014, available at <https://www.centralbank.go.ke/images/docs/legislation/NPSRegulations2014.pdf>

FIGURE 3  
**FINANCIAL ACCESS IN KENYA<sup>10</sup>**



FINANCIAL SERVICE LOCATIONS

- BANK AGENT (7,052)
- COMMERCIAL BANK (1,221)
- MFIS (500)
- MOBILE MONEY AGENT<sup>11</sup> (48,524)
- OFFSITE ATMS (503)
- POSTBANK (93)
- SACCOS (706)
- MOBILE COVERAGE

10. FSP Maps, Bill & Melinda Gates Foundation, 2013, available at <http://www.fspmaps.com>.

11. According to FSD-Kenya, which coordinated the field research on behalf of the Bill & Melinda Gates Foundation, the FSP Maps data collated in 2012 (launched in 2013) comprised of physical access points without regard to the number of Agent Tillis issued per outlet. Geographical locations experiencing security challenges, for instance the North Eastern Province, were not adequately covered. Similarly, agent locations within corporate establishments, such as staff canteens, and national security installations, such as military barracks, were not mapped.

## Lessons from Kenya's mobile money experience

What lessons can regulators, policymakers and operators draw from Kenya's mobile money experience?

### Lessons for regulators and policymakers

- **Regulators can be agents of change for financial inclusion.** Kenya has low levels of financial exclusion in large part because of the financial inclusion policies implemented by the CBK, such as allowing non-bank financial service providers (FSPs) to enter the market and deliver low-cost financial services to the unbanked and underserved. In permitting a non-bank to launch M-PESA, Kenya's first mobile-enabled money transfer and payment system, the CBK was making a bold statement: that it was committed to improving the efficiency of the payment system and the financial sector, standing on the side of innovation, and ensuring operational, legal, and liquidity risks were properly and sufficiently mitigated. The CBK is a bright example of a public sector authority enabling socio-economic development, and it has paved the way for other countries to initiate reforms to foster financial inclusion.
- **Mobile money is a catalyst for financial inclusion and the development of the digital ecosystem.** Mobile money providers are not financial intermediaries and do not undertake banking business. On the contrary, mobile money complements banking. Partnerships with mobile money providers provide a cost-effective way for commercial banks and microfinance institutions (MFIs) to collect public deposits and offer credit services to new customers that are otherwise beyond their reach. Mobile money has also contributed to the development of the digital ecosystem by providing a readily available payment mechanism for many startups.
- **Mobile money does not introduce systemic risk to the financial system.** Data from the Central Bank of Kenya indicates that mobile money accounts for only 6.59% of total NPS throughput value despite very high transaction volumes,<sup>12</sup> which means mobile money does not, by itself, introduce systemic risk to the financial system. However, the high volumes transacted by large segments of the population indicate that mobile money is a very important part of the financial system for consumers. To protect consumer interest and ensure services are sound, mobile money providers have implemented policies to prudently manage operational risk, safeguard and ring-fence customer money, protect consumers, and plan for business continuity.

### Lessons for operators

- **Early and sustained engagement with the regulator is good for business.** When seeking a licence to launch a new product, mobile money providers should engage with the regulator early on to understand the regulatory rationale, and provide all the information the regulator needs to understand their business and products. This demonstrates to the regulator a willingness to comply with the prevailing regulatory environment. A coherent plan for engaging with the authorities and sustaining dialogue is essential to ensuring the regulatory framework and business models remain compatible.
- **Adapting to a dynamic regulatory environment is essential.** Mobile operators must anticipate and adapt to changes in the regulatory environment, some of which can benefit the industry as a whole (such as non-exclusive dealings with agents), while others can be detrimental if not managed properly (such as burdensome tax policies).
- **The development of the mobile money ecosystem creates many opportunities.** As the mobile money ecosystem matures, providers can forge new partnerships to offer additional products (such as savings) or expand their business into other areas (such as international money remittance). Mobile money interoperability is another opportunity for operators to tap into a larger market created by combined economies of scale.

12. Central Bank of Kenya, Payments Systems Statistics January–December 2013, <https://www.centralbank.go.ke/index.php/2012-09-21-11-44-41/payment-systems-statistics>

# The early stages of mobile money: Conceptualising a regulatory model

“When regulators embrace a leadership role in developing the market, they become innovative and take reasonable risks inherent to making the changes needed to create a more inclusive financial sector. Although regulators’ main concern is always the safety and soundness of financial systems, those that have made the most progress have been willing to explore new routes or to use new tools to enhance traditional financial activities.”

**Prof. Njuguna Ndung’u**  
Governor, Central Bank of Kenya<sup>13</sup>

## M-PESA: A regulatory turning point

In 2005, the Central Bank of Kenya was overseeing an underdeveloped financial sector that, despite high potential demand, suffered under the weight of inefficiencies and an inadequate statutory and legal framework to support the development of digital financial services. More adults in the country were excluded from the financial system (38.4%) than had access to financial services (26.4%) (see Figure 1, *supra*). Commercial banks were closing down rural branches due to the high operational costs of maintaining them. The Central Bank did not have much latitude in the legal or regulatory framework to deal with new products introduced by non-banks.

It was against this backdrop that the CBK addressed an application by the Commercial Bank of Africa (CBA), Safaricom Limited, and Vodafone Group to authorise M-PESA, a mobile-enabled money transfer and payment service. The CBK faced a stark choice: should it maintain the status quo and refuse the application on the grounds that the legal framework does not permit the participation of non-banks, or should it navigate the necessary risks to find a regulatory solution that would foster greater financial inclusion? It chose the latter, giving rare audience to Safaricom and its partners.

While the Central Bank of Kenya Act (CBK Act)<sup>14</sup> gave the CBK discretion to “formulate and implement such policies as best promote the establishment, regulation and supervision of efficient and effective payment, clearing and settlement systems”,<sup>15</sup> the Act was weak on the statutory authority required for the CBK to issue regulations on payment services generally. As will be discussed later, this statutory authority was granted when the National Payment System Act was enacted in 2012.

13. Simone di Castri (2013), “A conversation with Professor Njuguna Ndung’u, Governor of the Central Bank of Kenya, on the critical policy issues around mobile money”, GSMA Blog, available at <http://www.gsma.com/mobilefordevelopment/a-conversation-with-professor-njuguna-ndungu-governor-of-the-central-bank-of-kenya-on-the-critical-policy-issues-around-mobile-money>

14. Section 4A (d)

15. *Ibid.*

The first challenge Safaricom and the CBK had to overcome was ensuring product design was compatible with the existing legal framework (see Box 1). The CBK had to be satisfied that Safaricom would not be intermediating M-PESA customer funds, which the Banking Act restricted to licensed banks.<sup>16</sup>

## BOX 1

**BANKING BUSINESS AND RESTRICTIONS ON DEPOSIT-TAKING**

The Banking Act<sup>17</sup> defines ‘banking business’ as:

*“the accepting from members of the public of money on deposit repayable on demand or at the expiry of a fixed period or after notice;*

*the accepting from members of the public of money on current account and payment on and acceptance of cheques; and*

*the employing of money held on deposit or on current account, or any part of the money, by lending, investment or in any other manner for the account and at the risk of the person so employing the money.”<sup>18</sup>*

Section 16 of the Act has a general restriction on deposit-taking other than by “an institution which holds a valid licence or a duly approved agency conducting banking business on behalf of an institution”.

A ‘deposit’ is defined as “a sum of money paid on terms:

- a. *under which it will be repaid, with or without interest or a premium, and either on demand or at a time or in circumstances agreed by or on behalf of the person making the payment and the person receiving it; and*
- b. *which are not referable to the provision of property or services or the giving of security.”<sup>19</sup>*

The CBK’s legal opinion was that, at the point at which cash was converted to mobile money, bank notes or coins would be exchanged at par value for an equivalent amount of mobile money. This electronic value would be reflected on the customer’s mobile money wallet, which was accessible through their mobile phone, and would remain in the customer’s possession and control. While the customer parts with physical cash at the agent outlet, this money is not ‘paid on terms’<sup>20</sup> to the agent taking the cash (as envisaged in the Banking Act). This was a critical difference: in the mobile money model adopted in Kenya, neither the service provider nor the agent accepts the cash exchanged for e-money on current account, nor do they use any of the money to lend, invest, or for any other purpose for its own account and at its own risk.

The CBK went a step further, seeking assurances from Safaricom that it had taken appropriate measures to ensure sufficient system security, maintain business continuity plans, adopt a comprehensive AML/CFT and risk management programme, and manage solvency risk.<sup>21</sup> The CBK assembled a cross-functional team of experts from various departments, including Banking and National Payments, Bank Supervision, and Legal, to review the application for M-PESA.<sup>22</sup> Safaricom was eventually invited to demonstrate to the team how the product worked.

16. Under Section 16 (9).

17. 16 Chapter 488 of the laws of Kenya, available at [https://www.centralbank.go.ke/images/docs/legislation/Banking\\_Act\\_edited\\_August\\_2014\\_updated\\_CRB.pdf](https://www.centralbank.go.ke/images/docs/legislation/Banking_Act_edited_August_2014_updated_CRB.pdf)

18. Ibid., Section 2

19. Ibid., Section 16

20. The conversion of cash to mobile money is not tied to the fulfilment of any legal obligation between the agent and the customer as provided for under Section 16 (9).

