



# Mobile Money for the Unbanked

## Mobile Money for the Unbanked Case Studies

Insights, best practices and lessons from across the globe



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# MMU case studies: New mobile money success stories and innovations

Today, mobile money services are available throughout much of the developing world. Most markets have a live offering and many have multiple services. In 2007, there were fewer than 20 mobile money services for the unbanked worldwide. Since then the number of deployments has ballooned to over 190, with another 115 planning to launch.<sup>1</sup>

How are these 190 services faring? Unevenly. Many mobile money services have yet to achieve significant scale, but a collection of stand-out services appear to have figured out the formula and are riding a steep growth trajectory. According to GSMA's 2012 Global Mobile Money Adoption Survey,<sup>2</sup> 14 services qualified as Mobile Money Sprinters, the world's fastest growing mobile money services. What has been the formula for their success?

A number of elements need to be in place for a mobile money service to become a sprinter, including an enabling regulatory environment, adequate levels of investment, strong marketing, and well-managed distribution networks. Over the past year, MMU has published case studies that examine how certain mobile money services have managed to thrive in countries such as Zimbabwe, Pakistan and Somaliland. Together these case studies demonstrate that mobile money success is no longer the story of just one country or region, and by sharing these lessons with the industry, MMU hopes to accelerate the success of more mobile money services around the globe.

<sup>1</sup> See MMU Deployment Tracker. <http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/tracker>

<sup>2</sup> GSMA Mobile Money Sprinters are the most successful mobile money services, as identified in the GSMA Adoption Survey. See Claire Pénicaut, 2013. "State of the Industry: Results from the 2012 Global Mobile Money Adoption Survey."

MMU has also researched how a more enabling regulatory environment for mobile money came about in Sri Lanka and how Indonesian operators have managed to achieve interoperability. These examples offer valuable lessons that other industry players can apply in their own markets to achieve greater financial inclusion.

## Reaching scale: Case studies from Zimbabwe, Pakistan and Somaliland

Though less mature than some of the well-documented mobile money success stories in East Africa, three of the services featured in MMU's case studies are experiencing similar

**ECOCASH**

OPERATOR:  
ECONET ZIMBABWE

### Success metrics (1.5 years after launch)

- 31% of adult population registered
- Transaction volumes equivalent to 22% of GDP

### Innovations:

- High degree of organisational commitment and long-term view
- Full interoperability with banking sector enabled by bank-grade switch

**easypaisa**

OPERATOR:  
TELENOR PAKISTAN AND TAMEER BANK

### Success metrics (<4 years after launch)

- Over 5 million monthly users and 25,000 agents
- \$1.4 billion cumulative throughput

### Innovations:

- Unique corporate structure
- Over-the-counter transactions allow non-Telenor customers to access service

**Telesom**  
The Reliable Choice

OPERATOR:  
TELESOM SOMALILAND

### Success metrics (<4 years after launch)

- High level of activity: >30 transactions per month per active user
- 70% of Telesom airtime sold over mobile money

### Innovations:

- Unique pricing structure: All customer transactions are free
- Robust ecosystem of merchants and salary payers keep funds in system



growth trajectories. Each has contributed a unique set of innovations to the industry, demonstrating that a variety of approaches are possible in different markets.

#### WHAT LESSONS CAN THE MOBILE MONEY INDUSTRY DRAW FROM THESE CASE STUDIES?

- **There is more than one workable business model.** Telenor Pakistan’s Easypaisa service transacts the majority of its volume over-the-counter or through mobile-enabled agents rather than a customer wallet. In Somaliland, Telesom’s Zaad service placed an early emphasis on the ecosystem, putting a big effort into signing up salary payers and merchants rather than focusing on P2P transfers. EcoCash in Zimbabwe is investing heavily in a bank-integrated merchant acquisition business to drive the majority of its transactions.
- **Mobile money has “legs” beyond Kenya and its immediate neighbours.** These three services operate in environments that are geographically, culturally, and socio-economically distinct from markets in East Africa that have also had a lot of success with mobile money.
- **Mobile operators can deliver financial services in diverse and challenging operating environments.** All three services operate in difficult markets where traditional financial services players have failed to reach the underserved. Political turmoil, hyperinflation, security issues, and lack of internationally recognised financial institutions are some of the barriers these operators have overcome.
- **Best practice exists in heterogeneous market conditions.** Though the services have different product designs and strategic approaches, they all share some common operational and organisational features.
  - Each has **unequivocal C-level backing** and has created **separate business units or entities** to house mobile money. Mobile money is an important part of the operator’s core strategy and is acknowledged as an important driver of revenue and profitability in the future, rather than a regular value-added service.
  - Each has spent significant resources creating an **engaged and well-trained agent network**. These agents have become ambassadors of the service, eager to educate and serve customers.
  - Each relies heavily on **BTL field operations** to engage and educate customers on the service. For example, EcoCash registered three-quarters of its existing user base through a roving force of 500 “brand ambassadors”.

## Creating an enabling regulatory framework: A case study of Dialog eZ Cash in Sri Lanka

An enabling regulatory environment is a prerequisite for mobile money success. In some markets, regulation still prohibits or hinders adoption of mobile financial services.

MMU’s case study of Dialog’s eZ Cash service details how open engagement with regulators and progressive policy-making have created a clear and enabling framework for mobile money to flourish. After working with the Central Bank of Sri Lanka to adjust the regulatory framework to better fit the needs of the unbanked, Dialog experienced a spike of 1 million new eZ Cash users within one year.

## Innovation in service delivery: a snapshot of interoperability in Indonesia.

MMU’s most recent case study examines the developing story of mobile money in Indonesia. Three mobile network operators have decided to become interoperable from the outset, allowing customers to seamlessly transfer funds across networks. This case study documents both the technical solution and the collaborative model that allowed operators to become fully interoperable in just six months.

As the mobile money industry develops, MMU will continue to identify and highlight new success stories, innovations, and best practices. To learn more about MMU’s research, please visit [www.gsma.com/mmu](http://www.gsma.com/mmu).

MMU would like to thank all the operators who helped us create these case studies, as well as Sandy Pederson for her help in writing and editing them.



## Snapshot:

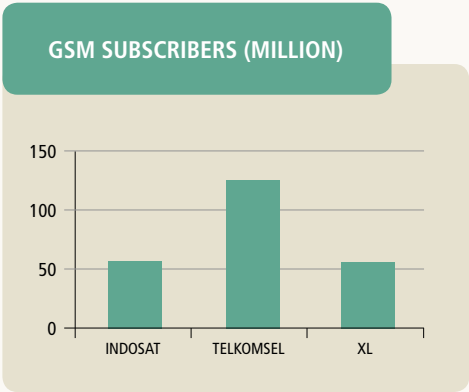
### Implementing mobile money interoperability in Indonesia

Author: Gunnar Camner



THE INDONESIAN CONTEXT

Indonesia’s 245 million inhabitants – the fourth largest population in the world – are dispersed over 17,000 islands. In the last decade, Indonesia has undergone significant economic and demographic shifts. More than 60% of Indonesia’s population is working age<sup>1</sup> and a large proportion is entering the middle class, which has grown 50-fold in the last decade and is projected to double again by 2020.<sup>2</sup> Consumer spending is driving domestic growth, with consumption currently accounting for more than half of the country’s GDP. Money is also being injected into the economy from abroad; 6.5 million migrant workers sent US\$7.2 billion home in 2012 and direct foreign investment has been over US\$20 billion for the last couple of years.<sup>3</sup>



Indonesia’s mobile and rapidly urbanising population is driving demand to move money around the country and to handle payments with greater efficiency. Money transfers for payments and remittances are pervasive, with 83% of persons above the age of 15 reporting sending or receiving a remittance or payment transaction in the previous month. The majority of these transactions happen in cash, which indicates a great opportunity for mobile-enabled financial transactions.<sup>4</sup>

Mobile operators recognised this opportunity and launched mobile money services. Telkomsel was first, launching TCash in 2007; Indosat followed in 2008 with Dompetku. When XL launched XL Tunai in 2012, the three operators had been joined by a small number of third parties and banks also moving into the mobile money space.



# Introduction

ON MAY 15, 2013, INDONESIA’S THREE MAJOR MOBILE OPERATORS—TELKOMSEL, INDOSAT AND XL—WENT LIVE WITH A GROUND-BREAKING INITIATIVE THAT ENABLED THEIR MOBILE MONEY CUSTOMERS TO SEND AND RECEIVE MONEY ACROSS EACH OTHER’S NETWORKS. THIS WAS A MILESTONE IN THE MOBILE MONEY INDUSTRY. FOR THE FIRST TIME, MOBILE MONEY PLATFORMS RUN BY MOBILE OPERATORS COULD TALK TO EACH OTHER—ACCOUNT TO ACCOUNT, OR “WALLET-TO-WALLET”—IN REAL TIME.

In most countries with mobile money deployments, money sent to a customer on a different mobile network generates a voucher that can only be cashed out at an agent in the sender’s network. Sending money “off-net” results in a cash-out, missing the opportunity to trigger additional electronic transactions. Until recently, mobile money customers in Indonesia were in the same boat.

However, the three main operators in Indonesia announced a new development in May 2013 to change this. Today, a mobile money customer can use the money in their e-wallet not only to pay a bill, buy airtime or transfer money to another customer in their network, but also to send money directly to an account, or m-wallet, in a mobile money scheme of another network.

In this case study, MMU provides a snapshot of the implementation of mobile money interoperability in Indonesia—specifically, how it came to be that three independent mobile operators worked together to make real-time transfers across their mobile money deployments a reality.

PAYMENTS DATA FROM SELECTED COUNTRIES	CASHLESS RETAIL PAYMENTS TRANSACTIONS PER CAPITA	PAYMENTS CARDS PER 1,000 INHABITANTS
NORWAY	380.3	3,583
CHILE	26.4	734
SOUTH AFRICA	21.8	N/A
INDONESIA	7.8	247
INDIA	4.7	173
MOZAMBIQUE	0.3	61

SOURCE: PAYMENTS SYSTEMS WORLDWIDE, THE WORLD BANK 2010

NEW REGULATION ENABLES MOBILE MONEY DISTRIBUTION

When mobile money was launched in Indonesia, a regulatory hurdle stood in the way of consumer uptake. Until recently, an agent could not perform a cash-out unless the outlet had a remittance license issued directly by Bank Indonesia. To withdraw cash from their mobile money wallet, customers had to go to an outlet managed directly by their mobile operator, but each operator has only 25 on average nationwide. This severely limited the service options for unbanked customers in remote areas and closed the door to anyone interested in building a capillary distribution network for financial services.

Bank Indonesia, Indonesia’s central bank, wanted to create an enabling environment for mobile banking that would advance financial inclusion. In 2007, only 42% of adults in In-

1 JANA Mobile, “The Growing Indonesian Middle Class”, <http://www.jana.com/blog/the-growing-indonesian-middle-class/>

2 “Indonesia’s Middle Class: Another BRIC in the Wall”, July, 2011 <http://www.economist.com/node/18989153>

3 Indonesia FDI Hits Record, but Growth Pace Slows, July, 2013, Wall street Journal

4 South Asians Heavily Reliant on Informal Money Transfers, Gallup 2013 <http://www.gallup.com/poll/161627/south-asians-heavily-reliant-informal-money-transfers.aspx>





EACH OF THE OPERATORS IN INDONESIA HAVE BEEN TRYING ON ITS OWN TO EDUCATE AND DRIVE ADOPTION IN THE MARKET. IT IS IN EVERYBODY'S INTEREST TO MOVE THE MARKET FORWARD AND WE SEE P2P INTERCONNECTION AS AN ENABLER FOR THIS.

YESSIE YOSETYA,  
HEAD OF XL TUNAI



Indonesia had a bank account, meaning that 80 million adults in the country did not. Mobile penetration is high, however, with operators counting over 280 million connections.

The Regulation on Funds Transfer issued in March 2013, followed by branchless banking pilot guidelines in May 2013, opened the way for smoother distribution of mobile money. Bank Indonesia appears keener than in the past to allow service providers to build networks of agents who can perform cash-in and cash-out for their customers, as well as open mobile money accounts on their behalf. Since the regulation came in place, several thousand mobile money agents have signed up to mobile money schemes.

#### OPERATORS SEE AN OPPORTUNITY TO INTERCONNECT

By 2012, each of the three operators had established payments systems on their own, but in a geographically dispersed country like Indonesia, isolated payments schemes are unlikely to have enough reach to drive significant usage. With a new and more enabling regulation... to communicate with each other. Connecting their platforms would allow them to capitalise on the potential of the payments market, strengthen the value proposition for their customers, and become more competitive overall in the payments market.

The first step was to find an appropriate platform to discuss collaboration on the GSM business with their main competitors. In December 2012, the CEOs of XL and Indosat entered into discussions about how to capitalise on the opportunity for mobile money in Indonesia and possible industry collaboration in this area. Telkomsel was invited to join the discussions shortly after as all three operators realised that the benefits would be greater if all were part of the collaboration.

## Approach to implementation

### HOW OPERATORS COLLABORATED, FROM THE VERY TOP TO ORGANISATIONAL TEAMS

As mentioned above, the operators began holding regular discussions in December 2012 and launched an interoperable solution just six months later, in May 2013. How did they accomplish this in such a short time frame?

The fact that the conversations between the three operators began at the CEO level was important to ensuring full commitment to industry collaboration within each organisation. It also helped to reach agreement more efficiently on which areas and customer use cases were interesting for collaboration and which were not. Industry collaboration and interoperability in the mobile money market can affect many different use cases, each with their own technical, operational, and commercial complexities.

The first priority agreed by the CEOs was to make sure money could be sent directly to accounts of the different schemes instead of a redeemable voucher within the originating scheme. It was decided that connecting to banks and ATM networks was outside the scope of the collaborative effort and it was instead up to each operator to pursue on its own. Decisions like this defined clear areas for collaboration, but equally important ensured that healthy competition was maintained in other areas. A single, tripartite agreement was set up and signed by each operator that outlined the principles and content of the collaborative effort. This ensured that the commercial and operational principles would be the same for all participating organisations.

The heads of departments for mobile money at each operator were then tasked to deliver and implement the project. Weekly meetings with the heads of mobile money were set up, and soon more meetings between their teams and relevant departments within each organisation were also occurring frequently.

A major reason why the operators were able to develop and launch a solution so quickly was that for each area affected by mobile money interoperability, such as legal, customer care and IT, they set up teams with members from each of these departments from across

the three organisations to discuss the challenges and determine and implement the appropriate solution.

