

STATE OF THE INDUSTRY

MOBILE CREDIT AND SAVINGS







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The authors would also like to express their sincere appreciation to The Bill & Melinda Gates Foundation, The MasterCard Foundation, and Omidyar Network for reviewing this report and providing useful insights.

Finally, the authors would like to thank Bima and MicroEnsure for helping collect data on mobile insurance services and CGAP for their support in identifying the mobile insurance services included in the MMU Mobile Insurance Deployment Tracker.

#### Disclaimer

This report is based on data collected through MMU's annual Global Adoption Survey of Mobile Financial Services, MMU Deployment Tracker, and on MMU internal analysis. As of the end of 2013 there were approximately 219 live mobile money services in the world, of which around 50% report mobile money data every year through MMU Global Survey. Because the larger mobile money providers tend to participate in the survey every year, our sample actually represents the majority of the world's market share of mobile money users.

#### Cleaning

Survey data is self-reported and has not been verified independently by the GSMA. Before data is entered it is checked for what's included or excluded and how the metric is defined. Data is also cross-checked against regulators' reports where available.

#### Confidentiality

Data was reported on a confidential basis and the report protects the confidentiality of each deployment. We only highlight individual services where the service provider granted approval to disclose key performance information.

#### Data availability and estimates

For some metrics, such as mobile money revenues, the amount of data reported is not as high as for the core metrics. Where it is sensible, estimates are made to complete the data set; in this report, numbers of mobile money accounts (both registered and active) have been estimated. This is undertaken by applying the extensive research experience of the team and comparison with other similar operators and markets.

#### **About MMU**

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

It is estimated that 2.5 billion people in lower to middle income countries are unbanked. They lack the financial services they need to invest in their livelihoods, protect their assets, and avoid falling deeper into poverty. Traditional bricks-and-mortar banking infrastructure is too expensive to serve the poor, particularly in rural areas. However, more than 1 billion underserved people in these markets already have access to a mobile phone, which can provide the infrastructure to offer financial services sustainably, such as payments, transfers, insurance, savings, and credit.

The MMU Programme is focused on providing convenient, safe and affordable financial services to the underserved by supporting mobile money services to reach scale. We do this by identifying and sharing benchmark data, operational best practices, and commercially viable interoperability approaches, as well as cultivating enabling regulatory environments.

The MMU Programme is supported by The Bill & Melinda Gates Foundation, The MasterCard Foundation, and Omidyar Network.

For more information, visit www.gsma.com/mmu

#### **Foreword**



Mobile money represents a tremendous opportunity for social impact through enabling customers to access services which can help them to manage their daily lives and improve their livelihoods. It also represents an important commercial opportunity, and as such many of our members have built mobile money into their core strategy for achieving future revenue growth.

Since GSMA began collecting and analysing mobile money data back in 2010, our insights from the annual State of the Industry report have helped to create a better understanding of the reach and the operational performance of mobile money services around the world. It also builds on an existing library of knowledge that has been developed by the GSMA's Mobile Money for the Unbanked programme, with support from the Bill & Melinda Gates Foundation, The MasterCard Foundation and Omidyar Network.

One of the themes in this report is the importance of collaboration, both among our members as well as with banks and other external parties, to develop a successful digital financial ecosystem. At the GSMA, we are committed to supporting the industry to do this. We are working with the industry to understand the opportunity presented by account-to-account interoperability and how it should be implemented to achieve its full potential for enabling digital transactions.

I hope that you find the contents of this report useful, and I look forward to GSMA's continued engagement with the mobile money industry to help accelerate its development so that we shall see even higher performance in the years to come.

Ame Boursot

Anne Bouverot

GSMA Director General & Member of the Board

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### Executive Summary

The GSMA Mobile Money for the Unbanked Programme (MMU) has been tracking the progress of the mobile money industry for the past few years. Each year, MMU's State of the Industry Report contains key findings and insights on the growth of the sector. This year, for the first time, the scope of the report has been extended to include not only mobile money, but also mobile insurance, mobile credit and mobile savings.

This report contains data from the MMU Deployment Tracker, which monitors the number of live and planned mobile money services for the unbanked across the globe. It also includes data from the MMU 2013 Global Adoption Survey of Mobile Financial Services (hereinafter the 2013 Global Survey), which had 110 participants from 56 countries. For some metrics, such as mobile money revenues, the amount of data reported is not as high as for the core metrics. Where it is sensible, estimates are made to complete the data set; in this report, numbers of mobile money accounts (both registered and active) have been estimated. We believe the findings in this report are truly representative of the industry overall.

Mini case studies on mobile financial services as well as particular mobile money best practices have also been included in the report, where they help to support or deepen the insights from the survey.

#### Highlights from the report include:

- The mobile money industry continues to grow and is now expanding across more regions. With 219 services in 84 countries at the end of 2013, mobile money is now available in most developing and emerging markets. While the majority of services remain in Sub-Saharan Africa, mobile money has significantly expanded outside of the region in 2013. The question is no longer whether mobile money services are available, but how to ensure that the industry continues to grow sustainably.
- Competition is increasing in many markets as mobile money is becoming a mainstream product for a growing number of operators. 52 markets have 2 or more mobile money services.
- The number of active mobile money accounts is growing fast, and in June 2013, there were over 60 million active mobile money accounts globally. An increasing number of services are reaching scale and 13 have over 1 million active users.
- For the majority of providers however, building the foundations of their mobile money services remains challenging. Globally, only 29.9% of registered mobile money accounts were active in June 2013. Similarly, ensuring adequate agent activity should be a priority in a number of markets.
- Several mobile money services, particularly those that have already created solid foundations, have made progress in developing their product offering, extending the digital financial ecosystem and growing revenues.
  - Product offering: Airtime top-up and P2P transfer remained the most adopted products, but in 2013, bulk payments
    was the fastest growing product with numbers of transactions increasing at an annualized growth rate of 617%. Rollouts
    of new products have been most successful where a solid distribution network and a large, active customer base have
    already been established.
  - **Ecosystem development:** With more mobile money services maturing, an increasing number of operators are recognising the ecosystem opportunity. In 2013, transactions involving external companies have been driving the growth in mobile money globally, representing 29% of the value transacted in June. These transactions are also growing much faster than airtime top-ups and on-net transfers.
  - **Revenues:** Mobile money has been financial rewarding for deployments that have reached scale. Five operators within our sample reported that mobile money contributed to over 5% of their revenues. Savings from airtime distribution can also represent an interesting indirect benefit for MNOs: 10 reported selling more than 10% of their airtime through mobile money.

2

- With an increasing number of services reaching scale, mobile money continues to be a driver of financial inclusion. Mobile money
  extends access to payments and financial services beyond the reach of traditional financial institutions in many developing countries. At the end of 2013, nine markets already had more mobile money accounts than bank accounts, compared to just four last
  year. In these markets, the mobile money industry has made financial services accessible to more people than the traditional banking industry ever has.
- The development of other mobile financial services including mobile insurance, mobile credit and savings will allow service providers to deepen financial inclusion by offering financial services beyond money transfer and payment.
  - 123 mobile insurance, credit and savings services are live of which 27 were launched in 2013, highlighting that there is strong interest in leveraging mobile to deepen financial inclusion.
  - The mobile insurance industry is gaining traction with the help of specialist intermediaries creating commercial and partner-ship models that appear to be accelerating product launches (30 in the past two years).
  - The business case is challenging, particularly because providers must rely on a large sales force and adequate customer
    education to acquire new customers as customer acquisition is more sophisticated and mobile insurance credit and savings
    services are currently not sold through mobile money agents.

### INTRODUCTION

#### About MMU State of the Industry report

Access to financial services can help low-income households manage day-to-day risks and provide a safety net to insulate them from financial shocks (e.g. a death in the family, illness, job loss, or natural disasters). However, an estimated 2.5 billion people in lower and middle-income countries are unbanked. The traditional bricks-and-mortar model adopted by most banking and payments providers struggles to serve the poor, and these people are forced to rely instead on informal financial services that are usually unsafe, inconvenient, and expensive.

However, among the unbanked population, more than 1 billion people have access to a mobile phone<sup>2</sup>. The mobile channel can be utilised to provide access to financial services such as payments, transfers, insurance, savings, and credit, in ways that are more cost-efficient, safe and convenient than existing alternatives. In many developing countries, mobile network operators (MNOs) have unique assets and incentives to deliver these services in a sustainable and scalable way: trusted brands, widespread distribution, and secure channel access.

The availability of data on mobile financial services is also critical to allow providers of mobile financial services make informed decisions and investments in this area.

#### TABLE 1

#### **DEFINITIONS OF MOBILE FINANCIAL SERVICES**

#### **MOBILE MONEY MOBILE INSURANCE MOBILE CREDIT AND SAVINGS** Mobile money uses the mobile phone to transfer Mobile insurance uses the mobile phone Mobile credit and savings use the mobile phone money and make payments to the underserved. to provide microinsurance services to the to provide credit and/or savings services to the underserved. underserved. MMU tracks mobile money services that meet the MMU tracks mobile insurance services that meet MMU tracks mobile credit and savings services following criteria: the following criteria: that meet the following criteria: · The service must offer at least one of the following services: P2P transfer, bill payment, • The service must allow subscribers to manage • The service allows subscribers to save money bulk payment, merchant payment, and risks by providing a guarantee of compensation in an account that provides principal security, international remittance. for specified loss, damage, illness, or death. and in some cases an interest rate, and/or allows subscribers to borrow a certain amount · The service must rely heavily on a network of • The service must allow underserved people of money that they agree to repay within a transactional points outside bank branches to access insurance services easily using a specified period of time. mobile device. Services that offer the mobile that make the service accessible to unbanked and underbanked people. Customers must be phone as just another channel for the clients of • The service must allow underserved people to able to use the service without having been an insurance company to access a traditional save money and/or to apply for credit and repay previously banked. Services that offer the insurance product are not included. it more easily using a mobile device. Services that mobile phone as just another channel to access offer the mobile phone as just another channel to · The service must be available even to a traditional banking product are not included. access a traditional savings account and/or credit customers with basic mobile devices. product are not included. · The service must offer an interface for initiating transactions for agents and/or customers that • The service must be available even to customers is available on basic mobile devices. with basic mobile devices.

Jake Kendall, Nataliya Mylenko and Alejandro Ponce, "Measuring Financial Access Around the World" (June 2010), Policy Research Working Paper 5253, The World Bank. Available at http://elibrary.worldbank.org/doi/book/10.1596/1813-9450-5253

<sup>2.</sup> CGAP, GSMA, and McKinsey & Company "Mobile Money Market Sizing Study" (2010).

The GSMA Mobile Money for the Unbanked Programme (MMU) is tracking the progress of the mobile financial service industry. Since 2011, MMU has published an annual State of the Industry Report to share key findings and insights on the growth of the sector. As in previous years, this report for 2013 looks at the state of mobile money, but for the first time, the scope has been expanded to include mobile insurance, credit, and savings.

With this report, we hope to provide the industry with much-needed information, data, and standard definitions, allowing different stakeholders to understand better and to succeed in this sector.

#### Methodology

In this report, we provide a quantitative assessment of the state of the mobile financial service industry based on data from the MMU Deployment Tracker and the 2013 Global Adoption Survey of Mobile Financial Services, as well as qualitative insights on the performance of mobile financial services based on MMU's engagement with the industry over the last past year.

#### MMU Deployment Tracker

The Mobile Money Deployment Tracker is an online database that monitors the number of live and planned mobile money services for the unbanked across the globe. It also contains information about each live deployment, such as the name of the provider and the name of the mobile money service, its launch date, what financial products are offered, and which partners are involved in delivering each service.<sup>3</sup> In 2014, the MMU Deployment Tracker will be extended to include information on mobile insurance services and mobile credit and savings services.

#### MMU Global Adoption Survey

Our Global Adoption Survey is an annual survey designed to capture quantitative information about the performance of mobile financial services around the world. All of the service providers represented in our Deployment Tracker were invited to participate in the 2013 global survey. Respondents supplied standardised operational metrics about their services for the months of September 2012, December 2012, March 2013, and June 2013, on a confidential basis.

A total of 110 service providers from 56 countries participated in the 2013 survey, with 98 submitting information on mobile money, 21 on mobile insurance, and 16 on mobile credit and savings. The full list of survey participants is included in Appendix A.

We believe that our sample is representative of the industry as it includes:

- 49% of mobile money services, 25% of mobile insurance services, and 41% of mobile credit and savings services that were live in June 2013, including the most well-known services in the world;
- services which span a range of development stages, from long-established services to those services that were only launched in 2013;
- a mix of services offered by different providers, e.g., mobile network operators (MNOs), banks, and third-party players;
- wallet-based services as well as over-the-counter services; and
- a diverse geographic representation from all regions.

All data was self-reported by participants. Data provided by the industry has not been verified independently by the GSMA, however all survey responses were carefully checked for consistency.

For some metrics, such as mobile money revenues, the amount of data reported is not as high as for the core metrics. Where it is sensible, estimates are made to complete the data set; in this report, numbers of mobile money accounts (both registered and active) have been estimated. This is undertaken by applying the extensive research experience of the team and comparison with other similar operators and markets. This is an important improvement from the 2011 and 2012 State of the Industry Reports, which aggregated only data from actual survey respondents.

A series of blog posts will be published over the course of the year that will discuss some of the report's findings in more detail. MMU has also provided confidential benchmark reports to each survey participant, comparing their performance to their global and regional peers.

This report is divided into two parts. In Part 1, we discuss the state of the mobile money sector and industry trends. In the first section, we provide an overview of the mobile money landscape in 2013, looking at the number of mobile money services globally. We then consider customer adoption of mobile money services and usage in section 2. Section 3 reviews how providers are making mobile money services accessible through large distribution networks. Only once a solid distribution network and a large, active customer base are in place can mobile money providers shift their focus to other actions that will drive success. Sections 4, 5, and 6 discuss the state of the mobile money industry in terms of:

- Product offering the breadth and sophistication of mobile money product offerings;
- Ecosystem development the ecosystem of companies and third parties connecting to a particular mobile money service;
- And revenues direct and indirect revenues generated by mobile money.

In Part 2, we provide insights on the state of other mobile financial services: mobile insurance (section 1), mobile credit (section 2) and mobile savings (section 3).

## PART1 MOBILE MONEY



## The mobile money landscape in 2013

#### **KEY FINDINGS**

- With 219 services in 84 countries at the end of 2013, mobile money is now available in most developing and emerging markets.
- Competition is increasing globally and 52 markets have 2 or more mobile money services.
- Mobile money is becoming a strategically important service for a growing number of providers, evidenced by the fact that 70% of providers plan to increase their investment in mobile money in 2014.

#### Number of mobile money services

The mobile industry reached a milestone at the end of Q3, surpassing 200 mobile money deployments. At the end of 2013, there were 219 services live in 84 countries, compared to 179 services in 75 countries at the end of 2012 (see figure 1). Our Deployment Tracker has also identified 113 mobile money services that are planning to launch.

In 2013, mobile money was rolled out in nine new markets: Bolivia, Brazil, Egypt, Ethiopia, Guyana, Jamaica, Tajikistan, Togo, and Vietnam. Regulatory reforms that are enabling mobile money services<sup>4</sup> are contributing to the growth of the industry in terms of number of deployments.

With a year-on-year increase (YOY) of just 22%, the growth of mobile money services is now slowing down. This deceleration in the number of new launches between 2012 and 2013 is true across all regions although there are significant variations. With a year-on-year increase of 53%, Latin America is showing the strongest growth in number of new mobile money services. This deceleration seems to be a natural consequence of the fact that mobile money is now available in most developing markets, rather than the result of mobile money services closing down.

52%

of mobile money services are in Sub-Saharan Africa

#### Regional expansion

In 2013, mobile money has significantly expanded outside of Sub-Saharan Africa, although the lion's share of live mobile money services remains in the region. At the end of 2013, 52% of live services were in this region. This follows a decreasing trend (in 2012, Sub-Saharan Africa represented 56% and in 2011 it represented 58%). We expect this percentage to fall below 50% next year as the majority of planned deployments are outside the region (see table 2).

With 19 planned mobile money launches, Latin America has the second largest number of planned deployments. For a long time, Sub-Saharan Africa led the industry, with the vast majority of deployments, success stories, and best practices coming from the region. Today this is changing, and innovative regional models are beginning to emerge (read text box 1 for more information about the new models emerging in Latin America).

For a comprehensive discussion of the regulatory reforms that support the sustainable growth of mobile money deployments, see Simone di Castri (2013), "Mobile Money: Enabling Regulatory Solutions", GSMA Mobile Money for the Unbanked. Available at http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU-Enabling-Regulatory-Solutions-di-Castri-2013.pdf

FIGURE 1

### NUMBER OF LIVE MOBILE MONEY SERVICES FOR THE UNBANKED BY REGION (2001-2013; YEAR END)

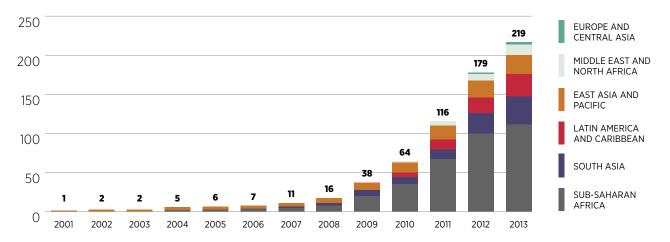


TABLE 2
PERCENTAGES OF LIVE AND PLANNED MOBILE MONEY SERVICES
FOR THE UNBANKED BY REGION (DECEMBER 2013)

REGION	EAST ASIA AND PACIFIC	EUROPE AND CENTRAL ASIA	LATIN AMERICA AND THE CARIBBEAN	MIDDLE EAST AND NORTH AFRICA	SOUTH ASIA	SUB-SAHARAN AFRICA
% OF LIVE DEPLOYMENTS	11.5%	1.4%	13.3%	6.0%	16.1%	51.7%
% OF PLANNED DEPLOYMENTS	8.8%	7.1%	18.6%	13.3%	10.6%	41.6%

#### **NEW MOBILE MONEY MODELS EMERGING IN LATIN AMERICA\***

Roughly 60% of adults in Latin America remain unbanked, ranging from 86% in Nicaragua and El Salvador to 44% in Brazil. [1] Policymakers and regulators are recognising the valuable role mobile network operators can play in providing mobile money services and are shifting towards frameworks that allow different business models to compete. Recent regulatory changes are enabling non-banks to issue e-money in several markets, most notably Bolivia, Peru, and Brazil [2]. Other markets, like Mexico, have provisions that allow non-banks to acquire limited banking licences to issue payments instruments. [3]

Enabled by this evolution in regulation, and encouraged by mobile money success stories around the globe, Latin American mobile operators and new payments companies have launched new products and services in recent years. According to the MMU Deployment Tracker, there are now 29 live mobile money deployments for the unbanked across 18 markets in Latin America and the Caribbean. With 19 planned mobile money launches, Latin America has the second largest number of planned deployments after Sub-Saharan Africa.

