



Mobile money: Getting to scale in emerging markets

**Beth Cobert,
Brigit Helms,
and Doug Parker**

More than a billion people in emerging and developing markets have cell phones but no bank accounts. Many low-income people store and transfer money using informal networks, but these have high transaction costs and are prone to theft. Mobile money is beginning to fill this gap by offering financial services over mobile phones, from simple person-to-person transfers to more complex banking services. To date, there have been more than 100 mobile-money deployments in emerging markets; at least 84 of them originated in the past three years.¹

Only a handful of these deployments have reached a sustainable scale; some notable examples

include M-Pesa in Kenya, MTN Uganda, Vodacom Tanzania, FNB in South Africa, and GCASH and Smart Money in the Philippines. Even these players have not gained much traction for financial services beyond simple transfers and payments. We sought to find out what drives on-the-ground success and to develop a preliminary set of prioritized, actionable recommendations. We interviewed and conducted workshops with more than 40 leading mobile-money providers (primarily mobile-network operators and banks) and industry experts, which we supplemented with a survey of about a dozen providers. Among the experts we consulted was Michael Joseph, the former CEO

¹These statistics were compiled in July 2011, when we conducted our research, from the “Mobile Money Live” site, maintained by the Group Spéciale Mobile Association’s Mobile Money for the Unbanked program. The site tracks the progress of the mobile-money industry; for more information and the latest statistics, see wirelessintelligence.com/mobile-money/unbanked.

of Safaricom in Kenya and “father” of the M-Pesa money-transfer service, which has inspired many recent deployments around the world (see “Getting people to send money home: Six questions for Michael Joseph,” on page 7). We have also begun compiling a benchmarking database that includes performance data for about 20 percent of existing deployments (see “Some preliminary mobile-money benchmarks,” on page 11).

Our research revealed the three most critical success factors to implement after a provider has launched its deployment and starts to face execution problems: (1) pay close attention to managing the agent network; (2) create a compelling product offering; and (3) maintain corporate commitment (Exhibit 1). As the exhibit shows, we identified four additional success factors, but they are more important when deciding whether to enter a market and design a new deployment than they are during the immediate postlaunch phase.² We are now in the process of testing these recommendations with providers. We hope to spur both debate and, more important, real breakthroughs in achieving success at scale in mobile money.

Managing the agent network

Our findings suggest that managing the agent network is the most critical postlaunch success factor. Agents conduct the cash-in and cash-out functions, enabling customers to convert cash into electronic money and back again in convenient locations; in the eyes of the customer, the agent is the face of the company. This means the agent can either build or destroy trust and credibility.

Many providers focus on building their agent networks as fast as possible, without careful

attention to the agents’ business case and profitability. According to our research, this is a mistake. We propose three key tenets in managing an agent network: (1) grow the customer base and the network in tandem; (2) understand agent economics and risk—the business case for agents is not that simple; and (3) only enroll agents who have the right skills and dedication, and be prepared to train and retrain.

Grow the network with the customer base

Getting the agent network rollout right is one of the most complicated aspects of launching mobile money. If a provider enlists too few agents, customers perceive the system as difficult to use, or even useless. On the other hand, if there are too many agents, many of them cannot generate enough business to cover the cost of managing liquidity. As a result, they stop maintaining their electronic money float and cash balances. This is bad for the agents and damages the system’s credibility with customers. It is best not to let such an imbalance continue. For example, when one African provider realized that it had too many agents relative to transaction volume, it cut its agent base in half.

