Mobile Money for the Unbanked

Annual Report 2011

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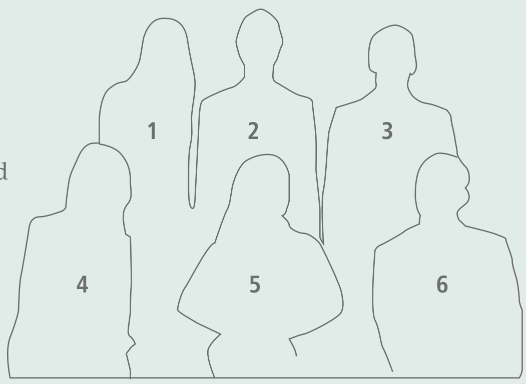

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https://www.mmublog.org

Introduction

One year on,the Mobile Money industry has doubled in size again

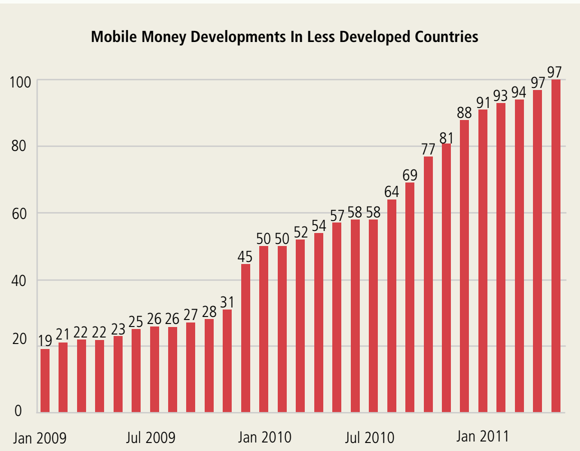
Author: Seema Desai

Over the last 12 months, the Mobile Money industry has doubled in size; and as the industry has grown, so has our understanding of what it takes to create a successful deployment. This report contains a selection of important best practices and insights that the MMU team have identified.

The Mobile Money industry has blossomed in the last year, doubling in size for the second year running, and, in May 2011, MMU celebrated the launch of the 100th live Mobile Money deployment in the world. With 88% of live Mobile Money deployments in developing markets, Mobile Money is now poised to become a powerful tool for financial inclusion; it has the ability to meet the needs of customers who previously could not access formal financial services and had to rely on less safe, less reliable and more costly alternatives.

Africa continues to be the heartland for Mobile Money and home to the industry's most successful Mobile Money service – inspiring operators, banks, governments and other industry players around the world with the socio-economic and commercial opportunities that Mobile Money services bring. It has nearly 50% of the world's deployments, and M-PESA, which generated more than 50% of Safaricom's non-voice revenue and is being used by over 70% of the adult population in Kenya, has become a key pillar of Safaricom's corporate strategy.[1]

Increasingly, as the industry's growth becomes a global phenomenon, the eye is being drawn away from Kenya and towards other markets. Last year, GSMA took its Mobile Money Summit to Rio de Janeiro, in order to engage with more Latin American operators around the opportunities that exist with Mobile Money. Today, 12% of existing deployments (and over a quarter of those that are planned) are in Latin America.[2] MMU has completed its first case study of a Latin American deployment; focusing on Tigo Paraguay, this study highlights some interesting nuances which we hope will generate further momentum for the growth of Mobile Money within this continent.



This year, the GSMA's Mobile Money Summit happens in Singapore – the premier international hub in South East Asia, a region that is home to the oldest Mobile Money deployment (SMART's Mobile Money service, SMART Money, was launched in 2003), as well as a number of newer roll-outs in countries such as Cambodia, Thailand, Indonesia and Vietnam.

As the industry has grown, so has our understanding of what it takes to create a successful deployment

Alongside this rapid growth, MMU has engaged with a number of Mobile Money providers across the globe in order to synthesise best practice, which we have shared through our Working Groups, our website, our publications, and, recently via webinars. MMU has fully allocated its 5m USD fund facility in sub-grants to 20 operators across Africa, Asia and Latin America, and these operators have been the source of many of the Programme's most penetrating insights.

One of the fundamental questions is whether there's any money in Mobile Money. Do genuinely sustainable deployments exist? The sheer number of live deployments is a testament to the industry's belief in the need for - and profitability of - Mobile Money services, however, a year ago, empirical evidence of the sustainability of these services was scarce. MMU has worked very closely with one of our grantees, MTN Uganda, to dive deeply into their financial model and assess the key costs and revenue drivers of the service. The results were positive and have provided financial benchmark data to the industry for the first time.

MMU strives to provide the industry with practical, actionable recommendations for how to create successful Mobile Money services. Complementing MMU's Agent Networks Handbook, which was published in last year's Annual Report, is a new guide to driving customer adoption of Mobile Money, which is contained in this Annual Report. Additionally, the research that we conducted into how banks and operators work together can be used world-wide to accelerate the development of effective relationships between these parties to successfully offer Mobile Money services.

1 FY 2011 Results Announcement, 18th May 2011

2 MMU deployment tracker for this data

Going forward, MMU remains committed to helping the industry succeed

The industry has grown quickly, and we have been building and curating a body of knowledge for the ecosystem to draw upon. Still, operators face a number of challenges. MMU will be focusing on the following areas to aid operators deployments:

- Regulatory barriers in some countries continue to inhibit the launch and scaling of Mobile Money. MMU will continue to build capacity with mobile network operators, so that they can better engage with their financial regulators and help sculpt regulatory environments that manage risks such as money laundering and terrorist financing while enabling financial inclusion.
- Maintaining active and ubiquitous agent networks remains a challenge for many Mobile Money deployments. MMU is working hands-on with operators to identify and solve problems in their distribution networks.
- Bringing a consumer from never having heard of Mobile Money to using the service regularly has proven to be a complex marketing challenge. MMU is supporting operators to develop marketing strategies that build awareness of what Mobile Money is, understanding of what Mobile Money is useful for, and knowledge of how it works
- In certain markets, the industry may need to test new models in order to exploit more effectively the economies of scale. The paper by Ignacio Mas from the Bill and Melinda Gates Foundation in this Report highlights why this is important and imagines what might be possible if operators were to pursue interconnectivity.

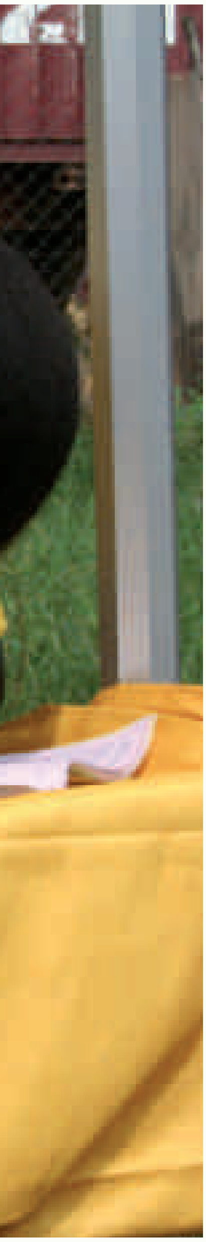
Although some best practices have been identified in Mobile Money, we have much yet to learn, and the industry needs to test the reliability of good practice across markets. While the MMU team will continue to identify and publish learnings, we have also begun to engage more deeply with deployments around the globe to diagnose key challenges, develop recommendations and support their successful implementation. We believe that doing so will help us to lock-on to crucial challenges more quickly and devise solutions for them that will then drive our agenda over the coming months, ultimately accelerating the deployment of services to more unbanked customers around the world.

Over two years, the industry has come a long way. We see more markets approaching the tipping point of achieving significant scale – such as Tanzania, Uganda and Pakistan – and an increasing number of deployments that are keen to learn from other markets and also share what they have learnt themselves. We are more aware of what the barriers are and how to go about breaking those barriers down. We'll continue to build on this strong foundation, to support the industry and unleash the full potential of Mobile Money.

Our thanks go to the Bill & Melinda Gates Foundation for their on-going support of MMU, our Working Group members and, in particular, our grantees, who have allowed us to work closely with them to develop many of the insights that we share in this report. Personally, my thanks go to the MMU team for the amount of effort that has gone not only into the preparation of this Annual report, but also for their hard work and commitment to making the MMU Programme, and ultimately the Mobile Money industry, realise its enormous potential.
MMU Director, GSMA Development Fund

Description of contents of the Annual Report 2011

Title	Description	Purpose
Is there really any money in Mobile Money?	Examines various aspects of the profitability of Mobile Money, based on the learnings from a deep-dive into the operational and financial results of MTN Uganda's Mobile Money.	To help the broader Mobile Money industry understand the topic of profitability by taking a closer look at MTN Uganda's numbers and addressing key questions relevant to Mobile Money practitioners.
Mapping and effectively structuring operator-bank relationships to offer Mobile Money for the Unbanked	In this piece, MMU shares valuable perspectives based on experiences from multiple countries on how the crucial relationship between mobile network operators and banks can work effectively.	To assist operators and banks that are planning and / or already working together to offer mobile financial services for the unbanked, providing ideas for how roles and relationship structures can be refined in order to promote cooperation.
Driving customer usage of Mobile Money for the Unbanked	This document highlights the key challenges that operators have faced when it comes to customer activation for Mobile Money and identifies marketing tactics that have been effective in overcoming them.	The help operators drive customer usage, by guiding customers on a journey from their first encounter with Mobile Money to habitual use of the Mobile Money platform.
Enabling different paths to development of Mobile Money ecosystems	Written by Ignacio Mas from the Bill and Melinda Gates Foundation. This article identifies different paths to building Mobile Money ecosystems and develops the commercial case for interconnection between schemes.	To help shape industry's thinking about the interoperability of Mobile Money services.
Mobile Money in Paraguay	This case study examines the key success factors of Tigo's Mobile Money product in Paraguay such as deep market knowledge, a successful distribution network and effective marketing tactics.	To provide lessons for Mobile Network Operators in Latin America readying for launches and help understand how this country emerged as a leader in Mobile Money and what lessons it offers for the region.



Chapter 1
Is there really any money in Mobile Money?

Author: Paul Leishman

From Afghanistan to Zambia, mobile network operators (MNOs) in developing countries are launching Mobile Money services at a rapid pace. Yet while their enthusiasm to enter this business is clear – to date 100 deployments have been launched and another 88 are being planned – their rationale for doing so is not. There's no doubt that Safaricom's runaway hit, M-PESA, is profitable. But Kenya represents somewhat of an anomaly – the perfect coalescence of latent demand, a dominant MNO and a progressive regulator. So the question remains for just about every MNO outside of Kenya: is there really any money in Mobile Money?

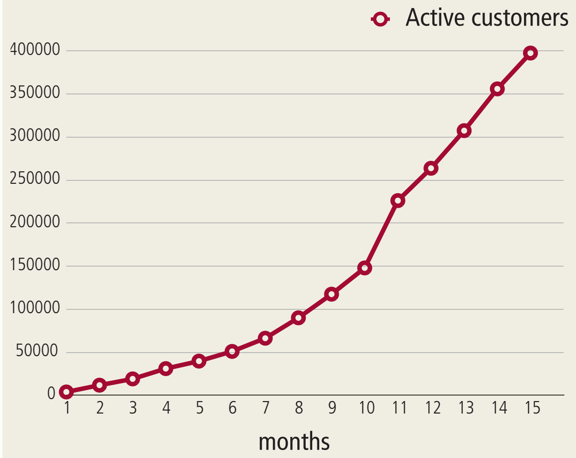
"MTN Uganda's Mobile Money is now cash- flow positive on a month-to-month basis – and they crossed this critical threshold just 14 months after launch."

To answer this question, GSMA has studied our portfolio of MMU fund grantees, which includes rapidly scaling deployments like easypaisa in Pakistan, M-PESA in Tanzania and Kenya, and True Money in Thailand; interviewed Mobile Money practitioners; and conducted a deep-dive into the operational and financial results of MTN Uganda's Mobile Money, a promising deployment from the East African country of 32 million where 80% of the population lacks access to financial services.

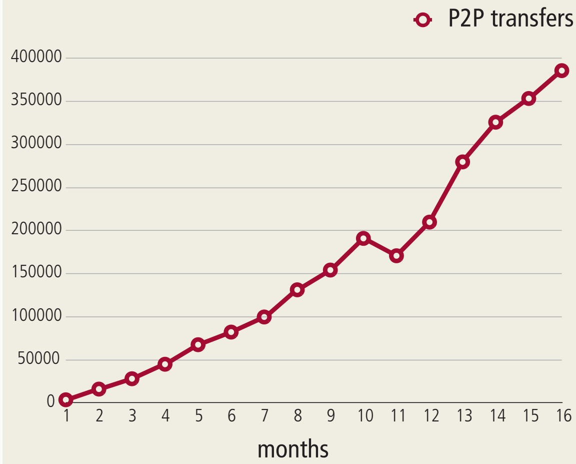
In an effort to provide a level of depth that's useful to Mobile Money practitioners, we'll focus primarily on MTN Uganda's Mobile Money, but will be sure to put their experience in a global context where relevant. So before we answer the provocative question posed in the title of this article, first a bit of background on MTN Uganda's Mobile Money.

Launched in partnership with Stanbic Bank in March 2009, the service enables customers to send and receive money domestically and buy airtime using their mobile phone; it's delivered via a network of 1,400 agents; and, most importantly, **it's growing rapidly, now counting 400,000 active customers, processing as many as 385,000 P2P transfers per month, and serving as the channel through which 3% of total airtime is sold per month.**[1]

Exhibit 1: Growth of active customers and transactions for MTN Uganda's Mobile Money



Active Customers, defined as any customer that has performed a cash-in, P2P transfer, cash-out, or airtime top-up within 90 days.



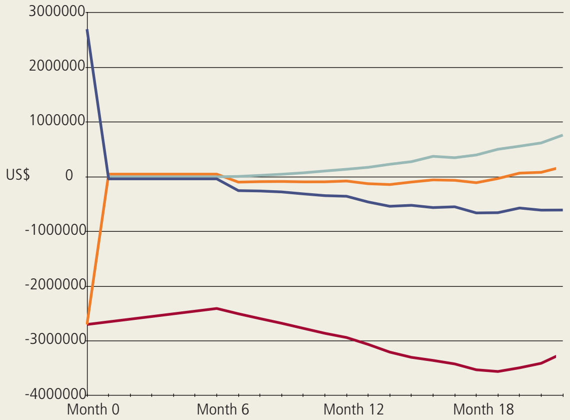
P2P transfers, defined as a transfer of money to a registered or unregistered customer.

While MTN does have a full roadmap of features planned, we've not made any projections in our study: every insight presented is based on actual data and has been analysed using our GSMA financial model.

1 For more information, refer to Exhibit 1

So, is there really any money in Mobile Money? In the case of MTN Uganda's Mobile Money, the answer is yes. **The service is now cash-flow positive on a month-to-month basis – and they crossed this critical threshold just 14 months after launch**. MTN's peak financing requirement, or the amount that they had to finance before Mobile Money became cash-flow positive, was less than US$4 million.

Exhibit 2: Financing requirement for MTN Uganda's Mobile Money



Monthly Revenue, including customer fees for money transfer service, savings from airtime distribution, income from reduced churn, and increased share of wallet from voice and SMS.

Monthly Cash Expenses, which includes agent commissions, customer acquisition costs, technology costs, SG&A costs, and up-front investment in technology (excludes non-cash items including depreciation of capital assets).

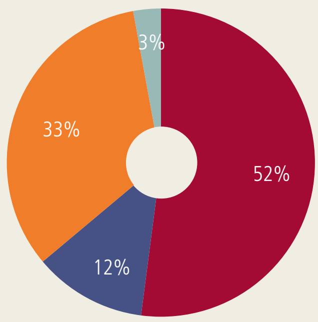
Monthly Net cash flow, equal to total monthly revenue less monthly cash expenses

Cumulative financing requirement, the rolling sum of monthly net cash-flow; the lowest point represents the peak financing requirement

Note: the timing of some costs incurred may have been altered slightly in a way that protects supplier confidentiality but does not affect the underlying story.

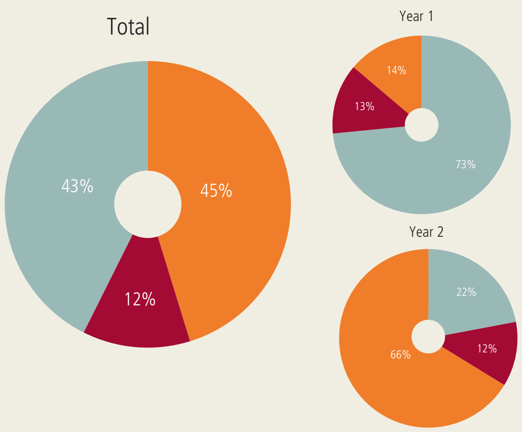
For MTN Uganda, these numbers are exciting. But what's interesting for Mobile Money practitioners everywhere is exactly how this service became cash-flow positive. **We found that indirect benefits unique to MNOs – including savings from airtime distribution, reduction in churn, and increased share of wallet for voice and SMS – combined to account for 48% of Mobile Money's gross profit to date**. We also found that 55% of the costs in the business to date are variable and step rather than fixed; in other words, **MTN's financing requirement has been (and increasingly will be over time) driven by their own customer growth**.

Exhibit 3: Gross profit contribution to date (MTN Mobile Money Uganda)



- Money Transfer Contribution
- Airtime Distribution Savings
- Retained ARPU from Churn Reduction
- Uplift in Voice/Data Consumption

Exhibit 4: Breakdown of total, Year-1, and Year-2 costs (MTN Mobile Money Uganda)



Fixed Costs, including marketing, field agency costs, SIM upgade fees for non-mobile money customers (assumption for amount attributable to MM), agent handset subsidies, fixed m-wallet provider fees) assumption for up-front investment), agent POS merchandising

Step Costs, including management staff and back-office staff

Variable Costs, agent commissions, SMS fees, SIM replacement, registration commissions, variable m-wallet provider fees, ARPU loss from discounting

How much must an MNO invest in Mobile Money before turning a profit?

"It's difficult to 'spend like Safaricom' unless customers are adopting and using the service"

The first chapter of this article introduced MTN Uganda's Mobile Money, a service that has turned an exciting corner into cash-flow positive territory. But the CFO of any mobile network operator (MNO) knows that simply getting out of the red on a month-to-month basis is not enough; his alternative investment options are usually very attractive, so he needs to know just how much is required to scale a Mobile Money service – and whether future income will justify the spend.

Unfortunately, **there's no generic amount that an MNO – in any market, operating with any business model – can assume they need to invest before turning a profit**. Until now, Safaricom's M-PESA has provided the industry's only reference point; and the best estimates reckon that Safaricom and Vodafone have spent to the tune of US$30 million scaling the service so far.[2] **Our team's recent analysis of MTN Uganda's Mobile Money indicates that they've spent somewhat less, roughly $10.5 million in total costs and investments to date, driving the service into cash-flow positive territory on a month-to- month basis**. It does merit note, however, that in its first 16 months M-PESA grew twice as fast as Mobile Money in terms of customer registration as a percent of mobile subscribers (roughly 31% vs. 17% by month 16).

Alas, in the absence of context, top-line investment figures like these are of limited applicability. For starters, Kenya's population is 36 million – so the country is a bad comparable for practitioners in Fiji (population 844,000), India (population 1,100,000,000), and most countries in between. Moreover, for better or worse, MNOs in other countries have not replicated the M-PESA model: in some cases they've promoted different services, and in others struck different bank partnerships – and each of these factors impacts profitability.

Finally, and perhaps most important, **a successful Mobile Money service's financing requirement will ultimately be driven by variable and step rather than fixed costs;** in other words, it's difficult to 'spend like Safaricom' unless customers are adopting and using the service.

So instead of asking "how much must I invest?", the more relevant question practitioners have begun asking is "what costs will drive my financing requirement?". To answer this question, let's again examine the case of MTN Uganda's Mobile Money. In Exhibit 4, we see that so far, 55% of Mobile Money's financing requirement stems from variable and step costs, and 45% from fixed costs – **thus, more than half of their financing requirement has come, in part, from customer adoption and use.**[3] We also see that in their first year of operation, they incur an initial flurry of fixed costs, including investment in the m-Wallet platform, upgrades to their SIM access gateway, spending on above-the-line marketing[4], and opting to embed their application on all new SIM cards. These fixed costs were not insignificant – yet as the service grew, they were quickly overtaken by variable costs, including customer registration commissions, agent commissions, and per-customer technology licensing fees. **In the second year of operations, variable and step costs like these account for fully 66% of the total costs in the business.**

It's clear, then, that the financing requirement for a successful Mobile Money service is driven largely by variable and step costs – but is all the spending even worthwhile? That is, can Mobile Money services generate a sufficient net present value (NPV)? For MTN Uganda's Mobile Money, the signs are promising: if we assume that the service continues to grow roughly at Uganda's rate of inflation and then include the terminal value in our calculation, the NPV for Mobile Money is positive. It's difficult to say exactly when the cumulative net cash-flow curve in Exhibit 2 will become positive, particularly since MTN is planning to launch additional services that will surely generate incremental revenue; still, simply based on the foundation they've laid with their domestic money transfer and mobile top-up offerings, it's only a matter of time before MTN recoups its investment.

2 Mas, Ignacio and Radcliffe, Daniel, Scaling Mobile Money (September 22, 2010)

3 And as the service grows, the model will be predicated even more on variable and step costs

4 MTN has spent a total of US$850,000 on above-the-line marketing; this amount is assumed to be slightly skewed to up-front spending.

How significant are airtime distribution savings to profitability?

One of the most important sources of value for mobile network operators (MNOs) who offer Mobile Money services is the ability to sell airtime using the platform. When a customer buys airtime using Mobile Money rather than with scratch cards, operators unlock value in two ways. **First, they pay lower commissions**: the commissions paid to agents for performing cash-in (a necessary step before buying airtime) are typically lower than the discounts at which MNOs sell airtime to the channel—although the degree of difference will vary by market. **Second, MNOs save on the manufacturing and storage of scratch cards**. Any savings realised in these ways flow straight to their pre-tax bottom line.

So how big a deal is this? We've found that for successful services, savings from airtime distribution can be a big deal indeed. **For MTN Uganda's Mobile Money, this value source has contributed a total of 12% of their gross profit to date**. Even though the service is less than a year and a half old, MTN has still managed to derive significant value from their mobile top-up feature: in their best month so far, roughly 3% of total airtime was sold through Mobile Money – at more than a 9% savings compared to airtime that would have otherwise been purchased via scratch cards.

Beyond Uganda, MNOs are collectively eyeing – or already capitalising on – mobile top-up as a means of reducing their cost of distributing airtime. **Safaricom has led the way, apparently selling 19% of its airtime on M-PESA**.[5] And in the context of total profitability for their service, this feat has been important: if we assume that Safaricom saves 8% in costs on airtime sold through M-PESA, and assume that in their last fiscal year, they sold about $800 million in prepaid airtime in total, this suggests that they'd have generated savings of $12.8 million (note that these figures are illustrative). By some estimates[6], that's more than a quarter of what M-PESA generated in profits on a standalone basis.

Outside of Africa, mobile top-up has been an equally important value driver for Mobile Money services – and often by strategic necessity. In the Philippines, where existing domestic money transfer alternatives are better than Kenya, both SMART Money and G-Cash have aggressively promoted their mobile top-up services; in Indonesia and Thailand where regulatory guidelines currently don't allow customers to withdraw money from an e-wallet, Telkomsel and True Move have both promoted mobile top-ups for T-Cash and True Money respectively as an important 'use of electronic funds'; and in Fiji, where physical distribution of scratch cards to remote areas can be a challenge, Digicel and Vodafone have both launched with mobile top-up as a core feature.

So how can MNOs evaluate the importance of mobile top-ups to their profitability? The first step is to identify the size of the discount at which airtime is sold to the channel: the higher the discount, the greater the opportunity for Mobile Money to deliver value. Second, an MNO must estimate the percent of total airtime sales they can reasonably convert from scratch-cards to Mobile Money. And third, an MNO must consider the myriad costs involved in facilitating mobile top-ups. These can include but are not limited to: perpetuities paid to top-tier agents on airtime sales for customers they register for Mobile Money; incentives paid directly to frontline agents or customers themselves to stimulate adoption; and commissions paid to agents for facilitating cash-in (because customers can't buy airtime from an empty e-wallet).

"For MTN Uganda's Mobile Money, savings from airtime distribution has contributed a total of 12% of their gross profit to date"

5 http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/M-PESA_Kenya.pdf

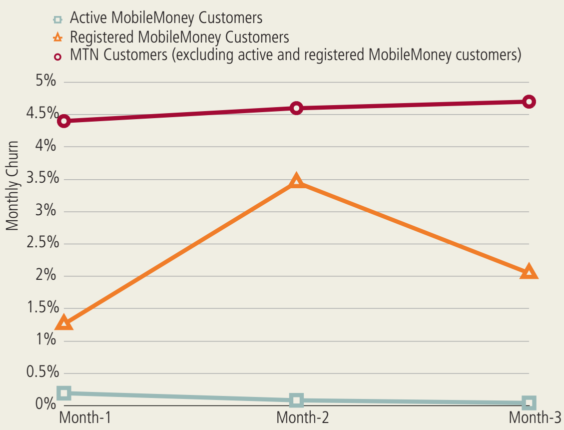
6 http://technology.cgap.org/2010/06/07/proof-mobile-money-can-make-money-m-pesa-earns-serious-shillings-for-safaricom/

How significant are churn reduction benefits to profitability?

If you've ever attended a Mobile Money conference, you've likely heard a speaker tout the potential benefit of 'reduced churn' that Mobile Money can unlock for an MNO. But what you probably haven't heard is whether any service has actually delivered on this promise – and if so, whether the subsequent benefits amount to a big or small deal in the overall financial model.

In our analysis of MTN Uganda's Mobile Money, a service that has turned the corner into cash-flow positive territory on a month-to-month basis, we uncovered a startling finding: **in any given month, the churn rate for active Mobile Money customers is negligible**. That is, while the churn rate for regular mobile customers was roughly 4.5% per month, the churn rate for an active Mobile Money customer was no more than 0.2% over the course of the three months for which we analysed data.

Exhibit 5: Churn comparison (MTN Mobile Money Uganda)



This is a dramatic reduction, but the question remains: does it make much of a difference to the overall profitability of the service? In the case of Mobile Money, the answer is a resounding yes. Of the total revenue generated to date, churn reduction benefits account for 33% – and if the service wasn't delivering this benefit, Mobile Money would have barely been out of the red by now. In other words, the benefit of reduced churn matters – a lot.

Alas, there is one catch: **not every service we've studied has generated results as impressive as the ones described above.** Some services report a less dramatic reduction in churn; some report no change in churn; and some even report a slight temporary increase in churn. This variance underscores an important message for MNOs that launch Mobile Money services on the basis of potential for churn reduction: the benefits are real and attainable, but only for those who execute effectively. That is, the services that have not realised any churn reduction benefits are those that have registered customers with no real interest in the service, or been plagued by bad customer experiences, poorly planned agent networks, and half-hearted attempts at creating a strong brand and relevant service offering. It's easy to see, then, why executives in some countries have gone as far as charging internal transfer pricing premiums to their Mobile Money business units, reasoning that a poorly executed foray into financial services will do nothing more than jeopardise existing relationships with valuable mobile customers.