A region known for correspondent banking models, Latin America is quickly becoming a testing ground for new mobile money schemes, many of which seek to integrate with the existing financial infrastructure through companion cards and links to banking switches. A range of business models are emerging, reflecting not only diverse market conditions, but also the supply and demand features unique to the region. At one end of the spectrum are models akin to those in Africa, where the mobile operator assumes most of the functions in the value chain (e.g. Tigo Money). At the other end of the spectrum, we see banks driving schemes, in some cases even acquiring mobile virtual network operators (MVNOs) to offer mobile financial services independently of mobile operators (e.g. Bancolombia's Ahorro a la Mano). New entities dedicated to mobile payments, such as joint ventures between mobile operators and financial institutions and/or card companies (e.g. Transfer and Wanda), are also offering a salient alternative approach to mobile money in the region.

As a mobile operator with a presence in Africa and Latin America, Millicom has been particularly active in mobile money and has gained experience in 10 different regional markets. In Latin America, Millicom's Tigo Money is operational in five Central and South American markets (Bolivia, Guatemala, El Salvador, Honduras, and Paraguay) with a total of over 1.4 million mobile money customers. In Paraguay, more than one-quarter of Tigo's customers use mobile money. [4]

With over 400 million GSM subscribers out of 550 million total subscribers in the region, America Móvil and Telefónica have developed group-level strategies for mobile money. America Móvil launched Transfer in Mexico in April 2012 as a joint venture with Banamex (a Citibank subsidiary) and Banco Inbursa. America Móvil (Claro) has since launched Transfer in Colombia. In Brazil, Claro has partnered with the largest retail bank, Banco Bradesco, to launch a variant of Transfer: Meu Dinheiro Claro. Telefónica/Movistar is also increasingly active in mobile money. Telefónica and MasterCard have a joint venture through which they have launched Wanda in Argentina and Zuum in Brazil.

While early signs are promising, more must be done for mobile money to take root in Latin American markets. Overall, adoption and usage of mobile financial services in Latin America still lags behind other regions, but it is clear that the region is ripe for innovation. The growing number of deployments and range of business models being adopted in the region are encouraging. Competition is clearly heating up, and investment and interest from the private sector are growing. Mobile money in Latin America may have reached a turning point.

- \* Written by Mireya Almazan (MMU)
- 1. The Global Financial Inclusion (Global Findex) Database, 2012
- Mireya Almazan, "Mobile Money Regulation in Latin America: Leveling the Playing Field in Brazil & Peru" (December 19, 2013), available at http://www.gsma.com/mobilefordevelopment/mobile-money-regulation-in-latin-america-leveling-the-playing-field-in-brazil-peru
- 3. Xavier Faz, CGAP, "A New Wave of E-Money in Latin America," (June 2013), available at http://www.cgap.org/blog/new-wave-e-money-latin-america
- Millicom International Cellular S.A. 2012 Annual Report and financial statements: <a href="http://www.millicom.com/sites/default/files/Millicom\_AR12.pdf">http://www.millicom.com/sites/default/files/Millicom\_AR12.pdf</a> and http://www.millicom.com/investor-relations/key-financial-data

#### Increased competition...

The mobile money landscape is becoming increasingly competitive, and this is especially true in Sub-Saharan Africa where mobile money is already available in 36 of 47 countries in the region (see figure 2). The majority of deployments launched in 2013 were in markets where mobile money services were already available. There are now 52 markets with two or more mobile money services, compared to just 40 at the end of 2012 and 33 at the end of 2011. Twenty-seven markets have three or more services. Stiffer competition means that consumers at the bottom of the pyramid (BOP) will have more options and mobile money providers will be forced to continuously improve their value proposition and the quality of their services if they want to retain customers.

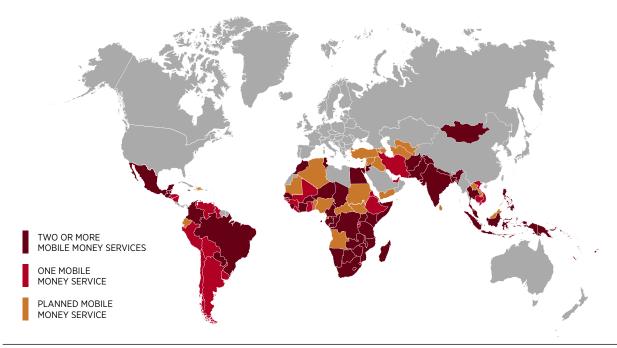
markets have 2 or more mobile money services

The fact that a large number of markets now offer multiple mobile money services highlights the opportunity for interoperability. Today, most mobile money services are closed loop systems. With these services, electronic money has to be converted to cash if it is sent to someone on another mobile money service. While this situation is not optimal from a customer experience perspective, it also reduces the opportunity for service providers to derive further transaction revenues from mobile money. As competition increases and operators seek strategies to increase the total size of the pie, we expect to see more mobile money providers exploring the opportunity of interconnecting their mobile money schemes.

Mergers of mobile money services contributed to the emergence of larger mobile money services and intensified competition in some markets. In Uganda, the acquisition of Warid by Bharti Airtel allowed Airtel Money to consolidate its position in the mobile money market. With more than 7.4 million GSM subscribers and 39% market share, Airtel has emerged as a serious competitor to MTN's mobile money services which counted over 3.5 million registered users at the end of 2012<sup>5</sup>. Soon after Airtel Money and Warid Pesa merged at the end of Q2, Airtel announced reduced mobile money rates, sparking a price war with MTN, intensifying competition in the market, and accelerating subscriber growth.<sup>6</sup> Mobile money services were also merged in Haiti<sup>7</sup> and in Cambodia<sup>8</sup>.

FIGURE 2

### NUMBER OF LIVE MOBILE MONEY SERVICES FOR THE UNBANKED BY COUNTRY (DECEMBER 2013)



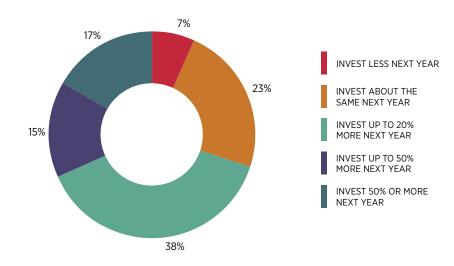
- Philip Levin, "Mobile money making its mark with major groups: Millicom, MTN, Vodafone, and Orange" (June 3, 2013), available at http://www.gsma.com/mobilefordevelopment/mobile-money-making-its-mark-with-major-groups-millicom-mtn-vodafone-and-orange
- 6. "Airtel & Warid launch new mobile money rates" (September 20, 2013), available at http://www.nbs.ug/details.php?option=acat&a=978
- 7. In Haiti, almost a year after Digicel acquired Voila, Digicel migrated to a new mobile money platform and fully integrated their respective mobile money services, TchoTcho Mobile and T-Cash. See "Digicel's TchoTcho Mobile Migrates to Utiba's Mobility Platform" (August 7, 2013), available at http://www.digicelgroup.com/en/media-center/press-releases/products-services/digicels-tchotcho-mobile-migrates-to-utibas-mobility-platform-represents the-first-completed-implementat
- 8. At the beginning of 2013, CellCard's mobile money service Cellcard Cash merged with Cambodia's largest mobile money service Wing, and seems to have enjoyed solid growth in the months since. See Stuart Alan Becker, "FTB and Wing partner to bring VISA cards to the masses" (May 31, 2013), available at http://www.phnompenhpost.com/special-reports/ftb-and-wing-partner-bring-visa-cards-masses and "Electronic payments company Wing set to transfer a billion dollars this year" (May 10, 2013), available at http://www.phnompenhpost.com/special-reports/electronic-payments-company-wing-set-transfer-billion-dollars-year

of providers are planning to increase their investments in mobile money in 2014

#### ... and increased investments

Mobile money is clearly becoming a strategically important service for a growing number of providers. This is evidenced by the fact that almost three-quarters of survey respondents plan to increase their investment in mobile money next year, while only 7% intend to make reductions (see figure 3). As mobile money is now becoming a mainstream service for MNOs, providers will need to find new ways to differentiate their services to stay relevant.

FIGURE 3
PLANNED INVESTMENTS IN MOBILE MONEY FOR 2014



#### More services growing fast

Over the last couple of years, the industry's performance has clearly been two-tiered, with a group of very fast-growing services, and a second group of services which were struggling to gain traction. The two graphs in figures 4 and 5 illustrate the performance of the mobile money industry globally. The horizontal axis represents time since launch (in number of months) and the vertical axis shows the ratio of transactions to the size of the addressable market (read text box 2 for more information on how we measure the performance of mobile money services).

What does the mobile money landscape look like in 2013? In 2013, we have seen more variations in the performance of mobile money services. In particular:

- We identified new fast-growing services in 2013.
- There is a new group of services in the "middle ground", showing more moderate growth trends than the sprinters from 2012, but significantly higher levels of adoption than the slow-growing services.
- Some previously slow-growing services have started to be widely adopted and enjoyed solid growth.
- On the other hand, some services that grew quickly in 2011 and 2012 began to stagnate or saw adoption levels drop due to publically-acknowledged incidents of fraud or technical challenges with their platform.

What does it mean for the mobile money industry? First, **an increasing number of services are overcoming operational hurdles associated with the distribution of mobile money and its adoption**, which is very encouraging. Second, it is now clear that growth trends can move in either direction—an extremely important development for the industry. In particular, this demonstrates that **mobile money can be successful even in markets where it struggled initially**, and that it is possible for a slow-growing mobile money service to become a sprinter.

In the next few months, MMU will be profiling a number of mobile money services to reveal the key factors behind their growth in 2013.

#### **MEASURING THE SUCCESS OF MOBILE MONEY SERVICES**

Comparing the performance of mobile money services is complex. It is difficult to find a common indicator that works for services at different stages of maturity, that use different delivery models (over-the-counter vs. wallet-based), and which target addressable markets of different sizes.

In previous years, we developed a methodology that allows us to compare the performance of mobile money services in spite of these differences.

In order to compare the success of mobile money deployments, we looked at their ratio of transactions to the size of the addressable market.

#### TRANSACTIONS

We looked at the total number of transactions, excluding airtime top-ups, cash-ins, and cash-outs.

- We chose to measure the number of transactions rather than the number of customers so that we could accurately compare wallet-based services and over-the-counter services.
- We did not include cash-ins and cash-outs because these transactions are often performed as a requisite first step by customers in order to perform other transactions in the case of wallet-based services.
- We did not include airtime top-ups as we found that this number can be strongly biased by promotions and bonuses encouraging customers to buy airtime via mobile money, and therefore does not accurately reflect how mobile money services are actually performing.

#### ADDRESSABLE MARKET

- For MNOs, we used the number of mobile subscribers as a proxy for their addressable market.
- For non-MNOs, we used the number of unique mobile subscribers in their country.

FIGURE 4 INDUSTRY PERFORMANCE, GLOBALLY (JUNE 2012)

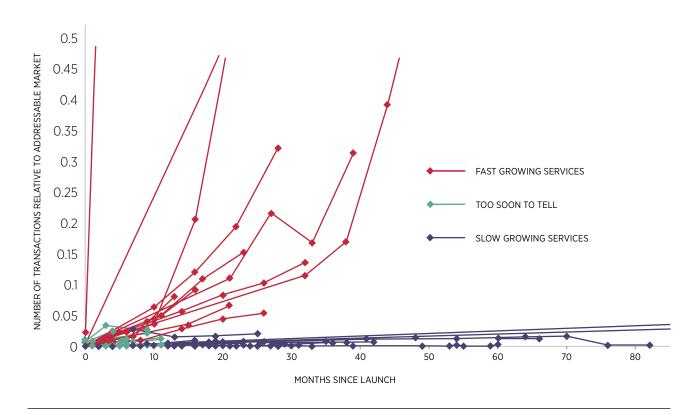
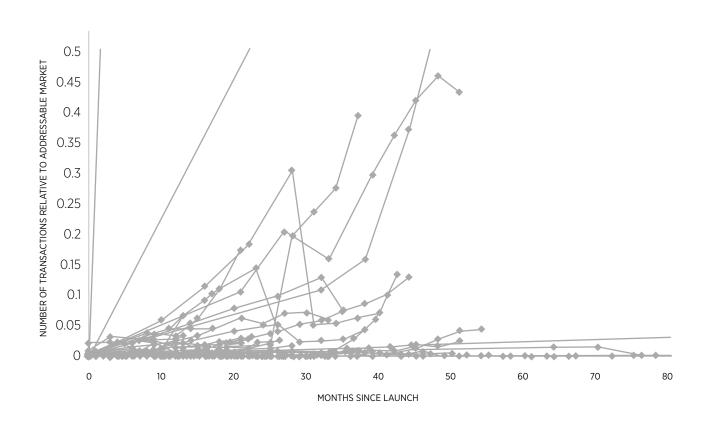


FIGURE 5 INDUSTRY PERFORMANCE, GLOBALLY (JUNE 2013)



#### **MOBILE MONEY IN CÔTE D'IVOIRE: A TURNAROUND STORY\***

After a challenging start, mobile money is taking off in Côte d'Ivoire. In June 2013, CelPaid, Moov, MTN, Orange, and Qash Services together registered close to 5 million mobile money accounts, 35% of which are active. [1] It is quite an impressive number considering there are only 9.6m unique mobile subscribers in Côte d'Ivoire (the mobile market has 20.1m GSM connections and a high degree of multi-SIMing). [2] However, it is only recently that Ivoirians have started to adopt mobile money. In December 2011, three years after the launch of the country's first mobile money service, there were just over 2 million registered accounts and 22% were active.

What external factors have driven the adoption of mobile money in Côte d'Ivoire? What tactics have mobile money operators employed to increase usage?

The story of mobile money in Côte d'Ivoire demonstrates that mobile money can be successful even in markets where it struggled initially, and that it is possible for a slow-growing mobile money service to become a sprinter. [3]

#### **BACKGROUND**

At first glance, the opportunity for mobile money in Côte d'Ivoire seems huge. With a population of 19.8m and the highest GDP per capita in the region, it has one of the most dynamic economies in West Africa. [4] In addition, with only 10.7% of adults in Côte d'Ivoire having access to a formal financial institution [5], mobile money seems an obvious conduit to increase financial inclusion.

Early on, the Central Bank of West African States (BCEAO) realised that mobile money had the potential to significantly increase financial inclusion. In 2006, the BCEAO issued regulation on electronic money that qualified non-banks for an e-money issuer license. Under this regulation, an e-money issuer can be a bank (in partnership with an MNO) or a non-bank institution that has been granted a specific licence by the central bank.

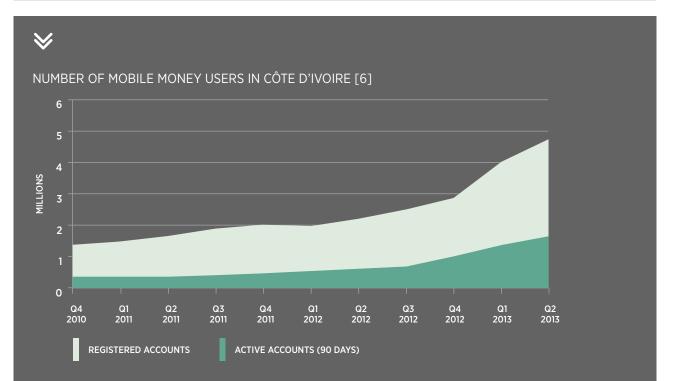
Since this regulation was issued, five companies launched their mobile money service in Côte d'Ivoire: Orange, MTN and Moov (the three leading MNOs in the country, licensed through their partner banks), and CelPaid and Qash Services (two non-bank e-money issuers).

#### MOBILE MONEY SERVICES IN CÔTE D'IVOIRE

MOBILE MONEY SERVICE	SERVICE PROVIDER	DATE OF LAUNCH
ORANGE MONEY	ORANGE IN PARTNERSHIP WITH BICICI (BNP PARIBAS)	DECEMBER 2008
MTN MOBILE MONEY	MTN IN PARTNERSHIP WITH SGBCI (SOCIÉTÉ GÉNÉRALE)	OCTOBER 2009
CELPAID	CELPAID	FEBRUARY 2011
FL00Z	MOOV IN PARTNERSHIP WITH BIAO	JANUARY 2013
MOBILE BANKING	QASH SERVICES	NOVEMBER 2013

It has taken time for mobile money to gain traction, but it seemed to reach a tipping point in mid-2012 when mobile wallet usage soared. What was behind this shift? Changes in market conditions following a period of civil strife, combined with new tactics by the leading providers to drive adoption. As Figure 2 illustrates, mobile money registrations have grown rapidly and today, over 40% of the adult population of the country has a mobile money account.





#### CHANGES IN MARKET CONDITIONS

The most obvious external factor driving the adoption of mobile money was the country's return to civil peace and economic recovery in 2012. [7] A decade of political crisis culminated in 2010 when two candidates both claimed to have won the presidential election, triggering a national conflict that weakened the economy and left the population vulnerable.

In the course of one week in February 2011, four banks suspended operations, creating a major money shortage. [8] Public distrust of the financial system deepened, and was aimed at all types of financial service providers, including mobile money providers. The limited presence of banks, especially in rural areas, also made liquidity management more difficult and limited the ability of mobile money agents to provide cash-out services. However, a return to civil peace has helped to restart the economy. Mobile money providers in Côte d'Ivoire agree that the post-election crisis had a negative impact on their services and attribute the uptake of mobile money in 2012 in large part to the country's economic recovery.

The uptake of mobile money in Côte d'Ivoire is not just the result of newfound stability, however. Over the last couple of years, mobile money providers have been using new and effective tactics to increase mobile money usage.

#### FOCUS ON ORANGE MONEY

For Orange, one of the key factors driving success has been the commitment of its CEO. With the arrival of CEO Mamadou Bamba in 2010, mobile money became a strategic service for Orange. In June 2010, Orange Money was established as a separate business unit, with the head of the unit reporting directly to the CEO. The benefits of this new approach quickly became clear: the business unit sharpened the company's focus on mobile money, which has proven to be an essential ingredient for success in other mobile money markets.

Orange also strengthened Orange Money's **brand image** by partnering with established companies like the national water and electricity utilities to administer bill payments. It also invested in building a network of ATMs, which allowed customers to access cash at any time without the assistance of a mobile money agent. This further reinforced the image of Orange Money as a reliable and secure service.

"On many occasions, customers told us Orange Money changed their life. In fact the various partnerships and initiatives we engaged in are the results of our willingness to simply provide adequate answers to their needs", Sadamoudou Kaba, Head Orange Money Business Unit at Orange Côte d'Ivoire





#### **FOCUS ON MTN**

MTN took a different approach, focusing its efforts on **consolidating its distribution network**. In early 2012, MTN decided to outsource the management of its distribution channel to Top Image, a field marketing agency with extensive experience in mobile money (having worked with mobile money providers like Safaricom in Kenya). Developing stronger recruitment criteria for agents, managing agent performance more closely, and increasing support for agent liquidity, all helped MTN to significantly increase its number of active agents. Very quickly, and without changing the commission structure, agent profitability multiplied four-fold. In the course of only a few months, agents became more motivated and provided better service to customers at the point of sale. With over 95% of its agents active on a 30-day basis, MTN Côte d'Ivoire now has one of the highest agent activity rates in the world.