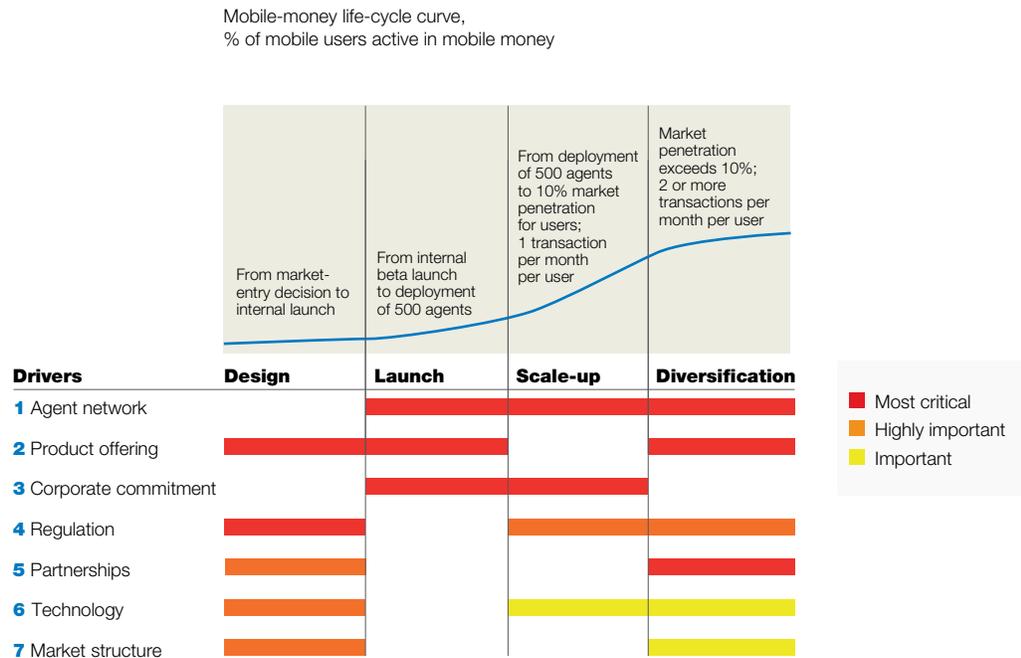
To ensure ease of use for customers and the appropriate level of business for agents, a provider must take a considered approach to network growth. As an example, one of the keys to Safaricom’s continued success has been its decision to match network growth to customer-base growth, ensuring a steady 1,000 transactions per agent per month (Exhibit 2).

The practical implication is that the agent network can start out smaller than commonly expected. The initial network will likely number in the hundreds, not thousands, and it does not

²The four success factors are: (1) comply with existing regulations while seeking more legislative support for mobile money; (2) where partnerships are required due to regulatory or practical concerns, be clear about goals, responsibilities, customer ownership, and brand ownership; (3) choose a technology platform to adopt based on future needs (that is, when scale has been achieved), not current needs; and (4) do not assume that initial low market share is an insurmountable barrier to success—this will slow things down, though, so the provider must be prepared to overinvest in the launch.

Exhibit 1

Seven success factors make mobile money work.



Source: Expert interviews; McKinsey analysis

have to cover the entire country. Safaricom launched M-Pesa with just 400 agents in a country of almost 37 million people. For larger countries, some experts urge a regional launch, accompanied by later rollouts.

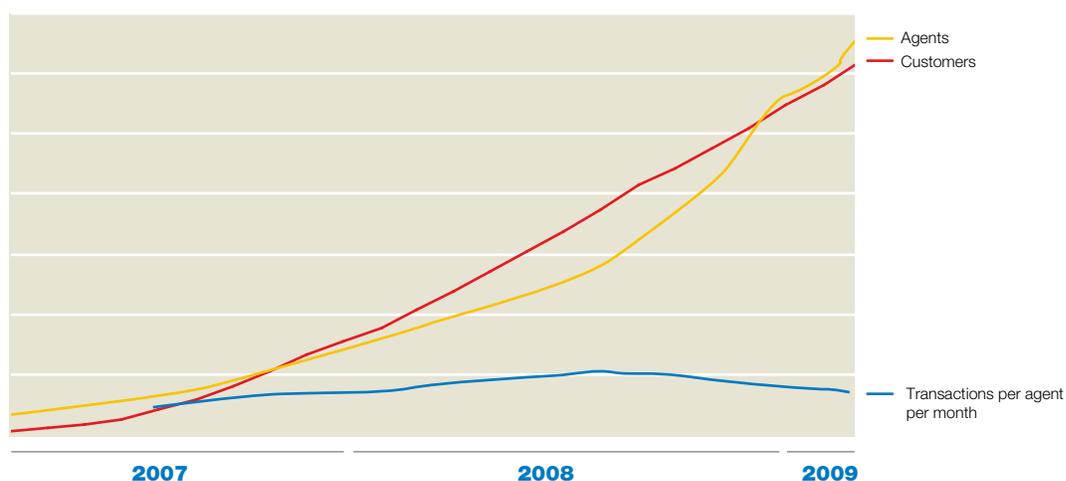
Develop a deep understanding of the agent business case

This advice may sound simple, but many providers have failed to ensure that their agents have a manageable path to profitability. Experts note that it takes a year or more for agents to see profits from mobile money. The Gates Foundation maintains that agents must process around 30 to 50 transactions per day for their business to be

viable. Understanding the business case for agents means analyzing their day-to-day operations and developing solutions to their biggest pain points, as well as understanding the trade-offs they face.