21. Gerald Nyaoma, Director, Banking Department, Central Bank of Kenya, speaking at the first AFI Global Policy Forum in Nairobi, Kenya, 2010, available at <http://www.youtube.com/watch?v=5npOSOJ08KA>

22. Ibid.

From the beginning, M-PESA was conceived as a low-risk money transfer service and various measures were taken to lower its risk profile, including:

- limits on the size (value) of mobile money transactions;
- daily limits on mobile money transaction values (only two transactions at the highest transaction level were permitted per day);
- maximum balance limits on mobile wallets (to discourage the use of mobile money wallets as a substitute for bank accounts);
- risk-compliance monitoring and adherence to stringent AML/CFT policies; and
- submission of monthly regulatory returns to the CBK, including an ‘inactivity report’ of residual funds held inactive over periods ranging from >30 to >90 days.<sup>23</sup>

In February 2007, the CBK issued Safaricom a letter of no objection authorising it to launch M-PESA. The letter specified reporting obligations and a full set of prudential and market conduct rules based on the risks identified during the exploratory stages. It allowed M-PESA to proceed under the oversight of the CBK pending a complete regulatory framework (which would be provided under the National Payment System Act, yet to be approved).

## Safeguarding customer funds

The business model approved by the CBK allowed Safaricom to issue mobile money in exchange (at par value) for cash held in a trust account under the custody of a trustee (see Figure 3).<sup>24</sup> Because the funds held in trust were separated from the funds of the service provider, the service provider was unable to use the funds and the money was safe from claims by creditors in the event of insolvency (see Box 2). Over time, the size of the trust account increased as the M-PESA service grew in popularity, and the trustee, in consultation with the CBK, made a decision to spread the funds across several banks to reduce the risk of a single custodial bank failure.

### BOX 2

#### THE COMMON LAW CONCEPT OF TRUSTS<sup>25</sup>

Sir Arthur Underhill<sup>26</sup> described a trust as “an equitable obligation binding a person (who is called a trustee) to deal with property over which he has control (which is called trust property), for the benefit of persons (who are called beneficiaries or cestuis que trust) of whom he may himself be one and any one of whom may enforce the obligation.”<sup>27</sup>

The trust is created by a settlor or donor who, together with the trustee, execute a trust instrument known as a ‘Declaration of Trust’ or a ‘Trust Deed’ under which the duties and obligations of the trustee and the beneficiaries in relation to the trust property are clearly defined.

In the mobile money case, the settlor is the mobile operator or service provider (if different), the beneficiaries are the customers, agents and other system participants (or another class of persons or causes as defined in the trust instrument), and the trust property is the pool of customer and agent funds.

The benefits of the trust accrue to the beneficiaries rather than to the trustee or the settlor.

23. These returns would enable the CBK to monitor (and stem) any ‘savings’ trends and order remedial action, if necessary.

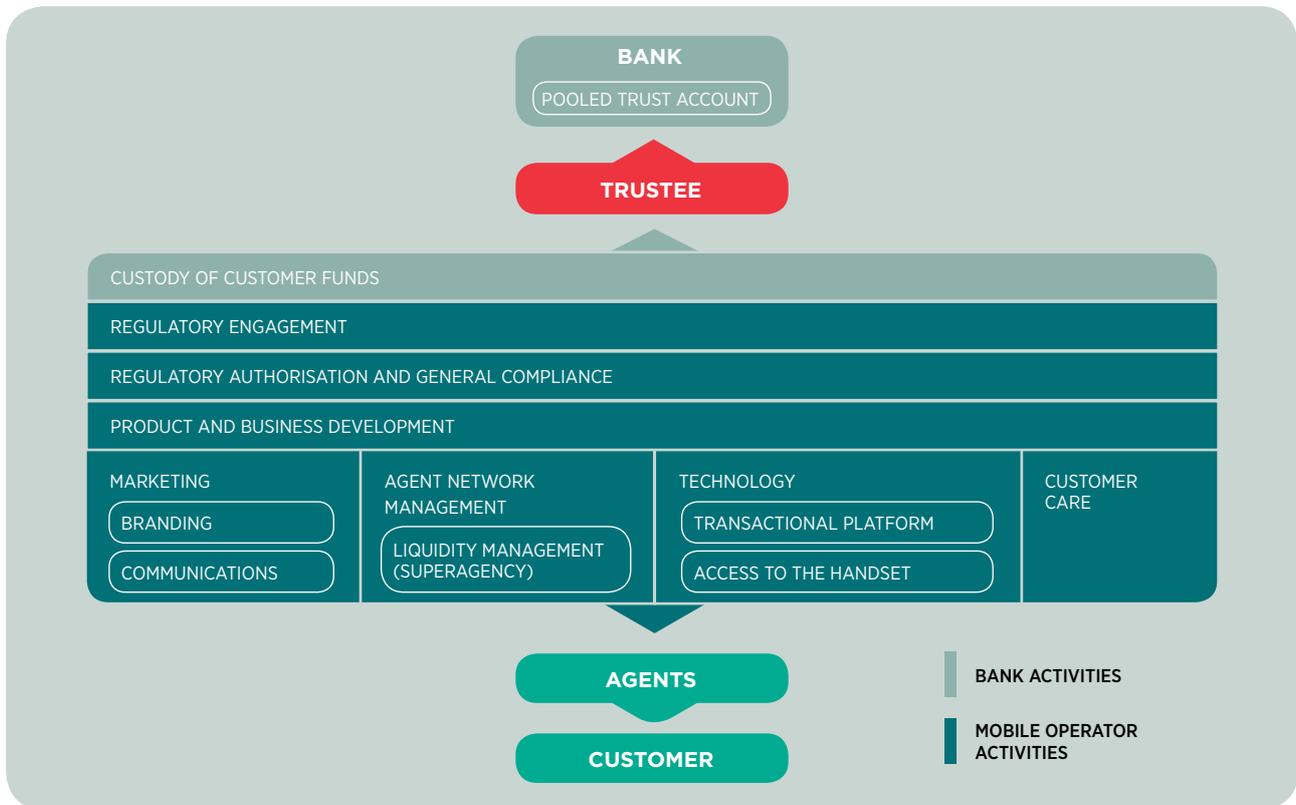
24. The trustee is fully independent of Safaricom and the trust account is held in a prudentially regulated commercial bank that also acts as the settlement bank.

25. See also “The Law of Trusts”, Kenya Law Resource Centre, available at <http://www.kenyalawresourcecenter.org/2011/07/law-of-trusts.html>

26. Underhill is the original author of this leading legal practitioner’s work, now known as Underhill and Hayton, Law of Trusts and Trustees.

27. Ibid. at 2

FIGURE 4  
**KENYA'S MOBILE MONEY BUSINESS MODEL**



## A prepaid distribution model

Safaricom was allowed to provide the M-PESA service through a network of agents under its direct supervision, whose role has been to register customers on behalf of Safaricom and provide cash-in and cash-out services. To achieve scale, some agents (known as 'aggregators' or 'master agents') were allowed to appoint sub-agents within their distribution networks.

The structure of the distribution network and the prepaid model has been critical to the exponential growth of M-PESA and the safety of the scheme. Agents have played a crucial role in enrolling new customers, ensuring liquidity in the market, and providing first-line support and basic information and education to customers.<sup>28</sup>

Agents typically prefund their e-money or 'float' accounts, receiving one unit of mobile money for each unit of conventional currency they deposit in the trust account. Agents then trade their float with customers through cash-in and cash-out transactions. In other cases, bulk payers (e.g. businesses making salary payments or public agencies making social transfers) pre-fund the trust account to cover the remittances they want to send. International remittance organisations might do the same to facilitate remittance payments directly into customers' mobile wallets.

In practice then, mobile money is not 'created', but rather converted into electronic value with an equivalent amount of cash held in a trust account. Trust account balances are reconciled daily with balances in the mobile money system. Interest earned on the pooled funds does not constitute mobile money and is not reflected in the mobile money system.

Mobile money is liquidated or extinguished when:

- agents withdraw commissions earned or otherwise cash out their float;
- merchants or bill pay recipients withdraw their takings or payment receipts; or
- the mobile operator liquidates airtime sales made through the mobile money system.

28. See Safaricom's description of the role of agents at <http://www.safaricom.co.ke/personal/m-pesa/m-pesa-agents>

## Setting a precedent

When the CBK responded to applications from other mobile operators, it used the same template and terms for the no objection letter it issued to Safaricom.<sup>29</sup> In February 2009, Zain launched Zap, a money transfer product, and Essar Telecom (YU Mobile) followed with the launch of 'Yu Cash' in December 2009. Orange Money was launched in December 2010, and by the end of that year there were six mobile money deployments, including two third party (mobile operator-agnostic) operators: Tangaza Pesa and MobiKash.

The no objection letter, though introduced as an interim measure to deal with a regulatory dilemma has been used successfully to launch similar mobile money services in the region.<sup>30</sup>

### BOX 3

#### KENYA'S BANKS CHALLENGE M-PESA

M-PESA's formative years were difficult for Safaricom. Despite large segments of the population embracing the service, M-PESA faced a great deal of resistance from banks in the first two years, and the CBK was under pressure to rescind its approval of the service.<sup>31</sup> These challenges from the banks were motivated by a concern that mobile money adoption would lead to disintermediation and drive down the use of savings accounts in traditional banks.

Sentiment was growing amongst some members of the Kenya Bankers Association that mobile money, which the banks perceived to be in competition with banking services, was receiving favourable treatment from the CBK. For instance, the banks complained they were not allowed to offer banking services through agents, yet MNOs were offering 'deposit-like' products through agents. The banks pitched for stringent regulations to 'level the playing field', and their lobbying efforts provided temporary reprieve. Even though the CBK had provided a monitoring framework for M-PESA in its letter of no objection, the Minister for Finance asserted that the absence of a legal framework to regulate and supervise mobile money was a gamble that might not pay off.<sup>32</sup> The Minister then ordered the National Treasury and the Central Bank to conduct an audit of M-PESA.

Years later, Michael Joseph, CEO of Safaricom from 1999 to 2010 and currently the Director of Mobile Commerce at Vodafone Group, recounted visiting the Finance Minister, John Michuki, at his office. Mr. Joseph asked Mr. Michuki for an opportunity to explain how M-PESA worked before making any decisions that could shake public confidence in the service. After a brief chat about how the Minister pays his farm workers at his rural home outside Nairobi, Mr. Joseph used his phone to demonstrate that M-PESA could be used to pay his foreman's wages. Once the foreman confirmed he had received his wages, Mr. Joseph recalled that the Minister had been impressed by how convenient, fast, and easy it was to use M-PESA.