"We started to make great progress in Ivory Coast as soon as we managed to put MTN Mobile Money distribution network in a virtuous circle, by supporting merchants enough so that they see profitability and growth. Should we put one pillar of the Mobile Money success in Ivory Coast before the others, it should be distribution as it remains our most important way to interact with our customers", Jean-Michel Chanut, CMO MTN Côte d'Ivoire

#### **FOCUS ON MOOV**

Moov was the third MNO to launch a mobile money service in Côte d'Ivoire in January 2013. Moov is a subsidiary of Etisalat Group. While Etisalat had substantial experience in Financial services, Côte d'Ivoire was the first market were Etisalat Group subsidiary Moov rolled out Mobile Money service "Flooz". Capitalizing on Etisalat experience accumulated from its international markets, as part of go-to-market activities, in Cote d'Ivoire, Etisalat paid special attention to the efficient merchants on-boarding and retail level activation activities.

"Of all the markets where we operate in West Africa, Côte d'Ivoire has demonstrated to be a very promising market for mobile money opportunities. There was a clear need for digitizing consumer finance services. Realizing the wealth of experience Etisalat Group gained from launching mCommerce offerings in other markets, we have decided to focus on SMEs and enterprise customers by developing the acceptance ecosystem " - Khalifa Al Shamsi, Chief Digital Services Officer at Etisalat Group.

- \* Written by Claire Pénicaud (MMU)
- 1. On a 90-day basis
- 2. GSMA Intelligence
- 3. Mobile Money Sprinters are the fastest growing mobile money services in the world as revealed by the 2012 GSMA Mobile Money Adoption Survey
- 4. WorldBank
- 5. IFC. http://www.ifc.org/wps/wcm/connect/2de255804ef863c8ac1bef3eac88a2f8/MobileMoneyScoping\_CI\_ENG.pdf?MOD=AJPERES
- 6. MMU Intelligence
- "The State of Financial Inclusion in Ivory Coast in the Aftermath of the Crisis", Microfinance Information Exchange (December 2013). Available at http://www.themix.org/publications/mix-microfinance-world/2013/12/state-financial-inclusion-ivory-coast-aftermath-crisis
- 8. "Ivory Coast's Gbagbo seizes 4 international banks", Bloomberg (18 February 2011). Available at http://www.businessweek.com/ap/financialnews/D9LF3DU80.htm

## The state of mobile money usage

#### **KEY FINDINGS**

- The number of active users is growing fast. In June 2013, there were over 60 million active mobile money accounts globally.
- An increasing number of services are reaching scale and 13 have over 1 million active users.
- Activating customers remains a challenge in most markets: globally, only 29.9% of registered accounts were active in June 2013.
- Mobile money continues to drive financial inclusion: nine markets have more mobile money accounts than bank accounts in 2013, compared to just 4 in 2012.

g

countries have more mobile money accounts than bank accounts

#### Registered mobile money accounts<sup>9</sup>

In June 2013, there were over 203 million registered mobile money accounts worldwide. In Sub-Saharan Africa only, there were 98 million registered accounts in June 2013; this is more than twice as many as the total number of Facebook users in the region<sup>10</sup>. East Africa accounts for a particularly large portion of mobile money accounts globally, representing 34% of total registered accounts.

Today, at least nine markets already have more registered mobile money accounts than bank accounts, compared to just four last year: Cameroon, the Democratic Republic of Congo, Gabon, Kenya, Madagascar, Tanzania, Uganda, Zambia and Zimbabwe<sup>11</sup>. In these markets, the mobile money industry has made financial services accessible to more people than the traditional banking industry ever has. It is also very encouraging to see the number of these markets more than doubling in just 12 months. All these markets are in Sub-Saharan Africa, a sign of the transformational power of mobile money in this region, where banking penetration remains very low. In seven of these markets the regulator has allowed MNOs to provide mobile money services. While regulation differs slightly from country to country, this data highlights the importance of creating an open and level playing field where both banks and non-bank providers can contribute to growth of the ecosystem and to achieve greater financial inclusion.

<sup>9.</sup> Most mobile money services rely on a mobile wallet that allows customers to store value in an account that can be accessed through their mobile phone. Once they have value in their mobile wallet (because, e.g., they have converted cash into electronic value or the value has been transferred to them from another account), customers can initiate payments and transfers directly through their mobile phone without needing to go to a mobile money agent. To understand how many people are using mobile money, it is useful to look at the total number of registered mobile money accounts.

<sup>10.</sup> Michelle Atagana, "Facebook's Jonathan Labin talks about ads, mobile and the focus on Africa" (December 4, 2013), available at http://www.timeslive.co.za/scitech/2013/12/04/facebook-s-jonathan-labin-talks-about-ads-mobile-and-the-focus-on-africa

This number may be even higher as data on the number of bank accounts was not available for a number of countries. The data on bank accounts are from the IMF Financial Access Survey Database and other IMF and World Bank sources where FAS data was not available. We were not able to find data for the following markets: Bahrain, Benini, Belivia Botswana, Burkina Faso, Côte d'Ivoire, Egypt, El Salvador, Ethiopia, Georgia Guinea, Guinea-Bissau, Haiti, Honduras, Iran, Jamaica, Lebanon, Lesotho, Mali, Mauritania, Mongolia, Morocco, Namibia, Nicaragua, Niger, Paraguay, Qatar, Senegal, Serbia, Sierra Leone, Somalia, Sri Lanka, Tunisia, United Arab Emirates, Vanuatu, Venezuela and Vietnam. It might be the case that the percentage of active bank accounts is higher on average than the percentage of active mobile money accounts. Unfortunately, we do not have access to information on the level of activity for bank accounts. This is why the comparison is based on number of registered accounts rather than on numbers of active accounts.

TABLE 3

#### REGISTERED MOBILE MONEY ACCOUNTS PER 100,000 ADULTS, GLOBALLY AND BY REGION<sup>12</sup>

MOBILE MONEY ACCOUNTS/ 100,000 ADULTS	WORLD	EAST ASIA & PACIFIC	EUROPE & CENTRAL ASIA	LATIN AMERICA & CARIBBEAN	MIDDLE EAST & NORTH AFRICA	SOUTH ASIA	SUB- SAHARAN AFRICA
JUNE 2011	1,542	1,067	63	319	924	578	12,024
JUNE 2012	2,315	1,387	75	878	2,729	1,445	15,832
JUNE 2013	4,361	1,657	416	2,165	15,164	3,485	24,652

#### Active mobile money accounts

Of the 203m registered accounts in June 2013, 61 million had been used to perform at least one transaction within the last 90 days<sup>13</sup>.

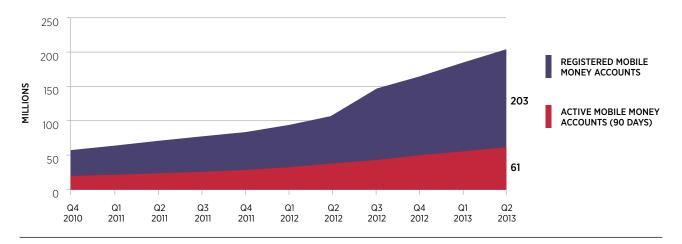
It is also encouraging to see that an increasing number of services are reaching scale. 13 services already have more than 1 million active users, seven of which passed this threshold between June 2012 and June 2013 (see figures 6 and 7).



However, despite the growth, activating customers remains a challenge for a large number of services. Globally, only 29.9% of registered accounts were active in June 2013 and only one third of respondents had more than 100,000 active accounts. A customer's journey from awareness of mobile money, to registration, and finally to regular usage, is quite complex. Even when customers are aware of the service, they may not necessarily understand how they would benefit from using it. Using mobile money represents a significant behavioural change in economies where almost all payment transactions are conducted in cash (read the text box for examples of customer activation strategies).

#### FIGURE 6

#### NUMBER OF ACTIVE (90 DAYS) AND REGISTERED MOBILE MONEY ACCOUNTS GLOBALLY (JUNE 2013)



<sup>12.</sup> Population data from the IMF Financial Access Survey Database, available at http://fas.imf.org and regions defined by World Bank, available at http://www.worldbank.org/en/country

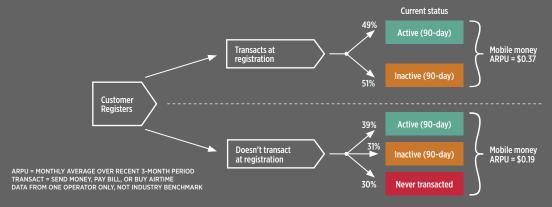
<sup>13. 37</sup>m active users on a 30-day basis

#### THE BIG PAYOFF: GETTING CUSTOMERS ACTIVE AT REGISTRATION\*

Low customer activity rates have been a persistent challenge across the mobile money industry. The question every operator is asking: How can one increase customer activity and therefore mobile money ARPUs?

One way to think about this question is asking how to maximise the value of every customer interaction. Perhaps the most important interaction is the point of registration. Here is where a customer learns about the service, identifies how it might fill a specific need, and draws first impressions.

Customers who have a positive experience at the point of registration—perhaps a sales agent who took time to thoroughly explain the service—might be encouraged to transact on that same day. Does this extra effort to encourage a transaction on the day of registration pay off? Let's look at data from one anonymous operator.



ARPU numbers are net of agent commissions.

This data reveals a stark difference in future activity between customers that transact at the point of registration and those that do not. Customers who transact at the point of registration are more likely to be future active customers (26% more likely) and produce significantly higher mobile money ARPU (95% higher) as those that walk away after registering without transacting.

Why is this so? Consider a customer that walks away without transacting. Perhaps after a few months they have forgotten how to access the service, or even more likely, can't remember their PIN. Suddenly there is a barrier to usage that did not exist at the point of registration. It should be no surprise that 30% of these customers are lost and never transact.

There is a saying in the insurance industry that "insurance is sold not bought." Might the same be true of mobile money—that the "push" of the sales and education process at the point of registration is a key determinant of whether a customer adopts the service along with pure customer "pull."

How can operators increase the likelihood that a customer transacts at the point of registration? Here are some ideas to consider:

- Place incentives on customer activity, not just registration: The mobile money sales force—whether agents or foot soldiers should have strong incentives to register customers that might actually use the service. With proper incentives, the sales force will take more care with each customer interaction.
- 2. Train agents how to educate and convince customers, not just the mechanics of transacting: If agents are involved with registrations, they should be thoroughly trained on providing a quality registration and customer education experience.
- 3. Experiment with promotions at the point of registration: Operators might consider adding incentives for agents and/or customers to encourage customers to transact at the point of registration, to strike while the iron is hot. For example, customers can receive a bonus contingent on same-day usage.

<sup>\*</sup> This article by Philip Levin (MMU) was initially published as a blog post on the MMU website on August 29, 2013.

#### Unregistered mobile money users

However, not all mobile money services rely on a mobile wallet. Some services are being offered primarily "over-the-counter" or OTC services. In such cases, a mobile money agent performs the transactions on behalf of the customer, who does not need to register to use the mobile money service. In some cases, service providers combine the two approaches and allow users to open a mobile money account and transact over-the-counter<sup>14</sup>. 13.4% of respondents to our survey offered services delivered primarily over-the-counter. Typically providers verify and record the identity of OTC customers to comply with customer due diligence (CDD) requirements, nevertheless it is challenging to calculate the number of individual users of OTC services, particularly when the transactions are recorded manually. However, based on the stored KYC information most respondents were able to estimate the number of unique unregistered mobile money users they have on a monthly basis.

13%

of mobile money services are delivered primarily over-the-counter

In June 2013, we identified 17.3 million unregistered mobile money users and four services had more than 1 million unregistered users. The number of unregistered mobile money users seems to be growing even faster than the number of active wallets at an annualized growth rate of 102%. Services offered primarily over-the-counter offer a compelling value proposition for unbanked customers, a segment where literacy levels are often very low and where people tend to be more suspicious of new technologies. The OTC model is particularly popular in South Asia, home to 87.6% of the world's unregistered users. However, in terms of financial inclusion, the full potential of mobile money cannot be realised with the OTC model. Mobile wallets remain a key tool in building the financial capability of the underserved (see text box 5 for more information about OTC).

#### TEXT BOX 5

#### OTC OR NOT OTC? THE EXAMPLE OF EASYPAISA IN PAKISTAN\*

Easypaisa, a mobile money service in Pakistan, serves more than 5 million customers a month through 25,000 points of service. By the end of 2012, it had processed more than 100 million transactions with a throughput of more than US\$ 1.4 billion. With a population of 180 million and only 15% bank penetration in 2008, Easypaisa seized an attractive market opportunity to deliver mobile money innovations in Pakistan.

One of the key features of Easypaisa is the fact that it was introduced over-the-counter (OTC). Easypaisa's success with OTC was due to its ability to serve all customers in the market, even non-Telenor subscribers, the simplicity of no registration requirements, and its imitation of consumer behaviour for electronic airtime top-up. Given the cost and obstacles associated with registering for an eWallet, and that Pakistan MNOs had relatively even market share, the OTC model was an effective way to drive the initial adoption of mobile money in Pakistan.

However, accepting OTC as the only way forward would be regrettable. The full potential of mobile financial services for Pakistan cannot be realised without a product which offers stored value, i.e. an eWallet. More can be done in Pakistan to extend the number of registration points, develop robust product offerings, and invest in raising awareness. Driving adoption of the eWallet is an essential step in building a robust digital financial ecosystem that will generate financial returns for mobile money service providers and contribute to financial inclusion.

To learn more about the innovative corporate structure underpinning Easypaisa, the levels of investment at launch, the pros and cons of the OTC model, the tactics used to rapidly build national distribution, and how Easypaisa maintains quality in their channel, read the full case study: McCarty, Y. and Bjaerum R., (July 2013), "Easypaisa: Mobile Money Innovation in Pakistan".

\* This text box is based on a blog post by Yasmina McCarty (MMU), published on the MMU website on July 5, 2013

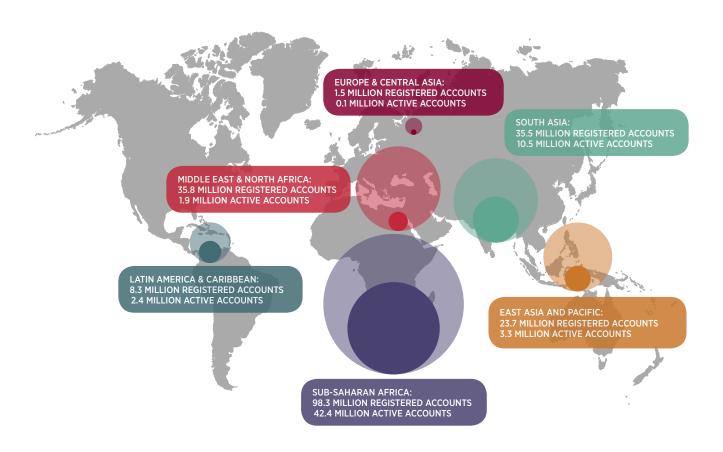
#### Women and mobile money

For the first time in 2013, we were able to collect data on the gender of mobile money users. Participants were asked whether they knew the gender composition of their customer base. Only 32% of respondents gave a positive answer and were able to report a number. Within this sample, on average, 36% of mobile money users were women. This percentage ranges from 4% to 86%, indicating the diversity of strategies used to target this segment of the market. Women represented the majority of users in only six deployments.

Globally, there has been a tendency to overlook women in the deployment of mobile money services. Women in developing markets are an important potential customer base for mobile financial service providers. They are active household financial managers—in some ways more active than men<sup>15</sup>.

FIGURE 7

#### NUMBER OF REGISTERED CUSTOMER ACCOUNTS AND ACTIVE CUSTOMER ACCOUNTS BY REGION (JUNE 2013)



<sup>15.</sup> To better understand the opportunity to provide mobile money services to women, the GSMA mWomen Programme and Visa Inc. have partnered with Bankable Frontier Associates to conduct research in five countries: Indonesia, Kenya, Pakistan, Papua New Guinea, and Tanzania. The report delves deeper into how best to reach women in these countries and what services and products will directly meet their needs, offering important lessons for mobile operators, financial institutions, governments, and other partners. For mobile money providers interested in this opportunity, the first step is tracking information on gender more systematically.

## The state of mobile money access

#### **KEY FINDINGS**

- The number of mobile money agent outlets grew rapidly in 2013 (71.5%), reaching 886,000in June 2013.
- Mobile money agents remain the most popular distribution channel for mobile money although an increasing number of services also use ATMs.
- In many markets, agents rather than banks are becoming the face of the financial industry: mobile money outlets outnumber bank branches in over 80% of markets in our survey.
- However, a major challenge for the industry will be ensuring agent activity and quality of service at the point of sales.

#### What does mobile money distribution look like in 2013?

The number of mobile money agent outlets continued to grow quickly in 2013 at an annualized growth rate of 71.5%, reaching 886,000 in June. One major trend we observed is the growth of the average size of an agent network. This year, the majority of mobile money deployments had more than 2,000 outlets compared to less than 50% in 2012 and less than one-third in 2011. Traditionally, every mobile money provider builds and manages its own network of mobile money agents, although in some cases agents can service multiple deployments in one market.

Mobile money agent outlets

In 2013, we began to see agent-sharing models becoming formalized, with service providers recruiting and managing agents that other companies use to deliver their own mobile money services. Examples of this model already exist in Nepal,<sup>16</sup> Nigeria,<sup>17</sup> and Zambia<sup>18</sup>. This emerging trend highlights an interesting alternative for operators seeking to manage their cost structure.

Globally, agents remain the most popular distribution channel for mobile money. In addition to mobile money agents, 22.7% of respondents also used ATMs as cash-in and/or cash-out points in June 2013, almost twice as many as in September 2012. Indeed, ATMs can be an attractive complement to a traditional network of agents: they are available 24 hours a day / 7 days a week, and usually have enough liquidity to support cash-outs. Some ATMs also enable cash-ins, but in most cases, they are used as alternative cash-out points. In three markets—Brazil, Indonesia, and Thailand—more than 40,000 ATMs can be used to perform mobile money cash-ins and cash-outs. This approach seems to be especially popular in the East Asia and Pacific region and in Latin America and the Caribbean. In Brazil, Indonesia, and Thailand, the number of ATMs per 100,000 adults is 118.6, 36.4, and 84.2 respectively. In June 2013, ATMs processed 1.5% of the total number of cash-ins to and cash-outs from mobile money accounts.

