



# Quarterly Update



## Mobile Money: A US\$5 Billion Market Opportunity

Initial findings of the CGAP-GSMA Mobile Money Market Sizing Study.



### Financially Connecting Africa through Mobile

A look at the state of mobile money in Africa, with consideration for the impact that deployments can have on markets with rapidly increasing mobile penetration and low access to finance.



### Mobilising Money through Enabling Regulation

David Porteous introduces the key dimensions of an enabling regulatory environment – openness and certainty – and illustrates the concept by plotting four countries that are active in mobile banking.

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## UPCOMING EVENTS

### Redefining the Landscape of Payment Systems

7th to 10th April, 2009, Cape Town  
[www.worldbank.org/paymentsystems](http://www.worldbank.org/paymentsystems)

### Mobile Money for the Unbanked Working Group

15th to 16th April, 2009, Cape Town  
[mmu@gsm.com](mailto:mmu@gsm.com)

### AITEC Banking and Payments Technology Conference

5th to 6th May, 2009, Lagos  
[www.aitecafrica.com/event/view/13](http://www.aitecafrica.com/event/view/13)

### M-Banking 2009

25th to 26th May, 2009, Nairobi  
[www.fletchermbanking.com](http://www.fletchermbanking.com)

### Mobile Money for the Unbanked Working Group

22nd June, 2009, Barcelona  
[mmu@gsm.org](mailto:mmu@gsm.org)

### Mobile Money Summit

23rd to 24th June, 2009, Barcelona  
[www.mobilemoneysummit.com](http://www.mobilemoneysummit.com)

### Mobile Money for the Unbanked Leadership Forum

25th June, 2009, Barcelona  
[mmuregulatory@gsm.org](mailto:mmuregulatory@gsm.org)



## Director's Note



### Welcome to the first Mobile Money for the Unbanked (MMU) Quarterly Update.

I was pleased to see such great representation from the financial inclusion industry – operators, banks, microfinance institutions, donors and technology providers – at the first Working Group session during the Mobile World Congress in Barcelona. The team is keen to build on the momentum we established at the session with this Quarterly Update as well as the rapidly approaching Working Group meeting in Cape Town on 15th and 16th April.

For the benefit of those who we were unable to speak with in Barcelona, I'd like to provide an overview of the MMU initiative and introduce the team.

MMU is funded by a grant from the Bill & Melinda Gates Foundation. Our vision is to make mobile money services available to unbanked customers living on under US\$2 per day by 2012. To achieve this vision, the initiative has been structured across two key components:

#### MMU Programme

Run by our core team at the GSMA, the MMU programme addresses key commercial and regulatory issues via regular convening of working groups, and knowledge development and dissemination through research and case studies. The programme acts as the global flag bearer for financially connecting the under served through mobile and aims to accelerate the deployment of financial services to those consumers living on under US\$2 per day. We will do so by working to find possible solutions to issues raised in our research, case studies, Working Group activities and global events. We will aim to test the solutions to these issues through trials and the MMU Fund and, where successful, replicate the solution across all markets.

#### MMU Fund

A US\$5 million fund managed by Coffey International, targeted at innovative, replicable and commercially viable ventures that will benefit unbanked customers living on under US\$2 per day.

With an understanding of the structure of the initiative, I would like to introduce the members of the MMU team. I have overall responsibility for the initiative and aligning its direction to the strategy and objectives we have formulated. I am supported by the core MMU team at the GSMA as well as many cross departmental contributors that assist the core team in everything from marketing and communications to events planning and logistics.



**Marina Solin**, Regulatory Director, leads the regulatory work stream of the initiative. Her aim is to accelerate discussion in the industry and with regulatory authorities to provide decision makers with information that helps them to create a regulatory framework conducive to banking the unbanked and making mobile money a mainstream business for mobile operators.



**Seema Desai**, Programme Manager, is responsible for managing the day-to-day MMU programme activities and ensuring that all delivery is clearly aligned with the programme's objectives. As an example, if the Working Groups aren't working, it will be her job to ensure we put them right.



**Paul Leishman**, Knowledge Manager, leads the development and dissemination of commercial content, including business strategy analyses focused on mobile money business models, and case studies profiling key success factors of deployments.



**Amaia White**, Programme Coordinator, is responsible for Working Group communications and logistics, and general team support.



We all look forward to collaborating with the Working Group members and the industry in general to ensure our work is relevant, actionable and plays a leading role in advancing the market. Throughout the duration of the initiative, we'll be sure to ask for feedback from stakeholders with whom we've collaborated to ensure we are delivering content and sessions that are of significant value. Of course, feel free to contact any of the team members at any time.

We've developed a full agenda for April's Working Group that reflects the key issues discussed in Barcelona including agent distribution, customer adoption and regulation.

June will see the release of the first MMU Annual Report, which will include the findings from the CGAP-GSMA Mobile Money Market Sizing Study and the Global Mobile Money Census which many of you contributed to. The third MMU Working Group will take place on 22nd June in Barcelona. Major stakeholders will convene at the Mobile Money Summit ([www.mobilemoneysummit.com](http://www.mobilemoneysummit.com)) on 23rd and 24th June to discuss the latest developments and next steps in mobile money, and the MMU Leadership Forum on 25th June will bring together decision makers from financial regulators and industry for the first time to explore ways to remove regulatory barriers.

I trust you will find the first edition of our Quarterly Update educational and informative and we look forward to seeing many of you in Cape Town in April to work on the issues raised in this report as well as establish the work plan for us all over the next period.

Regards,



**Gavin Krugel**  
Director, GSMA

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# Mobile Money: A US\$5 Billion Market Opportunity

Initial findings of the CGAP-GSMA Mobile Money Market Sizing Study.  
 By Paul Leishman

Initial market and revenue sizing figures of the CGAP-GSMA Mobile Money Market Sizing Study, conducted by McKinsey & Company, were released at the Mobile World Congress in February. Creating an accurate understanding of the current and projected market size for mobile money – specifically in the context of targeting unbanked customers – is an important step towards accelerating the market. With a clear view of the market opportunity, investment decisions mobile operators need to make become somewhat more manageable.

Based on the work conducted by McKinsey & Company, tools will soon be accessible to mobile operators that enable country level analysis to develop an accurate view of the size and potential growth in each market of interest. In advance of offering these tools, and announcing the full results of the market sizing exercise, some additional context has been provided below.

## Approach

147 developing countries, classified as countries where GDP per capita was below US\$15,000 per year, were included in the assessment. A cross section of early deployment experiences in Africa and Asia provided the basis for projected adoption rates, revenue models and product usage.

## Market Size: 2009 vs. 2012

In 2009, there are an estimated 1 billion people in developing countries who have mobile phones, but do not have access to formal financial services. By 2012, this number is projected to rise to as many as 1.7 billion. Whilst these figures include individuals living both above and below the 'US\$2 per day' threshold, they do make two key distinctions: they a) only include people living in developing markets who b) currently have no access to formal financial services. By way of adoption, it's projected



that up to 290 million unbanked people in developing markets could potentially be using mobile money services by 2012.

## Revenue Opportunity

By 2012, delivering mobile money services to unbanked customers has the potential to generate US\$5 billion in direct revenues and US\$2.5 billion in indirect revenues per year to mobile operators. Direct revenues

**▶ COMING SOON**

In June, the GSMA and CGAP will provide tools to mobile operators to enable country-level market sizing.

are based on transaction fees for delivering services (in line with current market rates), and indirect revenues conservatively account for reductions in churn, increases in ARPU and acquisition of new subscribers.

## Key Considerations

This exercise represents the most rigorous sizing of the current and projected

addressable market for delivering mobile money services to unbanked customers to date. The four month process involved primary research with mobile money users and non-users in Kenya and the Philippines, extensive secondary research and the market knowledge of CGAP, and GSMA and McKinsey & Company. The outcome provides an indication of how big this market could be if mobile operators pursue the mobile money opportunity with the right go-to-market strategy. Whilst the figures described above do suggest that there is a large potential opportunity, they are based on a key assumption: that the market is allowed to develop in an unconstrained regulatory environment. In other words, the model assumes that any mobile operator wishing to deploy mobile money services in a market will be reasonably accommodated by regulators. This underscores the importance of accelerating the discussion towards creating regulatory policies that are proportionate to risk.





# Making Mobile Money Mainstream

With a focus on Africa, this edition begins the process of addressing key commercial issues, including the distribution network, methods of accelerating consumer adoption, and approaches used to achieve profitability. The key issues addressed within these articles will be used to stimulate discussion and find solutions through working group sessions to deliver financial services to currently unbanked customers via the ubiquity and ease of use of mobile.

Please contact Paul Leishman at any time with comments, suggestions or enquiries at [mmu@gsm.org](mailto:mmu@gsm.org).

## In this Section

### Financially Connecting Africa Through Mobile

We've provided an overview of the state of mobile money in Africa. The article includes a high level analysis of mobile penetration rates and access to finance, a look at the diversity of some of the continent's most widely adopted deployments, and a summary of recent mobile money deployments.



### Mobile Money Launch Learnings: Zain Zap

We sat down with George Held, Group Marketing Director of Zain's One Network, to understand the key elements of the launch strategy for Zap, his projections for customer adoption, and the importance of working with regulators.

### Mobile Money Spotlight: South Africa

A look at the history, current market state and future innovations of the South African market – one of the most diverse mobile money markets.



### Interview with CEO of Celpay

Lazarus Muchenje, CEO of Celpay, tells us about the company's profitable operations in Zambia, his approach to identifying latent market demand, and some key success factors when it comes to marketing and distribution.

### MMU at the Mobile World Congress

The Mobile World Congress provided the platform for the launch of the MMU initiative and the release of preliminary mobile money market sizing figures by GSMA, CGAP and McKinsey & Company.





# Financially Connecting Africa through Mobile

A look at the state of mobile money in Africa, with consideration for the impact that deployments can have on markets with rapidly increasing mobile penetration and low access to finance.

By Paul Leishman

With the launch of the Mobile Money for the Unbanked (MMU) programme in February, there are many regions that are potentially poised for growth and merit careful analysis, including Africa, Asia and Latin America. The MMU initiative plans to consider each region, but for this edition of our Quarterly Update, Africa will be the focus. Africa has been a centre for mobile money activity as of late – with MTN announcing in March that its Mobile Money service will soon be available to its 80+ million subscribers in 21 countries, Vodafone seeking to replicate its Kenyan M-PESA scale in Tanzania, Zain launching ‘Zap’ in Kenya and Uganda with plans for a broader rollout, and Orange piloting a deployment in Cote D’Ivoire that will enable customers to transfer money and pay bills.

It’s fitting then, that mobile operators and technology providers will convene in Cape Town for the first MMU Working Group in April 2009 with the objective of making progress on:

- The economics of distribution networks
- The approach behind banking the distribution network
- Analysis of factors that drive consumer adoption
- Understanding industry initiatives for financial inclusion and the impacts of Mzansi on mobile money
- Developing a regulatory work plan
- Continuing the discussion on key regulatory issues

To effectively address these areas, it’s important to first understand the current state of mobile money in Africa and some

of the recent developments that have been instrumental in making the continent a highly active centre for mobile money.







## Q1 2009 Africa market snapshot

African mobile market penetration at the end of 2008 was 40%, up sharply from approximately 22% two years prior. Clearly, a key enabler of mobile money growth in Africa has been the rapid rise in mobile penetration, driven in large part by the availability of new low cost handsets and expanded coverage. With African mobile penetration forecast to reach 70% by the end of 2012, it's reasonable to believe that mobile money will continue to grow under the right conditions – both in number of deployments and customers. The growth of overall mobile penetration and mobile money is poised to generate significant social and economic development impacts – including for those living on less than US\$2 per day. In fact, Leonard Waverman of the London Business School estimates that an extra ten mobile phones per 100 people in a typical developing country leads to an extra half percentage point of GDP per person growth – and this benefit speaks

Region	Mobile Penetration (Q4)		
	2006	2008	2012*
<b>Africa</b>	<b>22%</b>	<b>40%</b>	<b>70%</b>
South Africa	75%	95%	113%
Kenya	22%	49%	101%
Zambia	15%	31%	63%
Ivory Coast	21%	52%	103%
Tanzania	14%	33%	61%
Sudan	13%	29%	73%
Egypt	26%	59%	100%

Source: Wireless Intelligence  
\*Projected

### ▶ INSIGHT

Three distinct mobile money models have been successfully deployed in Africa.