#### SOME NECESSARY CONSIDERATIONS FOR ACHIEVING AN EFFECTIVE SOLUTION

Some of the interconnection challenges that the teams had to overcome were as follows:



THE TECHNICAL TEAMS FROM TELKOMSEL, XL AND INDOSAT DURING A MEETING IN JUNE 2013 AT TELKOMSEL'S HQ IN JAKARTA

- 1. How to route transactions between schemes.** One of the first problems that needed a solution was how best to securely and efficiently route transactions across the three schemes. Should agreements be signed with a central party or directly between the three participants? Despite the fact that two of the operators had sister companies that either owned or operated payment switches connecting ATM networks and financial institutions, it was agreed that the operators would connect bilaterally so that no participant or third party would have more influence over the solution than any other. It was further decided that the inter-scheme transactions would be reconciled daily and the funds settled bilaterally between each scheme on a regular basis as needed, with the custodian banks performing net settlement through the real-time settlement service provided by Bank Indonesia.
- 2. Enabling communication across platforms.** In order to allow transactions across the platforms, the technical teams had to find a common language that all their platforms could interpret. The technical teams from the three operators together evaluated the options available and decided on a solution that would enable communication over secure direct connections using a commonly defined protocol. Each technical team was then responsible to enable their platform to interpret this common protocol and perform the required functions in response.
- 3. Managing AML/CFT.** To maintain the integrity of each mobile money deployment, each mobile money operator maintains responsibility for conducting their own Know-Your-Customer (KYC) and Anti-Money Laundering (AML) checks and procedures for all transactions on their platform. The fraud and risk teams came together to assess the newly introduced use cases and analysed what measures would need to be put in place to mitigate any new exposure to risk. Each operator is responsible to their own customer and because its first use case is direct credit, or transfer, the company with the sender is responsible for service delivery and to initiate any investigation on behalf of the customer in case anything goes wrong with the transaction.
- 4. Financial processes.** The finance teams and revenue assurance teams reviewed reconciliation and settlement procedures, and were responsible for setting up compliant and reliable processes to oversee the new transaction types.

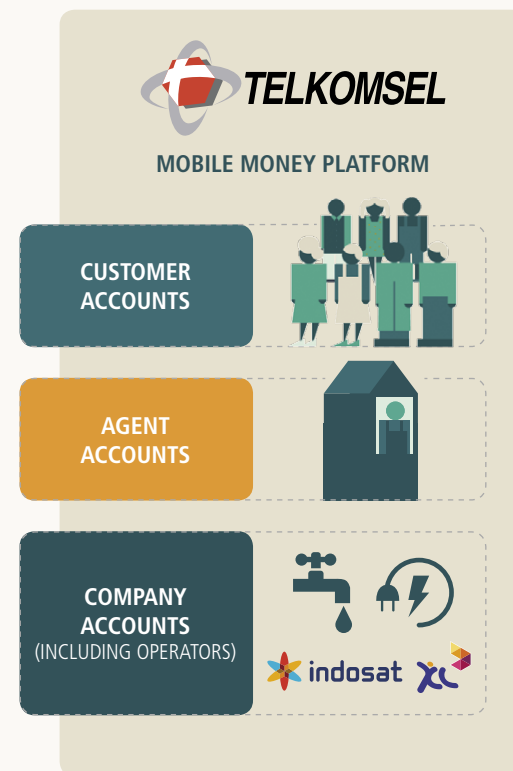
The operators have continued to meet weekly since December 2012 and during this time have agreed to a common Standard Operating Procedure (SOP) for handling issues such as customer care and fraud.

#### HOW IT WORKS

Despite the fact that all three deployments operated different mobile money platforms, the technical development to enable the platforms to talk to each other took only four months. Both Telkomsel and XL developed their platforms in-house, while Indosat bought their core platform from a mobile money vendor (Utiba). The technical teams from the three operators jointly defined the functionality of the inter-scheme collaboration and how information could be exchanged between them. They decided to describe the agreed functions using WSDL and communicate using a secure protocol, SOAP over HTTPS.



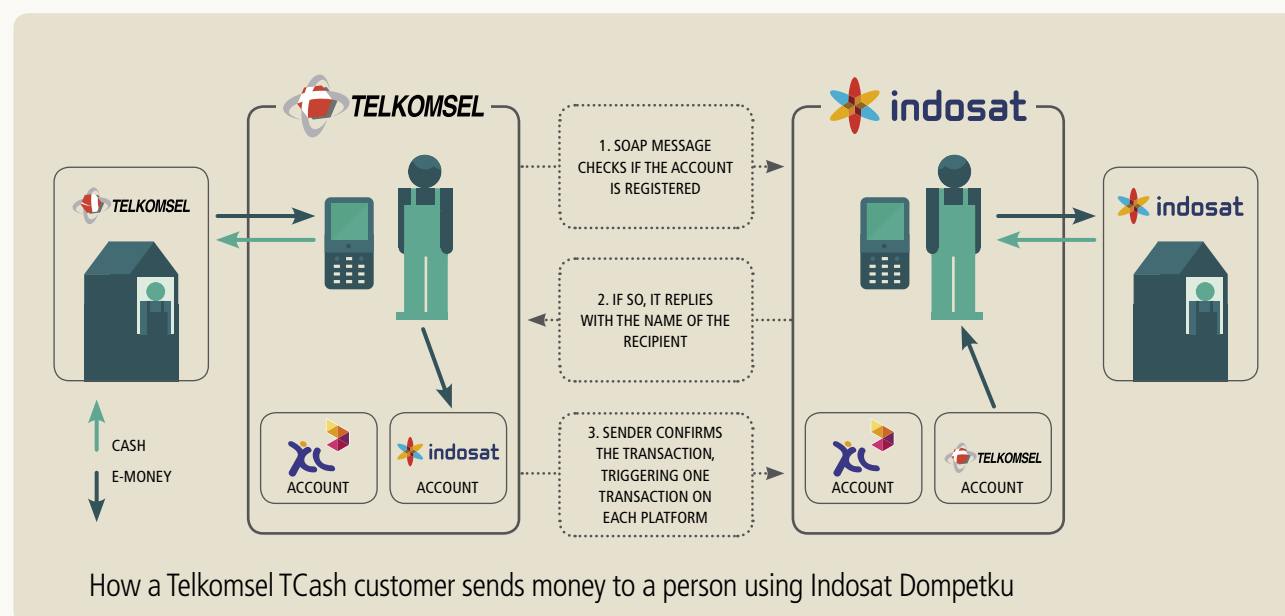
1. Each operator creates an account on the other platforms, just like accounts are created for partner banks, utility providers, or other companies. Due to high levels of trust between the operators in Indonesia, the accounts are not pre-funded, which is the case for other external companies.
2. The platforms communicate with each other through a secure and encrypted connection using a defined SOAP protocol with commonly defined functions.
3. After the schemes have communicated and established the existence of a recipient account, and sufficient funds at the originating account, the transaction between the two mobile money deployments consists of two main actions. The first is a transfer from the sender's account to the receiving operator's account on the originating platform. This is mirrored on the receiving operator's platform, where the originating operator's account credits the recipient's individual account.
4. All inter-scheme transactions are later reconciled (daily) and settled regularly between the custodian partner banks through the real-time settlement service provided by Bank Indonesia.
5. Cash-in and cash-out are handled by agents of the mobile money schemes of which the customer is a member' or 'to which the customer belongs.



This solution was chosen for its simplicity, affordability, and flexibility. Defining the features of inter-scheme communication from scratch allowed the operators to add certain functionality, such as displaying the name of the recipient when sending money to another scheme in order to reduce the likelihood of sending money to the wrong person – a feature that would not have been available using existing payments switches or an automated clearing house (ACH). Circumventing a commercial payments processor enabled them to not introduce any additional costs from a third party. However, there are many ways to implement and enable direct transfers between mobile money schemes and it is yet to be seen whether or to what extent the Indonesian implementation will set a precedent in the industry or not.<sup>5</sup> The operators presented their solution to Bank Indonesia, which has been supportive of their efforts and achievements to date.

#### THE COMMERCIAL MODEL

Sending money across networks costs customers IDR 2,000, less than USD 0.20. This fee is shared between the originating and receiving schemes. Transferring money within a mobile money scheme is, however, free of charge. A general question for the industry as transactions between mobile money schemes begin to become more popular, is whether to keep the commercial model from the telecommunications business side, where cross-net communication is penalised, or if new models should be investigated specifically for mobile money. The pricing model from the GSM business has resulted in extensive multi-SIM use, and it is unclear whether using that model would be optimal for mobile money. As cash-ins are currently a cost for each mobile money deployment, there should be an opportunity to find a commercial model that encourages, rather than discourages, transactions across schemes to increase total transaction volumes.



**Kirim Uang Bisa Ke Nomor Ponsel** **GRATIS Biaya Kirim**

**Dapatkan kemudahan pengiriman uang lewat ponsel.**

Silapa bilang transfer uang itu repot? Nikmati kemudahan kirim uang dengan aman dan cepat, langsung lewat nomor ponsel. Gratis biaya kirim selama tanggal 19 Juni - 31 Agustus 2013.

Segera aktifkan layanan ini dengan menghubungi:  
 \*789# untuk Indosat Dompotku, \*828# untuk TELKOMSEL T-CASH, dan \*123\*2201# untuk XL Tunai.

Syarat dan ketentuan berlaku.

**BANK INDONESIA**  
 BANK SENTRAL REPUBLIK INDONESIA

<sup>5</sup> A forthcoming paper published by Consult Hyperion and GSMA titled "Making Mobile Money Interoperable" will walk operators through the available options and present a framework for evaluating them.

## Considerations going forward

Enabling direct transfers between mobile money deployments is just the beginning of a much greater collaboration between Indonesia's mobile operators. So far, the industry has agreed to work jointly on the following areas:

- **Financial education programs.** Customer awareness of mobile money has been identified as a major hurdle for the industry. The operators will work together to raise awareness of the benefits of electronic transactions.
- **Airtime sales.** The operators will enable any mobile money account to purchase airtime from any operator. This is currently under development by the operators' technical teams.
- **Merchant payments.** The operators have agreed to define, develop, and implement a common solution for merchant payments to make sure customers of each scheme can pay at any merchant location that accepts mobile payments.
- **Refine operational procedures.** As the services grow in popularity, it will be necessary to continue refining agreements and processes around issues like dispute resolution.
- **New members.** The operators are open to other mobile money deployments joining the collaboration as they establish themselves in the market.

What operators in Indonesia have shown is that industry collaboration and interoperability is possible and can be technically implemented in a safe and timely manner without jeopardising the business model for mobile money. Still, several challenges lie ahead for the mobile money industry in Indonesia if it is to achieve its full potential.

The first is to identify and address the key customer value proposition that will make the services popular in the country.

Second, as popularity and transaction volumes grow, any operational procedures to handle issues introduced by inter-scheme transactions, for example, dispute issues, will need to be worked out and implemented effectively by the operators to avoid friction in the partnership and ensure customer satisfaction.

Third, the regulatory environment is still being formed. Success for financial inclusion in general and mobile money in particular will require banks and non-banks to operate on a level playing field in the payments space, with a risk-based approach to regulation and guidelines for account opening, KYC, and transaction limits. Currently, the three operators have different regulatory licenses for mobile money. Indosat, for example, only operates in certain districts of the country as they are part of a branchless banking pilot managed by Bank Indonesia. A closer dialogue with the regulator is required to ensure a positive outcome.

## Conclusion

Even though it is too early to measure the effect of the implementation, the operators are anticipating rapid uptake. There have been bold predictions that 52 million mobile money users will conduct transaction volumes of US\$42 bn and generate service revenues of almost \$2bn by 2017.<sup>6</sup> Predictions like this are always uncertain, but what is clear is that the market conditions in Indonesia offer strong potential for mobile financial services.

Interoperability was achieved in Indonesia thanks to CEO commitment, strong technical teams collaborating across operators, and mobile money managers designing robust SOPs to address customer service and risk management.

Enabling payments regulation and interoperability is an exciting beginning for Indonesia's mobile money industry, but it is only the first step in capturing the full opportunity. Competent technical execution now needs to be followed up with equally competent commercial investments and operations to achieve customer uptake in the market. The industry is counting on continued regulatory backing from Bank Indonesia to provide a competitive payments landscape for both banks and non-banks. Indeed, Indonesia is a mobile money market to watch closely in the coming year.

<sup>6</sup> Linklaters, "Mobile money – Indonesia", <http://www.tmtgenerationnext.com/case-study/mobile-money-indonesia>





## Easypaisa:

### Mobile money innovation in Pakistan

Authors: M. Yasmina McCarty and Roar Bjaerum





# Introduction

**EASYPAlSA**, a mobile money service launched in Pakistan in 2009, serves more than 5 million customers a month through 25,000 points of service. By the end of 2012, it had processed more than 100 million transactions with a throughput of more than US\$1.4 billion. Easypaisa was identified as a 2012 GSMA Mobile Money Sprinter – one of the 14 most successful mobile money services.<sup>1</sup>

Three important mobile money innovations emerge from the Easypaisa story. First, Easypaisa was launched from a unique corporate structure. Telenor Pakistan, a mobile network operator (MNO) acquired a 51% ownership stake in Tameer Bank, a microfinance bank, and then established Easypaisa as a common organisation across the two companies. Second, Telenor Pakistan and Tameer Bank introduced over-the-counter (OTC) mobile money services – an entirely new model that did not require registration for an electronic wallet. Third, Easypaisa achieved rapid national expansion by relying exclusively on its existing GSM distribution structure.

With a population of 180 million and only 15% bank penetration in 2008, Pakistan presented an attractive market opportunity for mobile money.<sup>2</sup> Easypaisa seized this opportunity by creating an innovative partnership, a new delivery approach, and an effective distribution model.

However, these innovations cannot stop here. OTC has become the de facto model for mobile money in Pakistan, but it has significant constraints. Without a stored value account, there are limitations to the product offering, reduced profits for the service providers, and an inability to build a robust financial digital ecosystem. Mobile money providers in Pakistan should focus their efforts on driving adoption of the mobile account by expanding registration locations, extending the product offering, raising awareness, and educating consumers about the benefits of a mobile account.



## PART 1

# Structuring for innovation

### A. THE OPPORTUNITY FOR TELENOR PAKISTAN: MOBILE FINANCIAL SERVICES AS A NEW REVENUE STREAM

In 2007, Telenor Group launched financial services through its company Grameenphone in Bangladesh, sparking excitement about the potential of mobile money. With GSM sales slowing in Telenor Group's mature markets, the company was looking for new growth opportunities in industries such as broadband, financial services, and media convergence.

Pakistan, among other countries, was evaluated for mobile financial services; with only 15% of the adult population banked, Pakistan presented an attractive market for financial services. At the time, Telenor Pakistan's GSM subscriber base was 21 million and its market share was 22%, making it the country's second largest MNO. The company considered itself well positioned to offer mobile financial services.

**While Telenor Pakistan was well positioned in many ways, it lacked experience in financial services and was not licensed to offer mobile financial services.**

### B. PARTNERING WITH TAMEER BANK: GAINING EXPERIENCE IN FINANCIAL SERVICES AND OVERCOMING REGULATORY HURDLES

The State Bank of Pakistan (SBP) issued Branchless Banking Regulation in March 2008. The regulation called for a bank-led model, which meant that only commercial banks and microfinance banks with an existing banking licence were eligible to apply for a branchless banking licence. The regulation also specified that MNOs could operate as a "super agents" on behalf of a bank, providing marketing and distribution in addition to participating in product development.

<sup>1</sup> GSMA Mobile Money Sprinters are the most successful mobile money services, as identified in the GSMA Adoption Survey. See Claire Pénicoud, 2013. "State of the Industry: Results from the 2012 Global Mobile Money Adoption Survey."

<sup>2</sup> The World Bank, 2009, "Access to Finance Survey 2009: Bringing Finance to Pakistan's Poor."

MOBILE MONEY MARKET OPPORTUNITY

Although only a small percentage of Pakistan’s adult population was formally banked, there was extensive use of informal financial services, with an estimated 35% of the population using other means to transfer and save money.<sup>3</sup>

Based on the number of unbanked and their income levels, Telenor estimated there was an addressable market of 60 million people.

Examining the opportunities for specific products, Telenor estimated domestic money transfer services as a 10 million person addressable market. The market for international remittances from international migrant workers was estimated at 5 million. And bill payment was believed to have a market size of 20 million households.