In January 2009, the Treasury issued a statement on the findings of the audit.<sup>33</sup> Much to the relief of mobile operators, it re-asserted that mobile money was not a banking service, but a low-value retail money transfer service which had passed the scrutiny of the CBK's internal legal and risk assessments, as well as an external information systems audit.<sup>34</sup> The statement distinguished between the conversion of cash into mobile money (and vice versa) and the acceptance of deposits from the public, emphasising that mobile money providers were not accepting deposits from the public or contravening the Banking Act. The CBK used the opportunity to assure the public that mobile money was being subjected to close oversight. This put to rest questions about the legality of mobile money, reaffirmed the government's strong support for financial inclusion, and gave the industry a much-needed boost of confidence.

29. See the Kenya Journey to Digital Financial Inclusion (*supra* at pages 3-4).

30. Rwanda, Tanzania and, to a lesser extent, Uganda, have taken an approach similar to Kenya's.

31. Peter Kiragu, "I blocked plans to kill M-PESA, says Ndung'u", *The Star*, 5 July 2012, available at <http://www.the-star.co.ke/news/article-11712/i-blocked-plans-kill-m-pesa-says-ndungu>

32. John Njiraini and James Anyanzwa, "Unmasking the storm behind M-PESA", *East African Standard*, 30 December 2008, available at [http://www.standardmedia.co.ke/?articleID=1144002826&story\\_title=Unmasking-the-storm-behind-M-PESA](http://www.standardmedia.co.ke/?articleID=1144002826&story_title=Unmasking-the-storm-behind-M-PESA)

33. Jackson Okoth, "Regulator gives M-PESA a clean bill of health", *East African Standard*, 27 January 2009, available at [http://www.standardmedia.co.ke/?articleID=1144004990&story\\_title=regulator-gives-m-pesa-a-clean-bill-of-health&pageNo=1](http://www.standardmedia.co.ke/?articleID=1144004990&story_title=regulator-gives-m-pesa-a-clean-bill-of-health&pageNo=1)

34. See Alliance for Financial Inclusion (2010), "Enabling mobile money transfer, the Central Bank of Kenya's treatment of M-PESA", available at <http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/09/enablingmobilemoneytransfer92.pdf>.

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## A collaborative approach to regulation

It was clear from the outset that the Central Bank of Kenya had the mandate to regulate Safaricom's payment services. However, Safaricom was an entity licensed by the Communications Commission of Kenya (CCK), and as such required a licence to offer mobile telecommunications services. This unusual situation required the CBK and the CCK to collaborate to ensure their respective roles and responsibilities were clearly defined when dealing with a mobile money provider, and to avoid unnecessary overlap or arbitrage. This collaboration began before M-PESA was authorised and continues to the present day.<sup>35</sup>

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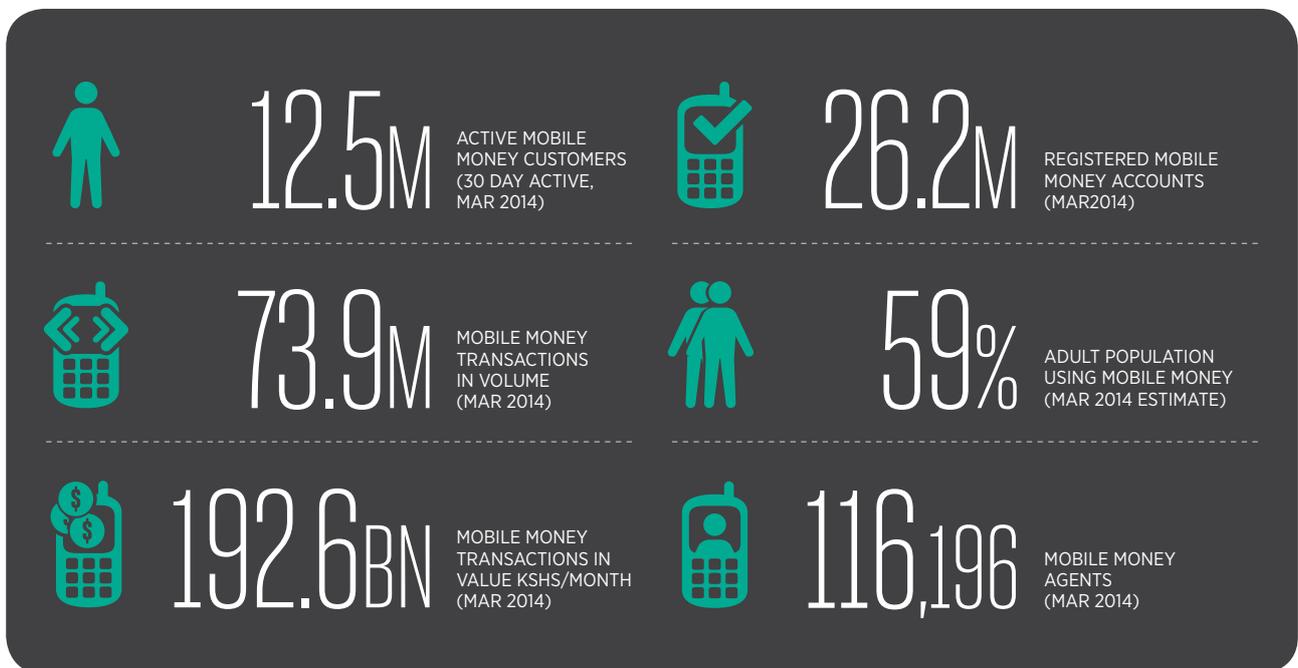
35. Markets that require the mobile operator to seek authorisation through a Special Purpose Vehicle (SPV) set up specifically to offer mobile money services avoid overlapping regulatory mandates; however, they must ensure the relationships between the customer and the mobile operator, the customer and the SPV are properly defined.

# The development of Kenya's mobile money market

In March 2014, there were 26.2 million mobile money accounts in Kenya and an estimated 12.5 million unique active users.<sup>36</sup> That same month, 73.9 million transactions were reported, with a daily average of 2.38 million transactions or 27.5 transactions per second and a throughput value<sup>37</sup> of KES 192.6 billion (USD 2.2 billion), primarily low-value retail transfers.<sup>38</sup>

Since mobile money wallets act as stores of value, mobile money providers have introduced additional payments functionality to allow customers greater choice in accessing other payments services. These additional use cases for mobile money have broadened the customer and client base, bringing efficiency to the payment system and enhancing revenue-generating opportunities for mobile operators.

FIGURE 5  
**KEY STATISTICS ON MOBILE MONEY IN KENYA**



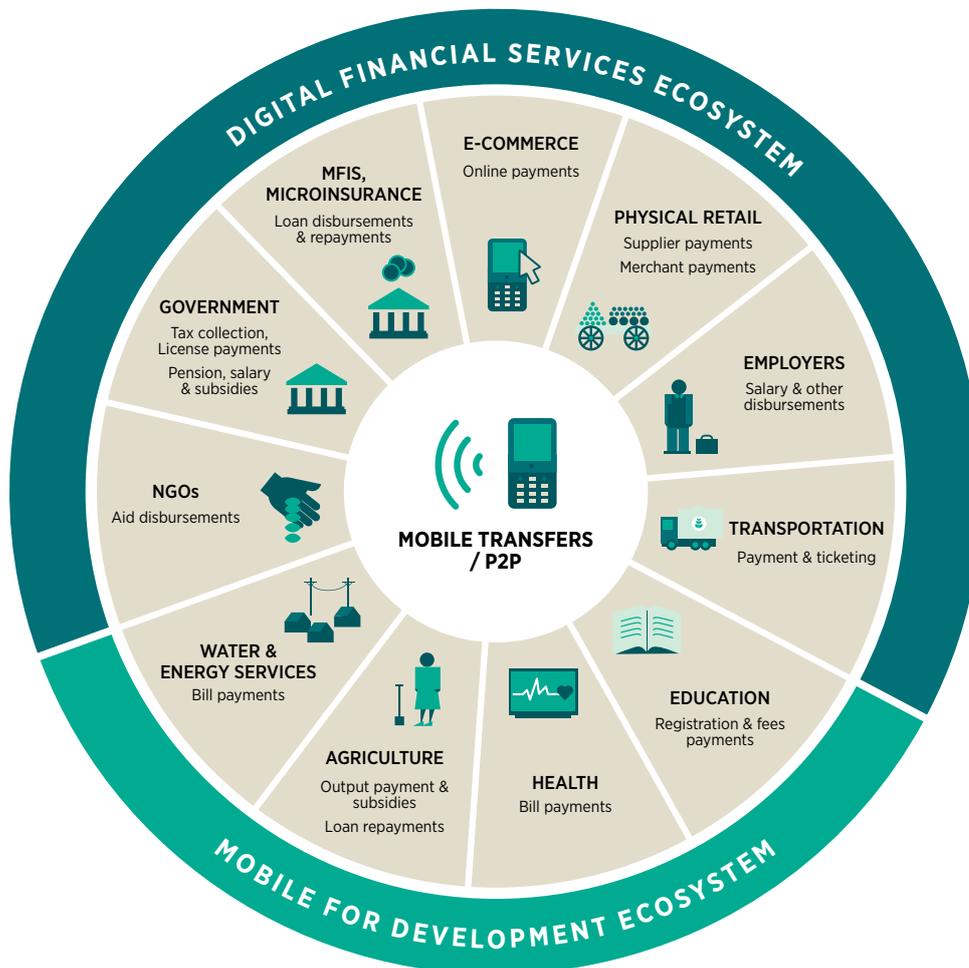
36. CBK Payments Statistics and GSMA analysis from operator surveys.