### ▶ YOUR OPINION

Can all three models continue to coexist?  
Email us at [mmu@gsm.org](mailto:mmu@gsm.org).

just to mobile penetration, and does not consider the benefits stemming from improved access to finance.

Along with the Philippines, Africa is home to some of the most widely adopted mobile money deployments in the world. Innovative deployments were first launched in South Africa in 2004 and 2005 by WIZZIT and MTN Standard Bank respectively. More recently, Safaricom's M-PESA was launched in Kenya in 2007 and has experienced rapid growth. As of March 2009, these three deployments alone account for over six million mobile money subscribers. Impressive as these African deployments have been at achieving early scale, the continent also merits attention based on the myriad of go-to-market models that have been deployed by mobile operators, financial institutions and technology vendors in various markets. The table on the next page provides a comparison of several widely adopted African deployments.



“MTN announced in 2009 intentions to expand to 21 additional countries, including Benin, Congo Brazzaville, Guinea Bissau, Guinea Conakry, and Liberia among others to build on its South African and Ugandan presence.”

<b>Deployment</b>	M-PESA (Kenya)	MTN Banking	WIZZIT
<b>Launch Date</b>	2007	2005	2004
<b>Markets Served</b>	Kenya (primary)	South Africa	South Africa
<b>Customer Tool</b>	Mobile phone	Mobile phone and MTN debit card	Mobile phone and Maestro debit card
<b>Brand</b>	Mobile operator led (Safaricom)	Hybrid of mobile operator and bank	Third party led with a partner bank
<b>Distribution Network</b>	<b>Sales and Service:</b> Post Office Supermarket Airtime dealers ATMs Banks	<b>Sales:</b> Mobile distribution channel to capture traffic in high volume areas  <b>Service:</b> Mobile phone ATM POS WEB Banks	<b>Sales:</b> Mobile 'Wizz' Kids with local neighbourhood knowledge  <b>Service:</b> Mobile phone ATM POS WEB Banks
<b>Services Available</b>	Money transfer Airtime top-up Bill payment Salary payment Merchant payment	Money transfer Airtime top-up Bill payment  Full transactional and informational banking through mobile	Money transfer Airtime top-up Bill payment  Full transactional and informational banking through mobile
<b>Technology Used</b>	SIM toolkit	SIM toolkit	USSD2

Several key market factors have contributed to the demand for mobile money services in Africa – particularly mobile money transfer services. In Kenya, the existence of the ‘dual system’, wherein individuals who have moved from rural parts of the country to urban centres continue to maintain ties with the village from which they have migrated, has been attributed as a key driver of M-PESA adoption in Kenya. In South Africa and a number of other African countries, the existence of both inbound and outbound

<b>South Africa: Money Transfer Volume</b>			
<b>Inbound Transfers</b>		<b>Outbound Transfers</b>	
Country	Value (US M/YR)	Country	Value (US M/YR)
UK	\$167	Lesotho	\$298
Mozambique	\$99	Swaziland	\$74
US	\$84	Botswana	\$24

remittance corridors has emphasised the need to develop international money transfer services. The table above

provides some details on the volume of international flows to and from South Africa.





## Highlighted market activity

The opportunities to achieve scale illustrated by M-PESA, MTN Banking, and WIZZIT among others have had three important effects on African mobile money market activity:

### Existing market players are seeking to replicate success in other African markets

- Vodafone launched in Tanzania and Afghanistan in 2008 to build on its widely adopted Kenyan M-PESA offering
- MTN announced in 2009 intentions to expand to 21 additional countries, including Benin, Congo Brazzaville, Guinea Bissau, Guinea Conakry, and Liberia among others to build on its South African and Ugandan presence
- Zain announced plans to launch Zap in early 2009, a new service to replace its prior offering, Sokotele, in Kenya, Tanzania and Uganda
- Celpay announced plans to expand from Zambia and the Democratic Republic of Congo to Tanzania
- TagAttitude plans to expand its market footprint with offerings in Mali, Nigeria and Ghana to complement a number of pilot test sites

### New market players have begun deploying mobile money services

- Orange Money launched in Côte d'Ivoire in December 2008 with the objective of rolling out across other African markets, contingent on success
- Saraf Mobile launched in Sudan in March 2009

### Aid organisations are increasingly supporting mobile money projects

USAID has sponsored a number of projects across Africa, including:

- The design of a pilot project in northern Nigeria to develop alternative delivery channels (namely mobile money) to Nigerian farmers in rural areas
- The introduction of cross-border, multi-currency transactions via mobile phones in the West African region beginning with Ghana, Nigeria and Senegal/UEMOA
- The roll-out of an e-banking platform targeting the unbanked in Zambia to provide unbanked, smallholder farmers with a more convenient and secure method of making payments through their mobile phone

In addition to these recent activities, a number of additional known African deployments exist, including:

- Several Banks including Barclays subsidiary Absa with one million mobile banking customers in South Africa, First National Bank with multiple markets offering mobile banking – including South Africa and Namibia, and Standard Chartered in seven African markets
- mIranZact shared access platform in Kenya (serving Equity Bank)

- Simplus (Vodacom owned shared access platform)
- MTC Namibia

It's clear that Africa will be the site of a great deal of mobile innovation and activity in the coming years. The number of unique deployment models and countries being targeted will make Africa an extremely important resource for learning.



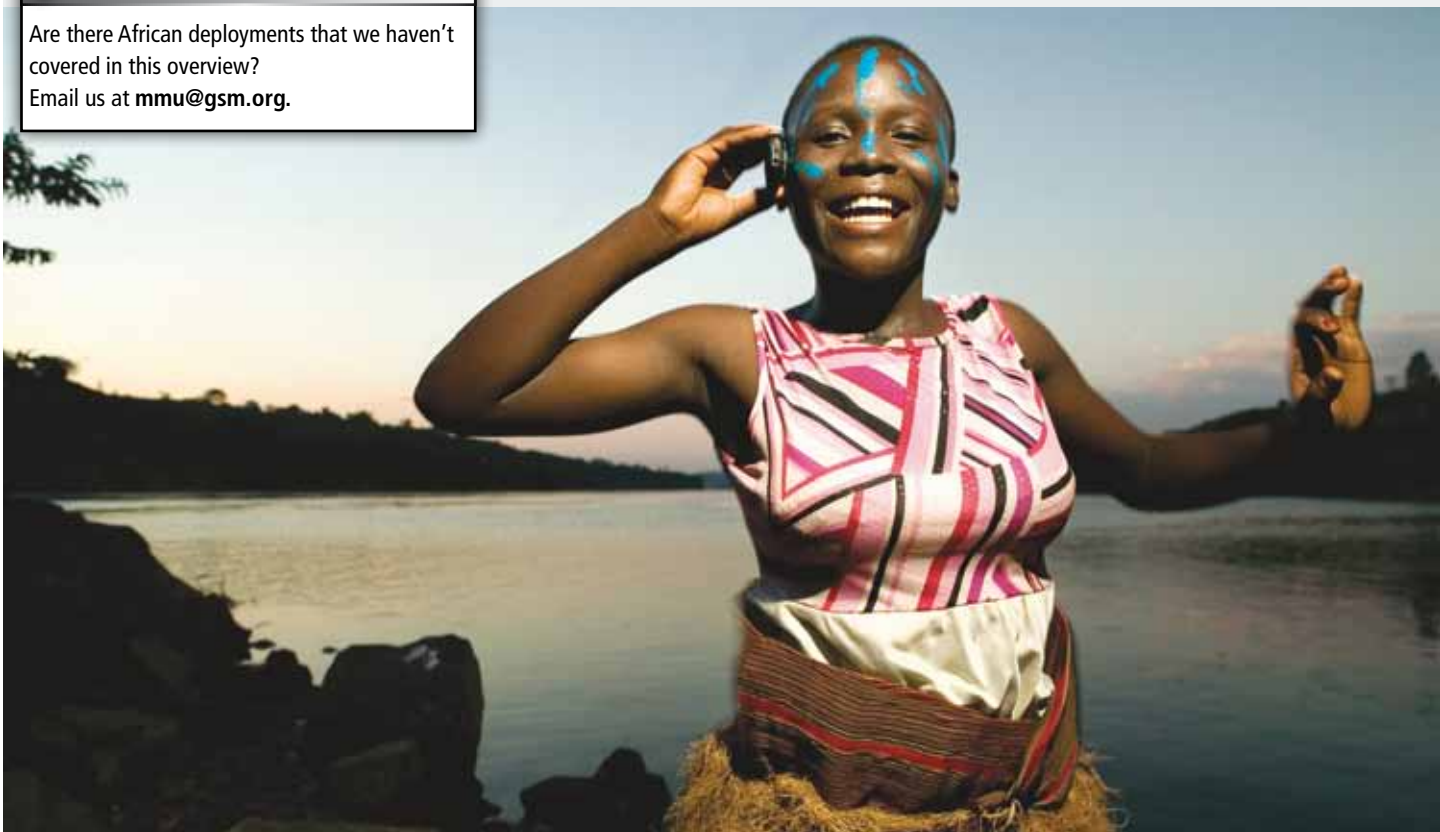
## Looking forward

In the context of the GSMA's Mobile Money for the Unbanked initiative, Africa is of particular interest given the state of access to finance across the continent. A high percentage of the population in many African countries lack access to basic financial services that are important enablers of economic and social development. Across Africa, the weighted average percentage of the population with access to financial services is approximately 23%. When compared to other regions of the world like North America (91%), the African figure stands out as being particularly low. In select countries, the level of access is particularly poor. In fact, in ten African countries (partial list at right), 15% or less of the total population have access to formal financial services. Though opportunities also clearly exist in Latin America and Asia to affect populations by launching mobile money services, Africa is of particular interest based on the combined impact of a) rapidly increasing mobile penetration in b) markets with extremely low access to financial services. In other words, mobile money has the potential to become a mainstream, accessible means of delivering transformational financial services.

Country	Access to Financial Services	Mobile Penetration	
		2008	2012*
Tanzania	5%	33%	61%
Kenya	10%	49%	101%
Liberia	11%	29%	49%
Mozambique	12%	26%	42%
Sierra Leone	13%	26%	55%
Zambia	15%	31%	63%
Sudan	15%	29%	73%
Nigeria	15%	46%	97%

Sources: Mobile Penetration: Wireless Intelligence  
 Access to Financial Services: World Bank: Finance for All?  
 \* Projected

**▶ YOUR OPINION**  
 Are there African deployments that we haven't covered in this overview?  
 Email us at [mmu@gsm.org](mailto:mmu@gsm.org).





# Mobile Money Launch Learnings: Zain Zap

Interview with George Held, Group Marketing Director of Zain's One Network, covering the key elements of the launch strategy for Zap, his projections for customer adoption, and the importance of working with regulators. By Paul Leishman

**GSMA: Can you tell me a bit about Zap?**

**Held:** On the technology side, Zap is a stored value account which is connected to financial institutions. So in addition to enabling people to transfer funds from one stored value account to another, customers have full access to their banking services. This is done in close partnership with Citibank and Standard Chartered Bank, who are our key financial partners in all countries in which we provide this service.



**GSMA: How does Zain differ from previous or other offerings?**

**Held:** Usually the services offered are agent supported solutions. They enable sending money from one individual to another. Zap offers more than money transfer – it's also payments, bill payments, bank access – so it's a much broader scope of customer-facing functionality than anybody else in the market has offered to date.

**GSMA: How optimistic are you about the growth potential for Zap?**

**Held:** From the markets in which we've already commercially launched, the results are above even our most optimistic expectations. We are getting more customers on Zap than our normal activations, which is absolutely phenomenal. We're expecting penetration levels after the first year of operations of 35% to 40% of our existing base.

**GSMA: So after one year of operations, 35% to 40% of Zain's mobile subscribers will be using Zap?**

**Held:** Yes, and not just theoretically be using the service – but actually using it. There is a big difference.

**GSMA: It sounds like Zap has been fairly well received so far and that you're optimistic for the future. Let's talk a bit about your launch strategy and what you believe to be key success factors. First, what type of research or consumer analysis drove product development of Zap?**

**Held:** Product development and research are very important points. We've spent more money on market research during development of the product than on the technical solution. We've spent a huge amount of money with different research agencies making sure that our interface

is simple and user friendly, that it works in all languages and that the subscription process is easy. At the same time, I would stress that we've been working very closely with the central banks to make sure that all KYC elements are properly integrated. It's a very careful balance between KYC compliance and user friendliness of the service. We believe the balance that we struck here has contributed to our successful take-up.