<sup>16.</sup> Gunnar Camner, "Banks in Nepal are building interoperable mobile money offerings" (November 25, 2013), available at http://www.gsma.com/mobilefordevelopment/banks-in-nepal-are-building-interoperable-mobile-money-offerings

Henry Ifeanyi, "Nigerian mobile money service Paga launches agent network unit" (December 10, 2013), available at http://www.itwebafrica.com/mobile/319-nigeria/232125-nigerian-mobile-money-service-paga-launches-agent-network-unit#sthash.j2SDCh8P.dpuf

<sup>18.</sup> Jared Worley, "The Power Of Partnerships: Airtel Money Now Powered By Zoona" (October 10, 2013), available at http://branchlessbanking.co/the-power-of-partnerships-airtel-money-now-powered-by-zoona

<sup>19. 2013</sup> indicators from the IMF Financial Access Survey (FAS) Database. Available at http://fas.imf.org

#### Reach of mobile money distribution networks

Thanks to widespread distribution networks, mobile money is extending access to financial services to more people and has become an effective complement to the banking and payments industries. On average, there are 28.4 agent outlets per 100,000 adults globally. This is six times more than the average density of bank branches in these markets, which stands at 4.6 per 100,000 adults. In 81% (44 out of 54 markets) of the markets where we had respondents, there are now more mobile money outlets than bank branches. This signals that mobile money is able to expand access to financial services for the unbanked and underbanked. In countries where there are more mobile money agents than bank branches, agents rather than banks are becoming the face of the financial services industry.

With an average of 39.0% agents in rural areas<sup>20</sup> in June 2013, the bulk of mobile money agents are in urban areas.<sup>21</sup> It is unsurprising that there are more urban agents for a number of reasons; one of them is recruitment. Indeed, mobile money providers look to recruit agents who can make the requisite monetary investments in mobile money, and who employ staff with a high level of literacy, which is more typically found in urban areas.

Carefully identifying the right areas to put mobile money agents is critical. Today, operators can use data to identify gaps in the coverage of financial services and that information to select the right candidates (read text box 6 to find out more).

48%

of registered agent outlets were inactive in June

#### Agent activity

As the number of mobile money access points continues to grow at a dizzying rate, a major challenge for the industry will be ensuring agent activity as well as quality of service at the point of sales. In 2013, mobile money providers registered large numbers of new agents. Unfortunately, a significant portion of them are inactive. 464,000 mobile money agent outlets were active in June 2013, performing at least one transaction in that month. Globally, 47.6% of registered agent outlets were inactive in June. In Sub-Saharan Africa, the majority of agents are inactive.

Viewed at a more granular level, the average number of transactions per active agent outlet per day increased slightly between September 2012 and June 2013, from 5.6 to 6.7. Based on MMU benchmark data, any ratio above 10 is usually quite healthy<sup>22</sup>. When that ratio is too low, agents may not generate enough revenue from transaction commissions to justify participation in the service. However, when the ratio is too high, the quality of the service declines because agents do not have enough time to serve customers properly or educate new ones about the service. The average number of transactions per day is even lower for ATMs: only 1.0 in June 2013.

Another relevant metrics to understand agent activity is the average number of active customers per active agent. This ratio also slightly increased between September 2012 and June 2013 from 77.1 to 80.0. Based on MMU benchmark data, a ratio between 150 and 800 is probably healthy. When that ratio is too low, under 150 customers per agent, agents may not earn enough to justify the business. If it's too high, above 800 customers per agent, customers may get frustrated by long queues because there are not enough agents to meet their needs.

This raises the question of whether mobile money providers should consider cutting inactive agents. The first thing to consider is the direct costs associated with recruiting and managing agents, including the time spent by sales and distribution teams, training costs, and the cost of agent materials, such as branding, and POS. Agents need to maintain a certain level of activity for a mobile money provider to recoup these investments in the channel. Inactive agents incur another indirect cost: creating a bad image of the mobile money service. Inactive agents typically do not understand the service well enough, do not maintain adequate float levels, and are not able to serve customers appropriately. This leads to poor customer experiences, damages the reputation of the service provider, and reduces the likelihood the customer will adopt or promote the service. Unfortunately, it is easy to get a bad reputation, but very difficult to turn it around. Different approaches to addressing this challenge should be considered:

 Agent segmentation: Mobile money services benefit greatly from segmenting their agent base by geography, level of investment, transaction volumes, product mix, and other variables. These analytics can help distribution teams understand how to allocate their financial and human resources most effectively, keep top performers loyal, and deal with underperformers.

<sup>20.</sup> Survey respondents were asked to provide their definition of "rural areas". 75% of respondents defined a rural area as an area outside of the major cities in their country. Other respondents (almost 20% of the sample) defined a rural area as areas with limited or no access to traditional financial services. It is unclear which criteria were used to precisely define these areas.

<sup>21.</sup> Only 41% of respondents knew what percentage of their agents are in rural areas and provided this percentage.

<sup>22.</sup> It is important to consider this ratio along the average number of active customer per active agent and the commission structure

- **Retraining inactive agents:** Some agents may become inactive because they do not understand the service and its business model well enough. In this case, retraining inactive agents could be helpful. (See text box 7 about the importance of agent training and how MTN Uganda communicates with its agent network.)
- Cutting inactive agents: Finally, mobile money providers should consider cutting some of their inactive agents. Several sprinters have already dismissed some of their agents and/or master agents, and three others were planning to do so when we interviewed them earlier this year. Reasons for dismissal included not only KYC infringements and fraudulent activities, but also low performance (based on the agents' transaction volumes and revenues) and branding infringements. While cutting an agent base may seem complicated, in the long run it is a better option than having inactive agents.<sup>23</sup>

#### ENABLING DATA-DRIVEN DECISIONS TO EXPAND AGENT NETWORKS IN KEY AREAS\*

Traditional access measures are very general – like the number of bank branches per 100,000 people for the entire country. But these measures do not give any indication of where people live in relation to financial service access points (Bank Branches, ATMs, Mobile Money Agents, Post Offices, etc.). Over the past year, at the Financial Services for the Poor programme (FSP) from the Bill & Melinda gates Foundation, we have worked with our partners to develop a set of resources to more accurately measure and track financial access.

We captured two main sets of data to create this tool. The first is detailed financial access point locations, including Commercial bank branches, ATMs, Micro-Finance Institutions, Mobile Money Agents, Savings and Credit Cooperatives Organizations, and Micro-Finance Deposit Taking Institutions. The other is a high-resolution population map that includes poverty densities and other demographic attributes. The population and poverty data are developed to a 1-kilometer resolution.

Once the two sets of data were captured and developed, it was time to put them to use. We used the population within 5km of an access point as our base measurement – and ran the analysis in Nigeria, Tanzania, and Uganda. Our findings show that between 28 and 48 percent of populations in these countries live within 5km of a financial access point of some type. Not surprisingly, the data show lower financial access for poor people living under less than \$2/day. In Uganda ~43% of the entire population, and only 34% of the poor population, live within a 5km radius to a financial access point. Another interesting finding is the discrepancy of access between urban and rural populations. In Tanzania, 97 percent of the urban population lives within a 5km radius to a financial access point while only 12 percent of the rural population lives within a 5km radius to a financial access point. This compares well with the Global Findex data which shows that only 17 percent of the Tanzanian adult population has an account at a formal financial institution. In Nigeria, a country of 150 million people, there are less than 16,000 access points and only 22 percent of the rural poor lives within a 5km radius to a financial access point.

The data clearly highlight gaps in access, but in doing so also provide critical insight into how countries can best address those gaps. Fspmaps.com is thus a potentially powerful and supportive tool which countries can employ in the service of achieving their poverty reduction goals. With this information, central banks, financial service providers, mobile network operators and other types of financial service providers can adapt policy and business practices to close gaps and they have already started.

Following in-country events where we shared the results of this project, several Central Banks have taken action to build upon the initial work by collecting additional data, dedicating organizational capacity to lead financial inclusion activities within their countries. Central Banks have also indicated an interest in amending policy to increase the role of digital money in expanding financial access for the poor. This is a positive start to a lengthy process of improving financial inclusion.

The long-term vision of Fspmaps.com is to have it become a public good which goes beyond serving as a tool to the financial inclusion field. It holds great potential to be expanded and used to improve management information systems of ministerial entities and local governance. Furthermore, the tool can become useful for donors and commercial players, including those involved in agriculture; health and financial services; mobile telephone services; and even fast moving consumer goods companies.

<sup>\*</sup> This text box is based on a blog post by Karina Nielsen (Bill & Melinda Gates Foundation) published on the MMU website on July 31, 2013

<sup>23.</sup> These insights were initially published as part of a blog post by Claire Pénicaud on the MMU website, "Should you be cutting your inactive agents?" (March 28, 2013), available at http://www.gsma.com/mobilefordevelopment/should-you-be-cutting-your-inactive-agents

#### HOW MTN UGANDA COMMUNICATES WITH ITS NETWORK OF 15,000 AGENTS\*

Keeping large scale mobile money agent networks actively engaged is quite a daunting task. Operators must constantly devise strategies to actively communicate to their large agent network in a manner in which they understand and truly appreciate, and of course at reasonable cost. The use of traditional telecom channels like SMS blast is not always effective given the low literacy levels in these markets. Unfortunately, direct interactions with agents through field staff ("TDRs" or "trade development representatives" in MTN's terminology) is also proving to be too expensive, given the scale of the network.

#### AGENT FORUMS FOR EFFICIENT INTERACTIONS

With over 3.5 million registered subscribers and over 15,000 active agent outlets, MTN Uganda have created a series of Agent Forums where it directly interacts with its agents across the country. This approach offers a direct and effective means of sharing ideas with agents and ensures MTN Uganda remains accountable to its agent network. It has proven to complement the traditional means of communication via bulk SMS and on-site interaction through TDRs.

These forums are held in key communities across the country on a quarterly basis. In the process over 25 key towns within Uganda are touched and over 8000 agents are accessed. These forums enjoy high level participation by agents because of the easy access to the centers and the content of the conventions.

#### CONTENT

The content of the Agent Convention is tailored to suit each market. Prior to such forum, the regional teams for MTN provide a list of "pain points" of agents in the region or specific location and this is incorporated into the agenda for the convention. This will be in addition to any other information MTN would like to share with its agents on topical issues affecting the business. Key topics covered include;

- Fraud Awareness and Prevention How to minimize risk of fraud such as keeping PIN safe, changing PIN frequently, detection of counterfeit currency, identifying and dealing with suspicious clients, sharing of latest fraud trends (hoax sms or calls to agents about an MTN promotion)
- Liquidity Management How to manage a good balance between e-float and physical cash to ensure constant availability of float. Also, share the impact of out of stock on overall business health for the agent from a customer retention point of view
- Product Awareness Share with agent network new products on MTN Mobile Money and how it works. We also demonstrate the
  importance of sharing their knowledge to handlers and customers. Also, MTN refreshes their knowledge on existing products
  and service
- **Basic Customer Service Practices** We emphasize the need for excellence in customer service to retain customers. We share basic tips on how agents can retain their top customers on an ongoing basis and the need for some basic investment to further grow the channel and enhance customer experience
- Agent Experience Sharing We invite agents to share with their fellow agents some of their experience on any of the above and showcase how they dealt with it. MTN would then guide agents as to how best they could address that challenge or opportunity better in the future
- Question and Answer This is perhaps the most heated part of the convention. Key questions asked include easy access to efloat, commissions, branding of outlets, fraud support, and general issues around the business





#### **FUTURE OPPORTUNITIES**

The Agent Forums are typically attended by the business owners, rather than simply the mobile money account handler, allowing us to directly engage with decision makers. In the other alternative channels, the communication is often received by handlers who do not always escalate to their owners.

The Agent Forums will continue to be key going forward. Further investment will have to make to reach out more to rural agents. With support from donors such as Bill & Melinda Gates foundation, we shall be able to engage agents and customers at an even more micro level to ensure that the rural links of the channel are not left out. We will also need to be innovative to keep the content alive to ensure that agents continuously see value in attending such conventions

<sup>\*</sup> This text box is adapted from a blog post by Shaibu Haruna (MTN Uganda) published on MMU's website on April 18, 2013

# The state of mobile money product offerings

#### **KEY FINDINGS**

- In 2013, airtime top-up and P2P transfer remained the most widely offered and used products.
- Merchant payment and bulk payment are now offered by over 60% of services while another 30% are planning to add them to their product mix next year.
- Of all products, bulk payment was the fastest growing with transaction volumes increasing at a 617% annualized growth rate in 2013 and multiple providers have already successfully rolled out bulk payments.

#### Growth in global volume of mobile money transactions

In 2013, the number of mobile money transactions has been growing faster than the number of active mobile money users (99% CAGR excluding cash-ins and cash-outs; 85% including them), an indication that mobile money usage is on the rise. 326 million transfers and payments were processed by survey participants in the month of June 2013. These transactions were worth USD 3.2 billion. If cash-ins and cash-outs are included, mobile money users performed 431 million transactions in that month, totalling USD 7.4 billion.

#### Mobile money product mix

Mobile money products fall into one of three segments based on their availability: 1) mainstream products, 2) widely available but not yet mainstream products and 3) marginal products.

**Mainstream products** – These products are already being offered by the vast majority of mobile money providers and are usually the first products to be launched when new mobile money services are rolled out. P2P transfer, bill payment and airtime top-up are offered by over 85% of respondents. Not surprisingly, these products also represent the largest share of the product mix.

• In terms of transaction volume, **airtime top-up** continues to dominate the product mix and represented almost three-quarters of the total number of mobile money transactions performed in June 2013. Moreover, the number of top-ups has also shown impressive growth having almost doubled between September 2012 and June 2013. However, this growth has not necessarily resulted in increased revenues for operators, as most of the growth has been artificially driven by promotions and bonuses primarily aimed at increasing the adoption of other mobile money products. On average, active mobile money users<sup>24</sup> performed 5.8 airtime top-ups in June 2013. Given the average size of a top-up is quite low—\$1.2—airtime top-up only represented 9.4% of the total value transacted in June 2013.

- **Domestic P2P transfer**<sup>25</sup> is the second most popular mobile money product in terms of number of transactions (17.8% of the global mix) and the most popular in terms of the amount of value transacted (68.6% of the global mix). However, P2P transfer experienced the slowest rate of transaction growth of all mobile money products, with the number of P2P transfers growing at an annualized growth rate of only 31%. After airtime top-up, P2P had the highest average number of transactions per user in June 2013: 1.2.
- In June, 12.9 million **bill payments** were paid using mobile money compared to 8.6 million in September 2012. In June 2013, bill payment represented 4.0% of total transactions and 10.8% of total transaction values. For services offering this product, the average number of bill payments per active user reached 0.3 in June 2013.

**Widely available products** – Bulk payment and merchant payment are already offered by 61% and 65% of respondents, respectively. However, with an additional 28% and 29% of respondents planning to launch these products next year, both bulk payments and merchant payments could soon become mainstream mobile money products.

- Bulk payment<sup>26</sup> was adopted faster than any other product in 2013, at an annualized growth rate of 617%. It represents 1.8% of the global product mix by number of transactions and 6.7% by value. In June 2013, survey respondents processed 6.0 million bulk payments compared to just 1.4 million in September 2012. It is interesting to note that this growth has not been driven by a single provider or region. Multiple providers have successfully rolled out bulk payments and six survey participants had processed over 250,000 bulk payments in June 2013, two of which were banks. This indicates strong demand across payers in developing markets for faster and more efficient mechanisms for delivering bulk payments, such as salary payments or government-to-person transfers (G2P). However, rolling out bulk payments is not without challenges. Unless a solid distribution network is in place to handle large amounts of liquidity, it can be extremely difficult to handle bulk payments efficiently. (See text box 8 for more information).
- Merchant payment is growing at a more moderate pace in terms of number of transactions (at an annualized growth rate of 53%).
   In June 2013, it represented 1.6% of all mobile money transactions and 4.0% of the value. While mobile money providers seem to recognise the opportunity of allowing merchant payments via mobile money, adoption has not yet met their expectations. Today, merchant payment numbers are significant for just a handful of services and it is struggling to gain traction in most cases.

Marginal products – International remittance remains a marginal service in 2013, offered by only four out of ten mobile money providers in our survey. However, this is twice as many as in June 2012, and with an additional 45% of respondents planning to launch it next year, it could become widely available in 2014. Globally, mobile money providers within our sample reported less than 50,000 international remittances sent by mobile money in June 2013. This indicates that, while a large number of providers are interested in launching international remittance, major barriers continue to slow down the uptake of this product (Read text box 9 to find out more).

<sup>25.</sup> Domestic P2P transfers include on-net P2P transfers between two customer accounts from the same mobile money scheme, off-net transfers (both from mobile money accounts to unregistered users and between accounts of two different but interconnected mobile money schemes) as well as transfers between mobile money accounts and bank accounts.

<sup>26.</sup> Bulk payments include both salary payments and G2P payments.

#### **G2P PAYMENTS & MOBILE MONEY: OPPORTUNITY OR RED HERRING?\***

Social protection schemes, in particular government-to-person (G2P) payments and other social transfers, can be an attractive business opportunity for mobile money providers in developing markets.[1] They often represent significant payments volumes, prospective new customers, and an additional source of revenue. For the social protection community, mobile money has the potential to lower delivery costs, yield operational efficiencies, and enhance development impact. G2P payment delivery via mobile money appears to be a win-win scenario. Yet the reality is that this line of business is incredibly challenging and requires fully committed partnerships to make it work.

Three pioneers from diverse geographies have shared insights with MMU on their experiences thus far with G2P payment delivery: United Bank Limited (UBL) in Pakistan, Banco Davivienda in Colombia, and Airtel in Malawi. UBL has been delivering a large portion of the Benazir Income Support Program (BISP) through its Omni platform since 2011, reaching nearly 1.3 million families. UBL is also partnered with the government and a range of NGOs for flood relief subsidies and cash for work programs. Davivienda began delivering social transfers, including Más Familias en Acción, through its DaviPlata mobile money service for close to 1 million families this year. While on a smaller scale, Airtel in Malawi is currently distributing subsidies through Airtel Money for Save the Children and the World Food Programme (WFP), reaching 23,000 families.

Customer Registration & Account Issuance: Two pioneers have found that intended social payment beneficiaries, primarily low-income women in rural areas, often don't own a basic mobile handset. Providers have taken various approaches to overcome this challenge. Airtel Money in Malawi worked with donors to acquire handsets for the 23,000 recipients. UBL started down that path, but decided it was more cost-effective in their case to issue smart cards during account registration instead. Davivienda has not encountered this challenge to the same extent in the Colombian context, though it did invest considerable resources in account registration drives, as did UBL and Airtel. Each scheme relies on their government and NGO partners to identify and convene beneficiaries for the registration process. Davivienda, for instance, registered 70,000 beneficiaries in one day in a mass registration drive, and a total of 920,000 beneficiaries over a two-month period.

The pioneers have found that tiered KYC requirements and flexibility in terms of identity documentation have helped to ease the customer registration procedure. The regulator in Pakistan allows for simplified KYC processes for BISP beneficiaries. Similarly, Colombian regulation enables remote, paperless account opening for low-value accounts. In Malawi, an NGO-issued ID card specific to program beneficiaries is accepted for KYC purposes.