So what does this mean for a Mobile Money practitioner? First, it means that execution is everything. **The promise of 'reduced churn' has been realised – but only by deployments that are well funded and have executed effectively.**

Second, **without considering the benefits of reduced churn, the profitability picture is incomplete.** Today, many MNOs choose to exclude churn benefits from their P&L or business plan: some do so because executives are sceptical about whether variances stem from 'causation' or 'correlation'; others reason that if this service is to be sustainable, it must be on the basis of direct benefits alone. The latter rationale is prudent, but when capital budgeting season arrives and executives start to ask for IRR figures, it behoves practitioners to have these figures at hand.

And finally, **the significance of churn reduction benefits underscores the importance of tracking the right metrics**. For practitioners to gauge whether the service is moving the needle on churn, they must first have a process established, usually one in which an external data warehousing team is engaged, to track the metric. This can be time consuming, but given the potential importance of this metric, it's clearly worthwhile.

How significant is ARPU uplift to profitability?

The previous chapter described how significant churn reduction benefits can be to the profitability case for Mobile Money; and when people talk about indirect benefits, 'reduction in churn' is usually closely followed in the same sentence by 'uplift in ARPU' (Average Revenue Per User). Having shed light on the important role churn benefits can play in the context of profitability, in this chapter we'll focus on the role of uplift in ARPU. But before we answer the question posed in the title of this chapter, let's first determine whether 'uplift in ARPU' is even the right metric for practitioners to measure.

To gauge whether Mobile Money actually causes customers to spend more, 'uplift in ARPU' would need to be measured over time. But this particular type of analysis is tricky. First, the average selling price for airtime and SMS, and therefore ARPU, in a country varies for any number of reasons on a month-to-month basis, so it's impossible to simply attribute any change solely to Mobile Money. Second, in many cases ARPU figures will already include revenue generated from Mobile Money – so taking credit again would be inaccurate.

It's clear, then, that 'uplift in ARPU' isn't a perfect metric. But what, if anything, is? **We propose that the less catchy, but somewhat more accurate, phrase of "increased share of wallet for voice and SMS" is the more relevant metric**. By measuring 'minutes of use' and 'billable SMS events', an MNO can isolate changes in customer behaviour, something that's not possible with an 'uplift in ARPU' calculation. Additionally, "increased share of wallet" accurately describes just why a mobile customer might consume more mobile services on their Mobile Money SIM; that is, it's easier to imagine a customer who carries two SIM cards, each month spending $3 on one, and $2 on the other, shifting some of her spending to the stickier of her two SIMs. So if we accept "increased share of wallet for voice and SMS" as a good metric, the question still remains: is it a significant driver of profitability?

Unfortunately, our findings in this department are inconclusive. From a survey conducted in 2009 by McKinsey & Co., CGAP and GSMA, we know that in the Philippines 44% of Mobile Money users carry more than one SIM, and 68% report using their Mobile Money SIM as their 'primary SIM'; this is encouraging, but not conclusive evidence that this benefit is real. In the case of MTN Uganda's Mobile Money, active customers do consume slightly more voice and SMS than non-Mobile Money customers, but drawing a solid conclusion here would be incredibly challenging from a data-mining perspective.

While we haven't conclusively pinpointed the impact of "increased share of wallet for voice and SMS" in a financial model, it's plain to see that the potential to reap benefits is massive – and there are some steps MNOs can take to position themselves to do so.

Beyond executing well to ensure customers do indeed have an incentive to keep their Mobile Money SIM in the phone more often than not (a subject I discussed in the previous chapter), promoting Mobile Money as a method of topping up is also important. In particular, **MNOs have found success by promoting Mobile Money as an option for topping up in small increments, and topping up after hours when scratch cards may be unavailable.** For instance, WING, a Cambodian Mobile Money service, has enjoyed success with their mobile top-up feature, and found that 33% of top-ups on their system occur outside typical store hours, and 70% occur at the US$1 price point, a level at which scratch-cards are a particularly expensive as a distribution option.

How significant are direct revenues to profitability?

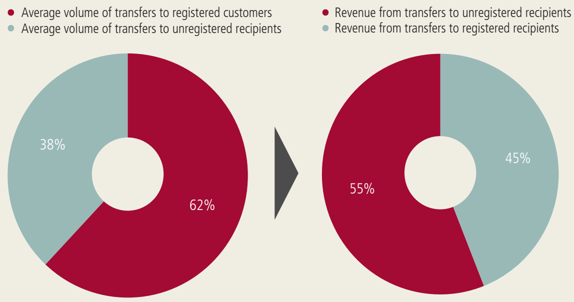
So far in this article, we've written about the role that indirect benefits play in enabling a mobile network operator (MNO) to turn a profit from a Mobile Money service – but what about the most obvious source of value, direct revenue from customer fees? After all, this is often the single source of value upon which MNOs evaluate the business case for Mobile Money.

For MTN Uganda, who currently offer domestic money transfer and mobile top-up services, direct revenues include fees to send money, and fees to withdraw money from an e-wallet. **To date, these direct revenues, less commissions paid to agents, contribute 52% of total gross profit for the service.** It's clear then, that this is an area of the business case not to be neglected. So how can MNOs ensure they're well positioned to fully capture this source of value? Well in the case of MTN Uganda's Mobile Money, **one decision has had more of an impact than any other: enabling P2P transfers to unregistered recipients.**

Uganda is a fragmented mobile market: according to Wireless Intelligence at time of writing, MTN holds 44%, Zain, Warid and Uganda Telecom each hold roughly 18%, and Orange holds 3% market share. So it's not surprising, then, that when MTN launched the service, they made sure customers could send funds to recipients on any network. **To date, 38% of P2P transfers made using Mobile Money have been from a registered customer to an unregistered recipient;** and this use case has generated 45% of total revenue (and even more in gross profit). Two things are striking about this data: first, **the overall number of P2P transfers to unregistered users is quite high**, which suggests that had MTN not offered this option, they likely would have left some revenue on the table. Second, **P2P transfers to unregistered users are more lucrative for MTN than P2P transfers to registered users** (i.e. 38% of transactions are generating 45% of revenue). This occurs because MTN charges customers a premium – 7% for low and 94% for highest value transfers – to make a transfer to an unregistered recipient, and the commission paid to agents remains the same. Thus, by enabling P2P transfers to unregistered recipients, MTN not only expands the base of potential users for their service, they also generate a significant amount of revenue.

Exhibit 6: % of transactions to unregistered customers

Exhibit 7: Money transfer revenue



But not every MNO allows P2P transfers to unregistered recipients: some reason that by doing so, they are forfeiting potential net new mobile revenue from recipients who, if they want to receive money, have no choice but to activate a SIM from the MNO in question (and then, as the theory goes, start to use this new SIM for mobile services, too). But this walled garden logic is risky: Mobile Money is a service that is predicated on network effects, and particularly in countries with fragmented mobile market share, the 'closed model' presents an insurmountable customer experience barrier to adoption, ultimately making it difficult to scale the Mobile Money service. And if a Mobile Money service cannot scale, its sustainability becomes questionable – so in the end, any benefits of net new revenue will be short lived.

It's clear, then, that direct revenues are a significant value source, and mobile network operators have an opportunity to maximise them by enabling P2P transfers to unregistered recipients – a feature that, coincidentally, is just what customers in Kenya, Uganda and other successful Mobile Money countries have demonstrated that they want.

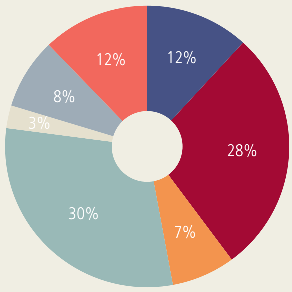
How can an MNO manage costs to achieve profitability?

When most people hear the phrase "to turn a profit, we need to manage our costs", they usually take it to mean "to turn a profit, we need to reduce our costs". But when it comes to Mobile Money, practitioners have found that some costs can be done away with more easily than others. So the trick, then, is to understand which are strategic (and must be protected), and which are discretionary (and can be curtailed).

But before we begin our evaluation process, let's first briefly take stock of the costs (and there are many) that are involved in launching a Mobile Money service. Before launch, MNOs incur a series of technology costs, including investing in an m-wallet platform, upgrading their SIM or USSD access gateway (in most cases), and deciding whether to embed their application on all new SIMs – and in most cases consequently upgrade to a larger card (while this isn't a cash outlay at first, it's a decision of major financial significance). The next tranche of costs are go-to- market related, and include recruiting and paying for management and back-office staff, training and merchandising a network of agents, and designing and launching above and below-the-line marketing 30% campaigns. Most of the costs identified thus far carry 7% on after the service has been launched, but the day a service goes live, a third set of costs come into play: ongoing costs. These typically include cash-in/ cash- out commissions for agents, SIM cards, starter packs and agent registration commissions for customer acquisition, and internal transfer fees for using SMS services or selling airtime at a discount. For a full breakdown, refer to Exhibit 8.

So which of these are strategic and which, if any, are discretionary? Unfortunately, answering this question is not as simple as sorting costs according to size. If we look at the drivers for MTN Uganda's Mobile Money, **we find that highly strategic operational activities – things like building and managing an agent network, or providing great customer care – are comparatively inexpensive**. Since launch, 7% of Mobile Money's total costs have been on building and managing their agent network[6], and 4% has been on back-office customer care.[7] And while it's true that Safaricom spends somewhat more on these particular activities, and has benefited from an agent network of industry leading quality, the insight is still applicable: these activities are routinely touted as strategic imperatives for any successful Mobile Money service – but for MTN, they've cost a pittance compared to the amount spent on technology[8] (30%) or customer registration commissions[9] (12%) to date.

Exhibit 8: Detailed breakdown of costs



Agent network costs
Handset subsidies POS merchandising field marketing agency contract

Technology costs
Up-front investment in m-wallet solution SIM access gateway upgrade recurring fees for m-wallet solution recurring fees for SIM access gateway upgrade maintenance SMS communication fees (internal transfer price)

ARPU loss from discounting
Total airtime bought through mobile money at a discount multiplied by discount rate

Selling expense
Marketing and advertising

G&A
Management staff back office staff

Cash-in/cash-out commissions
Money transfer commissions agent airtime commissions

Customer acquisition & registration costs
Customer registration collateral registration commissions SIM swap cost incremental SIM cost for upgrading to larger card

So if these activities deliver such good value for money, why do some practitioners have a difficult time getting budget to do them properly? In many cases, this stems from the fact that **highly strategic, financially insignificant costs often require a commitment to spend in advance of having any indication of whether the Mobile Money service will be a success**. For instance, MTN had to commit to a fixed monthly contract with a field marketing agency ($623,000); pay for and train their dedicated call centre representatives ($440,000); and design and fund an above-the-line marketing campaign ($850,000) all prior to launching their service. Each of these activities has been instrumental in MTN Uganda's success, **and their decision to invest aggressively in them ultimately stemmed from their confidence that the service would become a hit.**

6 Includes handset subsidies, agent POS merchandising, and field marketing agency costs

7 Includes total cost of back-office staff

8 Includes cost of m-wallet platform and monthly charges, SIM access gateway upgrade and monthly maintenance charge, and SMS communication fees

9 Includes commissions paid from MTN to agents ($1.33 per registration).

"MTN's decision to invest aggressively in marketing, agent monitoring, and call centre staff ultimately stemmed from their confidence that the service would become a hit"

But that's not to say all of their spending has been strategic; some costs were discretionary, and potentially could have been substituted for less expensive, equally effective alternatives. For instance, MTN recently introduced an airtime bonus for customers who top-up using Mobile Money an incentive many MNOs have used in an effort to encourage customers to top-up using their e-wallet. But this tactic was particularly costly since it negates a big portion of the savings realised from eliminating discounts paid to dealers.

Moreover, like they have in other markets, MTN has pursued a strategy of aggressively registering new customers in Uganda. In practice, this has meant registering more inactive customers (552,213) than active ones (421,254). And this strategy has been expensive: MTN has spent a total of $1.3 million on registration commissions and new SIM cards for customers that have not performed a single revenue-generating transaction.

How can MNOs ensure their tariff and commission models are well designed?

For a Mobile Money service to scale and achieve profitability, it's critical to have well designed customer tariff and agent commission models. So how can MNOs ensure their tariff and commission models are well designed? Here again, MTN Uganda's Mobile Money exemplifies some key insights.

If the Mobile Money customer tariff model looks familiar to you, that's probably because you've seen it in action before: in structure, it's a replica of Safaricom's M-PESA. And as Ignacio Mas noted in the 2009 Mobile Money for the Unbanked Annual report, this tariff structure (and the way it's taken to market) works for a few reasons: **it's simple and transparent, customers are not bound by minimum balance requirements or prohibitive deposit fees, and it offers customers an ability to send money to non-customers.**[10] It's inevitable that MNOs will innovate and trial new models, but the design features listed above can be considered prerequisites for an effective tariff model in any environment.

MTN Mobile Money rates

Activity	Transaction Tiers		Charge
	Min	Max	
Loading Money	5,000	1,000,000	0
Sending Money			
To registered user	5,000	1,000,000	800
	5,000	30,000	1,600
	30,0001	60,000	2,000
To non-registered user	60,0001	125,000	3,700
MTN or Local network			
	125,001	250,000	7,200
	250,0001	500,00	10,000
	500,001	1,000,000	19,000
Withdrawing			
	5,000	30,000	700
	30,001	60,000	1,000
	60,001	125,000	1,600
By registered user	125,001	250,000	3,000
	250,001	500,000	5,000
	500,001	1,000,000	9,000
By non-registered user	5,000	1,000,000	0
MTN or Local network			
Buying airtime	5,000	1,000,000	0
Daily transaction limit	UGX 1,000,000		

It also merits note that **MTN Uganda's customer tariff model grants customers minimal leeway to defraud the operator of prospective direct revenues.** That is, given that the P2P transfer fee typically accounts for less than half of the total end-to-end cost of sending money using the service, **customers have little incentive to perform a direct deposit**. Moreover, MTN has structured its tariff tiers in such a way that **there is no opportunity for a customer to reduce their fees by splitting a cash-in or cash-out into multiple smaller tranches**.

But it's not just MTN's customer tariff model that merits attention. Their agent commission model has been thoughtfully designed, too. The article Neil Davidson and I wrote for the 2010 Mobile Money for the Unbanked Annual Report details most of our thinking on agent incentives, but it's worth briefly noting here how MTN espouses some key principles.

First, **MTN pays Mobile Money agents a commission for every activity that they perform, even though MTN may not charge customers a fee directly for each one**. For instance, even though MTN doesn't

10 Ignacio Mas: Good Service Design Features of M-PESA's Money Transfer Service. 2009 MMU Annual Report.

charge customers a fee to cash-in, they do provide agents a commission for providing this service in recognition of the time and cost involved. Of course, while MTN take a temporarily hit by subsidising cash-in, the fees collected from an end-to-end money transfer (which includes a cash-in, a transfer, and a cash-out) do exceed the corresponding commissions paid. **All told, the margin MTN earns for a typical end-to-end P2P transfer (excluding variable technology fees) to a registered customer is just north of 50%**.

Second, while MTN may pay agents for both cash-in and cash-out, **they deliberately pay a higher commission to agents for facilitating cash-out than they do for cash-in**. This stems from the simple fact that 'cash-out' agents have a higher cost of restocking their inventory of physical cash than cash-in' agents do for restocking their inventory of e-money. As such, 'cash-out' agents must be compensated accordingly.

Third, MTN recognised that to keep agents engaged in the period following launch when transaction volumes are typically low, it would be important to provide them with a different source of revenue. To this end, they have provided agents with a commission for every customer that they register.[11] Thus, in the early days following launch, Mobile Money agents earned money by registering customers; as the service scaled they increasingly earned their money from facilitating cash-in and cash-out transactions for customers.

Appendix A: Resources

GSMA Financial Model

The GSMA Financial Model is an excel tool that practitioners can use to develop a comprehensive view of the profitability of their Mobile Money service. The model generates a P&L statement that is based on a series of user inputs, including investment, direct benefits, indirect benefits and costs.

GSMA Metrics Dashboard

The GSMA Metrics Dashboard is an excel tool that presents practitioners with an easily digestible summary of their operational metrics that matter most. Existing and future customers of Comviva, Fundamo, Sybase 365 and Utiba can integrate the Dashboard as a reporting feature free of charge.

To receive a copy of the GSMA Financial Model or the GSMA Metrics Dashboard, send an email to mmu@gsm.org.

11 This decision also helped drive customer growth.


easypaisa
KING'S SUPER STORE & PHOTO STATE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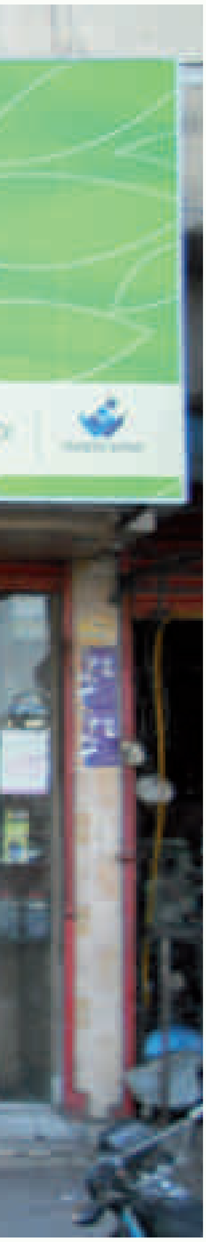


Chapter 2
Mapping and effectively structuring operator-bank relationships to offer Mobile Money for the Unbanked

Author: Neil Davidson

Foreword

We are living in an era of unprecedented change. One of the most transformational of these changes has been the influence of the mobile phone—which has become one of the most commonly used technologies on our planet.

We continue to see the ways in which people use their mobile phones grow and change. One of the most important of these has been in financial services, an area that will have a significant, positive impact on the global economy. When people access financial services applications through their mobile phones, they become members of the digital economy, opening up a new set of opportunities, particularly for the unbanked—those individuals who are completely outside of the banking system today.

For those of us in the mobile financial services ecosystem, Mobile Money represents both an opportunity and a responsibility. The business opportunity is clear, but with that comes a responsibility to work together as an industry to leverage each other's strengths in order to reach those currently excluded from formal financial services.

One of the critical pieces necessary to make mobile financial services work is the relationship between mobile network operators and banks. To be effective, this needs to be a win-win relationship.

"Mapping and effectively structuring operator-bank relationships to Offer Mobile Money for the unbanked" by the GSMA shares valuable perspectives based on experiences from multiple countries on how this relationship can work effectively.

I invite you to read this interesting publication and hope you can make practical use of its lessons learned.

Tomasz Smilowicz, Global Head of Mobile Solutions
Citi, Global Transactions Services

Executive summary

In the past several years, both banks and mobile network operators have moved aggressively to offer mobile financial services to the unbanked. For banks, Mobile Money for the unbanked is a way to serve a vast swathe of customers who would otherwise be out of the reach of costly branch infrastructure; for operators, Mobile Money represents an opportunity to differentiate themselves from their rivals. To offer Mobile Money, banks and operators need to work together—yet negotiating agreements to do so can be contentious and time-consuming: our research suggests that early attempts to forge these agreements took banks and operators a full year, on average, to negotiate.

In this article, we introduce the idea of the "business owner": the bank, operator, or third party that assumes the bulk of the financial risk of offering a Mobile Money service. The business owner contracts with other entities to undertake the activities in the Mobile Money value chain it chooses not to operate itself. We take a close look at these activities and evaluate which party—a bank, an operator, or a third-party—has the most relevant assets and capabilities for each task. In general, we find:

- Operators have a widely recognised and accessible mass-market brand, which most banks lack. However, banks are more experienced in educating their customers and persuading them to consume a service that, unlike airtime, they didn't already know they need.
- Operators know how to build networks of independent retail agents and can leverage these networks to serve as cash-in/cash-out points for a Mobile Money service. Banks, particularly those with branches in rural areas, are ideally situated to support agent liquidity.
- Both banks and operators have experience running transactional platforms, although in practice, the platform itself is usually built by a third party.
- Given existing relationships, banks are better positioned to engage with regulatory authorities. But we discuss the significant tensions that can arise when a Mobile Money service with an operator as its business owner is viewed as "bank-led" by the regulator.

We also discuss how agreements can be formalised and value allocated. We point out that while operators need not work with just one bank, it is harder for banks to work with just one operator. We consider what functions are easily outsourced to another entity by the business owners and which are not. And we discuss the pros and cons of complex agreements that allow two or more parties to share business ownership of the Mobile Money service. Regardless of their complexity, we highlight the three hallmarks of successful agreements: clarity about roles and responsibilities, a "win- win" proposition that extends into the future, and explicit governance structures.

Two appendices are included at the end of the article. The first is a tool that operators and banks can use as a framework when looking to structure (or re-structure) their engagements. The second is a pair of case studies showcasing engagement models between banks and operators in Kenya and Pakistan.

Introduction

It is impossible for a mobile network operator to offer Mobile Money without a bank: at minimum, a bank must hold the deposits which back the electronic value stored in customers' and agents' wallets. Conversely, it is impossible for a bank to offer Mobile Money without an operator: at minimum, an operator must provide the data channel which allows customers and agents to initiate transactions using their handsets.

But between these two extremes **there is a very wide variety of ways for banks and operators to work together.** Telenor Pakistan and Tameer Microfinance Bank have together created a "virtual organisation" to run their easypaisa service, finely sorting roles and responsibilities and allocating them between the partners; more typical is for a bank to handle two or three functions and the operator to take on the rest. Sometimes, these arrangements are formalised with contracts and service level agreements, with one party agreeing to offer a service or services to the other for a fee. More rarely, operators and banks may enter into a joint venture, or find some other way of sharing in the risks, and the rewards, of offering Mobile Money.

This diversity of options, paired with the necessity of striking some kind of deal, can make the process of negotiating contentious. In one African country, a proposed Mobile Money service has been stalled for more than a year while an operator and a bank have debated the nature of their relationship. This is not atypical; our research indicates that, on average, **negotiation between a bank and an operator seeking to work together on Mobile Money takes twelve months to complete**. Even when negotiations are concluded, it can leave one or both parties uncertain whether they've hit on the operating model that allows them to build a Mobile Money service most effectively, and to capture an appropriate share of the value that's created in the process. **Such uncertainties can reduce the effectiveness of banks and operators when developing and refining a service that truly meets the needs of the target market.**

To shed light on these issues, we seek to answer a few fundamental questions about the relationships between banks and operators in this article:

- What are the respective strengths that mobile operators and banks bring to Mobile Money?
- What are the activities that need to be performed to offer Mobile Money, and which party (a bank, an operator, or a third party) is best equipped to perform each?
- What are the different ways that banks and operators can engage with each other?
- How can banks and operators structure, or restructure, their agreements to reduce friction and improve the service that they offer to their customers?

We posed these questions in a series of interviews to dozens of executives at banks and operators in Africa, Asia, and Latin America. We spoke with representatives from multinationals and from companies with operations in just one market; with strategists and with line managers; with those only contemplating Mobile Money and with industry veterans. We are grateful to them for sharing their insights and experiences, which form the backbone of this article.[2]

Surveying the landscape

As of May 2011, there are 100 live Mobile Money deployments in low- and middle-income countries that target the unbanked.[3] In each**, it is possible to identify a business owner, which we define as the entity which assumes the bulk of the financial risk of offering the service**. The business owner contracts with one or more parties to provide certain services. If successful, the business owner captures the residual profits from the venture after all other parties have been paid.[4] In this article, we will identify the business owner of various deployments rather than characterising them as bank-led or operator-led—since although these terms are widely used, they are vaguely and inconsistently defined.

In principle, a bank, a mobile operator, or a third party— or some combination thereof—can serve as the business owner. Today, we see the following:

- In the large majority of cases, the *mobile network operator* acts as the business owner, contracting with one or more banks to provide services such as float holding and regulatory engagement and compliance.

"In operator-bank partnerships, each entity has to have the trust to let the other do what they do best."

Nadeem Hussain, CEO, Tameer Microfinance Bank[1]

1 Tameer Microfinance Bank, which is partially owned by Telenor Pakistan, offers a Mobile Money service called easypaisa with Telenor. For more about the Telenor-Tameer partnership, see the appendix.

2 We are grateful to Rambert Namy and Alexander Boeller of Sofrecom and to Amitabh Saxena for their work researching this article, and to Chris Bold for supplying imagery.

3 See the Mobile Money for the Unbanked Deployment Tracker (http://www.wirelessintelligence.com/mobile-money/unbanked/) for a list.

4 Economists would call the business owner the "residual claimant": the entity with a claim on profits after all costs have been paid and all debts have been repaid.

- In a handful of cases, a *bank or bank subsidiary* acts as the business owner, contracting with one or more mobile operators to provide services such as access to short codes and the USSD gateway.
- There are two services offered by a *partnership* between a bank and an operator in which the two parties share in the risks, and the potential profits from, Mobile Money: easypaisa and M-KESHO (a third, MTN Banking, is being absorbed back into Standard Bank after a number of years as a joint venture co-owned by Standard Bank and MTN in South Africa).
- Finally, there are a handful of third parties, like Splash in Sierra Leone, that act as the business owner, contracting with both banks and mobile operators to provide services required.

In this article, we discuss a wide range of Mobile Money services for the unbanked, regardless of their business owner. And we include services that range from the basic (bill payments) to the sophisticated (savings, insurance, and credit).

Excluded from our analysis, however, are mobile financial services that are primarily conceived by banks as channel extensions, giving their customers, who are by definition already banked, a new way to interact with the bank, complementing existing channels such as branches and internet banking. That's not to say that such services are unimportant, for banks or mobile operators. In fact, they can be popular with users, a competitive differentiator, and profitable for banks and operators alike. But they are different enough from services that target the unbanked that we have chosen not to discuss them here. (In the next section, we discuss the key feature that distinguishes an unbanked-focused Mobile Money service from a "channel extension": a network of independent agents at which customers can cash in and cash out.)

Why banks and mobile network operators are interested in Mobile Money for the unbanked

In a 2009 study commissioned by the GSMA and the Consultative Group to Assist the Poor (CGAP), McKinsey & Co. estimated that there will be 1.7 billion unbanked customers with mobile phones by 2012 and that up to US$5 billion in direct revenues can be earned by serving this segment between 2009 and 2012.[5] Mobile operators and banks have obvious, but distinct, strategic interests in serving this market.

For banks, Mobile Money is a way to serve a vast swathe of customers who are otherwise out of reach. Generally speaking, the low-income segment cannot be profitably served using the traditional banking model, in which bricks-and-mortar branches are the primary point of contact between customers and the financial institution. That's because it is rarely economical to build and operate bricks-and-mortar branches, with their high fixed costs, where the poor live: even if such a branch were busy all the time, the fees the bank would have to charge their clients, relative to the size of those clients' transactions and/or deposits, to cover the branch's costs would exceed customers' willingness to pay.[6] And this problem is exacerbated in rural areas, with low population density. In contrast, Mobile Money services allow users to cash in and cash out at a network of independent agents, leveraging existing infrastructure to serve customers more cheaply than in a bricks-and-mortar branch.[7] Moreover, customers can then move value (whether it is to pay bills, send money to a relative, or perform some other transaction) by issuing commands directly from their handset, here again leveraging existing infrastructure to further bring down the cost of serving poor customers. As such, Mobile Money allows banks to profit from helping to serve a market they might otherwise have to forsake.

5 See "Understanding the Unbanked Customer and Sizing the Mobile Money Opportunity" by Paul Leishman (http://www.gsmworld.com/ documents/mmu_2009_annual_report.pdf).