For example, managing liquidity is the largest cost for agents, representing one-third of their total costs. In this context, there are two sides to liquidity: managing physical cash on hand and managing the amount of e-money the agent has bought as “e-float.” Agents must invest significant amounts of money up front in e-float and other costs, which in many countries can be as much as three times per capita GDP. In the early days of a deployment, there are too few transactions to

Exhibit 2

M-Pesa's customer-base growth drove agent-network growth.

M-Pesa manages its agent network to match trends in the growth of its customer base, ensuring a steady stream of around 1,000 transactions per agent per month.

Source: Consultative Group to Assist the Poor; expert interviews

offset these costs. Even when transaction volume increases, agents often see their revenue only once a month, when commissions are paid. Another cost of liquidity management is the risk of robbery for agents holding large amounts of cash for payouts, which has been a problem for some Brazilian banking correspondents.

Liquidity is also an agent's most vexing logistical challenge. Most agents struggle to maintain enough cash or e-money to meet customer demand on peak days, like government paydays. And even on normal days, most M-Pesa agents must typically plan to send someone to the nearest "superagent" (that is, an intermediary agent—larger than others in the network—that

helps the provider manage parts of the network and ensures that smaller agents can conveniently manage liquidity) or bank branch to rebalance cash and e-money.

Some of these timing issues have relatively simple solutions. For example, paying agents to sign up customers can help the agent earn some income before transaction volumes really kick in. However, to ensure this does not become an incentive to sign up a large number of dormant customers, these commissions should be staggered, with parts becoming due, for example, at initial registration, first deposit, first financial transaction, and continued use. Providers should also consider up-front loans to high-potential

agents. The key is to understand the full business case and design incentives, loans, and other financial aspects of the relationship appropriately.

Invest in maintaining agent quality

Agent quality is critical for maintaining customers' faith in the system. The best agents maintain liquidity consistently, market mobile money effectively, educate customers in mobile-money use, and remember their training instructions. Such agents are an essential asset in mobile money, but acquiring them requires careful recruitment, training, and monitoring, with a particular emphasis on protecting customers from fraud.

Mobile-network operators (MNOs) interested in launching mobile money have often tried to convert their prepaid airtime distribution network to a mobile-money network, but this strategy has not always worked. Airtime dealers are rightfully wary of cannibalization of their business by mobile money—once users adopt mobile money, what is to stop them from buying airtime over their handsets? This could kill the agents' airtime sales. This discrepancy in incentives between airtime sales and mobile money has been a major barrier to mobile-money growth for an MNO in Southeast Asia.

And the switch to becoming a mobile-money agent does not initially appear lucrative, since commissions on mobile money are typically lower than commissions on airtime. Therefore, providers seeking to build a network may need to be choosy with respect to existing airtime sellers—recruiting only high-potential early adopters—and then branch out to different sources of high-quality talent, such as retail chains, or aggregators, such as superagents.

In addition to recruiting effectively, providers must offer agents ongoing training services, especially at launch and when introducing new features. Because airtime dealers have high employee turnover, retraining agents by visiting each shop up to twice a year may be necessary. Safaricom has outsourced this successfully to the independent contractor Top Image. Other providers, including EKO in India, have managed training well in-house, choosing to outsource only the more day-to-day functions of agent management (liquidity balancing, for example).³ Consistency, continuous follow-up, and in-shop training are all important. Experts told us that agents prefer not to send their employees off-site for training and that employees who receive off-site training typically do not retain what they have learned as well as those trained on-site.

Monitoring agents for fraud is also critical. Many customers do not understand how to use the technology and will hand their phones to agents to perform the tasks involved in a transaction for them. Dishonest agents can easily send customers' money to themselves or to friends. Safaricom took a strong stand on this kind of behavior, firing 80 of its first 200 or so agents and taking away their airtime business. This sent a clear signal that Safaricom would not tolerate theft, which the company wisely coupled with generous customer compensation for all fraudulent transactions.

Creating a compelling product offering

Most experts consider a product (or suite of products) that generates two to two and a half transactions per month per customer to be a commercial success. So, which products are most likely to achieve this level of transaction volume?