In spite of a regulation that specified a bank-led model, Telenor Group and Telenor Pakistan decided to move forward with developing mobile financial services. **Given the regulatory requirements and Telenor Pakistan’s lack of experience in financial services, they saw majority ownership in a microfinance bank as the optimal way to enter the mobile money market.** Telenor Pakistan soon entered into discussions with Tameer Microfinance Bank Limited.<sup>4</sup>

Tameer Bank was established in 2005 and was at the forefront of innovation in financial inclusion. It was the first microfinance bank in Pakistan to offer real-time online banking at branches, open 24-hour service branches, and to make use of capital markets to fund the microfinance bank. Tameer Bank had an experienced management team and strong institutional knowledge about reaching the financially excluded.

**Tameer Bank had already identified branchless banking as an important way to grow their services and was in search of a partner that could provide national distribution.** By partnering with Telenor Pakistan, Tameer Bank saw an opportunity to significantly extend the reach of financial services beyond the existing 2 million microfinance customers in Pakistan.

TELENOR PAKISTAN’S STRENGTHS

**Nationwide reach:** Telenor Pakistan had 200,000 points of service selling airtime for its GSM business, unlike bank branches, which had limited geographical reach.

**Low cost structure:** Telenor Pakistan’s distribution structure had no fixed costs; GSM agents operated on a commission basis and could build viable businesses on small transaction volumes and values.

**Strong brand image:** Telenor Pakistan believed their brand was more widely recognised than any bank. Also, the company’s Brand Health Tracker showed the Telenor brand was trusted and perceived as reliable.

**Large customer base:** Telenor had 21 million customers compared to the 10–15 million bank customers.<sup>3</sup>

<sup>3</sup> World Bank, 2009. “Bringing Finance to Pakistan’s Poor.”

<sup>4</sup> Tameer Microfinance Bank Limited (TMBL) is a private commercial microfinance bank licensed by the State Bank of Pakistan under the Microfinance Institutions Ordinance 2001.

**In 2008, Telenor Pakistan acquired 51% ownership stake in Tameer Microfinance Bank Limited (TMFB).** The acquisition of 51% ownership was PKR 1 billion, equal at the time to approximately USD 12 million or USD 10 million in today’s exchange rates (May 2013). The vision for this partnership was three-pronged:

- **Ensure integration of the value chain.** Structuring the relationship through an agent agreement would have limited the collaboration to a transactional relationship. A full-fledged partnership ensured tighter integration, increased commitment from both sides to the shared venture, and better execution across the value chain.
- **Influence over customer data.** Regulations required that customer accounts reside with a financial institution and prohibited exclusivity in agent-bank contracts. Consequently, a bank would be free to use customer information and transfer the relationship to other channels / agents. By taking 51% ownership in the bank, Telenor Pakistan would have more influence over the use of customer information and the future value of these customers.
- **Ease discussions of revenue sharing.** With a 51% ownership structure, discussions between the bank and the mobile operator about how to divide revenues and costs were simplified. This structure also allowed Telenor Pakistan to capture revenues generated by both the bank and the agent side of the branchless banking business.

With the partnership model in place, Telenor Pakistan and Tameer Bank divided responsibilities by knowledge, experience, and regulatory adherence. **It was determined that Telenor Pakistan would take the lead on branding, marketing, and distribution, while Tameer Bank would direct operations, risk management, compliance, and liquidity management.** Other areas, such as product development and technology, were shared by both organisations.

In the beginning, the relationship was challenging. Since Telenor Pakistan had a controlling interest in Tameer Bank, some Telenor employees saw themselves as the parent company and the primary decision-makers. At the same time, some employees of Tameer Bank considered themselves the decision-makers since Telenor operated as a distribution agent of Tameer Bank. Operating out of two separate cities compounded the situation.

**The companies addressed these challenges by establishing a common management team for Easypaisa, which consisted of members from both Tameer Bank and Telenor Pakistan, with one common leader who reported to both companies.**

STRUCTURING FOR INNOVATION: KEY TAKEAWAYS

To launch Easypaisa, US\$7 million was invested in the technology platform, national marketing campaign, organisational structure, and agent training. An additional budget was ring-fenced for expected losses over the initial years of operations. The investment paid off, with the service operating at break even and expectations that financial services will generate up to 10% of total revenue for Telenor Pakistan.

Telenor Pakistan and Tameer Bank found the right partnership structure to seize a market opportunity, leverage telco and banking expertise, and adhere to regulatory requirements. It divided up responsibilities based on the strengths of their respective organisations and created a streamlined governance structure to ensure ongoing alignment.





## PART 2

# Designing the model: Over-the-counter vs. mobile account

### Considerations for the model

With the corporate and regulatory structures in place, Easypaisa was ready to design the mobile money model. The mobile money sector at the time was dominated by the mobile account – an electronic wallet on the customer’s phone, usually run on USSD or STK. The key feature of the wallet is stored value – customers visit agents to “cash-in”, converting cash to digital currency, after which they can trigger transactions from anywhere.

However, the Easypaisa team was worried about the viability of this model. First, Telenor Pakistan had 22% market share. **Using the mobile account model would mean their total addressable market would exclude about 40 million non-Telenor Pakistan GSM subscribers as well as those with no mobile subscription, all of whom were potential mobile money customers.**

**Second, regulations for mobile account registration mandated comprehensive Know-Your-Customer (KYC) procedures, which were cost prohibitive and time consuming.** Registering for a mobile account required a photo, a copy of the customer’s original government-issued ID card (CNIC), and a signed account-opening form. In addition, the regulation specified that a biometric fingerprint of the customer had to be obtained.<sup>5</sup> Registration points therefore

<sup>5</sup> A temporary exception from the biometrics requirements was obtained from SBP. However, it was unclear how long that exception would last. Easypaisa’s optimal registration device was a mobile handset, but as it lacked the biometric functionality, Easypaisa delayed investing in handsets. Updated regulation issued in 2012 removed the biometric requirement.

required an internet-enabled device (computer or smartphone) to take the photo, scan the CNIC, and upload the signed form to the back office for processing. Finally, the CNIC card had to be verified with the governmental bureau NADRA to confirm the customer’s identity, which created an additional cost. In total, it cost between US\$1.50 and 2.00 per account opening and the investment in registration equipment for each point of service was roughly US\$150. **The Easypaisa team was concerned that these registration requirements would be too costly for the business model and would present a major barrier to customer adoption.**

**The team decided to launch Easypaisa as an over-the-counter (OTC) service, whereby all transactions were agent assisted and no registration was required.**<sup>6</sup> This model would make it possible to serve all mobile phone subscribers instead of only Telenor Pakistan customers. The plan was to start with OTC and, as customers came to understand the benefits of mobile money, active users would migrate to the electronic wallet. This phased approach would alleviate the costs associated with registering a large number of customers who may not become active customers. The OTC model also ensured buy-in from the agents since it provided them with more transactional revenue versus the mobile account service, in which commission is limited to cash-in and cash-out transactions.

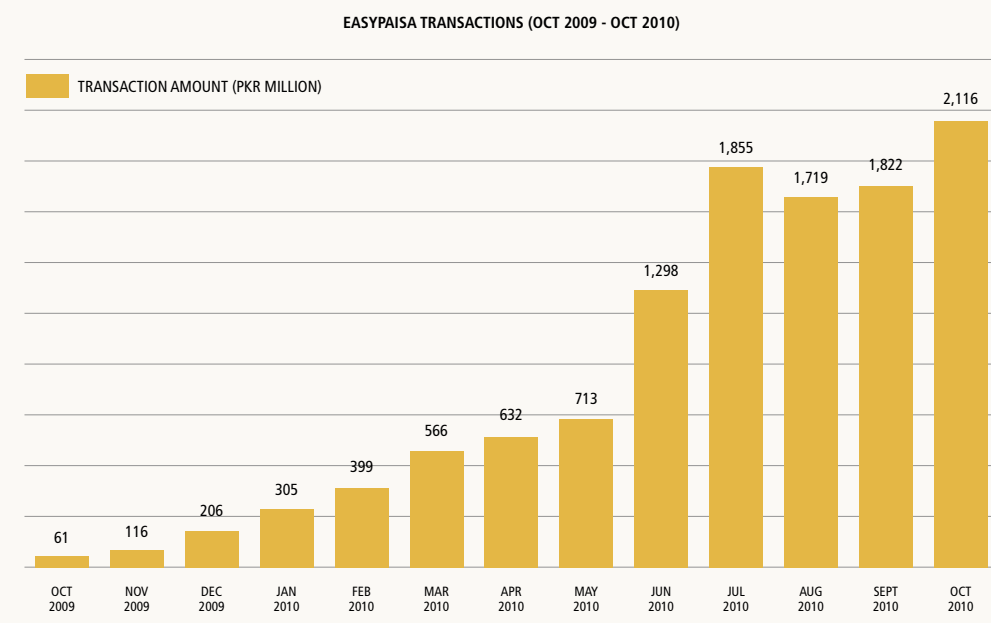
In October 2009, Easypaisa OTC was launched, first with utility bill payments and then money transfer a few months later. All transactions were agent assisted. Customers who wanted to pay bills or send money simply went to any Easypaisa agent, presented their CNIC and handed over cash to the agent, who performed the transaction. The customer did not have to register and did not need a mobile account.

In 2010, the “Easypaisa M-Wallet” was launched with money transfer and bill payment services. Additional products were rolled out over time, including other bill payment services (government, school), charity donation, airtime top-up, savings, and insurance.



“There’s some good news and some bad news...”

**Easypaisa met impressive results, primarily through OTC. After just 11 months in business, Easypaisa had processed 5 million transactions. By the end of 2012, this had risen to**



**FIGURE 1**  
Easypaisa transaction values in first year of operations

<sup>6</sup> The OTC model was not explicitly listed in the regulation; a special acceptance letter from SBP was obtained to operate the service.



**100 million transactions with a throughput of US\$1.4 billion.** As the company anticipated, the OTC model gave Easypaisa a wide reach: 70% of its customers were not Telenor Pakistan mobile subscribers.

Easypaisa’s vision of migrating OTC customers to a mobile account was not immediately realised. **One year after launching the service, less than 5% of money transfers and bill payments, Easypaisa’s core products, were conducted through the M-Wallet.**<sup>7</sup> Three main reasons were identified for the slow uptake:

- **Ease of use.** The OTC customer experience was just too easy for the customers. Customers do not need to register to transfer money or pay a bill. They simply walk up to a neighbourhood agent they already know and trust from purchasing airtime, and conduct a transaction instantaneously. They do not need to learn the USSD menu themselves and they receive assurance the transaction completed because the agent issues a receipt.
- **Product features.** The product offering of Easypaisa’s M-Wallet was practically the same as the OTC offering. Using the M-Wallet gave customers up to a 25% discount on certain products, but that was not a compelling enough incentive.
- **Registration points.** Because of the high upfront cost of registration equipment, the Easypaisa channel team prioritised rolling out OTC transaction points over M-Wallet registration points. One year after launch, only 1,200 of the 8,000 Easypaisa points of sale offered customers the option to sign up for M-Wallet.

The implications of OTC success

IMPACT ON MOBILE MONEY IN PAKISTAN

According to the Financial Inclusion Tracker Survey of Pakistan (FITS) from 2012, 87% of mobile money transactions in Pakistan were conducted over-the-counter rather than through an account.<sup>8</sup> Easypaisa’s OTC model has become the de facto standard for the Pakistan market; subsequent mobile money launches in Pakistan, such as UBL Omni, MobiCash (Waseela Microfinance Bank and Mobilink), and TimePey (Askari Bank and Zong) followed suit, launching both models but with a focus on OTC.

**Would mobile money have thrived in Pakistan without OTC? The view from the Easypaisa team is probably not.** Without OTC on offer from the start, cumbersome registration procedures across the distribution network would likely have resulted in poor transaction volumes in the first few months after launch. This would have discouraged agent investment and it would have been harder for Easypaisa to justify continued investment.

**Given the comprehensive KYC requirements and a telecommunications landscape without a dominant MNO, the OTC model was the most agile way to launch and expand mobile money in Pakistan.**

THE IMPACT ON EASYPaISA AND OTHER MOBILE MONEY SERVICE PROVIDERS

Given OTC’s success, Easypaisa questioned to what extent the M-Wallet merited continued investment. **However, the OTC model has a number of limitations that, if not addressed, will significantly hamper the potential of Easypaisa and mobile money in Pakistan:**

Limitations for the customer:

1. **Limited product offering.** With the OTC model, products are limited to one-time transactional financial services, such as a bill payment or money transfer. Savings and credit, which require recurring transactions, cannot be seamlessly facilitated through OTC.

UBL OMNI: ANOTHER SUCCESS STORY FROM PAKISTAN

UBL is Pakistan’s second largest private bank with more than 1,300 branches and 3 million retail clients, assets of US\$7.5 billion and a 10% market share of deposits (year end 2012). UBL had the vision of using mobile as a banking channel as early as 2005, when it first developed a mobile wallet (Orion). When the formal regulations for branchless banking were rolled out in 2008, UBL seized the opportunity to enhance its in-house technology platform and to launch a mobile money service, UBL Omni. The vision was to deepen the bank’s reach beyond its existing retail customers, generate new revenues for UBL, create new business models and provide financial services to low-income households.

UBL Omni launched in early 2010, with a focus on G2P payments, first disbursing payments for the World Food Programme (WFP) and then the Benazir Income Support Programme (BISP), a governmental programme for low-income women and their households. UBL Omni was also able to facilitate emergency cash transfers to more than 1.2 million families affected by the flood in 2010. In recognition of these projects, UBL Omni won the GSMA 2011 award for best use of mobile in a humanitarian crisis.

Although UBL Omni offered a complete product suite from launch, the absence of a sizeable distribution network was a barrier to adoption of the other products. The focus on G2P in the early days allowed UBL the time to build a national distribution network. Today, the footprint is 13,000 strong, and supports a robust product offering: account opening and ATM card issuance at retail locations, bill payments, airtime top-up, domestic money transfer, cash management services for corporations, salary disbursements for SMEs, cash collection services for charities and microfinance institutions and cash disbursement services for a host of UN agencies as well as Government of Pakistan.

An estimated 3.5 million Pakistanis use UBL Omni every month, and do so through either the OTC model or through accounts via SMS, mobile app, ATM cards, IVR, and online.

Limitations for mobile money providers:

2. **Low customer loyalty.** Picture a scenario where a small corner store offers four different OTC mobile money services. Why chose one provider over another? Assuming all services are equally reliable, it is actually not the customer who chooses. Cash is handed to the agent and it is the agent who decides which OTC provider to use.
3. **Extensive cash management and agent compliance.** Since there is always cash involved in an OTC transaction, there is a heavy burden on the distribution network to collect cash from high cash-in locations and to ensure cash is available at high cash-out locations. Also, agents are involved in all money transfer and bill payment transactions in the OTC model, which require significant control mechanisms to ensure that agents comply with regulatory guidelines and processes.
4. **Lower margins.** Every OTC transaction involves an agent, and therefore he needs to earn commission on every transaction. Mobile money providers in Pakistan pay out approximately 50% of transaction revenues to the channel in commissions. With a mobile account, customer-triggered transactions do not involve an agent, so the mobile money provider can retain the fees earned on those transactions.
5. **Fewer indirect benefits.** Telenor Pakistan’s original objective in launching mobile money was to generate both direct revenues and indirect benefits, i.e. increased market share and stickiness. However, OTC has limited indirect benefits for a GSM business.

