





MOBILE MONEY SUMMIT 2009

Accelerating the Development of Mobile Money Ecosystems

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Chris Gabriel, Chief Executive Officer, Zain Africa

Gavin Krugel, Mobile Money Director, GSMA

Timothy Lyman, Senior Policy Adviser, CGAP

Jojo Malolos, Group Head, Financial Services, Smart Communications

Rizza Maniego-Eala, President, G-Xchange Inc., Globe Telecom

Stephen Rasmussen, Manager, Technology Program, CGAP

Brian Richardson, Chief Executive Officer, WIZZIT

Abhishek Sinha, Co-Founder & Chief Executive Officer, Eko

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Preface: The Occasion for This Report



"The mobile money industry has grown significantly in size and scope in the brief year since the First Mobile Money Summit was held in Cairo. However, the industry's growth – and its development impact – can only be maximized if stakeholders work together toward identifying the appropriate policy and business models that can achieve scalability. Balancing the needs and expectations of consumers, operators, businesses and regulators is the most sensible and balanced way to reach sustainable development of the mobile money ecosystems, especially in developing economies.

The World Bank Group is well positioned to support the growth of the mobile money industry. By engaging in investment, advisory services and policy/regulatory work, we expect to play a catalytic role in facilitating "access to finance" through mobile platforms, and the development of an efficient global e-money ecosystem – the goal we share with the industry as a whole."

MOHSEN A. KHALIL, DIRECTOR, GLOBAL INFORMATION AND COMMUNICATIONS TECHNOLOGIES, IFC/THE WORLD BANK

Photograph: IFC

This report is written on the occasion of the second annual Mobile Money Summit, held June 23-24, 2009 in Barcelona, Spain. The Summit provided an opportunity to take stock of the industry in the year since the inaugural Mobile Money Summit held in May 2008 in Cairo, Egypt. It is clear that, in this time, the industry has grown significantly in scope and sophistication. While the number of deployed mobile money initiatives more than doubled in the last year, reaching more than 120,¹ the challenges of realizing mobile money's full potential – as a market opportunity and as a poverty alleviation tool – have also become better understood.



Photograph: GSM Association

Mobile money refers to a suite of financial services offered through mobile phones and other handheld mobile devices. These services can include 1) person-to-person transfer of funds, such as domestic and international remittances, 2) person-to-business payments for the purchase of a range of goods and services, and 3) mobile banking, through which customers can access their bank accounts, pay bills, or deposit and withdraw funds.²

Thus, in Barcelona, it was not surprising to find sustained optimism mixed with a keen awareness of the work still to be done. The Summit moved beyond the "what" and "why" of mobile money and began focusing on the "how."

The Barcelona Summit brought together more than 40 speakers and 450 participants from 68 countries, despite a general decrease in executive travel due to the global economic crisis. Nearly two-thirds were senior management, and they represented every sector of the mobile money industry – including financial services institutions, mobile network operators, development organizations, solutions vendors, and policymakers.³ Many participants pointed to the 30 central bankers in attendance, a three-fold increase over the Cairo Summit, as a particularly encouraging sign of maturation in the industry.

Drawing on the proceedings in Barcelona and in-depth interviews with speakers and other industry experts, this report explores key evolving themes in the mobile money space, seeking to consolidate promising practices and examine critical challenges. As Kent Lupberger of the World Bank Group noted in his closing remarks in Barcelona, "progress over the last year has been amazing, but the devil is in the details." This report is intended to further the conversation surrounding those details.

Revisiting the Mobile Money Opportunity

he opportunities of mobile money were well understood at the 2008 Mobile Money Summit in Cairo. For businesses, mobile money was a way to reach new customers and improve and diversify services for existing ones. For customers, mobile money offered increased affordability, security, and convenience. Furthermore, participants in Cairo acknowledged the "enormous potential for development impact" associated with mobile money's potential to facilitate financial inclusion – which reduces poor people's vulnerability to shocks and increases their ability to invest in income-generating activities and assets.⁵

One year later, these diverse but interconnected opportunities are still core to the mobile money value proposition, and new research has shed more light on the nature and extent of the potential. For mobile network operators (MNOs), for example, a new market sizing study by CGAP and GSMA found that the average revenue per user (ARPU) for mobile money customers is 74% higher than that of non-mobile money customers. Mobile money services were also shown to help reduce customer churn, one of MNOs' most significant challenges.⁶ While these figures are associated with today's mostly higher-end consumer base, and may adjust as the industry reaches deeper into previously unbanked segments, the business rationale for mobile money is nevertheless quite compelling: MNOs, for instance, stand to earn \$7.8 billion in direct and indirect revenues from serving 364 million clients by 2012.⁷

Consumers increasingly understand and appreciate the mobile money opportunity, too. In Kenya, for instance, FSD Kenya found that four out of five M-PESA users believe that not having access to M-PESA's services would have a "large negative impact" on their lives. Users view M-PESA to be faster (98%), more convenient (97%), and more secure (98%) than the informal methods that are often used to send or receive money.⁸ In the Philippines, CGAP found that approximately 90% of mobile money users view their money to be safe and would recommend the services to family and friends.⁹ Consumers will continue to benefit as mobile banking services become more sophisticated – extending speed, convenience, and security to a broader range of products such as savings and credit.