³Mark Fleming, Claudia McKay, and Mark Pickens, *Agent Management Toolkit: Building a Viable Network of Branchless Banking Agents*, Consultative Group to Assist the Poor and The World Bank, 2011.



Recent mobile-money deployments have generally taken one of two approaches to product design. The first has been simply to copy M-Pesa's successful product in Kenya, focusing on person-to-person (P2P) transfers and echoing M-Pesa's value proposition: "Send money home." The second has been to launch a complete financial-product line with the hope that one of the products or the package as a whole will generate enough demand to achieve sustainability. Neither of these strategies has met with great success.

A more promising approach would be to focus first on identifying a "killer app" that would drive a high volume of transactions onto the platform, and then promoting this product through both above-the-line (ATL) marketing (which includes mass-market advertising channels such as television, radio,

newspapers, magazines, and outdoor advertising) and below-the-line (BTL) marketing (which includes nonmedia marketing techniques such as direct mail or face-to-face sales). We believe that the most successful deployments will expand into other products only when a killer app gains traction.

Choose a narrow killer-app product to go to market

The first step in designing a killer app is to conduct a detailed customer-needs assessment that maps the current behavior and pain points of the provider's most important customer segments, and then implement a service to address the needs identified. M-Pesa did this effectively when it offered Kenyans something that addressed a real pain point: a simple, safe, low-cost way to

(continued on page 10)

Interview by
Brigit Helms

Getting people to send money home: Six questions for Michael Joseph

The force behind M-Pesa explains some of the keys to launching a mobile-money deployment.

“The need was just obvious to us; appreciating the human dimension of your customers and agents is so crucial to success in mobile money.”

So says Michael Joseph, who is called the “father” of M-Pesa (the successful mobile-money venture that has operated in Kenya since 2007) due to his critical role in the service’s launch and success. It is no exaggeration to call M-Pesa a phenomenon. According to the International Monetary Fund’s October 2011 regional economic outlook for sub-Saharan Africa, “M-Pesa now processes more transactions domestically within Kenya than Western Union does globally and provides mobile-banking facilities to more than 70 percent of the country’s adult population.” With more than 14 million customers and roughly 28,000 agents, the service has inspired over 108 telecom companies and banks to launch mobile-money deployments in emerging markets. (For more on M-Pesa’s history and the outlook for mobile money in other markets, see “Mobile money: A game changer for financial inclusion,” on McKinsey’s *What Matters* site.¹)

Joseph was CEO of Safaricom when the telco launched M-Pesa, and he says customers’ enthusiasm for M-Pesa exceeded everyone’s expectations, including his own. To date, no deployment has truly matched the rapid adoption or the solid revenue generation of M-Pesa. Joseph recently spoke with McKinsey’s Brigit Helms about some of M-Pesa’s early moves and a few of the barriers on its road to success.

McKinsey on Society: Why is mobile money important to low-income and unbanked customers?

Michael Joseph: Mobile money allows people access to financial services for very small transactions. No formal

financial institution could afford or want to offer any financial services for such small amounts. You can use the system to send small amounts of money to others, whether it’s to pay for goods and services such as a small bag of sugar, to buy airtime, or to save. You don’t need a formal address or to go hundreds of kilometers to visit a bricks-and-mortar bank.

McKinsey on Society: What are the most critical issues when launching a mobile-money deployment?

Michael Joseph: The most important issue in the launch phase is getting your main message right. First, you have to have the right thing you’re trying to say, the right product to offer people. It can’t be a generic product that tries to be all things to all people all the time. You have to understand: what is the particular need in the country where you are? We tried a few different options in the early days, notably a payments solution for a Kenyan microfinance institution. In the end we landed on “Send money home.” The second piece is communicating in the right way, in a way that reaches people. You have to reach out both above and below the line. It’s not enough to just blast a TV campaign. Your marketing message must be simple and focused and resonate with the end customer. Another issue critical to a successful launch and operation is getting the number and geographical spread of the agent network right. You need agents on literally every corner in every village. This will help ensure the trust and acceptability of the system. If people know that when someone sends them money they can withdraw it “just around the corner,” then people start to believe in the system.

¹Wolfgang Fessler, Michael Joseph, and Philana Mugenyi, “Mobile Money: A game changer for financial inclusion,” *whatmatters.mckinseydigital.com*, November 2011.

McKinsey on Society: What about agents? What's important to get right in managing the agent network?