6 This makes the achievements of "pro-poor" banks like Equity Bank (Kenya), Grameen Bank (Bangladesh), and BRI (Indonesia), which have managed to establish branches even in low-income areas despite these challenging economics, all the more impressive. See "The Economics of Branchless Banking" by Ignacio Mas (http://mmublog.org/global/article-from-ignacio-mas-the-economics-of-branchless-banking/).

7 See "Scaling Mobile Money" by Ignacio Mas and Daniel Radcliffe (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1681245).

How Mobile Money for the unbanked fits into a bank's broader mobile strategy

It would be unusual for a bank's only use of the mobile channel to be offering a Mobile Money service for the unbanked. More commonly, banks first seek to exploit the mobile channel as a new way of serving their existing customers. By allowing customers to check their balances, view transaction reports, and move money between accounts, banks offer customers a value added service and realise operational savings (when customers choose to interact with the bank by mobile vs. through more expensive channels, like telephone or a branch). They may even earn additional revenues if customers are willing to pay to use the mobile channel.

Banks who participate in the value chain of a Mobile Money service for the unbanked typically see that initiative as distinct from their use of the mobile channel to better serve their existing customers. Since few banks target the same customers in their core business as in the Mobile Money service for the unbanked, the potential for cannibalisation is typically low.

For operators, Mobile Money does not usually represent an opportunity to serve a new market segment; instead, it allows them to cross-sell a new service to customers whom they already serve (i.e., their own subscribers) or compete for (the subscribers of other mobile network operators). Given the increasing competition in developing countries among operators for share of the mobile business, and the increased propensity of customers to churn from one operator to another in search of a lower tariff, differentiation has become a primary strategic objective. So although the revenue opportunity that Mobile Money presents is huge, mobile operators are increasingly focused on Mobile Money's potential to strengthen their relationship with mobile users, giving them a compelling reason not to churn away to a lower-priced operator.

What are the activities that need to be performed to offer Mobile Money? For each, is a bank or an operator best equipped to perform it?

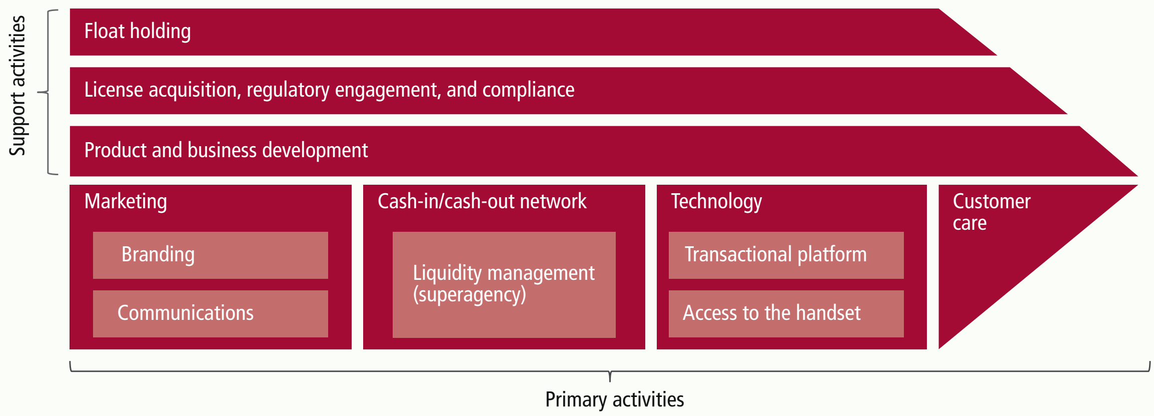
A basic tenet of corporate strategy is that companies should seek to perform the activities which they are uniquely well-positioned to perform—and outsource those which they aren't to firms with greater expertise. Banks and operators do this all the time in their core businesses; both, for example, routinely contract with other firms to handle their security needs. Bharti Airtel has become famous for taking this principle to its logical extreme; in the so-called "Indian model" of mobile telecommunications, Bharti outsources network infrastructure, call centres, and retail stores to other firms, allowing it to focus on understanding and meeting customer needs.

This logic offers a useful framework for thinking about how banks and operators might work together to offer Mobile Money. Offering Mobile Money, like any other product or service, requires carrying out a coordinated set of activities. These are sometimes collectively called the value chain. The diagram below, although not exhaustive, lists the important parts of the Mobile Money value chain.[8] Primary activities are those which create and deliver the Mobile Money service to customers; support activities are required in order to carry out primary activities.

How sophisticated services fit into the Mobile Money value chain

Sophisticated offerings like savings, credit, and insurance can be, and increasingly are becoming, a part of the Mobile Money value chain. M-KESHO, which is described in the appendix, gives customers access to savings, loans, and insurance. And in other markets, sophisticated services are becoming part of the Mobile Money value chain in more modest ways. Banks have begun to engage with the business owners of Mobile Money services in order to allow their customers to move money into and out of mobile wallets from and to their bank accounts. Airtel Africa (formerly Zain), for example, makes it easy for banks to integrate securely with the Zap platform in order to offer this functionality to customers. In effect, these institutions are helping to create, and becoming part of, an enlarged Mobile Money value chain that offers users a broader array of services than payments alone.

Because offering such services requires the participation of appropriately regulated financial institutions, the expansion of the Mobile Money value chain in this way is likely to increase the number of relationships we observe between operators and financial institutions in the future.



8 See Competitive Advantage: *Creating and Sustaining Superior Performance* by Michael Porter. Strictly speaking, Porter calls value chains that are spread across multiple companies, like those we are discussing in this paper, value systems.

Banks are uniquely well positioned to perform some of these activities; operators are to perform others; and third-parties yet others. To assess which entity is best positioned to take on these services, it is useful to review the generic strengths that banks and operators generally bring to the table. From our conversations with banks and mobile operators in the developing world, the picture below emerged.

In the following pages, we attempt to map the assets and competencies of mobile operators and banks to the segments of the Mobile Money value chain. Since our scope is broad—operators and banks in the developing world—the discussion below necessarily requires making some generalisations that won't apply in every market. So at the end of this article, we offer a guide for operators and banks seeking to structure—or restructure—relationships with each other to conducting this analysis on a local level.

The assets and competencies, relevant to mobile money, of banks and mobile operators

	Banks	Mobile Network Operators
Tangible assets	■ Full suite of financial services, including credit and savings ■ Deposit-taking license ■ Branches with trained staff, security, and deep pools of liquidity ■ ATMs/cash machines ■ Integration with broader financial system ■ Secure core banking platform	■ Large and growing customer base, a significant proportion of whom are unbanked ■ Pervasive airtime distribution network ■ Control over the SIM card on and data channel to customers' handsets ■ Robust high-volume, low-value transaction processing platform
Intangible assets	■ Reputation for stability and security ■ Relationship with financial regulator	■ High mass-market awareness ■ Trust of consumers as a transaction partner ■ Relationship with telecommunications regulator
Competencies	■ Risk management, fraud deterrence, and regulatory compliance ■ Retail operations, including liquidity management ■ Financial product development	■ Building and managing a third-party distribution network ■ Mass market brand-building and advertising ■ Rapid value-added service development

Marketing

Branding

The broad level of awareness that already exists of mobile operator brands is a key asset when it comes to marketing Mobile Money. Equally valuable is the "accessibility" of most operator brands: high rates of mobile penetration in most of the world means that wide swathes of the low-income segment have existing relationships with one or more mobile operators. Indeed, since in the pre-paid model such relationships require the consumer to trust their mobile operator to store value that they load into their airtime balance until they use it, consumers of mobile telephony come to trust the operators they use regularly.

Banks typically have lower levels of brand awareness, since they compete for the business of a narrower range of consumers and confine their brand-building activities accordingly. Nevertheless, their brands have certain attributes that could be helpful when promoting Mobile Money—in some cases, a reputation for stability and security. **But these brand features can be overshadowed by associations that prove to be liabilities when marketing Mobile Money**. Many banks in the developing world are perceived as exclusive ("not for people like me") by the poor; this perception is sometimes encouraged deliberately when banks cultivate an upmarket image in order to appeal to the aspirations of potential clients. Such a strategy makes obvious sense when it comes to building market share in more affluent segments, but poses complications when it comes to marketing Mobile Money.

Not all banks find themselves in this position; a few (like Equity Bank in Kenya, Grameen Bank in Bangladesh, and Bank BRI in Indonesia) explicitly target the low-income consumer and have developed a brand profile to match, and such institutions would be well positioned to treat Mobile Money as a brand extension. Nevertheless, in practice there are few bank-branded Mobile Money deployments that target the base of the pyramid. Even WIZZIT and WING, Mobile Money services offered by subsidiaries of banks (in South Africa and Cambodia, respectively), have chosen to build new brands from scratch rather than go to market under the brand of their parent banks. The only exceptions to this pattern we know of are Standard Bank Community Banking in South Africa and Zanaco's Xapit in Zambia.

Occasionally Mobile Money services are co-branded; marketing materials for Vodacom M-PESA in South Africa, for example, carry the Nedbank logo. This approach is usually only adopted when required by a regulator, probably because co-branding has certain costs. First, it can be confusing to the customer; second, it exposes both brands to the fortunes of the other. On the other hand, it may enhance the offering's credibility with customers.

Communications

Operators' experience in building and maintaining a mass-market brand and in investing heavily in mass- market advertising situates them naturally to take on the responsibility of marketing Mobile Money. One of the main reasons Tameer Microfinance Bank's shareholders (a deposit-taking financial institution in Pakistan) agreed to sell Telenor shares in the bank was Telenor's willingness to invest far bigger sums in marketing easypaisa than Tameer would have been willing or able to do on its own and its expertise in addressing that consumer. The subset of banks that have chosen to build mass-market brands of their own might equally have the experience and muscle to market Mobile Money.

At the same time, the challenge of marketing Mobile Money is significantly different from the task of marketing operators' core offering, airtime. Operators who take on this challenge find themselves forced to develop new kinds of communications materials (and indeed to adapt their entire marketing mix) in order to build awareness of a financial service, educate customers about it, and generate demand— objectives that differ significantly from those of a campaign to drive sales of airtime, which the target market already knows, understands, and demands. Banks, although usually targeting a narrower socio-economic band that mobile operators, are likely to have a better understanding of this kind of marketing challenge.[9]

Co-marketing is extremely rare; M-KESHO is the only example we know of. This is largely because of coordination issues: Safaricom and Equity Bank both note that it took longer to develop marketing communications because two design teams were involved, and two sets of approvals were required. (See the appendix for more about the Safaricom-Equity Bank partnership that led to M-KESHO.)

9 See Driving Customer Usage of Mobile Money for the Unbanked (Chapter 3).

Cash-in/cash-out network

As discussed previously, the use of a distributed agent network is what transforms the economics of offering financial services to the poor from a high-fixed-cost business to a low-variable-cost business. As such it is the lynchpin of a sustainable Mobile Money service.

Operators bring experience from airtime distribution that is relevant to building a network of Mobile Money agents. Every mobile operator in the developing world has developed a sophisticated airtime supply chain that involves a large number of independent airtime dealers. (bharti airtel airtime is available for purchase at more than 1.5 million retailers in India, for example.) Appointing and managing channel intermediaries, performing margin analyses, devising trade promotions, and finding ways to get branded collateral to the farther reaches of their markets are some of the capabilities that operators have built for distributing airtime and that can be leveraged when building a Mobile Money agent network.

Not having traditionally relied on independent agents, most banks lack this expertise. However, an interesting regional exception to this rule is Latin America, where banks in countries like Peru and Brazil have built networks of banking agents themselves. Although these are smaller than airtime distribution networks, they have developed know-how around training and monitoring agents who perform transactions and collect KYC information. This represents both a capability and an asset: these banks have the know-how to create an agent network and they can leverage the network they've already built to serve as cash- in/cash-out points for a Mobile Money service.

Finally, in Latin America and in India, a special kind of third party has emerged, sometimes dubbed an agent aggregator, which takes on the task of building and managing a network of agents on behalf of the business owner of a Mobile Money service. These players recognise the value of such agent networks (and, in some cases, realise economies of scale by "selling" the use of its agents to multiple Mobile Money or other service providers), although their ability to build and maintain them will vary.

Liquidity management (superagency)

Despite rarely having experience building agent networks themselves, there is one component of agent network management where banks can add significant value to a Mobile Money deployment without building any new capabilities: liquidity management. One of the biggest challenges facing Mobile Money services is the need to keep agents, particularly in rural parts of the country where customers primarily seek to perform cash-out transactions, stocked with enough cash to meet demand. Banks have established cash logistics networks and instituted appropriate security measures to maintain deep pools of liquidity in their branches; as such, **these branches can support the agent network by allowing agents to exchange electronic value for cash in their branches**. Banks which play this role, sometimes called superagents, are usually compensated with a per-transaction fee that may increase with the size of the transaction; the fee can be charged to the agent, the masteragent, or the operator.[10]

What makes a bank an attractive superagent? Primarily, a large branch network in rural areas, where agents are most desperate for cash. Rural banks and other banks that target the poor are most likely to have such networks.

Why would a bank want to serve as a superagent? Serving as a superagent offers banks an additional revenue stream—one that is particularly attractive in branches that suffer from low capacity utilisation. (If transaction values are significant, however, they will force the bank to assume new costs: not just for headcount, but also to move cash where it is needed within the branch network.) Serving as a superagent also allows banks that have clients that are agents of the Mobile Money service provide those clients with the convenience of being able to rebalance their float at the same time they perform banking transactions.

Occasionally, banks offer to use their branches not as superagents that serve agents, but as agents that serve customers. United Bank for Africa (UBA) has recently forged an agreement with MTN to serve this function in Uganda, hoping not only to earn transaction fees but also cross-sell users on full UBA bank accounts and other products once they're in the branch. However, it remains to be seen whether this model is sustainable in the long term, given the high fixed costs of formal bank branches discussed in the introduction to this article.

10 For more on superagents, masteragents, and liquidity management, see "Building, Managing, and Incentivising a Network of Mobile Money Agents" by Paul Leishman and Neil Davidson (http://mmublog.org/global/gsma-publish-2010-mobile-money-for-the-unbanked-annual-report-2/).

Finally, it is worth highlighting an important asset that banks can leverage in a Mobile Money service: its network of ATMs (i.e., cash machines). ATMs can complement a network of independent agents as an option for customers seeking to cash out. Making use of this asset typically requires either issuing users ATM cards that are linked to their Mobile Money account (the option adopted by SMART Money in the Philippines) or undertaking a software upgrade to ATMs to allow customers to initiate and authenticate a withdrawal with their PIN rather than with a card (the route taken by M-PESA in Kenya).

Technology

Transactional platform

Mobile Money services require the development and maintenance of a transactional platform that creates individual accounts (“mobile wallets”) for customers and agents; processes movements of value between accounts; and interfaces with handsets, billers, and the core mobile platform.

Both mobile operators and banks have extensive experience operating transactional platforms, although they bring complementary strengths to the table: banks stress the importance of integrity and robustness when it comes to core banking systems, while operators’ first priority for their airtime billing platforms is stability and speed when handling huge volumes of transactions.

In practice, however, banks and operators rarely build their own Mobile Money transaction platforms, because there are a host of third-party providers offering them in the marketplace. The role of the bank or the operator is usually therefore confined to selecting the vendor, providing business rules and other specifications, developing APIs for systems integration, and (in many cases) hosting and operating the platform.[11] Given the complementary standards by which banks and operators evaluate transactional platforms, operators can consult with their bank (or vice versa) when selecting a technology solution to be sure that it meets the needs of each participant in the value chain.

Access to the handset

To offer users of a Mobile Money service the ability to initiate transactions on their handset, a data channel and user interface must be established. Generally speaking, it is difficult to offer customers a user-friendly experience without the mobile operator either (1) embedding a menu for the Mobile Money service on the SIM card or (2) assigning a USSD short code and providing access to the USSD gateway.[12]

This is the single asset necessary for Mobile Money which banks are unable to build on their own. But banks can negotiate with operators for access to the handset in either of these two ways described above. In South Africa, SIM cards of all the major mobile networks carry mobile banking applications, allowing users to access their existing bank accounts from the handset, while WIZZIT has secured access to the USSD channel from the three leading operators in the market.

Customer care

Both mobile operators and banks run, or outsource, call centres that cater to their existing customers. In principle, then, either is well-positioned to set up this function for a Mobile Money service—particularly since both banks and operators have found that they train a sub-set of their call-centre staff to deal with Mobile Money inquiries in order to effectively resolve problems for customers. Similarly, banks and most operators have experience running walk-in customer care points (branches in the case of banks, and flagship stores or customer care centres in the case of mobile network operators).

Float holding

As noted in the introduction, float is always held by a bank and never by a mobile network operator, because only banks are licensed to take deposits.

Why would a bank want to hold float for a Mobile Money service?
First, banks make money on deposits by charging borrowers higher interest rates than they pay depositors, and they can make money on float holdings in exactly the same way.[13] If a Mobile Money service achieves significant scale, this can become a very large deposit. And it’s an unusually stable deposit: because it represents the holdings of many end users and agents, it is unlikely to fluctuate in value significantly over time. Second, banks can charge mobile operators transaction fees.

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11 The acronym API stands for application programming interface, which refers to the interface of one piece of software (in this case, a payments platform) that allows it to interface with another.

12 It is technically possible for banks to offer Mobile Money without working with operators by using fully open mobile channels. But each of these poses significant challenges or costs: SMS interfaces are difficult to use and are not secure; voice is expensive; and the mobile web is inaccessible to most low-income customers.

13 Although in some markets, banks struggle to place their holdings in this way, limiting the value that they capture from deposits alone.

Since float accounts can be high-transaction-volume accounts, these fees can be considerable. Third, there is at least one indirect benefit of holding float. Clients of a bank holding float for a Mobile Money service are sometimes able to convert deposits in their own accounts into e-money more quickly than others, because an intrabank transfer is faster than an interbank one. Some M-PESA agents have opened accounts at CBA to take advantage of this difference.

Operators need not use only one bank to hold float. In Kenya, Safaricom and CBA decided once the value of the float account had reached a certain threshold that, for prudential reasons, it made sense to diversify the holding among several banks. Today, the float that backs up value in the M-PESA system is split between three Kenyan banks: CBA, Standard Chartered, and CFC Stanbic (the local subsidiary of Standard Bank).

License acquisition, regulatory engagement, and compliance

Practically every Mobile Money service in the world requires the permission of the national financial regulator (typically, the central bank) to offer a Mobile Money service. In some markets, the regulator will only confer an e-money or payments license (or a letter of no objection) to banks; in others, both operators and banks are eligible.

Banks clearly have the edge over mobile operators when it comes to license acquisition and regulatory engagement. Banks are able to build on existing relationships with the central bank, and they are already intimately aware of the concerns and perspective of the financial regulator. They also have established compliance functions and understand issues like anti-money laundering (AML). Operators who seek to be licensed directly must establish new relationships and educate themselves on the central bank's interests from scratch. **Even so, operators who are eligible for direct licensing typically choose to pursue it themselves.**

But when regulators do not give operators this option, we often see banks serving as the licence holder and regulatory engagement manager for Mobile Money services, even if the operator is the business owner and/or carries out the bulk of the other activities in the Mobile Money value chain.

For example, Vodafone Qatar works with Doha Bank as a supplier that provides, among other services, an interface with the Qatar Central Bank and that audits Vodafone Qatar's processes for regulatory compliance.

Whether banks and operators, and indeed regulators, will find this arrangement satisfactory going forward is an open question. At least one operator we spoke to has found its aspirations to extend the functionality of its Mobile Money service foiled by the bank holding its payments licence; the bank, fearing that the new functionality (bulk payments) would encroach on one of its existing business lines, declined to propose the new functionality to the regulator. At the same time, banks can struggle to manage the risks entailed by a Mobile Money service when they do not directly control its operations. Operators and banks in this situation routinely complain that the other fails to guage appropriately the riskiness of the service and often fail to agree on the appropriateness of risk-mitigation measures like the AML policy—the root cause often being a compliance policy, developed by a global bank to protect against risks in mature markets, that the operator (and sometimes the local bank subsidiary itself) feels is ill-suited to managing the actual risks of a Mobile Money service. Finally, regulators can be left frustrated when they find they lack direct oversight of those operations. This has prompted regulators to move in one of two directions: to restrict the ability of banks to "outsource" responsibilities to mobile operators—forcing banks who wish to offer Mobile Money to operate the service themselves—or to make mobile operators eligible for direct licensing as a payments provider or e-money issuer—giving the central bank direct oversight of the operations of a Mobile Money service.[15]

Compliance: a thorn in the side of many operator-bank relationships

Many mobile network operators express frustration with the conservative approach that banks take to interpreting and fulfilling regulatory requirements. Banks counter that operators fail to appreciate why they take compliance so seriously.

Financial regulations are established by national regulators (typically the national central bank). In many cases, the rules that they write are strongly influenced by international standards setters like the Financial Action Task Force (FATF), the remit of which is to minimise the risk that the global financial system will be used to finance terrorism or launder money.

Countries that do not impose sufficient anti-money-laundering (AML) controls can be subject to sanctions by FATF. In the same way, banks adhere closely to rules that national regulators set because laxity in doing so can jeopardise their business. Financial regulators are often empowered to impose harsh penalties on banks they deem non-compliant, up to, in extreme circumstances, license revocation and/or criminal prosecution. International banks must comply with regulations both where they are based and where they are operating, and for obvious reasons must hold themselves to whichever standards are more stringent.

This is why banks take regulatory compliance so seriously when it comes to Mobile Money for the unbanked—and why it's important for banks and operators to work together to help regulators devise requirements that are risk-proportionate.[14]

What qualifies a bank to take responsibility for license acquisition, regulatory engagement, and compliance?

In some markets, operators have been encouraged by the regulator to work with a bank that is locally owned rather than part of an international group. In other cases, operators have sought the prestige that comes with the brand name of a multinational. It is also important to evaluate how strategic the bank considers Mobile Money compared to its core business: banks that are highly committed to Mobile Money may be more willing to "go to bat" for the service with the regulator on issues like KYC requirements than those more preoccupied with protecting their existing franchise.

Product and business development

A wide variety of services can be offered on a Mobile Money platform. Although payments (principally P2P) have constituted the first wave of service offerings globally, there is substantial scope for this range of services to be expanded over time. Developing these services requires assessing customer needs, product design, partner identification and selection, market sizing, pricing, and financial modelling.

Neither banks nor operators bring the ideal set of capabilities to the task of devising mobile financial services for the poor, as the degree of product- and service-line innovation in both industries tends to be low (compared, for example, to consumer package goods firms). Still, **mobile operators know the low-income consumer, while banks understand how to design and price financial services** (although only in certain cases will they have experience doing so for the poor). To date, however, very few operators and banks have taken advantage of this natural complementarity for the purposes of product development for Mobile Money.

Of course, when it comes to actually operating more sophisticated financial services, banks have an asset (the license to offer a financial service) that operators will probably never apply for. Operators cannot pay interest on savings, cannot make loans, and cannot write insurance policies; only financial institutions can. As such, **regardless of who designs these services, operators will need to turn to banks (and/or insurance companies and other non-bank financial institutions) actually to offer them.**

14 See the GSMA discussion paper "Mobile Money: Methodology for Assessing Money Laundering and Terrorist Financing Risks" by Marina Solin and Andrew Zerzan (http://mmublog.org/wp-content/files_mf/amlfinal.pdf).

What makes banks and operators attractive to each other?

In the course of our interviews with banks and operators, we heard some interesting, and in some cases surprising, views about what they look for in a potential partner.

Bigger is not always better: Banks agreed that operators with large market shares are most attractive. But operators did not always feel the same about banks. In most cases, the size of a bank's customer base was irrelevant to mobile operators. More important was evaluating how committed to Mobile Money the bank was likely to be: a big bank (in terms of revenues) might actually turn out to be a less committed partner than a small one.

Local vs. international: We sometimes heard that it is easier to work with locally owned companies rather than subsidiaries of multinationals, because local management is empowered to structure and enter into agreements more quickly. On the other hand, some multinationals bring to bear valuable experience from other markets in offering Mobile Money for the unbanked.

A commitment to serving the poor cuts both ways: Banks with a commitment to serving the poor might be expected to be more enthusiastic about participating in Mobile Money given its relevance to the low-income market. But some are reluctant to offer Mobile Money services that could cannibalise their existing business. Those which do choose to participate in the Mobile Money value chain may seek to control more of it.

How can banks and operators structure their agreements most effectively?

Once a bank or an operator has decided which parts of the value chain it wishes to own, and identified a counterpart willing to take on those it doesn't, the arrangement can be formalised in a commercial and legal agreement.

Simple outsourcing contracts

By far the most common approach is for one party, **the business owner, to contract with the other to provide certain services.**

Banks and operators have experience outsourcing some activities—making it easier for them to offer these functions to the business owner of a Mobile Money service. For example, it is straightforward for WIZZIT to contract with South African mobile operators to provide access to short codes and their USSD gateways in part because operators in that market offer such access to other companies as well. It is even easier for operators to open an account at a bank for float holding because offering deposit accounts to other businesses (and customers) is something banks do all the time. **But it is harder for banks and operators to outsource what has traditionally been a support function of their own core business**. For example, it is difficult for banks to take responsibility for license acquisition, regulatory engagement, and compliance for a Mobile Money service that is operated by a mobile operator. In part, this is because banks are accustomed to providing such services for themselves but not for external clients. This can be contrasted with float holding, which requires only that banks open and maintain a deposit account for the operator—something banks do for external clients every day.

In addition, investment in certain activities is so closely linked to the ultimate success of the service that it would be very difficult to design a contract that would incentivise an entity other than the business owner to invest appropriately. For example, it would be almost impossible to assign responsibility for investment in marketing communications to a party other than the Mobile Money service's business owner. Given the tight link between marketing spend and customer adoption, between customer adoption and revenues, and between revenues and profits, it would be unrealistic to expect any party except the business owner—which keeps the profits from Mobile Money after other parties have been compensated for their contributions—to invest adequately in marketing communications.

Lastly, it is difficult to outsource a function that will lack specifiable, and measurable, outputs. If it's not possible to write a service-level agreement (SLA) that is clear about the service provider's obligations to the business owner, it will be hard to share that part of the value chain.

When services can been delegated, they are usually provided on a fee-for-service basis. Examples include:

- For *superagency*, business-owning operators typically pay banks a flat fee every time an agent sells e-money to a branch for cash or a percentage of the value of the e-money sold to the branch for cash, although these fees are sometimes passed on to agents
- For *access to the handset*, business-owning banks and third parties typically pay mobile operators a per-session fee, plus a flat fee for space on the SIM (if applicable)
- For *float holding*, banks can charge transaction fees but typically pay interest to the business-owning operator—unless the bank is providing other services, such as *license acquisition, regulatory engagement, and compliance*—in which case interest is often not paid at all

Commercial terms for such deals vary widely across (and sometimes even within markets), and it can be difficult for banks and operators to ascertain how much they should be paying for a given service. Operators are able to exploit the fact that, in most markets, banks outnumber operators by a wide margin and can open negotiations with multiple banks—allowing them to choose a supplier of a given service or services based in part on the cost of such services. If, for example, a mobile operator seeks a bank to serve as a superagent, it can open discussions with several to find out how much it might need to pay. Banks, which often seek to cut deals with multiple mobile operators or restrict themselves to working with only operators with large market shares, are less able to use parallel negotiations to discover prices in the same way. Similarly, operators which structure their contracts carefully will have the opportunity to switch banks after launching their service; banks usually do not have this luxury.