Finally, as mentioned above, the development potential of mobile money rests in its ability to facilitate financial sector inclusion. Fortunately for the mobile money industry, MNOs have had much greater success than traditional financial institutions reaching low-income consumers. New estimates predict that by 2012, the number of people with mobile phones but without bank accounts is estimated to grow from 1 to 1.7 billion.¹⁰ The platforms exist. The challenge will be to incorporate financial services for previously unbanked consumers



Photographs: Smart Communications, G-Xchange Inc

onto these platforms. The industry's ability to do this at scale remains to be seen. In some cases, the mobile channel has been critical to providing new bank accounts. However, in other cases, mobile banking has simply been a value-added service for existing bank customers. For instance, approximately 70% of M-PESA users were already bank customers. Increasing the speed, convenience, and security of banking services should have positive economic effects, but only to the extent that people have access to those services in the first place.

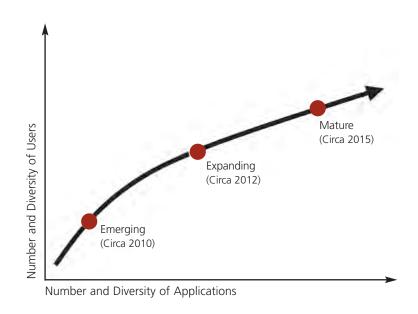
Advancing the Development of Mobile Money Ecosystems

hile our understanding has been refined over the past year, the industry has generally arrived at consensus on the "what" and the "why" of mobile money. Now the industry has intensified its focus on the "how" – how to approach common constraints in order to capture fully the opportunities described in the previous section.

Despite progress over the last year, there is an acknowledgement that there are still too few successes at scale. Much remains to be done to reach critical mass, the point at which an industry has gained sufficient penetration for momentum to be self-sustaining. In the mobile money space, this will require both more customers and more transactions per customer.

Reaching critical mass will require mobile money ecosystems to become more dynamic and productive. Mobile money ecosystems are the networks of organizations and individuals that must be in place for mobile money services to take root, proliferate, and scale up. They are characterized by interdependence and coordination among any number of actors – such as MNOs, banks, airtime sales agents, retailers, utility companies, employers, regulators, international financial institutions and donors, and even civil society organizations (see Appendix 2).¹²

FIGURE 1: PROJECTED MATURATION OF THE MOBILE MONEY INDUSTRY14





Photographs: Jim Rosenberg / CGAP

Within the industry, there is a sense that the players are getting better at managing the interdependence and coordination that dynamic and productive mobile money ecosystems require. As GSMA's Nav Bains noted, "All participants in the mobile money ecosystem see the value in collaboration." In particular, collaboration with regulators has increased dramatically in the last year – though striking the right regulatory balance remains a critical challenge for the industry, as discussed in the next section.

Developing and strengthening mobile money ecosystems will help move the industry from its current emerging phase to an expanding phase and, eventually, a mature phase. The arc of maturation in the industry is illustrated in Figure 1. Table 1 defines in more detail what will characterize each stage.

TABLE 1: STAGES OF MATURATION OF THE MOBILE MONEY INDUSTRY¹⁵

	Emerging	Expanding	Mature
Actors	Small-scale mobile money operations emerge from mobile network operator-led, bank-led, or 3rd-party models. Many require subsidies from parent companies, main businesses, donors, etc.	Base revenue from urban markets to support rural market operations. Some players start to provide mobile money revenue segment information in their financial reports. Several large domestic players. Many global mobile network operators spin off mobile money operations. Some begin to have initial public offerings.	Lots of mergers and acquisitions. Some very large international players act as independent payment service providers.
Level of Regulation	Regulators encourage emergence of the actors in the ecosystems.	Regulators modestly control yet nurture the actors in the ecosystem.	Regulators impose robust control over the actors in the ecosystem.
Number of Users (per provider) and Frequency of Use	10k-10m users, but not using regularly; only "early adopters."	1m-30m users, majority using regularly; large scale uptake.	10m-100m users, more than 70% adult penetration in most developing markets and 90% in developed markets. Widespread, normal usage as part of daily life.
Payment	Mostly person-to-person (P2P) remittances and pre-paid value storage.	Regular payments, e.g. payroll, utility bills, government-to-person, P2P, etc.	Any type of payments.
Characteristics Level of Interoperability	Limited interoperability.	Uers start to demand substantial interoperability.	Full interoperability.

However, critical questions remain: what does it mean to effectively catalyze the development of a mobile money ecosystem? And what does this process require?

In the twelve months since Cairo, the answers have, to some degree, become more consistent. For the sake of comparison across time, this report will look at the three key components of



Photograph: GSM Association

mobile money ecosystem development laid out in the Cairo report: utility, capacity, and an enabling environment. In each of these areas, this report considers three key questions:

- 1 How has the mobile money industry matured in the last twelve months?
- 2 What promising practices have emerged?
- **3** What are the persistent or newly emerging challenges in advancing mobile money ecosystems?

Utility

"What needs to be elevated as the most critical aspect of all of this is managing the consumer: understanding the behavior of the consumer, understanding the value proposition, and understanding what is the compelling need that will define your product."