Michael Joseph: Managing the agent network right is absolutely critical to success. It has a huge impact on your margins, in particular. Other deployments don't see the gross margins M-Pesa sees, and I believe at least some of the time it's because they have let agents get away with fraud—making transactions on behalf of customers without their knowledge just to collect commissions. If you let your agents abuse the system and get away with it, it's very difficult to fix the problem later on. It's so important to manage your agent network rigorously.

And that includes managing the speed of agent-network growth. Yes, you need a critical mass of agents, but your agents need to be successful, so they're encouraged to do business. Keep track of your agents' average revenue per day.

When we started M-Pesa, none of our airtime dealers wanted to be agents. They saw it as diversionary, so we had to go and get our own agents—personally, not recruiting through newspapers. We talked to mom-and-pop stores and informal stores, and I think that was great for us. For these people, M-Pesa was a great way to substantially increase revenue earnings. Many of those mom-and-pop stores are still our key dealers and are making a reasonable living.

McKinsey on Society: Once M-Pesa was launched and you were trying to grow the deployment to scale, what were the major barriers to growth?

Michael Joseph: It would have been ideal if we could have known from the beginning how many transactions we could expect. This was impossible in our case, but it would have helped in choosing the technology platform. It's so important to predict the volume of transactions your platform will need to handle once the deployment reaches scale, because it's very difficult to upgrade your platform live.

After that, our biggest challenge was education, both of agents and of customers. We had to help these shopkeepers and airtime retailers understand what it takes to be a proper agent and instill in them the importance of maintaining float. And customers, too—at first, customers made so many mistakes. When people would remember phone numbers incorrectly or just get the digits mixed up, they would send money to the wrong person. This lack of understanding of the system early on also led to problems with fraud. New customers didn't really feel comfortable using M-Pesa, so they would literally hand their phones to the agent to perform the transaction for them. Then the agent could easily send the money to himself or a friend.

Understandably, then, our next biggest issue was customer service. Our back office was never designed for the numbers of customers we had or the volumes of transactions we were seeing. It's best to design the entire system from the beginning with growth in mind.

McKinsey on Society: Other deployments have struggled at times to win customers' trust. What do you think made customers feel comfortable trusting M-Pesa, especially in the early days?

Michael Joseph: We were very fortunate to have a strong brand name that people not only already recognized but trusted. Safaricom was regarded as a Kenyan company, so Kenyans knew and trusted it.

In the early days of M-Pesa, a woman did her PhD research on the deployment's growth; it's really an interesting document. She found that people accepted and trusted M-Pesa because it was run by Safaricom, because we were such a strong brand and were everywhere in Kenya and involved in local communities. I can see how winning customer trust would be a real challenge for a newer company.

Other deployments in Kenya have failed to understand the seriousness of mobile-money transactions. These people

are giving all their money to you. They are used to moving physical cash around on buses and walking with it. When a customer walks into a mobile-money agent's shop, it can't be a run-down place. Mobile-money outposts have to be branded correctly; they have to look like places where people would want to hand over their hard-earned money. You can't ever forget that you are asking people to put what little they have into the hands of an agent. You're asking them to trust that their money really goes into a phone and comes out on the other end.

McKinsey on Society: What has been your experience expanding beyond Kenya?

Michael Joseph: Taking the system outside Kenya has been challenging, but slowly people are getting the message. To be successful you need to invest in the agent network, in education, and in communication. And you need to have a real passion for the service. Without this, you will not be successful. If you initially look at it from a financial perspective, you will fail.

Michael Joseph



Vital statistics

Born January 3, 1946, in Johannesburg, South Africa

Married, with 3 children

Education

Studied electrical engineering at the University of Cape Town, graduated in 1971

Career highlights

Vodafone Group Services Limited

(November 2011–present)
Director of mobile money (including M-Pesa)

World Bank Fellow

(March 2011–present)
Adviser to governments, regulators, and other institutions on mobile money and other initiatives related to information and communications technologies

Vodacom Group (Proprietary) Limited (2009–present)

Nonexecutive member of board of directors for Vodacom Group, Vodacom Mozambique, Vodacom Tanzania, and Safaricom Limited

Safaricom Limited (2000–10)

Chief executive officer

Fast facts

Awarded CEO of the year by the Kenya Institute of Management in 2004

Received individual recognition for most outstanding contribution to mobile money through M-Pesa at the Mobile Money Transfer Awards in October 2010 in Dubai