37. Calculated as the sum of total deposits and total withdrawals. Transactions taking place within the mobile money ecosystem are not factored in.

38. Ibid.

The pervasiveness of mobile money usage amongst large segments of Kenya's population has had a spin-off effect on the digital ecosystem. For instance, utilities companies see it as an efficient way of collecting dues, and banks see it as an efficient way to mobilise deposits, disburse loans, and receive loan repayments. For startup companies, mobile money has been a cost-effective payment method for their services and, for public organisations, an effective instrument for disbursing benefits and other social payments. The participation of myriad payers and payees, coupled with the safety and efficiency of the system, has transformed mobile money from a simple P2P instrument to the 'rails' on which the digital ecosystem runs. Mobile money is now more than just a way to send money home; it has become *the* payment platform for millions of mobile subscribers, who can conveniently access financial and non-financial products now that they are financial included.

FIGURE 6  
**THE DIGITAL PAYMENTS ECOSYSTEM**



## Beyond payments: Expanding digital financial inclusion

Between 2008 and 2012, several innovative solutions were launched as collaborative efforts between various financial services players, the most significant of which is probably M-Shwari. In 2008, bill payment and bulk payment services were introduced, which banks used to facilitate loan repayments and disbursements. The first cardless ATM withdrawal service was also launched during this period, allowing M-PESA users to withdraw cash from PesaPoint ATMs regardless of whether they were banked, effectively making the ATMs virtual mobile money agents.

In 2009, other innovative products began to appear, launched by cross-sector partnerships that were leveraging the ubiquity of mobile money. One of the first products was Grundfos LifeLink, which allowed rural households to pay for clean drinking water using M-PESA. Households were issued a pre-paid key fob associated with their Grundfos account. The pre-funded key fob could be used to access

the water pumping station, where clean drinking water was dispensed. To fund the Grundfos account, households were required to use the M-PESA 'Pay Bill' service, with each payment credited to the household's key fob. Another social innovation was Kilimo Salama, an insurance product launched in collaboration with Syngenta Foundation, UAP Insurance, and Safaricom that allowed farmers to insure against crop failure with premiums paid through M-PESA.

In 2010, a mobile savings, credit and insurance product, M-KESHO, was launched in partnership with Equity Bank. M-KESHO would allow Equity Bank customers to pair their bank account with their M-PESA account, making it convenient to move money between accounts. However, disagreements between Equity Bank and Safaricom curtailed further investment in the product and dealt a death blow to the credit and insurance elements within three months after launch.<sup>39</sup>

Safaricom kept the concept alive, however, and in 2012 teamed up with the Commercial Bank of Africa (CBA) to launch a similar product: M-Shwari. This time, Safaricom improved the product offering and customer experience by giving customers the ability to open an account remotely through electronic contracting.<sup>40</sup> Account activation was seamless since all due diligence was conducted 'behind the scenes'<sup>41</sup> and practically in real time, while credit eligibility was determined within 30 days of a customer's initial deposit based on a credit score derived from their mobile usage. M-Shwari has become a popular product, with more than KES 24 billion (USD 26 million) in deposits<sup>42</sup> and more than 890,000 loans disbursed.<sup>43</sup>

TABLE 1  
**SIMILARITIES AND DIFFERENCES BETWEEN M-KESHO AND M-SHWARI**

	M-KESHO	M-SHWARI
LAUNCH	2010	2012
PARTNER BANK	Equity Bank	Commercial Bank of Africa
ELIGIBILITY CRITERIA	M-PESA account holders	M-PESA account holders
ACCOUNT OPENING	Complete account opening forms at Equity Agents or branches	Remote, customers can activate the account from their mobile phone through the M-PESA menu
KYC	Fresh KYC required	Existing KYC held by MNO used by bank. Bank independently verifies its accuracy <sup>44</sup>
ACCOUNT ACTIVATION	>48 hours	Within minutes
ELIGIBILITY FOR CREDIT	>6 months <sup>45</sup>	>30 days after initial deposit
LIFE INSURANCE	Available	Not available

In 2011, Airtel Kenya launched a virtual payment card service "Payonline" in partnership with MasterCard and Standard Chartered Bank. Payonline provided online buyers who previously had no access to credit cards with an opportunity to make payment for goods and services using a virtual pre-paid credit card funded through their Airtel Money accounts.

39. The product remains available to many customers who still use it, however, neither Equity Bank nor Safaricom appear to be making any further investments in the product.

40. This was made possible through amendments to the Kenya Information and Communications Act that gave legitimacy to electronic contracts and digital signatures.

41. See Simone di Castri (2013), "Tiered risk-based KYC: M-Shwari successful customer due diligence", GSMA, available at <http://www.gsma.com/mobilefordevelopment/tiered-risk-based-kyc-m-shwari-successful-customer-due-diligence>

42. As of February 2014. This figure represents the total value of deposits mobilised through M-Shwari to February 2014, but does not necessarily represent the total deposit liabilities held by CBA under this product portfolio.

43. George Ngigi, "M-Shwari lifts CBA above Equity in loan accounts", Business Daily Africa, 9 June 2014, available at <http://www.businessdailyafrica.com/M-Shwari-lifts-CBA-above-Equity-in-loan-accounts/-/539552/2342556/-/o6wxli/-/index.html>

44. See also Simone di Castri (2013), "Tiered risk-based KYC: M-Shwari successful customer due diligence", GSMA, available at <http://www.gsma.com/mobilefordevelopment/tiered-risk-based-kyc-m-shwari-successful-customer-due-diligence>

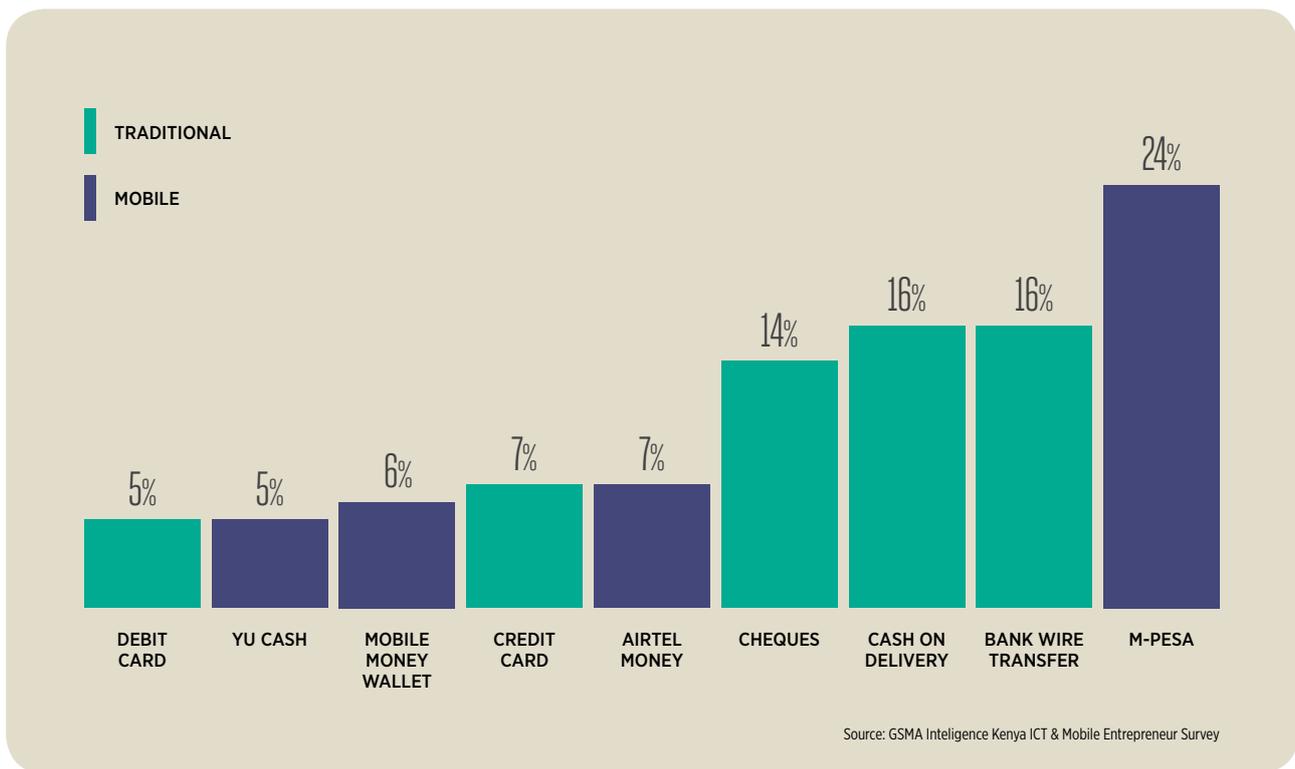
45. The product is still on each party's portfolio, but no credit has been issued.

## The rise of digital entrepreneurship

Since the introduction of mobile money in 2007, there has been a corresponding growth in digital entrepreneurship in Kenya. Nairobi has seen the proliferation of innovation hubs<sup>46</sup> and the emergence of tech startups<sup>47</sup> using the services of mobile network operators, including mobile money. Mobile money consumer-to-business (C2B) services have made it more convenient for customers to make payments. A recent GSMA study<sup>48</sup> shows that mobile money was the most popular payment method accepted by Kenyan startups (see Figure 7). The potential for mobile operators to play a major role in the digital ecosystem is huge, such as in the provision of channel access (USSD, SMS, IVR) and related hardware/software and network infrastructure (hosting hardware and software, international bandwidth, testing facilities, application programming interfaces, billing and accounting software, etc.).<sup>49</sup>

Kenya’s success has proven that mobile money can stimulate digital entrepreneurship and accelerate access to formal financial services. According to the 2006 and 2009 FinAccess National Surveys, banking penetration grew 19% spurred by developments in mobile money. The introduction of agent banking (inspired by the success of mobile money) and increased collaboration between mobile operators and banks have significantly deepened banking business since 2010. Access to the mobile channel (including mobile money) has had a positive impact, allowing digital entrepreneurs to leverage mobile technology to monetise their ideas.