<sup>7</sup> The percentage of Easypaisa transactions made through the M-Wallet would be higher if Easyload (airtime top-up) was included in the calculation (15% vs. 5%).

<sup>8</sup> The Pakistan FITS survey is part of the FITS Project, a multi-year survey effort in Pakistan, Tanzania, and Uganda that aims to generate critical data, analysis, and insights for mobile money stakeholders. The survey was funded by The Bill & Melinda Gates Foundation and research was conducted by Intermedia. Full results are available at <http://m-moneydata.org/>.

Additionally, a number of mobile money providers gain significant savings in airtime distribution through the mobile account; this cannot be achieved through OTC.

*Limitations for the market:*

- 6. **No ecosystem development.** Without a stored value account, cash is digitised only briefly. The opportunity therefore to offer mobile money merchant payments and integrate with other financial institutions is greatly reduced. A holistic and innovative mobile money ecosystem relying on digital payments cannot flourish using only OTC.

**THE WAY FORWARD IN PAKISTAN**

OTC defined mobile money in Pakistan. The accessibility of the product coupled with high market demand resulted in impressive traction for mobile money. The State Bank of Pakistan reports that nearly 35 million branchless banking transactions worth PKR 151 billion were processed in Q4 2012.<sup>9</sup>

**However, mobile money should continue to innovate and evolve beyond OTC. A mobile account offering will provide richer products for the consumer, generate greater direct and indirect benefits for mobile money providers, and create a foundation for a digital payments ecosystem.** More recent figures are encouraging, with 2.1 million mobile accounts as of December 2012, and 20% growth over the previous quarter, but SBP notes that “uptake and usage in [branchless banking] accounts is still low as compared to OTC transactions.”<sup>10</sup>

Mobile money service providers should consider the following to drive adoption of the mobile account:

- **Extend registration points for mobile accounts.** As long as the majority of mobile money agents are OTC agents without equipment to register customers for mobile accounts, OTC usage will be much higher. SBP data indicates that only 27% of agents across Pakistan can open accounts.<sup>11</sup> With few registration points, customers will continue to associate mobile money in Pakistan with OTC and not switch to a mobile account.
- **Product offering and awareness.** A robust product and service offering on the mobile account would increase the perceived value for customers. The FITS results showed that 59% of OTC users did not open a mobile account because they did not think it was necessary to open one. Easypaisa Khushaal, a savings product with insurance benefits available only through Easypaisa M-Wallet, is an innovative way to increase the customer value proposition. Other innovative services are needed to drive usage of mobile accounts. Furthermore, mobile money providers will need to invest in awareness campaigns to help potential users understand the benefits of the mobile account.
- **Industry collaboration to overcome the registration barrier.** There may be an opportunity for mobile money providers to work together to simplify the registration process. Eliminating some of the steps would lower the cost of registration requirements and could increase the number of registration points. Reducing the fee to NADRA would also make it possible for players to run more aggressive recruitment campaigns for the mobile account.

<sup>9</sup> State Bank of Pakistan Branchless Banking Newsletter. “Leveraging Technologies and Partnerships to Promote Financial Inclusion.” Issue 6, October – December 2012. Page 4.

<sup>10</sup> Ibid. Page 3.

<sup>11</sup> Ibid. Page 4.

**OVER-THE-COUNTER VS. MOBILE ACCOUNT: KEY TAKEAWAYS**

The results of Easypaisa’s innovative model were impressive with 5 million transactions processed after just 11 months of operations. Easypaisa’s success with OTC was due to its ability to serve all customers in the market, even non-Telenor subscribers, the simplicity of no registration requirements, and its imitation of consumer behaviour for electronic airtime top-up. Given the cost and obstacles associated with registering for a mobile account, and that Pakistan MNOs had relatively even market share, the OTC model was an effective way to drive the initial adoption of mobile money in Pakistan.

However, accepting OTC as the only way forward for mobile money in Pakistan would be regrettable. The full potential of mobile financial services for Pakistan cannot be realised with a product that does not offer stored value.

Evidence from Easypaisa’s first years in operation suggests that OTC customers do not naturally migrate to a mobile account. To increase adoption, a more concerted strategy is required – one that targets customer segments who are most likely to see the benefits of a mobile account, creates a robust product offering, and increases the number of registration points.



### PART 3

# Distribution: Balancing reach and quality

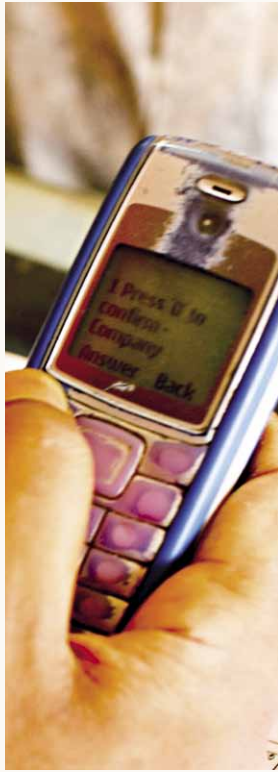
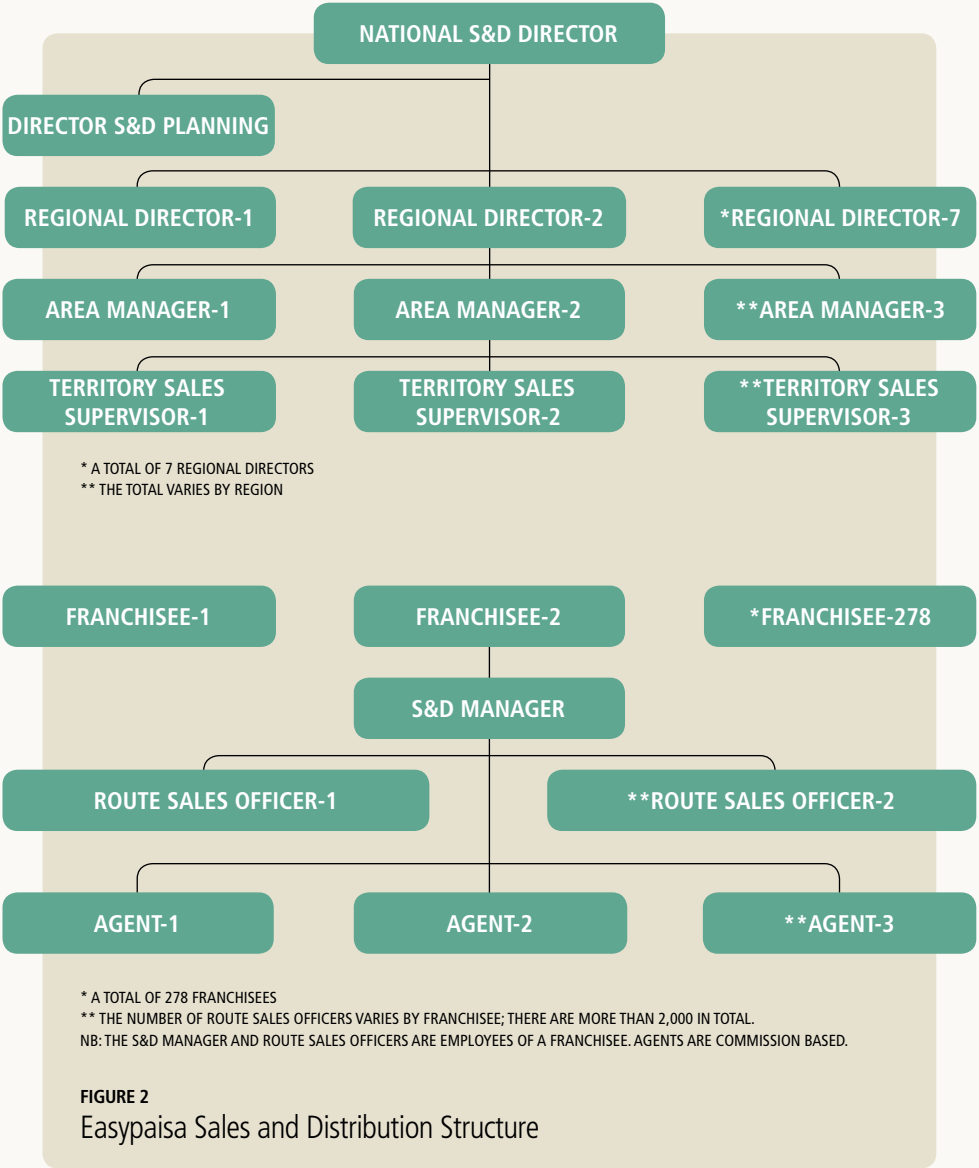
The Easypaisa story would not be complete without detailing its approach to distribution, which has achieved two major successes. First, Easypaisa rapidly built a national mobile money distribution footprint. Second, the Easypaisa team developed and continues to develop sophisticated agent management practices to ensure that the quality and performance of the distribution network is not compromised by growth.

### Easypaisa’s distribution structure

Telenor Pakistan franchisees, the linchpin of GSM distribution, were established early on as the main players in Easypaisa’s distribution strategy. These 278 businesses were long-standing partners of Telenor Pakistan, responsible for the sales and distribution of scratch cards and electronic top-up. They had geographical exclusivity and were responsible for recruiting and serving retailers, i.e. selling and distributing airtime and SIMs.

For Easypaisa, franchisees were tasked with recruiting, training, and shuttling cash to mobile money agents. In addition to franchisees and agents, Easypaisa is offered through Telenor Pakistan’s 30 owned and operated sales and services centres and Tameer Bank’s 40 bank branches.

To support the franchisees, Telenor Pakistan leveraged their GSM sales organisation both centrally and regionally. The centralised unit set KPIs, planned the rollout of products,



launched below-the-line campaigns to drive usage and set up training programs. The regional teams worked directly with the franchisees and agents to set targets, follow up on performance, develop trade marketing activities to ensure local visibility, conduct trainings, and offer general support to the franchisees in developing their business.

### Results: Rapid rollout of a national distribution network

**At the time of Easypaisa’s launch, there were 2,500 agents trained and ready to sell Easypaisa services to customers. By the end of the first year there were 8,000 agents and three years after launch there were 20,000.** With more than 200,000 points of sale for airtime, Telenor’s expertise in building far-reaching and high-quality distribution networks was a powerful asset that they applied to mobile money distribution.

Interestingly, however, other mobile money services have not consistently succeeded, relying exclusively on their existing channel partners. Safaricom’s M-PESA went outside their core GSM distribution structure to recruit non-GSM agents to drive mobile money. Of the 14 2012 GSMA Mobile Money Sprinters, 11 use a mix of GSM and non-GSM retailers for mobile money distribution.



**While other mobile money services have struggled to compel their existing channel partners to invest in mobile money, Easypaisa overcame this challenge through its strong relationships and history with the franchisees.** In the first three years of GSM operations, Telenor Pakistan moved from fifth position to second in market share. The franchisees could, however, foresee that the initial strong growth would slow and were interested in Easypaisa as a new revenue stream. The willingness of the franchisees to invest was also fuelled by Easypaisa’s comprehensive marketing campaigns over the first couple of years, which raised awareness in the market and demonstrated the company’s commitment to mobile money. An estimated 15% of Telenor Pakistan’s overall marketing budget was allocated to Easypaisa during this time.

**Easypaisa considers its decision not to establish a separate agent network for mobile money and to instead utilise its existing distribution network for GSM business as a key reason for its success.** The willingness of franchisees to invest with Telenor Pakistan to expand the distribution network was crucial for Easypaisa to build nationwide distribution quickly.

## Agent segmentation and training

The second lesson from Easypaisa’s distribution is how it balanced extending financial services to every part of the country with delivering quality service across the network.

A detailed segmentation of the Easypaisa channel in 2011 revealed that a small number of agents drove a large amount of transactions and revenue. **The top performing quartile (as measured by revenues) earned 73% of all Easypaisa commissions with an average of 27 transactions per day, while the lowest performing quartile took home just 2% of Easypaisa commissions with an average of two transactions per day.**

This is in line with the experience of a number of other fast-growing mobile money services. **Given the need to cover high-density urban areas and low-volume rural villages, there is high variability in performance across the distribution channel. The result is that a small number of agents drive most of the revenues.** Looking at the national level in Pakistan, there are 41,567 agents, of which only 5% do more than 3,000 transactions per quarter or an average of 33 per day.<sup>13</sup>

With variability in performance at agent points, there is a related challenge of ensuring high quality customer service. If transaction volumes are low, agents may provide poor service because they are out of practise. They may be unable to educate customers about the mobile money product, fail to conduct transactions according to standard operating procedures, and/or lack cash when customers need to cash-out.

Easypaisa splits its training activities into on-the-job and off-the-job training. **On-the-job training is conducted by Telenor Pakistan sales and distribution staff who visit the franchisees three to five times a week and the franchisee staff who visit retailers almost every day.** Off-the-job training is conducted periodically to train new retailers, refresh existing retailers on products and operating procedures, and to introduce new products and system changes. Telenor Pakistan hosts retailer conventions every quarter and periodically for new product launches to bring retailers together for training and relationship building. **To check the quality of the service, Tameer Bank also conducts regular quality reviews of a large number of agents and prepares quarterly reports on areas needing improvement, which help to inform training sessions.** In a 2011 CGAP study, 90% of Easypaisa customers found the service highly effective.<sup>14</sup> As it is the agents who conduct the service, this indicates that the quality of the agents’ service is meeting or exceeding customers’ expectations.

Training is an ongoing necessity that helps to drive high-performing mobile money distribution.<sup>15</sup> To address the inevitable challenges of delivering high-quality service from a rapidly growing retailer base, Easypaisa decided to expand its retailer training and quality assurance. In 2012, Easypaisa embarked on a major agent training and follow-up pro-

gramme with a third party to retrain the majority of its retailers. **The results were clear: agents who were retrained had increased transaction volumes of 8% on bill payments and 6% on OTC money transfers. Underperforming agents were cut.**

Other major initiatives to manage and improve on agent quality include robust agent selection criteria, CLM campaigns targeting underperforming agents, and additional visits to low throughput retailers to improve cash management and product availability.

### DISTRIBUTION: KEY TAKEAWAYS

Easypaisa is achieving two impressive feats in distribution. First, they rapidly built a national distribution network while relying exclusively on their existing GSM channel partners. While other services have struggled with this approach, Easypaisa franchisees recognised the opportunity to generate new revenues, and Easypaisa’s commitment to invest, which compelled them to invest in mobile money.

Second, Easypaisa continues to innovate in achieving a wide distribution reach while delivering even performance and quality of service. A 2011 channel segmentation study revealed that a small number of retailers drove much of Easypaisa’s business (73% of commissions earned by the top quartile), while a large number of agents had low transaction volumes and low return on float investment. Easypaisa increased their commitment to agent training to address these issues and to ensure that even as the distribution network continues to grow, the performance of the distribution network and the quality of service offered to the customer will remain high. The results of retraining agents delivered immediate return on investment with an 8% increase in bill pay and a 6% increase in OTC money transfer.

<sup>13</sup> State Bank of Pakistan Branchless Banking Newsletter. “Leveraging Technologies and Partnerships to Promote Financial Inclusion.” Issue 6, October – December 2012. Page 5.

<sup>14</sup> Chris Bold. 2011. CGAP Blog. “Does Branchless Banking Reaching Poor People? The Evidence from Pakistan.

<sup>15</sup> Easypaisa received a grant from The Bill and Melinda Gates Foundation in 2011, which in part was used for training the channel. The grant was US\$6.5 million, with one-third upfront unconditional funding and the remaining two-thirds contingent on milestones.