Finally, it is worth noting that, in cases where a bank and a mobile network operator are positioned equally to perform a certain activity—customer care, for example—there will be no reason to delegate it to the non-business-owning party. Even if a business owner can achieve modest efficiencies by outsourcing an activity to another party, the time and expense required to make the necessary commercial and operational arrangements might outweigh the value of realising such efficiencies.

Sharing risk and reward: more ambitious partnerships

When operators and banks want to share business ownership of the Mobile Money service, they will need to structure a partnership in which revenues, or profits, are shared between them according to some formula. Tameer Microfinance Bank and Telenor Pakistan, which jointly offer easypaisa, split revenues according to a set formula; then, because Telenor owns 51% of Tameer, profits are ultimately split between the partners. Another option is to form a joint venture (JV), as MTN and Standard Bank in South Africa did to form MTN Banking.

This structure makes most sense when both parties must invest significantly in driving the business to grow, because it aligns their interests to the long-run success of the venture. In this way, such agreements minimise conflicts of interests between the two parties: since both win when the venture succeeds, both are likely to support its growth. It also makes sense when both parties aspire to offer an increasingly comprehensive suite of financial services in the future.

At the same time, compared to ordinary, arms-length contracts, such agreements are significantly more difficult to structure and maintain over time—and, for better or for worse, they are more difficult to dissolve. MTN Banking, one of the most famous early experiments in Mobile Money, struggled to achieve a critical mass of formerly unbanked users in part because of the difficulty of coordinating the investment by and activities of its two main stakeholders, MTN and Standard Bank. The JV did not eliminate the need for MTN and Standard Bank to carry out certain activities in the Mobile Money value chain; as such, the creation of the JV actually multiplied the number of contracts and SLAs that were necessary to orchestrate the entire value chain. Banks and operators contemplating such arrangements therefore have to consider whether the cost of setting up, and getting right, such a complex agreement are outweighed by the potential benefits of close collaboration.[15]

15 Interviewees stressed, however, that to focus only on those issues arising from the structure of MTN's and Standard Bank's partnership gives an incomplete picture—a number of other contextual factors played their roles, too.

Regardless of their complexity, banks and operators note the following best practices in structuring agreements with each other:

- **Clarity about responsibilities**: the more carefully expectations and requirements are enumerated in a commercial agreement (and associated service level agreements), the less likely disputes are to arise later. This should include a mechanism for identifying problems and should clearly designate who is responsible for solving them in order to minimise disruption for the end user.
- **An explicit governance structure**: a steering committee composed of managers with decision-making authority, designated points of contact, and/or other mechanisms for communication and coordination help keep partners aligned.
- **A win-win proposition, now and in the future**: both parties need to be adequately rewarded for participating in the relationship. But it is difficult for banks and operators to assess how a new business will evolve over time. Building in regular opportunities to assure that the agreement remains a "win-win" makes it more likely that both parties stay engaged and committed.

Appendix I: A checklist for negotiating (or re-negotiating) operator-bank agreements

Careful planning, negotiation, and deal-making are the foundation for effective bank-operator relationships. In this appendix, we offer both parties a checklist of questions to ask, and things to remember, when forging relationships with each other.

Take stock

Before seeking out potential counterparties, it makes sense to begin with an internal assessment.

- What is our company's strategy? Is Mobile Money complementary to it?
- What role do we seek to play? Do we have the management buy-in, investable capital, and risk appetite to be the principal, owning the Mobile Money business, with the risks and rewards that it entails? Or do we prefer to act as a service provider, limiting our investment and our potential upside?
- What are our strengths and our relative weaknesses? Does the table on page 26 accurately describe them?
- What parts of the Mobile Money value chain are we well positioned to own? Which are we not?
- What characteristics do we seek in a counterparty?

Align on objectives and allocation of activities

It's difficult to negotiate with a partner that doesn't share your vision or that fundamentally disagrees about the assets and capabilities that they bring to the table. The following questions can be used to assess whether there's a good fit between an operator and a bank.

- What are the strengths and weaknesses of each party? The assets and capabilities of each?
- What kind of service are we hoping to build together? Who is the customer? What services will we offer, now and in the future?
- Do the negotiating partners have the authority to represent their respective organisations, or do they lack buy-in, from above or below or from across relevant functional areas?
- Can we agree on which parts of the Mobile Money value chain to allocate to each partner?
- Is one party comfortable as the business-owning principal and the other as a service provider, or do both seek a closer partnership agreement where risks and rewards are more evenly divided?

Agree commercial terms

Agreeing on commercial terms is often one of the most challenging parts of any negotiation.

- Could the service (or group of services) being sought be provided by any other bank or operator? That is, how unique is the contribution being made? Would exploratory negotiations with another party help pinpoint the value of the service being offered?
- What costs (investment, operating expenses) will the service provide be obligated to assume?
- How much risk does each party seek to take on? Does the service provider prefer to take on more risk (suggesting a revenue-sharing arrangement) or less (fee-for-service)?
- Will exclusivity be required of one or both parties?

Establish a governance structure

- How will we monitor the effectiveness of the working relationship? In what fora will we discuss and resolve concerns?
- When will we revisit the commercial terms of the arrangement, and revise them if necessary?

Look ahead

- If in the future we seek to extend the range of services offered to customers, how will we expand our agreement accordingly? What if only one party is interested in such expansion, or if such expansion would cannibalise an existing business of one of the parties?
- If in the future it becomes necessary to do so, how will we unwind our agreement?

Appendix II: Case studies

Safaricom, Commercial Bank of Africa, Equity Bank, and other Kenyan banks

Safaricom launched M-PESA in March 2007, a story which has been told in exhaustive detail elsewhere.[16] This case study examines the evolution of Safaricom's relationships with banks in Kenya—from a simple, one-to-one partnership with a float-holding bank to its role at the centre of an ecosystem that encompasses most of Kenya's banks today.

Volunteers wanted: finding a home for M-PESA's float

In 2004 when Vodafone was in the visioning phase for M-PESA, Safaricom invited a number of banks and MFIs to join with them to develop a mobile payments service—although at the time, details were quite sketchy about what the service was going to look like. Apart from a local MFI, Commercial Bank of Africa (CBA) was the only one to say yes.

CBA started operations in 1962. It is owned by private shareholders and is the 6th largest bank in Kenya, with 15 branches, mainly in Nairobi and Mombasa. Its customer base is chiefly corporate investors, high net-worth individuals and institutions such as NGOs, embassies, etc. One of CBA's corporate clients in 2004 was Safaricom, and CBA executives saw working with Safaricom on M-PESA as a way of deepening that relationship. In retrospect, Douglas Pinto, Head of Corporate Business for CBA, speculates that the fact that CBA are locally owned and managed allowed them to seize this opportunity in a way that would have been difficult for the local operations of a big banking group.

CBA joined a steering committee constituted to develop the idea of M-PESA and was ultimately asked by Safaricom to be the exclusive custodian of M-PESA's e-float. Its role can be understood as the ultimate M-PESA superagent, since any agent, suparagent or other business transacting with M-PESA which wants to buy or sell e-money must make a deposit or withdrawal with CBA. However, Safaricom is responsible for creating and destroying e-money based on transaction reports that are delivered to it by CBA throughout the day and for continuously reconciling the value in the bank account with the value of e-money in M-PESA. The bank account is in the name of a trust called M-PESA Holding Company, the legal entity which holds deposits on behalf of everyone who has an e-money balance in M-PESA.

CBA makes money three ways from holding M-PESA float. First, it assesses transaction fees—and a lot of them. Since every time an agent buys or sells e-money they must make a deposit or withdrawal with CBA, this is an exceptionally high transaction-volume account. Second, as with any deposit, CBA benefits from the spread between what it charges borrowers and what it pays the M-PESA Holding Company. (CBA and the M-PESA Holding Company negotiate that interest rate on a monthly basis.) Third, it is slightly faster for agents to convert money to e-money when they transfer from a CBA account, so some M-PESA agents have opened accounts at CBA to benefit from this.

A senior account manager at CBA manages the M-PESA relationship, handling issues when they arrive. An SLA is in place, primarily to provide guidelines on how long transactions should take to complete.

In interviews, representatives from both CBA and Safaricom mentioned that part of the success of their relationship is the absence of a conflict of interest between CBA's and M-PESA's business model: CBA does not compete for M-PESA's targeted customer base (middle to low-income).

Since March of 2007, when M-PESA was launched, the value of deposits backing up electronic value has ballooned. Safaricom, the M-PESA Holding Company, and CBA agreed it was prudent to limit the size of CBA's holding, so today, Standard Chartered and CFC Stanbic hold some of the deposits as well.

Enlarging the ecosystem: linking with Kenya's formal financial system

Although M-PESA was designed to appeal to the unbanked, a survey in 2008 indicated that 72% of M-PESA users had bank accounts.[17] Many of these customers sought a way to move money between their bank accounts and their M-PESA wallets. The Vodafone Money Transfer platform, which runs M-PESA, was not originally designed with transfers between wallets and bank accounts in mind, so Safaricom was only able to offer banks and their customers a rather jury-rigged mechanism:

16 The classic account, by two of the architects of M-PESA, is "M-PESA: Mobile Money for the 'Unbanked': Turning Cellphones into 24-Hour Tellers in Kenya"(http://www.policyinnovations.org/ideas/policy_library/data/m_pesa/_res/id=sa_File1/INNOV0201_pp-63-81_hughes-lonie_1.pdf).

17 See "The performance and Impact of M-PESA: Preliminary Evidence from a Household Survey" by Tavneet Suri, Caroline Pulver, and William Jack (http://technology.cgap.org/technologyblog/wp-content/uploads/2009/10/fsd_june2009_caroline_pulver.pdf).

- If banks wanted to allow their customers to sweep money into their bank accounts from the M-PESA wallet, they could use the M-PESA Pay Bill functionality. Customers could initiate these transactions directly from the M-PESA menu on their handset. Citibank, Co-operative Bank, Eco Bank, Family Bank, Post Bank (the Kenyan post office bank), and K-REP Bank have all enabled this service for their clients.
- On the flip side, banks can use M-PESA's bulk-payment functionality to give their customers the ability to transfer money from their account to M-PESA. Family Bank, Kenya Commercial Bank, and CBA offer this service, although such transactions must be initiated through a channel, like mobile banking, other than the M-PESA menu.

Microfinance institutions have also taken advantage of these options to disburse loans and collect loan payments from their clients.

Safaricom has established fixed tariff structures for corporate customers seeking to use either the Pay Bill or bulk-payment functionality of M-PESA. Banks can, in turn, pass some or all of these fees on to customers if they wish.

New products for a new platform: the partnership with Equity Bank

One of the banks Safaricom developed links with during this period was Equity Bank. Equity Bank is Kenya's largest bank with roughly 4.3 million bank accounts. It was originally a building society until it transformed to a full bank in the early 2004, and has since experienced massive growth. It has taken a commercial approach to financial inclusion and aims to provide a bank account to every Kenyan adult.

Unlike CBA, Equity viewed the rise of M-PESA as a competitive threat. As such, decisions about whether and how to collaborate with Safaricom were complex. The decision to serve as an M-PESA superagent is illustrative. Many Equity Bank customers were small business owners who served as M-PESA agents, and Equity recognised that allowing these agents to buy and sell float when they visited the branch to perform other business would be a valuable service. But Equity evaluated the commission that Safaricom pays and felt it was too low compared given the time it would take their tellers to fulfil the transactions. Ultimately, they compromised: offering customers the service, but not promoting it.

It took a meeting between James Mwangi, Equity's charismatic CEO, and Michael Joseph, his counterpart at Safaricom, to set in motion the collaboration that would lead to M-KESHO. The vision was simple: to offer users the ability to access sophisticated financial services via the familiar M-PESA interface.

Senior representatives from Safaricom and from Equity spent the next 12 months together designing, developing, and testing the service. The offering (which evolved to include a savings account, a short-term loan facility, and a microinsurance product—all of which could be accessed on the phone after a one-time account opening process at an agent) was jointly designed by this team—although the design of the bank account itself was the responsibility of Equity as the bank.[18] The design process was carried out largely in secret, to avoid news of the offering leaking before it was ready to launch.

Reportedly, the design process was slow but not contentious; the commercial negotiation was more challenging. Equity Bank sought to retain all transaction revenues charged for offering what it considered to be financial services; Safaricom, which was providing the channel, felt this rule of thumb was inappropriate given the distribution costs they were saving Equity Bank.

Eventually, in May 2010, Safaricom and Equity reached agreement and brought to market their new service. Almost all of the functions related to M-KESHO—including marketing, product development, IT, and regulatory engagement—are performed jointly. As such, meetings are frequent on the operational level (e.g. customer care, agents, marketing and IT). But there are no full-time resources at Safaricom or at Equity dedicated to M-KESHO, with the exception of a back-office team at Equity responsible for processing account-opening forms.

By November 2010, roughly four months after the launch of M-KESHO, 650,000 customers had signed up for the service, depositing a total 600 million Kenyan shillings (US$7.5 million) into M-KESHO savings accounts to date.

18 See "A financial inclusion holy alliance in Kenya: Equity Bank accounts riding on M-PESA rails" by Ignacio Mas (http://mmublog.org/africa-east/m- kesho-in-kenya/) for a full description of M-KESHO.

Telenor Pakistan and Tameer Microfinance bank

Telenor Pakistan is the second largest mobile network operator in Pakistan, which has a large and poor population that is poorly served by existing financial institutions. Telenor Group had experience operating an over-the- counter bill payment scheme in neighboring Bangladesh (Grameenphone), and when it began to study the Pakistan market in 2007 it expected to import a similar model.

But in March 2008, the State Bank of Pakistan issued "Branchless Banking Regulations for Financial Institutions Desirous to undertake Branchless Banking." These explicitly forbade mobile network operators from offering mobile financial services. In addition, it specified parts of the value chain—for example, risk management—that the bank could not outsource, and others, such as agent network management, which it could.

Given these constraints, Telenor identified Tameer Microfinance Bank as its most suitable partner in Pakistan. Founded by a group of ex-Citibank bankers, Tameer had a demonstrated commitment to, and knowledge of, the low-income market, and they had been experimenting with branchless banking since 2006. Importantly, as a regulated deposit-taking microfinance banks, Tameer could accept deposits and pay interest in addition to making loans.

The branchless banking guidelines specified that Telenor could not own some parts of the Mobile Money value chain. But for the others, Tameer and Telenor engaged in a painstaking audit of organisational competence to decide which party would take on each activity required to offer their service—to be called easypaisa.

How Telenor and Tameer describe, and split, activities in the Mobile Money value chain

easypaisa	Products Marketing & Awareness	Customer Acquisition & mgt.	Distribution & Agent Network	Technology & infa-structure	Treasury, Float mgt. & comp-liance
Telenor Pakistan	Product design Pricing Branding and Campaigns	Call centre	Distribution management Physical distribution	Customer and financial transaction systems	
Tameer	Endorsed brand Credit product design	Customer registration & know-your-customer	Brach distribution cash management Agent certification	Transaction switch Billing servers Banking Operations	Accounting, Treasury Float Liquidity mgt Compliance Audit

In November 2008, Telenor announced that it was buying a 51% stake in Tameer. The acquisition was motivated by a number of considerations:

- Allocating responsibilities according to the above schematic was going to be difficult; defining the formula for allocating revenues and profits was going to be even harder. Telenor's acquisition of Tameer took some of the pressure off of those discussions, since it reduced Telenor's incentive to "negotiate hard" for its piece of the profits (since 51% of the profits accruing to Tameer would flow up to Telenor eventually)
- The acquisition gave Telenor better strategic control over its Mobile Money approach in Pakistan, flexibility it would be unable to attain any other way given the branchless banking guidelines
- The acquisition, which was structured as a rights issue, provided Tameer capital which could be used not only to invest in easypaisa, but also in its core, branch-based lending business
- The acquisition cemented Tameer and Telenor's commitment to each other and to easypaisa

Nevertheless, since Telenor only acquired some of Tameer's shares, it still had to structure an arms-length deal with Tameer to allocate responsibilities and share value. As such, in addition to the Tameer shareholders' agreement to which Telenor is a party, two agreements were forged between Telenor and Tameer: a superagency arrangement, which empowers Telenor to appoint and manage agents (under Tameer's close supervision) and an agreement which enumerates Telenor's IT responsibilities. Telenor is paid for its services according to a revenue-sharing model in which revenues are shared based on the costs that each party incurs. No goods or services are billed from one partner to the other, eliminating the need to agree transfer pricing.

A virtual organisation, composed of staff from both companies, runs easypaisa. It is managed by a steering committee: the CEOs of both Telenor and Tameer, who meet monthly. Reporting into the steering committee are senior executives who oversee the group, which is composed of some dedicated, and many more shared, resources. Despite major challenges (KYC requirements in Pakistan are very restrictive, making account opening a major obstacle for customers), Telenor and Tameer have together built one of the most successful Mobile Money services in the world. Between October 2009, when it was launched, and September 2010, over five million transactions (bill payments and money transfers) were processed by easypaisa.

Chapter 3
Driving customer usage of Mobile Money for the Unbanked

Authors: Neil Davidson and M. Yasmina McCarty

As of May 2011, there are 100 Mobile Money platforms around the world.[1] What began as a novel offering from a handful of pioneering mobile network operators has become a mainstream service offering for operators in developing markets.

While the number of Mobile Money deployments has experienced explosive growth, the number of active Mobile Money users has not grown on the same trajectory. Indeed, there have been widely varying levels of customer activation among Mobile Money deployments, with some platforms enjoying widespread customer interest and others struggling to scale.

Introduction

Operators have encountered significant challenges in customer activation, such as:

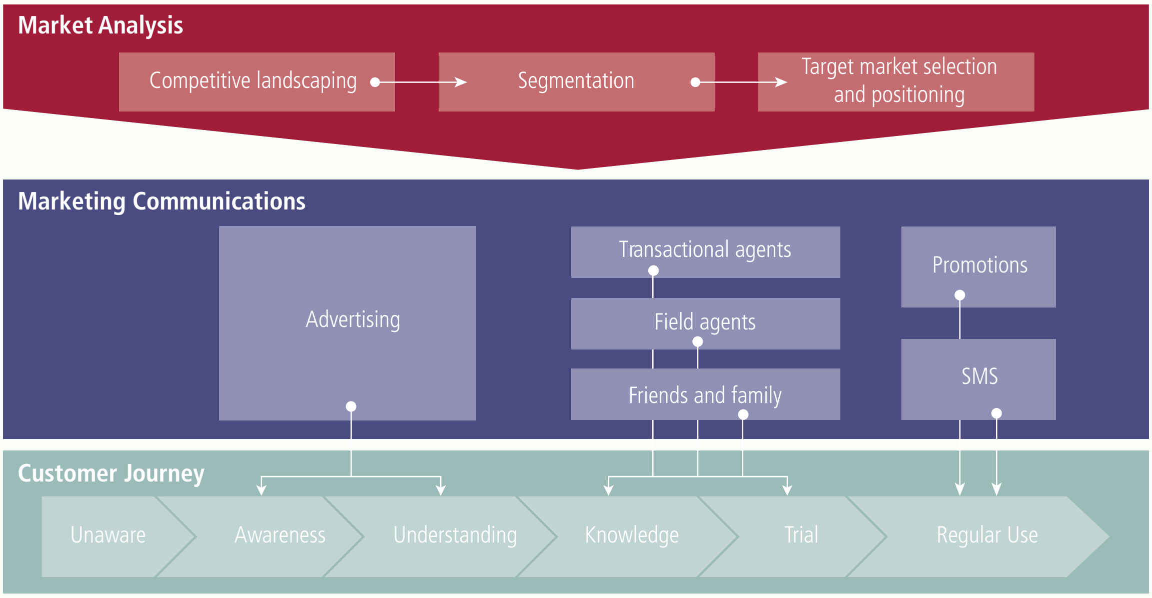
- Customers are aware of the Mobile Money service, but do not understand how it could be beneficial to them
- Customers get bogged down in the registration process and never try the product
- Customers don't understand the mechanics of performing transactions and are apprehensive to try something so novel as Mobile Money
- Customers don't trust the operator's brand or network and are hesitant to conduct financial services on the platform

This document highlights the key challenges that operators have faced when it comes to customer activation for Mobile Money and identifies marketing tactics that have been effective in overcoming them.

As a starting point, we first consider the customer journey for Mobile Money, emphasising that moving the consumer from awareness to regular use requires different marketing interventions at each step in the journey. We then consider Mobile Money in its context, looking closely at the market situation to determine how to identify the best target market for Mobile Money services. Finally, we conclude with a detailed look at above-the-line marketing communications that are best suited to help customers understand the benefit(s) of using Mobile Money and the below-the- line marketing tactics that motivate consumers to try the product and become regular users.

The following diagram provides a visual overview to the steps involved in marketing Mobile Money and serves as a guide to the contents of the article.

Effective marketing, the subject of this article, is necessary for a Mobile Money service to reach scale. But low levels of customer activation can also be attributed to problems in other parts of the Mobile Money programme, from the agent network to the technology platform. As such, we conclude this article with a diagnostic tool that is designed to help operators home in on the root cause(s) of low rates customer activation in their market.



1 The GSMA Mobile Money Deployment Tracker, available at http://www.wirelessintelligence.com/mobile-money/.

The customer journey

The objective of any operator's marketing programme is to persuade consumers to register and become regular users of its Mobile Money service. Given the current products and services consumers are using instead of Mobile Money, the adoption of mobile financial services represents a significant behaviour change.

To drive customer usage, operators must guide customers on a journey from their first encounter with Mobile Money to habitual use of the Mobile Money platform.

In many cases, the customer journey for Mobile Money resembles the following diagram.

Unaware	Awareness	Understanding	Knowledge	Trial	Regular Use
Customer has never heard of mobile money	Customer has heard of mobile money and knows what it is	Customer understands how mobile money could be useful to them	Customer knows the steps necessary to transact	Customer tries the service	Customer habitually uses the mobile money service

- **Awareness & Understanding:** In the beginning of the customer's journey, he or she becomes aware of a Mobile Money service. But it's not enough that consumers know the name of the Mobile Money service or even that they know what Mobile Money is. Rather, **awareness campaigns must build understanding to help users see how this new service is both relevant and beneficial to them**. This lays the groundwork for behaviour change.
- **Knowledge:** Once the customer understands what Mobile Money is, what it does and how it could be useful, the customer learns how to transact. **This typically requires a process of education carried out by an agent of the operator (either a cash-in/ cash-out agent or a field agent) or by a friend or family member of the user.**
- **Trial & Regular use:** Once a customer is aware of the Mobile Money service, knows what it does, is convinced that it can be useful for them, and furthermore understands the processes for performing transactions, they are ready for their first trial. After a number of positive transaction experiences, users can become regular users.[2]

The position of registration varies from platform to platform and therefore has not been called out as a unique step in the journey. Mobile Money services that can be accessed over-the-counter, for example, allow customers to become regular users before they register. Other services insist on registration before transaction, but use different mechanisms to do so: sometimes, customers can be signed up without even knowing what Mobile Money is or what it does (by registering customers for Mobile Money at the same time that they register a SIM, for example)! It is essential for the marketer to consider registration, however, and how it fits into the customer journey, particularly if it may create special barriers to adoption.

While operators have a range of marketing tools at their disposal to move customers along this journey, different marketing mechanisms are effective in moving customers along different parts of the journey. In the "Marketing Communications" section of this article (p. 53), we discuss each of these phases in more detail and note which marketing tools have been found to be most effective at which stage.

2 The definition of regular use will vary depending on the service offering and usage patterns. For people who pay a bill once a quarter, regular use would be performing a transaction once every 90 days. For those using the Mobile Money platform to send money to family every time they receive a pay packet, more frequent transactions would be expected.

Marketing Airtime vs. Marketing Mobile Money

This discussion of the Mobile Money customer journey illustrates a lesson that many operators have learned over the past three years: **marketing Mobile Money is very different from marketing airtime.**

In most developing markets, awareness of mobile brands is already extremely high, and almost everyone already understands what mobile connectivity is. As such, it has for many years been unnecessary for operators to articulate this in their marketing efforts. Similarly, nearly everyone understands how to use a phone and how to load airtime – and if they don't, they can always ask a friend or family member. Here again, operators don't need to educate their customers on how to use their service. Perhaps most importantly, customers trust mobile operators' core offering because they or those around them have been loading airtime, and trusting operators to keep good track of it until they use it.

The Role of trust in the Mobile Money customer's journey

A necessary precondition for trying Mobile Money is trust in the Mobile Money service, which must be high, since for most users, their first interaction with a Mobile Money service will be to hand over cash. An association with a known mobile operator brand, extensive above-the-line advertising, trustworthy agents, and positive word of mouth all build trust. But the most effective way to gain a customer's trust is to ensure that their experience with the service is a good one. If it's not, it's unlikely that the customer will ever become a regular user.

Market analysis

Competitive Landscaping

An understanding of the competitive landscape is the first step in developing a marketing strategy for Mobile Money. Specifically, it is crucial to identify the services that potential customers use as alternatives to Mobile Money and their advantages and disadvantages so that Mobile Money can be positioned compellingly.

Competitive analysis at true money

In late 2009, a group of executives at True Money in Thailand gathered to discuss the possibility of offering a money transfer service to their users. They had heard about the extraordinary success of M-PESA and wanted to understand whether such a service could be successful in Thailand.

One member of the team, who had been responsible for examining the competitive landscape, rose to share his findings. He explained that the Thai post office, with around 1,200 branches, offered quick and reliable money transfer for a low flat fee to transfer up to 10,000 baht (about US$300). Banks offered a service with similar features. One of his colleagues pointed out that, based on prevailing commissions in Thailand, meeting the post office's or banks' prices would hardly generate enough revenue to adequately compensate cash-in and cash-out agents for facilitating a medium-size transfer, let alone leave any profit for True Money. And since customers found the post office and banks to be convenient, quick, and reliable, it wasn't clear that True Money could position its money transfer service as a superior option – and therefore command a higher price.

This analysis of the competitive landscape ultimately led the team to decide that it would be impossible to compete with existing alternatives on the basis of any of the dimensions that mattered to users, so they decided not to develop a money transfer offering. Instead, they chose to continue to focus their energy on expanding their bill payment service. In the bill payments market, True Money had already proven that they could compete successfully with alternatives in the market: at the time, their system was processing over USD$900 million in electronic payments and 120 million transactions per year.

Identifying relevant competitors

What is the real competition for services offered on Mobile Money platforms? There are obvious direct competitors such as Mobile Money platforms offered by competing mobile network operators. But there are also less obvious indirect competitors, such as, when it comes to money transfer services:

- Remittance companies
- Bus companies or drivers
- Post offices
- Airtime transfer facilities
- Friends and family carrying cash

Indirect competitors often represent the most formidable competitive threat to Mobile Money. Understanding these competitors is the first step to effectively competing with them.