FIGURE 7  
**PAYMENT METHODS ACCEPTED BY STARTUPS IN KENYA<sup>50</sup>**



46. These include iHub, Nailab, iLabAfrica, and m:Lab East Africa.

47. Such as M-KOPA, which developed a pay-as-you-go business model for its solar business.

48. GSMA (2014), "Digital Entrepreneurship in Kenya 2014", available at [http://www.gsmaentrepreneurshipkenya.com/GSMA\\_KENYA-AR2014-060214-WEB-SINGLE-PGS.pdf](http://www.gsmaentrepreneurshipkenya.com/GSMA_KENYA-AR2014-060214-WEB-SINGLE-PGS.pdf)

49. Ibid., p. 26

50. Ibid., Figure 7, p. 34

# Kenya's new regulatory framework

**“A regulator must realise that better regulation is more beneficial than more regulation. This is because we must ensure that innovations are not stifled by heavy regulatory regimes.”**

**Prof. Njuguna Ndung'u,  
Governor, Central Bank of Kenya<sup>51</sup>**

Effective financial markets require regulations that bring certainty, foster competition, sustain innovation, and promote ethical and responsible business conduct that upholds the rights of customers.

A robust statutory foundation is also needed to anchor good regulations. In 2010, when the CBK first proposed a draft regulation for electronic retail payments, there was no National Payment System Act. A National Payment Systems Bill had been introduced in Parliament, but lapsed when the House was prorogued. In 2011, Kenya's Parliament passed the National Payment System Act,<sup>52</sup> but the notice of commencement was not officially announced until three years later, in March 2014. This paved the way for the National Payment System (NPS) Regulations, since it provided a solid legal foundation for regulations to be issued.

## National Payment System (NPS) Regulations of 2014

On 15 August 2014, the Cabinet Secretary for the National Treasury issued a Legal Notice officially giving life to the NPS Regulations of 2014.<sup>53</sup> Publication of the Legal Notice capped off a long wait for a formal legal framework for mobile money. The NPS Regulations have codified into law the regulatory practices that have evolved since mobile money was introduced in 2007, beginning with the prudential and market conduct requirements enshrined in the no objection letters, and have given more legitimacy to existing business models. For operators, the NPS Regulations provided much-needed certainty in the market and direction for investors seeking to enter it. In a country where there are over 26.2 million registered mobile money accounts and 59% of the adult population actively uses mobile money, it is customers who will benefit most from comprehensive mechanisms for consumer redress, disclosure of terms of service, maintenance of privacy, and confidentiality of customer data.

The CBK has adopted a functional rather than institutional approach to regulation, which permits both banks and non-banks, including mobile operators, to provide mobile money services. Under the NPS Regulations, mobile money providers may be designated as either payment service providers<sup>54</sup> or e-money issuers.<sup>55</sup> Customer funds must be held in trust with a 'strong' rated prudentially regulated bank, and lending or investment of these funds is not permitted. The funds are isolated from the service provider's funds and protected from the claims of its creditors. Service providers can appoint agents and are responsible for the actions of agents. The CBK's oversight, inspection, and enforcement duties are formally recognised.

51. Simone di Castri (2013), "A conversation with Professor Njuguna Ndung'u, Governor of the Central Bank of Kenya, on the critical policy issues around mobile money", GSMA, available at <http://www.gsma.com/mobilefordevelopment/a-conversation-with-professor-njuguna-ndungu-governor-of-the-central-bank-of-kenya-on-the-critical-policy-issues-around-mobile-money>

52. Act No. 39 of 2011.

53. Central Bank of Kenya (2014), "The National Payment System Regulations, 2014. Arrangement Of Regulations" Available at <https://www.centralbank.go.ke/images/docs/legislation/NPSRegulations2014.pdf>

54. A payment service provider is defined under the NPS Act as (i) a person, company or organisation acting as provider in relation to the sending, receiving, storing or processing of payments or the provision of other services in relation to payment services through an electronic system; (ii) a person, company or organisation which owns, processes, operates, manages or controls a public switched network for the provision of payment services; or (iii) any other person, company or organisation that processes or stores data on behalf of such payment service providers or users of such payment services.

55. An e-money issuer is defined under the NPS Regulations as a payment service provider that is authorised to issue e-money.

The NPS Regulations are expected to drive competition and collaboration within Kenya's payments market. A stronger compliance and risk mitigation regime is also expected to emerge from the new regulatory framework. The Regulations validate existing mobile money business models and reinforce the AML/CFT compliance regimes practiced by mobile money providers. Beyond validating the regulatory and business practices that have evolved since the launch of M-PESA, the NPS Regulations also address a range of 'second-generation' issues that have emerged as the mobile money market has matured. These issues are detailed below.

### Governance and business models

While the NPS Regulations do not require mobile money business to be conducted under a separate legal entity, the framework validates the existing business model that allows mobile operators to operate under distinct corporate business units or divisions.<sup>56</sup> The CBK was keen to ensure there would be no disruption of business for existing mobile money providers. Mobile operators therefore do not need to change their structures, and may continue to offer their mobile money service along with their core voice and data services, provided roles and management are clearly separated. Given that the CBK has taken a functional approach to regulation, nothing restricts the formation of wholly or partly-owned subsidiaries of mobile operators to conduct mobile money business, which is common in other markets.<sup>57</sup>

The NPS Regulations require a payment service provider engaged in electronic retail transfers and other commercial activities to establish adequate governance arrangements, which must be effective and transparent to ensure the integrity of its service.<sup>58</sup>

The NPS Regulations prohibit a payment service provider from transferring any funds to itself or co-mingling trust funds with other funds. Therefore, considerable emphasis has been placed on the management and governance of the trusts set up to hold customer funds.

### Non-exclusive mobile money distribution

The NPS Regulations provide that "[n]o contract for the provision of retail cash services between an electronic retail payment service provider and an agent or cash merchant shall be exclusive",<sup>59</sup> and empower agents to work with multiple service providers.<sup>60</sup>

Providing for non-exclusive dealings when a substantive law on competition already exists may be unnecessary, but it is a powerful policy statement on the regulator's perception of vulnerabilities in the market.<sup>61</sup> Providing for non-exclusive dealings with agents could promote competition and encourage dynamic change in the mobile money market, and protecting the rights of agents to contract with operators of their choice is a commendable move by the CBK. However, agents must have the capacity to manage these transactions, which will mean meeting the liquidity demands of every provider. Also, the investment required to build an effective agent or distribution network is substantial and needs to be protected. The primary operator appointing an agent for the first time incurs high training and routine supervision costs, and has already defined its operating standards. It is therefore incumbent upon the regulator to ensure that while it advocates non-exclusive dealings, adequate measures have been put in place to ensure common operating and branding standards are adopted and agent supervision costs are shared equitably.

### Interoperability

Interoperability has not been mandated under the NPS Regulations. Rather, payment service providers are permitted "to enter into interoperable arrangements".<sup>62</sup> The NPS Regulations define interoperability as "commercial interconnectivity between providers of different payment systems or payment instruments including the capability of electronic systems to exchange messages and 'interoperable' shall be construed accordingly".<sup>63</sup> Under this definition, "commercial" implies the CBK will leave it to the market to determine how players should interoperate.

56. S.25 (2) (d)

57. In many markets, non-banks, including mobile operators, are typically required to set up separate legal entities authorised by the financial regulator to provide mobile money services.

58. The requirements include: a) establishment of a Board of Trustees of persons of calibre, credibility, and integrity who fulfil the fit and proper criteria prescribed in the draft regulations; b) clearly documented ownership and management structure; c) segregation of duties and internal audit functions to minimise risk of fraud; and d) conducting payment services in a separate and distinct business unit from other business units, including maintaining a separate management structure and keeping separate books of account for the payment services division.

59. S.15.2

60. S.15 (3): "An agent and cash merchant may provide services to multiple electronic retail payment service providers and/or institutions provided that (a) the agent or cash merchant has separate contracts for the provision of such services with each institution and provided further that (b) the agent or cash merchant has the capacity to manage the transactions for the different institution."

61. In the early stages of the development of the market, the CBK took a non-interventionist approach to the use of agents, holding that intervention would only be necessary if the market conditions required it to avert market failure. In late 2010, public discourse on formalising the regulatory framework had begun, upon the CBK's initiative. Airtel and Yu had already launched their services and sought to expand their distribution networks. The CBK had just issued agent banking guidelines allowing banks to appoint agents; however, banks faced difficulties in building effective agent networks due to the higher compliance requirements for bank agents than mobile money agents, for instance, the requirement for specific agent approval. Quality agents skilled in cash handling became a much sought after asset, and prompted demands for non-exclusive dealings with agents. At the time, Safaricom's agents were the most experienced in providing cash-in and cash-out services, and had tied its agents to exclusive contracts. Meanwhile, the number of agents was increasing in density and scope. The more agents there were in a particular location, the more profits would be eroded for incumbent agents. In time, agents joined the clamour for non-exclusivity to maximise their profits.

62. S.21.2

63. S.2

The CBK has not taken a prescriptive approach to interoperability, but it has gone to great lengths to propose a framework within which interoperability may be conducted. The NPS Regulations permit the Central Bank to recognise a Payment Service Provider Management Body (PSPMB), whose intent is to facilitate interoperability amongst payment service providers.<sup>64</sup>

### Consumer protection

The NPS Regulations include very detailed provisions for consumer protection. Service providers are required to have disclosure mechanisms, open channels for consumer redress, and clear terms and conditions for the service in place, and must maintain the privacy and confidentiality of customer data.