JOJO MALOLOS, GROUP HEAD, FINANCIAL SERVICES, SMART²⁶

Utility is the ability of a good or service to satisfy some human want or need. For mobile money, utility is a function of the number of ways and places one can use it. In 2008 it was noted that the greater the utility, the greater the uptake.¹⁷ This observation holds true, and many industry leaders are starting to speak more frankly about the fact that increasing utility is a core challenge for the mobile money industry. These discussions focus on two areas where utility must increase in order to drive the uptake needed to reach critical mass: 1) increasing the number and diversity of useful applications, and 2) promoting interoperability.

Increasing the number and diversity of useful applications

In Cairo, participants noted that mobile money services were being used where consumers were able to identify a "very clear, simple value proposition" – most often the ability to "send money easily, cheaply, and securely." Industry leaders believed that remote payments and remittances would catalyze the market for more diverse and sophisticated services, offering greater utility to their consumers.

This is beginning to happen, with consumers already using mobile money services like savings accounts and microloans in a number of countries. Because the mobile money business is a typical low-margin, high-volume transactions business, services that entail large numbers of periodical – even daily – payments are not only convenient for consumers but also critical for providers. Such services can help providers break even and accelerate their growth.

However, there are also examples of new mobile money services that have not been adopted by potential customers. MNOs have experienced impressive market penetration with mobile phones, but offering financial services through these platforms is a complex undertaking, especially for previously unbanked consumers. The theory that "if you build it, they will come" has not always been borne out.¹⁹

As Smart's Jojo Malolos notes, in increasing the number and diversity of mobile money applications, "what needs to be elevated as the most critical aspect of all of this is managing the consumer: understanding the behavior of the consumer, understanding the value proposition, and understanding what is the compelling need that will define your product."²⁰

One way to do this is consumer research. For instance, South Africa's First National Bank (FNB), whose mobile money services have experienced rapid growth over the last year, commissioned consumer research to gain feedback on the quality of existing services and the range of services that should or should not be offered. Another form of consumer research is to look at how consumers are using mobile money services, paying particular attention to creative usage patterns and purposes the provider did not intend. In one study, CGAP's Steve Rasmussen has found that consumers in both Kenya and the Philippines want mobile money services to expand beyond payments and are finding ways of adapting current services to meet their needs. For instance, more than 30% of M-PESA users in Kenya already use M-PESA to store value, despite the fact that M-PESA is neither designed nor regulated to provide savings services.²¹ In this case increasingly sophisticated consumer demand should drive the development of new services, new regulations, and potentially new technologies.

Understanding consumer needs is more difficult in segments that providers have yet to penetrate – where future consumers may have trouble conceptualizing and providing feedback on services they have not yet experienced. For instance, unbanked consumers may lack experience not only with financial services via mobile phone but also with financial services generally. MNOs have pointed to microfinance institutions as key partners in understanding the financial services needs of such consumers.²²

Mobile money providers have recognized that compelling need does not always translate into consumer demand, and are taking more deliberate measures to cultivate consumer markets for their services. Two such measures – critically important in the financial services sector – are educating consumers and building trust. For example, when WIZZIT CEO Brian Richardson was asked what he might do differently if starting his business today, he suggested that he

might partner with a more recognizable brand name business – both to increase consumer familiarity with mobile banking products and to leverage the trust inherent in a recognizable name.²³ In another example, FNB enjoyed existing brand awareness and trust when it entered the mobile money space, but had to work on marketing and consumer education around these new services. FNB Mobile and Transact Solution CEO Len Pienaar cited one awareness campaign, a 2008 competition the company conducted via the local media, as a particularly successful effort to publicize its mobile banking services.²⁴

Promoting Interoperability

"Interoperability can be defined in different ways. For example, interoperability occurs if different systems are technically able to work together. Alternatively, it can refer to the linking of networks that allows users of one network to access the services of another network. In the context of mobile money services, interoperability could apply at different levels."²⁵

Interoperability increases the number of ways and places mobile money can be used, and therefore increases its value to consumers. Interoperability in the mobile money space could take a number of forms. For example:²⁶

- Customers of provider A could make payments to customers of provider B
- Customers could transact via any mobile network operator channel
- Customers could switch mobile network operators without having to switch banks
- Customers of provider A could use agents of provider B and vice versa

Interoperability is currently extremely limited, and consumers are responding by opening multiple mobile money accounts and swapping SIM cards in and out of their phones. This reduces the efficiency mobile money can offer. It is generally agreed that, without at least some degree of interoperability, the utility of mobile money will be limited significantly enough to prevent the industry from reaching critical mass.

In a few cases, service providers are beginning to respond. For example, WIZZIT, which works across all mobile networks in South Africa, is frequently noted as an example of genuine interoperability. Nevertheless, as recently as last year, WIZZIT was still the only mobile-enabled branchless banking initiative in the country to provide such an arrangement.²⁷



Photograph: GSM Association

In another example, in August of this year, Nokia announced that it would be launching Nokia Money in 2010, providing mobile financial services targeting emerging market consumers with mobile phones but no bank accounts. The services will be based upon the Obopay platform – a U.S. and India-based mobile payment service that lets users receive, send, or spend money through a mobile phone using Obopay's mobile application, text messaging, or a variety of other mobile and web-based access methods.²⁸ Mary McDowell, Nokia's Chief Development Officer, explained "Nokia wanted to move beyond a system in which people were tied to a single operator or bank, (she also noted) that the Obopay works with both Nokia and non-Nokia handsets."²⁹ Obopay not only works across different handset brands but also across banks and mobile networks.³⁰

To date, the challenges of balancing competition and collaboration have impeded interoperability. Despite widespread recognition of its importance, mobile money providers – seeking to establish competitive advantage in a new market – have been reluctant to relinquish control. Market forces should drive increasing interoperability over time. The role of regulation in accelerating this process is discussed below (see Enabling Environment section).