Understanding the competition

With a list of competitors in hand, it is possible to compare the product offerings available in a particular market. Looking specifically at money transfer services, for example, competitors can be evaluated along the following dimensions:

Product features and process	Service points[3]
■ Is registration required? If so, what are the requirements (including documentation) and how long does it take ■ Transfer time ■ Maximum and minimum transaction amounts ■ Ease of use[4] ■ Proofs of transactions	■ Number ■ Distribution (are they in business districts? slums? rural areas?) ■ Quality (what level of service do agents offer?)
Price	**Consumer perceptions**
■ Cost for end-to-end transfer[5]	■ Awareness levels ■ Reputation for safety of funds ■ Brand associations

3 For a bank, these are branches; for a remittance company, their offices; and for an MNO, transactional (cash-in/cash-out) agents

4 Some examples of this are lengths of queues in banks, delays in bus schedule, user interface on phone

5 It may be difficult to compare the cost of money transfer services because they use different pricing structures: some may price on the basis of the value transferred (percentage based) while others will probably charge a flat fee. Moreover, when one or more competitor is a Mobile Money platform, it will usually be necessary to add a transfer fee and a cash-out fee in order to reveal the cost of an end-to-end money transfer. A useful tool for analysing the price of competing money transfer services are charts which plot the price for difference services both as an absolute value and as a function of the value transferred. See the MMU Webinar on Pricing and Commissions for more.

This exercise can again be conducted for all Mobile Money services the operator plans to offer, such as bill payments, bulk payments and storage of value. It can be undertaken in house, or by a market research agency. Either way, a good competitive landscaping exercise includes not just desk research but also speaking to customers of each competitor and visiting service points.

Competitive analysis in Tanzania

In mid-2009, two researchers undertook a competitive review of money transfer options in Tanzania.[6] Even at that time, the Mobile Money landscape in Tanzania was crowded: Vodacom had launched M-PESA in April 2008, hoping to replicate their success in Kenya, and Zain and Zantel also offered money transfer services to users. But the analysts noted in a report that, although M-PESA was the most widely used Mobile Money platform in Kenya, it was by no means the most popular option among Tanzanians for sending money. Instead, they found that a varied menu of formal and informal options were more widely used:

- Asking a relative or friend to hand-deliver cash. This option was presumably fairly low risk and low cost, but could be time-consuming, since the sender would have to wait for a relative or friend to travel to the part of the country where the recipient resided.
- Transferring money between accounts at National Microfinance Bank, which had approximately one million customers (out of 22 million Tanzanian adults) and 120 branches. This was an inconvenient option, even for people with bank accounts, because it usually involved waiting in long queues at possibly distantly located branches, but it had the advantage of being free.
- Sending money using regional buses. This could be either formal – where the payment would be dropped off and picked up at ticket offices of the bus company – or informal, where cash would be handled by an individual bus driver. The formal option was considered expensive and inconvenient for remittances to rural areas, where the bus companies had no offices; the informal version was considered risky and inconvenient, since the recipient would have to wait, sometimes for hours, to meet the bus on arrival whose driver was carrying their cash.
- Sending goods – foodstuffs, clothes, even building materials – instead of money. This was expensive (high transportation cost) and unreliable (risk of damage, delay, or theft in transit), but people felt it was at least less risky than cash.
- Purchasing an airtime voucher and sharing the top- up code with the recipient, who would in turn sell the airtime to someone who needed it in exchange for cash. This option was expensive – costing between 10% and 40% of the value transferred, because "second-hand" airtime could be sold for only 60% and 90% of its face value – and slow, because it could take a while for the recipient to find a buyer for their airtime. But it was safe.

The researchers concluded by connecting their competitive landscaping exercise with an observation about the way that M-PESA was beginning to successfully differentiate itself from its competitors. "The most common explanation people using M-PESA gave for choosing the service was convenience. M-PESA involves less time travelling and queuing compared to other methods. At the same time it is affordable, which is the second most popular reason given to why they chose the service."

6 Gunnar Camner and Emil Sjöblom, "Sending money in Tanzania: Overview of available alternatives in 2009," available at http://www.valuablebits.com/ tanzania_sending_money.pdf

Segmentation

Segmentation is the process of identifying groups of consumers likely to use a Mobile Money service, understanding their requirements, and defining their profiles. It is only after segmenting the base of potential customers that operators can select a target market.

Why segmentation matters

Financial services are more complex than mobile services because of the variety both of customers' needs and of the attributes that customers seek from products that meet those needs. **Because different customers have different needs and preferences, it is impossible to market a Mobile Money service that addresses everyone's equally well**. Segmentation helps the operator develop a marketing strategy that effectively drives customer activation.

Microinsurance in South Africa

In South Africa, it is customary to hold expensive funerals as a sign of respect for the dead. Paying for these events can expose households to significant financial hardship, unless they have prepared for them in advance, either by saving or through insurance.

In focus groups conducted in South Africa, it emerged that while urban dwellers used a mix of savings and insurance to prepare for funeral expenses, rural inhabitants preferred only to save.[7]

This is a good example of a case where a group of users have the same financial need – to protect against the financial shock of having to pay for a funeral out of pocket – but where major differences exist in the attributes customers seek from a product that would address that need.

A marketer who was unaware of the difference between the way that rural and urban customers preferred to prepare for funeral expenses could easily spend large sums of money promoting funeral insurance in rural areas to little effect. It is a clear example of the power of segmentation.

Segmentation is never undertaken as an end to itself; it always has a practical application. In fact, **the ability to apply the segmentation to Mobile Money service design and/or the development of marketing campaigns is the sign of good segmentation**. For example, an advertisement targeting urban migrant workers who send money home would obviously look different and use a different marketing mix from an advertisement targeting rural parents who send money to their children in school.

There are numerous ways to segment a market; in this section, we will discuss a typical approach to segmentation in Mobile Money and highlight examples of segmentation by Mobile Money providers around the world.

Segmentation by Safaricom for M-PESA

Safaricom and Vodafone designed M-PESA as a way for recipients of microcredit to make loan repayments in Kenya. But when it was pilot tested in 2006, they discovered something surprising: people were using the service to transfer money to each other more frequently than to their microfinance institution. A competitive analysis of the mechanisms that Kenyans were using for money transfer at the time revealed why: people would typically use informal mechanisms – usually, asking a friend, family member, or taxi driver to hand-carry cash – which tended to be unreliable, inconvenient, and often expensive.

What's more, a 2006 Finaccess survey showed that just 3% of Kenyans had a loan from a microfinance institution, while 17% reported having sent money at least once in the last twelve months.[8] This meant that selecting remitters as the target market rather than MFI borrowers would allow Safaricom to address the needs of a larger segment.

Safaricom knew it was not enough to identify the 17% segment that sent money. They wanted further information on their target market. They were able to further refine the segmentation by targeting customers who wanted to "send money home" from an urban location where they had moved for work. This in turn allowed Safaricom to create a socio-demographic profile of customers in its target market: they were likely to be male, young, and wage-earners, and they were likely to live in Nairobi or one of Kenya's other large cities. For more of how this target market selection influenced the marketing communications which Safaricom used to promote M-PESA, see "M-PESA Advertisements" (p. 56).

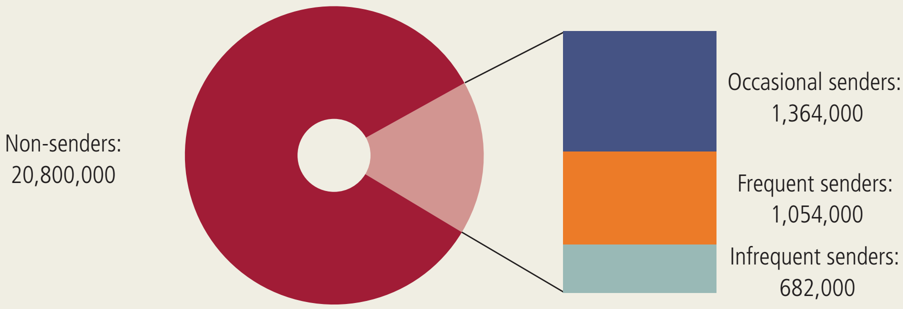
7 H.J. Bester and D. Chamberlain, "A regulatory review of formal and informal insurance markets in South Africa, a report prepared for the FinMark Trust by Genesis Analytics," available at http://www.finmark.org.za/new/pages/Focus-Areas/Insurance.aspx?randomID=f48c141a-d6a2-4c61-b33e-42a90c40f701&linkPath=6&lID=6_7

Identifying segments

The most common first step in segmentation is identifying the groups of customers who most need the product being offered. For Mobile Money transfer, this means identifying consumers who are already transferring money on a regular basis.

Money transfer in Tanzania

In a survey undertaken recently in Tanzania, 13% of respondents indicated that they send money to other people, which suggested a total of 3.1 million customers.[9] It is possible to segment these customers into three groups: those who send money frequently (i.e., at least once a month), infrequently (less than once a month, but at least once every three months), and occasionally (less than once every three months):



Once the operator has been able to identify the population which is sending money, customers can be grouped according to their motivations for making money transfers. While every market is different, a list of potential segments might look like this:

- Parents sending money to their children in school
- Migrant workers sending money home. In some markets, it may be useful to sub-segment this group, for example:
  - Young adults supporting parents
  - Spouses supporting their family
- Family members sending gifts / support to other family members
- Traders paying wholesale suppliers for inventory
- Small companies / factories paying wages

If a bill-payment service is being offered, the same exercise can be completed, looking instead at the different monthly bills that people pay.

Some operators undertake quantitative market research to generate lists like the one above as well as to determine the size of each segment. Operators who do not invest in such research have to base their analysis on secondary sources.

8 "Financial Access in Kenya: Results of the 2006 National Survey," available at http://www.fsdkenya.org/finaccess/documents/FinaccessReportFINALMain.pdf

9 David Montez and Peter Goldstein, "Mobile Money for the Unbanked: Lessons from Tanzania," available at http://www.audiencescapes.org/sites/ default/files/AudienceScapes_Mobile%20Money%20for%20the%20Unbanked_Lessons%20from%20Tanzania_December%202010.pdf

Tigo Ghana's Pre-launch market research

In preparation for launching TigoCash, Tigo Ghana undertook market research to understand the demand for remote payments in Ghana. First, their market research agency conducted a series of eight focus groups, with customers grouped into socioeconomic or demographic segments, to explore how people were sending money already. On the basis of those focus group discussions, the team formulated a set of hypotheses which informed the development of a quantitative survey, which yielded quantitative estimates for the number of customers making remote payments, their reasons for doing so, and their socioeconomic and demographic profiles. Finally, a second round of focus groups was held in order to (1) understand why customers were behaving in the ways that had been reported in the quantitative study and (2) gauge reactions to TigoCash product concepts.

The MMU programme has a variety of tools to help operators undertake market research, including a Customer Insights Toolkit and sample focus group discussion guides and survey questionnaires. They are available upon request by e-mailing mmu@gsm.org.

Understanding segments

With a list of segments in hand, operators undertake to understand the preferences, attitudes, and socioeconomic and demographic characteristics of customers in each segment.

Preferences

It will be hard to market a Mobile Money service to customers without understanding what they are likely to seek from it. Understanding segments' preferences answers the question, "What features of a Mobile Money transfer service are most important to the customer?"

Often, preferences are rooted in behaviours. The table below describes the way an illustrative segment, migrant workers, behave and what that suggests about their preferences when it comes to selecting a mechanism for transferring money. Operators can use market research to test these implied preferences and discover others that do not flow obviously from observed behaviour.

Observed behaviour	Implied preference
Migrant workers typically work long hours and have few breaks from work, so they do not have time to stand in queue.	This segment will seek convenience from a Mobile Money service. Having an agent near their work with extended hours and no long queue will likely be very important to them.
Migrant workers typically have lower wages, which have to cover their living costs as well as the living costs of their family back home.	The cost of the money transfer will probably be very important to them, as will reliability – since the impact of losing part or all of a given remittance would cause a severe financial shock for them or their intended recipient.
Migrant workers often have lower educational level.	The user interface for the Mobile Money service will need to be simple and the marketing messages should have more visuals than words. Also, migrant workers will need some support from agents for conducting the transactions.

Sub-segmentation can be helpful at this stage, if it is possible to identify groups within a segment that seek different product attributes. For example, an operator might discover that there are two kinds of migrant workers with significantly different preferences: one higher-income group that cares primarily about speed and convenience (and is willing to pay for it) and a lower-income group that cares primarily about price (and is willing to sacrifice speed and convenience). In this situation, two groups with the same need have different preferences, which calls for sub-segmentation.

Understanding customer preferences in Thailand

In early 2010, True Money was seeking to drive customer usage of its over-the-counter bill-payment service, True Money Express. It commissioned a set of focus groups to try to understand attributes customers valued from a bill-payment service. True Money knew it could market its service touting a variety of attributes – cost, speed, reliability, convenience, etc. – but it didn't know which of these messages were most likely to resonate with potential customers in one segment of particular interest: 20-year-olds in greater Bangkok.

In focus groups, customers made their preferences clear: convenience was the single most important feature of a bill-payment service, and it was on that basis that they chose which service to use. How did they define convenience? First, proximity of agents to where they lived and worked, and second, the ability to transact anytime, including outside of regular business hours.

True Money was able to exploit this insight in two ways: by focusing its distribution team on growing the agent network strategically to ensure optimal agent positioning and recruiting outlets with long hours, and by refining its marketing messages to accentuate the convenience of using True Money Express.

Attitudes

Sophisticated marketers also seek to understand attitudes of customers, either as a way to understand customers better in a given segment or even to use differing attitudes as a basis for segmentation. For example, customers can be characterised by their attitude toward using new technology. People who are very open to trying new technology, or "early adopters," are likely to be easier to persuade to try Mobile Money than those who are uncomfortable or distrustful of technology.

It is very hard to assess the attitudes of customers without market research. However, operators can make assumptions about customers' attitudes on the basis of their socioeconomic and / or demographic profiles. For example, young people are generally seen to be more likely to adopt new technology products than old people; educational attainment is sometimes also cited as a predictor of early adoption.

The important attitudes to consider vary depending upon the product line offered on a Mobile Money platform. To market a savings product, for example, it would be helpful to understand customers' attitudes toward the future.

Socioeconomic and demographic characteristics

Finally, after identifying the uses of money transfers and the needs of the customers, it is possible to define or sub-segment segments with the demographic and socioeconomic markers such as age, gender, income, etc.

Continuing the above example, we can construct a profile for an illustrative migrant worker segment:

- **Gender**: male
- **Age**: 25–45
- **Education**: primary schooling; most are numerate, but many are illiterate
- **Income**: monthly earnings of approximately $80
- **Residence**: shared housing in lower-income neighbourhoods of urban centres

Target market selection and positioning

After segmenting the universe of potential customers, operators select the priority target market(s) where they will focus. Selecting a target market helps operators communicate effectively with consumers and position the service based on their needs and preferences.

Target market selection

How do operators select a target market? Two criteria are most important:

1. **Size:** There is little point in selecting a target market that is too small to support the Mobile Money business through its initial growth phase. There are two reasons why it is imperative to have a reasonably large initial target market in Mobile Money. First, Mobile Money services experience strong economies of scale at both the platform and the agent level, so it is essential to drive volumes as quickly as possible. Second, Mobile Money services focused on transfers benefit from strong network effects. As such, all else being equal, operators should select a target market that will allow it to scale up as quickly as possible.

   By size, however, we refer to volume of transactions rather than number of customers. Sometimes, operators choose to focus on smaller segments (small-scale traders, for example) because they have the potential to become heavy users. When these heavy users are accustomed to sending money to or receiving money from a large number of other parties, this can also help to exploit the strong network effects that characterise Mobile Money. Signing up "nodes" – users who are likely to have many transaction partners – will help drive adoption by those transactions partners as well.

The target market need not be vast to put a Mobile Money service on the road to mass-market success. As "M-PESA Growing Beyond Safaricom's Target Market" (p. 13) illustrates, it is quite natural for customers outside the target market to sign up for and begin using Mobile Money even without being explicitly targeted by the operator. Word of mouth, turbocharged by advertising and network effects, helps this process along; so do agents, who, if correctly incentivised, will become effective salespeople to customers outside the target market. So it is important to balance a desire for a large target market with the need to target customers who are likely to be receptive to the Mobile Money proposition.

For more about the role of network effects in Mobile Money, see "Understanding (and Exploiting) Network Effects in Mobile Money", available at http://mmublog.org/global/understanding-and-exploiting-network- effects-in-mobile-money/.

2. **Alignment between customers' needs and the benefits of Mobile Money:** As important as a segment's size is the intensity of the demand that customers in the segment are likely to experience for Mobile Money. That's because the higher the intensity of their demand, the more likely they are to try the service.

Generally speaking, intensity of demand for the operator's Mobile Money product is a function of how dissatisfied they are with their current money transfer mechanism. **Customers who are very frustrated with their current approach to money transfer are significantly more likely to try Mobile Money.**

To put this more strongly, operators can look for the segment in which customers are suffering from the most acute "pain points" that Mobile Money might solve. All else being equal, this is likely to be the most attractive segment to target.

Three additional considerations are especially relevant when choosing a target market in the context of Mobile Money.

- **Consider the penetration within a potential target market of operator connections**.
  For wallet- based services offered by operators, owning SIM card issued by that operator is a pre-requisite for signing up for Mobile Money. Operators that select a target market in which their core business has low penetration will have a more difficult marketing challenge, because there will be one more hoop – SIM purchase – for potential users to jump through before they can sign up.

Selecting a target market for Celcom aircash

Axiata Group, having identified that a number of its operating companies were in place at either end of significant international remittance corridors, was one of the first operator groups to map out a strategy for using Mobile Money as a way to capture part of these flows. In line with this strategy, Celcom Axiata Berhad, the first telecommunications service provider in Malaysia and an Axiata subsidiary, developed a service that would allow Indonesian migrants living in Malaysia to send money home – working with XL, Axiata's subsidiary in Indonesia, to work out the cash-out logistics.

When Celcom launched its international remittance product, customer adoption was not as robust as expected. Market research revealed that, despite Celcom's strong market share in the mobile market, migrant workers were more likely to use one of its competitors, DiGi. And without a Celcom SIM, customers couldn't use its international remittance service.

Rather than cede the segment, Celcom executives worked to find other ways that it might cater to migrant workers. It ultimately decided to position one of its prepaid airtime brands, Celcom Sukses, to meet the needs of migrant workers – notably, by offering the lowest international direct dial call and SMS rates to countries, including Indonesia. The result was a product portfolio, including but extending beyond Mobile Money, that was driven by the needs of a particular segment and that could be marketed to that segment in an integrated way.

- **Consider whether a potential target market is composed of early adopters**. Operators which select a target market of early adopters are more likely to see rapid adoption of their service than others.
- **Consider the addressability of a potential target market**. When marketers refer to a segment as addressable, they mean that it is possible to reach those customers through marketing channels. In general, the more media that customers consume, the easier it is to address them.

Segmentation and target market selection by WING in Cambodia

In 2007, ANZ Bank created WING, a subsidiary that offers Mobile Money for the Unbanked in Cambodia. In preparation for its launch, the WING team conducted a segmentation exercise with a market research agency. They assigned Cambodia's 8.2 million Cambodians aged 15–55 to eleven segments, based on age, income, occupation, and dependents. For each of these segments, WING prepared a profile consisting of:

- **A customer description:** age, family status, monthly income, job type, and spend items
- **Attitudes, needs, and behaviours:** attitudes and feelings toward money and money usage patterns, needs, and desires and aspirations
- **Suitability for WING:** transactions performed, mobile phone usage, geographical presence, and ease to reach – all of which fed into an overall "suitability rating"

WING was able to rule out five segments as targets right away: two that did not have sufficient financial resources to make use of WING services and three that seemed to have their payment needs satisfied by other institutions.

By comparing the transactional needs of the remaining segments with WING's planned service offering (money transfers, airtime purchase, bill payments, and merchant payments), WING narrowed the list of remaining segments to the four which would find WING most useful:

"Urbanised blue collar workers," e.g. garment factory and construction workers; "High school kids"; "university students"; and "First freedom white collar workers," e.g. nurses, teachers, business owners, and bank employees

Finally, after assessing the specific needs of each of these segments, WING decided to make "urbanised blue collar workers" its target market. This segment was largely composed of employees in garment factories, aged 15–35, earning less than $100/month. WING chose to target this segment for a few reasons.

1. Their research suggested that, on average, garment workers sent 30–50% of their income home to support their families in rural Cambodia. As such, they were obvious potential users of WING's money transfer service.
2. Research suggested that the risk of theft was something that garment workers worried a great deal about. As such, they might well find the possibility of a safe place to store money (which a WING account would offer) attractive.
3. Finally, this segment was highly addressable: garment factories in Phnom Penh were concentrated in particular areas, so it would be easy to concentrate marketing spend and the agent-network footprint in places that migrant workers would frequent.

WING estimated that there were 1.1 million Cambodians in this segment, representing about 14% of the adult population of the country.

A final point on choosing a target market: **selecting a target market does not mean that the Mobile Money product will exclude all other customers. In fact, most operators design their Mobile Money platform with enough flexibility that the products and services offered can be used by anyone.** Selecting a target market simply helps operators craft a marketing strategy that will be effective with the customers they most strongly want to serve. For this reason, target market selection should not be confused with market sizing.

M-PESA growing beyond its target market

It is not exactly known how large the Safaricom's target market of urban, male migrant workers sending money home was when M-PESA was launched in 2007, but research conducted at the time indicates it was probably no more than three million Kenyans, or 14% of the adult population. As of late 2010, M-PESA boasted 13 million active users, or 61% of the adult population. Although its marketing was highly targeted, the design of M-PESA made it useful for a very wide variety of customers.

Positioning

Drafting a product positioning statement is the bridge between selecting a target market and developing a communication strategy. Once a target market has been chosen, the operator can decide how best to position a service to that market, thereby laying the foundation for a successful marketing campaign.

The positioning statement defines the main benefit of the Mobile Money service and differentiates it from the competition. An example of a Mobile Money product positioning statement is as follows:

> *For urban migrant workers who need a safe way to send money home to their families in rural areas, mCash is a Mobile Money transfer service that provides safe transfers across the country. Unlike bus drivers and other informal remittance options, mCash uses a secure electronic transfer system to ensure cash is never stolen en route.*

Positioning statements are not communicated verbatim to customers. Instead, they are used as an input to the development of a marketing campaign.

Obviously, the primary benefit that is articulated in the positioning statement should be one that is highly valued by customers in the target market. It should also be one that no competitor, direct or indirect, can offer. **For these reasons, it is very difficult to develop a compelling positioning statement without a clear understanding of the competitive landscape and of the target market's preferences.**

The textbook approach to positioning a product requires selecting a single primary benefit that will be promoted. Operators often have trouble selecting a primary benefit because Mobile Money product offers multiple benefits to using the product, i.e., convenience, speed, security and so on. **But the more focused the positioning statement is, the clearer the marketing messaging will be.**

Marketing communications

Operators have a range of marketing tools to bring customers from unaware to regular use. Certain marketing communications tactics are effective in the earlier stages of the customer journey, while others are only useful at the end.

Building awareness and understanding

Unaware	Awareness	Understanding	Knowledge	Trial	Regular Use
Customer has never heard of mobile money	Customer has heard of mobile money and knows what it is	Customer understands how mobile money could be useful to them	Customer knows the steps necessary to transact	Customer tries the service	Customer habitually uses the mobile money service

The starting point for any Mobile Money campaign is building awareness: letting potential customers know that the service has been launched, what is being offered, and how they might use it. As discussed in "The Customer Journey" (p. 44), high-level brand awareness is not enough. For marketing Mobile Money, it is essential that operators also build understanding by communicating how the platform is useful for the consumer.

Advertising

Advertising is the primary tool that operators employ to raise awareness of Mobile Money. Most operators take the view that a national advertising campaign is the right way to launch Mobile Money. The widespread presence of advertising builds trust and confidence in the way that a campaign composed exclusively of below-the-line elements cannot. This is particularly true for money transfer services, since a national campaign reaches both potential senders and recipients.

The media most often utilised in awareness-building advertising campaigns are television, radio, and "outdoor" such as billboards or bus branding. While these media are often used together for maximum impact, they each have different strengths, both in their ability to communicate a compelling message and their ability to reach a large number of people.

Television enables operators to tell a story with sound and movement, and engage the viewer with a more compelling message. Outdoor can be eye-catching but conveys only a simple static message. Radio can tell a brief story, but cannot provide much detail before the listener tunes out.

The reach of each of these media differs from market to market. Sophisticated advertising agencies will place advertisements where they are most likely to be consumed by the target market, taking into account patterns of media consumption in a given country.

Matching media to target market segment in Pakistan

The mix of media used to promote easypaisa, a service offered by Telenor and Tameer Microfinance Bank in Pakistan, was based on the relative strengths of each channel and on campaign objectives. For example, Telenor Pakistan has spent very little money advertising easypaisa on the radio. This was due in part to the low popularity of radio, and the widespread consumption of television, among its target market.

The genius of effective campaigns is in their execution. For this reason it is critical to enlist the right advertising agency as a partner and to properly brief this agency on the campaign objectives. To give the advertising agency all the tools they need to succeed, savvy operators provide in-depth agency briefs to outline the core principles of the brand (including the brand architecture), the positioning statement, and the desired tone of the campaign. Operators are also responsible for ensuring advertising agencies keep communications consistent across all marketing elements, both above-the-line and below-the-line.

Messaging

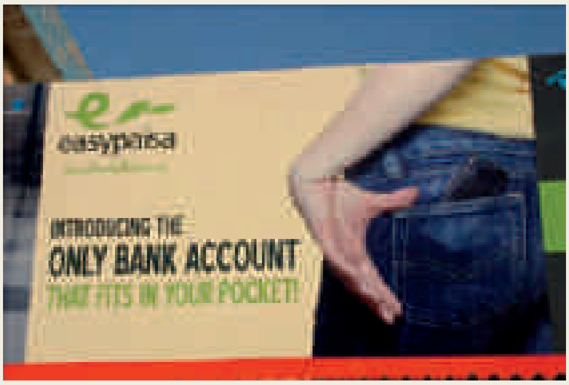
With operators spending such significant money on awareness campaigns, finding the right communication message (words and images) for the launch campaign is essential. This is harder than it sounds, because Mobile Money often targets consumers who may never have heard of Mobile Money, or possibly never even used formal financial services. **Mobile Money launch campaigns have to (1) introduce the Mobile Money platform, (2) explain what service(s) is being offered, and (3) advise users of the primary benefit(s) of that service.**

Campaigns that omit any of these messages tend to be less effective in moving customers along their journey to activation. Because Mobile Money is still an unfamiliar concept in most markets, basic awareness messages such as "mCash has arrived" or "Financial services and mobile technology have come together to make mCash" do not provide enough information to consumers to compel any type of action: users become aware of the Mobile Money program but fail to see why they should try it. **Providing a clear user benefit in the awareness campaign leads to the best return on investment for awareness campaigns.**

The evolution of marketing the easypaisa mobile wallet

Telenor Pakistan launched easypaisa in 2009, a platform that initially allowed customers to pay bills and transfer money over-the-counter. For easypaisa's launch, an ambitious brand-building campaign was mounted to introduce the brand to potential customers. Complementing this campaign were advertisements in which Telenor promoted bill-payment and money-transfer services. A relatively low degree of customer education was required in order to persuade customers to begin using these services, in part because these were over- the-counter services which required only that a customer walk into an easypaisa outlet – the transaction itself was performed by the agent on his handset.

On the back of strong customer demand for over-the-counter services, Telenor added a mobile wallet to the easypaisa product line in February 2010. It chose to explain the uses of a mobile wallet with a number of billboards, featuring text like "Introducing the only bank account that fits in your pocket!" and "Ever paid utility bills or transferred money while cooking?"