*Disclosure:*<sup>65</sup> In addition to providing a clear description of the service and providing customer support lines,<sup>66</sup> providers are required to disclose to customers and the CBK any material changes in the rates, terms, conditions, and charges for the service at least seven days before the changes take effect. Providers are also required to provide the following payment-related information:

- a payment reference;
- name of the payer/name of the payee;
- amount of the transfer;
- date of the transaction; and
- statements on request.<sup>67</sup>

Providers are prohibited from:

- charging customers to fulfil its disclosure and information obligations under the NPS regulations; or
- issuing misleading advertising on its products or services.

*Customer redress:*<sup>68</sup> Service providers are required, within six months of commencing operations, to establish a customer redress and complaints-handling mechanism, and to inform customers of the procedures for lodging complaints, including how to escalate the complaint if the customer is not satisfied with the initial response. Complaints must be filed within 15 days of the event, and service providers must respond to all complaints. The service provider is required to inform the customer of the expected outcomes and timeline for the resolution of the complaint within 60 days. The provider cannot charge customers for lodging complaints. However, it may levy a reasonable charge when records more than three months old must be retrieved, or when retrieval results in incremental expense or inconvenience to the service provider.

*Privacy and confidentiality:*<sup>69</sup> Disclosure of confidential customer<sup>70</sup> information is prohibited except under the following circumstances:

- to the customer concerned;
- to the Central Bank;
- when authorised in writing by the customer concerned; or
- as required by law.

A significant fine of KES 1 million (USD 11,600) may be imposed on service providers (including agents or cash merchants) that fail to comply with these disclosure requirements.

64. Ibid. Section 22 (1) further provides: "A payment service provider may, for the purposes of facilitating interoperability, participate in a payment service provider management body." The PSPMB would be established to manage and regulate, in relation to its members, all matters affecting payment instructions, acting as a channel for communication by its members with the Government and the Central Bank; and deal with and promote any other matter of interest to its members and foster co-operation among them. As a collective membership body, a PSPMB is required to self-regulate. To this end, the NPS Regulations provide that the rules of a PSPMB shall empower it to admit new members and regulate, control, and terminate membership (with the approval of the Central Bank); and constitute, establish, or dissolve any committee, forum, or body consisting of its members provided that such committee, forum, or body has an impact on, interacts with, has access to, or makes use of any payment, clearing or settlement systems, or operations. The CBK retains some residual powers over the affairs of a PSPMB; thus, the body cannot terminate the membership of any of its members except with the approval of the Central Bank.

65. S. 35

66. In addition to the standard legal terms commonly found in customer terms and conditions, the following additional provisions should be included in the service agreement: a) detailed description of the services offered; b) registration requirements for account opening; c) procedures for maintaining a customer account; d) the electronic retail service provider's privacy policy; e) customer account use and access responsibility; f) conditions and procedures for loading, transferring, receiving, and withdrawing funds; g) suspension, termination, and freezing of accounts; and h) account access procedure in the event of death of the account holder.

67. S. 35 (7).

68. S. 38

69. S. 42

70. Includes agents and cash merchants.

In addition to these measures, the NPS Regulations specify how advertisements are to be produced, including a requirement that advertisements are not misleading and are clear, concise, and comprehensive enough to inform customers of the main features of the product being advertised.<sup>71</sup>

### AML/CFT regulatory framework

When M-PESA was launched in 2007, no comprehensive AML/CFT legislation or regulations were in place. Banks were subject to the Prudential Guidelines on Anti-Money Laundering issued by the CBK under the powers conferred upon it by the Banking Act. Since mobile operators were not subject to the Banking Act, the CBK could not extend the application of the Prudential Guidelines to mobile money providers. In the absence of a substantive law on AML/CFT, mobile operators, notably Safaricom, implemented a voluntary AML/CFT programme consisting of staff and agent training, identity verification, know your customer (KYC) procedures, and transaction controls.<sup>72</sup> In 2009, Kenya enacted the Proceeds of Crime and Anti-Money Laundering Act (the AML Act).<sup>73</sup> The AML Act defines (and criminalises) money laundering and related offences, provides enforcement measures for Kenya's government (such as tracing and seizure of assets), and imposes penalties on offenders. The Act also imposes obligations on 'reporting institutions'. These obligations include the obligation to verify customer identity,<sup>74</sup> maintain customer records, and establish AML suspicious activity reporting mechanisms. All reporting institutions are required to register with the Financial Reporting Centre (FRC) and file any suspicious activity reports with the FRC. The proceeds of Crime and Anti-Money Laundering Regulations 2013<sup>75</sup> (AML Regulations) flesh out the AML Act and require reporting institutions adopting new technologies or new business practices, including new delivery mechanisms, to undertake a risk assessment before introducing a new product, business practice, or technology.

While the AML Act and AML Regulations do not explicitly provide for a risk-based or tiered approach to KYC, it can be inferred that since mobile money providers are permitted to accept additional KYC information incrementally, such as a utility bill, employment or occupational details, or a tax Personal Identification Number, a risk-based approach can be implemented. The AML Act does not discriminate between different classes of reporting institutions, but regulatory authorities may prescribe the extent to which and the circumstances under which incremental KYC documents may be requested.

#### BOX 4

### DETERMINING MOBILE MONEY'S SYSTEMIC RISK PROFILE

Mobile money in Kenya has been extremely successful, posting impressive customer and transaction figures. However, much of this data has never been objectively compared to other payment instruments, which raises the question: Would the failure of a mobile money scheme have any systemic impact on Kenya's financial system?<sup>76</sup>

The GSMA has sought to answer this question by examining the contribution of mobile money to the National Payment System throughput value.<sup>77</sup> Data obtained from the Central Bank of Kenya has revealed some interesting results (see Figures 7 and 8). For example, while the volume of transactions transacted in Kenya in 2013 was enormous, the value of mobile money transacted accounted for only 6.59% of total NPS throughput.<sup>78</sup> By contrast, the Kenya Electronic Payment and Settlement System (KEPSS)<sup>79</sup> accounts for 78.61% of the total NPS throughput value, while Automated Clearing House (ACH)<sup>80</sup> and payment cards account for 9.48% and 5.32% respectively.<sup>81</sup> The sheer dominance of the KEPSS demonstrates it is the systemically important payment system in Kenya, not mobile money.

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71. S. 37

72. Mercy W. Buku and Michael W. Meredith, "Safaricom and M-PESA in Kenya: Financial Inclusion and Financial Integrity", 8 WASH. J.L. TECH & ARTS 375 (2013) at 398 et seq. available at <http://digital.law.washington.edu/dspace-law/bitstream/handle/1773.1/1204/8/WJLTA375.pdf?sequence=5>

73. Act number 9 of 2009. In 2012, the Prevention of Terrorism Act (Act number 30 of 2012) was passed and adopts the same definition for 'reporting institution' as the AML Act. The Prevention of Terrorism Act imposes similar obligations on reporting institutions.

74. Acceptable forms of identification allowed under Section 45 (1) (a) are: birth certificate, national identity card, passport, driver's licence, or any other official document as may be prescribed.

75. Legal Notice No. 59 of 2013.

76. According to the Bank for International Settlements (BIS) Committee on Payments and Settlement Systems (CPSS), "a payment system is systemically important where, if the system were insufficiently protected against risk, disruption within it could trigger or transmit further disruptions amongst participants or systemic disruptions in the financial area more widely [...] Systemic importance is determined mainly by the size or nature of the individual payments or the aggregate value. Systems handling specifically large-value payments would normally be considered systemically important. A systemically important system does not necessarily handle only high-value payments; the term can include a system which handles payments of various values, but which has the capacity to trigger or transmit systemic disruption by virtue of certain segments of its traffic. In practice, the boundary between payment systems which are systemically important and those which are not is not always clear cut and the central bank needs to consider carefully where that boundary should be drawn." See Committee on Payment and Settlement Systems (2001), "Core Principles for Systemically Important Payment Systems", Bank for International Settlements (BIS), available at <http://www.bis.org/cpmi/publ/d43.pdf>

77. A measure of the flow of funds through mobile money systems vis-à-vis the flow of funds through the National Payment System.

78. CBK Payments data January–December 2013.

79. KEPSS is a systemically important Real-Time Gross Settlement (RTGS) payment system operated by the CBK for high-value payments.

80. The ACH is a clearing house owned by the Kenya Bankers Association (KBA) and operated under the oversight of the CBK.

81. CBK payments data January–December 2013.

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However, even though mobile money contributes just under 7% of the NPS throughput value, it commands a staggering 66.56% of the total NPS throughput volume. It is therefore fundamentally a high-volume, low-value retail payments instrument. The data suggests that while mobile money is widely accepted and used in Kenya and has made a major contribution to improving the efficiency of the NPS and economic growth, mobile money service providers are not systemically important institutions.<sup>82</sup>

The CBK, therefore, has been right to adopt a regulatory approach that is functional (regulating by type of product and allowing different types of institutions to enter the market) and proportionate, encouraging innovation and growth whilst avoiding an overly prescriptive or burdensome approach (such as treating mobile money the same as higher risk profile savings and credit products offered by commercial banks).

Comparing the data on NPS throughput value has provided an accurate measure of the prevalence of mobile money, and this evidence should put to rest some regulators' fears that mobile money services will introduce systemic risk in their markets due to its massive potential for growth.