Capacity

Advancements in technological capacity over the past year, such as with near field communications (NFC) and smart phones, have kept pace or stayed ahead of what the emerging mobile money industry has required.

Furthermore, for the most part, consumers have exhibited a growing level of comfort with mobile banking technologies and a willingness to adopt new technologies.

However, as utility – and hence uptake – increase, the capacity of mobile money networks may become a constraint. This type of capacity includes MNOs' systems, the back-end systems of settlement banks, and the connections between the two. Among some, there is a degree of uncertainty whether the mobile money industry would be able to support a critical mass of customers and the number of transactions that would entail. As Fundamo's Hannes van Rensburg commented, "We need to build the systems of tomorrow today."³¹

Organizational capacity is another key consideration as the mobile money industry begins to expand. Do players in the mobile money space have the systems, skills, even attitudes – such as openness to new markets and new business models – required? Capacity concerns exist at



Photograph: Jim Rosenberg / CGAP

all levels of a mobile money ecosystem, from consumers and agents up through commercial banks and regulators. In Barcelona, discussions focused primarily on the capacity of distribution networks.

Effective distribution networks are essential to reaching critical mass in the mobile money industry. As a result, it is critical for mobile money providers to maintain capable and stable networks of agents – typically the owners, operators, or employees of small retail or postal outlets that provide services, such as sign-up and cash handling, directly to consumers.³²

Given that the provision of mobile money services is usually only one portion of an agent's business, the process of developing and maintaining an effective distribution network requires a close understanding of agents' economics. How does each agent see his or her business, and how does he or she make money? When agents' economics are understood, it becomes possible to offer appropriate and effective incentives. In Kenya, Safaricom drove increases in subscribers and in transactions by paying agents at sign-up and again at the time of the subscriber's first transaction. In Pakistan, Telenor has incentivized transaction growth even more, paying agents based on the number of transactions within six months, one year, and so on.³³ Such models help to retain effective agents and drive growth.

An Enabling Environment

"What we have learned is that the supervisor needs to balance regulation, competition, innovation, and the growth of the mobile money industry."³⁴
KIM VADA, DEPUTY DIRECTOR GENERAL OF THE NATIONAL BANK OF CAMBODIA

Perhaps the most significant change in the mobile money industry in the last year concerns the role of regulation. One year ago, it was generally agreed that regulation was the biggest challenge to expanding mobile money ecosystems. While the optimal regulatory framework remains elusive, there is now far more optimism that effective solutions will be found. Mobile money providers are now pursuing collaboration with regulators to build enabling environments for mobile money.

Mobile money providers continue to emphasize the need for incrementality and proportionality in designing regulations. Given that mobile money is still in its emerging phases, there is consensus that regulations must be implemented gradually and designed to evolve as the industry expands and matures – an approach that seeks to respond to risks in the mobile money space as they emerge. Regulatory responses should then be proportional to the risks.

Participants at the Cairo Summit acknowledged the challenges the incremental, proportional approach presents to regulators, and pointed to increased business-government dialogue as key to making it feasible. The dramatically increased presence of regulators at the Barcelona Summit was a strong indication that such dialogue is taking place. The leadership forum that followed the Summit was a particularly successful example of such exchange. The discussions emphasized two key regulatory areas: competition and consumer protection.

Competition

Increasing competition will be a positive force in the market, but it will also present new regulatory challenges. Two such challenges are particularly relevant at this point in the maturation of the mobile money industry:

- competition between banks and non-banks, and
- balancing competition and interoperability.

Competition between banks and non-banks. Competition between banks and non-banks has increased notably in the year since Cairo. This has created opposing phenomena.³⁵

On one hand, banks are using their clout with regulators and exploiting those regulators' risk aversion – particularly in the crisis context of the past year – to limit space for non-banks, such as MNOs, to play any role beyond that of electronic communications channel.³⁶

On the other hand, non-bank providers of mobile money services, such as MNOs, are operating outside the regulations that apply to banks – an enormous competitive advantage. For example, banks are often prohibited from using non-bank retail agents as cash-in/cash-out points, which limits the size of their distribution networks. MNOs face no such restriction and often have tens or even hundreds of thousands of retailers that could potentially serve as mobile money agents. In addition, MNOs already own the telecommunications infrastructure, positioning them to control access.³⁷ This tilting of the scales towards MNOs can be seen in Kenya, where MNOs such as Safaricom have a clear competitive advantage over banks.

As banks gain confidence in the prospects of mobile banking and seek to enter the market, regulating bank/non-bank competition will become an even more pressing challenge. A possible solution comes from the Philippines, where regulators have attempted to level the playing field by imposing the same reporting requirements for all mobile money providers, regardless of whether they are banks or non-banks. Industry leaders point to the need for continued business-government dialogue in the process of finding solutions, and emphasize



Photograph: G-Xchange Inc

that collaboration is needed to reach scale. Zain Africa's CEO, Chris Gabriel, noted, "Collaboration of the entire ecosystem is the key," and pointed specifically to the opportunity to coordinate with regulators to determine "service-enhancing regulations."³⁸

Balancing competition and interoperability. There is a high level of consensus within the mobile money industry that interoperability is essential, and yet competition has outweighed collaboration to date. What is the best way to drive increasing interoperability?