## Conclusion

Telenor Pakistan and Tameer Bank formed an effective partnership that resulted in a successful mobile money service. **They divided up responsibilities based on their organisations' strengths and created a streamlined governance structure to ensure continued alignment.**

In distribution, Easypaisa rapidly built a high-performing national footprint, relying exclusively on the GSM channel. While other fast-growing mobile money services have struggled with this approach, Easypaisa succeeded because of their **GSM channel partners willingness to invest in the mobile money business.**

Easypaisa developed an innovative new model for mobile money, the over-the-counter model, which gave customers access to financial services without burdensome registration processes. **Thanks to Easypaisa's early success, OTC became the dominant model for the Pakistan market.**

In markets where the telcos' market share is balanced and customer registration for mobile accounts is complex, **OTC can be successful at promoting the initial uptake of mobile money. But, given its limitations, mobile money in Pakistan would benefit from evolving beyond OTC.**

More can be done in Pakistan to extend the number of registration points, develop robust product offerings, and to invest in raising awareness and driving adoption of mobile accounts. **The mobile account is an essential first step in building a robust digital financial ecosystem that will both generate financial returns for mobile money service providers and contribute to financial inclusion.**





## Big ambition meets effective execution:

How EcoCash is altering Zimbabwe's financial landscape

Author: Phil Levin





## Introduction

**31%**  
THE PERCENTAGE OF  
ZIMBABWE'S ADULTS  
WHO REGISTERED  
WITH ECOCASH  
WITHIN 18 MONTHS  
OF LAUNCH.

Just 18 months after launch, the results are impressive: 2.3 million Zimbabweans have registered for EcoCash mobile money accounts, outnumbering all of Zimbabwe's traditional bank accounts combined. Over 1 million of these accounts are active<sup>3</sup> and push US\$200 million of volume over the EcoCash platform every month. When annualised, that volume represents an amount equivalent to 22% of Zimbabwe's GDP.<sup>4</sup> This case study highlights how big ambition matched with effective execution has allowed EcoCash to fundamentally alter the financial landscape in Zimbabwe in such a short period of time.

EcoCash is part of Econet Services, an independent company set up in 2012 by Zimbabwe's largest mobile network operator, Econet Wireless. EcoCash's fast start has been achieved

### ECOCASH AT A GLANCE (APRIL 2013)

**Operator:** Econet Wireless Zimbabwe

**Launch date:** October 2011

**Product:** Wallet-based mobile money service offering P2P remittance, merchant payment, bank interoperability, bill payment, bulk payment, payroll, and other services

**Users:** 2.3m with over 1m 90-day active

**Volume:** US\$200m per month

<sup>3</sup> On a 90-day basis

<sup>4</sup> CIA World Factbook, nominal GDP, 2012, <https://www.cia.gov/library/publications/the-world-factbook/geos/zi.html>

### 5 KEYS TO SUCCESS

The rapid growth of EcoCash is the result of five key strategies:

**Finding the pain point:** Identifying specific pain points in the market allowed EcoCash to meet customer needs in a targeted way.

**Taking a long-term view:** Long-term vision and commitment from shareholders allowed EcoCash to focus on the foundations of the business rather than short-term profits.

**Keeping mobile money separate:** Creating a new company with dedicated staff and governance gave EcoCash the focus and financial resources it needed to succeed.

**Starting with a simple product:** Despite broader long-term ambitions, EcoCash began by launching a product with a simple and clear proposition: "Send and receive money".

**Embracing the financial ecosystem:** EcoCash is working within the existing financial ecosystem and focusing on interoperability to create linkages between Zimbabwe's banked and unbanked populations.



through an effective operational strategy, but also through an unusually large investment in mobile money. Excluding customer support, EcoCash staff number 110 full-time employees and EcoCash represents the largest component of Econet's marketing budget. Econet's leadership justifies this investment as necessary to achieve equally big ambitions. The vision extends far beyond P2P money transfer: Econet wants to completely alter how financial services are delivered in Zimbabwe. Their goal is to become the dominant payment infrastructure in Zimbabwe by making EcoCash the primary way people pay for goods and services – from sweets to school fees.

### FINDING A STRATEGIC OPPORTUNITY

The first part of the case study examines the economic challenges in Zimbabwe that spurred Econet to create EcoCash. After a volatile decade of currency collapse, hyperinflation, and widespread mistrust of the formal financial system, EcoCash sees strategic opportunities in Zimbabwe's booming informal economy, where payment services are lacking and mobile phone penetration is high.

### ECONET'S BIG BET

Big ambition requires sizeable investment and senior-level vision and commitment. At Econet, this commitment comes directly from group-level leadership, led by founder and Executive Chairman Strive Masiyiwa. In the second part of the case study, we will discuss the Econet Wireless Group (EWG) strategy to push aggressively into financial services. The EWG recognises the need to diversify out of the core telecom business in Zimbabwe, where voice ARPUs are under competitive pressure, and to create new lines of business with significant revenue potential. Consistent with Econet's long-term commitment to revenue diversification, EcoCash has been housed within Econet Services, a separate company from Econet Wireless (the MNO) with its own C-level management, budget, governance, and dedicated staff.

### STARTING SIMPLE, BUILDING A STRONG FOUNDATION

The third part of the case study examines how EcoCash has built up its service. Its long-term goals are ambitious, but Econet has opted to start with a simple use case that fills a basic consumer need: sending and receiving money. They have also chosen to sacrifice short-





term profitability in order to build a robust distribution network and attract customers. For example, EcoCash is paying out 80% of revenues in the form of agent commissions to build a strong and committed agent network. Here we will see how a combination of aggressive promotions, ground-level subscriber engagement, and agent incentives has allowed EcoCash to race to 2.3 million subscribers in 18 months.

#### MOVING BEYOND P2P MONEY TRANSFERS

Finally, we examine how EcoCash plans to transition from a simple money transfer product to become Zimbabwe's dominant payment infrastructure. Here, EcoCash sees two major opportunities: retail payments and payment flows between the banked and the unbanked. To seize these opportunities, EcoCash is working within, rather than outside, Zimbabwe's financial infrastructure. With the help of bank-grade technology, EcoCash is integrating with Zimbabwe's financial institutions to facilitate formal payments between banked and unbanked customers. To crack retail payments, EcoCash is combining an aggressive merchant acquisition drive with focused customer messaging.



## PART 1

# Seeing a strategic opportunity

#### HYPERINFLATION AND THE CURRENCY CRISIS

Once a major player in the Southern African economy with a well-developed financial services sector, in 1998 Zimbabwe descended into a volatile decade of hyperinflation, currency collapse, high unemployment, and loss of confidence in the banking sector.

Driving this economic upheaval was the collapse of Zimbabwe's currency, which caused inflation to rise by an unfathomable 231,000,000%.<sup>5</sup> Prices in shops and restaurants rose exponentially, changing by the hour or even the minute, peaking during the evening commute.<sup>6</sup>

Money held in bank accounts became worthless as quickly as people queued to withdraw it. Banks responded by imposing withdrawal limits on accounts, prompting bank customers to open multiple accounts to access more cash.<sup>8</sup> Meanwhile, the government printed more and more bills, including a hundred trillion dollar note so worthless it would not even buy a loaf of bread.

#### HYPERINFLATION BY THE HOUR<sup>7</sup>

- At the peak of hyperinflation in July 2008, a Coke bought at 8 a.m. cost ZIM\$50 billion
- At noon, the same Coke cost ZIM\$100 billion.
- By 7 p.m. that day, the same Coke cost ZIM\$150 billion.

<sup>5</sup> The Economist, 27 April 2013, "In dollars they trust," <http://www.economist.com/news/finance-and-economics/21576665-grubby-green-backs-dear-credit-full-shops-and-empty-factories-dollars-they>.

<sup>6</sup> "Hyperinflation in Zimbabwe", [http://en.wikipedia.org/wiki/Hyperinflation\\_in\\_Zimbabwe](http://en.wikipedia.org/wiki/Hyperinflation_in_Zimbabwe) (accessed 8 June 2013).

<sup>7</sup> As cited in Ahmed Dermish, Ben Hundermark, Caitlin Sanford, 2012, "Mapping the Retail Payment Services Landscape", FinMark Trust, p.11, [http://www.cenfri.org/documents/Payment%20systems/BFA%20country%20studies/RPS\\_Zimbabwe.pdf](http://www.cenfri.org/documents/Payment%20systems/BFA%20country%20studies/RPS_Zimbabwe.pdf).

<sup>8</sup> Ibid., p.17.

THE ZIMBABWE OPPORTUNITY

Bring payment services to the informal economy

Zimbabwe’s economy is rebounding and the informal economy is thriving, but cash is still king. Most of Zimbabwe’s employed work in the informal sector and do not have access to payment services.

Replace cash in the retail environment to solve the “change problem”

Introducing electronic payments would allow consumers to pay exact prices instead of rounding up to the expensive \$1 minimum currently required with cash.

Bridge the formal and informal economies

EcoCash is not only a product for the unbanked – cashless transactions also need to appeal to wealthier, banked customers and provide a practical way for money to be transferred between people in both sectors.

In 2009, the local currency (Zimbabwean dollars) was abandoned and replaced with a multi-currency system dominated by the U.S. dollar. This shift has stabilised inflation, but it has created new challenges such as coin shortages.

THE MOVE TO THE INFORMAL ECONOMY

One of the results of hyperinflation was a dramatic rise in unemployment, which pushed people out of salaried jobs and into the informal economy. The majority of the employed (84%)<sup>9</sup> still work in this sector, which can bring in more money than a low-wage job in the formal sector. This is not a minor, underground economy – US\$2.8 billion passes through Zimbabwe’s informal sector each year, and in 2009 it accounted for more than half (52%) of the country’s productive output.<sup>10</sup>

THE BANKS LOSE CONFIDENCE

The impact of hyperinflation on consumer trust in Zimbabwe has been profound, especially faith in financial institutions. When the multi-currency system was introduced, it was difficult for banks to assign value to account balances of largely worthless Zimbabwean dollars, and many customers had their balances completely wiped out.<sup>11</sup> A certain segment of the public still blames the banks for this and are reluctant to open new accounts. This view is particularly prevalent among the “ex-banked” – roughly 12% of the population who have had a bank account in the past, but are now choosing to use informal financial services instead.<sup>12</sup>

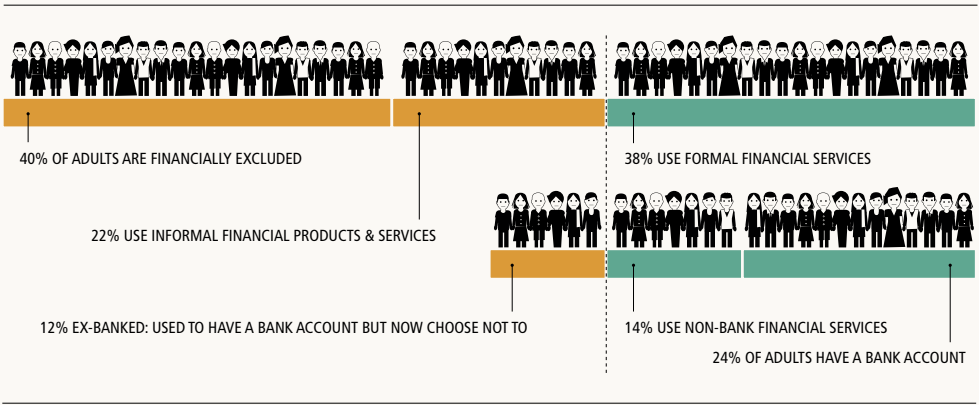


FIGURE 1  
Formal financial service penetration in Zimbabwe

<sup>9</sup> Zimstat, “2011 Labour Force Survey”, p. 113, <http://www.zimstat.co.zw/dmdocuments/Laborforce.pdf>.

<sup>10</sup> Albert Makoche Kanwa, 2013, “Measuring the second economy in Zimbabwe”, African Journals Online, p. 51, [www.ajol.info/index.php/boje/article/download/85407/75332](http://www.ajol.info/index.php/boje/article/download/85407/75332).

SEIZING THE OPPORTUNITIES

With 8 million subscribers and 70% GSM market share,<sup>13</sup> Econet has a reach many times greater than the formal financial sector and a high level of consumer trust. Econet management knew there was an opportunity to play a role in financial service delivery, but wanted to address Zimbabwe’s most acute pain points.

Where does EcoCash see the greatest opportunities?

SERVING THE PAYMENT NEEDS OF THE INFORMAL ECONOMY

With most employed people working in the informal economy and 65% of business transactions moving through this sector, bringing the informal economy into a electronic transaction system would capture massive amounts of payment flows. Current alternatives, such as transferring money through bus companies, can be inconvenient, slow, insecure, and expensive. Mobile money, on the other hand, fits the needs of the informal economy because it does not require customers to have a bank account – something many Zimbabweans are reluctant to embrace again. Part 3 will describe how EcoCash built a critical mass of subscribers and agents within this informal economy.

REPLACING CASH IN THE RETAIL ENVIRONMENT AND SOLVING THE “CHANGE PROBLEM”

The switch to the U.S. dollar has helped to stabilise inflation, but it has created what is known in Zimbabwe as the “change problem”: \$1 minimum transactions. The weight of U.S. coins makes them expensive and difficult to import, so with little U.S. change available, goods that used to cost 99 cents or less now cost a dollar. Sometimes merchants offer credit notes or even sweets as change. Shoppers are often forced to buy additional, non-essential items – essentially impulse buys – to bring their total purchase to one dollar. In a nation where the average person lives on less than two dollars a day, a dollar is still a lot of money. As one journalist put it, “Once worth too little, money in Zimbabwe is now worth too much.”<sup>14</sup>

EcoCash aims to solve the change problem by replacing cash in the retail environment. Using mobile money would allow customers to pay the exact price electronically, eliminating the expensive headache of the \$1 minimum.

The change problem may be unique to Zimbabwe, but the bigger challenge – penetrating the retail environment – will resonate with any operator trying to expand the utility of their mobile money service. Part 4 will reveal some of the tools and merchant incentives EcoCash is using to crack this notoriously difficult problem.

BRIDGING THE FORMAL AND INFORMAL ECONOMIES

The formal and informal sectors do not live in complete isolation from one another. Wealthier, banked Zimbabweans support their unbanked extended families and social networks, and unbanked Zimbabweans still need to make payments into the formal sector, such as utility bills and school fees.

Econet management recognised that EcoCash should not only be a product for the unbanked – it needed to appeal to people operating in both economies and provide a practical way for payments to be made between them. Part 4 will explore how EcoCash is interoperating with Zimbabwe’s existing banking system to create these linkages.

QUESTIONS FOR OPERATORS

What are the unmet financial service needs and true pain points in your market? How similar are these to Zimbabwe’s?

<sup>11</sup> Ahmed Dermish, Ben Hundermark, Caitlin Sanford, 2012, “Mapping the Retail Payment Services Landscape”, FinMark Trust, p.17, [http://www.cenfri.org/documents/Payment%20systems/BFA%20country%20studies/RPS\\_Zimbabwe.pdf](http://www.cenfri.org/documents/Payment%20systems/BFA%20country%20studies/RPS_Zimbabwe.pdf).