FIGURE 8  
KENYA'S NATIONAL PAYMENTS LANDSCAPE (TRANSACTION VOLUMES ('000))

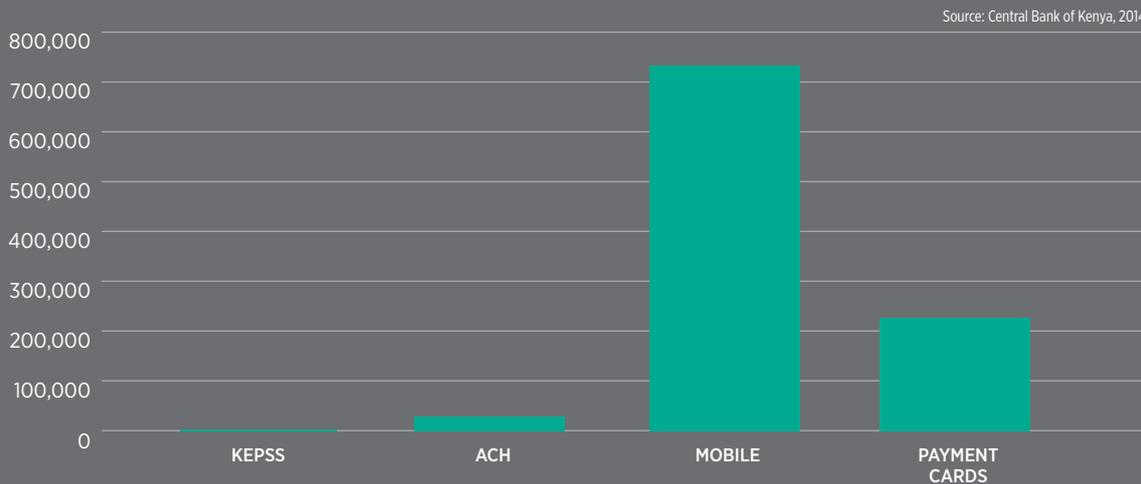
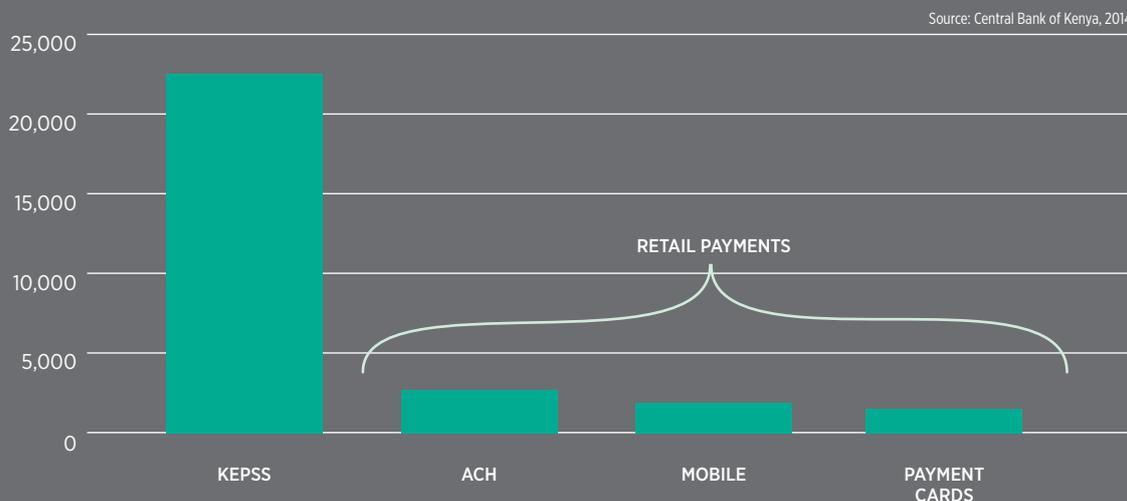


FIGURE 9  
KENYA'S NATIONAL PAYMENTS LANDSCAPE (TRANSACTION VALUE (KES BILLION))



82. See also Claudia McKay and Rafe Mazer, "10 Myths about M-PESA: 2014 Update", CGAP Blog, 1 October 2014, available at <http://www.cgap.org/blog/10-myths-about-m-pesa-2014-update>

# Current mobile money issues in Kenya

**W**hile a lot has been done to codify existing regulatory practices into law, the regulatory environment is dynamic and has several players. Even in Kenya, where mobile money has grown exponentially, the industry is still in its infancy. It is therefore not surprising that some issues have yet to be fully addressed by regulation or government agencies. Some of these issues are discussed below.

## Taxation of mobile money

Mobile telecommunications remains one of the highest taxed sectors of the economy.<sup>83</sup> Kenya's regulatory environment has enabled mobile money to thrive, but a lack of government consultation with the industry threatens to diminish some of the financial inclusion gains that have been made. For instance, in 2013, the National Treasury introduced a 10% excise duty on money transfer services without adequately consulting industry stakeholders. As a consumer tax, it has inevitably been passed on to mobile money customers through higher transaction charges, and low-income households in particular may be deterred by the rising costs of basic transactions and choose informal ways to transfer money instead of using mobile money.<sup>84</sup> Any additional tax on mobile money may:

- Make the market less profitable for service providers and discourage them from investing in new products and services or expanding distribution networks. Lower profits would ultimately mean less tax would be collected.
- Raise market prices, creating a barrier for customers to use the service.<sup>85</sup>

## Deposit insurance

In addition to collaborating with tax authorities, regulators should explore collaborations with other agencies, such as deposit insurance corporations or deposit protection boards, to address financial system failures that could impact mobile money users. Ringfencing and safeguarding measures have been put in place to protect users against the failure of the mobile money operator,<sup>86</sup> but not enough has been done to protect users from the failure of the custodial bank. The spirit of the Kenya Deposit Insurance Act<sup>87</sup> supports extending deposit insurance to accounts held under a fiduciary capacity.<sup>88</sup> Extending or 'passing through' deposit insurance to cover mobile money accounts (or similar deposit-like products held in a fiduciary capacity) would be a welcome development, but requires further research on the actuarial pricing of deposit insurance and the extent or limit of the cover for such accounts.<sup>89</sup>

83. Deloitte (2011), "Mobile telephony and taxation in Kenya", available at <http://www.gsma.com/publicpolicy/wp-content/uploads/2012/03/mobiletelephoneandtaxationinkenya.pdf>

84. See Simone di Castri (2012), "GSMA position on the taxation of mobile money transactions in Kenya", GSMA, available at <http://www.gsma.com/mobilefordevelopment/gsma-position-on-the-taxation-of-mobile-money-transactions-in-kenya>

85. Ibid.

86. For a more detailed analysis, see the GSMA Mobile Money Regulatory Guide, "Ringfencing and safeguard of customer money", available at <http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/safeguard-of-customer-money>

87. Act number 10 of 2012, available at [http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/Kenya\\_Deposit\\_Insurance\\_Act2012.doc](http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/Kenya_Deposit_Insurance_Act2012.doc)

88. See Brian Muthiora (2013), "Reinventing the wheel: 'Pass through' deposit insurance coverage for mobile money in Kenya, GSMA, available at <http://www.gsma.com/mobilefordevelopment/reinventing-the-wheel-pass-through-deposit-insurance-coverage-for-mobile-money-in-kenya>

89. Currently, the Deposit Protection Fund Board provides deposit protection coverage of up to KES 100,000 (USD 1,160) to each depositor of a member institution. This limit is unlikely to apply to mobile money accounts, as it would (in theory) guarantee 100% deposit insurance cover for mobile money accounts with an account balance ceiling of KES 100,000, perhaps to the detriment of other depositors.

## Accrued interest

As mobile money usage has grown, so have aggregate residual balances held in trust. These balances are usually held in interest-earning current accounts. However, because mobile money schemes have been designed as payment products rather than deposit products, regulation prohibits mobile money wallets from accruing interest.<sup>90</sup>

In Kenya, “any income generated from placement of these trust funds shall be (a) used in accordance with Trust legislation and in consultation with the Bank, or (b) donated to a public charitable organisation for use for public charitable purposes.”<sup>91</sup>

Different markets have taken different approaches to accrued interest. Some regulators are considering passing on the accrued interest directly to mobile money customers.<sup>92</sup> In August 2014, Tigo Tanzania announced<sup>93</sup> that, upon approval from the Bank of Tanzania, it would distribute profits earned from pooled funds held in trust (which then amounted to USD 8.7 million)<sup>94</sup> to its customers, making it the first mobile operator in the world to do so. The Bank of Ghana recently issued draft *Guidelines for E-Money Issuers*, which expressly allows interest to be passed on directly to the customer.<sup>95</sup>

Ultimately, mobile money users, including agents, whose funds (or capital) have generated interest income should benefit from the accrued wealth, and regulators should devise innovative ways of ensuring the benefit is passed on to the users without running afoul of existing banking or deposit-taking legislation or regulations. This may require additional ‘test and learn’ approaches to identify the suitable model for each market.

90. NPS Regulations, Section 43 (2): “E-money shall not earn interest or any other financial return to the E-Money holder or customer”

91. NPS Regulations, Section 25.5. See also part IV *supra*.

92. See also Simone di Castri (2014), “Should the interest accrued on the trust or escrow account be paid out to mobile money customers?”, GSMA, available at <http://www.gsma.com/mobileforddevelopment/should-the-interest-accrued-on-the-trust-or-escrow-account-be-paid-out-to-mobile-money-customers>. See also GSMA, “Mobile Money Regulatory Guide”, [www.gsma.com](http://www.gsma.com)

93. See the announcement at <http://www.tigo.co.tz/tigo-world/press-room/corporate/tigo-pesa-trust-first-world-distribute-mobile-money-profit>

94. See also Chris Williamson (2014), “Financial inclusion in Tanzania: Tigo rewards its mobile money customers”, GSMA, available at <http://www.gsma.com/mobileforddevelopment/financial-inclusion-in-tanzania-tigo-rewards-its-mobile-money-customers>

95. Section 10 (5) of the Guidelines provides “E-money issuers shall pass through not less than 80% of the interest accrued on the e-money float net of any fees or charges related to the administration of the pooled float accounts to e-money holders. Such fees and charges must be the standard applicable to the account type in question. Any use of frivolous fees and charges or the invention of a new account type to hold e-money float for the purposes of limiting interest below that of other account types will be seen as an attempt to defraud the e-money holders and grounds for severe sanction of the bank and any colluding partner. Such fees and charges may also not exceed the interest income generated on the account such that the balance in the account falls below the total value of the part of the e-money float held in the account in question. Interest generated on over-the-counter transactions which are not associated with a given customer account can be retained or disposed of in full by the EMI.”