**GSMA: On the topic of central banks, if you could make one request to regulators, what would it be?**

**Held:** To continue having an open mind, which the regulators we've been working with so far have had. To understand what this has done for the economies of the countries where services have been launched. So far the central banks have been supportive to us, and we hope that all new countries where we're launching will be as open minded and forward looking as the central banks in countries where we've already launched.

**GSMA: When launching a new service, how valuable are short-term letters of understanding from central banks in the absence of full mobile money regulation which can take some time to develop?**

**Held:** Actually, in some countries we've received a full permission from the central bank to launch the service. So it's not just a letter of understanding – it's a letter of 'no objections'. We decided to take a proactive role and talk to central banks from the beginning together with our financial partners. This was key to getting support from central banks.

 **INSIGHT**  
 In the absence of full regulation, operators should work with regulators to develop a 'letter of no objection' for their deployment.

 **YOUR OPINION**  
 How should operators approach regulators in advance of product launch?  
 Email us at [mmu@gsm.org](mailto:mmu@gsm.org).

**GSMA: How does your mobile market share – in other words, whether you’re a leader or second place – impact the strategy you use when launching in a country?**

**Held:** It doesn’t. We believe all of our customers need the same access to services. We won’t ignore markets simply because we’re not a market leader. In our markets, we are a first or strong second player, so we are never really in the position of being a weak player. We are building one brand of Zain and believe customers in different markets should have the same experience and scope of offering.

“do you have NFC; are you using RFID”. That’s not a sustainable differentiator. Market execution is the only sustainable differentiator.

**GSMA: So what are the things that Zain has done right during your launch to ensure Zap succeeds?**

**Held:** There are a few things. First, from the beginning we worked very closely with the central banks. To us this was very important because it ensured we avoided possible conflicts. We sought guidance from the

Central Bank on how the service needed to be implemented. Central banks appreciated this approach. Second, we believe that user interface, simplicity and convenience have been key. And finally, execution of our go-to-market strategy has been important. Those are the three key elements.

**GSMA: Can you tell me a bit more about execution of go-to-market?**

**Held:** We don’t believe that a product like Zap can be introduced by a couple of billboards and TV ads. The name of the game is going to the streets in the caravans and explaining to people how the service works.

**GSMA: What has Zain done beyond billboards and TV?**

**Held:** During development, we spent more money on market research and clearly understanding customer needs than on technology to make sure our interface was built on customer requirements. During launch, and probably most importantly, we rolled up our sleeves and went to the remote villages to explain to people how Zap works.

**GSMA: Thanks very much for your time, George.**



**▶ INSIGHT**

Technology alone cannot provide a sustainable competitive advantage – it needs to be complemented by an in-depth understanding of customer preferences and sound go-to-market strategy.

**▶ YOUR OPINION**

What user experience elements do operators need to understand most?  
 Email us at [mmu@gsm.org](mailto:mmu@gsm.org).

**GSMA: How important is product differentiation – specifically when launching in markets where there is a lot of competition?**

**Held:** It’s impossible in this business to find a sustainable differentiator which no other player will be able to match. For example, our counterpart in Kenya, Safaricom, is as intelligent as we are technically and by way of infrastructure. To me, the name of the game is execution, go-to-market strategy and customer interface. It’s not about

**▶ INSIGHT**

An operator’s mobile market share could have implications on the approach used when deploying mobile money services.

**▶ YOUR OPINION**

What are the ways in which entry strategies should change based on mobile market share?  
 Email us at [mmu@gsm.org](mailto:mmu@gsm.org).



# Mobile Money Spotlight: South Africa

A look into the history, current market state and future innovations of the South African Market.

By Gavin Krugel

South Africa is considered by many to be one of the first places in which mobile money developed in Africa. We've provided a brief overview of how industry collaboration catalysed deployments in the country, how mobile operators and technology vendors have taken products and services to market, and where the country currently stands in 2009.

### Industry collaboration seeds innovation and partnership and the first bank led deployments emerge

The South African Wireless Payments Group (SAWPG) convened in 2000 and 2001 with a view to establishing a common interoperable architecture for mobile payments and banking. The group consisted of MasterCard, Visa, the country's banks and the then two mobile operators – Vodacom and MTN. The process took some eighteen months, was filled with interesting debate on appropriate business models and led to a documented architecture for mobile payments and banking.

It was assumed that the architecture went no further than this document, however on a closer look it seems as though many of the world's deployments have some element of this original thinking in it. This also seeded the strategies and thinking for the markets leading mobile money deployments.

Absa Bank (now Barclays subsidiary) and First National Bank launched their mobile banking services in 2000 and 2001 respectively. Mobile is an added channel to existing accounts for both of the banks. Absa offers free banking on mobile and not on any other channel.

### Market data:

Country:	Continent:	Population:	Banked Population:
South Africa	Africa	48,123,133	22,136,641

Total Mobile Money users:  
Of which were previously unbanked:  
Of which live on sub US\$2 per day:

Not reported as yet  
Not reported as yet  
Not reported as yet

### Total Number of Connections

	Q4 2008	Q4 2012*
South Africa	49,039,836	60,100,742
Cell C	5,420,836	6,920,827
MTN	17,169,000	21,510,272
Vodacom	26,450,000	31,669,643

\* Projected

### Two leading technology providers emerge with different business models

Fairly simultaneously, two innovators in South Africa – Cointel and Fundamo – were developing solutions to suit the requirements and identified demand to extend access to financial services to mobile. Fundamo's software development has led them to be one of the leading mobile wallet software providers in the world – including key customers such as MTN Group. Fundamo went on to launch Celpay

in Zambia in 2002 which was awarded the Wall Street Journal Europe Innovation Award. Celpay is one of the first mobile money services to have a profitable model.

Cointel with MasterCard developed a mobile phone managed micro enterprise community service airtime management system which allowed community service (shared phone) phone operators to recharge their community service phones by debiting a pre-funded MasterCard registered in the Cointel wallet system. The airtime was then sold on a minute by minute basis to consumers who paid in cash – the same cash used as liquidity to fund the MasterCard account. The platform's capabilities were quickly identified as being able to enable broader mobile commerce and banking. With this change in functionality, MasterCard branded a recharge product called rePower off the platform and Cointel packaged the platform's capabilities into a product offering branded Simplus. US\$350 million a year in processed volume later, Cointel/Simplus were awarded for their

### ▶ INSIGHT

In South Africa, industry collaboration has seeded innovation in mobile money.

### ▶ YOUR OPINION

Are there other markets in which similar industry collaboration would be beneficial for stimulating speed, scale or sophistication in mobile money?  
Email us at [mmu@gsm.org](mailto:mmu@gsm.org).

substantial contribution to MasterCard's global business.

The Simplus platform acted as an 'on-behalf' platform and jointly developed the technology that drove the WIZZIT commercial launch in 2005 (technology since taken in house by WIZZIT).

Simplus launched additional on-behalf services in South Africa, including a mobile acquiring service called SimTransact that allowed the mobile phone to be used as a card acceptance device for small and medium enterprises, market stall owners and corporates with travelling sales/service people. The services were launched with Absa Bank, Standard Bank, and Card Marketing under the brand Way2Pay. Simplus also launched in Namibia with mobile network operator MTC and First National Bank. Simplus went on to license its technology to mTranZact in Kenya.

**The market's first non-bank led deployments are launched**

WIZZIT is a bank account and Maestro card managed through a USSD2 based mobile banking interface. The product is distributed through WizzKids who are agents certified to open bank accounts. The company has partnered with the South African Bank of Athens to offer a banking product through mobile and card to a typically unbanked target market. IFC invested in WIZZIT in 2008 and they have since taken their model to two additional markets.

The product is distributed in a CD cover including the user guide, application, and a Maestro card. The card and account are activated remotely and the card can be used at all ATM and POS terminals.

Due to the nature of the server based application, all SIM cards and mobile phones can be used to access the banking menu.

Also in 2005, MTN (the largest mobile



MTN MobileMoney account being opened



operator in Africa) acquired the Fundamo platform and went on to develop and launch MTN Mobile Money in a 50/50 joint venture with the Standard Bank Group (the largest banking group in Africa).

The product is distributed with a card and a SIM card in a SIM card starter pack through MTN and Standard Bank distribution points and through remote agents. The application resides on the SIM card to ensure end-to-end security. The product was MTN branded and leveraged MTN distribution but was supported by Standard Bank's financial

services license and deemed a division of Standard Bank.

MTN's target market was the middle to lower market segments that were either unbanked or looking to tap into the convenience of mobile banking.

The regulation was changed to support proportionate KYC with transaction and balance limits on accounts with lower KYC compliance.

A full suite of transaction capabilities are available to both MTN MobileMoney and WIZZIT customers including; domestic money transfers, bill payments, prepaid airtime purchases, mini statements and balance enquiries.

**Mobile operator strategies**

There are three mobile network operators and one MVNO (Mobile Virtual Network Operator) in South Africa. All three of the mobile operators (Vodacom, MTN and CellC) have a successful 'bearer and application' strategy where they enable the banks to leverage the SIM card for mobile banking applications or go so far as allowing the banks to leverage access to WAP, SMS or USSD to provide access to the consumers' bank accounts. This model is both successful and profitable for the mobile operators with all four major banks having mobile banking offerings which include the sale of the mobile operators' airtime. MTN has gone one step further by leveraging its brand and distribution channel in partnership with Standard Bank to compete with the banks.

This means that an MTN SIM card will give you access to all of the banks in the market as well as the option to be banked by them, whereas the other two networks give you access to your bank account through the bank's application and do not at this stage have a direct to consumer proposition. Could this, with the ability to send funds to other banked customers using the mobile phone, be the first signs of interoperability?

**▶ INSIGHT**  
The market in South Africa has been described as interoperable.

**▶ YOUR OPINION**  
What does 'interoperable' really mean?  
Email us at [mmu@gsm.org](mailto:mmu@gsm.org).





### Diverse mobile money offerings

A recent visit to South Africa showed that the market is advanced in its thinking and mobile money deployments.

Consider the following list of services offered in the market:

- Most accounts are able to be accessed through a mobile phone or SIM based application
- Entry level accounts are opened on a mobile phone
- Unbanked customers are able to get access to a bank account (transactional or savings), remote from a bank branch and through retail distribution points
- Full service transactional banking on mobile is available, including:
  - Inter-account transfers
  - Person to person transfers – both within my bank and cross banks
  - Airtime purchases
  - Prepaid electricity purchases
  - Bill and utility payments
- Full service informational banking is available through mobile, including:
  - Balance enquiries
  - Mini statements
- Mobile acquiring (accepting cards on basic mobile phones)
- Corporate commerce and payment solutions
  - Shared phone (GSM payphone) airtime management
  - Corporate acquiring solutions for roaming sales people
- Mobile insurance products

### Market Update 2009

- WIZZIT continues to grow its base by targeting unbanked market segments

### Mobile operator strategies

Bearer channel only	Application provider	Joint venture	Third party
Vodacom	Vodacom	MTN	WIZZIT
CellC	CellC	Standard Bank	Bank of Athens
MTN	MTN		All mobile operators

- and expanding its WizzKids distribution network. WIZZIT has also launched in one other market and is about to launch in another (details to follow in future case study work).
- MTN and Standard Bank have introduced domestic cash-to-cash remittances and have begun pilots in Community Service Banking. At the upcoming Working Group in Cape Town in April we will hear of innovations in KYC compliance, paperless and remote account opening in less than ten minutes, cost of serving the sub US\$2 per day consumer and plans for the commercial roll out.
- MTN has announced the planned deployment of MTN MobileMoney in 20 other countries across Africa with their technology partner Fundamo with a view to targeting their 80 million+ subscribers.
- Absa Bank has recently announced that it has passed the one million mobile banking customer mark and continues to see growth at some 5000 customers per day.
- FNB now has 1.3 million customers and “peaked in December at 4.5 million transactions and has been above 100% year-on-year growth for eleven consecutive months” according to Len Pienaar.

- Cointel and its South African third party processing platform Simplus have since been acquired by Vodafone subsidiary Vodacom. Vodacom are focusing the asset on their core Community Service GSM Payphone business.
- Fundamo has grown from a 50 to a 200 person organisation and has had recent (2008) investment from HBD Venture Capital (Mark Shuttleworth Foundation). Fundamo has multiple other market deployments.