<sup>12</sup> Ibid., p.9

<sup>13</sup> Estimate from IHSecurities, “Econet Wireless 1H12 Earnings update,” [http://www.ihscurities.com/images/pdf/lrg/Econet\\_1H12\\_Earnings\\_Update\\_Valuation\\_Disconnect.pdf](http://www.ihscurities.com/images/pdf/lrg/Econet_1H12_Earnings_Update_Valuation_Disconnect.pdf)

<sup>14</sup> Lydia Polgreen, 24 April 2012, “Using U.S. Dollars, Zimbabwe Finds a Problem: No Change”, The New York Times, [http://www.nytimes.com/2012/04/25/world/africa/using-us-dollars-zimbabwe-finds-a-problem-no-change.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2012/04/25/world/africa/using-us-dollars-zimbabwe-finds-a-problem-no-change.html?pagewanted=all&_r=0).





## PART 2

# Econet's big bet

The vision of EcoCash comes straight from the top, led by Mr Strive Masiyiwa who is the founder and Group Executive Chairman. Mr Masiyiwa is a pioneering Zimbabwean entrepreneur who originally drove adoption of mobile telephony in his home country by forming Econet Wireless, the first privately-owned MNO in Zimbabwe. EWG's approach to EcoCash shares the same long-term commitment, major investment, and broad social view that applied to the founding of its parent company.

Econet has never been just about the money. From the beginning, the company has been motivated by meeting needs that improve people's lives. At that time of its founding, 70% of Africans had never heard a telephone ring.<sup>15</sup> Today, Econet's investment in services, equipment, infrastructure, and customer education has helped to push mobile penetration in Zimbabwe to almost half the population.<sup>16</sup>

Twenty years on, Econet sees another way to make a big difference through technology: inclusive payment services that fulfil the financial needs of the poor in Zimbabwe. Still a believer in strong and focused long-term investment, this time they are counting on mobile financial services – and EcoCash specifically – to meet those needs.

### DECLINING VOICE REVENUES SPUR DIVERSIFICATION

Econet's financial services push was driven not only by a desire to achieve a social impact, but also by an equally strong business need to grow new revenue streams.

This business need stems from the state of the core GSM market in Zimbabwe. ARPU growth in core GSM services has plateaued in Zimbabwe and in a number of markets across Africa as competition has saturated the market. Although the number of connections

<sup>15</sup> Mfonobong Nsehe, 24 February 2013, "Five Lessons From Zimbabwe's Richest Man, Strive Masiyiwa," Forbes Magazine, <http://www.forbes.com/sites/mfonobongnsehe/2013/02/24/five-lessons-from-zimbabwe-richest-man-strive-masiyiwa/>

<sup>16</sup> Estimates from GSMA Intelligence. While penetration on a SIM basis is close to 100%, it is closer to 50% on a unique subscriber basis.

in Zimbabwe continues to rise as new subscribers sign on (as of Q1 2013, just under 50% of Zimbabweans had cellular connections, with an average of two SIM cards per subscriber), revenue per subscriber is tapering off. Average revenue per unique mobile subscriber in Zimbabwe declined by 9.6% from US\$15.52 to \$14.95 between Q4 2011 and Q4 2012, much of this driven by declining voice ARPUs.<sup>17</sup>

To Econet, the best hope for long-term growth is diversifying into financial services, data, and other overlay services that drive ARPU growth.

EXCLUSIVE TO ECONET SERVICES	SHARED WITH ECONET WIRELESS
<ul style="list-style-type: none"><li>• Governance</li><li>• Operating budget</li><li>• Customer support (e.g. call center)</li><li>• Sales &amp; distribution</li><li>• Product development</li></ul>	<ul style="list-style-type: none"><li>• Network infrastructure</li><li>• Audit</li><li>• Some fraud controls</li><li>• Some marketing</li><li>• Retail service centres</li></ul>

### ECONET SERVICES: A NEW COMPANY TO FOCUS THE VISION

While most MNOs have recognised the value of services such as mobile money, Econet's level of strategic commitment in this area is unusual. Its commitment manifests itself not only in financial investment but also in how it has organised and structured the company. Rather than simply create a new department within Econet Wireless, the EWG has established a completely new entity – Econet Services<sup>18</sup> – to house and focus on overlay services, of which EcoCash is one.

As a part of Econet Services, EcoCash has its own governance, management team, budget, and resourcing. While strong linkages to Econet Wireless (the MNO) still exist, and some resources are shared between the organisations, Econet Services is able to forge ahead independently of Econet Wireless.

## Why start fresh?

Given the size of the opportunity that Econet sees in mobile money, creating a separate company helps to ensure the right level of focus on mobile money within the overall business. GSMA's Mobile Money for the Unbanked Programme (MMU) conducted interviews with 2012 GSMA Mobile Money Sprinters – leaders of some of the fastest growing mobile deployments in the world – and it emerged that successful services tended to create an "organisational separateness" for mobile money.<sup>19</sup> As a mobile money sprinter, Econet's organisational choices are not unique, but it has taken it a step further by establishing separate governance and by housing the majority of the functions of the mobile money team in a new and distinct organisation.

Second, incubating a business with long-term goals within a telecom business with ambitious short-term GSM targets can make it difficult to achieve the objectives of both businesses. It can be a challenge for any MNO to allot the requisite resources and attention to mobile money services when its core GSM business is much larger and initially more profitable. Patience is easier to manage within a separate organisation, and Econet Services anticipates a 3-year path to profitability for EcoCash.

### TOP-LEVEL TALENT WITH A MIX OF BACKGROUNDS

Another major investment was recruiting and hiring high-calibre executives that bring experience from a range of relevant industries and African markets. Econet Services CEO Darlington Mandivenga brought telecom experience from senior executive positions in



ECONET SERVICES IS A STRATEGIC RESPONSE TO A STRATEGIC CHALLENGE: DECLINING VOICE ARPUS.

DARLINGTON MANDIVENGA  
CEO, ECONET SERVICES

<sup>17</sup> Estimates from GSMA Wireless Intelligence

<sup>18</sup> Econet Services also operates in Econet Group markets outside of Zimbabwe.

<sup>19</sup> Claire Pénicaud, 2013, "State of the Industry: Results from the 2012 Global Mobile Money Adoption Survey," GSMA Mobile Money for the Unbanked Programme, p. 13, [http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU\\_State\\_of\\_industry.pdf](http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU_State_of_industry.pdf)





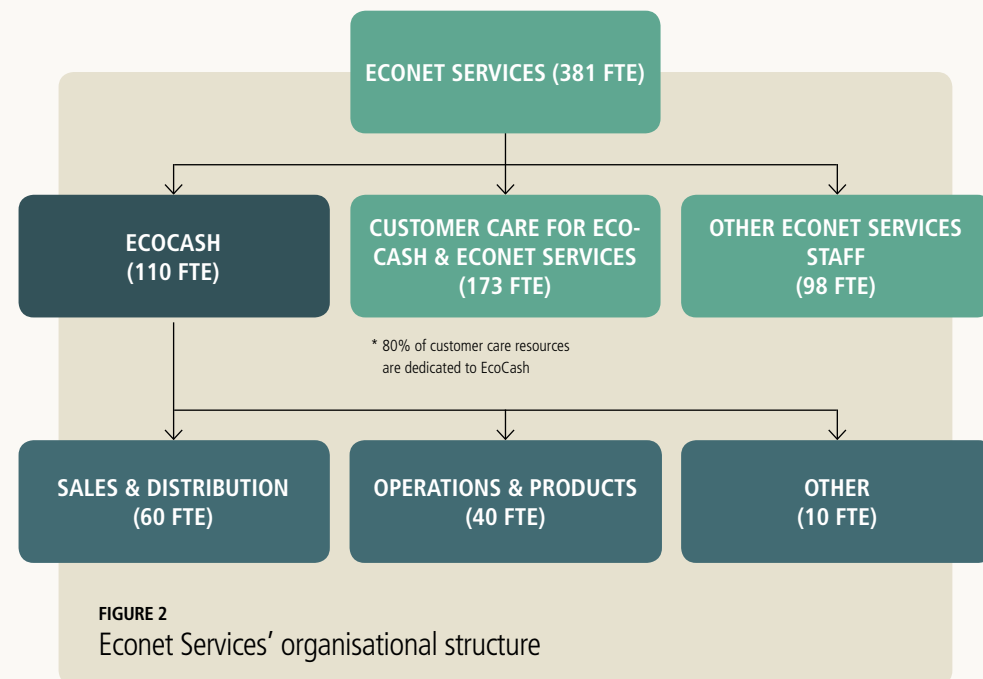
ECONET SERVICES CEO  
DARLINGTON MANDIVENGA

the Econet Group in various African countries, including Nigeria, Kenya, Zimbabwe, and Burundi. EcoCash senior staff include former executives in the payment industry, FMCG, and from financial regulators.

#### WHY SUCH A BIG INVESTMENT? THE BUSINESS CASE FOR ECOCASH

Econet seems to think about mobile money differently than many operators. Their approach to mobile money shares more in common with a typical approach to building a data network than launching a value-added service. It is a long-term, ambitious investment targeting a substantial future revenue stream. 3G networks are not expected to provide a return on investment in the first year of operation, nor is Econet expecting an immediate ROI from their mobile money business. Likewise, Econet does not see mobile money supporting its core GSM business. Rather, they want financial services to be a core future revenue stream that offsets anticipated pressure on the core voice business. Their aggressive organisational positioning and heavy resourcing all stem from this basic belief. Econet Services CEO Darlington Mandivenga is quite frank in saying that he does not think EcoCash would have achieved its initial success without such a high level of investment.

EcoCash has been built to be profitable only at significant scale and with a high level of customer activity over a range of products and services. Despite the large user numbers, senior management does not expect EcoCash to break even until three years after launch. As described in Part 3, the domestic P2P business was purposefully designed with thin margins. EcoCash plans to recoup its investment from what it sees as a larger and more profitable ecosystem built around banks and retailers. This strategy is discussed further in Part 4.



## PART 3

# Starting simple, building a foundation

Econet recognised early on that mass uptake of mobile money would be won or lost on field activities – distribution and marketing – rather than the development of new product features. This initial focus was on building a robust distribution channel and acquiring a critical mass of users.

It began by building a broad network of agent outlets, particularly in semi-urban and rural areas where users cash-out the transfers they receive. It also had to ensure that the agent network had sufficient cash and float liquidity to meet the demands of its rapidly growing customer base, and for this they provided bonuses and special incentives to motivate them to invest in EcoCash and educate new customers.

Econet also understood that simply making the service available was not enough; it would also have to take an aggressive approach to customer acquisition and undertake extensive field activities to register and educate customers about the value of EcoCash.

With over 1 million 90-day active users and 4,000 active agents in only 18 months, their efforts are clearly paying off. How did they reach this point so quickly? By employing three key strategies.

#### STRATEGY #1: START SIMPLE

EcoCash launched with a simple product: a basic USSD interface that allowed customers to deposit, withdraw, and send money from their mobile phone or agent outlet. The

**75%**  
THE PERCENTAGE  
OF ECOCASH  
USERS REGISTERED  
BY “BRAND  
AMBASSADORS”  
RATHER THAN  
AGENTS.

initial focus on P2P transfers was driven by two inputs: a survey of existing money transfer options for Zimbabwe’s large informal sector and qualitative customer research conducted prior to launching the product. The survey of existing options, including cash transfers through bus companies or the post office, revealed that EcoCash could provide a better offering in a range of areas, including price, security, and convenience.

The initial customer message was simple: “Send and receive money.” By launching a product with a simple value proposition and mass appeal, EcoCash has been able to focus their efforts entirely on go-to-market activities.

It is no secret that EcoCash wants to move beyond being a simple P2P service, and it is difficult to imagine the company taking it slow. However, the foundations of a functioning mobile money service take time to build and require buy-in at all levels: consumers, agents, and the regulator. EcoCash leadership knew that to achieve its long-term goals, the company had to take a collective breath and start simple.

#### LESSONS FOR MNOS: BUILDING A FOUNDATION

##### Start with a simple product

Customers need to be educated on a simple value proposition that fits their needs. Keep the product simple and the message clear and relevant.

##### Focus on BTL

ATL can drive awareness, but rapid customer acquisition requires extensive field presence and investment.

##### Kick-start the agent network

Focusing on short-term margins can stifle growth. Generous benefits for the initial core agents, such as bonuses and special incentives, can help to ensure a positive initial customer experience.

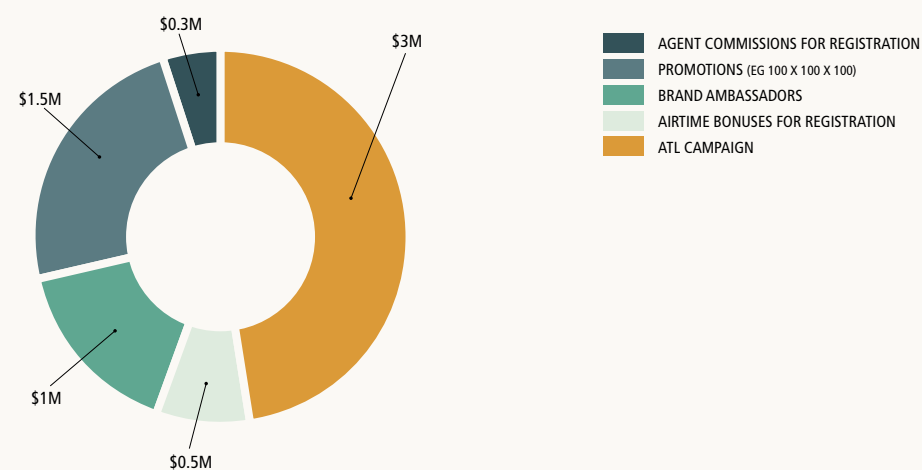


FIGURE 3

EcoCash customer acquisition expenditure by category  
Total = \$6.3 million

#### STRATEGY #2: BRING THE SERVICE DIRECTLY TO USERS

Since EcoCash launched in 2011, Econet has devoted a large proportion of its marketing budget to EcoCash – comparable to what they would spend to launch a data network. In the first two years, EcoCash will represent the largest share of Econet’s marketing budget.

#### BTL AND BRAND AMBASSADORS

Above the line (ATL) advertising, such as radio, TV, and print, was used to raise initial awareness of EcoCash, but given the novelty of the service, Econet believed below the line (BTL) activities would be more effective at educating consumers about the service and convincing them to try it. “Brand ambassadors”, EcoCash’s 300 field staff, were at the core of this strategy. Brand ambassadors were assigned to high traffic areas and economic centres of the informal economy, such as rural trade centres. The objectives were to educate people about EcoCash and to register new customers. Generally, a brand ambassador was expected to register 25–30 subscribers per day. Approximately 75% of EcoCash users were brought into the service by brand ambassadors rather than EcoCash agents.

How did EcoCash manage its brand ambassadors? EcoCash core sales staff each managed a group of brand ambassadors and allocated them to strategic areas where the EcoCash agent network was being built or fortified. Rather than working for commission, brand ambassadors were paid a flat salary, which was intended to motivate them to take their customer education role seriously. By not tying salary to registration numbers, Econet could encourage the brand ambassadors to focus on the quality of registered users rather than simply quantity. Brand ambassadors were extensively trained and closely monitored by Econet’s core sales team to ensure high-quality customer engagement. Close monitoring is only one approach to managing field staff: other operators have approached this same problem by tying brand ambassador commission to customer activation.