• Distribution & Liquidity Management: G2P payments are inherently lumpy and infrequent, usually distributed on a monthly or bi-monthly basis. This exacerbates the liquidity management burden on agents as it results in sizeable spikes of demand for cash, often in rural areas. As banks, UBL and Davivienda have alleviated the liquidity burden on agents by tapping into their ATM network for payment distribution. In fact, a large proportion of BISP payments delivered by UBL's Omni platform are cashed-out at an ATM. However, UBL reports their agent network is adequately incentivised to handle the demands for cash for BISP and does so effectively when informed of the payment calendar. Larger flood relief payments, on the other hand, are best handled by UBL's ATM network. Davivienda reports that bill payment activity and deposits at agents have helped to lessen the withdraw-al liquidity pressure. Moreover, Davivienda employs a system whereby families are assigned to a distribution outlet and date in order to smooth liquidity needs. The recipient is informed by Davivienda via SMS.





In a somewhat similar manner, Airtel Money in Malawi relies on their banking partners to provide additional liquidity points to agents during predetermined dates in the distribution period. While this approach is working, it is undoubtedly resource-intensive. The monthly disbursement involves physical representation from key partners: the agent/bank partner (the liquidity supplier), the NGO, and an Airtel customer service representative in case of any trouble. PIN resets, in particular, were cited as a key challenge in G2P payment delivery across markets.

- Product usage: The salient trend in G2P payment-linked accounts is that they are "dump & pull"—beneficiaries withdraw 100% of funds as quickly as they are able to.[2] The pioneers confirm this trend holds based on their experiences. This contributes to the liquidity challenge discussed above and limits recurrent usage of the account, thereby hindering the development of a digital financial ecosystem. It would make business sense for mobile money providers to encourage greater account usage amongst beneficiaries, yet they may not necessarily have the support from their partners. Many social protection program administrators are of the opinion that subsidies and humanitarian aid must be immediately liquid, in some cases requesting prompt withdrawals. The focus of the service provider then becomes how to ensure the distribution network can handle this, rather than how to encourage customers to keep and use funds digitally through targeted marketing. Greater account usage would be most welcome by financial inclusion stakeholders.
- Business case: G2P payments can be an important source of revenue for mobile money providers. Airtel Malawi distributed a
  total of \$3.5 million USD for its NGO partners. This contributed to 60-70% of their business as of March 2013. For UBL, G2P payments started off as being a key business driver (60% of revenues in 2011), but has now dropped to 20-30% of revenues as account activity levels are growing. For Davivienda, G2P payments beneficiaries comprise roughly half of all customers registered
  on DaviPlata. As banks, the revenue model for UBL and Davivienda can include float income, though all three pioneers may
  negotiate service fees as a percentage of the ticket size of the disbursement depending on the program. It is too soon to report
  on the overall profitability of this business line.
- Timing for introducing G2P payments: UBL seized the G2P payment delivery opportunity even before the commercial launch of
  Omni. They had to build the agent network from scratch in order to fulfill their G2P payment commitments. They in fact have
  more rural than urban agents today, reflecting their deliberate approach to effectively deliver G2P payments from the start.
  Davivienda began offering G2P payments via DaviPlata nearly two years after launch, though the timing in their case was
  influenced by the government's open bidding process. Many would argue G2P payments should be phased in only after a mobile
  money operation has reached a critical mass of agents and transaction levels. There are too few proof points to make the case
  one way or another, and one must acknowledge the complexities involved with securing contracts for social transfers.

There's no sugar coating this. G2P payment delivery will be a challenge across markets for years to come, even in a place like Kenya where M-PESA has reached the majority of adults and agents are nearly ubiquitous. The Red Cross recently piloted the delivery of humanitarian relief payments via mobile money in semi-rural villages in Kenya and came across many of the same challenges highlighted here. That said, we commend the pioneers for embracing partnerships with governments and donors. As one insightful pioneer shared, their imperfect and costly system is still better than the alternative of handing out cash envelopes and being subject to high degrees of fraud and leakage.

<sup>\*</sup> This text box was adapted from a blog post by Mireya Almazan (MMU) that was published on the MMU website on September 30, 2013

<sup>1.</sup> Hereafter we refer to social transfers generically as "G2P payments", although we recognize that many social transfers are in fact funded by donors and NGOs. We also recognize that G2P payments can more broadly include pensions and civil servant salaries.

<sup>2.</sup> This phenomenon has been documented by CGAP and Bankable Frontier Associates

# INNOVATIONS AND NEW BUSINESS MODELS FOR INTERNATIONAL REMITTANCES\*

At GSMA 2013 NFC and Mobile Money Summit, MMU invited Marius Dano from Bics, Gregg Marshall from Western Union, Eric Barbier from TransferTo, Jerry Ejikeme from Sochitel and Daniel Aranda from Ripple Labs to discuss innovations and new business models in the area of international remittances. The session was moderated by Andria Thomas from Dalberg Global Development Advisors. This article highlights some of the key points discussed on stage.

Developing countries received over \$400 billion in remittances in 2012 according to a World Bank report. In these markets, using mobile money for international transfers represents a tremendous opportunity that would benefit both customers by making transfers quicker and more convenient, and mobile money providers by creating a new source of funds for mobile wallets. However, while the number of deployments has increased from 8 to 32 over the past 3 years, transaction volumes remain low and Andria explained that a number of challenges have slowed down progress in this area.

Western Union and Bics's HomeSend are the two major hubs, connecting 70% of the mobile money deployments that support international remittances. When Gregg Marshall and Marius Dano were asked to share their thoughts on what would be required for international remittances over mobile money to take off, they mentioned four critical factors:

- The need for a critical mass of active mobile money users in receiving countries;
- Greater customer acceptance on the sending side;
- The importance of interoperability to allow transfers between different types of accounts (bank accounts, mobile money accounts, etc);
- The need for more enabling regulatory frameworks.

#### IN RECEIVING COUNTRIES, A LARGER CRITICAL MASS OF ACTIVE MOBILE MONEY USERS IS NEEDED

One of the lessons that Gregg Marshall has learned working for Western Union Digital is that international remittances over mobile money won't take off until there is a critical mass of active mobile money users in receiving markets.

Indeed, active mobile money users very quickly realize the benefit of using their mobile wallet to receive money from abroad. However, international remittance does not seem to be an attractive enough proposition for non-mobile money users to open a mobile wallet. In this context, a larger number of mobile money users is needed in receiving countries for international remittances to be successful over mobile money.

#### DEVELOPING CUSTOMER ACCEPTANCE IN SENDING COUNTRIES IS CRITICAL

We hear a lot about how difficult it is to raise awareness and to educate customers on using mobile for money transfers in developing countries. However, it is just as challenging to develop customer acceptance in sending countries, and we know that it is the sender rather than the recipient of a remittance who decides which channel to use.

To address this challenge, it is important to focus on the senders – typically economic immigrants –, trying to understand who they are and using distribution and marketing models they are comfortable with is critical. Partnering with MVNOs in sending countries is another way of solving the acceptance problem. In Europe for example, MVNOs' customer bases are composed mostly of migrants who regularly send money home. MVNOs also have large distribution networks in sending countries and are particularly strong in the areas where migrants live. Some partnerships are already in place, for example between Bics, MTN and Lycamobile on the UK-Ghana remittance corridor.

However, international remittance to a mobile money wallet was not the only model discussed. Both Sochitel and TransferTo found that by replicating a user experience that senders are usually familiar with, sending airtime, the need for customer education was reduced. International airtime top-ups appear to be a complement rather than a substitute to international money transfers, and it is





gaining ground faster due to less constraint for growth. According to Eric Barbier, the use cases have interesting differences: while a customer of TransferTo makes transfers worth below USD 20 on average 3 times a month, people who remit money home usually do so once a month and send larger values.

#### CAN INTEROPERABILITY BE A GAME CHANGER FOR INTERNATIONAL REMITTANCES?

Finally, the lack of interoperability between different types of accounts (bank accounts and mobile money accounts for examples) and between different mobile money schemes domestically, seems to be a hurdle for the development of international remittances over mobile money.

Daniel Aranda shared with us how Ripple Labs is trying to address this problem. Ripple Labs created Ripple, an open source protocol for payments, similar to SMTP for email. This is done using a large distributed and decentralized network and allows for autonomous settlement for any kind of asset. In theory, this system allows people to send money to anyone, anywhere, and in any currency. Perhaps the greatest promise of Ripple is that these transactions can be executed with a much lower cost than what we see today, almost for free. As costs still are high for international transfers and remittances, this is an area where innovation can make a big difference for customer uptake.

With the growing willingness of the different entities within the financial ecosystem to interconnect, and innovations like Ripple being developed in parallel, we seem to at the beginning of a long path towards healthy global interconnected systems.

\* This text box is based on a blog post by Claire Pénicaud (MMU) that was published on MMU website on November 7, 2013

PRODUCT OFFERING (JUNE 2013)

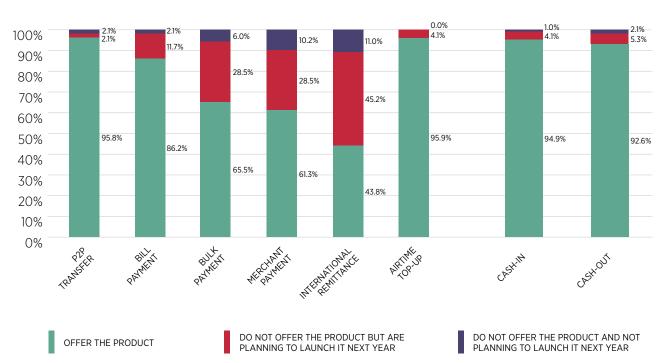


FIGURE 9 **GLOBAL PRODUCT MIX BY VOLUME** (JUNE 2013)

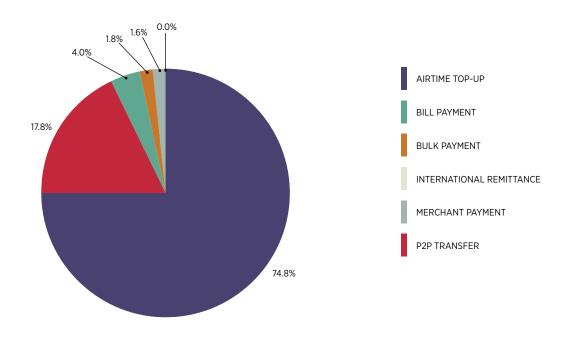


FIGURE 10 **GLOBAL PRODUCT MIX BY VALUE** (JUNE 2013)

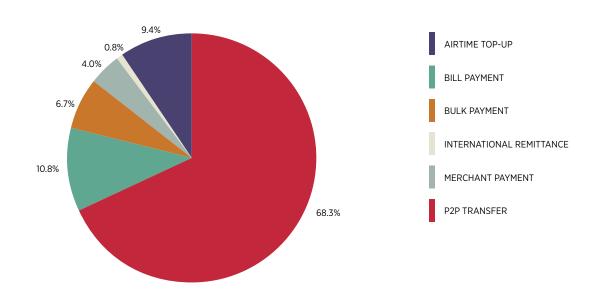


FIGURE 11

#### GLOBAL AVERAGE NUMBER OF TRANSACTIONS PER ACTIVE USER (30 DAY) PER MONTH (JUNE 2013)<sup>27</sup>

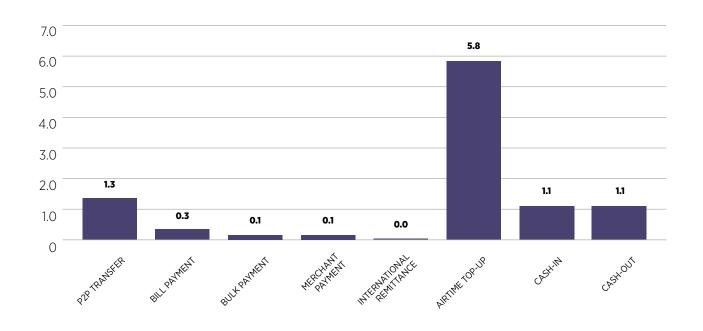
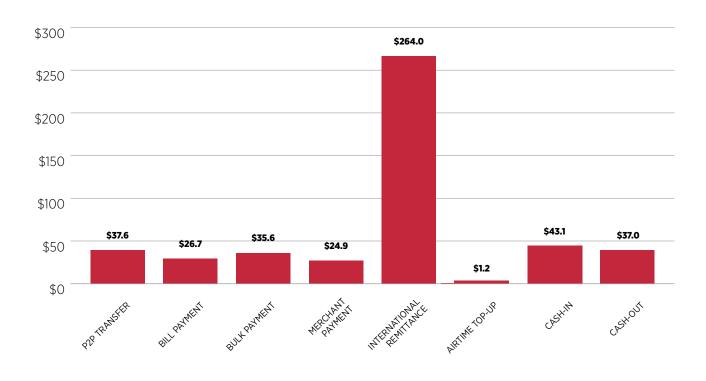


FIGURE 12

# GLOBAL AVERAGE VALUE OF TRANSACTIONS (USD) PER PRODUCT (JUNE 2013)



<sup>27.</sup> The average number of transactions per active user has been calculated based separately for each product based on data from services that actually offer those products.

# The state of the mobile money ecosystem

#### **KEY FINDINGS**

- In 2013, transactions involving external companies have been driving the growth in mobile money globally, representing 29% of the value transacted in June. These transactions are also growing much faster than airtime top-ups and on-net transfers.
- Over 53k merchants and 16k companies are using mobile money as an efficient and affordable way to accept and make payments

Once the foundations of a mobile money service have been established, service providers can significantly grow the volume of transactions by developing a mobile money ecosystem around their platform. Indeed, given the low penetration of banking and card payments in a large number of markets, many companies are struggling to find efficient and affordable ways to accept payments and scalable billing options. Actively getting companies, merchants, and government institutions to use mobile money as a payment platform can generate very large transaction volumes for deployments that have already built a strong agent network and a large and active customer base (See text box 10 to read about the example of Econet Zimbabwe).

## How big is the global mobile money ecosystem?

In June 2013, 27.3 million transactions totalling \$998m USD were processed across mobile money platforms and involved an external company, e.g. bill payments, bulk payments, merchant payments, international remittances, transfers between mobile money accounts and bank accounts as well as off-net P2P transfers to unregistered users. This represents 8% of volume and 29% of value of transactions for the industry in June 2013, compared to 7% and 24% in September 2012.

Transactions involving external companies are also growing faster than airtime top-up and on-net P2P transfer (CAGR of 219% and 197% respectively).

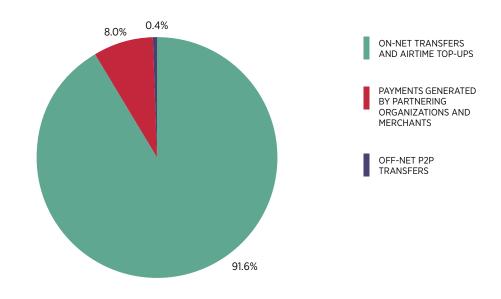
16k

organisations using mobile money as a platform to make or accept payments A large number of companies and merchants have started to use mobile money as an efficient and affordable way to accept and make payments at a large scale. Data from our sample reveals that as of June 2013, 53k merchants were accepting payments via mobile money, 12k of which effectively accepted a payment in June 2013. 16k organisations are using mobile money as a payment platform for accepting bill payment (3k) or making bulk payments (13k).

South Asia has the highest proportion of transactions involving external companies, driven mainly by bill and bulk payments. East Africa & Pacific has focused more on international remittances, and Latin America is building out the ecosystem through integrating mobile money within the existing formal financial ecosystem.

FIGURE 13

# PERCENTAGES OF TRANSACTION VOLUMES DRIVEN BY THE ECOSYSTEM GLOBALLY (JUNE 2013)



PERCENTAGES OF TRANSACTION VALUES DRIVEN BY THE ECOSYSTEM GLOBALLY (JUNE 2013)

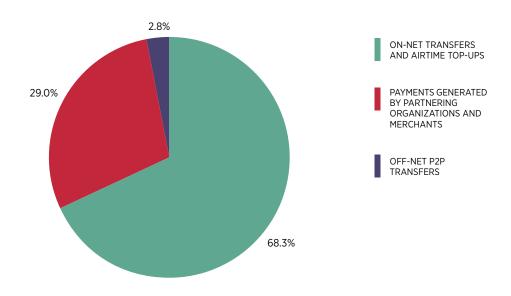


FIGURE 15

#### PERCENTAGES OF TRANSACTION VOLUME DRIVEN BY THE ECOSYSTEM BY REGION (JUNE 2013)

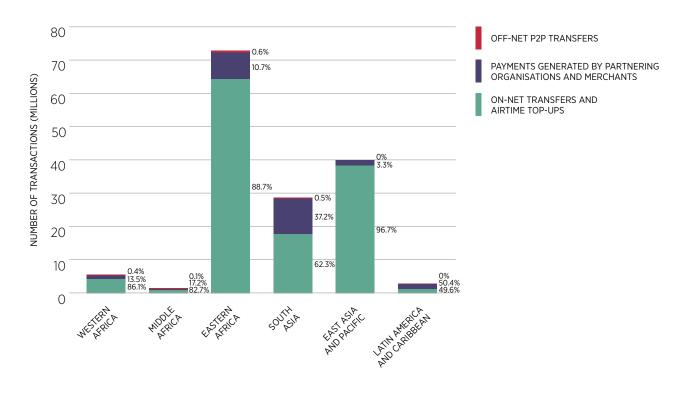
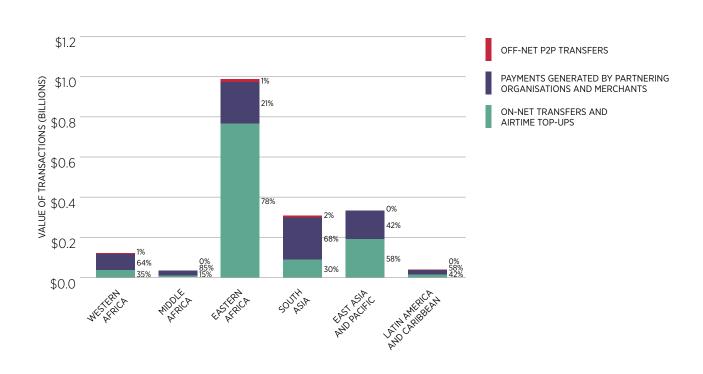


FIGURE 16

# PERCENTAGES OF TRANSACTION VALUE (USD) DRIVEN BY THE ECOSYSTEM BY REGION (JUNE 2013)



#### **MOVING BEYOND P2P MONEY TRANSFERS: ECOCASH IN ZIMBABWE\***

For EcoCash, offering domestic P2P money transfer services is just the first step towards a much bigger goal: becoming the dominant payment system in Zimbabwe for the banked and unbanked alike. EcoCash is currently targeting two pain points with major commercial opportunity: enabling retail payments to merchants and creating a bridge between the informal and formal sectors. To capitalise on these opportunities, EcoCash is building two important structures: a merchant acceptance network and full interoperability with Zimbabwe's banks.

#### SHIFTING CUSTOMER PERCEPTIONS

EcoCash has spent the last 14 months convincing customers that EcoCash is a great way to send money. It is now engaging with its customers in a new way, working to change the perception that EcoCash is just a P2P money transfer service and convincing them to see EcoCash as the main financial tool in their daily lives.

EcoCash is encouraging this shift with a new marketing campaign, "Live Life the EcoCash Way". The goal of the campaign is simple, but ambitious: when someone buys a loaf of bread or pays their child's school fees, EcoCash wants them to reach instinctively for their mobile phone, not cash.