Regulation is one option. Yet, at this emerging stage of the industry's development, new players must be incentivized to enter the market. Non-interoperability is one way to incentivize them, as it allows them to capture new customers and reduce churn.

However, the diversity of actors in a mobile money ecosystem makes the prospect of regulating interoperability complex. CGAP Senior Policy Advisor Tim Lyman explains that, from a regulatory standpoint, the idea that the customer of mobile provider A could make a payment to the customer of mobile provider B should not be problematic "as long as the net proceeds from issuing e-money on both sides are stored in prudentially regulated institutions that are connected to each other through the payment system."³⁹ However, the answers to a range of other interoperability scenarios, like those described in the Utility section above, are less clear.

At the same time, market forces seem well-positioned to drive increasing interoperability on their own, over time. As discussed earlier, interoperability increases mobile money's value to the consumer – and consumers are already beginning to demand it. Interoperability also benefits companies, allowing them to focus on their core businesses and leverage the core competencies of other actors in the ecosystem.

Consumer Protection

As in the financial services sector more broadly, consumer protection is critically important in the mobile money space. The need will become even more pressing as the industry expands into previously unbanked segments, where consumers may be less familiar with financial products and services and less aware of their rights. The challenge for regulators is to encourage service providers to experiment with ways of serving previously unbanked consumers, while protecting those consumers from the risk inherent in experimentation. Financial inclusion and consumer protection must not be allowed to become mutually exclusive objectives. As Mr. Lyman urges, "Don't set the bar so high that no one can serve the poor profitably."

Looking Forward

"There needs to be a progress of successes – do not try to build an ecosystem all at once. Allow mobile network operators, regulators, commercial banks, and other key stakeholders to learn gradually and move forward deliberately." LEN PIENAAR, CEO, MOBILE AND TRANSACT SOLUTIONS, FIRST NATIONAL BANK OF SOUTH AFRICA

The Barcelona Summit combined renewed optimism about mobile money's potential with an awareness of the challenges ahead as the industry pushes from an emerging into an expanding stage. As this happens, mobile money providers will need to continue learning about their consumers, especially in previously unbanked segments; pay attention to the business drivers for greater collaboration; and deepen the business-government dialogue on enabling environments for growth. Thus advancing mobile money ecosystems will enable the industry to reach critical mass, fulfilling its potential as a market opportunity and an instrument of poverty alleviation.

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Appendix 1 List of Interviewees





Dag-Inge Flatraaker, Chairman, M-Channel Expert Group, European Payments Council

Chris Gabriel, Chief Executive Officer, Zain Africa

Gavin Krugel, Mobile Money Director, GSMA

Timothy Lyman, Senior Policy Adviser, CGAP

Jojo Malolos, Group Head, Financial Services, Smart Communications

Rizza Maniego-Eala, President, G-Xchange Inc., Globe Telecom

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Abhishek Sinha, Co-Founder & Chief Executive Officer, Eko

Kim Vada, Deputy Director General, National Bank of Cambodia

Hannes van Rensburg, Chief Executive Officer, Fundamo

Appendix 2 Players in the Mobile Money Ecosystem

Players	Assets and Capabilities	Incentives
MNOs	 Mobile infrastructure Extensive retail outlet/agent networks Massive customer bases that include low-income segments Strong branding Customer trust Customer service structures Ability to make good margins on low ARPUs 	 Acquire customers Manage churn Reduce airtime distribution cost Increase ARPUs Capture additional revenue opportunities, e.g. interest on float or commission on float mobilized; commission on B2B transactions; finders fees for bank accounts opened Meet service obligations and CSR goals
Banks	 Banking license and infrastructure Ability to facilitate foreign exchange, clearing, and settlement Regulatory compliance expertise Retail outlet networks (though significantly more limited than those of MNOs) 	 Significantly reduce cost of delivering financial services Establish presence in new customer segments and new geographic areas Meet service obligations and CSR goals Capture additional revenue e.g. through retention of deposits
Agents	 Physical points of presence Customer trust (in some cases) Knowledge of customer usage habits and needs 	 Earn commissions on transactions Increase traffic and thus sales potential (for agents who are retailers)
Retailers	Physical points of presence	Reduce cost of handling cashReduce queues at peak timesManage inventory more effectively
Utilities	Periodic billing and collection	Reduce cost of payment collection and processingIncrease timeliness of paymentOffer greater customer convenience
MFIs	 Service presence among low-income segments Regular communication with low-income clients Knowledge of low-income clients' habits and needs 	 Safer and lower-cost methods of disbursement and collection Improve business efficiencies
Employers	• Existing periodic payroll distribution to employees	Reduce cost of payroll processing, risk of cash handlingOffer greater employee convenience
Regulators	Authority to impose regulation and monitor and enforce compliance	 Promote financial inclusion Enable wider range of payment choices Address AML/CFT concerns by moving cash into more visible, formal channels National socio-economic development
IFIs and Donors	 Contacts, experience, and expertise across countries, sectors, and industries Credibility with regulators Comprehensive suite of relevant functions International presence 	 Promote financial inclusion Drive development in general, in line with organizational mission
Civil Society	 Local contacts and knowledge in low-income markets Credibility and trust Relevant operations 	 Enhance social and economic impacts of their activities Drive development in general, in line with organizational mission
End Users	• Relevant needs	 Reduce risk of carrying cash Increased access and affordability of payment, remittance, and other financial services Convenience of remote payment, remittance, and other financial services