#### PROMOTIONS

Econet launched aggressive promotions to attract subscribers and encourage them to use the service. Airtime bonuses lured initial customers to the service – customers who registered for EcoCash received \$1 in free airtime. With over 2 million bonuses paid, this was a costly incentive, but Econet management believes it was effective in encouraging registration. Other operators have tried a different approach to airtime incentives: offering discounts when purchasing airtime with mobile money. While this approach can boost registration and initial adoption, it runs the risk of customers perceiving mobile money as an airtime purchase service rather than a financial service.

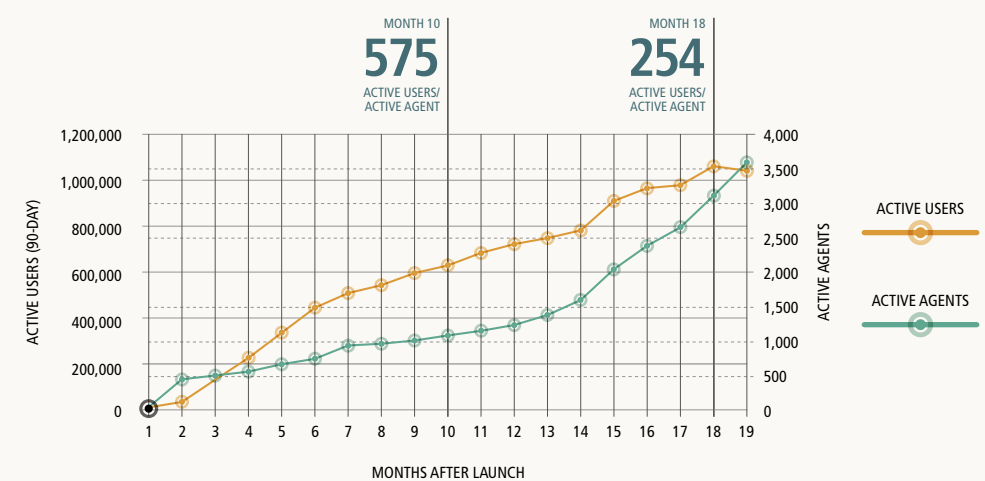


FIGURE 4

User and agent growth over time





“THERE IS NO BUSINESS LIKE THIS IN ZIMBABWE.”

PHITEN MOYO, IN FRONT OF ONE OF HIS 17 OUTLETS

The next step was to encourage customer activity. Econet launched a major promotion focusing on usage rather than just registration. Anyone who used the service was entered into the “100 x 100 x 100” promotion, which gave away \$100 to 100 people for 100 days. Then, on the 100th day, one user received a grand prize of \$100,000. This was Zimbabwe’s largest cash promotion ever, and proved to be effective at driving up transactions and maintaining activity over time. During the promotion, activity rates (on a 30-day basis) went up from 20% to 30%, peaking at 34% by the end of the promotion. Activity rates among these customers did not dissipate in the three months following the promotion.

**STRATEGY #3:  
KICK-START THE DISTRIBUTION NETWORK**

Econet had to quickly build an agent network to contend with the deluge of new EcoCash users brought in through the field activities and promotions described above. However, it had to carefully control the growth of the network in order to manage the ratio of active subscribers to active agents, and to ensure agent quality. Too few agents would have reduced service coverage across the country and created long queues where it was available. Too many agents would have had two negative effects: it may have forced EcoCash to compromise on quality and it would have spread the commission benefit too thinly across a large network and reduced the incentive to invest in the service and educate customers. This controlled distribution channel growth has allowed EcoCash to maintain a ratio of 250–600 active subscribers per agent and ensure these agents meet their standards for quality. These figures are comparable to other mobile money sprinters, which on average had 275 active subscribers per agent.

**80% OF REVENUE DISBURSED IN AGENT COMMISSIONS**

Econet has made a strategic decision to sacrifice short-term margins and pay out 80% of its revenue in agent commissions. This has provided agents with strong liquidity and motivated them to make higher capital investments and open new outlets, which has allowed the network to cope with rapidly growing customer numbers (see “Before and After EcoCash” box above). Some agents have even found it advantageous to extend their operating hours to capture additional transaction revenue, with a few even operating 24-hours.

**BEFORE AND AFTER ECOCASH:  
THE EFFECT OF 80%  
COMMISSION PAY-OUTS**

*Phiten Moyo is a co-owner of Celzone Investments and has been operating in the peri-urban areas outside Harare for over a decade. Prior to EcoCash, his primary business was selling Econet airtime recharge cards. After EcoCash, his business focus and fortunes changed completely*

**BEFORE ECOCASH**

- Sold Econet Wireless airtime
- 9 outlets and 10 employees
- \$12,000 in capital
- \$4,000-5,000 in revenue

**AFTER ECOCASH**

- Focuses on EcoCash
- 17 outlets and 30 employees
- \$100,000 in capital (reinvests his commission each month)
- \$25,000 in revenue with a 30% profit margin

**EXTRA PERKS FOR TOP PERFORMERS**

One of the most innovative EcoCash incentives has been to award top-performing agents with solar kiosks. Operated by agent staff, these kiosks have allowed agents to quickly expand their footprint into high traffic areas. In addition to attracting foot traffic, these solar kiosks provide solar charging for mobile phones to avoid any lost mobile money or GSM usage due to dead batteries.

**IS ECONET OVER-INVESTING IN THE FOUNDATIONS?**

Observers may see Econet’s push to build the foundations of EcoCash as an over-investment. Can operators without Econet’s deep pockets draw lessons from its approach?

Econet views the distribution channel and customer acquisition in much the same way as they view building a data network: a foundational investment that will pay off in the long term. If Econet’s only goal was to operate a domestic P2P transfer service, this investment would not make sense – the 80% channel commissions alone would destroy the business case. However, Econet has much greater ambitions for EcoCash and achieving these ambitions will naturally bring improved margins.

The next section describes Econet’s strategy for increasing transaction volumes within the EcoCash system, including retail payments. By getting customers to perform multiple transactions in between cash-in and cash-out, EcoCash margins will increase even if its cash-in/ cash-out commission rates stay the same.



**SOLAR KIOSK ECOCASH AGENT**

Over 170 kiosks are now live with 1,000 more being deployed



“GET YOUR PHONE CHARGED HERE FOR FREE”



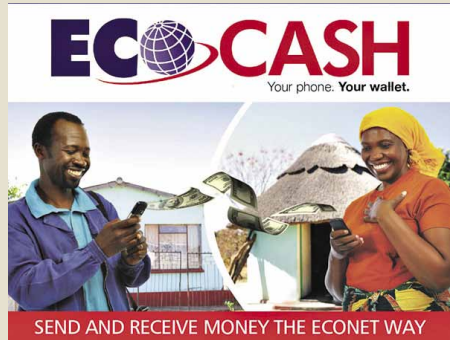


QUESTIONS FOR OPERATORS

1. Should operators be concerned with profit margins in the first few years after launching a mobile money service or see customer acquisition and building a robust agent network as a one-off investment? What is the appropriate time frame over which MNOs should evaluate mobile money profitability?
2. What is the appropriate mix of ATL, BTL, registration incentives, and promotions to encourage mobile money adoption and usage?



SHIFTING CUSTOMER PERCEPTIONS: BROADENING CUSTOMER PERCEPTION OF ECOCASH



Year 1 messaging:  
"Send and receive money"



Year 2 messaging:  
"Live life the EcoCash way"

PART 4  
Moving beyond P2P  
money transfers

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

SHIFTING CUSTOMER PERCEPTIONS

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

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

Interoperating with the banks

LINKING THE FORMAL AND INFORMAL SECTORS

EcoCash sees interoperability with banks as the key to linking Zimbabwe's formal and in-

//  
THE FUTURE OF MOBILE  
MONEY IS NOT IN  
MONEY TRANSFER.  
IT IS IN PAYMENTS.

DARLINGTON MANDIVENGA,  
CEO OF ECONET SERVICES



USE OF A BANK-GRADE SWITCH ALLOWS ECOCASH TO INTEGRATE WITH BANKS IN JUST **1-3 WEEKS**

MOVING QUICKLY IN A REGULATED ENVIRONMENT

As EcoCash expands its remit, it will rely on another foundational element it has developed in its first year of operation: an open and constructive working relationship with the Reserve Bank of Zimbabwe (RBZ), which oversees the National Payments System. RBZ has made financial inclusion a priority and supports EcoCash as a powerful force in that effort. RBZ Governor Gideon Gono notes that “empirical evidence suggests that improved access to finance is not only pro-growth, but also pro-poor, thus making it a means to achieving income quality and poverty reduction.”<sup>20</sup> In the absence of an existing mobile money regulation, RBZ has employed a “test and learn” approach. Open and frequent engagement between the parties allows EcoCash to operate safely under the oversight of RBZ, while RBZ gains a greater understanding of how to regulate the new business.

INTEROPERABILITY IS CENTRAL TO THE VISION FOR ECOCASH.

CUTHBERT TEMBEDZA, CEO OF ECOCASH

formal economies. There is substantial demand for payment services between these sectors, with money flowing between banked and unbanked families, and between unbanked individuals and the formal sector in the form of retail payments, school fees, and utility bills.

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

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

SPEEDY INTEGRATION WITH THE BANKS THROUGH A SWITCH

MNOs have found bank integrations to their mobile money platforms to be costly and time consuming. Some report that a typical integration might require six months (or more) of technical development as both the mobile money platform vendor and bank decide how to create a secure and reliable interface between the two systems. EcoCash has managed to avoid these timely and costly procedures, however. In just six months, it has integrated with 10 banks in Zimbabwe, five of which are already live.

How did EcoCash accomplish this? Instead of connecting directly to each bank through their core mobile money platform (Comviva’s Mobiquity), Econet opted to purchase a bank-grade switch, Postilion from ACI Worldwide, based on ISO 8583 standards. The Postilion switch acts as an intermediary layer between the mobile money platform and the banking platforms, allowing instructions to be transmitted through commonly accepted banking sector standards rather than through a bespoke integration. Integrating new banks has become routine, and the technical process now only requires one to three weeks of work. The majority of time is now spent securing bank approvals rather than engineering complex technical connections.

THE EARLY RESULTS

EcoCash registers approximately 200 customers per bank each month. Small totals, but these have been very active, high-value customers who are transferring on average \$145 per month between their bank account and EcoCash wallet. The banks are also happy because queues are shorter and their banking halls are less congested.

20 Herald Online, 24 June 2011, “Banks still shun rural areas: RBZ”, [http://www.herald.co.zw/index.php?option=com\\_content&view=article&id=13423:banks-still-shun-rural-areas-rbz&catid=41:business&itemid=133#\\_UbxGfefVB8E](http://www.herald.co.zw/index.php?option=com_content&view=article&id=13423:banks-still-shun-rural-areas-rbz&catid=41:business&itemid=133#_UbxGfefVB8E)

Can EcoCash crack retail payments?

Despite the quick growth of the mobile money industry in Africa, building a scaled retail payment business has proven elusive to most operators. As of June 2012, retail payments accounted for less than 1% of total mobile money transactions globally.<sup>21</sup> MNOs are learning that simply adding a “pay merchant” menu item to a mobile interface is not enough.

Accepting retail payments is a two-sided market: customers will only load their wallets to purchase everyday items if they feel there is widespread merchant acceptance, and merchants will only offer digital payments if they feel there is sufficient customer demand.

Retail payments took decades to gain full acceptance in western markets, with companies like Visa and MasterCard focusing exclusively on certain pieces of the problem. Econet has made a major investment in cracking the retail payment business; in fact, the scale of its investment may be unprecedented for an MNO.

How is EcoCash responding to the challenges of retail payments?

CHALLENGE #1: FORM FACTOR

**Problem:** USSD-based payments are much slower than cash at the checkout and do not print receipts. Retailers, especially larger ones, fear that digital payments will create queues and confusion at the tills.

**EcoCash’s planned approach:** EcoCash has purchased and distributed 10,000 **point-of-sale (POS) terminals** to large merchants. This is a huge increase over the 4,800 terminals currently in Zimbabwe. The POS terminals are USSD- and SMS-enabled to work in areas without data coverage. Transactions are initiated on the customer’s phone, which then communicates with the merchant’s POS terminal via the EcoCash network to print a receipt. For agents that double as retailers, merchant accounts are separated from agent accounts to simplify record keeping. EcoCash calls this transaction flow a “virtual debit card”. The POS terminals are NFC-enabled to prepare the retail payment solution for the expected proliferation of smartphones in the coming years.

It is not economical to provide smaller merchants with \$400 POS terminals, so EcoCash has designed a lower overhead solution for them. These smaller merchants interact with customers through a phone-based **USSD interface** rather than a POS terminal. These merchants are

**\$145**  
AVERAGE MONTHLY VALUE USERS WITH LINKED BANK ACCOUNTS TRANSFER BETWEEN THEIR BANK ACCOUNT AND ECOCASH WALLET

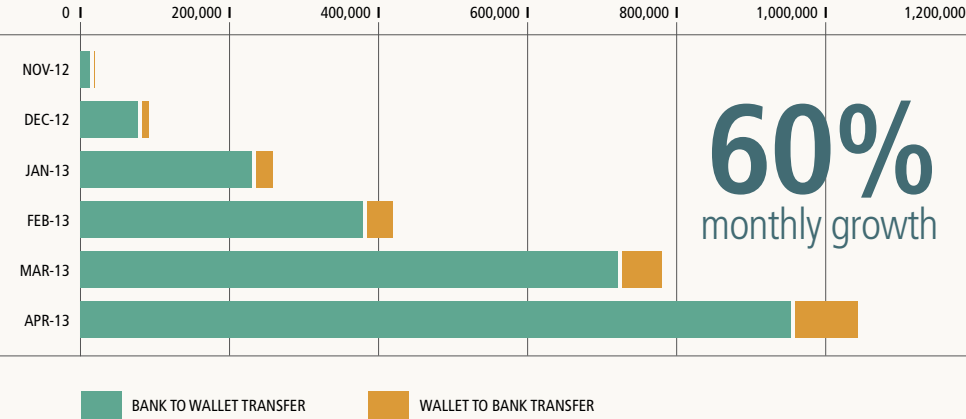


FIGURE 5 Bank interoperability volumes (USD)

21 Claire Pénicaud, 2013, “State of the Industry: Results from the 2012 Global Mobile Money Adoption Survey,” GSMA Mobile Money for the Unbanked Programme, [http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU\\_State\\_of\\_industry.pdf](http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU_State_of_industry.pdf)



provided five-digit merchant pay numbers and signage, to make it clear that customers can pay using EcoCash and prevent mistakes in keying in 10-digit telephone numbers.

**CHALLENGE #2: MERCHANT ACCEPTANCE**

**Problem:** In other markets, merchants have been reluctant to accept digital payments. Why should they pay a fee to accept a payment – something that used to be free? Merchants also sometimes fear that terminals may not be well supported by the supplier.

**EcoCash’s planned approach:** EcoCash recognised that selling the proposition to retailers would be a challenge, so it has created a dedicated company, PayBay, to focus exclusively on this problem. **PayBay** staff spend all of their time convincing retailers of the benefits of receiving digital payments, including reduction in cash handling costs, association with the EcoCash brand, and increased customer traffic.

A second company, **TPS (Transaction Payment Solutions)**, has been established to provide a high level of technical support to POS merchants. TPS trains merchants, sets up new terminals, and provides support and maintenance for existing terminals. This support structure is intended to ease merchant fears about the reliability and hassle of POS terminals.

POS terminals can be a significant capital investment, especially for smaller retailers, so EcoCash has set up an **affordable fee and leasing structure**. Retailers pay either a flat monthly minimum fee or a small percentage of purchases made through EcoCash, whichever is greater. Retailers doing a moderate level of purchase volume will only pay the small percentage fee and the POS terminal will come at no cost.