#### INTEROPERATING WITH THE BANKS: LINKING THE FORMAL AND INFORMAL SECTORS

EcoCash sees interoperability with banks as the key to linking Zimbabwe's formal and informal economies. There is substantial demand for payment services between these sectors, with money flowing between banked and unbanked families, and between unbanked individuals and the formal sector in the form of retail payments, school fees, and utility bills.

However, EcoCash believed that wealthier, banked customers would use mobile money services differently than their unbanked counterparts. Instead of making transactions through traditional mobile money agents, EcoCash anticipated they would want more convenient payment options.

Bank interoperability meets this need for convenience by creating a direct link with a customer's bank account, allowing them to load their EcoCash wallet directly from their mobile phone. This creates a clear value proposition for a new set of customers and provides a convenient and practical way for money to be transferred between Zimbabwe's formal and informal sectors. Attracting active, high-value banked customers has the added benefit of injecting liquidity into the mobile money system.

\* This text box is adapted from a case study by Philip Levin (MMU) that was published on the MMU website on July 1, 2013

# The importance of ecosystem development for mobile money profitability

Building a digital financial ecosystem enables customers to perform more digital transactions, hence generating more transaction revenues for service providers before the cost of cashing out is incurred, which helps to drive the overall profitability of the mobile money service. Commissions to M-PESA agents are now the single biggest contributor of direct costs for Safaricom: in the first 6 months of the reporting year, 5 billion Kenyan shillings (USD 60 million) was paid out to agents, compared to voice and SMS interconnect costs of KES 3.09 billion and airtime commissions of KES 4.65 billion. By building the ecosystem, more(non-agent) transactions can happen between cash-in and cash-out to grow revenues without increasing costs, resulting in increasing 'the velocity of money' on the platform.<sup>28</sup>

<sup>28.</sup> These insights were initially published as part of a blog post by Gunnar Camner published on MMU website on November 18, 2013, "Reading the M-PESA half-year results for 2013-2014", available at http://www.gsma.com/mobilefordevelopment/reading-the-m-pesa-half-year-results-for-2013-2014

#### The case of off-network transfers

There are two types of off- network transfers: transfers that are initiated by registered mobile money users to unregistered users, and transfers between two accounts of different but interconnected mobile money schemes. Currently, off-net transfers are very marginal in the global product mix (<1%); most transactions take place within the "closed loop" of mobile money service. However, as operators' interest in interoperability is rising, this proportion of off-net transfers is expected to grow in the future (read text box 11 to find out more about interoperability in Indonesia). Growing off-net transactions will be an important step for mobile money to become a true replacement for cash. More off-net transactions would also decrease the number of immediate cash-outs and allow the digital money in the system to flow through longer.

#### **TEXT BOX 11**

# A CLOSER LOOK AT INTEROPERABLE MOBILE MONEY SCHEMES IN INDONESIA\*

Interoperability in mobile money is an important topic, and as deployments grow in popularity, the question of what role they will play in the payments landscape and how best to fit into the financial infrastructure becomes more relevant. The route taken in Indonesia was to jointly develop a protocol to allow transactions to happen directly between the three deployments. This was chosen for its simplicity, neutrality, and cost-efficiency. Connecting and integrating with ATM networks and banks are up to each operator to pursue, and already over 8,000 ATMs can enable transactions from mobile money deployment.

The solution was implemented in 6 months, including a 2 month pilot phase. One of the reasons behind the rapid implementation was that they assigned working groups in all areas affected by interoperability.

#### KEY FACTORS THAT HELPED THE INDONESIAN OPERATORS TO DELIVER THIS SOLUTION:

- 1. Having a clear roadmap backed by senior leadership that defines what is within and what is outside the scope of the collaboration.
- 2. Enlist a task force responsible for delivering the service.
- 3. Have the task force engage each department affected by interoperability for specialised collaboration across the organisations (e.g. customer care, finance, legal, and technical teams).
- 4. Establish common procedures for newly introduced use cases, such as reversals and disputes across schemes.

However, it's still early days for mobile money in Indonesia. The operators have shown technical and organisational skills in delivering an interoperable solution, but this will not be enough to drive mobile money in the market. An attractive customer value proposition for mobile money and a robust agent network need to be established. Additionally, the regulatory environment is still unclear as the three MNOs operate under different licences.

<sup>\*</sup> This article was adapted from a blog post by Gunnar Camner (MMU) that was published on the MMU website on October 14, 2013

# A COMPLEMENTARY VIEW FROM THE FINANCIAL INCLUSION TRACKER STUDY

The Financial Inclusion Tracker Study (FITS) is a three-year panel study tracking household financial behaviours in Tanzania, Uganda, and Pakistan. Interviews with mobile money users revealed some interesting parallels, particularly between Tanzania and Uganda—the more advanced markets. The research found that, in Tanzania, 21% of M-PESA users and 12% of Airtel and Tigo Pesa users use mobile money for business transactions. Most (74%) use it to pay suppliers, 23% use it to receive customer payments, and 7% use it to pay employees. Similarly, in the FITS Uganda study, 19% of mobile money users said they use mobile money as part of their business. Most received payments from customers through mobile money or used mobile money to pay suppliers for inventory [1]. A portion of these transactions are likely to be done through P2P today, which means that there is an even greater demand from businesses and SMEs to use mobile money in their business interactions.

 Michelle Kaffenberger, "Mobile Money for Business: What the data shows in Tanzania, Uganda, DRC and Pakistan," (October 24, 2013), available at http://www.gsma.com/mobilefordevelopment/mobile-money-for-business-what-the-data-shows-in-tanzania-uganda-drc-and-pakistan

# The state of mobile money revenues

#### **KEY FINDINGS**

- Mobile money has proven to be rewarding for deployments that have reached scale. Within our sample, 8 mobile money services generated over USD1m in June 2013, representing 86% of total revenues reported by 69 services
- Five operators within our sample reported that mobile money contributed to over 5% of their revenues.
- Savings from airtime distribution can also represent an interesting indirect benefit for MNOs: 10 deployments reported that they sell more than 10% of their airtime over mobile money.

mobile money services generated > USD1m during the month of

June 2013

As mobile money becomes mainstream, its power to drive indirect revenues via churn reduction reduces and the importance of generating direct revenues from transactions starts to grow.

Revenue data was a new and optional section of the Global Survey. 69 respondents provided this information, but several large deployments declined. Data provided in this section are based on information provided by this sample.

#### Direct revenues

**Direct revenue generated from mobile money remains a two-tier landscape.** For 8 mobile money services, mobile money has proven to be rewarding and it generated over USD1m in June 2013. These 8 services together generated USD40.5m in June 2013.

Revenues from mobile money can form a significant proportion of the total revenues for mobile network operators. For example, Vodacom Tanzania made significant progress in 2013 and saw M-PESA's contribution to the company's total revenues increase from 12.6% in September 2012 to 18.7% in September 2013.<sup>29</sup> In our sample, 5 operators reported mobile money revenues contributing over 5% to their total revenue.

FIGURE 17

# PERCENTAGE OF TOTAL REVENUES GENERATED BY MOBILE MONEY FOR MNOS (JUNE 2013)

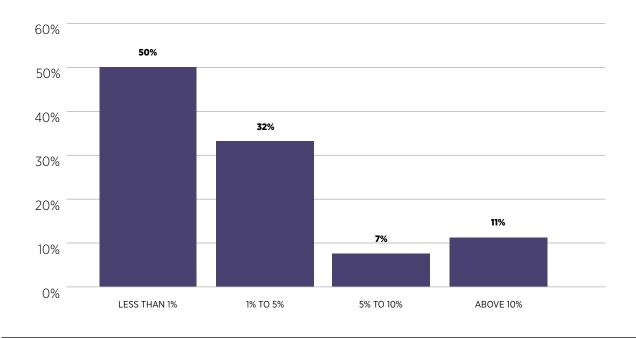
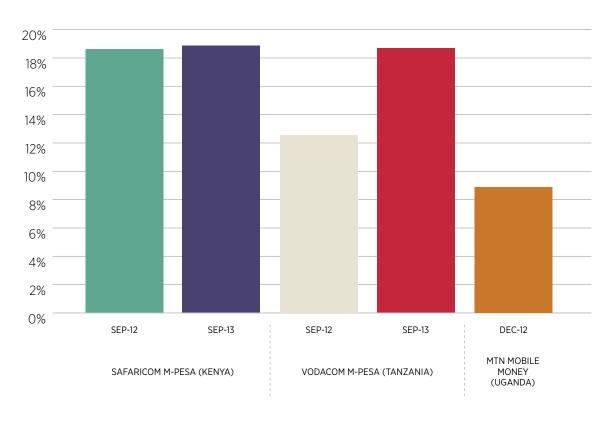


FIGURE 18

# PERCENTAGE OF TOTAL REVENUES GENERATED BY MOBILE MONEY FOR SAFARICOM, VODACOM (TANZANIA) AND MTN (UGANDA)<sup>30</sup> 31 32

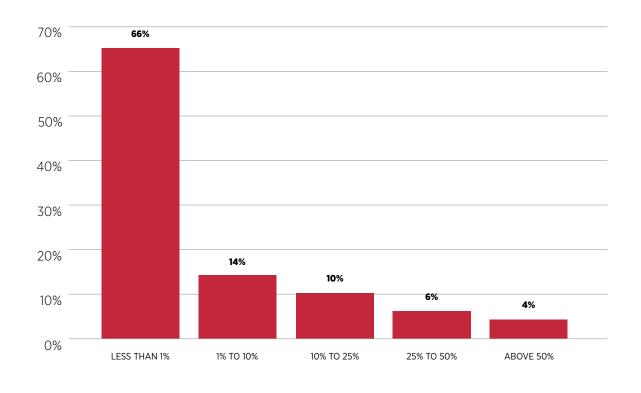


 $<sup>30. \</sup>quad Safaricom: http://www.safaricom.co.ke/images/Downloads/Resources\_Downloads/Half\_Year\_2013-2014\_Results\_Presentation.pdf$ 

 $<sup>{\</sup>tt 31.} \quad {\tt Vodacom: http://www.vodacom.co.za/cs/groups/public/documents/vodacom.co.za\_portal\_webassets/announcement\_new.pdf} \\$ 

<sup>32.</sup> MTN: https://www.mtn.com/Investors/Financials/Documents/presentation\_2012.pdf

FIGURE 19
PERCENTAGE OF AIRTIME MNOS SOLD VIA MOBILE MONEY (JUNE 2013)





## Indirect revenues

A number of MNOs have launched mobile money for its indirect benefits. However, **mobile money's potential to reduce churn is fading as it becomes a mainstream service for MNOs, but savings on airtime distribution remains an attractive indirect benefit.** Using mobile money as a tool to increase customer loyalty becomes increasingly challenging in markets where most operators have launched mobile money. To differentiate their service and attract new customers, operators have used various tactics including making mobile money free for certain periods of time. These types of price promotions have had mixed results so far (read more in the text box 13).

However, savings from airtime distribution seem to represent a more attractive opportunity for operators. 10 MNOs within our sample reported selling more than 10% of their airtime via mobile money, totalling USD 19 million in June 2013.

# PRICE PROMOTIONS: AN EFFECTIVE TACTIC FOR SOME, BUT IT MAY NOT BE RIGHT FOR EVERYONE\*

Price is one of the most dynamic marketing tactics in an operator's toolkit because it is easy to implement and, under the right circumstances, can efficiently drive network effects. As Ignacio Mas has highlighted, price penetration worked for PayPal, which willingly lost \$23 for every new customer in their first 9 months[1]. More recently, going "free" has proven itself in Somaliland. For ZAAD, offering an entirely free service was cited as a critical success factor in facilitating rapid mobile money adoption. Although ZAAD's innovative approach is somewhat unique, we have seen varying price penetration strategies (from free money transfers to airtime bonuses) be effective in moving the needle in mobile money adoption.

However, pricing promotions are not without risk. Here are three questions that operators might consider before launching a new pricing strategy to avoid the potential unintended consequences of playing with pricing.

#### (1) IS PRICE THE MAJOR BARRIER TO ADOPTION?

Price promotions only work when a decrease in price results in an increase in volume. If a mobile money service isn't perceived as relevant and reliable to its target market, then price is not the pain point and a reduction in price will not result in an increase in volume. Before cutting prices, take the time to assess whether affordability is a major barrier for your target customers.

#### (2) WHAT'S THE RISK OF PERMANENTLY UNDERVALUING THE SERVICE?

Operators also need to consider the long-term impact of a price penetration strategy. In some highly competitive markets, price promotions could result in a price war between operators and/or other service providers. Price wars are easy to start and expensive to win (as MNOs remind us again and again). So, before launching a promotion, operators need to consider both their position in the market as well as that of their competition.

- What's the likelihood that one of your competitors will follow suit? How long will you realistically be able to sustain a clear pricing advantage?
- What effect will pricing have on your brand? Large marketing campaigns focused on pricing can erode brand strength, which is a valuable asset in building trust with customers.
- How much can you afford to lose? Without significant increases in volume, price reductions have an exponential impact on profitability. As an example, for a company with 10% profit margin, a reduction in price of 1% will result in a 10% decrease in operating income unless there's an increase in volume. [2]

#### (3) HOW DOES THE PRICING PROMOTION FIT INTO YOUR LONG-TERM BUSINESS MODEL?

Pricing penetration can be an effective way to drive network effects, but operators also need to determine how they will otherwise recoup the value left on the table. This question applies mostly to operators who have either decided to maintain an indefinite pricing promotion or those who find themselves in a position where re-introducing prices is proving challenging (dropping them tends to be a lot easier than raising them). In either case, operators need to find other ways of making mobile money economically sustainable.

There is no question that innovative approaches to price can yield significant value. However, price penetration strategies do not come without risks and, in some markets, a price promotion could result in unintended (and uneconomic) consequences. As operators look to tip the market towards mobile money, price promotions can be an effective strategy, but the circumstances are unlikely to work for everyone.

<sup>\*</sup>This text box was adapted from a blog post by Lara Gilman (MMU) published on the MMU website on August 12, 2013

Financial Access Initiative, "Contrasting Two E-payment Success Stories: PayPal and M-PESA", (June 13, 2011), http://www.financialaccess.org/blog/2011/06/contrasting-two-e-payment-success-stories-paypal-and-m-pesa

<sup>2.</sup> Alexander Chernev, "Strategic Marketing Management," Brightstar Media, Inc., (2008).

The business case for mobile money is slightly different for non-operators and while they cannot benefit from some of the indirect benefits associated with mobile money such as savings on airtime distribution, they can usually count on additional sources of revenues including earning interest from the deposits (see text box 14 for the example of DBBL).

#### **TEXT BOX 14**

## WHAT IS THE BUSINESS CASE FOR BANKS TO GET INTO MOBILE MONEY? THE EXAMPLE OF DBBL IN BANGLADESH\*

When MNOs enter the mobile money business, they see a business case of direct revenues from revenues and indirect benefits of ARPU lift, churn reduction, and/or savings on airtime distribution. However, a bank's rationale for entering the mobile money business will necessarily be different as they don't have the indirect benefits. In the case of Dutch-Bangla Bank Limited (DBBL), their aim was to increase their balance sheet, growing the number of deposits taken in over mobile banking and on lending those funds. On this basis, they estimated that at an interest spread of 5%, a deposit of 5 billion taka (USD 62.5 million) would create an annual income of 250 million taka (USD 3.125 million). This is equivalent to the maximum annual expense of the project and a target they were hoping to achieve by the end of 2013.

Following the issuance of the central bank's "Guidelines on Mobile Financial Services (MFS) for the Banks" (of 22 September 2011, as amended on 20 December 2011), it was clear to both Bangladeshi banks and MNOs that mobile money would only be through partnership models led by banks. DBBL launched its mobile money service on May 31, 2011.

After the launch of its mobile money service last year, DBBL opened 400 small offices in the country's rural areas. A total of 10,423 agents have been appointed to perform cash-ins and cash-outs for customers. These agents are normally small shop owners or retailers of various MNOs. Agents perform on average 3.3 transactions (cash-in and cash-out) per day.

DBBL now has partnerships with Citycell, Banglalink, Airtel, and GrameenPhone. As per the partnership agreement, MNOs provide USSD connectivity between the DBBL server system and agents/customers who are using their mobile phones. They also engage their retailers to work as DBBL agent points. In return, MNOs get around 25% of the transaction fees paid by customers[1].

Launching the service proved more difficult than expected. In particular, the main challenge faced by DBBL was customer education. But 14 months after the launch of its mobile money service, DBBL is on the way to reaching its financial targets.

When I asked Mr Abul Kashem Md. Shirin, the Deputy Managing Director, what advice he would give to other banks willing to launch mobile money service for the unbanked, this is what he told me:

- Don't be afraid to put a lot of money on the table: mobile money requires heavy initial investments.
- Manage expectations: mobile money will be profitable in the long-term, but don't adopt a short-term view.

<sup>\*</sup> This text box was adapted from a blog post by Claire Pénicaud (MMU) published on the MMU website on August 20, 2012

<sup>1.</sup> On average, customers pay 1% of the transaction amount as a fee. This fee is tentatively shared among the parties as follows: Agent: 50%, MNO: 25%, Bank: 25%

# PART 2 MOBILE INSURANCE, CREDIT AND SAVINGS



# Introduction

#### **KEY FINDINGS**

- 123 mobile insurance, credit and savings services are live of which 27 were launched in 2013, highlighting that there is strong interest in leveraging mobile to deepen financial inclusion.
- The mobile insurance industry is gaining traction with the help of specialist intermediaries and innovative business models that appear to be accelerating product launches (30 in the past two years)
- The business case is challenging, particularly because these services typically require more customer education than mobile money products such as P2P transfer, and so providers are building new sales forces to acquire customers for mobile insurance credit and savings rather than using existing mobile money agents.

This year we expanded the scope of the MMU Global Survey to include mobile insurance, credit and savings. Driven by the market, these are new areas that MMU is starting to explore using data and insights gathered in 2013. It is early days for mobile insurance, credit and savings and as we collect data on these services in the coming years, we hope to deepen our insights.

# Mobile money and its relationship with mobile insurance, credit and savings

While mobile insurance can be linked to mobile money, allowing convenient payment of premiums and/or claims, the largest mobile insurance deployments in our sample do not use the infrastructural "rails" laid down by mobile money. Some mobile insurance deployments are able to provide insurance to anyone in their market with a mobile phone, given they don't require mobile money to be in place. For example, mobile insurance premiums can be paid for from an airtime balance or insurance can be offered for free as a customer loyalty benefit. Therefore, the potential reach of mobile insurance is not restricted by the actual reach of a mobile money provider.

On the other hand, **mobile credit and savings rely on the infrastructure created by mobile money deployments**, and therefore depend on the growth of mobile money to succeed. As a result, the most successful deployments are in countries where mobile money has reached scale (Kenya, Zimbabwe, and Pakistan).

# Mobile insurance

## The opportunity for mobile insurance

Insurance is defined as an arrangement by which a company or the state undertakes to provide a guarantee of compensation for specified loss, damage, illness, or death in return for payment of a specified premium.