There are new innovations emerging separately from SmartCall and Hollard Insurance companies in Mobile Insurance – to be reported on separately.

### Companies referenced in this article:

- [www.absa.co.za](http://www.absa.co.za)
- [www.celpay.com](http://www.celpay.com)
- [www.fnb.co.za](http://www.fnb.co.za)
- [www.fundamo.com](http://www.fundamo.com)
- [www.hbd.com](http://www.hbd.com)
- [www.hollard.co.za](http://www.hollard.co.za)
- [www.mtn.co.za](http://www.mtn.co.za)
- [www.mtranzact.com](http://www.mtranzact.com)
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- [www.wizzit.co.za](http://www.wizzit.co.za)

# Interview with CEO of Celpay

Lazarus Muchenje, CEO of Celpay, tells us about the company's profitable operations in Zambia, his approach to identifying latent market demand, and some key success factors when it comes to marketing and distribution. By Paul Leishman

**GSMA: Can you tell me a bit about Celpay?**

**Lazarus:** First, I'll describe where we fit in the mobile chain. We are not a mobile network operator, neither are we a bank. And that's quite an important distinction. We work with mobile network operators and we work with banks – we sit in between as an enabler. However, we do provide services directly to the market, with the banks and the MNOs behind us. So you can look at it in two ways – MNOs and banks that want to do mobile banking can contract us to white label their services, but we are also providing services directly to customers as well. That's our business model in a nutshell, and where we fit in the value chain. We currently operate in the Democratic Republic of Congo, Zambia, Tanzania, and we will probably incorporate in Zimbabwe in the next couple of weeks. We are highly optimistic that there will be an opportunity in Zimbabwe in the future. The other countries we are looking at are Kenya and Malawi.

**GSMA: Are your services currently offered to customers under the Celpay brand as well as bank or MNO brand?**

**Lazarus:** All our services are Celpay branded, and even the banks that work with us co-brand.

**GSMA: You're optimistic about a few African markets – can you explain what you see as the key market indicators of demand when sizing up a market?**

**Lazarus:** The first point is the level of banking penetration, coupled by a high volume of cash transactions going through that market. There must also be insufficient banking infrastructure and good mobile take-up. From these factors, we have an



Lazarus Muchenje, Celpay



inferred demand. Next, you take these figures and ask 'how many of these people are not banking because of cost? Because of convenience? Because they don't trust the banks? And how many aren't banking because they see no need for banking?' Of all those four types of people, our model addresses the needs of three – all but the ones who simply don't see a need. You'll never convince a guy to bank who doesn't want to just because now there is mobile banking. Our model provides convenience. Our model is low cost – we charge no monthly fees, no subscriptions, no fixed monthly deposits, no entry balance, so we have done a good job of keeping cost of entry at zero, which is important. Our model is transaction based (cost paid by the business). Now for the third group – the guys who mistrust banks – we find that they actually have a fair amount of trust

with mobile network operators. When we began, our name was aligned with Celtel, but now we have developed trust with consumers under the Celpay brand.

**GSMA: How successful have you been so far at achieving profitability?**

**Lazarus:** I don't know many people who have been successful by way of profitability in this field. We're very fortunate in that we are above break-even in Zambia. In fact in Zambia we are quite profitable now. How profitable are we? We know now what works and what does not work. We know what will make us break even in the DRC, but it's a challenge to get the overall company to break even with all the markets we are pursuing.

**GSMA: So your model in Zambia is the successful one that you hope to replicate in other markets?**

**Lazarus:** Yes, that's the one we are taking to other English speaking countries in this part of Africa.

**GSMA: What have you focused on in Zambia that's taken you to this state of profitability?**

**Lazarus:** We've focused on the low hanging fruit first – which is business-to-business transactions. We find that the issue of collection of cash easily by people with large distribution networks is a huge challenge for them. We've sat down with many corporations and understood what their banking challenges are and developed B2B solutions that address their challenges. So if you were to ask me what would make someone successful, it's not necessarily just 'banking the unbanked', it's to bank the informally banked when doing business. Take an example of a network operator –



with over 1,000 distributors paying them on a daily basis. Those distributors are not normally banked, so they struggle to make cash payments. Those distributors can now open an account and make payments through us. So we solve a number of problems for the MNO – they don't have to hold or take out insurance on cash anymore. Those people – who were always business people, who were always handling a fair amount of volume through their hands, but were never recognised by the banking system are now actually paying through our system. After 6 months, the same previously unrecognised businesses can now go to a bank and get a loan

**GSMA: So you're not banking the end user, you're banking the distribution network.**

**Lazarus:** Exactly. When we talk about B2B, our key success factor is taking businesses from a 'small b' to a 'big B'. Big businesses have always had requirements for systems like this, but the banks had never been flexible enough to accommodate small businesses that make up a big part of a distribution network. That's the niche that we fill out. That's our form of financial inclusion.

**GSMA: Do you offer any services to the end consumer or are you strictly focused on the distribution network right now?**

**Lazarus:** We've always offered services to the end consumer. The real issue is the levels of success. We've been around now for over seven years. You can imagine that when we were beginning, even sending text messages was not fashionable. Thus, there was a fair amount of resistance, which is how we ended up with our focus on B2B. It meant that for the same amount of effort, you could get much higher volumes. The stage we're at now, is that we're looking at P2P – by way of money transfers and the sale of airtime on a retail basis. We currently

### ▶ INSIGHT

Focusing on banking the distribution network can deliver short-term profitability and generate cash to invest in banking the end user and achieving scale.

### ▶ YOUR OPINION

How could 'banking the distribution network' lead to banking the end consumer?  
Email us at [mmu@gsm.org](mailto:mmu@gsm.org).

offer transfers and airtime payments and payments to service providers.

**GSMA: When it comes to the P2P model, what types of marketing and promotion have you found to be most successful, and which have been least successful at driving adoption?**

**Lazarus:** We're in a better place to speak to B2B, because it's really early days for us in the P2P space. However, I can tell you that we've learned that you need a big brand to make this work. You also need a lot of interactive marketing. You can't just have a simple campaign, because success in P2P requires consumer trust. So you really need a multi-faceted campaign where you put up your billboards and TV spots, but also where you engage the consumers and get

### ▶ INSIGHT

A good prospective distribution agent meets two basic criteria: they are trusted in their community and have experience handling cash.

### ▶ YOUR OPINION

What other attributes should operators consider when selecting distribution agents?  
Email us at [mmu@gsm.org](mailto:mmu@gsm.org).

their feedback. This feedback informs you on how to move forward. You can't simply run a dry campaign and then after a while hire someone to do a market impact analysis – it needs to be more interactive. You need to find out what the market is thinking on a weekly basis and then react immediately.

**GSMA: So when it comes to distribution, what are the key things to understand?**

**Lazarus:** We do have some success in the P2B service, wherein an example would be a customer paying for satellite television services to a corporation. To have success here, we've had to build out an extensive distribution network. So we're quite qualified to speak to this. A good distribution partner is one who is trusted in the community. You also need somebody who has a fair amount of cash on hand. Cash is important because that's the medium. They need to have the systems and capacity to accept and disburse cash. If a business doesn't have cash handling system in place, then they are not suitable because that's not something that can be taught overnight. If you look at our distribution, you'll find a lot of pharmacies, the 'key shop' in the village, post offices – people normally handling cash. The key really is to leverage existing cash-handling systems. Those systems don't have to be complicated. The word system makes it sound like you need to have a big staff, etc. But that's not the case.

**GSMA: How enabling are the regulatory environments in Zambia, DRC, Tanzania and some of the other markets you're in or considering?**

**Lazarus:** There has been a fair amount of positive change since we started. When we started, there was nothing at all. Today, Tanzania and Zambia have enforced new laws. We see this as progress. In DRC, we have found that due to socio-political

factors, the priorities are such that the regulatory infrastructure is just not in place. What does this all mean for us? It means that we can operate in markets like Zambia or Tanzania with relative certainty. In the DRC, we operate on other forms of certainty, like permission from the Central Bank – but this is not backed by law. The absence of a formal law makes it difficult to invest with certainty.

**GSMA: If you could make one request to regulators in any of the markets that are relevant to you, what would it be?**

**Lazarus:** It would be to learn from the progressive markets where these laws have already been implemented. We don't need to relearn these things. The laws that have been

made to date are actually very good. They've been made together with all stakeholder interests being taken into account.

**GSMA: What would you like to see the GSMA do to help move this market forward from either a regulatory or a commercial perspective?**

**Lazarus:** Interoperability is a huge issue for us – especially when we are one of two or three players in a market. You need to bring us together on neutral ground to ensure we have similar standards. Second is to help engage in constructive conversation with regulators.

**GSMA: Finally, how optimistic or pessimistic are you about the prospect of using mobile**

**to deliver financial services to unbanked customers in developing markets?**

**Lazarus:** I am quite optimistic, but we need to be realistic. In each market, we need to understand why people aren't banking, with regard to the four reasons discussed earlier. If people aren't banking because they don't want to bank – for religious reasons, cultural reasons, whatever the case, then the outlook in those markets is bleak. But where people are not banking because it hasn't been made convenient, or its costs are prohibitive, rather than based on lack of trust, then I'm quite optimistic that we will be able to do well in that part of the market.

**GSMA: Thanks for your time, Lazarus.**





# MMU at the Mobile World Congress

Highlights from the Congress, including perspectives from the Bill & Melinda Gates Foundation, CGAP, and details of MMU vision. By Nicholas P Sullivan<sup>1</sup>



**The Mobile Money for the Unbanked (MMU) initiative got off to a strong start at the Mobile World Congress in Barcelona, convening its first Working Group comprised of operators, vendors, bankers, microfinance institutions and development organisations.**

The Bill & Melinda Gates Foundation has provided US\$12.5 million to fund the initiative, which includes a US\$5 million Fund to support innovative, commercially viable and replicable projects. Utilising these resources, the vision of the three year initiative is to make mobile money services available to 20 million new unbanked customers living on under US\$2 per day. In achieving this vision, the MMU initiative will accelerate the:

- Speed at which deployments come to

market by creating knowledge of business models, reducing regulatory barriers and reducing technology costs

- Scale of impacted segments by providing financial support for prospective down-market deployments that are accessible to customers living on under US\$2 per day
- Launch of more sophisticated mobile money services such as savings, credit and insurance offerings

In addition to providing a venue for sharing details about the MMU initiative itself, the Mobile World Congress also provided a platform for McKinsey & Company to make a significant announcement about the current and projected size of the mobile money market. The firm, which has been working with the GSMA and CGAP (Consultative Group to Assist the Poor) to quantify the market for mobile money, announced

preliminary findings that by 2012, up to 290 million previously unbanked people could be using mobile money services, generating up to US\$5 billion in direct revenues and another US\$2.5 billion in indirect revenues for mobile operators.

To date, the mobile money market has been synonymous with money transfer services – the impact of which cannot be underestimated. Elizabeth Littlefield, CEO of CGAP, cited M-PESA surveys showing that 83% of users would suffer a “severe negative impact” were they to lose mobile banking services, and 98% citing mobile banking as “faster, cheaper, easier and more convenient” than traditional banking (which most have never used). Part of the MMU vision is to increase the types of services available to consumers beyond mobile money transfer to include bill payments, loan repayments, salary payments – and ultimately savings.

<sup>1</sup> Publisher of *Innovations: Technology/Governance/Globalization* (MIT Press), and author of *You Can Hear Me Now: How Microloans and Cell Phones Are Connecting the World's Poor to the Global Economy*



## Leveraging mobile networks to deploy mobile money services

Early experiences with mobile money have shown that money transfer services are often best suited to serve as an entry point to financial services for unbanked customers, followed by bill, loan and salary payment services. This initial adoption creates opportunities to subsequently introduce savings into the equation.

Any formal financial services offering – whether transfer, payment or savings – requires scale, distribution and trust, which

is why mobile phones provide a perfect medium. In most developing countries, mobile operators are the most respected and trusted brands, whereas banks are often distrusted.