However, customer adoption of the mobile wallet was disappointing. Market research suggested that these advertisements had not conveyed a compelling reason for customers to sign up for the wallet. It was not clear to customers why they shouldn't just keep paying bills and sending money over the counter.

As such, while streamlining the registration process, Telenor undertook market research to understand what benefits of the mobile wallet potential customers were most likely to value. Safety and security emerged as a theme, so Telenor worked with its creative agency to create a marketing campaign that would tout the easypaisa wallet as a safe place to store money.

It is worth noting that campaigns which communicate a key user benefit are only possible to design once operators have selected their target market and articulated a positioning statement. Because this positioning statement identifies one key user benefit for one specific user group, it necessarily improves the focus of the campaign.

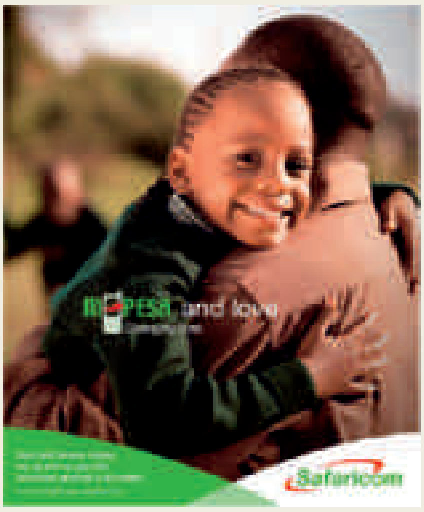
A number of operators are reticent to speak to just one consumer group, and often opt for simple explanatory messages at launch with the objective of broadly speaking to everyone about the availability of Mobile Money. However, in trying to speak to everyone, they are left with a weaker message that does not compel users to action.

M-PESA advertisements

Creative elements of the M-PESA "Send money home" campaign clearly reflected the targeting of young male migrant workers, and two key product benefits, ease of use and affordability, are plainly articulated. The advertisement achieved deeper awareness with their target market, whereby consumers knew what M-PESA was but more importantly, they knew how it could help them. A number of other elements are of note:

1. Safaricom green is the backdrop for the advertisement, leveraging the strength of Safaricom's brand in Kenya to build trust in M-PESA
2. The ribbon of shilling notes makes concrete the abstract nature of sending money by phone, designed to communicate with users unfamiliar with the concept of Mobile Money transfer – even those who cannot read
3. The advertisement appeals as much to money transfer recipients (the parents in the photo) as to the sender, reflecting the influencing role that recipients play when senders choose a method for sending money
4. The call to action is clear and extremely prominent
5. The sender is depicted as relatively prosperous, and neatly if not formally dressed – splitting the difference between a realistic and an apsirational depiction of migrant workers

Safaricom invested so heavily in the send money campaign that by August 2008, 17 months after launch, only 18% of nonusers of M-PESA didn't know about it, and by December 2009, that figure had dropped to just 3%. With such high levels of awareness, Safaricom crafted a new campaign, with an eye towards establishing a more emotional, rather than functional, relationship between users and M-PESA. A series of print advertisements and billboards, complemented by a TVC, explored the reasons for which people were sending money and the emotional resonances of those transactions. In this advertisement, a little girl in a school uniform is shown hugging her father, who paid her school fees using M-PESA.



Safaricom executives note these advertisements would have been ineffective in a launch campaign, because they do not communicate clearly what M-PESA does and how it might be useful to the target customer.

A final consideration on messaging for the campaign is the imagery utilised. The Mobile Money users depicted in any advertisement must resonate with potential customers in the target market. If they are seen as too different, then customers will assume the advertisements are speaking to someone else and ignore them.

The best way to find out if an advertisement will resonate with the target market is to test it. Focus groups to verify that campaign elements are comprehensible and compelling are relatively inexpensive in the context of the budget for a major advertising campaign.

Aspirational imagery vs. depicting "People like me" – evidence from Thailand

For years, True Money has been promoted using marketing creative that features aspirational imagery. Advertisements feature models that appear high-status, the idea being to create a brand for the service that is appealing and inspirational for users.

However, True Money discovered in focus groups that such branding was actually alienating some potential customers. When asked to describe users of True Money, nonusers conjured up an image of a business person who was very busy and earned a high salary – a profile they noted was very different from their own.

This insight prompted True Money to consider whether its marketing creative was as effective as it could be, particularly when addressed to lower-income segments.

Timing

The launch of any advertising campaign only makes sense once the customer can actually transact. Most importantly, the agent network must be ready. **Operators who have not properly trained and incentivised agents to help users sign up or have not ensured agents have adequate liquidity for initial customer trials have realised low returns on their initial marketing investment**. Worse, these events erode the confidence of customers who have bad experiences, making them less likely to try the service again later.

In "Measuring Effectiveness" (p. 69), we discuss tools that operators can use to evaluate when their objectives for building awareness have been achieved (and when, as such, resources can be re-deployed to focus on activation).

Branding

Most operators launching Mobile Money already have strong brands in their respective markets – consumers know of the operator and have an opinion about their strengths in the market. This raises three important considerations when it comes to Mobile Money.

First, operators have found **it important for any Mobile Money messages to fit within the overall brand**. If an operator has positioned their brand as the "company that helps you keep your friends and family close," then a Mobile Money campaign can easily communicate that the Mobile Money service is just another way to bring the family and friends closer.

On a less positive note, operators have to face up to the fact that perceptions of their core brand are not always positive, and **negative perceptions of the core brand affect people's reaction to a Mobile Money service.** For example, do consumers perceive the operators' network as unreliable? This can pose a real barrier to Mobile Money adoption, as consumers will only transact on Mobile Money platforms they trust. As such, understanding the associations that customers have with the core brand, good or bad, can help operators as they develop their marketing strategy.

Finally, **operators have the challenge of determining how the Mobile Money brand will fit within the overall brand architecture**. Some operators have chosen to launch Mobile Money as a product within their brand, while others have elected to launch the overall Mobile Money platform as a sub-brand, for which there may be multiple products such as money transfers, bill pay, etc. Considering the product roadmap can help operators "future proof" their decisions about how to fit Mobile Money into the brand architecture.

Sub-branding by Grameenphone in Bangladesh

Grameenphone launched a bill-payment service in 2006 in Bangladesh, which it called, for simplicity, "BillPay." Over time, Grameenphone expanded its line of payment products with railway and cricket ticketing and lottery e-voucher distribution, and as of late 2010 it had plans to expand this portfolio yet further.

Grameenphone decided that it needed to consolidate all of these products into a single brand for the Mobile Money platform. Accordingly, it developed MobiCash, an umbrella brand that could encompass all of Grameenphone's mobile financial services.

Educating and activating customers

Unaware	Awareness	Understanding	Knowledge	Trial	Regular Use
Customer has never heard of mobile money	Customer has heard of mobile money and knows what it is	Customer understands how mobile money could be useful to them	Customer knows the steps necessary to transact	Customer tries the service	Customer habitually uses the mobile money service

While awareness building is perfectly suited to mass media advertising campaigns, **customer education typically requires a more personal approach**. As such, operators leverage transactional agents, field agents, and current users to guide potential customers from awareness to use.

Effective awareness-building campaigns bring customers to the point of recognising how Mobile Money might be useful to them. But to compel users to register and try the service, further work is required to educate the consumer on how it works. Many elements of the Mobile Money customer experience are non-obvious from the perspective of a consumer, from the existence of an electronic wallet to the need to use independent agents as cash-in/cash-out points. Operators need to educate customers about these facets of the service if customers are going to become knowledgeable enough to transact.

Customer activation in Tanzania

When asked to reflect on lessons learnt while rolling out M-PESA in Tanzania, one Vodacom executive cited the importance of customer education. He said that above-the-line marketing is not enough to get a Mobile Money service "off the ground" and that a lot of effort must be invested to get people comfortable with the idea of transferring money using their phones. Indeed, he estimated that it takes at least 30 minutes of personal interaction (with a transactional agent, a field agent, or a friend or family member familiar with M-PESA) to get a new customer to understand how to use a Mobile Money service.

Transactional agents

The cash-in/cash-out agents that facilitate Mobile Money transactions are perfectly positioned to support customer activation. They can answer customers' questions and concerns about the service, customise a "sales pitch" for an individual customer, and demonstrate to customers the mechanics of transacting. Of course, in most markets, they also register customers – usually a prerequisite to making a first transaction.

There are three key success factors for leveraging agents to activate customers:

- **Training** – **Well-trained agents are proven to be effective in driving customer activation**. Poorly trained agents won't be able to perform their side of transactions, let alone demonstrate to customers how to perform theirs.
- **Incentives** – Explaining to consumers how to use Mobile Money is time-consuming for agents. **It is therefore important that agents have been incentivised properly for both registration and cash-in**, and for the balance between those incentives to be right. As important as the commissions that agents are paid are the volume of transactions that they are able to perform; this in turn obligates operators to carefully grow their agent network in proportion to their user base in order to meet the needs of both groups.
- **Oversight** – Agents can be a powerful force for driving customer adoption; unfortunately, if unsupervised, they can as easily drive customers away. Unscrupulous, incompetent, and illiquid agents do more harm than good, so **operators need to monitor the network to discover and rectify these problems.**

For more on agent training, incentives, and oversight, see "Building, Incentivising, and Managing a Network of Mobile Money Agents," which is available at http:// www.gsmworld.com/documents/Agent- Networks-full.pdf.

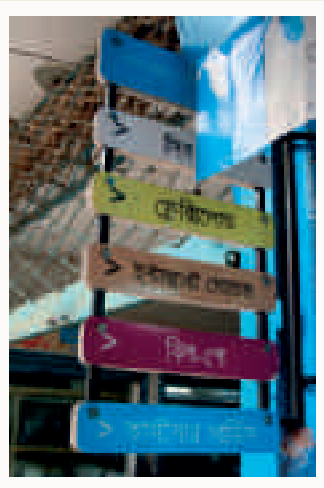
Marketing materials at the cash-in/cash-out agent's shop help educate users about the service. In almost every case, agents are required to display branding for the Mobile Money service and certain customer information, like a tariff schedule, the agent's ID number, and customer advisories.

Agent branding in Kenya, Bangladesh, and Thailand

Operators have taken a number of different approaches to branding their agents' shops in order to raise the visibility of their Mobile Money service and instil customer confidence at the point of transaction.

Safaricom has taken by far the most aggressive approach, insisting that its agents paint their shops green (and, at least in theory, stop selling the airtime of its competitors) and prominently display the M-PESA logo, which is impossible to confuse with the ordinary Safaricom logo. That's important, because without an obvious way to tell Mobile Money agents from airtime retailers, customers can get frustrated trying to locate the former.

Grameenphone distinguishes BillPay agents from regular Grameenphone airtime retailers using colour-coded signage that indicates which services are available at the agent.



In Thailand, True Money charges shopkeepers to become agents, and the shop branding they receive varies depending on how much they pay. Top-tier agents receive a lightbox which they can install on the outside of their shop and which draws traffic to shops even at night.

Field agents

Transactional agents are not always able to do the "hand-holding" that customers require. To supplement their efforts, **operators have deployed special teams of marketing field agents to educate the customer about Mobile Money.**

This tactic of "feet-on-the-street" is popular not just in Mobile Money, but also widely utilised in fast-moving consumer goods, microfinance, health interventions, etc. It has proven to be a very effective method of customer education in emerging markets, particularly when significant behaviour change is required of users.

The key advantage of field agents when compared to transactional agents is mobility. Transactional agents have to wait for customers to come to them; field agents can seek out customers where they live and work.

The critical success factor for this tactic is the incentives for field agents: the commissions paid to the agents must be aligned with the objectives of the campaign. **Field agents who are paid simply for registering customers will leave operators with a large volume of registered but inactive customers.**

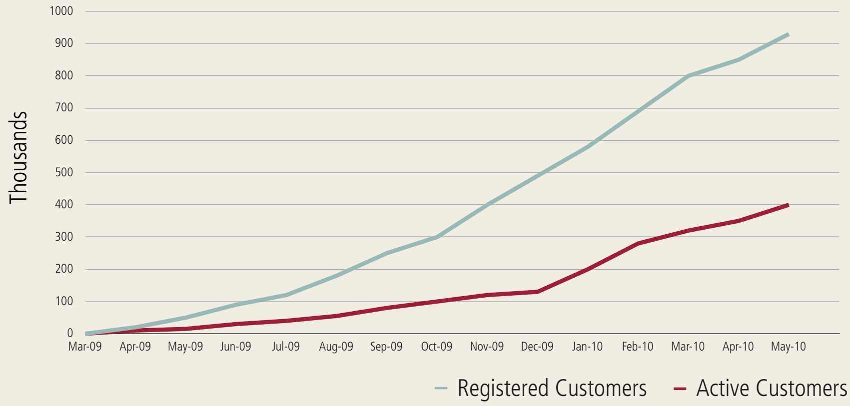
If the sourcing of field agents is outsourced to a marketing company, operators have discovered that it is important to carefully oversee agent training and to ensure that agents use specific "talking points" about Mobile Money. These field agents are viewed by the consumer as representatives of the Mobile Money brand, and it is therefore important to shape the messaging they employ.

Barriers to customer adoption in Uganda

MTN Uganda launched Mobile Money in March 2009. It decided to drive customer sign-ups to its Mobile Money platform by using a cadre of hundreds of dedicated customer acquisition agents. Field registration agents had been instrumental in building MTN's core mobile business in the late 1990s and early 2000s, so it seemed like an obvious way to grow the Mobile Money user base as well. These agents circulate in markets and go door-to-door, educating customers, performing SIM swaps, and undertaking KYC. Agents are paid a commission for each customer that they sign up. The vast majority of Mobile Money's more than 1 million customers have been acquired in this way.

Despite rapid customer adoption of Mobile Money, however, the number of customers who were transacting was significantly lower. Fifteen months after launch, the active rate (the percentage of registered users who had transacted in the last 90 days) stood at 43%.

This may be because users struggled to find a cash-in/cash-out agent after they had been signed up by a registration agent. Or it may have been that registration agents were signing up users with a low demand for mobile money services.



Bridging the registration/activation gap in West Africa

In Côte d'Ivoire, Senegal, Mali and Niger, Orange offers a Mobile Money service called Orange Money. To begin using Orange Money, customers must first visit a transactional agent and complete a short registration procedure. Customers who register with an agent who has an internet connection receive automatic account confirmation and are able to make their first transaction immediately. But for those customers who register with an agent who is not online, the process is manual, and the paper registration form is sent to the Orange office for processing. This offline registration process generally takes one to two days, after which Orange sends the customer an SMS confirming the registration is complete and they can transact.

In Mali, Orange found that this delayed registration process resulted in low activity rates. Despite the Orange Money customer having taken the initiative to register, not all of them returned to the agent two days later to make their first transaction.

To address this issue, Orange commissioned 100 field agents, whose principal focus was to support users in conducting their first transaction. In fact, their commissions were paid out only on the basis of transactions, not registrations. The work of these "feet-on-the-street" agents was quite successful, with Orange Money enjoying a very significant increase in activation rates of these customers.

Event marketing

Some operators use events to bring potential consumers together, explain to them the key benefit(s) of Mobile Money and demonstrate exactly how it works. These events can be small community parties held in an outdoor plaza or the community centre, or larger-scale events taking place at popular sporting events. **Whatever the size of the event, the key success factor is the presence of an adequate number of trained representatives of the Mobile Money service to interact personally with potential customers and demonstrate the service.**

Event marketing and chance-based promotions by SMART in the Philippines

SMART Money was launched in the Philippines in 2001. During 2009 and 2010, SMART worked to extend the reach of SMART Money to remote islands (the Philippines is composed of some 7,000 islands, of which roughly 4,000 are inhabited) that have limited access to financial services and are not priority areas for traditional financial institutions. They did so by partnering with MFIs and cooperatives which agreed to operate SMART Money Centres in their branches.

To sign up customers for SMART Money in these communities, SMART organised “activation blitzes.” Timed to coincide with general assemblies of their co- op partners or with village fiestas, the activation blitzes were an opportunity to tell a large number of users about SMART Money at the same time and register them on the spot, often by offering prizes to lucky new registrants. Because in many cases customers in these areas did not have sufficient documentation (i.e., a national ID card) to open a SMART Money account, SMART would sometime arrange for a village chief, who was authorised to verify people’s identities with an official letter, to be present, easing what could otherwise be a major bottleneck in the registration process.

Offering prizes, rather than a flat incentive (i.e. a starting balance) appeared to be more effective in driving registrations at such events. However, the team found that, although these events could reliably drive registration, those registrations did not necessarily translate into activations, and that other, subsequent efforts were necessary to get customers to begin using the service.

Friends and family

Perhaps the most important way potential customers learn how to use Mobile Money is from active Mobile Money users. A friend, a family member, or a colleague, can explain to a nonuser how a product works and even demonstrate a transaction. Additionally, a recommendation from a friend who has had a positive experience with Mobile Money can prove invaluable in building trust for a nonuser. The role that friends and family play in educating new customers about Mobile Money is particularly pronounced given the network effects that characterise Mobile Money transfer: customers who want to transfer money to a nonuser are more likely to invest the time to teach the recipient what to do upon receipt.

Despite the importance of word-of-mouth, this type of peer education is not in the direct control of the operator. However, the behaviour can certainly be encouraged. For example, refer-a-friend campaigns to incentivise users to help friends sign up for the service could be an effective tactic for operators with a core base of early adopters looking to grow their customer base. “Take home” pamphlets with clear, step-by-step instructions are also useful enablers of this behaviour.

Encouraging regular use

Unaware	Awareness	Understanding	Knowledge	Trial	Regular Use
Customer has never heard of mobile money	Customer has heard of mobile money and knows what it is	Customer understands how mobile money could be useful to them	Customer knows the steps necessary to transact	Customer tries the service	Customer habitually uses the mobile money service

The evidence to date shows that customers who have a positive experience after their first use of Mobile Money are likely to continue using it. Unfortunately, however, there are a variety of ways that the customer experience can go wrong, from problems with an agent's liquidity levels or service quality to an unstable technology platform. While these issues fall outside of the scope of marketing communications, they demand the attention of the Mobile Money general manager.

After all, **when a customer tries a service once and never uses it again, it means that all of the marketing investment that had been made in that customer has been wasted.**

Customer care plays a pivotal role in keeping customers on track to regular use. When a customer seeks out customer service, it is usually because they've had a problem; resolving their concern effectively is an opportunity to keep that problem from becoming the reason a customer abandons Mobile Money altogether.

In "Diagnosing Customer Activation Issues" (p. 70), we describe a number of problems in the customer experience that can deter customers from trying the service again, and provide links to resources that can help operators to solve them.

Of course, a positive first experience with Mobile Money doesn't just mean experiencing no problems. It also includes finding that Mobile Money delivers on its promised benefit(s) and represents a real improvement over the status quo (that is, the customer's previous way of sending money, paying a bill, etc.) in order to justify permanent behaviour change.

Customer protection in Kenya and Cambodia

Although most of the early adopters of M-PESA were previously banked and thus had some experience with financial services, as M-PESA matured it increasingly began to acquire customers which were completely unbanked. Research suggests that between August 2008 and December 2009, the percentage of unbanked adults who were using M-PESA went from 25% to 50%.[10]

Perhaps unsurprisingly, this trend dovetailed with an increased incidence of PIN-related fraud. After all, customers who have no experience devising, using, remembering, and protecting a PIN are unlikely to be able to do so without sensitisation. As such, Safaricom developed a mini-campaign to remind customers not to share their PIN with anyone.

10 William Jack and Tavneet Suri, "The Economics of M PESA: An Update," available at http://www9.georgetown.edu/faculty/wgj/papers/M-PESA_Update.pdf

Posters in agent shops were complimented with radio advertisements, to address the population which cannot read.

When launching CellcardCash in Cambodia, Cellcard hoped to stave off such problems and devised a similar poster for use in agent shops. (The poster depicted here has been translated into English from Khmer.) It also includes two pointers about the cash-in/cash-out process to help customers protect themselves from being defrauded by an agent.

Promotions

Customer promotions (offering them discounts or bonuses for performing certain transactions) can be an effective marketing tool to incentivise customer behaviour.

In general, **operators have found that promotions are more effective to drive repeat use rather than first-time use**. This may be because lapsed customers have, by definition, previously demonstrated demand for a particular service; they may have lapsed because they forgot their PIN, or because their agent closed, or for some other reason, but it is probably not because they don't need the service. As such, targeting such customers raises the likelihood that the promotion will be effective.

In contrast, **investing in customer promotions for new users risks offering bonuses to the wrong users** – ones that have no recurring need for the service in question and that are therefore less likely to become regular users in the future.

Sign-up bonuses in Uganda

To drive customer adoption of Mobile Money, MTN ran a promotion in which customers who signed up for MTN Mobile Money were rewarded with a starting balance of 5,000 Ugandan shillings (about US$2). It is difficult to assess the impact that this promotion had on the rate of customer acquisition. But its effect on customer activation was disappointing. In an analysis of its customer database in July 2010, MTN discovered that roughly 40,000 customers who had never transacted still had a balance of exactly 5,000 shillings. It appeared that customers who had received the bonus had not just failed to become regular users – they hadn't even cashed out or converted into airtime the free initial deposit they had been awarded.

Careful design of promotions can dramatically improve their effectiveness. For example, customers in some markets appear to react more favourably to chance-based promotions such as giveaways and lucky draws (where they have a small chance of winning a big price) rather than a promotion in which their bonus is guaranteed but small.

"Recharge and Win" in Tanzania

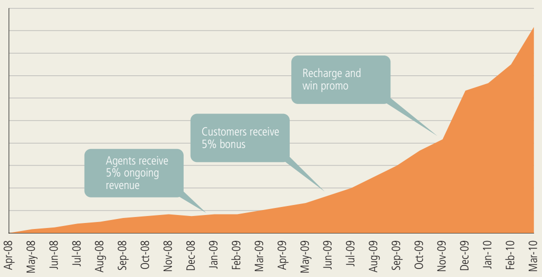
Vodacom Tanzania has for some time sought to drive customer adoption of M-PESA by promoting the airtime top-up functionality of the platform – the rationale being that customers find airtime top-up easier to grasp conceptually than money transfer.

M-PESA management identified that agents would be key to helping to drive top-up volumes – or, more to the point, that they would hinder customer adoption of this service if not specially incentivised to be supportive. Why? Because the margin that agents earn selling airtime is greater than the commission that they earn converting cash into electronic value, and agents would be reluctant to cannibalise their own sales of airtime in favour of a less profitable cash-in transaction. So Vodacom offered agents a special deal: every time customers who signed up with a given agent purchased airtime with M-PESA, the agent would receive a 5% commission. This "annuity" meant that it was in agents' best interest to persuade customers to start purchasing airtime through M-PESA, assuming that the agent could register them for M-PESA.

Although this had an effect, Vodacom decided that it needed to complement this channel incentive with a consumer promotion. (This is likely because the commission bonus only incentivised agents to encourage customers that they themselves had registered to M-PESA to top up using Mobile Money.) So it rolled out a new offer: a 5% bonus on all airtime purchased on the M-PESA platform. This helped to drive a more pronounced increase in top- up volumes.

Remarkably, however, it was a chance-based promotion called "Recharge and Win" that seemed to be the most effective driver of airtime top-up using M-PESA. Under this scheme, customers who used M-PESA to top-up were entered into a drawing to win various prizes. Although the typical customer was unlikely to win a prize each time they topped up (unlike the 5% bonus, which applied to every transaction), it seemed to capture customers' attention in a way that was highly effective.

It's impossible to know whether "Recharge and Win" would have been as effective without the 5% channel commission and customer bonuses that were already in place when it was launched. But what is clear is that "Recharge and Win", like most chance-based promotions, was significantly cheaper than ongoing discounts or commissions (which, combined, mean that Vodacom is now paying significantly more to distribute airtime via M-PESA than via scratchcards). And they are easier to discontinue.



Because operators can offer airtime to customers at essentially no marginal cost, it is a particularly cheap "currency" to use in customer promotions and therefore popular as a giveaway when driving adoption of Mobile Money.

Targeted promotions in the Philippines

To increase usage of SMART Money in the Philippines, SMART has experimented with giving bonuses, in the form or either airtime or free SMSs, to customers when they transfer money. Such bonuses are given only during certain promotional periods, and SMART does not intend for them to become regular rewards that customers come to expect over time; rather, the idea is to incentivise customers, particularly inactive ones, to try SMART Money (again or for the first time) in the hopes that they will do so again, even without a bonus, in the future.

A final word of caution regarding promotions that offer customers blanket discounts: like any change in pricing, they should be scrutinised from the perspective of a fraudster to ensure that they will not incentivise undesirable behaviour.

A transaction-fee holiday in Afghanistan

In early 2010 Roshan ran a "Send Money Free" promotion, waiving the usual tariff for transferring money, in an attempt to get people to try M-Paisa. This triggered a massive spike in transactions. Unfortunately, transaction monitoring revealed that approximately 75% of these transactions were agents who took advantage of the system: by making multiple small cash-ins to a wallet, then sending money to another wallet and cashing out, they could earn more in commissions than these transactions cost them in fees. Approximately 35 agents took part, who were then suspended or entirely removed from the system.

SMS

Like their ability to dispense airtime relatively cheaply, operators are able to exploit the SMS channel to cheaply deliver messages to customers. The character limitation of this medium makes it less effective for the early stages of marketing, but **SMS comes into its own as a retention tool**. This is because operators can draw on customer data and transactional histories associated with a particular line to deliver highly targeted messages to certain customers. For example:

- Customers who send money to unregistered customers receive a message after completing the transfer reminding them that they could save money on transaction fees by encouraging the recipient to sign up for the service. This could be combined with a promotion offering the customer a referral bonus for signing up the recipient.
- Senders and recipients of an operator's airtime transfer functionality receive a message touting the benefits of using Mobile Money instead – which, again, could be combined with a promotion to incentivise migration to Mobile Money.

Budget and effectiveness

Establishing a budget

One of the biggest headaches that operators face is establishing a marketing budget for their Mobile Money campaigns. Benchmarks are challenging to find, since every country, service, and target market is different, and each of these variables affects required spend. That having been said, those Mobile Money deployments that currently enjoy momentum in growth of active users have generally invested in a multi-million-US-dollar advertising campaign.

Like mobile services, money transfer services are characterised by strong network effects, which means that the value of registering for the Mobile Money platform increases as the number of other registered customers increases – just as the value of owning a phone increases as the number of other people with phones increases. This makes it hard to convince early adopters of Mobile Money to sign up, since they will have a small number of transaction partners. This has two implications for marketing Mobile Money. First, **a large investment in marketing sends a signal to potential users of commitment: this service is here to stay**, and so you can count on more and more people joining the network in the future. Second, **making a big splash in a shorter time period makes more sense than investing the same amount of money into a longer, lower intensity campaign.** This is an axiom in marketing that is even more important when network effects are at play because the goal is to bring lots of customers onto the platform in a short period of time, minimising the period during which the small number of registered users makes joining seems relatively unattractive to everyone else.

Raising awareness in Tanzania

It is easy to underestimate the investment that is necessary to raise awareness of a Mobile Money service. Vodacom Tanzania launched M-PESA in April 2008 and invested over US$5 million in marketing and agent acquisition over the course of the subsequent 25 months. Yet a telephone survey conducted in February 2010 revealed that just 20% of Vodacom customers were aware of what M-PESA does and how to use it.