Awarded an honorary Doctor of Letters degree by Africa Nazarene University, in recognition of his contribution to the growth of Safaricom

Member of the Institute of Electrical and Electronics Engineers

Member of the Institute of Electronic Engineers (United Kingdom)

Experience implementing and operating large telecom networks in Argentina, Australia, Brazil, Greece, Hungary, the Middle East, Peru, Spain, South Korea, and the United States

transfer money. In other countries, customers may have a completely different pain point. “Send money home” is not a magic formula that will resonate universally. Some providers have instead focused on utilities payments for their core urban-based customers, as alternatives pose significant cost and time challenges. Other possible killer apps could be point-of-sale payments, business-to-business transfers, mobile bill pay, mobile payroll, international remittances, agricultural insurance, savings, or microloans.

Promote the killer app through significant and ongoing marketing

Experts frequently cite poor marketing as one of the key barriers to adoption. Our research validates this observation. For example, a customer-acquisition funnel for the Philippines reveals ample room for improvement at each stage of the funnel. Our research also suggests that the most successful mobile-money providers

have combined both ATL and BTL marketing to drive registration and transactions.

For mobile money to gain traction, people must be aware of the deployment and its value proposition (Exhibit 3). ATL marketing that utilizes a variety of channels can quickly and effectively increase widespread general awareness. ATL marketing messages, however, must be careful to balance aspirational messages that depict higher-income people with the sense that the product is for “average people.”

One expert told us that simply removing the gold jewelry from the models in marketing images had a major, positive impact on customer acquisition. When the provider used models wearing gold jewelry, most people assumed that mobile money wasn’t for “people like them.”

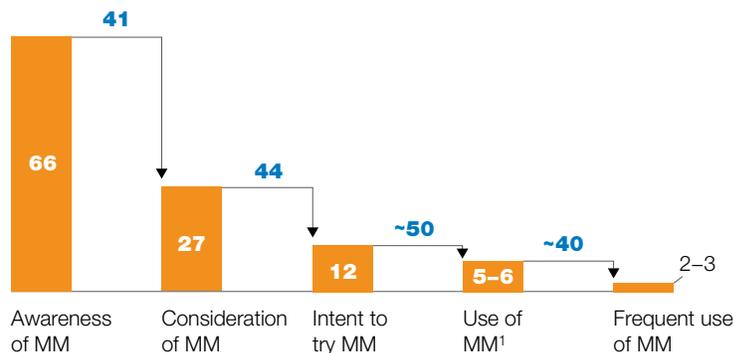
BTL, face-to-face interaction is critical to drive trust. Potential customers must receive quite a bit

Exhibit 3

Considerable marketing efforts are needed to build a base of frequent users.

Comparison of mobile-money (MM) awareness and perception,
n = 184, % non-MM users responding positively

Conversion ratio



¹Estimated conversion rate based on rule-of-thumb discount for true conversion rate and mobile-network-operator case studies from the Philippines.

Source: Feb–Mar 2009 McKinsey survey of unbanked consumers in the Philippines

Some preliminary mobile-money benchmarks

Although there are relatively few success stories in mobile money to date, there is an emerging consensus among experts about some of the critical metrics for a successful business model. Four of the key indicators are the percentage of active mobile-money users in the telco's subscriber base (more relevant for a telco but could be adapted for use by banks in the future), the number of customers each mobile-money agent serves, the average number of transactions each agent conducts each day, and the average number of transactions each customer

conducts per month. The table below offers some numbers in support of these still-nascent benchmarks that signal a mobile-money deployment has successfully scaled up and passed the tipping point.

Providers can track their own progress by comparing their numbers with these preliminary benchmarks. As the mobile-money landscape continues to evolve, more robust performance benchmarks will emerge.

Indicator	Success is
% of active mobile-money users among total telco subscriber base	>10%
Number of customers per agent (across growth trajectory)	400–600
Average number of transactions per agent/day	30–50
Average number of transactions per customer/month	>2.5

Source: Expert interviews

of education about how the new service works and what it could mean for them before they will trust the system. Individual agents and marketing representatives will be most effective in building this customer trust, especially early in the deployment. Experts estimate that most customers need 10 to 15 minutes of face time with an agent or other mobile-money representative in order to feel comfortable using the product.

All marketing activities should drive customer adoption and usage. A common mistake is to focus marketing efforts on customer acquisition at the expense of use. Messaging should

communicate the benefit of frequent use and educate customers about the variety of situations in which using mobile money could benefit them.