“The big idea is not mobile phones – the big idea is the retail channel that mobile phones provide,” says Ignacio Mas, Deputy Director of Financial Services for the Poor at the Bill & Melinda Gates Foundation. Mas continued to cite a number of mobile industry attributes which provide an

important foundation for mobile money deployments, including:

Experience of providing high value, low cost prepaid platforms

- Broad distribution network of top-up agents that service prepaid customers
- Inclusive approach to addressing markets, exemplified by mobile operators’ willingness to provide prepaid minutes in increments as low as 20 cents

## Savings: A focus of the Bill & Melinda Gates Foundation

Speaking at the Congress, Ignacio Mas reaffirmed that “the focus of the Bill & Melinda Gates Foundation is savings. Savings is much harder than credit because poor people have unpredictable cash flows, and because savings requires proximity to a bank. Mobile financial services are banking’s last mile.”

Addressing the widely held developed world attitude about savings in developing markets, Mas noted that “there is a common misperception that poor people don’t save. Absolutely they save. They have no choice. The problem is not that their income is lower; the problem is that it’s erratic. Today is average, I made US\$2. Tomorrow I make zero. The day after that I make US\$5. People have to spread their income because it’s so erratic.”

“The poor lead very complex financial lives, working hard to amass savings in informal channels, such as local associations or neighbours,” said Mas. “But the poor are forced to rely on other people like themselves, who also have



Ignacio Mas, the Bill & Melinda Gates Foundation

unpredictable and unreliable cash flows.” The subsequent insecurity results in a high level of transactions, as people constantly arbitrage their precious money to manage the present. This focus on the present deters long term savings, as there is little focus on the future.

Another issue that makes savings challenging for this population is proximity to banks. “To encourage savings, you must be close to the customer,” said Mas, noting lack of proximity to banks as a prohibitive factor for most unbanked people, even if they have qualified for and can afford

bank services. Existing mobile money deployments have shown that the mobile phone infrastructure solves this issue of proximity. M-PESA, for example, operated by Safaricom in Kenya, saves its banking customers about US\$4 million a week in travel fees, according to CGAP. WIZZIT, the South African mobile money operator, extends the “banking” system 20% further outside the bank branch perimeter.

In the context of microfinance, many assume that lending is the primary activity, though both Littlefield and Mas noted the evolution in service offerings to include insurance, savings, and deposits. “Deposits account for 62% of microfinance institution assets,” says Littlefield, “and 90% of loans are covered by these deposits.” For example, when Grameen Bank in Bangladesh opens a new branch, the branch officer must mobilise a preset minimum in local deposits before beginning to lend, which adds credence to the concept that the poor have assets traditional bankers have overlooked.



## The market opportunity

In launching the MMU programme, the first goal is to make the business case to mobile operators that mobile banking can be a profitable value-added service for customers. The first step in this process is to take an inventory of where the industry stands today and make projections for how it will evolve. Commissioned by the GSMA and CGAP, McKinsey & Company have sized the market for mobile money through to 2012. They presented preliminary findings during the Congress that indicate that by 2012:

- The number of unbanked people with mobile phones is expected to increase from 1 billion today to 1.7 billion
- Up to 290 million previously unbanked people could be using mobile money services
- Mobile money has the potential to deliver US\$5 billion in direct revenues and US\$2.5 billion in indirect revenues per year to mobile operators

These findings suggest that the growth in mobile money over the next three years could be rapid, especially when considered alongside trajectories of other forms of financial services. By comparison, microfinance institutions have been in operation for over 30 years and currently service 150 million people. Thus, mobile money has the potential to achieve relatively rapid scale on the back of the ubiquity of mobile phones.

In assessing this massive market and considering the likelihood that mobile phones will in fact be selected by the market to deliver financial services to unbanked customers, it's important to



consider how mobile phones compete with other types of technology on the basis of availability. Consider the prevalence of mobile, fixed-line phone and PC devices in the 147 emerging markets considered in McKinsey & Company's market sizing:

- Mobiles: 526 per 1,000
- Fixed line phones: 132 per 1,000
- PCs: 61 per 1,000

Thus, mobile money is well positioned for growth based on the widespread reach of mobile phones.



## Importance of the distribution network

Given the important role distribution networks play in deploying mobile money services, it's not surprising that (in addition to regulation), this topic was front and centre at the Congress. A number of questions and challenges related to distribution were raised, one of which was the need to better integrate non-bank agents into the value chain. A disconnect exists in that non-bank agents fulfill the same role in the mobile value chain as top-up agents selling prepaid minutes, but the commissions they receive for selling top-up scratch cards or even toothpaste can be much higher than for handling cash-in/cash-out.

Another distribution challenge that must be addressed is cash management, especially since mobile money services are often most popular in areas rife with bandits (consider that one of the reasons mobile money is so popular is that it's safer than carrying cash by bus). Depending on their location, agents are likely to specialise in accepting cash for e-loading (in urban areas), or disbursing



cash on the receiving end (in remote locations). In either case, agents are handling large sums and potentially exposed to risk.

To begin addressing key questions and concerns, distribution networks will be a topic at the MMU's Working Group session in Cape Town on 15th to 16th April.

## Mobile money in the future

For the industry to turn mobile money for the unbanked into a US\$5 billion market, and reach 290 million customers by 2012, several key challenges must be met, including:

- Service-enhancing regulation that enables the unbanked to get access to financial services through mobile
- Broad and effective distribution models that develop existing channels into effective agent networks

- Simple products and services that are easy to use, reliable and which tap into genuine consumer needs

The MMU initiative is well designed to address industry challenges through a programme that convenes key players and a Fund that accelerates development of innovative, replicable and commercially viable projects.





# Regulating Mobile Money for the Unbanked

With this report we hope to accelerate and stimulate the regulatory discussion over the coming three years. We are going to provide the information and discussion needed in order to reach satisfactory regulatory solutions helping to bank unbanked customers living below US\$2 per day. Our readers include mobile operators, regulators, vendors, international organisations, researchers and experts. You are all invited to let us know your thoughts and experiences and what you need to get out of the discussions on various issues.

Please contact Marina Solin at any time with comments, suggestions or inquiries at [mmuregulatory@gsm.org](mailto:mmuregulatory@gsm.org).



## In this Section

### Outcomes of Global Leadership Seminar

Policy makers from eighteen countries conclude high level meeting on mobile banking regulations: consumer protection, rules for non-banks front and centre.

### Interview with EU Internal Market Commissioner

In the recent months we have heard from both financial regulators and mobile operators that they are interested in moving forward on non-bank regulation (e-money and payments). So where better a place to start than an interview with one regulator who has already designed non-bank regulation. We have interviewed the EU Internal Market Commissioner Charlie McCreevy, a regulator who has already designed non-bank regulation, to understand more about the Commission's rationale for non-bank regulation.



### Mobilising Money through Enabling Regulation

There's constantly discussion about when it's the right time to regulate – too early and too late both have negative effects! David Porteous has contributed this article on openness and certainty.

### Mitigating the Risks that Accompany Mobile Money

This is the first article in our discussion in this issue on anti money laundering. We have provided a summary of the World Bank's report on Integrity in Mobile Financial Services. This report was published last year – we will be discussing it in our April Working Group to provide input for the next steps of this report.

### M-PESA Audit Results Released by Kenyan Treasury

The most prominent example of a market implementation being at the tipping point between openness and certainty at the moment is on course M-PESA in Kenya. This article on the recent Central Bank of Kenya's audit on M-PESA will provide insight into the latest developments.

### Industry's Favourite Regulatory Solution

This will be the start of a series of examples of regulation which we can all learn from. In this edition, we have profiled South Africa's AML regulation, which provide a good example of the principal of proportionality being applied and allowing for a good mobile experience for customers.

### An Answer to the Economic Crisis?

Overview of the Alliance for Financial Inclusion, which launched in September 2008 and provides members with tools and resources to share, develop and implement their knowledge of financial inclusion policies that deliver tangible, evidence-based results.





# Outcomes of Global Leadership Seminar

Policy makers from eighteen countries conclude high level meeting on mobile banking regulations: rules for non-banks front and centre. By Jim Rosenberg, CGAP



To promote effective regulation of mobile banking, CGAP, DFID, and the Alliance for Financial Inclusion (AFI) organised the second Global Leadership Seminar for high level policy makers and regulators who set policy for branchless banking, including mobile banking. Held on 9th to 11th March, 2009, outside of London, seminar participants represented countries where branchless banking is growing quickly, or is poised to

do so soon: Argentina, Bangladesh, Brazil, Colombia, Egypt, India, Kenya, Maldives, Mexico, Pakistan, Peru, the Philippines, Russia, Rwanda, Sri Lanka, South Africa, Tanzania, and Zambia.

Amid all the uncertainties of the financial crisis and resulting economic downturn, one might expect financial regulators to be cautious about embracing novel approaches for delivering financial services to the world's poor. However, in joining this event, participants demonstrated their conviction that these new models for branchless banking can

be implemented safely and, given the potential of rapidly reaching scale among the poor, that branchless banking could be a powerful tool in these tough economic times. (Poor people, after all, are the ones most vulnerable to the global economic decline.)

In their regulatory approach to branchless banking, these policy makers are ideally positioned to lead the world toward establishing the critical balance among access to formal financial services, consumer protection, and financial stability.

## Rules for mobile money: evidence-based policy...or policy-based evidence?

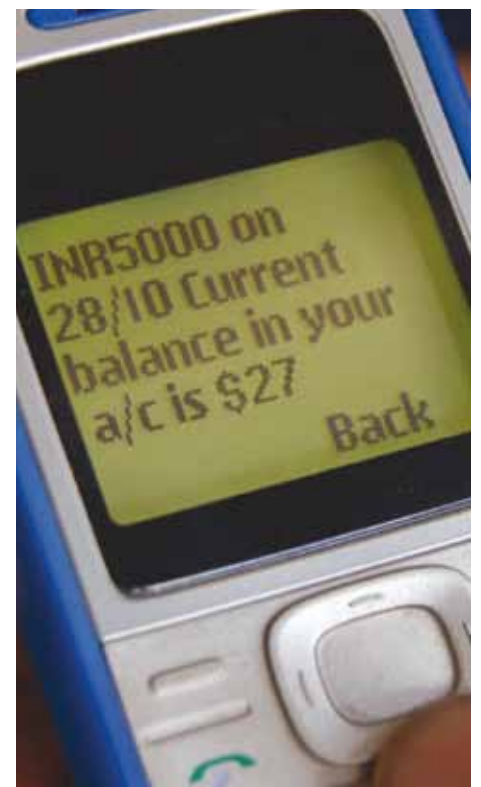
For many poor people, the distinction between a purse for spending and an account for saving is irrelevant. What they need is the ability to safely "store" value, and smooth out what may be erratic cash flows. Many questions arise when we talk about stored value: Is it just a payment instrument? How is this different from cash? Or a deposit? How is it defined from a regulatory perspective?

The term "e-money" gets thrown around quite a bit in this field, and put simply, e-money can be considered a virtual replacement for currency. When this virtual currency is held not in a physical wallet but in a mobile wallet on a cell phone or on a smart card, we call it stored value. An appropriate regulatory framework would identify how institutions are expected to manage risk. Proportionate rules on capital, liquidity, asset liability management,

management systems and controls are all ways to establish a safe operating environment for stored value to operate as a cash substitute.

For officials, it's important to fully understand the risks involved in branchless banking before making the rules. Open and vigorous dialogue with industry can help. Regulatory space can be established to allow officials to monitor and supervise branchless banking business models while creating incentives for the market to develop innovative products that are more likely to take hold among customers.

To be clear: this is not a call for hands-off regulation. It may be more of a "hands clasped" approach, as a continuous and hearty relationship between regulators and market players can establish a model to ensure that service providers have clear incentives while customers are protected.



## Consumer protection and mobile banking

In recent years, several developing countries have issued regulations governing mobile transactions, e-money, and other aspects of branchless banking. Yet, as adoption increases for services ranging from smartcard-enabled agent networks to mobile phone payment systems, regulators continue to face challenges in ensuring adequate consumer protection, particularly for new users of financial services.

Challenges are intensified by the fact that many services have been widely available for only a short while. As a result, there are no “off-the-shelf” regulatory frameworks that can successfully mitigate risks and address problems in complex and far-reaching branchless banking systems. Nor is there a rich trove of historical data to use in shaping policy.