Roles	Limitations and Constraints	
 Provide infrastructure and communications service Agent oversight and quality control Issue e-money (where commercially desirable and permitted by law) Exercise leadership in drawing mobile money ecosystem together Advise other businesses (e.g. banks, insurers, utilities) on their mobile money strategies 	 Regulatory limitations on providing financial services, e.g. on taking deposits, issuing e-money Shareholder pressure for faster, higher returns Strategic focus that may not include mobile money 	
 Offer banking services via mobile Hold float or accounts in customers' names Handle cross-border transactions, manage foreign exchange risk Ensure compliance with financial sector regulation 	 Narrow customer base Lack of experience with, and in some cases interest in, low-income customers Stringent regulatory requirements with significant compliance burdens 	
 Perform cash-in and cash-out functions Handle account opening procedures, including customer due diligence (where commercially desirable and permitted by law) Report suspicious transactions in accordance with AML/CFT requirements Identify potential new mobile money applications 	 Liquidity shortfalls Basic business skills gaps Lack of customer trust (in some cases) Limited ability to partner with large corporations 	
 Accept mobile payments Use mobile payments in B2B transactions, payment of wages Build customer trust in mobile money by leading by example 	 Customer demand (or lack thereof) for payments through mobile channel Business partner willingness to transact by mobile 	
Offer mobile payment options	Potential threat to existing bill collection agents	
 Introduce low-income segments to mobile money Educate end users 	Back office systems may not link with mobile money platforms Cultural resistance	
Offer direct deposit of wages into mobile money accounts	Cultural resistance	
 Provide enabling environment for mobile money Protect stability of financial system Demonstrate leadership to encourage and protect behavior change 	 Lack of experience with convergence of financial and telecommunications regulatory regimes Lack of financial and technical capacity 	
 Undertake research, especially on lower income segments Provide financing and/or technical assistance Facilitate dialogue among ecosystem players Support government reforms Financial literacy awareness and education 	• Can only act as catalyst	
 Undertake research, especially on lower income segments Build the capacity of agents and small retailers Engage in operational partnerships with mobile money providers Financial literacy awareness and education 	 Philanthropy-based, not-for-profit funding models limit scale Cultures and business processes may not easily lend themselves to partnership with business 	
• Use mobile money to improve their lives	Lack of awarenessLimited financial literacyCultural and psychological resistance	

Appendix 3 Mobile Money Summit Agenda



TUESDAY, 23 JUNE 2009

FINANCIALLY CONNECTING THE WORLD THROUGH MOBILE

09.00 Welcome & Introduction

Siki Mgabadeli, Award Winning Financial Journalist and Business News Anchor

09.10 Keynote Introductions

Keynote Speakers: Chris Gabriel, Chief Executive, Zain Africa; Mohsen Khalil, Director of the Global Information and Communication Technologies, The World Bank; Tim Attinger, Global Head of Product Innovation and Development, Visa Inc.; Kent Lupberger, Senior Manager, Portfolio and Technology – Global Information and Communication Technologies, International Finance Corporation, World Bank Group

09:55 Commercialisation of Mobile Money and Significant Developments since Mobile Money Summit 2008

Panellists: **Gavin Krugel**, Director, GSMA An industry update on Mobile Money movements globally and setting the scene for the Mobile Money Summit.

10:40 Future and Emerging Payments Technologies

Presenter: Dag-Inge Flatraaker, Chairman M-Channel Expert Group, European Payments Council

The spread of mobile money services is underpinned by the innovation and evolution of the underlying technology. This presentation will examine technology best practice, the need for standardization and how existing underlying infrastructure is driving mobile services.

11:40 Global Innovations in Mobile Money – An MNO Viewpoint

Presenter: Mung-Ki Woo, Vice President Payment and Contactless Services, Orange-FT Group A look at the latest mobile money technology innovations as well as a report on the health of the mobile money technology supply chain. Are there real differences in technology requirements between developed and developing markets?

12:00 Panel: The Reality of Deploying the Latest Mobile Money Innovations

Panelists: Dag-Inge Flatraaker, Chairman, M-Channel Expert Group, European Payments Council; Steve Granek, Vice President of Business Development; Neustar Hannes van Rensburg, CEO, Fundamo; Mung-Ki Woo, Vice President Payment and Contactless, Orange-FT Group

Areas to be discussed include:

- Near-field communications: what is the value proposition for themobile operator? Does this prevent handset churn? Is this a bank-driven offering?
- Mobile ticketing: SIM, NFC, or server-based? What is the size of the mobile ticketing market?
- Mobile bill and utility payment: truly larger than money transfer?
 What are the cost savings and convenience factors for consumers?
- 2D barcodes: new innovations and how 2D barcodes can be leveraged in mobile financial services

14:30 Keynote Presentation

Presenter: **Bob Christen**, Director, Financial Services for the Poor Global Development Program, Bill and Melinda Gates Foundation

14:55 Delivering Successful Mobile Money Solutions to the Unbanked – Customer Acquisition

Presenter: **Stephen Rasmussen**, Manager, Technology Program, CGAP This presentation will explore the opportunity for mobile money in developing markets, with a particular focus on key challenges, identifying the right services and sustainable solutions, as well as consumer adoption and customer lifecycle.