Our research suggests that companies may need to revise their expectations regarding the level of marketing investment needed. For example, once Vodacom refined its marketing campaign in Tanzania so that it would resonate with customers, the company wound up spending about twice the amount per customer that its affiliate Safaricom had spent in Kenya—primarily because there were fewer potential customers in Tanzania and they were harder to reach.

Wait to achieve minimum scale with initial product before diversifying

After attracting a loyal customer base, the most successful mobile-money deployments will diversify the product offering to attract new customers and/or increase the transaction volume per customer. When M-Pesa started to catch on in Kenya, grocers and other merchants began accepting M-Pesa payments. In 2010, Safaricom began offering crop-insurance products to M-Pesa users. A similar path of diversification will likely characterize other successful deployments, as diversification both draws new customers and allows deployments to capture more of the spend of existing customers. Diversifying too quickly or starting with a diverse platform of products can confuse customers and dilute messaging.

Set yourself up for future success

Early in the deployment, the provider should have a vision of what it hopes to be known for.

This vision should drive the ultimate suite of products the provider will offer (Exhibit 4). For instance, will this eventually be a banking platform, or will it be a trading and payments platform? Based on successful models, it is clear that becoming a payments platform is a promising strategy in many cases. The sheer number of transactions in the business-to-business or government-to-people spaces that still occur in cash indicate that some effective business models have yet to be built. For instance, in a recent payments map of India, we estimated a total current volume of \$9 billion in person-to-person transactions versus \$6.8 trillion in business-to-business transactions.

Sustaining a strong corporate commitment

Our research suggests that even successful deployments require three to five years to reach profitability, which can strain corporate commitment. An enthusiastic, committed

Exhibit 4

A company's aspirations should drive its product offerings.

Example 1

Bank for the unbanked

Vision: Become the least expensive provider for the full range of bottom-of-the-pyramid customers' financial-services needs

Potential products:

- Bill pay
- Payroll direct deposit
- Domestic and international remittances
- Savings
- Credit
- Life insurance
- E-wallet ("me-to-me" current account)
- Welfare and social-security payouts
- Pensions

Example 2

Trading and payments platform

Vision: Become a comprehensive platform for applications and payments, offering an alternative to credit card platforms

Potential products:

- Bill pay (eg, utilities)
- Point-of-sale payments
- Payment facility for informal trade (eg, consumer to kiosk owner)
- Lease-to-own payments (eg, solar panels, scooter)
- Real-time weather applications
- Agricultural insurance
- Commodities-markets updates

Source: Expert interviews; McKinsey analysis

corporate culture that is willing to make significant up-front investments and patiently wait for impact at scale is crucial to mobile-money success.

Mobile money has great potential to be profitable for MNOs in the long term because of the combination of direct fee revenues and indirect benefits (churn reduction and lower airtime-sales-channel costs being the most significant). Our conservative estimates indicate that both MNOs and banks can generate significantly more profits once mobile money reaches scale. From what we have seen so far, though, mobile money tends to become profitable only after it begins to “go viral” and enjoy the benefits of network effects. Because new technologies and people’s money are involved, it takes time for people to become comfortable and trust the system. Therefore, strong corporate commitment and faith in mobile money’s future profitability is crucial for success in the launch and scale-up phases.

Companies often have to commit more funds than expected to reach scale. Most successful mobile-money launches have had the backing of millions of dollars. Safaricom poured over \$30 million into M-Pesa. Other successful deployments received similar levels of investment: Vodacom spent \$25 million, and MTN Uganda put up \$10 million in initial

investment. Numerous other deployments in the last few years have attempted to get off the ground with less than \$1 million, only to find themselves unable to gain traction. Mobile banking is not simple; it requires a thorough, careful understanding of customers and agents, and a willingness to invest in the buy-in of both these groups. If companies are not willing to invest and stay committed, the deployments will not reach scale.



The potential for mobile money remains promising, and the next generation of success stories will help shape the innovations that enable hundreds of millions of the world’s citizens to participate more effectively in the global economy. The biggest barriers to mobile money’s success arise from common misperceptions or mistakes in execution. Providers could vastly improve upon the low success rates of mobile-money deployments to date by better understanding their customers and agents and investing more confidently and patiently in mobile money. ○

This article was originally published by *McKinsey on Society* in February 2012.