Growing adoption of branchless banking means that regulators are also likely to see new consumer safety issues arise, as an increasingly complex financial system gives rise to more sophisticated

### ▶ INSIGHT

Policy makers have expressed an interest in engaging in dialogue with industry

### ▶ YOUR OPINION

The MMU Leadership Forum, hosted in Barcelona on 25th June will provide an opportunity for policy makers and regulators to convene alongside industry representatives to continue the dialogue. Now that regulators have indicated their interest, perhaps it's fitting to ask industry – what would you like to see from regulators? Email us at [mmuregulatory@gsm.org](mailto:mmuregulatory@gsm.org).

frauds. While there's no one-size-fits-all solution to protect against current and future branchless banking problems, to date regulators have done well by focusing on implementing basic rules that protect consumers, define regulatory and supervisory powers, and limit risk-taking by providers.

The first step is to define, in laws and regulations, the activities that are subject to licensing, regulation, and supervision by the financial authority. Providers of branchless banking must also be required to offer clear disclosures of prices and service offerings, ensure fair treatment of all customers, and observe agent qualification, data privacy, and security rules.

Perhaps most important, as branchless banking cuts across diverse regulatory domains and industries, enforcement will work only if there is coordination among different supervisory agencies.

CGAP is an independent policy and research centre dedicated to advancing financial access for the world's poor. It is supported by over 30 development agencies and private foundations who share a common mission to alleviate poverty. Housed at the World Bank, CGAP provides market intelligence, promotes standards, develops innovative solutions and offers advisory services to governments, microfinance providers, donors, and investors. More at [www.cgap.org/technology](http://www.cgap.org/technology)



# Interview with EU Internal Market Commissioner

Discussing the rationale, objective and principles of e-money and payment regulation for non-banks. By Marina Solin

As European Commissioner for the Internal Market and Services, Charlie McCreevy is responsible for the European Union's policy on the functioning of the internal market of 480 million people across 27 Member States. One of the priorities of the Commissioner is to deepen the integration of Europe's capital markets and improve its financial infrastructure so that the cost of capital is reduced, the inefficiencies of fragmentation are minimised, and competition is intensified to the overall benefit of Europe's economy. A difficult task in these times of financial crisis.

The initiative for non-bank regulation such as e-money and payment services comes from Commissioner McCreevy's department. We have interviewed him to learn more about the rationale, objectives and principles of e-money and payment regulation for non-banks.

Whilst these regulatory instruments are only relevant for the European Union, we believe that the principles, objectives and motivation behind these Directives are relevant for mobile operators and regulators in developing countries who are thinking about the creation of similar regulatory tools.

## Benefits of non-bank regulation

**GSMA: Commissioner McCreevy, the EU Commission has recently been very active in reviewing the regulatory framework for financial services to provide access for non-banks.**

**McCreevy:** Yes, we are currently reviewing the E-Money Directive (EMD) and the Payment Services Directive (PSD) is due to be implemented in the EU Member States in November 2009.



Charlie McCreevy, European Commissioner

**GSMA: What would you say are the main benefit of these two new Directives?**

**McCreevy:** There are three objectives of the EMD proposal. First: enable innovation and the design of new and secure electronic money services, creating tangible benefits for consumers, businesses and the wider European economy. Second: provide market access to new players and foster real and effective competition between all market participants. And third: modernise the provisions of the EMD ensuring consistency with the PSD.

I believe the EMD will accelerate the up-take of electronic money in Europe. These modern rules will foster competition and innovation, while ensuring market confidence and a high level of protection for consumers.

The PSD aims also to introduce more competition in payments systems and facilitate the realisation of economies of scale. This will improve efficiency and reduce the cost of payment systems to

the economy as a whole. The PSD will also underpin consumer protection and enhance competition and innovation by establishing an appropriate prudential framework for new entrants to the retail payments market. This should encourage technological progress and the realisation of new product opportunities.

**GSMA: You mention competition: how will consumers benefit from increased competition?**

**McCreevy:** A general increase in competition should benefit consumers by lowering price and improving service performance. It will also promote more innovation and wider choice.

## What is covered by non-bank regulation?

**GSMA: Can you explain briefly what is covered by E-Money and by Payments according to the two Directives we are discussing here?**

**McCreevy:** According to the EMD, electronic money is the electronic alternative to cash, which enables users to store funds on a device, like a card or phone, or through the internet to make payment transactions.

The PSD covers money remitters, payment transactions carried out by mobile telecom operators and full-range payment service providers (for example: credit transfers, direct debits, card payments) including credit relating to payments. Put simply with regard to mobile payment services, where a telecom operator makes a payment on behalf of a payment services user to a third party, the payment transaction will fall within the scope of the Directive when the mobile operator



acts solely as an intermediary making the payment.

**GSMA: What authorisation requirements do payment services institutions have to fulfil?**

**McCreevy:** Payment institutions are required to fulfil a variety of qualitative and quantitative requirements. Qualitative requirements include, but are not limited to, sound administrative, risk management and accounting procedures, proper internal control mechanisms, directors and managers that are of good repute and possess appropriate knowledge and experience, as well as shareholders that are suitable taking into account the need to ensure the sound and prudent management of a payment institution.

Quantitative capital requirements are required to ensure financial stability of the Institution. They include the initial and ongoing capital requirement. These have been defined to be appropriate to the level of risk associated with the payment institutions and the nature of the service. For example, the initial capital requirement for a money remitter is EUR 20,000, for mobile payments it is EUR 50,000, for a full-range payment service provider it is EUR 125,000, and for a bank it is EUR 5,000,000. There are also additional ongoing capital requirements.

**What is the difference between banking and non-bank regulation?**

**GSMA: Why do banks have generally higher capital charges for payment services?**

**McCreevy:** Banks hold deposits which they use for a variety of risk-taking activities, including providing credit, and can pose a systemic risk to the wider financial system. On the other hand, payments institutions cannot take deposits, and cannot use monies in a payment account to finance its payment activities (including possible credit granting). Payment institutions are

**▶ INSIGHT**

There are some existing examples of non-bank regulation in the EU that can serve as a starting point for determining where the discussion should go in the future.

**▶ YOUR OPINION**

Are the high level principles outlined in this article transferrable to the MMU discussion? What issues should we focus on resolving within the MMU project? Email us at [mmuregulatory@gsm.org](mailto:mmuregulatory@gsm.org).

therefore subject to an extremely low level of risk which does not pose a systemic risk to the financial system (but even so payment institutions are still subject to oversight arrangements by the ECB and national central banks).

**Current e-money discussion in the EU**

**GSMA: How would you describe the situation with regard to e-money in the EU?**

**McCreevy:** The initial E-Money Directive (2000/46/EC) adopted in 2000 sought to facilitate access by non-credit institutions to the business of e-money issuance. However, e-money is still far from delivering the full potential benefits that were expected at the time of its adoption. Figures on the limited number of fully licensed electronic money institutions or on the low volume of electronic money issued, demonstrate that electronic money has not yet really taken off in most of the EU Member States. The evaluation of the application of this Directive has shown that some of its provisions seem to have hindered the take-up of the electronic money market, hampering technological innovation.

The new proposal aims to enable the design of new, innovative and secure electronic money services, providing

market access to new players and fostering real and effective competition between all market participants. As all provisions have been amended and the structure was revised, it is proposed to repeal the existing E-Money Directive and replace it by a new Directive. The proposal is now being discussed.

**GSMA: Which changes to the EMD did the Commission propose?**

**McCreevy:** The proposal includes a technologically neutral and simpler definition of 'electronic money' to ensure legal certainty. The new definition covers all situations where the payment service provider (an e-money institution or a credit institution) issues a prepaid stored value in exchange of funds. The proposal includes a new prudential regime, ensuring greater consistency between prudential requirements of electronic money institutions and payment institutions under the PSD (2007/64/EC). The main elements of prudential rules are:

- an initial capital of EUR 125,000 enabling market entrance for smaller players
- a new formula to determine ongoing capital
- safeguarding requirements for electronic money institutions in line with safeguarding requirements for payment institutions under the Payment Services Directive
- an updated waiver regime, according to which small entities can obtain derogation for some of the authorisation requirements
- anti-money laundering rules are updated, ensuring consistency with the thresholds of the PSD

**GSMA: Thank you very much for your time to discuss this with us. It will be interesting to see whether a similar discussion will take place in developing countries as an additional way to provide access to new and innovative services by non-banks for the unbanked consumers.**

# Mobilising Money through Enabling Regulation

David Porteous introduces the key dimensions of an enabling regulatory environment – openness and certainty – and illustrates the concept by plotting four countries that are active in mobile banking.

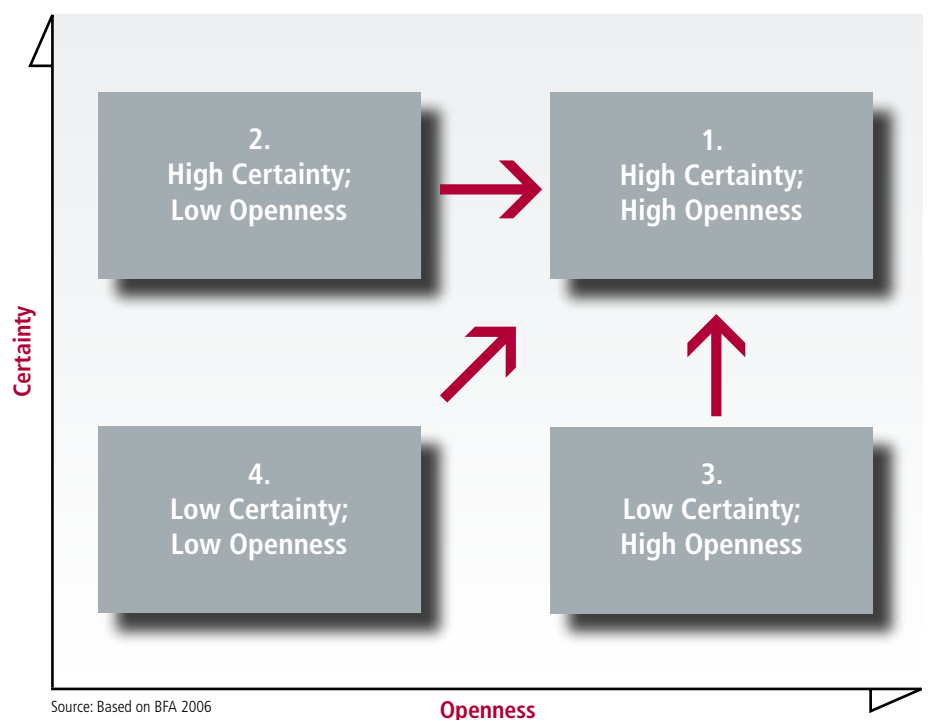
An enabling environment is one that allows, and may even encourage, the introduction and development of new business models that meet a defined public policy objective. In this case, the objective espoused by many countries is that of increasing financial inclusion — the proportion of people with appropriate formal financial services. In our 2006 report for DFID, we proposed two key dimensions for an enabling environment in a new sector like mobile money. These were:

**Openness:** the extent to which new models that had the potential to be transformative were not prohibited from starting up.

**Certainty:** the extent to which policy makers and regulators provide clarity that reduces the level of risk for private sector operators not only at start-up but over time.

Quadrant 1 (high certainty and high openness) is clearly the most suitable situation to facilitate mobile money, hence the direction of the arrows. However, based on early diagnostic work in two African countries (South Africa and Kenya), we hypothesised that middle income countries like South Africa were more likely than low income countries to be in quadrant 2 (high certainty, low openness) because they typically have more developed regulatory regimes. That is, they usually have a range of regulatory institutions that have issued regulations or guidance on mobile money or related issues, increasing the certainty, but they face the real risk that a plethora of overlapping and sometimes obsolete regulations will reduce the space in which they can innovate. Conversely, we hypothesised

Figure 1: Dimensions of an enabling environment



Source: Based on BFA 2006

that in low income countries like Kenya, there was simply less on the books in the way of legislation and regulation, usually resulting in more discretion for regulators (and correspondingly, less certainty for providers), but this lack of regulation could also create more openness for the development of innovative models. The report suggested which regulatory domains were affected by mobile money but did little to prioritise among them.