15:20 Mobile Money: The Numbers and Consumer Insights in 2009

Presenter: Caroline Pulver, FSD Kenya Jon Gravrak, McKinsey and Company The launch of the CGAP/GSMA Global Market Sizing and Consumer based research conducted by Mckinsey and FSD Kenya.

16:20 The Business Case for Targeting Unbanked Markets – Mobile Payments in a Time of War

Presenter: Miyanda Mulambo, General Manager, Celpay This presentation will examine the Democratic Republic of Congo's unique challenges for financial service provision and how these have been addressed by mobile services with lessons learnt from other regions.

16:45 Leveraging Existing Infrastructure and Behaviour for Branchless Banking

Presenter: Abhishek Sinha, Co-founder & CEO, Eko Why success in the mobile money space will require a business model that supports extremely low cost of servicing and hugely rapid scale by leveraging existing technological, IT & distribution infrastructure, existing behaviour, and intuitive and secure interfaces. The result should be a great value proposition without compromise in features and availability, with extremely low barrier pricing for customers.

17:05 Panel: The Reality of Delivering Mobile Money in Developing Markets

Panelists: Zahir Khoja, Director, Product Marketing and Head of Mobile Commerce; Roshan Rizza Maniego-Eala, President, G-Xchange, Inc, Globe Telecom; Jojo Malolos, Group Head Financial Services, Smart; Roberto Rittes, Director, Oi Paggo Betty Mwangi Thuo, Chief Officer - New Products, Safaricom; Brian Richardson, CEO, Wizzit

A unique panel of commercially launched mobile banking service operators that will examine the key challenges faced in a variety of regions. It will look at the current ecosystem, how it has evolved and what developments are expected over the next 12-18 months. This interactive session will allow delegates to learn from the panellists experience and how they can be applied to their home markets.

17:40 Day One Closing Remarks

Siki Mgabadeli, Award Winning Financial Journalist and Business News Anchor











WEDNESDAY, 24 JUNE 2009

FINANCIALLY CONNECTING THE WORLD THROUGH MOBILE

On the morning of day two, participants will have the choice to select between sessions in the Regulatory Landscape Track or the Mobile Money Transfer Track. Our Regulatory Track sessions will look at how the regulatory challenges identified last year are being met, the new challenges we face and how the industry is addressing them. The Mobile Money Transfer Track will discuss progressing the mass deployment of international remittances through mobile.

09:15 REGULATORY TRACK

The Regulatory Landscape for Mobile Money

Timothy Lyman, Senior Policy Adviser, CGAP; Claire Alexandre, Financial Services Regulation, Vodafone

Explore developments in regulation over the past twelve months and the key challenges that still remain going forward - What were the successes and the failures? How does regulation need to change to match the growth in mobile financial services? How can the industry assist in driving these changes?

Integrity in Mobile Financial Services

Pierre-Laurent Chatain, Lead Financial Sector Specialist, Financial Market Integrity, The World Bank

Governments are increasingly challenged to support the growth of Mobile phone financial services (m-FS) on the one hand, while mitigating their risks – including terrorist financing and money laundering – on the other. Last year, the World Bank released a paper exploring the risks associated with mobile financial services and how a sample of countries mitigate them. This presentation will show the outcomes of this survey and discuss the extent to which mitigation practices observed in several countries are consistent with the Financial Action Task Force standards on combating money laundering and terrorist financing.

MOBILE MONEY TRANSFER TRACK

Edgar Dunn Results of Mobile Money Payments Report;

Samee Zafar, Director, Edgar Dunn

The session will present the highlights from the forthcoming EDC Advanced Payments Report and will discuss the current trends, perspectives and industry insights derived from discussions with industry leaders and the annual EDC stakeholder survey. The session will also present regional forecasts for Mobile Money on a global and regional basis.

Western Union

Khalid Fellahi, SVP Africa, Western Union; Mike Rodin, Associate General Counsel, Western Union

Gold and Gold Rushes: Digging for Riches in MMT A Prospector's Perspective

Gregg Marshall, SVP, UTIBA

- Gold Rush Dynamics -- learning from history
- Gold Rush Goals how they apply to MMT
- Mining for Gold MMT field challenges in 2009

11:00 REGULATORY TRACK

Panel: Current and Future Requirements for Mobile Money Regulation

Panellists: Stephen Mwaura, Central Bank, Kenya; James Olekah, Director, Banking Operations Department, Central Bank of Nigeria; Kim Vada, Deputy Director General, National Bank of Cambodia; Carlo Corazza, Payment Systems Development Group, The World Bank

A panel of regulators will discuss their views of the current and future requirements of mobile money regulation. Questions to be discussed include:

- Brand and distribution are seen to be the key assets required to deliver mobile money services. How does regulation for retail distribution as cash in and cash out infrastructures enable mobile money?
- Financial services regulation for non-banks is alive in some markets and has been blocked in others. What are the reasons for this difference in regulatory opinion? Which approach provides both access and consumer protection?
- Innovation and trial in regulation over the past year has there been any movement?
- What are the next immediate actions in solving the regulatory barriers to mobile money?