Vodacom is confronting these low levels of awareness with a three-pronged initiative:

- a major above-the-line marketing campaign focused on communicating the functional benefits of using M-PESA
- a retraining campaign for agents, designed to improve their capacity to serve as ambassadors for M-PESA
- a dramatic increase in the resources allocated to field marketing

Is it possible to spend too much on marketing Mobile Money? Of course. **The cost of acquiring a customer – or, in the case of Mobile Money, the cost of activating a customer – should not exceed the lifetime value of that customer**, which is defined as the present value of the revenues (less direct costs) that that customer is likely to generate. The lifetime value of a customer can be estimated by working out the revenues that an average customer is likely to generate in a year, deducting the commissions that will have to be paid to agents to facilitate those transactions, and then multiplying that number by five.[11] The resulting figure can be thought of as a marketing budget: the upper bound on what an operator should be willing to spend to activate a single customer.

Analysing the cost of activation in Uganda

Between March 2009, when Mobile Money was launched, and June 2010, MTN Uganda spent approximately US$700,000 on direct marketing expenses. During this time, it registered 973,000 customers, of which 371,000 were active at the end of the period.

The ROI for MTN's marketing spend increased over time. As customers started to tell each other about the service and network effects started to kick in, MTN needed to spend less and less in order to drive customer adoption. In the month it launched, for example, MTN spent a little less than $10 on above-the-line marketing for each new active customer it gained; fourteen months later, that figured had dropped to approximately $0.10.

In markets where the concept of Mobile Money is already understood, new Mobile Money deployments may be able to spend less, because some of awareness building and customer education has already been done. In these cases, the marketing challenge is to persuade users that one Mobile Money service is better than another, rather than having to start by explaining what Mobile Money is.

11 This rule of thumb values the stream of after-commission revenues from a customer as a growing perpetuity, and assumes that the operator's discount rate minus the growth rate of the annual after-commission revenues equals 20%.

Measuring effectiveness

Operators typically measure success on three levels. At the highest level, they try and answer the question of the overall success of the Mobile Money program. They then look back at the customer journey, to identify if customers are losing their way from awareness to regular use. And at the most granular level, they measure the effectiveness of each marketing tactic utilised.

High-level measures of success

In the early days of Mobile Money, the number of customers registered for a Mobile Money platform was the most commonly used metric for evaluating success. **Today, however, it is more common to hear operators refer to the number of active users**, which is typically defined as a user that has initiated a value-movement transaction in the last 30, 60, or 90 days. (Operators decide how long of a period to use by assessing what a regular use pattern would look like for customers in their target market.)

The number of active users is one of the key performance indicators reported in the Mobile Money dashboard, a tool that is available for mobile operators to use and customise. It is available upon request by e-mailing mmu@gsm.org.

It can be even more meaningful to put the number of active Mobile Money users in context. Dividing the number of active Mobile Money users by the number of the operator's mobile connections gives a sense of the Mobile Money penetration within the broader subscriber base.

A different tack is to measure success in terms of market share. This is an easy calculation to do for bill payments – simply divide the number of bills paid using Mobile Money by the total number of bills paid in a given period (a figure which the biller can provide). However, it is much more challenging to analyse money transfer market share since direct and indirect competitors will not all reveal their transaction volumes regularly.

Tracking customers' progression on the journey to regular use

Metrics that measure the number of active users are less helpful when diagnosing low levels of customer adoption. That's because they reveal nothing about where customers have gotten stuck in the journey toward regular use.

By administering a survey to a sample of potential customers in the target market, operators ascertain how far along customers have come, and where they have gotten stuck. This is a somewhat costly approach, but does provide operators with a clear indication of how to retool their marketing mix in order to better reach nonusers. A simplified version of this approach is described "Diagnosing Customer Activation Issues" (p. 70).

Awareness of MTN Mobile Money in Ghana

MTN launched Mobile Money in Ghana in July 2009. It invested heavily in TV and radio advertisements (including spots on local-language radio stations) to good effect: a survey commissioned by MTN in 2010 revealed that 88% of MTN subscribers were aware of Mobile Money. But usage rates were low, and the survey revealed why: fewer than 40% of respondents knew what the platform could be used for and how to use it.

In response, MTN Ghana made two changes to its marketing mix. First, it retooled its above-the-line advertising to stress the functional aspects of Mobile Money. Second, it invested in a major customer-education campaign, relying primarily on front-line Mobile Money representatives, including agents, to teach customers about the platform and how to use it.

Evaluating tactics

Finally, at the most granular level, **operators measure the effectiveness of specific marketing tactics**. For example, if customer promotions were utilised, one can measure their effectiveness by calculating the total cost, the number of customer activations, and the number of customers that remained active after a given period of time.
The effectiveness of marketing campaigns targeted at certain geographical areas can be measured by monitoring agents' transaction levels in the target area. This type of analysis is a worthwhile exercise because it provides direct input to the optimum marketing mix; unfortunately, it is easier to measure the effectiveness of some tactics than others.

Supplement: diagnosing customer activation issues

Mobile Money deployments hit a number of challenges as they try and bring the customer along the journey from awareness to regular use. The following diagnostic highlights the main challenges operators face and indicates possible causes.

Challenges with building awareness and understanding

In a number of markets, operators have faced problems with low levels of customer awareness. This at times is a complete lack of awareness from the consumer, in the sense that they have never heard of the programme. Or they have heard about the Mobile Money service but they do not understand what it could be useful for. In both cases, these problems are apparent through market research with the target market.

Possible causes	Diagnostic tools	Corrective actions	Reference section(s)
Wrong marketing mix for campaign	Analyse the audience of media employed: are marketing communications reaching the target market?	Redirect marketing spend to reach the target audience	Segmentation (p. 46) Marketing Communications (p. 53)
Customers don't understand why they should try Mobile Money / Communications messages are unclear	Elicit customer feedback on marketing communications: is the product's functionality and positioning clearly communicated? Does it resonate with the target market?	Revisit marketing communications to clarify messaging	Positioning (p. 52) Marketing Communications (p. 53)
Insufficient budget for marketing	If neither of the two culprits above apply, insufficient budget is likely the problem	Invest more aggressively in marketing communications	Budget and Effectiveness (p. 66)

Barriers to trial, including education and registration

If market research indicates that customers in the target market are aware of the service and understand how it is beneficial to them, but still do not sign up for the service, there are a number of possible issues around registration and trial to explore.

Possible causes	Diagnostic tools	Corrective actions	Reference section(s)
Customers don't understand how to perform a transaction	Mystery shop at agents: do they explain to users how to transact?	Employ more marketing tactics to educate consumers through field or transactional agents	Educating and Activating Customers (p. 58)
Customers struggle to find a registration agent	■ Seek customer feedback: have they tried to register, but could not find an agent? ■ Analyse the geographic distribution and density of registration agents: are they situated where customers in the target market live or work?	Optimise the number and location of registration agents	Transactional Agents (p. 59)
Mobile Money does not meet the needs of customers better than existing alternatives	■ Analyse the competition: in what ways is mobile money better than alternatives? ■ Seek customer feedback: what do customers value about competitors' products over mobile money?	Revisit customer segments to identify the target market with the most potential for Mobile Money	Competitive Analysis (p. 44) Segmentation (p. 46)
Customers don't trust the operator's brand or its network	Seek customer feedback: how do customers perceive the operator's brand?		Branding (p. 57)
Onerous process for user registration	■ Seek customer feedback: have they tried to register, but been deterred by onerous requirements? ■ Benchmark the registration process with good practice globally: is KYC proportionate? ■ Assess the availability of required documentation (i.e., IDs) among the target market: is this a constraint?	Streamline customer registration process – engaging the regulatory authorities if necessary	

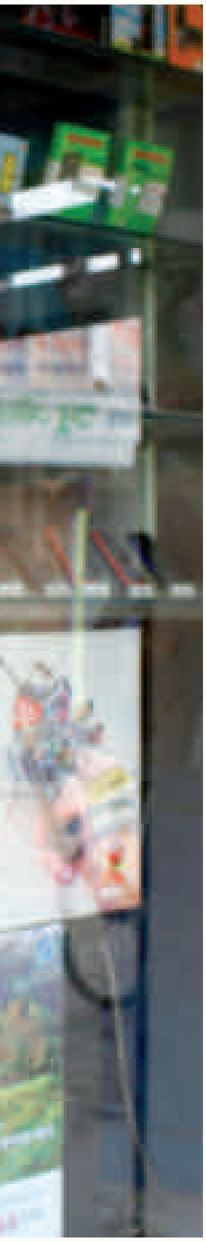
Possible causes	Diagnostic tools	Corrective actions	Reference section(s)
Agents find registering customers is more profitable than transacting with them – so they only do the former	■ Mystery shop at agents: are they promoting the service? ■ Seek customer feedback: are agents taking the time to show them how to transact? ■ Analyse the agent value proposition: are their incentives skewed toward registration rather than transactions? ■ Review agent e-money float balances: are agents able to facilitate cash-in transactions?	Analyse the agent value proposition and revamp commissions if necessary	Branding (p. 57)
There is a waiting period between registration and account activation, during which customers cannot transact	Benchmark the registration process with good practice globally: can customers begin to transact immediately?	Streamline customer registration process – engaging the regulatory authorities if necessary	Transactional Agents (p. 59)
Different agents are responsible for registration and cash-in/cash-out transactions	Seek feedback from customers registered by registration agents: were they directed to a transactional agent? Are they likely users of the service?	Revamp the registration agent commission model to make commissions contingent on customers' transactions	Transactional Agents (p. 59)

Barriers to regular use

Finally, if the operator's database is showing that users are trying the service once and not transacting again, there are a number of possible issues that may be curbing regular use.

Possible causes	Diagnostic tools	Corrective actions	Reference section(s)
Customers are having unsatisfactory experiences at the retail level ■ Agents are illiquid or "too busy" to serve customers	■ Seek customer feedback: do they struggle to locate liquid agents? ■ Mystery shop at agents: are they liquid in cash? ■ Review agent e-money float balances: are they liquid in e-money?	■ Analyse the agent value proposition and revamp the commission model if necessary ■ Optimise the customer/ agent balance, at the local and system level	Transactional Agents (p. 59)
■ Agents are insufficiently trained	Mystery shop at agents: do agents demonstrate mastery of the service and competently explain the service and how it works to potential users?	Assess the effectiveness of agent training, monitoring, and disciplinary procedures	Transactional Agents (p. 59)
■ Agents are scarce	Analyse the geographic distribution and density of agents: are they situated where customers in the target market live or work?	Optimise the customer/ agent balance, at the local and system level	Transactional Agents (p. 59)
■ Agents are unclearly branded/differentiated from ordinary airtime retailers	Review store branding guidelines and compliance: are Mobile Money agents clearly marked?	Revamp agent branding/ merchandising guidelines/ requirements	Transactional Agents (p. 59)
■ Agents are defrauding customers	Seek customer feedback: have they been defrauded?	Assess the effectiveness of, and revamp if necessary, agent training, monitoring, and disciplinary procedures	Transactional Agents (p. 59)
Customers are having unsatisfactory experiences with customer care	Seek customer feedback: did customer care resolve their issue in a timely way?	Improve existing customer service and/or launch dedicated Mobile Money customer service scheme	
Customers are having unsatisfactory experiences with the user interface	Seek customer feedback: do they find the user interface intuitive?	Improve the user interface based on feedback	


MY ZONE
MY ZONE



Chapter 4
Enabling different paths to the development of Mobile Money ecosystems

Author: Ignacio Mas, Senior Advisor at the Bill & Melinda Gates Foundation

Building a successful Mobile Money system requires a complex ecosystem of players handling a large volume of transactions. Succeeding in this game is proving harder than was anticipated by the dozens of telcos and the handful of banks that jumped at the opportunity in the last 2-3 years. Their perseverance can be celebrated, but the industry will need more successes to keep the optimism up. Excitement can easily look like hype with hindsight.

The development of Mobile Money ecosystems is largely conditioned by three key factors: (i) the degree of fragmentation of roles in the value chain, (ii) the existence or not of interconnection between competing schemes, and (iii) the coordination mechanism that is used to bring the various players together.

One lesson from the global experience so far is that it is too early for anyone –regulators, practitioners and donors—to assume there is an established or 'orthodox' method of building Mobile Money. There is still a need to experiment with different business approaches to learn how each performs in different market circumstances.

In this paper we first identify four principal paths to building Mobile Money ecosystems. These four paths are not an exhaustive list, they are not always easily separable, and in practice they may exist sequentially or simultaneously. We make the case that countries should adopt regulatory frameworks that allow for any or all of these models to emerge. In the final section we develop the commercial case for interconnection between schemes.

1. **Dominant player path**
   This path –exemplified by the biggest success to-date, Safaricom's M-PESA in Kenya– calls for a big player with a dominant market share and unmatched marketing muscle to cobble together the ecosystem (banks, cash in/out points, and managers of such points) and aggregate transaction volumes. Big players, especially mobile operators, already have the majority of customers, a widely recognised brand, and a distribution network which includes a large number of retail outlets in their territory. But –Safaricom aside– big corporations with dominant market shares and high margins are not generally known for innovation and speed. They often grow distant from their customers and can easily get caught up in the fear of losing existing higher-margin business, perceived brand and reputational risks and sheer organisational complexity.

   Generally speaking, though not always, the largest mobile operator in a country is in the strongest position to become the dominant player in Mobile Money. Incumbent mobile operators have brands with mass-market appeal, established retail channels and experience with a high volume transactional business model. Thus, from a regulatory stand-point, enabling the dominant player model hinges on permitting mobile operators to issue e-money and manage cash in/out points. If successful, the dominant player has one major downside - it requires authorities to closely monitor the competitive implications of a dominated model for potential abuses of market power. Correcting anti-competitive behaviour is not an easy matter once a player has established dominance.

2. **Orchestrated multi-party path**
   The alternative is for someone to organise a coalition of diverse (perhaps at first smaller) players under a multi-party interoperable framework. This way each player gets to remain specialised while still benefitting from collective network effects. Although a number of players aspire to play this role in various countries (often claiming to be "the Visa of mobile payments"), this path has yet to succeed anywhere.

   The primary problem is who gets to play orchestrator. Smaller players wanting to coordinate a multitude of larger players lack the credibility and resources. Larger players will immediately be suspected by everyone else of seeking advantage. Attempts by government to drive toward collaborative outcomes could make market players wary of commercially unjustifiable pricing impositions or favouritism (or even corruption). And even if a credible neutral party emerges, it is hard to expect anyone to work out a system of incentives that durably aligns everyone's interests in the context of an entirely new service proposition that is as yet unproven in the market.

   From a regulatory perspective, governments often attempt to encourage interoperability – whether through moral suasion or by creating national switches. But mandating interoperability from the outset runs the risk of destroying the incentive and motivation of critical first entrants.

   Both of these approaches –the dominant player model and the orchestrated multi-party model– are hard to create and more so to replicate because they require a driver of the ecosystem. They differ only in the degree to which certain ecosystem-building functions are kept in-house by the orchestrator or delegated to third parties.

   But there are two other models to consider which do not rely on a central driver – and which therefore could prove to be more potent paths to Mobile Money development.

3. **Gradual bank-based path**
   For mobile operators, Mobile Money needs to reach scale quickly for it to have any chance of success, especially if its marketing is predicated on convenient money transfers which require substantial network effects (in terms of number of customers in the system) and density of cash in/out points (substantiating the convenience proposition). However, established banks can embark on a path of mobile-enabled branchless banking with relatively low risk and cost. Unlike mobile operators, banks can exploit the deployment of cash in/out points incrementally, since they already have an existing product range, a branch network and marketing channels. A bank could start by signing up a few cash in/out points around a few branches, and over time build a substantial base.

The business case for banks can also shift over time, starting from a cost reduction story built around branch decongestion and only later turning into a full-fledged proposition to attract new otherwise unreachable clients. While the gradual bank-based path presents few obstacles since banks are already fully prudentially regulated and supervised, they can often be slow to develop.

4. **Decentralised unbundled path**
   Finally, a Mobile Money ecosystem could develop as a sequence of loosely coordinated actions by multiple and diverse players, without any single player emerging as the lynchpin.

For that to be possible, Mobile Money needs to be understood as three entirely separable businesses. First, there are the real-time transactional platforms which perform the fairly mechanical functions of account management and transaction authorisation (plus some more sophisticated –but in the end really no less mechanical– ones such as fraud detection and electronic transaction monitoring). Second, there is the intermediation of funds, which consists of the thoughtful (not mechanical) investment of the funds that are backing those accounts, channelling the resources back to productive opportunities in the wider economy. Third, there is the cash in/cash out business, which consists of helping customers exchange between two forms of money (cash and electronic value) against the store's own inventory of the same two forms of money.

The more these three businesses are bound into one, either by regulation or in the minds of the private players, the harder it could be to create the ecosystem, falling into the pitfalls of the three paths described above. Regulators bind the account management and intermediation businesses whenever they require that payment platforms be operated (directly or indirectly) only by banks. Allowing non-banks to be e-money issuers is a good way of unbundling these two businesses. Indeed, a growing number of regulators around the world are permitting non-bank e-money issuers, allowing non-banks to engage in the accounts management business as long as the banks retain the higher-risk intermediation business. This opens up the range of players that can serve the poor without undermining the prudential regulatory and supervisiory framework that regulators have painstakingly built.

While regulators are increasingly unbinding account management from intermediation, regulators commonly continue to bind the account management and cash in/out businesses by requiring a tight contractual relationship between the retail cash in/out outlets and the account issuer. This is often compounded by a requirement that the account issuer assume responsibility for the actions of the retailers.

So what would an unbundled system look like? Take the case of India, where the National Payments Corporation of India (NPCI) has created a micro-switch enabling mobile transactions between accounts of participating banks. If all the banks (and any licensed non-bank account issuers) join and set the interchange fee low enough, then any retailer could in principle declare itself a cash in/out point for any bank simply by virtue of having an account with one participating bank. From that account, they could buy and sell bank balance against cash, meeting the liquidity needs of their customers.

In this situation, banks wouldn't need to worry about building and managing their own cash in/out networks. Retailers would see a business opportunity since they could service a wide range of their customers (not only the customers of one bank) by maintaining a single bank account. Banks would see benefit in joining the micro-switch not only because of the network effects in electronic payments but also because that would give them access to the emerging network of cash in/out points – without having to do side distribution deals with telcos.

Gaining the customer's trust would be the hardest challenge in an unbundled system, because there would not be a single brand stretching over the entire service delivery chain. You may trust your nonbank account issuer which happens to be your mobile operator, and you may trust the bank in which they are depositing your funds because you know it is being actively supervised by the authorities. But what about the thousands of independent stores at which you can cash in and cash out? Retail franchising solutions will need to emerge to address this key customer concern.

Cash in/out would logically become a heavily branded business, since retailers would compete on the basis of reliability (stable inventory of cash and electronic value), fairness (transparent pricing, no fraud) and good service (in store as well as customer care in the event of problems or disputes). It may be that franchises emerge independently, and they invest in their own brand that represents safe cash in/out. Franchises could also be operated and/or branded by the switch provider, just as many switches manage ATMs. (A cash merchant's till and its mobile phone or point of sale terminal are, together, functionally equivalent to an ATM.) Perhaps account issuers (whether bank or non-bank) will decide to license their logos to retail franchises that meet their levels of service, thereby recreating an end-to-end branded experience for their customers. Many approaches would undoubtedly be tried, and ultimately customers would choose the one with which they feel most comfortable.

Closely associated with trust and branding is the issue of customer pricing. At one extreme of decentralisation, each retail outlet (or franchise) would set and collect its own charges for cash in/out directly from customers. But it is possible that, in order to minimise customer confusion caused by ad-hoc pricing, some retail franchises (e.g. one associated with the switch) may strike deals with banks to collect fixed commissions from them rather than directly from customers.

To be sure, an unbundled branchless banking system would require determined collective action by a number of players, with multiple levels of coordination. Banks would need to agree to join a common switch. Banks and telcos would need to find ways to offer a secure transactional capability on people's mobile phones. Retail cash in/out franchises would need to aggregate over a large number of independent stores. But there need not be a single master orchestrator. These collective actions can build on each in what can become a gradual march towards Mobile Money.

An unbundled branchless banking system should not be viewed as a deregulated one. In an unbundled regulatory framework, there would not be a central party assuming all responsibilities – an approach that is convenient for regulators but too limiting business model-wise. Instead, all risks would need to be carefully thought through and assigned to the right player.

The bank intermediating the funds should be subject to all the prudential requirements that Basel and governments impose. The entity managing the accounts (whether a bank or nonbank) should be fully responsible for the operational and technological integrity of their platform in all its aspects (accounting accuracy, platform reliability and resilience, data confidentiality, compliance with anti-money laundering provisions, etc.). Cash in/out outlets would be responsible for implementing all the necessary consumer protection measures (disclosures through signage, adequate complaint handling processes).

Regulators may take a gradual approach towards a decentralised model, learning from more integrated (and hence easier to supervise) approaches before fully unbundling regulations. It is still too early to know which path is most likely to succeed in the long run – the dominant player path, the orchestrated multiparty path, the gradual bank-based path or the decentralised unbundled path. But each could prove successful - betting on more than one horse may produce some unexpected winners that maintain the industry's momentum.

Developing the case for interconnection

Two of the paths discussed above –the orchestrated multiparty and the decentralised unbundled paths– rely on there being some level of interconnection between competing Mobile Money schemes.
I conclude this paper by stating three basic reasons why Mobile Money schemes should seriously consider interconnecting with each other from an early stage.

1. **Very few players can presume to have sufficient scale to make the service attractive on their own.** Imagine a developing country with 50% effective mobile penetration (counting people rather than SIM cards, i.e. after removing data-only and multiple SIM card holders), where the dominant operator has a fairly whopping 50% market share, and where the Mobile Money service achieves a very respectable 50% penetration among its mobile customers (i.e. similar to SMS). This means that its cash merchants will on average only be able to serve one out of eight villagers (50% x 50% x 50% = 12.5% = 1/8th of the population), and its customers will be equally restricted in who they can send money to. That's a fairly weak network effect – even for an operator that controls half the market.
2. **If providers don't interconnect their schemes, users will do it themselves**. In the above scenario, the Mobile Money customers of the incumbent operator will most probably seek to transact beyond the relatively small closed loop of people who are on the same Mobile Money scheme, and will do so by acquiring SIM cards from the other operators. For operators who believe that the main reason why they are doing Mobile Money is to entangle their customers with a sticky service, the very inexistence of interconnection between schemes will undermine this objective. Churn will not be reduced if customers select which SIM card to use each time they want to do a transaction based on which Mobile Money network the recipient of the funds is on.
How much better to delight your customers by offering them full payment choices, including inter-scheme money transfers, and ensuring they stay with you.

   A similar story applies to cash merchants: they will seek to break beyond the one-customer-in-eight proposition that the incumbent operator has for them, by signing up with all competing Mobile Money schemes independently.

   Exclusivity will be hard to enforce, unless an operator has a truly towering market share, like Safaricom has in Kenya. Customers' experience will be impaired as store signage becomes cluttered and the store's liquidity is fragmented across multiple wallets, and store training and supervision costs will be duplicated.

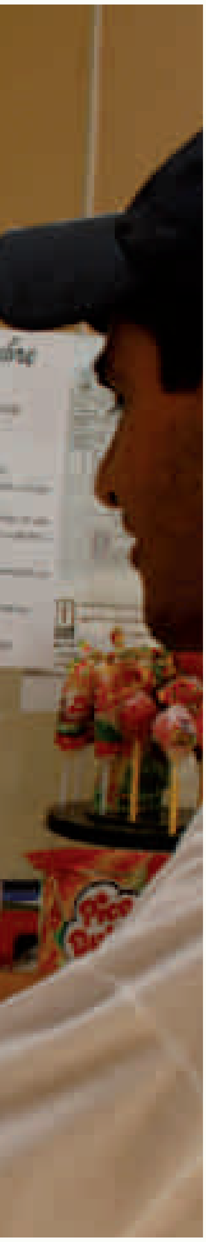
3. **Lock in customers by balancing incentives to join with incentives to stay**. Larger and more advanced Mobile Money providers see interconnection as a concession of value to their laggardly competitors. That may be true to a larger or smaller degree, but what they should be focusing on is how to maximise the lock in of their customers to their Mobile Money service. Lock-in is a function of two things: the probability that customers will join the scheme, and the probability that they will choose not to leave. Interoperability helps lock-in by increasing the incentives to join (you can send money to more than just that 12.5% minority). Interoperability may reduce lock-in by making it easier for customers to leave, if they feel that other schemes can deliver on an equally large network.

   It is by no means obvious that operators should be focusing on the latter during the early phase of development of a new Mobile Money market.

It's always hard for competitors to decide to work together on some key aspects of their business. It usually comes down to whether the players involved opt to maximise the total size of the pie or just their slice of the pie. In networked businesses, in general, the more the players work together to enlarge the pie, the larger the slice each one will get. That's why mobile operators have a tradition –of which they are rightly proud– of interconnecting their voice and data bearer services. They long since discovered that their customers are best served by making sure they can send and receive messages to/from anyone, even if they are on a different network.

But we haven't yet seen this logic extend to Mobile Money. In most countries, the prospect of providers working together is probably less a matter of *if* than *when*- just as it has been for banks sharing ATMs and mobile operators sharing towers. That being the case, it's probably not even about *when* but about *how*. This will be the path for ecosystem development.


Giros
tigo
Aquí
Ahorrá
50%
saldo de regalo
Si tu plan
DINERO



Chapter 5
Mobile Money in Paraguay

Authors: Camilo Tellez and M. Yasmina McCarty

With over 100 live deployments around the world, Mobile Money continues to emerge as a must-have service for operators in emerging markets[1]. However, there has been a notable absence of programs in Latin America, with the fewest deployments of any other region in the world. This seems to be changing in 2011 with Mobile Network Operators (MNOs) in both Central and South America readying for launches. Mobile Money for the Unbanked (MMU) visited Paraguay to understand how this country emerged as a leader in Mobile Money and what lessons it offers for the region.

This case study begins with a summary of the Paraguayan mobile financial ecosystem, highlighting the favourable conditions which have contributed to the development of Mobile Money. It then examines the key success factors of Tigo's Mobile Money product such as deep market knowledge, successful distribution network, effective marketing tactics, and collaboration with an aligned bank partner

Acknowledgements
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1. GSMA Wireless Intelligence Deployment Tracker available at: http://www.wirelessintelligence.com/mobile-money/unbanked/

I. Favourable conditions for Mobile Money

A. The Paraguayan context

Paraguay is one of the poorest countries in Latin America, with high levels of financial inequality and rural areas suffering from inadequate access to education and financial services. However, this small country has led the region in its development of Mobile Money services. It is the only country in Latin America where the two largest operators, Tigo and Personal, both have live Mobile Money platforms.

Mobile penetration in the country is close to 100% with an estimated 6.36 million connections out of the 6.35 inhabitants.[2] Tigo, the market leader in Paraguay with 54.67% market share, first introduced Mobile Money in 2008, with its product "Tigo Cash," a multifunctional e-wallet which focused on retail payments.[3] After a strategic shift in direction, Tigo re-launched Mobile Money services in 2010 under the product name "Giros Tigo."[4] The Giros Tigo product focuses on domestic remittances and is an over-the-counter model with the sender going to an agent point to send e-money to the recipient, who receives a notification via SMS and can then go to an agent point to cash out using his/her PIN.