# The outlook for Kenya: A rapidly shifting mobile money landscape

**T**he mobile money ecosystem is developing at a rapid pace and, in the next phase of growth, we should expect to see new players in the market, new technologies, and a broader ecosystem. These developments are likely to alter Kenya's mobile money landscape even more.

## New players: Mobile virtual network operators (MVNOs)

Recent events in Kenya have demonstrated the impact of mobile money on financial services and financial inclusion. In May 2014, the Communications Authority of Kenya issued mobile virtual network operator (MVNO) licences<sup>96</sup> to ZionCell/Mobile Decisioning (MoDE), Mobile Pay (TangazaPesa), and Finserve<sup>97</sup> (Equity Bank). All of these services are hosted by Airtel Kenya, and have been established with the aim to take charge of the mobile channel and better reach their respective customer bases with financial services. For instance, Equity Bank intends to revolutionise the delivery of banking products (savings, payments, and credit) through its MVNO affiliate by dramatically lowering the costs of these services, which has prompted Safaricom to revise its rates to be more competitive.<sup>98</sup>

## New technologies: Overlay (thin) SIM

When Equity Bank announced it had acquired an MVNO licence through its subsidiary, Finserve, it also announced it would launch the service with the deployment of paper-thin SIM cards that can be overlaid on existing SIM cards. This technology allows customers to switch from one provider to another without having to purchase a dual-SIM phone, which is expected to speed adoption of the new service.<sup>99</sup> Since the Communications Authority of Kenya has authorised Finserve to deploy the Thin SIM, other players (banks, mobile operators, and third parties) are likely to follow suit in an attempt to reduce churn and increase low-value retail transaction revenues.<sup>100</sup>

## A broader ecosystem

- **Interoperability:** The NPS Regulations have provided an elaborate framework for market-led interoperability. The seamless convergence of mobile money products could provide economies of scale for operators to reach a broader market and could enhance competition and lower transaction costs for customers. The NPS Regulations have already anticipated the formation of a Payment Service Provider Management Body.

96. An MVNO licence allows an entity without a network infrastructure licence, spectrum, or network infrastructure of its own to resell the mobile network services of its host network under its brand name. MVNOs have full control over the SIM card, branding, marketing, billing, and customer care operations. Because MVNOs purchase bulk minutes from their host network at discounted rates, they are able to offer voice and data services at competitive rates. See <http://www.telecomspace.com/latesttrends-mvno.html>

97. Trading as 'Equitel'.

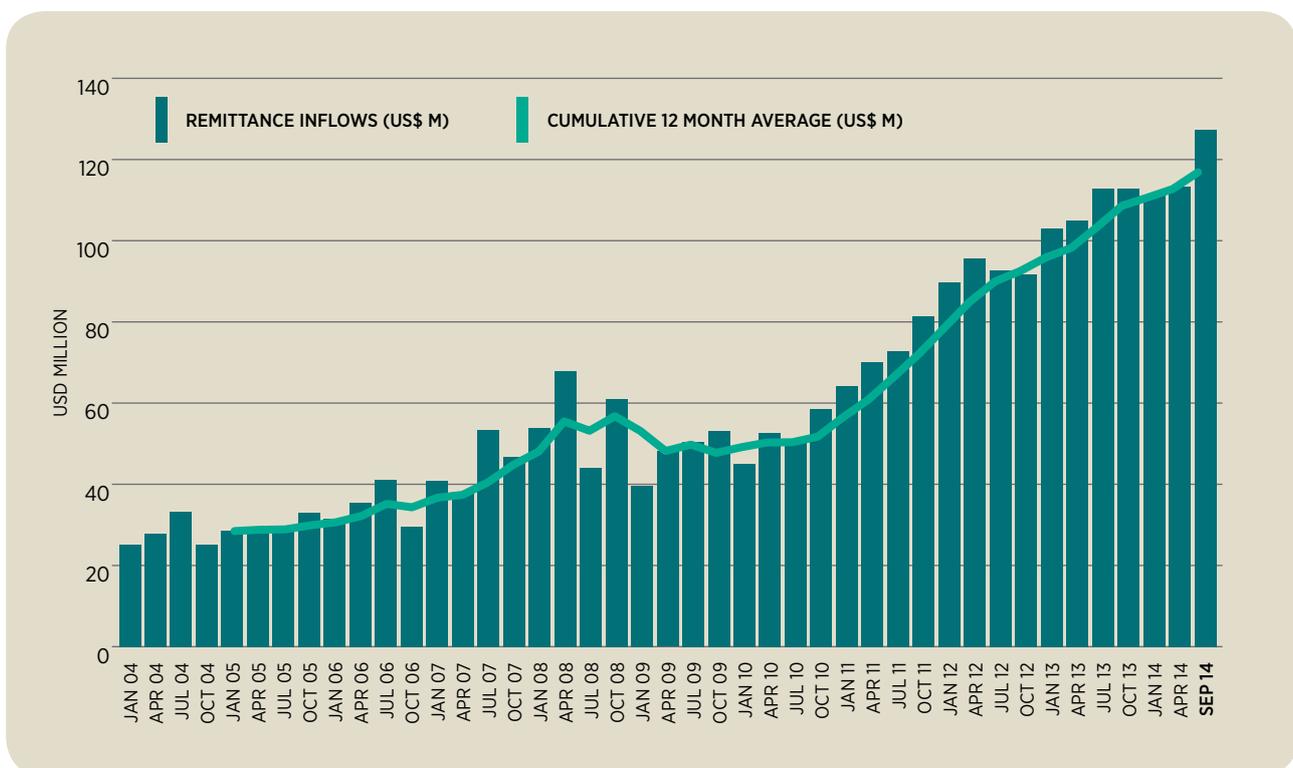
98. Matina Stevis, "Kenya's Safaricom to Slash M-PESA Transaction Fees", The Wall Street Journal, 19 August 2014, available at <http://blogs.wsj.com/frontiers/2014/08/19/kenyas-safaricom-to-slash-m-pesa-transaction-fees/>

99. See "Equity Bank to take on M-PESA with Thin SIM technology", Finextra, 18 October 2014, available at <http://www.finextra.com/news/fullstory.aspx?newsitemid=26548>

100. In August 2014 GSMA issued a neutral security assessment on overlay SIM technology highlighting theoretical risks associated with the technology. The assessment recommended that network operators, regulators and other stakeholders should be aware of the risks that such technologies pose. See the GSMA Generic Overlay SIM Security Assessment available at [http://www.gsma.com/publicpolicy/wp-content/uploads/2014/08/GSMA-Security-Group-Overlay\\_SIM\\_Security\\_Assessment\\_August\\_18\\_2014.pdf](http://www.gsma.com/publicpolicy/wp-content/uploads/2014/08/GSMA-Security-Group-Overlay_SIM_Security_Assessment_August_18_2014.pdf)

- Adapting to a changing market:** As the mobile money market becomes more dynamic and competitive, it will be imperative for providers to stay relevant, anticipate shifts in the market structure, and leverage goodwill in the industry to tackle adversities. For example, a re-energised banking sector is advocating for a single national switch to enable low-value, mobile-based retail credit transfers (RTCs), and entry into the telecommunications sector is imminent.<sup>101</sup> But commercial banks are struggling to compete with mobile money in the low value retail payments space because of the expense of providing RTCs. Mobile money providers could leverage their technology to facilitate RTCs to other participants in the payment system and grow their revenues from non-traditional sources.<sup>102</sup>
- International remittances:** The opportunity for mobile money providers in the international remittance space is enormous. According to the CBK, remittances to Kenya were USD 127 million in September 2014 (See Figure 10).<sup>103</sup> The majority of inflows are low-value ticket sizes that could be delivered through mobile money directly to customer wallets.

FIGURE 10  
**MONTHLY REMITTANCE INFLOWS TO KENYA, SEPTEMBER 2014<sup>104</sup>**



Mobile money providers have struggled to scale their international remittances services because of a strict regulatory regime that restricts outflows of foreign currency to commercial banks. This changed in 2013 with the issuance of the Money Remittance Regulations,<sup>105</sup> which created a regulatory framework for the operation of stand-alone remittance companies, which are permitted to offer inward and outward remittances.<sup>106</sup> Mobile money providers could take advantage of this regulatory regime to seek approval for their international remittance services. Moreover, the expansion of trade within the East African Community (EAC)<sup>107</sup> has created a market opportunity for cross-border transfers. The East African Cross-Border Payment System has been launched and processes transfers originating in any of the partner states. By creating partnerships with commercial banks, mobile money providers could harness this opportunity to grow this revenue stream.

These are exciting times for mobile money. As new players, new technologies, and a dynamic ecosystem take shape in Kenya, we eagerly await the next phase of mobile money development in this pioneering market.

101. Such as Equity Bank's acquisition of an MVNO license through its subsidiary, Finserve.

102. It was announced in March 2014 that Millicom, the parent company of Tigo Rwanda, had acquired a controlling stake in R-Switch, a national switch operating in Rwanda.

103. Central Bank of Kenya (2014), "Commentary on Remittances for September 2014", available at <https://www.centralbank.go.ke/index.php/diaspora-remittances>

104. Ibid.

105. Issued under the Central Bank of Kenya Act, Chapter 491 of the Laws of Kenya.

106. This regulatory framework was introduced to formalise the business of smaller remittance companies that use technology as their primary interface. Stand-alone companies are distinct from global remittance providers, such as Western Union or MoneyGram.

107. The EAC is comprised of Burundi, Kenya, Rwanda, Tanzania, and Uganda.



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