Much of the world takes insurance for granted, but traditional insurance does not cater to those with low incomes in either developed or developing nations. This is primarily because the cost of selling, underwriting, collecting premium payments and administering a claim does not decrease in proportion to the value of the policy. Therefore an opportunity may exist to leverage mobile technology to provide insurance more cost effectively.

However, low-income individuals are not always familiar with insurance and providers must invest heavily in customer education to explain the features and benefits of an insurance policy. A well-known saying in the insurance industry is "insurance is sold, not bought." These customer education efforts can be expensive and further complicate the business case for bringing insurance to those with low-incomes.

## The mobile insurance landscape

Mobile insurance has had a number of false starts dating back almost 10 years. Seven mobile insurance services that were launched have since either closed or merged, indicating that it has taken some time to get the commercial and partnership model right. It is therefore critical for deployments to have an exit strategy in the event they can no longer offer the service. This will help protect the brands of both the MNO and the insurance company offering the service as they will continue to trade independently of each other after a closure.

Despite these false starts, there is still strong interest in exploring the mobile insurance opportunity. The MMU Deployment Tracker reveals 84 live services, 16 of which launched in 2013. In addition, 8 survey respondents reported they were planning to launch mobile insurance in the next twelve months. The regions where mobile insurance has been most popular (in terms of number of policies initiated) are Sub-Saharan Africa and South Asia.

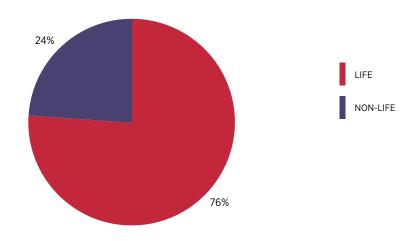
## The mobile insurance product offering

Over three quarters (76%) of mobile insurance services in our sample offer life cover, while the other 24% provide health insurance, accident coverage, or agricultural insurance. Life insurance requires simpler sales and claims administration processes relative to other insurance products, making it simpler to enable via mobile.

With a view to simplify non-life products, some mobile insurance providers are innovating in the use of data collection to automatically pay out claims via mobile money. For example, Killimo Salma, a micro-insurance program for farmers in Kenya, has developed a system whereby they pay out based on weather conditions and the data they collect from specially set-up weather centres, proving that a service that is automated and can be verified using low-cost technology is likely to have quick market uptake.

#### FIGURE 20

#### LIFE VS. NONLIFE INSURANCE POLICIES (JUNE 2013)



#### **TEXT BOX 15**

# USING M-PESA MOBILE MONEY "RAILS" TO ENHANCE HEALTHCARE ACCESS\*

Kenya, the "home of M-PESA," has been a hub for innovation at the intersection of health and mobile financial services (MFS). With M-PESA providing the "rails" upon which value-added services can be built, a variety of health-related mobile finance offerings have emerged in Kenya and Tanzania. From pre-paid savings to health insurance, mobile platforms are striving to ensure affordable healthcare is not solely a luxury; but rather, a universal right.

#### MOBILE HEALTH INSURANCE FOR THE BASE OF THE PYRAMID

Changamka Microhealth Ltd. launched the Linda Jamii platform, in partnership with Safaricom and Britam insurance company, which offers mobile microinsurance to low-income individuals. Through the platform, customers can save money on their phone and purchase health insurance once they meet a certain savings threshold.

\* This text box was adapted from a blog post by Julienne Lauler of Mondato, published on the MMU website on May 23, 2013

#### Marketing and distributing mobile insurance

Customer acquisition for mobile insurance is relatively sophisticated and providers must rely on a large sales force, which can provide necessary customer education when acquiring new customers. In Bangladesh, the number of mobile insurance policies initiated<sup>33</sup> exceeded 2m in June 2013, demonstrating the ability of the mobile insurance industry to provide insurance coverage to large numbers of underserved people in developing markets. In the case of Bima Life Insurance Service in Bangladesh, a large sales force of 800 dedicated agents, and an outbound call centre team of 40-50 agents<sup>34</sup> was required to drive sign-ups, resulting in high acquisition costs. In Senegal, Tigo hired a field force of over 40 foot soldiers to individually educate and register customers to its life insurance services Tigo Kiiray. A dedicated outbound call centre follows up with each registered customer to ensure they understand the product, know how to make a claim, and keep the policy active by spending the required minimum amount on Tigo's network

<sup>33.</sup> Mobile insurance policies initiated: when a customer signs up / opts-in for an insurance policy, vs. live or in-force policies which are maintained either by paying a premium or meeting a predefined airtime spend.

<sup>34.</sup> http://www.bimamobile.com/robi-axiata/

#### PROMISING START IN MOBILE INSURANCE, THE EXAMPLE OF TIGO KIIRAY IN SENEGAL\*

Tigo Senegal has 2.6 million GSM subscribers in a country of 13 million people. In April 2012, in partnership with microinsurance specialist Bima and insurer UASen Vie, Tigo launched Tigo Kiiray, a mobile life insurance product aimed at their GSM subscriber base. Tigo's initial aim in launching Kiiray was to increase GSM ARPUs and decrease churn but the service has also begun to generate appreciable revenue. In the 1.5 years since launch, Tigo Kiiray has seen strong take-up, reaching more than 10%% of Tigo's subscriber base, and is already among the largest insurance programs in Senegal.

#### PRODUCT DESIGN

Tigo Kiiray is a "freemium" life insurance product, whereby customers are given a certain amount of free insurance coverage and can opt into a paid version with additional coverage. For the free version, eligibility for coverage requires a minimum spend on Tigo's GSM network. If a customer's spend on the Tigo network exceeds FCFA 1500 (US\$3.13) in a month, they are eligible for Kiiray life insurance coverage of between FCFA 60k and 300k (US\$125 and \$630). If the customer churns from Tigo's network, they lose their Kiiray coverage. For the premium paid version, FCFA 330 (US\$0.69) is automatically deducted from the customer's airtime account in small increments over the course of a month in exchange for a doubling of their life insurance coverage.

#### **OPERATIONAL DEPLOYMENT**

Tigo and operating partner Bima believe that insurance is a "push" product rather than a "pull" product – that is, few people wake up in the morning wanting to buy insurance, rather, they need to be convinced to buy it. Furthermore, they believe that in a country with low insurance penetration, most customers would have to be individually educated on the benefits and features of life insurance. Consequently, Bima has hired a Tigo Kiiray field force of over 40 foot soldiers along with dozens of outbound call center representatives to individually educate and register customers across the country. A dedicated quality control team follows up with registered users to ensure they understand the product, know how to make a claim, and keep the policy active by spending the required minimum amount on Tigo's network.

#### **RESULTS**

In the month of October 2013, 180,000 subscribers qualified for either paid or free coverage, covering 360,000 individual lives in Senegal. Remarkably, a majority of the policyholders have opted for the paid premium version of the service, proving the unmet demand for mass market life insurance in Senegal. Tigo reports that churn rates among these customers have been significantly lower than what would have otherwise been experienced.

\* In Q1 2014, GSMA will release an in-depth case study featuring successful mobile insurance models, including Tigo Kiiray. Stay tuned.

### The business model for mobile insurance

Mobile insurance can be offered either as a loyalty reward for mobile customers or where customers pay a premium for the service. Our survey found 52% offer mobile insurance free in return for meeting certain airtime usage levels, whereas 48% charge a premium.

For customers paying mobile insurance premiums:

- Users can subscribe or sign up via their mobile phone (46%), insurance company (4%), dedicated agents on the ground, or a call centre (50%).
- Premium payments can be made using mobile money wallets (54%) or via airtime wallets (46%).
- Claims are disbursed using mobile money (56%) and banks (44%).

FIGURE 21 COMMERCIAL MODEL FOR MOBILE INSURANCE (JUNE 2013)

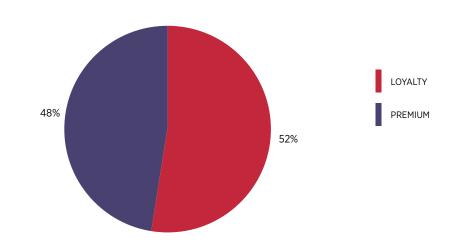
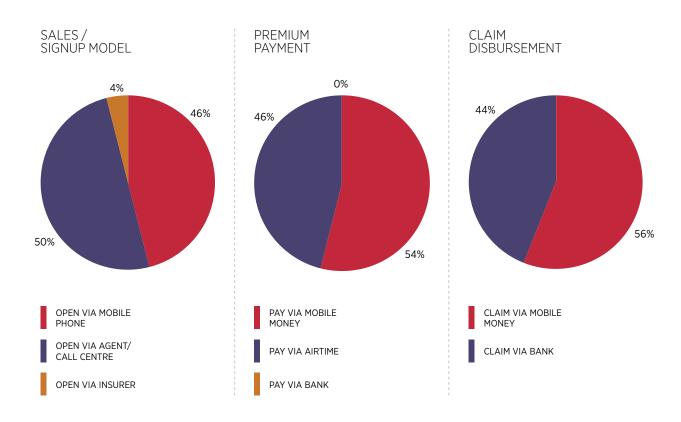


FIGURE 22 SIGN-UP MODEL, PREMIUM PAYMENT, AND CLAIM DISBURSEMENT FOR MOBILE INSURANCE (JUNE 2013)



# TIGO, BIMA, AND MICROENSURE BRING A "FREEMIUM" MODEL TO MOBILE INSURANCE\*

Insurance is a complicated product but one where mobile distribution models hold some promise. What works and what doesn't? MicroEnsure, a company that partners with MNOs to offer insurance to the mass market, has experimented with a few models and their experience in Ghana might give mobile operators some ideas.

MicroEnsure had originally experimented by partnering with MNOs to offer insurance directly to customers through the mobile money wallet. Customers would sign up for insurance directly on the phone or through an agent and pay premiums through their mobile money accounts. Unfortunately, insurance awareness and understanding in Ghana is low (life insurance penetration is under 2%) and the mobile money ecosystem was still developing. These schemes struggled to reliably collect premiums and secure consumer trust in an unfamiliar product through a non-traditional channel.

In Ghana, MicroEnsure tried a variation on this model that seems to have had more success. Through a partnership between Tigo, Bima, and MicroEnsure[1], Tigo subscribers were offered so-called "embedded" insurance—a free benefit on an opt-in basis. Subscribers are awarded free life insurance coverage in proportion to the amount of airtime they use as a loyalty benefit. The purpose of the free insurance is to create brand loyalty for Tigo and reduce churn. The scheme has resulted in more than 1 million new individuals covered by insurance in Ghana and Tanzania (where a similar service was launched), 80% of whom had never had insurance coverage.

Here is the innovative part: In addition to the free embedded benefit, Tigo offered an option to double the insurance coverage for a monthly fee of GH¢1 (US\$0.52). This might be called a "Freemium" model—offering a basic level of service for free to many customers in the hope that some customers will voluntarily upgrade to a more premium paid service. Free + Premium = Freemium.

Impressively, Tigo has seen tens of thousands of customers upgrade from free insurance to paid premium product since the program's launch in February. By offering the free embedded product they have created a market of customers that want and understand insurance. This market is coming back to Tigo to buy more of the product.

Peter Gross from MicroEnsure points out that Coca-Cola enters new markets with a similar model—first offering free samples of Coca-Cola to customers to get them hooked on the product and then subsequently selling it to them. For new products that are not yet well understood by consumers, this approach might have some merit.

- \* This text box was adapted from a blog post by Philip Levin (MMU) published on the MMU website on July 2, 2013
- The roles between the parties are split as follows: Tigo provides the subscriber base and markets the product. Bima provides the technical interface, agency force to register users
  to the insurance service, and other supporting functions. MicroEnsure handles the insurance partnerships and claims administration.

It is early days for mobile insurance, but looking at the first successful services reveals three key factors that are currently driving success:

- the ability to automatically debit, at set intervals, an account that is likely to have an active balance (an airtime wallet rather than a mobile money wallet);
- offering mobile insurance in partnership with insurers and third-party implementing partners with specific expertise in microinsurance; and
- employing a "freemium" model whereby customers are given free insurance in exchange for loyalty to the MNO and given the option of upgrading to a more robust paid policy with additional features or coverage.

# Mobile credit

The MMU Deployment Tracker reveals 17 live services, 2 launches in 2013. In addition, 8 survey respondents reported they were planning to launch mobile credit within the next twelve months.

**Multiple mobile credit services can be offered on one mobile money deployment**, such as M-Shwari (service offered by Kenya's Safaricom) and Musoni (service offered by a third party provider – see text box 18), proving that these services are not strictly the domain of mobile money deployments and that there is an opportunity for other third party providers to jump on board.

In terms of the sales model, the deployments in our survey do not use mobile money agents, relying on a more sophisticated customer acquisition model than mobile money. For example, Musoni uses cash-less branches for clients to visit, meet staff and discuss issues at hand. However, all deployments require users to have mobile money accounts, as mobile money wallets are used for all loan disbursements and repayments.

Algorithms using airtime purchases and call history data for credit scoring allow providers to measure purchasing power and reliability, lower the cost of customer acquisition, and reduce default rates, all of which improve the ability of both traditional micro finance institutions and mobile credit providers to offer credit services to greater numbers of people (see text box 19 for more information).

#### IN KENYA, MICROFINANCE IS GOING MOBILE\*

Musoni ('M' for Mobile and 'Usoni' for future) is a young but very promising MFI in Kenya. Established at the end of 2009, Musoni believes the next generation of microfinance is mobile. Musoni's vision is to substantially improve the quality and availability of financial services to low income, unbanked, and underbanked individuals in the developing world through the establishment and support of best practice MFIs with an emphasis on efficiency, transparency, and client focus.

Musoni is the first MFI in the world to go 100% mobile, using mobile money transfer services for all loan repayments and disbursements. Musoni has successfully integrated its back office with the leading Kenyan mobile network operator, thus enabling seamless processing of all transactions. Musoni's success in taking advantage of the Kenyan M-PESA service, with its 45,000 agents and 18 million clients, has enabled it to offer a flexible and convenient alternative to the traditional time-consuming and manual microfinance processes.

Musoni has cash-lite operations, but not branchless. The branches are places for clients to visit, to meet staff, and discuss issues at hand, but are not used for cash transactions, which are made at money transfer agents and shops. After a little more than two years, Musoni has set up five branches spread across three cities, two of which are in and around the capital city of Nairobi.

#### CHALLENGE #1: REDUCING THE COST OF SETTING UP MFI BRANCHES...

Setting up brick-and-mortar branches is quite expensive for an MFI, and Musoni made the bet that this cost could be substantially reduced if transactions were not in cash. For example, a strong room is an obvious requirement if cash is to be held at a branch. In addition, tellers are required in the branches to process the cash repayments. In many MFIs, a number of the costs associated with brick-and-mortar operations are eventually passed on to the consumer. And it's not just about cost; it's also about convenience, speed of transaction processing, and fraud-related risks.

This is why Musoni decided to operate cashless. This way, using the same resources as other MFIs, particularly staff, Musoni has been able to establish more branches and serve a much greater number of customers. Going forward, Musoni will be better able to set up branches in more remote areas than a traditional MFI.

#### CHALLENGE #2: ...WHILE IMPROVING QUALITY OF SERVICE

Loans are disbursed and repaid via mobile money, enabling Musoni to disburse loans much faster than traditional cash and chequebased models. Musoni guarantees its customers loan money within 72 hours of application. The MFI enjoys lower risks, less paperwork, better customer service, and easier and more accurate transaction tracking.

The first loan was issued in May 2010, and since then over 18,000 loans have been disbursed, totalling more than KES 500 million (approximately USD 6 million). Musoni currently serves over 8,000 clients.

<sup>\*</sup>This text box was adapted from a blog post by Claire Pénicaud published on the MMU website on September 6, 2012

# AIRTIME-BASED CREDIT SCORING: CAN IT DRIVE INNOVATIVE LOAN PRODUCTS FOR MOBILE MONEY?\*

With the vast majority of mobile subscribers in emerging markets using pre-paid SIMs, there is incredibly rich data available on airtime purchase and usage behaviours. Couple that with the poor quality of information available at credit bureaus, and airtime-based credit scoring is an attractive approach to targeting and risk profiling for credit products.

As a result, customer patterns of airtime top-ups are being used to determine the credit-worthiness of a prospective borrower and to approve/deny loans. Will this technique facilitate the development of innovative microloans via the mobile channel? Is the data truly an adequate predictor of customers' ability to repay? What's the upside for the players involved?

#### AIRTIME-BASED CREDIT SCORING IN A NUTSHELL

Most emerging markets have little to no infrastructure that adequately collects customers' credit history: credit bureaus either don't exist, or exist on a limited number of individuals and with very thin financial data. For individuals without credit history, the result is stringent borrowing terms such as high collateral coverage, months of demonstrated savings, and/or individual or group guarantors.

The idea behind airtime-based credit scoring is to use an individual's history of airtime top-up as a proxy indicator of what amount they can afford to borrow and their credit-worthiness. The precise calculations and algorithms employed to do this is the "secret sauce" of Experian MicroAnalytics and Cignifi, two companies working in this space.

#### HOW TO MANAGE CREDIT RISK ON MOBILE LOANS?

Four distinct components are required to make mobile branchless loans work. These are:

- An origination credit scoring system that utilizes the information available on the borrower at the time of application to predict
  credit risk. The key predictors of risk are: airtime top-up patterns (for example, do you top-up large amounts once a month or
  small amounts every other day?); voice and SMS usage; information gathered directly from the borrower (for example income,
  marital status, etc.); and information available externally (for example, where available, from a credit bureau). When combining
  this data it is possible to develop scorecards that discriminate well credit risk.
- 2. An automated customer management system to send alerts to borrowers to remind them a payment is due, to increase or decrease dynamic exposure to good/bad borrowers, and to streamline the management of overdue payments.
- 3. A credit risk agent management system to dynamically rank agents by the quality of the clients they have introduced to the bank and to calculate and disburse risk-adjusted commissions. In addition, the system alerts agents when their introduced clients are late with a loan payment to trigger early collections action.
- 4. An enhanced mobile interface for end clients that allows them to manage their credit product and review, for example, when their instalment is due, make anticipated payments, request additional credit lines, etc., all managed in an automated and real-time fashion.

\*This text box was adapted from blog posts by Yasmina McCarty, published on the MMU website on March 23, 2012 and December 6, 2012, and by Elio Vitucci, Managing Director of Experian MicroAnalytics, published on August 7, 2012

# Mobile savings

**Traditional mobile money services can be used for savings.** Indeed, some people will cash-in and store value on their mobile money account until the point that they need to perform a digital transaction or cash-out. This use case can be quite common in some markets. For example, CGAP analysed usage of mobile money services in West Africa and found that savings was the most popular use case<sup>35</sup>. There is customer demand for a mobile-enabled solution allowing people to store and save value in a secure and convenient way. However, traditional mobile money services do not offer optimal user experience when it comes to savings and a number of companies have decided to develop mobile savings solutions (see text box 20).