Personal, the second largest operator in Paraguay, which controls 29.68%[5] of the market launched its Mobile Money product in 2010 under the name "Billetera Personal."[6] This service is an electronic wallet which allows users to make money transfers, merchant payments and bill payments. However, Billetera Personal operates over a linked no frills bank account, provided by partners Banco Atlas and Banco Continental.

While MNOs in the country have not publicly disclosed their user numbers or number of monthly transactions, the Central Bank of Paraguay (BCP) estimates that there are approximately 60,000 active Mobile Money users in Paraguay.

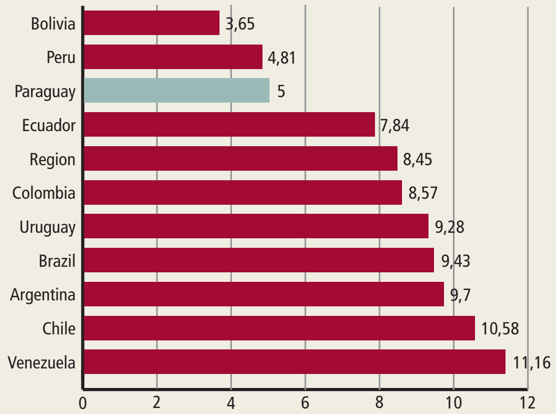
2 GSMA Wireless Intelligence, Q1, 2011; World Bank World Development Indicators, 2009.
3 GSMA Wireless Intelligence. Q1 2011
4 A giro in Spanish is best translated as a domestic remittance.
5 GSMA Wireless Intelligence. Q1 2011
6 Billetera in Spanish means wallet in English.

B. Fertile ground for the development of Mobile Money

1. Low level of financial inclusion

At the end of Q2 2010, there were 621,766 reported deposit accounts at Paraguay's banks and financial institutions or approximately 10% of the country's population.[7] Paraguay has one of the lowest densities of bank branches in the region, with just five branches for every 100,000 inhabitants.[8] There are unregulated financial institutions such as cooperatives and bancas comunales which serve lower income populations, and should be taken into account when calculating the level of financial inclusion.[9] But overall, it is estimated that 70% of Paraguay's population are financially excluded.[10]

Number of Bank Branches per 100,000 inhabitants



In terms of domestic remittances, the most popular option in the country seems to be informal mechanisms such as bus drivers. With regards to payments, there are private companies called *redes de cobranza* which serve as payment points for utility bills. However, there is a gap in coverage of the rural areas, with only 100 out of 240 districts covered by these payment points. While there has been a notable increase in financial inclusion in recent years, with a year on year growth of 21.4%, there are still significant barriers for those in the informal sector to access financial services.[11] These low levels of financial access have created significant opportunity for Mobile Money to develop.

2. Positive regulatory environment

In the same way Paraguay's socioeconomic factors had an important role in the emergence of Mobile Money, the conducive regulatory environment in the country has also been a key factor in the growth of mobile financial services.

a) A country level commitment to financial inclusion

According to the Superintendencia de Bancos del Paraguay there are a series of strategic initiatives led by the government and multilateral donors such as the IADB, which seek to support the development of sustainable approaches to financial inclusion.[12]

Paraguay's Minister of Finance Dioniso Borda has gone on record saying, "The government's challenge is to develop a solid financial system which is not only safe but also able to provide quality services to every stakeholder in the economy, regardless of their income. Financial inclusion is a key objective in the design of domestic economic policy."[13]

Interesting to the Paraguay context is that the key regulatory actors, the BCP and the Superintendencia, identified mobile financial services as a key pillar in their long term strategy in financial inclusion.

b) A balance between commercial interests and risk management

When Mobile Money services first launched in Paraguay, there was no specific regulation for Personal or Tigo's Mobile Money products. At the time of launch, both the BCP and la Superintendencia decided to cautiously watch Mobile Money, allowing it to develop commercially without issuing any regulation

It is only now, nearly three years after launch, that the BCP and la Superintendencia have decided to introduce regulation for Mobile Money. At the end of 2010, new regulation was introduced on AML/CFT, which has become the key regulation in place in terms of remittances and money transfers in the country. Further, the BCP and la Superintendencia are in the process of analysing how to best regulate Mobile Money, considering existing regulation on non-banking correspondents (NBC), branchless banking as well as the possibility of introducing distinct e-money rules. Presently, e-money is not regulated in Paraguay, but there are some stipulations within the civil code which could be applicable.

Usually referred to in the industry as a "test and learn" approach, this regulatory stance has been used by regulators in other markets where Mobile Money has exhibited strong growth. Neither Kenya nor the Philippines had formal regulation in place at the time Mobile Money launched, but later the Philippines central bank introduced e-money guidelines.[14]

7. "Breves Apuntes sobre la Bancarización en el Paraguay", la Superintendencia de Bancos del Paraguay, April 15, 2011.
8. "Paraguay registra un bajo nivel de cobertura de sucursales financieras," abc digital, 16 de diciembre de 2010
9. Bancas comunales are community-led micro-credit organisations which often give credit to groups of 10-20 members
10. Global Market Sizing Study, McKinsey 2009 for CGAP/GSMA.
11. "Breves Apuntes sobre la Bancarización en el Paraguay", la Superintendencia de Bancos del Paraguay, April 15, 2011.
12. In Latin America, the financial system is governed by two important actors: The central bank and la Superintendencia. Generally speaking, these two entities are separated, one focused on setting regulation and one focused on monitoring and supervision. In the case of Paraguay, la Superintendencia de Bancos del Paraguay is an independent unit but sits under the BCP.
13. "Limitada inclusión financiera retrasa potencial económico, según Borda," abc digital, 10 de septiembre de 2010
14. In March 2009, the Bangko Sentral ng Pilipinas issued Circular 649 which provides guidelines governing the issuance of e-money and the operations of e-money issuers in the Philippines.

3. Simplified KYC requirements

The relative ease of registering and activating clients has also contributed to the growth of Mobile Money services. In Paraguay, all SIM cards (prepaid and postpaid) require formal registration with identification. However, for both MNOs and consumers, fulfilling this requirement is relatively simple given that the majority of Paraguayans have a national ID and there is a national identity database.

Since MNOs are already in possession of basic client information, the registration process for Mobile Money is nothing more than confirming the details. Using a two-step USSD process, users enter their date of birth and national ID number. They can immediately begin transacting after receiving an SMS confirming their registration.

One of the MNOs in Paraguay has leveraged its existing KYC database to provide its clients with an innovative way of opening a caja de ahorro or no frills bank account. Mobile operator Personal has aligned with Banco Atlas, which is not only is a strategic partner but also a share holder in the company. Using a USSD channel, a consumer simply confirms their national ID number and date of birth, and within seconds, they receive an SMS confirming registration. Personnel electronically sends the users' details to the bank, the bank account with Banco Atlas and the e-wallet are then automatically opened, and the consumer can transact immediately. Should the customer wish to increase their transaction limits or upgrade the account, they have to visit one of the branches, fill out an application form and provide their signature.

4. Bi-directional remittance flows

Finally, it is interesting to note that the growth in the agricultural sector in the country has also contributed to the development of mobile financial services, and created a particularly unique situation. In Paraguay, the agricultural sector represents the largest contribution to GDP with 27%.[15] The rapid growth of this sector in recent years (10.5% in 2008 in relation to 5.4% of GDP) has created a significant amount of wealth in rural areas.[16]

When Tigo launched their domestic remittance product, the expectation was that Mobile Money remittances in Paraguay would flow from urban to rural areas, as seen in the majority of Mobile Money deployments around the world. However, this turned out not to be the case. With Giros Tigo, money seems to be flowing bi-directionally from urban to rural as well as from rural to urban.

The implication of this situation is significant, in that rural agents, who in other countries struggle the most to balance their float, seem to have more of a natural equilibrium between cash-in and cash-out transactions.

Giros Tigo Agent Transactions:[17]

	% of transactions sending money	% of transactions receiving money
Agents in urban areas	50%	50%
Agents in rural areas	53%	47%

I. Key success factors in the Tigo deployment

The Giros Tigo product has shown a number of innovations that set a strong benchmark for forthcoming Mobile Money programs in the region: leveraging deep market understanding to design the product, building a satisfied and motivated agent network, developing compelling marketing strategies to drive customer activation and usage, and collaborating with an aligned bank partner.

A. Deep market understanding

1. Lessons from the first product

Tigo's first foray into the world of Mobile Money was in 2008 with the launch of its product Tigo Cash. Tigo Cash was an e-wallet which offered a range of products and services, but promoted merchant payments as the primary functionality. The market's reaction to the product was disappointing with low customer registrations and transactions.

One barrier to adoption of Tigo Cash was the complicated registration process: A contract was required to register and there were various steps involved to become fully registered for the service. Another issue was the level of investment in the product, which proved inadequate in terms of marketing to help promote the product.

2. Willingness to re-design the product according to the clients' needs

Tigo management remained committed to Mobile Money, and set out to design a new product for the market. As a starting point, they commissioned a national quantitative study with a particular focus on domestic remittances and payments, which were viewed as the areas with high potential.

15. World Bank national accounts data and OECD National Accounts data files. http://data.worldbank.org/indicator/NV.AGR.TOTL.ZS/countries.
16. World Bank national accounts data and OECD National Accounts data files. http://data.worldbank.org/indicator/NV.AGR.TOTL.ZS/countries.
17. Data self-reported by Tigo Paraguay

The results of the market study highlighted key remittance corridors, the frequency and average amount of money transfers, and payment behaviour. Additionally, the study mapped the competitive landscape and customer preferences among the alternative money transfer options. These results proved essential in two ways. First, the study helped to inform an effective market segmentation. It highlighted a sizable market segment who were using informal methods to send and receive money and who responded well to the Mobile Money concept. And second the study informed specific changes that would need to be made to redesign a new Mobile Money product.

The study showed that the target market was primarily sending and receiving money via bus drivers. Although these money transfers often took the better part of a day, users had grown accustomed to it and were not complaining about the speed. Thanks to this insight, Tigo realised that the attribute which mattered most to the target segment was not speed but rather price. Additionally, Tigo learned that a product which had its primary benefit as speed would not attract clients. "To drive customer usage, we learned that it was necessary to compete on price. We had to demonstrate that Giros Tigo was better value for money than alternative money transfer options. To maintain customer loyalty over time, the remittance product would also need to be quick. But to drive activation, price had to be the dominant message," said Rafael Cabral, head of Tigo's Financial Services Business Unit.

In July 2010, Tigo re-launched its service under the name Giros Tigo. Unlike Tigo Cash, Giros Tigo focused on one high potential customer segment with a Mobile Money product that was designed specifically to meet their needs.

Tigo's Mobile Money product evolution:

	Tigo Cash	Giros Tigo
Product characteristics	e-Wallet Merchant payments P2P money transfers Utility bill pay Top up	e-Wallet OTC money transfers Utility bill pay Top up
Function promoted to users	Merchant payments	Domestic remittances
Registration process	Online application process with validation required at the agent point	Approximately 45 seconds for two entries over USSD
Transaction process	Electronic transactions from the e-wallet	Transactions at the counter, validation of ID, form filled for each transaction

B. Satisfied dealers and agents

While a number of Mobile Money programs have struggled to keep their agents active and appropriately incentivised, Tigo Paraguay has built a network of motivated agents and dealers.[18] This stems from management's perspective that there are two customers in the Mobile Money game—the users of Mobile Money and the agents—and both parties need to be satisfied. "We understand that the agents are the entry point for Mobile Money and for this reason, our agents have to be satisfied so that we can attract new customers," says Rafael Cabral. The organisation structure is aligned to this principle, with the two key commercial positions of the program being Distribution & Sales and Product Development & Consumer Marketing.

1. Incentivising dealers to manage liquidity

Mobile Money models sit atop a network of cash and e-money distribution, which makes liquidity management essential for a service to succeed. There are a variety of approaches mobile operators have employed to manage agent liquidity. The two critical elements that distinguish these approaches are the entity which is responsible for balancing agents' float i.e. whether it is a bank, aggregator, super agent or airtime dealers and the entity which bears the cost of balancing float e.g. does the agent leave his/her shop to go to a bank branch or does an airtime dealer visit the agent.

Similar to what has been observed in other OTC models in Asia, Tigo Paraguay has assigned liquidity management to its dealers and this activity takes place at the agent shop. In practice, the dealers use the same staff for balancing Mobile Money float as for restocking airtime. The airtime dealers visit agents three times a week to sell airtime stock; on the same visit, these staff now also balance e-money float.

If the dealer is not able to meet an agent's need to buy or sell e-money, the agent has the option to manage his/her float by going directly to the bank. If the agent manages his/her float directly with the bank, then it is the bank which receives the commission from Tigo. Dealer incentives are tied to float management rather than Mobile Money transactions. The result is that dealers are motivated to visit their agents frequently, and even agents in rural areas receive the visits they require to keep their float balanced.

18. The term "dealer" is used to describe the persons or businesses which distribute airtime for Tigo.

2. Careful agent selection

Giros Tigo agents are selected for their location and their capacity to invest in the Mobile Money business i.e. maintain float. Out of the 30,000 airtime top up points, less than 1,000 have been selected as Mobile Money points of service. Tigo has built its Mobile Money agent network primarily on the back of its existing airtime agent network, but occasionally ventured out of the network, enrolling a currency changer in a busy market place, for example, a chemist near a doctor's office.

Tigo has carefully located agent points in strategic locations, keeping in mind the coverage of key remittance corridors as well as identifying locations which are convenient for clients. A good example of this are the Giros Tigo agents located at the central bus terminal in Asunción to capture consumers who are accustomed to sending and receiving money through the bus companies. While the dealers are responsible for the actual onboarding procedure of any new agent, it is Tigo who decides the location of each agent point. This allows Tigo to monitor the ratio of Mobile Money users to agents and ensure an appropriate balance is maintained.

Finally, Tigo monitors each agent's e-money balance and monthly earnings daily to gauge whether the agent is committed to the Giros Tigo product; agents who are not showing healthy growth month over month are eliminated.

3. Targets for agent commissions

Tigo wants satisfied and committed Mobile Money agents and as such, closely tracks agents' earnings from Mobile Money. The Giros Tigo team sets a target for monthly commissions agents should earn, and works hand in hand with the agents to achieve that target. The dealer is also focused on growing the agent's business and is empowered to use local marketing strategies to support agent points. For example, one agent had recently relocated, so his dealer sent an SMS to all customers living near that agent point to announce the new location, promote Giros Tigo and provide the agent's phone number for any queries.

"The gateway to the Giros Tigo is our agents. They need to be motivated and financially incentivised to continue providing quality service to our customers. So we want to see them earning good commissions each month," says Javier Irala, head of Giros Tigo distribution.

4. Quality control and customer service

The dealers are responsible for balancing agent float, as well as the branding and merchandising at each agent point, but Tigo maintains quality control over both these areas. With respect to liquidity management, Tigo sends the dealers a detailed report every day at six in the morning reporting the e-money balance of each Giros Tigo agent. This report is utilised by the dealers to monitor their agents as well as address any urgent cases of low float. For monitoring the branding at the agents shops, the Tigo team regularly visits agent points. Based on those visits, Tigo staff sends a weekly report to the dealers, highlighting any agent points not in compliance with the brand standards set by Tigo. This supervision on the part of Tigo is particularly important in the context of new Mobile Money services in Latin America, as poorly managed branding can prove to be a barrier for clients to start using Mobile Money.

Finally, Tigo knows that dealers are not able to solve each and every agent issue that arises. So they have introduced a customer service line specifically for agents, where agents can directly reach the Tigo office to resolve any problem or question they have with regard to the service.

Agent network responsibilities of Tigo and the dealers

	Tigo	Airtime dealers
Agent selection & recruitment	Tigo staff decide where new agent points will be located.	Once the location is determined by Tigo, the dealers are responsible for the formal onboarding procedure of new agents.
Agent training	Tigo staff offer support and provide the necessary materials for the training.	The actual training is led by the dealers, who conduct the training at agent's shops.
Branding at agent shop	The Tigo Branding team works together with the Giros Tigo commercial team to ensure the locations of agents contribute to the overall Giros Tigo branding efforts. Additionally, the Tigo team highlights zones which require more visibility.	Dealers are responsible for placing posters, signage, etc. at agent points. For full Giros Tigo branding (painting the shop in the Giros Tigo yellow), Tigo reviews the agent's performance and then approves or denies the request.
Monitoring of branding at agent shop	Tigo staff regularly check Giros Tigo agent points to ensure branding is in compliance. Any failures are reported to senior management at the dealer.	
Maintaining float		Dealers are responsible for visiting agents and balancing float. This is usually done three times a week, at the same time as airtime sales.
Agent commission payments	Agents invoice the dealers; Dealers invoice Tigo.	

Fully branded agent point with Giros Tigo yellow; new agent in rural area with partial branding

C. Customer insight to develop compelling marketing

For the relaunch of Giros Tigo, Tigo sought to develop a marketing strategy which would drive customer activation. Tigo again turned to market research, conducting multiple rounds of focus groups. The results of the research combined with the lessons from the initial Tigo Cash launch, produced three critical inputs to the marketing strategy.

1. One Segment, one message

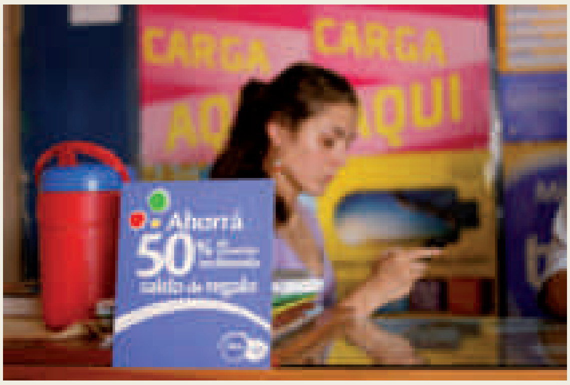
Tigo developed a marketing strategy to focus on one core message for one specific segment. “We learned that lesson from Tigo Cash, where we tried to communicate all of the services available to all the segments. With Giros Tigo, we wanted to communicate just one message to one customer segment,” expressed Natalia Oviedo, Giros Tigo product manager.

2. Distinguish the product from competitors

Tigo wanted to position Giros Tigo to compete with competitive money transfer options the target segment was using. Research showed that customers’ principle pain point with the competitive products was price, and therefore price became the most important product benefit for Giros Tigo. The Giros Tigo product was designed with a lower tariff than the target segment’s other options, and the Giros Tigo product launched with a price oriented promotion, “Send & Save.” The total cost for a money transfer was set at 4% of the remittance, but of that, 2% was returned to the client as airtime. For instance, if a client wanted to send Gs. 100,000 Guaranís, they would pay Gs. 4,000 in commission and receive Gs. 2,000 in airtime credit.

3. Build awareness, understanding and know how

From the experience with Tigo Cash, Tigo knew brand awareness alone did not drive customer activation. For the launch of Giros Tigo, Tigo developed communications that introduced first, what Giros Tigo was, second, showed consumers how it could be useful to them in their daily life and third explained exactly how it worked. The first TVC that launched highlighted the benefits and uses of Giros Tigo. The second TVC that launched utilised the same cast acting as the first TVC, but this time, the cast acted out the step by step actions required to make a transaction.



“Save: 50% of commission paid will be gifted as airtime”

How do you send money with Giros Tigo? Easy!
All you have to do is visit a Giros Tigo point, tell the cashier the mobile number of the person within Paraguay to whom you want to send the money and the amount of the remittance. And that's it! You are will receive confirmation SMS.

How do you save?
We charge just 4% of the amount of your remittance. E.g. if you send Gs. 50,000, you pay only Gs. 2,000. Also, we give you an airtime topup of 2% of the value of your remittance, which means the remittance costs you just 2% of the amount you sent. Here are some examples of how you can save with Giros Tigo:

How do you receive your Giros Tigo?
When someone sends you a remittance, you will instantly receive a message. Just pass by any Giros Tigo point to collect your cash.

Tigo also considered two other factors mentioned by consumers as it developed the marketing communications for the launch. First, the research showed that Paraguayans were not just sending monthly remittances for household expenses, but also using money transfers for a variety of "every day" needs. Therefore, the launch campaign showed three different uses of money transfers – a rural father sending money for his son's school fees, a domestic maid sending money back to rural areas, and a mom sending money to a neighbouring city for her son's birthday party. These different scenarios all promoted the key benefit of affordable money transfers, but also showed that Giros Tigo wasn't only for people with a monthly need to send money. Second, research indicated that marketing communications imagery needed to include the target segment. Tigo's TVCs feature individuals from its target segments, such as artisans and the working class.

Tigo's development of marketing communications that communicated one key message to one key segment paid off. The launch campaign produced an initial spike of customer acquisition numbers as well as sustained growth of new customers in the months after the campaign. Importantly the marketing strategy also drove customer usage, with an average increase in transaction volume of 25% month over month.[19]

D. Aligned bank partner

Tigo's bank partner is Visión Banco, which holds their trust account and is responsible for clearing transactions. Visión Banco is a bank specifically focused on SMEs. With a history of 16 years as a finance company and three years as a bank, Visión today has 81,786 accounts and a loan portfolio of US$ 382,535,980. They have a distribution network of 70 branches, which guarantees their presence in the main urban and rural areas.

19. Data self-reported by Tigo Paraguay

Tigo's dealers and agents are part of Visión Banco's target market, and as such, Visión has an interest in offering them financial services. Specifically, Visión Banco has served the dealers in two ways: first, they made credit lines available to the dealers; second, Visión Banco together with Tigo developed an IT system to facilitate liquidity management of the agents.

Luis Rojas, head of the bank's Strategic Business Unit, outlines the synergies between Tigo and Visión Banco as follows: "Basically the objective of both entities is that unbanked populations can access financial services, loan repayments, disbursements, bill pay and domestic remittances within the country, through their mobile phone using the USSD technology as a secure, simple platform that can be adapted to any model. For that, the Bank became involved in providing loans to Giros Tigo points, which needed more operating capital, using the technology network and agent network for the disbursement and/or payments of loan instalments, etc."

III. Conclusion

A. Importance of regulation in the region

This case study showed how the two largest mobile operators in Paraguay were able to develop Mobile Money services and refine their model without regulatory constraints. The fact that BCP observed the nascent Mobile Money services but did not formally regulate them at launch created a favourable regulatory environment for the growth of Mobile Money in Paraguay.

From the authors' perspective it is indeed regulation that is the critical issue in Latin America for the future development of Mobile Money. There is increased awareness on this issue and some central banks and superintendencies are moving forward. Some countries in the region, like Perú, are considering specific legislation for e-money, while other countries, such as Colombia, are looking for a way to broaden existing banking correspondent regulation to include Mobile Money.

Enabling regulatory environments for Mobile Money platforms and/or the introduction of regulation for Mobile Money holds the key for the development of Mobile Money in Latin America.

B. OTC vs. e-wallet Models

The Giros Tigo OTC model described in this case study, has been further rolled out to Guatemala and Honduras. As such, for commercial deployments in the region, the OTC format looks to be dominating for the time being. While the continued emergence of OTC models represents a healthy growth and diversity in Mobile Money deployments, the model does create some challenges.

Under OTC, clients generally have no incentive to store money on their phone. In most cases, clients transacting OTC cash out the full balance of any monies received, making it difficult to introduce e-wallet based money transfer or payments. For operators seeking to layer on additional products and services to their Mobile Money platform, customer's lack of experience using the e-wallet puts up certain limitations.

The Mobile Money sector has yet to identify a clear roadmap of how to drive electronic wallet usage once customers are accustomed to doing all their transactions at the agent point. Tigo Paraguay has plans to introduce an educational campaign, which uses simple messaging to gradually encourage OTC users to use the additional USSD services in the menu such as bill pay. However, at present, there are no best practices in the industry of what are the effective ways to move users from OTC to e-wallet use and this is an emerging risk for the region if new deployments continue with OTC models.

Whichever Mobile Money models are launched in Latin America, it will be interesting to observe the continued development of Mobile Money in the region and the best practices that emerge from the new deployments. The success of Tigo in Paraguay, as illustrated in this case study, shows that there are many ways to deploy and scale Mobile Money platforms.

Glossary

Agent
A person or business that is contracted to facilitate transactions for users. The most important of these are cash-in and cash-out (i.e. loading value into the mobile money system, and then converting it back out again); in many instances, agents register new customers too. Agents usually earn commissions for performing these services. They also often provide front-line customer service—such as teaching new users how to initiate transactions on their phone. Typically, agents will conduct other kinds of business in addition to mobile money. The kinds of individuals or businesses that can serve as agents will sometimes be limited by regulation, but small-scale traders, microfinance institutions, chain stores, and bank branches serve as agents in some markets. Some industry participants prefer the terms "merchant" or "retailer" to describe this person or business to avoid certain legal connotations of the term "agent" as it is used in other industries.

Aggregator
A person or business that is responsible for recruiting new mobile money agents. Often, this role is combined with that of a masteragent, and the two terms are sometimes used interchangeably.

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

Bearer
The mobile channel through which instructions are communicated between a customer's handset and a mobile money application platform. Mobile network operators provide the 'bearer channel' in any deployment, sometimes for a fee to compensate them for the cost of data traffic. The most commonly used bearer channels are USSD, SMS and GPRS.

Cash in
The process by which a customer credits his account with cash. This is usually via an agent who takes the cash and credits the customer's mobile money account.

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

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

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

Formal financial services
Financial services offered by regulated institutions as opposed to informal financial services, which are unregulated. In addition to banks, remittance service providers, microfinance institutions and MNOs can be licensed to offer certain financial services.

G2P
Government to person

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

Interoperability
The ability of users of different mobile money services to transact directly with each other. Given the technical, strategic, and regulatory complexities that enabling such transactions would entail, no mobile money platforms are to date fully interoperable with each other. However, many mobile money services allow users to send money to nonusers (who receive the transfer in the form of cash at an agent).

Know Your Customer (KYC)
Rules related to AML/CFT which require providers to carry out procedures to identify a customer.

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

Masteragent

A person or business that purchases e-money from an MNO wholesale and then resells it to agents, who in turn sell it to users. Unlike a superagent, masteragents are responsible for managing the cash and electronic-value liquidity requirements of a particular group of agents.

Mobile banking

When customers access a bank account via a mobile phone; sometimes, they are able to initiate transactions.

Mobile Money

A service in which the mobile phone is used to access financial services.

Mobile Money transfer

A movement of value that is made from a mobile wallet, accrues to a mobile wallet, and/or is initiated using a mobile phone.

Mobile payment

A movement of value that is made from a mobile wallet, accrues to a mobile wallet, and/or is initiated using a mobile phone. Sometimes, the term mobile payment is used to describe only transfers to pay for goods or services, either at the point of sale (retail) or remotely (bill payments).

Mobile wallet

An account that is primarily accessed using a mobile phone.

Over-The-Air (OTA) registration

A term used to describe creating a mobile money account for a customer via the mobile network and without the need to update any physical hardware in the phone.

P2P

Person to person.

P2B

Person to business.

Point of Sale (POS)

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

Platform

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

Regulator

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

Savings

Traditionally, the storage of a customer's money by a bank within an interest-bearing account. It is sometimes used more loosely to describe any store of money, such as the balance of electronic money within a mobile wallet.

Superagent

A business, sometimes a bank, which purchases electronic money from an MNO wholesale and then resells it to agents, who in turn sell it to users.

Unbanked

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

Underbanked

Customers who may have access to a basic transaction account offered by a formal financial institution, but still have financial needs that are unmet or not appropriately met. For example, they may not be able to send money safely or affordably.

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