Recently, three colleagues Lyman, Pickens & Porteous (2008) went further, suggesting how to prioritise the factors

based on identifying two necessary conditions for branchless banking to emerge from the range of country diagnostic missions undertaken in 2007. These conditions are:

- **Agents must be allowed to operate on behalf of banks and others to open accounts and handle cash in and out functions.** As Lyman, Ivatury, and Staschen (2006) argued convincingly, this particular arrangement greatly extends the potential reach of the financial system since existing businesses, such as local merchants, can function as financial

1 The author is founder and director of Bankable Frontier Associates, a consulting firm based in Boston, Massachusetts. The author wishes to thank the UK's Department for International Development (DFID), which financed BFA involvement in several projects leading to some of the conclusions in this article; and CGAP, the Consultative Group to Assist the Poor (especially Tim Lyman, Gautam Ivatury and Mark Pickens), with whom he has worked directly or in collaboration on many of the issues in this paper over the last three years.

service points at much lower cost than if a bank had to set up a new branch or even an ATM infrastructure.

- Regimes to oppose money laundering and the financing of terrorism (AML-CFT) should be proportionate.** Specifically, the due diligence procedures required under Know Your Customer (KYC) regulations (now present in most countries) for opening new deposit accounts or taking payments, must allow for reduced identification and verification procedures for low risk customers. Otherwise, low income people could never meet the standards set in developed countries which, for example, require them to verify a physical address by presenting a utility or other bill.

Lyman et al. (2006) identified four more regulatory areas (“next generation issues”) that would affect the trajectory of



development. There should be an appropriate space to issue e-money and other stored value instruments, along with effective consumer protection, an inclusive system to regulate payments, and appropriate

competition rules for new payment systems.

They also affirmed the earlier observation that, because the regulation of mobile money cuts across many regulatory domains, the risk of coordination failure is higher.

## From information to rating

To proceed from the general insights about regulatory factors above to a country rating model for mobile money, we took two steps:

- We designed a simplified questionnaire that collects answers about the status of policy or legislation (including regulation or guidance) across the two dimensions of openness and certainty and in the main domains bearing on mobile money.
- We then developed a scoring model that weights the answers obtained relative to the purpose of the rating expressed above: the weights we use for each of the eight domains are shown in Table 1.

**Table 1: Weighting of domains in the scorecard**

	Openness	Certainty
1. E-commerce	5%	10%
2. AML/CFT	25%	10%
3. Electronic stores of value	25%	25%
4. Outsourcing and use of agents	30%	20%
5. Consumer protection	5%	20%
6. Foreign exchange control	5%	NA
7. Taxation of financial services	5%	NA
8. Coordination	NA	15%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>

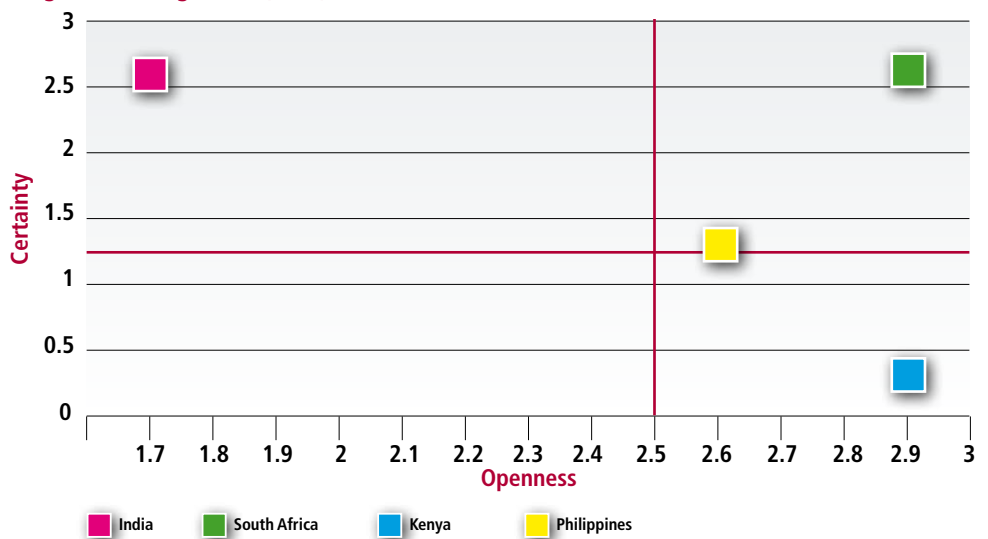


## Initial results

We have focused on using publicly available information from diagnostics in four key countries, chosen because of their scale and the levels of interest and activity in mobile banking. They include three leading countries that are mobile money pioneers in the developing world — Kenya, the Philippines and South Africa — and India. In India, interest in mobile money has exploded in the past three years after mobile subscriptions took off in that massive country with its great infrastructural challenges for traditional models of extending the financial system. Several Indian banks have introduced various mobile channels for their customers, although mass usage of those channels reportedly remains low and is certainly not yet transformational.

While this is a small sample, these four countries offer sufficient variation in terms of income level per capita and extent of activity and development in mobile money to test our hypotheses about enabling environments and the growth of mobile money.

Figure 2: Rating scores (2008)



The outcome of the scoring summarised in Figure 2 supports several of the hypotheses I advanced earlier. Three points are especially important. First, the openness of the environment does indeed matter: in all of the three countries that are ranked much higher on the openness axis (i.e. to the right hand side), mobile

money models have been relatively more active for longer and are more widely used, compared to India, which lies lower on the openness axis.

Second, however, the countries classified as middle income by the World Bank (South Africa, the Philippines and India) all lie higher on the certainty scale than low income Kenya which is clearly in the bottom right quadrant (high openness but low certainty). The Philippines is positioned just inside the top right quadrant, reflecting the fact that while its environment is very open, some of the models have been authorised based on bilateral letters of agreement, the Filipino Central Bank (BSP) is now moving beyond this level of discretion towards a broader framework in key areas like e-money issuance by non-banks. On 9th March 2009, the BSP published a guidance circular setting out an approach for non-bank e-money which increases the certainty around this issue: in fact, it results in an





increase of 0.5 in the certainty score for the Philippines, decisively boosting its position within the top right hand quadrant.

In some ways, South Africa's position is surprising: experiments began there comparatively early and several well-known pioneering models such as WIZZIT and MTN Mobile Money emanate from there, but the role that non-banks can play in issuing e-money is circumscribed by the current guidance note on e-money which has frustrated some potential innovators. To further enhance its environment, South Africa would have to amend its position, for example by creating a category of regulation for non-bank e-money issuers, or 'narrow banks,' a step that has in fact been suggested. In general, common law countries have an advantage in terms of openness because of the presumption that whatever is not prohibited is in fact allowed; in civil law countries, the reverse applies.<sup>2</sup>

Finally, India has a plethora of legislation. Its laws, regulations and guidelines across a range of areas provide certainty, but limit

the openness on key issues: for example, what types of entities can serve as agents? The Reserve Bank of India first allowed agents to function in 2006, and in 2008 issued further guidelines to clarify the restrictions on this role.

While it is easy to make the case for openness, recent events in Kenya also show the importance of certainty. For example, M-Pesa, perhaps the largest single mobile money model in these four countries based on number of users, is not formally regulated but operates at a system-wide scale under a no-objection letter from Kenya's Central Bank.

Clearly, openness and certainty alone are not sufficient to ensure the sustainable development of mobile money. The safety of clients' deposits matters too, as Lyman Pickens and Porteous (2008) point out. In the absence of a framework that creates certainty about which types of entities can enter and how they must behave, too much openness to innovative models from new entrants can be risky, especially once these models move beyond the small-scale pilot stages.

## ▶ INSIGHT

This shows a simple method for rating country environments for mobile money. Clearly, the scoring model would benefit from being extended to include data from other countries in order to broaden the sample and define the medians of openness and certainty based on more variety.

For international mobile money providers looking to enter new markets, this rating system is a relatively low-cost tool to screen for (or at least understand) a choice of country in terms of some of the most vital regulatory issues that can so hamper or facilitate subsequent development.

For policy makers and regulators, this methodology, like other country ratings, should stimulate pointed discussions about how to facilitate the development of mobile money. The answers to the underlying diagnostic questions provide a way for regulators to assess their own situation, and to consider what they can do. Whether or not policy makers are concerned about their country's relative ranking on any rating, they should be concerned about improving their enabling environment.

## ▶ YOUR OPINION

What is the right balance between openness and certainty and how can regulators find it?  
Email us at [mmuregulatory@gsm.org](mailto:mmuregulatory@gsm.org).

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<sup>2</sup> Indeed this is our experience of rating two unnamed civil-code countries: one (a LIC) falls into the bottom left corner, the lowest potential quadrant. This is of course in line with the general findings of doing business that common law environments are usually more enabling for business than civil-code countries.





# Mitigating the Risks that Accompany Mobile Money

Introduction to a study conducted by the World Bank detailing approaches to mitigation of key risk factors, including anonymity, elusiveness, rapidity and poor oversight.

Nearly half of the world's population subscribes to a mobile phone service - the majority in poor countries - and the numbers keep growing. The limit of this growth is still yet to be approached; the mobile signal continues to expand and now covers over 80% of people on the planet, carrying with it great potential for economic development. Yet, that nearly three billion people, overwhelmingly in developing countries, lack even a basic bank account precludes them from economic development for a number of reasons, foremost of which is the ability to invest in the future, making day-to-day survival their key concern. Traditional banking institutions often may prevent the poor from accessing financial services due to high transaction costs, great distances to the nearest bank branch or ATM and negative public perceptions of the traditional providers. Mobile phone financial services overcome much of these impediments.

## What are the Risks?

However, these very services that can forward economic development carry risks of undermining it. Mobile phone financial services may threaten market integrity by

making the market more vulnerable to fraud and other financial crimes such as money laundering and terrorist financing. Criminal activities of this nature cause customers to lose confidence in the market and may threaten the sustainability of the business itself. This has been seen in one country with a superficial regulatory regime. To seize their opportunity so that success is not thwarted by the risks, the World Bank has released a study that identifies the risks and measures governments are using to mitigate them.

The study distinguishes four major risk factors – anonymity, elusiveness, rapidity and poor oversight – that should be mitigated to establish a safe and sound marketplace. Criminals and terrorists have a strong interest in keeping their true identities hidden and unconnected to the funds they are moving. Mobile technology does not require the face-to-face interaction that traditional banking requires and thus offers a unique avenue to provide anonymity. In one country for instance, drug trafficking groups are paying

### ▶ INSIGHT

This article suggests that there are some business practices which can mitigate AML/CFT risks. Industry (mobile operators and banks) and authorities have to work together to find ways for the market to develop solutions, which effectively minimise risks without the need for new AML/CFT standards for mobile phones.

### ▶ YOUR OPINION

Industry practices have been recommended as a means of mitigating these four risks. Should industry develop guidelines as a response? What might these guidelines entail? Email us at [mmuregulatory@gsm.org](mailto:mmuregulatory@gsm.org).



poor people to open a bank account and then hand over the phone that is linked to it, in essence letting them use the account in the person's name.

Criminal groups may also evade high-value transaction detection by sending multiple small transfers. Mobile technology makes this scheme easier because it can be done by one person using multiple mobile phones and accounts. It also allows for such transfers to occur rapidly at any time and any place, giving financial institutions little time to suspend a suspicious transaction until more information is obtained.

Lastly, perhaps the most prevalent of all risks is one that has occurred with virtually any new market development – a lack of legal framework to regulate it. Questions on obligations - essentially who is responsible for doing what - abound in many countries. New players are emerging and blurring the lines between regulatory bodies. Non-financial institutions such as telecoms are providing financial services. Should they be overseen by the telecommunications or banking authority? If uncertainty is allowed to fester, it may expose a market to abuse. Criminals can therefore make use of the holes in oversight to create pathways to funnel money to or from illicit activity.