Customers of mobile savings services can open savings accounts that are distinct from mobile money accounts and which offer additional functionalities that are relevant for savings. **According to the MMU Deployment Tracker, 22 mobile savings services are live, 9 launched in 2013.** In addition, 7 survey respondents reported they were planning to launch mobile savings within the next twelve months. We find no regional bias; mobile savings services are offered in all regions. However, there are comparatively fewer services than mobile insurance, which doesn't need to rely on the infrastructure of mobile money.

#### **TEXT BOX 20**

#### **NEXT: MOBILE SAVINGS FOR THE UNBANKED\***

Mobile money providers are increasingly pondering the path from payments to savings. If people were comfortable keeping higher e-money balances it would likely increase the activity rate on mobile money transfers, as well as reduce the proportion of transfers that are converted back into cash – a costly step.

In a paper with Colin Mayer, we describe how savings goals can be defined and managed as a system of deferred payments (committed today but paid tomorrow). This means that a whole savings edifice can be constructed merely by adding a couple of optional fields in a standard mobile money transfer user interface: what is the value date for the transaction (default: immediate), and what is the purpose (an alphanumeric field or selectable from a standard list of options).

This allows customers to earmark money they receive today to (for instance) send it home when the rent is due, construct their own sequence of installments to buy a bicycle, or establish a commitment savings pattern to create their buffer against medical emergencies (deferred payments to self).

All these deferred payments would in effect constitute a system of sub-accounts, allowing a very personalized way for customers to view and use their account, but all would operate from the single customer mobile money account. Moreover, imagine the possibilities for credit scoring if the provider knew what a customer's goals were, how intensively they used the commitment payment/savings feature, and how regularly they contributed to these.

Because savings is mainly delayed expenditures, the savings service experience is a logical extension of the payments experience. Savings are about adding a time dimension to basic money transfers. Presenting savings opportunities as deferred payments has the advantage of reminding people more directly of why they are saving at all.

\*This text box was adapted from blog post by Ignacio Mas, published on the MMU website on September 7, 2011

Not all mobile money savings schemes pay interest; nearly half of the providers in our sample do not pay interest, including some banks.<sup>36</sup> Some mobile savings customers choose to save, even though they don't earn interest, demonstrating there is customer demand for mobile savings either for securing against theft or saving for high-price purchases. Given most bank accounts in emerging markets are effectively negative interest, the fees exceed any possible interest earnings for low-income individuals. A truly no-fee, no-interest account is actually a step up from the status quo.

#### TEXT BOX 21

#### M-SHWARI: MOBILE MONEY SAVINGS AND LOANS\*

M-Shwari is a credit and savings product for M-PESA customers launched by Safaricom and the Commercial Bank of Africa (CBA) in December 2012. Customers can apply for a quick approval loan, open a bank account, and move funds from their mobile wallet to an interest-bearing bank account.

To apply for a loan there are no fees and no paperwork. M-Shwari customers can dial \*234\*6# to find out their credit limit (maximum possible loan value). To qualify for an M-Shwari loan, a customer must be an M-PESA subscriber for at least 6 months, and then an algorithm based on their past use of Safaricom services (M-PESA, bonga points, voice, and data) is used to determine the initial eligible loan limit. Subsequent loan limits are determined based on 1) levels of "regular savings" with M-Shwari, and 2) repayment history of M-Shwari loans. Both loan disbursements and repayments are made through M-PESA. Loans can be taken for between KES 100 (USD 1.15) and KES 20,000 (USD 235), have a 30-day term, and carry a facility fee of 7.5%. Failure to pay triggers the loan to roll-over, meaning if a customer pays the loan late, the effective rate is much higher.

Ten months later, M-Shwari continues to grow and has now reached 2.4 million active users (September 2013). These users have collectively deposited KES 1.8 billion (USD 21 million), and the loan balance stands at KES 800 million (USD 9.3 million). Non-performing loans have dropped to 3.8% of the portfolio, which is a good sign for the industry that their customer due diligence and credit scoring algorithms seem to be working well. The product has increased the number of deposit accounts at CBA from under 35,000 to over 5 million in less than a year, making CBA the second largest bank in Kenya in terms of customer accounts after Equity Bank.

\*This text box was adapted from blog posts by Yasmina McCarty, published on the MMU website on December 6, 2012, by Simone di Castri, published on July 8, 2013, and by Gunnar Camner, published on November 18, 2013

# CONCLUSION

This year, mobile money deployments show a much broader range of performance than we saw in the two-tier landscape that was identified in 2012. Then, the industry was clearly two-tiered with a small group of services growing really fast, following the path of M-PESA in Kenya while other services were struggling to gain traction. Today, the growth rates of different mobile money services are much more varied, and there is no longer a clear set of slow-growing mobile money services versus sprinters. This year's data also shows that mobile money can be successful even in markets where it struggled initially, and that it is possible to turnaround the performance of what were previously slow growing services.

Going forward, MMU predicts the industry will continue to evolve in the following areas:

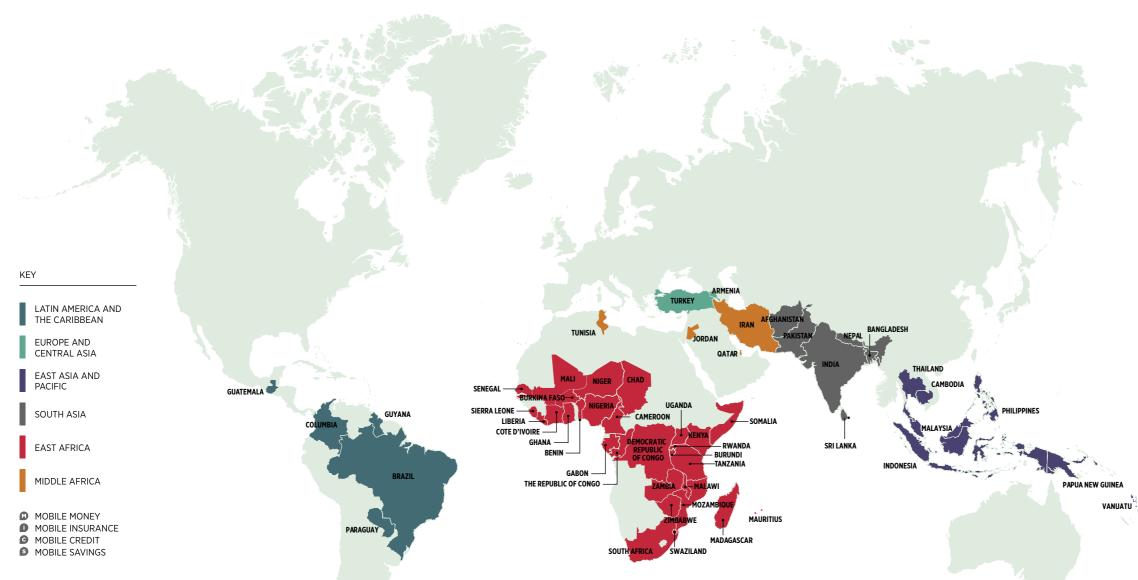
- More examples of account-to-account interoperability, among mobile wallets and also with banks: In 2013, Indonesia was the first market where three operators Indosat, Telkomsel and XL enabled their mobile money schemes to directly transfer money in real-time between each other. Given how there are already 52 markets which have 2 or more mobile money services, MMU expects that more markets may also seek to interoperate their mobile money platforms, once they have identified the right technical and commercial models to do so successfully. There is also an opportunity for mobile money services to connect with more traditional financial services, enabling transactions and new products between bank accounts and mobile wallets. Many deployments have already started to integrate their services in this way, and we anticipate that many more will follow.
- **Ecosystem development:** In 2013, transactions involving external companies have been driving the growth of mobile money globally, representing 29% of the value transacted in June. This is especially true among more mature services, where external companies and merchants contribute to an even larger share of the product mix. Going forward, we expect to see more mobile money services capture the payments demand from companies and institutions to drive high volumes of transactions on their platforms.
- Other mobile financial services: A growing number of providers are interested in launching mobile insurance, credit and savings services, and we expect to see many new launches over the next couple of years. Mobile insurance, credit and savings are important new offerings and could serve to deepen financial inclusion, not only in terms of expanding access of these services to low-income customers, but helping to ensure financial stability and security as well. However, more proof points are needed for how these services can be offered sustainably, in order to ensure adequate levels of investments are made by the industry.

The mobile money industry continues to grow, however there are also barriers in many markets which need to be overcome if mobile money is to achieve its full potential. The industry will need to continue its work to embed best practices in order to accelerate its growth, and continue to engage with regulators and standard setting bodies to create more enabling regulatory environments that will allow these services to flourish. Further investment is also needed to build strong foundations for mobile money services to grow to the next level, together with more identifying sustainable business models for new products and services that ultimately will create a digital financial ecosystem.

STATE OF THE INDUSTRY 2013

APPENDIX A

# Appendix A -List of Participants<sup>37</sup>



#### SUB-SAHARAN AFRICA

Benin Areeba (MTN) 
Burkina Faso Airtel 
Burundi Econet Wireless 
Cameroon MTN Orange 
Chad Airtel Tigo (Millicom) 
Côte d'Ivoire Moov (Etisalat) MTN Orange 
Crange CelPaid Corange CelPaid Corange CelPaid Corange Corange

Democratic Republic Airtel ☑ Vodacom ☑ of Congo

Ghana

Kenya

Liberia

Malawi

Niger

Madagascar

Gabon Airtel BICIG

Airtel D Tigo (Millicom) DD

Txtnpay 🚨 MTN 🗈

Airtel ☑ Musoni ☑S Orange (Telkom Kenya) ☑

Safaricom Tangaza Changamka Syngenta

yu (Essar Telecom) 
Lonestar (MTN) 
Airtel 
Orange 
Airtel 
TNM

Mali Orange 

Mauritius Emtel (Tigo) 

Mozambique mcel 

Mozambique

Nigeria eTranzact 🗗 Ecobank Nigeria Plc 🗈

Airtel 🚨

FETS Fortis MO mKudi Parkway Projects Teasy Mobile

Rwanda Airtel MTN Senegal Tigo (Millicom)

Sierra Leone Airtel 
Somalia Golis Telecom Telesom

South Africa FNB MTN 🗈

Swaziland MTN 🕪 🗈

Tanzania Airtel Vodacom Tigo (Millicom)

The Republic of Airtel

Congo Uganda

Airtel 🚨 MTN 🚨

Housing Finance Bank DDS

Zambia Airtel D Zoona DO
Zimbabwe Econet Wireless D

✓ SAMO

#### LATIN AMERICA AND THE CARIBBEAN

Brazil Zuum 📭
Colombia DaviPlata 📭
Guatemala Tigo (Millicom) 🗭
Guyana GT&T 🕡
Paraguay Tigo (Millicom) 🗭

#### **EUROPE AND CENTRAL ASIA**

Armenia VivaCell (MTS) 
Turkey Turkcell

#### EAST ASIA AND PACIFIC

Vanuatu

Wing 🚨 Cambodia Fiji Digicel D Vodafone Indonesia Bank Sinar Do Indosat (Ooredoo) D mCoin D Telkomsel D BTPN 🗗 XL 🕕 Maxis DIGI D Malaysia Nationwide Microbank DDS Papua New Guinea Smart (PLDT) DGG Philippines Globe Telecom Samoa Digicel 🚨 AIS D True Move D Thailand Tonga Digicel 🚨

Digicel 🚨

#### SOUTH ASIA

Roshan (TDCA) 🚨 Bangladesh Banglalink (Orascom) D bKash D Grameenphone (Telenor) Robi (Axiata) Aircel (Maxis) D IDEA Cellular D India MMPL Oxigen Vodafone Finaccess PGS FonePay D Nepal Telenor DDS UBL Bank DS Pakistan Habib Bank Limited 🚨 Sri Lanka Dialog Telekom (Axiata) Mobitel **1** 

#### MIDDLE EAST AND NORTH AFRICA

Iran Jiring D

Jordan Zain D

Qatar Ooredoo D

Tunisiana 🚨 Viamobile 🚨

61

60

<sup>37.</sup> For further details on each service, please visit MMU Deployment Tracker http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/tracker

# Appendix B - Glossary38

#### **Agent outlet**

In the case of mobile money, an agent outlet is a location where one or several mobile money agents are contracted to facilitate transactions for users. The most important of these are cash conversion transactions for customers (cash-in and cash-out). In many instances, agents register new customers too. Agents usually earn commissions for performing each of these services. As they are human touch point for the mobile money service, they also often provide front-line customer service such as teaching new users how to initiate transactions on their phone. The kinds of individuals or businesses that can serve as agents will sometimes be limited by regulation, but small-scale traders, microfinance institutions, chain stores, and bank branches serve as agents in some markets. Some industry participants prefer the terms "merchant" or "retailer" to describe this person or business to avoid certain legal connotations of the term "agent" as it is used in other industries.

An active agent outlet is an agent outlet that facilitated at least one transaction within the past 30 days.

#### Airtime top-up

Purchase of airtime via mobile money, usually funded from a mobile money account.

#### Anti-money laundering/ combating the financing of terrorism (AML/CFT)

A set of rules, typically issued by central banks, that attempt to prevent and detect the use of financial services for money laundering or to finance terrorism. The global standard-setter for AML/CFT rules is the Financial Action Task Force (FATF).

#### **Bill payment**

A payment made by a person from either a wallet or over the counter to an organisation via a mobile money platform in exchange for services provided.

#### **Bulk payment**

A payment made by an organisation via a mobile money platform to a person's mobile wallet. For example: salary payments made by an organisation to their employees mobile wallet or payments made by a Government to a recipient's mobile wallet (G2P payment).

#### Cash-in

The process by which a customer credits his account with cash. This is usually via an agent who takes the cash and credits the customer's mobile money account with the same amount of e-money.

#### **Cash-out**

The process by which a customer deducts cash from his mobile money account. This is usually via an agent who gives the customer cash in exchange for a transfer of e-money from the customer's mobile money account.

#### E-money

Short for "electronic money," is stored value held in the accounts of users, agents, and the provider of the mobile money service. Typically, the total value of e-money is mirrored in (a) bank account(s), such that even if the provider of the mobile money service were to fail, users could recover 100% of the value stored in their accounts. That said, bank deposits can earn interest, while e-money traditionally cannot.

Certain definitions were taken from Guideline Note Mobile Financial Services: Basic Terminology, by Mobile Financial Services Working Group, AFI http://www.afi-global.org/sites/default/files/publications/MFSWG%20Guideline%20Note%20on%20Terminology.pdf

#### **Float**

The balance of e-money, or physical cash, or money in a bank account that an agent can immediately access to meet customer demands to purchase (cash in) or sell (cash out) electronic money.

## Government-to-person (G2P) payment

A payment by a Government to a person's mobile money account.

#### Informal financial services

Financial services offered by unregulated entities. Examples of informal financial services are susu collections in Ghana, loan-shark lending, savings groups, etc.

#### International remittance

Cross border fund transfer from one person to another person. This transaction requires an intermediary organisation such as Western Union.

#### Interoperability

The ability of users of different mobile money services to transact directly with each other. Interoperability requires technical compatibility between systems, but can only take effect when commercial interconnectivity agreements have been concluded.

#### Liquidity

The ability of an agent to meet customers' demands to purchase (cash in) or sell (cash out) e-money. The key metric used to measure the liquidity of an agent is the sum of their e-money and cash balances (also known as their float balance).

#### **Merchant payment**

A payment made from a mobile wallet via a mobile money platform to a retail merchant in exchange for goods or services.

#### Mobile credit and savings

Mobile credit and savings use the mobile phone to provide credit and/or savings services to the underserved.

MMU tracks mobile credit and savings services that meet the following criteria:

- The service allows subscribers to save money in an account that provides principal security, and in some cases an interest rate, and/or allows subscribers to borrow a certain amount of money that they agree to repay within a specified period of time.
- The service must allow underserved people to save money and/or to apply for credit and repay
  it more easily using a mobile device. Services that offer the mobile phone as just another
  channel to access a traditional savings account and/or credit product are not included.
- The service must be available even to customers with basic mobile devices.

# Mobile financial services (MFS)

The use of a mobile phone to access financial services and execute financial transactions. This includes both transactional and non-transactional services, such as viewing financial information on a user's mobile phone. Mobile money, mobile insurance, mobile credit and mobile savings are mobile financial services.

#### **Mobile insurance**

Mobile insurance uses the mobile phone to provide microinsurance services to the underserved.

MMU tracks mobile insurance services that meet the following criteria:

- The service must allow subscribers to manage risks by providing a guarantee of compensation for specified loss, damage, illness, or death.
- The service must allow underserved people to subscribe to insurance services easily using a
  mobile device. Services that offer the mobile phone as just another channel for the clients of
  an insurance company to access a traditional insurance product are not included.
- The service must be available even to customers with basic mobile devices.

#### **Mobile money**

Mobile money uses the mobile phone to transfer money and make payments to the underserved.

MMU tracks mobile money services that meet the following criteria:

- The service must offer at least one of the following services: P2P transfer, bill payment, bulk payment, merchant payment, and international remittance.
- The service must rely heavily on a network of transactional points outside bank branches that
  make the service accessible to unbanked and underbanked people. Customers must be able to
  use the service without having been previously banked. Services that offer the mobile phone
  as just another channel to access a traditional banking product are not included.
- The service must offer an interface for initiating transactions for agents and/or customers that is available on basic mobile devices.

## Mobile money account / mobile wallet

An e-money account that is primarily accessed using a mobile phone that is held with the e-money issuer. In some jurisdictions, e-money accounts may resemble conventional bank accounts, but are treated differently under the regulatory framework because they are used for different purposes (for example, as a surrogate for cash or a stored value that is used to facilitate transactional services).

An active mobile money account is a mobile money account that has been used to conduct at least one transaction during a certain period of time (usually 90 days or 30 days).

## Mobile network operator (MNO)

A company that has a government-issued license to provide telecommunications services through mobile devices.

#### Off-net transfer

There are two types of off-network transfers: transfers that are initiated by registered mobile money users to unregistered users, and transfers between two accounts of different but interconnected mobile money schemes. In the former case, the e-money will need to be cashed-out at an agent of the sender's agent network.

# Over the counter (OTC) services

Some mobile money services are being offered primarily over-the-counter (OTC). In such cases, a mobile money agent performs the transactions on behalf of the customer, who does not need to have a mobile money account to use the service.

# Person-to-person (P2P) transfer

A transfer made from one person to another person.

#### Point of Sale (POS)

A retail location where payments are made for goods or services.

#### **Platform**

The hardware and software that enables the provision of a mobile money service.

#### Regulator

In the context of mobile money, this typically refers to the regulator who has supervisory authority over financial institutions within a particular country—usually the central bank or other financial authority.

#### **Unbanked**

Customers, who do not have a bank account or a transaction account at a formal financial institution.

#### **Underbanked**

Customers who may have access to a basic transaction account offered by a formal financial institution, but still have financial needs that are unmet or not appropriately met.

#### **Unregistered users**

Customers who use mobile financial services primarily over-the-counter. Unregistered users include both people transacting over the counter in the case of OTC services, and unregistered recipients of off-net P2P transfers in the case of wallet-base services



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