Leveraging Celcom

Malaysia's Mobile Money Services for a Groupwide Rollout Presenters:

Kevin Henry, Vice President – Business Innovation Division, Celcom (Malaysia) Berhad

Eckhard Ortwein, Area VP mCommerce, Sybase 365 Celcom Malaysia

Berhad, Malaysia's premier mobile network, launched a standardized USSD-based mCommerce platform for national mobile money services and mobile money transfers into Indonesia and the Philippines. Celcom leverages its groupwide agent infrastructure for cash-in and cash-out processes and reveals the value of executing on a groupwide strategy.

MOBILE MONEY TRANSFER TRACK

Enabling Mobile Money Interworking - Domestically and Across Borders

Frédéric Schepens, EVP Strategic Business Development, Belgacom ICS

The mobile money transfer market is in need of catalysts that facilitate the domestic wallet deployment and/or provide a solution for international transfers, which, in most receiving markets, is a "killer application" in mobile financial services. Once the market has reached a certain maturity, the hub will undoubtedly be the model that makes most sense for international mobile remittances. In the meantime, a solution that combines a hosted wallet, a remittance hub, service deployment expertise and, where possible, an e-money license, can be a powerful accelerator. All this should of course be tailored to the specific needs of each region.

Enhancing The MMT Experience: A Standard Architecture For Industry Collaboration

Steve Granek, VP Marketing and Product Management, Neustar (GSMA Pathfinder)

The mobilization of financial services presents unique opportunities for collaboration between the mobile industry and the financial sector to the benefit of both. How will remittance providers find recipients served by mobile operators worldwide? How can the parties ensure the best user experience across these two industries? Mobile operators have unique attributes that contribute to the full value chain by improving the flow of funds in many ways. The GSMA PathFinder Service provides the foundation for a standard scalable architecture to support this multilateral business collaboration addressing privacy, security, global reach, time to market, and the interests of all parties.











WEDNESDAY, 24 JUNE 2009 CONTINUED

FINANCIALLY CONNECTING THE WORLD THROUGH MOBILE

Cross-border funds transfer and regional remittence

George Held, Group Marketing Director, Products and Innovation, Zain

A presentation and discussion around the regulatory environment, integration challenges, Service levels, reconciliation treatment and Hub approach to MMT

Mobile Money for the Unbanked: Programme Update Seema Desai, MMU Programme Manager, GSMA An update on the MMU grant programme

14:00 Retail Applications and Mobility

Presenter: **Eric Duprat**, General Manager, PayPal Mobile A look at the evolution of the handset and how it is becoming the payments platform of the future. This presentation will address some key questions including: What are the challenges that providers in developed markets have? What is holding back adoption? Where will the market be in 12-18 months?

14:25 Customer Usage Patterns and Adoption Curves for Bank-led Deployments

Presenter: Len Pienaar, CEO, Mobile and Transact Solutions A look at the key statistics underpinning a successful mobile banking service and the factors in play in driving usage.

14:50 Catalyzing Mobile Payments Worldwide

Presenter: Carol Realini, Global CEO, Obopay
As consumers around the world continue to discover the potential benefits of mobile payments, industry players must take a global approach to infrastructure development and service implementation. Players in the mobile payments industry are in a unique position to benefit from a global approach to industry developments; financial services, wireless and service providers need to partner and build a sustainable ecosystem that will propel the industry at a global level by building a sustainable common platform that addresses the needs of today's consumers.

15:40 Creating Sophistication in Mobile Money

Panelist: Roberto Rittes, Director, Oi Paggo

16:00 Panel: Addressing the Challenges and Realising the Potential of Mobile Banking in Developed Markets

Panelists: Eric Duprat, General Manager, PayPal Mobile Alastair Lukies, CEO and co-founder, Monitise Carol Realini, Global CEO, Obopay

Len Pienaar, CEO, Mobile and Transact Solutions

Key questions to be addressed include: What are the challenges currently being felt in developed markets? What can developed markets learn from service launches in emerging regions? What are the key trends? How are the players across the whole value chain working together to drive successful services?

16:45 Future Strategies, Commitments and Projections for Mobile Money

Gavin Krugel, Director, GSMA

Kent Lupberger, Senior Manager, Portfolio and Technology – Global Information and Communication Technologies, International Finance Corporation, World Bank Group

Mohsen Khalil, Director of the Global Information and Communication Technologies, The World Bank

Stephen Rasmussen, Manager, Technology Program, CGAP Anuradha Bajaj, Adviser, Financial Sector Team, DFID What the key players have planned and are committed to do, and a look at the projections for the mobile money market over the

17:15 Closing

next year.











THE CSR INITIATIVE, HARVARD KENNEDY SCHOOL

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The **GSMA** is the global trade association representing more than 700 GSM mobile operator Members across 218 countries and territories of the world. In addition. more than 200 Associate Members (manufacturers and suppliers) support the Association's initiatives as key partners. Encompassing commercial, public policy and technical initiatives, the GSMA focuses on ensuring mobile services work globally, thereby enhancing their value to individual users and national economies while creating new business opportunities for operators and their supplier partners. The Association's members now serve more than 3 billion customers - 85% of the world's mobile phone users.

www.gsmworld.com



research center 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. CGAP's Technology Program aims to improve the lives of millions of poor people. We do this by helping financial institutions and others to expand access to financial services through the innovative application of technology. The program is co-funded by the Bill & Melinda Gates Foundation. To read the program's mobile banking blog, visit http://technology.cgap.org.

CGAP CGAP is an independent policy and



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