#### **How are the risks being mitigated?**

Fieldwork reveals that private industry practices, which are not always motivated by money laundering or terrorist financing concerns, have often played a part in mitigating many of the risks and minimising costs. For instance, the same technological innovation that allows mobile phones to provide financial services can be used to reduce the risk of anonymous transactions. Some providers, with a view to lessen their exposure to fraud, have put in place certain biometric identification systems such as

<b>Risk</b>	<b>How Mobile Phones are Vulnerable</b>	<b>Sample of Risk Mitigation Measures</b>
<b>Anonymity</b>	Mobile transactions do not require the same level of person-to-person interaction that conventional banking does. Ensuring that the person accessing the account is the same as the one listed is more difficult.	New technologies such as voice recognition or fingerprinting to verify ID  Requirements to check customer ID at most vulnerable points of transaction (deposit or withdrawal for example).
<b>Elusiveness</b>	Criminals can use phones to evade detection by dividing a large transfer of funds into small ones using multiple mobile phones and accounts.	Automated systems that profile a customer, flagging unusual account ownership activity.
<b>Rapidity</b>	Money is sent and received in fractions of a second, sometimes not giving financial institutions enough time to suspend a suspicious transaction.	Integrated systems of internal controls that instantly respond to suspicious transactions.
<b>Poor Oversight</b>	New innovations, including mobile phone financial services, are often not fully incorporated into the regulatory regime. This may make them vulnerable to criminal activity.	Licensing and registration procedures that identify market players  Publishing guidelines for the industry  Consult industry to make regulations

voice recognition or electronic fingerprinting. To mitigate the risks of criminals avoiding detection by breaking a large transfer into small ones, some providers have put customer profiling systems in place that flag if account activity is inconsistent with the customer type. Also, rapidity risks have been dealt with by some providers by integrating internal control systems that can automatically suspend or immediately prompt action for suspicious transactions. Ensuring that poor oversight risks are reduced, authorities in some countries have worked with market players so that any regulatory gaps are filled without negatively affecting business. They also made licensing and registration requirements to identify the providers and created guidelines so providers knew their responsibilities.

#### **Going forward**

Authorities and private industry ought to

work together to promote these services as a major driver for growth, which includes dealing with any risks that could threaten the market. In so doing, industry should move ahead with delivering these services even where the legal framework is absent as measures to mitigate the risks already exist – often coinciding with good business practice – and imply that new AML/CFT international standards are not required.

The World Bank can facilitate this development by providing technical assistance to countries attempting to ensure that mobile providers and financial services do not fall outside the regulatory umbrella. If done properly, it will minimise costs and close any regulatory loopholes that could undermine the sustainability, and ultimately, the viability of mobile phone financial services — a vital tool in reaching the poor.

# M-PESA Audit Results Released by Kenyan Treasury

A summary of key points articulated by the Central Bank of Kenya at the conclusion of its M-PESA audit.

One example of an implementation which currently sits on the tipping point of openness and certainty – the key dimensions of an enabling regulatory environment that were introduced in David Porteous’ article – is Safaricom’s M-PESA. This service which has been rapidly adopted by a large customer base has recently undergone an audit by the Kenyan Treasury.

On January 25th, 2009 the Kenyan Treasury published the results of the audit of the M-PESA money transfer service undertaken by the Central Bank of Kenya at the end of 2008. The note released in the national press articulates three important points: (i) it concludes that M-PESA is safe and reliable to use, thereby putting an end to its audit; (ii) it clarifies the nature of the regulatory framework under which M-PESA operates; (iii) it highlights the contribution of M-PESA in the national payment system.

The M-PESA money transfer service has been available in Kenya since March 2007. It allows customers to transfer money to each other, to transfer cash to and from their mobile account using the wide network of agents available throughout Kenya, thereby allowing unbanked customers to transact and alleviating financial exclusion. With the number of customers adopting the service constantly rising and M-PESA used for an increasing volume of transactions, the Kenyan authorities decided to launch an audit of the service to ascertain the safety and reliability of the service.

The review emphasised the key role of the trust account in which the money collected by M-PESA agents is held. The trust account resides with a major commercial bank in



Kenya and the amount held cannot be used in any way which would put it at risk. Together with the strict scrutiny of the trust deed performed by the Central Bank, it provides legal protection to the beneficiaries.

## ▶ INSIGHT

The CBK audit shows that in the absence of formal regulation, development of innovative services such as M-PESA can come from regular dialogue between the industry and the regulator. There is no shortcut to a thorough understanding of the market by a regulator. With or without formal regulation, the market solution has to survive the scrutiny of an audit.

## ▶ YOUR OPINION

True dialogue between regulators and industry is needed – what are the ways in which each party would prefer to conduct such dialogue? Email us at [mmuregulatory@gsma.org](mailto:mmuregulatory@gsma.org).

The audit also reviewed a number of risks and the mitigation measures which have been put in place and established, for instance the absence of credit risk and negligible operational risk. The Central Bank of Kenya concluded that M-PESA was safe and reliable for the Kenyan public to use.

The release of the audit’s results was also an opportunity for the Central Bank to clarify the nature of the regulatory framework under which M-PESA operates. Based on the mandate the Central Bank Act gives it, the Central Bank has been consistently seeking to enable innovation within payment systems without compromising the objectives of safety, reliability and efficiency. More specifically, section 4A1(D) of the Central Bank Act effectively enables the oversight of M-PESA, waiting for a new National Payment System Bill to be adopted in the near future.

The Central Bank of Kenya also highlighted in its note the innovative nature of M-PESA and its contribution in the national payment system. The M-PESA account is indeed different to a bank account, with a very low average outstanding balance demonstrating it is primarily used for transactions. The Central Bank also emphasised how M-PESA meets the demand of Kenyan customers for new money transfer and payment services and noted with interest the increasing number of partners, including from the banking sector, working with M-PESA, which will undoubtedly contribute to reduce further financial exclusion in the country.

# Industry's Favourite Regulatory Solution

A look at South Africa's AML regulation, which provides a good example of the principal of proportionality being applied and allowing for a good mobile experience for customers. By Marina Solin

Each Quarterly Update will feature one proposal for 'industry's favourite regulatory solution'. Our goal is to feature good examples of regulation which already exist in the market as a starting point for discussion. In each feature, we will explain which elements of the regulation work for the industry and why. We will also seek to identify areas for potential improvement. Most importantly, we want to elicit and collect your views to move the discussion forward, ultimately leading to improved regulation. We appreciate that each market is unique and that regulatory solutions from one market cannot be replicated in exactly the same manner elsewhere. Nevertheless, what we want to focus on are the underlying regulatory principles of examples of good regulatory solutions.

In this edition, which is preceding our first MMU Working Group meeting in Cape Town on 15th and 16th April, we have chosen the AML (anti-money laundering) regulation for mobile money in South Africa.<sup>1</sup> This example has been chosen as 'industry's favourite regulatory solution' because it is proportionate to risk and it allows a mobile experience for customers.

Whilst regulation promoting mobile money has to be efficient in preventing money laundering and financing of terrorism, it also has to be proportionate to the given risks and allow for a good customer experience. By mobile experience, we mean that the regulation takes into account the needs of the customer to use the mobile money service anywhere and at any time.

1 Exemption 17 and circular 6

2 ZAR 1000

3 ZAR 25000

4 ZAR 25000

## What we like about South Africa's AML/KYC regulation

### Mobile experience and proportionality

A customer in South Africa can register for a mobile banking service with a truly 'mobile experience' by opening their bank account with their mobile phone. There is no need to go to a bank branch initially if the customer has a valid South African identity number and if the following limits are observed:

- daily transfer limit<sup>2</sup> of approx. US\$100 (approx)
- monthly transfer limit<sup>3</sup> of approx US\$2,500 (approx)
- maximum balance<sup>4</sup> of US\$2,500

The customer can start using the service by transacting small amounts without going to a bank branch to provide an address.

This approach is proportionate to risk, because the identification requirements become more onerous as the transaction sizes increase. The customer has to provide identification when transacting up to US\$500 with the same monthly limit and maximum balance of US\$2,500 respectively.

If the customer wants to transact higher amounts, a full identification and proof of address has to be provided in person to a bank representative.

The appropriateness of the actual daily/monthly transfer limits as well as balance limits may depend on the risks of the service and on the customer group. In addition, different transaction limits may be appropriate in different markets. However, the underlying principle of low transaction sizes constitute low risk and should be less onerously regulated than higher transaction sizes which constitute higher risk, is what is key for a proportionate regulatory solution.

### Potential for improvement

This solution is limited to customers who have a South African identity number. This means that migrant workers do not qualify.



### ▶ INSIGHT

South Africa has developed a proportionate approach to AML/KYC regulation that accommodates the needs of industry.

### ▶ YOUR OPINION

Which elements of South Africa's AML/KYC solution can other countries replicate?

What should industry do with such elements of good regulatory examples? Which regulatory solution should we focus on in our next quarterly update?

Email us at [mmuregulatory@gsm.org](mailto:mmuregulatory@gsm.org).



# An Answer to the Economic Crisis?

The economic crisis has not only highlighted the weaknesses of the global financial system but also created a unique opportunity for developing countries to chart a new course and help the world economy back on its feet, says Alfred Hannig, Executive Director of the newly formed Alliance for Financial Inclusion (AFI).

**“There are more than three billion people in developing countries earning less than US\$2 a day – half of the world’s population – without access to savings accounts, insurance and other formal financial services,”** says Hannig. **“That’s a huge, untapped reservoir of economic potential.”**

### Win-win economic opportunity

“If these people got access to financial services, the economic impact could be enormous. Apart from the US\$1 trillion of capital and liquidity injected into the global system, it would stimulate significant investments by the poor into health, education and small businesses. In fact, research has consistently shown that greater financial access not only leads to higher per capita income but also reduces income inequality. Everyone wins.”

And AFI is confident that it can help policymakers unlock this economic potential. Established in September 2008, AFI is a global network of policymakers in more than 100 developing countries that provides its members with tools and resources to share, develop and implement their knowledge of financial inclusion policies that deliver tangible, evidence-based results.

### Pioneering policy solutions

“The most innovative and successful financial inclusion policies have originated from developing countries,” says Yashwant Thorat, a former Chairman of the National Bank for Agricultural and Rural

Development (NABARD) and now a senior AFI advisor. “The Philippines, for example, has pioneered mobile phone banking for the poor, while Brazil has made fantastic progress with agent banking. One of the problems, though, is that the knowledge and experience of these solutions is scattered across the globe. We need to bring together policymakers so they can share best practice and identify the most appropriate solutions for their countries’ individual circumstances.”

Another stumbling block is that policymakers face a bewildering choice of nearly 200 strategic partners to bring their chosen solutions to life, from research organisations and donors to standard setters and private sector partners. “Who do policymakers turn to and when?” asks Muliaman Hadad, Deputy Governor of Bank Indonesia, the Indonesian central bank.

### Three core services

AFI plans to help its members overcome these difficulties by offering three main services:

**Knowledge sharing:** Policymakers will have access to online and face-to-face channels, including an interactive web portal ([www.afi-global.org](http://www.afi-global.org)), field visits and workshops, so that they can share and develop their knowledge and first-hand experience of cutting-edge financial inclusion policies that work. The knowledge gained from these exchanges will be captured centrally so that others can benefit from it and continue to build it.

“One of the most critical ingredients of our approach is that we will only focus on policies that have been shown by independent research to deliver tangible results,” says Gabriela Braun, Director of Grant Management at AFI. “So far, we



have identified six broad policy areas that satisfy this condition and m-banking is one of these that has a potential to expand financial services to the poor dramatically." The six include:

- Agent banking
- Mobile phone banking
- Diversification of financial service channels and providers
- State bank reforms
- Financial identity
- Consumer protection

"As fresh evidence emerges from research and our members' policy initiatives, we will embrace other policy areas," adds Braun.

**Grants:** Short- and long-term grants, from US\$50,000 to US\$1 million, will be available for policymakers to pilot and develop their chosen solutions.

**Links to strategic partners:** AFI will also use its global network of contacts to connect

policymakers to the right strategic partners at the right time, from researchers and technical experts to funders and private sector partners.

"We're a truly inclusive organisation," says Hannig. "We welcome all partners who can help our members increase financial access for the poor and who share our high professional standards, including honesty, transparency and accountability. By 2012, our goal is to enable an extra 50 million people living on less than US\$2 a day to have access to formal financial services – a dramatic increase on current levels."

#### Independent

More crucially, AFI is independent. Although it is managed by GTZ (German Technical Cooperation) with funding from the Bill & Melinda Gates Foundation, the choice, control and direction of the policy solutions is determined solely by policymakers. "They understand their countries' individual needs better than

anyone," says Hannig. "AFI only provides them with the tools and resources, free of any vested commercial or national interests, in line with the Paris Declaration. Our independence is underlined by the fact that we support all evidence-based solutions and that our long-term grants are assessed by an independent panel of regional experts."

It's an approach that clearly appeals to policymakers. In just six months, policymakers from nearly 30 developing countries, from Mexico and Kenya to China and the Philippines, have either signed up or are poised to join to AFI. "As our membership base expands and our members' needs develop, we'll evolve with them, introducing new services," says Hannig. "If we get it right, we could create a new paradigm for the delivery of financial services."

For further information about AFI, visit its website at [www.afi-global.org](http://www.afi-global.org)





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