Zimbabwe has experienced a proliferation of single-issuer POS terminals and retailers have accumulated a collection of different bank terminals behind the counter. EcoCash plans to make its **POS terminals compatible with Visa, Mastercard, and several banks** to help retailers move closer to a simple one-terminal system.



**CHALLENGE #3: CUSTOMER NEED**

**Problem:** To customers, electronic retail payments require a significant behaviour change. Why would a customer want to load cash in an eWallet to pay for everyday items?

**EcoCash’s planned approach:** EcoCash is responding to this issue with a marketing campaign, “Live Life the EcoCash Way”, which highlights the change problem and **promotes the benefit of paying exact prices**.

For banked customers, EcoCash is making it possible to **instantly load a wallet from a bank account**. A user with an attached bank account can load their wallet at the retail point for the exact amount and pay instantly. This solves the challenge of expecting users to pre-load their account.

Finally, EcoCash is **promoting retail payments to people who receive money transfers** by explaining that they can pay for goods electronically with received funds instead of incurring cash-out fees. There has also been a push to sign up cash-out agents and EcoCash merchants.

Will Econet be able to provide workable solutions to the retail payment problem and stand as a positive example for the mobile money industry? With Econet’s level of investment and the change problem providing a unique customer motivation, the conditions in Zimbabwe are about as favourable as they would be anywhere in the world. Any MNOs thinking of launching their own retail payment initiatives should keep a close eye on this story.



**QUESTIONS FOR OPERATORS**

1. Should mobile money services exist outside of the banking system or actively try to integrate with it?
2. Are mobile money operators in a good position to introduce digital retail payments into their markets? What level of investment is required to succeed?



## PART 5

# Conclusion

The EcoCash story shows just how quickly a mobile money operator can scale its service when there is a confluence of market need, effective operational execution to build strong foundations, and far-sighted commitment (and resourcing) from top leadership. In a short time, EcoCash has become a significant part of Zimbabwe's economy. When annualised, the \$200 million in monthly EcoCash transaction volume represents an amount equivalent to 22% of Zimbabwe's GDP.<sup>22</sup> By continuing to push integration with the banking sector and by greatly expanding acceptance of digital retail payments, EcoCash seeks to become an even greater part of the national payment infrastructure.

We hope this case study will provoke a healthy debate about the size of the opportunity for mobile money operators and how far they should go to seize it. Will Econet's big ambitions end in disappointment and overzealous investment? Or will Econet end up playing a central role in rebuilding Zimbabwe's flagging financial infrastructure and bringing the blossoming informal sector back into the fold? Either way, this will be a story to watch with significant lessons for the rest of the industry.

<sup>22</sup> Zimbabwe GDP estimate from CIA World Factbook <https://www.cia.gov/library/publications/the-world-factbook/geos/zi.html>



# ZAAD



Innovative inclusion:

How Telesom ZAAD brought mobile money to Somaliland

Authors: Claire Pénicaud and Fionán McGrath





# Introduction

In June 2009, Somaliland's leading mobile network operator (MNO) Telesom launched Telesom ZAAD, the country's first mobile money service. Since then, the service has gained significant traction: in June 2012, almost 40% of Telesom GSM subscribers were active users of Telesom ZAAD. What is most striking about the service is the level of activity on the mobile money platform. Active Telesom ZAAD users perform over 30 transactions per month on average, far above the global average of 8.5 per month.<sup>1</sup> Telesom ZAAD is one of the 14 GSMA Mobile Money Sprinters<sup>2</sup> and is recognised as one of the most successful mobile money services in the world.

The World Bank's Global Financial Inclusion Database (FinIndex) recently revealed that Somalia was one of the most active mobile money markets: 26% of the population reported using mobiles to pay bills, which is the highest rate in the world, and 32% to send and receive money. Most of this mobile money activity has been driven by Telesom ZAAD.

This case study details the success of Telesom ZAAD and the factors underlying this success. The objective for Telesom's mobile money service, in the words of its CEO, has always been to bring financial inclusion to Somaliland. It was this vision that drove the company to offer their service to customers for free, and it has produced a number of other unique outcomes as well, which are discussed in the first section of the case study.

To transform its vision of financial inclusion into a reality, Telesom's strategy has been to develop the mobile money ecosystem around Telesom ZAAD. This ecosystem is focused on solving two issues faced by mobile money services around the world: getting money into the system and then keeping it there. Most mobile money services are still functioning as a money transfer service, with customers withdrawing all their funds from the system as soon as they receive them. However, Telesom ZAAD has succeeded in convincing users to keep money in their e-wallets by building an ecosystem of salary payers and merchants. Exactly how the ecosystem works and how the business is structured is discussed in section two of the case study.

The results of this original and ambitious mobile money strategy are presented in section three. These results frame a discussion of how successful Telesom ZAAD has been at functioning as a cash replacement. The case study concludes with a brief discussion of the challenges facing Telesom ZAAD as they evolve their service over the coming years.



## PART 1

# Developing a mobile money strategy for Somaliland

Telesom is the leading MNO in Somaliland with close to 1 million mobile connections (about 85% market share). Founded in 2002, Telesom is a privately held company owned by 1,500 shareholders – all Somalilanders who live locally or abroad. The Telesom CEO, Abdikarim Mohamed Eid, was also one of the seven founders of Telesom and he has been driving Telesom's work for the past 12 years.

There is no formal banking infrastructure in Somaliland and no internationally recognised banks operate there. Mr Abdikarim Mohamed Eid and his management recognised the negative impact that the lack of formal financial services were having on Somaliland's economy and that there was an opportunity for Telesom to address this issue through Telesom ZAAD. Their broader vision was to bring financial services to Somalilanders, while on a strategic level the service was initially designed as a customer retention tool.

### LEARNING FROM M-PESA AND ADAPTING THE MODEL TO SOMALILAND

Prior to launching Telesom ZAAD, a team of senior Telesom officers travelled to Kenya and Tanzania to study Safaricom's and Vodacom's M-PESA services. They learned a lot about the model, but identified some aspects of the services that would not translate to Somaliland. Telesom decided to adapt the M-PESA model to its country context in three distinct ways.

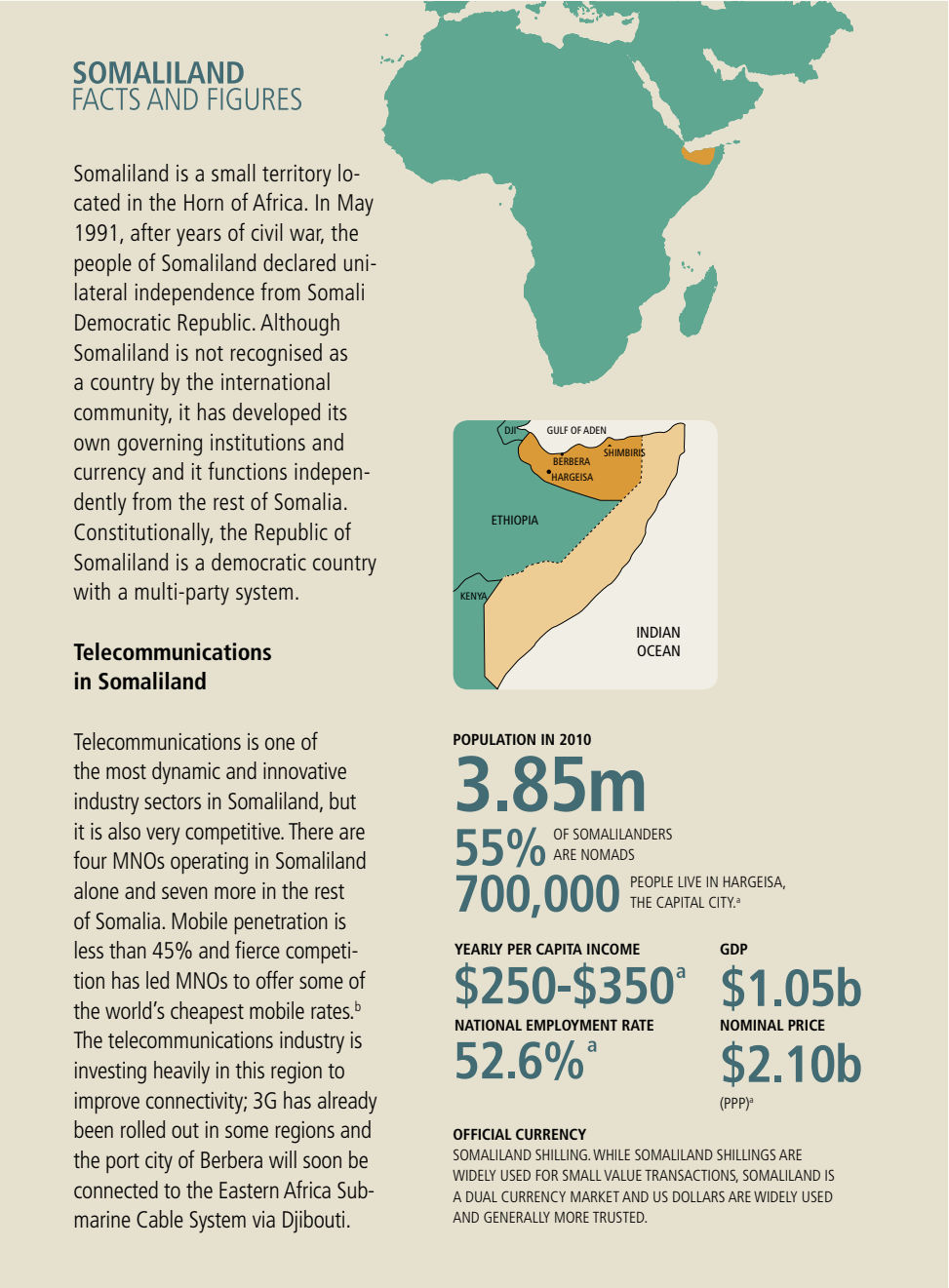
- **Making the service free.** In an interview with MMU, Mr Abdikarim Mohamed Eid told us, "We decided to offer the service for free. The M-PESA business model was not applicable in the context of Somaliland where people are very poor and not fa-

<sup>1</sup> See Claire Pénicaud, 2013, "State of the Industry: Results from the 2012 Global Mobile Money Adoption Survey," GSMA Mobile Money for the Unbanked Programme. Available online: [http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU\\_State\\_of\\_industry.pdf](http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU_State_of_industry.pdf)

<sup>2</sup> Ibid.

miliar with mobile money.” Telesom ZAAD aimed to achieve an active rate of 40% of their GSM customer base before revisiting that policy.

- **Using in-house agents.** Telesom decided to utilise its own distribution network and not to recruit external agents. This meant relying on the stores it already owned and operated with salaried employees. This decision was driven in part by the fact that there was no formal banking infrastructure or suitable chain of retail stores / businesses in Somaliland equipped to deliver the service or to provide an adequate distribution solution for Telesom ZAAD. Since mobile money was a completely new concept in Somaliland, Telesom management also realised that it would be challenging to convince external agents to offer the service. For both these reasons, Telesom decided to use its own outlet network as mobile money agents.



<sup>a</sup> Ministry of National Planning and Development, Somaliland, 2012, “Somaliland In Figures.” <http://slministryofplanning.org/images/somaliland-in-figures/somaliland-8edition.pdf> (accessed 5 April 2013).

<sup>b</sup> World Bank Data

	SAFARICOM’S M-PESA	TELESOM’S ZAAD
CUSTOMER OUTREACH STRATEGY	AGENTS ARE THE KEY POINTS OF CONTACT BETWEEN SAFARICOM AND ITS CUSTOMERS. <ul style="list-style-type: none"><li>• HAS CLOSELY MONITORED THE RATIO OF CUSTOMERS TO AGENTS SINCE LAUNCH</li><li>• ABOUT 260 REGISTERED CUSTOMERS PER REGISTERED AGENT (MARCH 2013)<sup>5</sup></li></ul>	MERCHANTS ARE THE KEY POINTS OF CONTACT BETWEEN TELESOM AND ITS CUSTOMERS. <ul style="list-style-type: none"><li>• STABLE RATIO OF CUSTOMERS TO MERCHANTS SINCE LAUNCH</li><li>• ABOUT 43 REGISTERED CUSTOMER PER REGISTERED MERCHANT</li></ul>
DISTRIBUTION STRATEGY	USE BOTH INTERNAL AND EXTERNAL AGENTS FOR CASH-IN/ CASH-OUT; MOST M-PESA AGENTS ARE EXTERNAL AGENTS	ONLY USE TELESOM’S STORES FOR CASH-IN/CASH-OUT
PRODUCT STRATEGY	FOCUS ON DOMESTIC P2P TRANSFERS	FOCUS ON MERCHANT PAYMENTS AND SALARY PAYMENTS
BUSINESS MODEL	PAYING SERVICE; M-PESA REPRESENTS 18% OF SAFARICOM’S REVENUES	FREE-OF-CHARGE SERVICE; FOCUS ON INDIRECT REVENUES

TABLE 1  
A comparison of Safaricom’s M-PESA and Telesom’s ZAAD

- **Including merchants from the start.** While Telesom has offered money transfer as a core product from the start, management saw an opportunity for goods and services payments to spur growth and to help the company keep up with its growing numbers of customers. As a result, merchant acquisition took the place of agent acquisition in the Kenyan model.

INVESTMENT AND RETURNS

From the very start, Mr Abdikarim Mohamed Eid’s commitment to the service was matched by strong investment: “We decided early on to invest heavily in the service. We knew customer education would be difficult as the level of financial literacy in Somaliland was far behind that in either Kenya or Tanzania.”

An open book approach to budgeting was taken in the first year to get the service off the ground. One quarter of the initial investment of US\$1 million<sup>4</sup> was put into developing the in-house platform using Telesom’s own coding and development expertise. Since Telesom ZAAD has always been treated as a separate business from Telesom’s core GSM business, it has had its own dedicated business unit from the start. Another half of the initial investment was used to build and equip the Telesom ZAAD head office where the team now works.

The investment strategy takes on a new light when the business model was discussed: Telesom ZAAD has been a free-to-use service from the start. Although this is both a financial and strategic decision, it is driven by a commitment to financial inclusion and the recognition that customer education would pose a major challenge to the success of the service.

From a financial perspective, although Telesom decided to offer its mobile money service for free, the company was able to quickly recoup its initial investments from indirect revenues:

- Savings on airtime distribution have been significant, with almost 70% of Telesom airtime sold over Telesom ZAAD in April 2013 rather than through scratch cards. These savings amounted to US\$2 million in 2012, \$1.8 million in 2011, and \$865,000 in 2010.
- Telesom also measure increased airtime sales due to Telesom ZAAD. This represents the difference between projected sales growth and actual growth. In 2010, soon after the launch of the service, Telesom registered a 33% increase in airtime sales, 22% in 2011, and 17% in 2012.

OVER  
**70%**  
OF TELESOM  
AIRTIME IS SOLD  
OVER MOBILE  
MONEY

<sup>4</sup> This figure of US\$1 million is in line with most other mobile money sprinters. See Claire Pénicaud, 2013, “State of the Industry: Results from the 2012 Global Mobile Money Adoption Survey,” GSMA Mobile Money for the Unbanked Programme, available at: [http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU\\_State\\_of\\_industry.pdf](http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU_State_of_industry.pdf)

<sup>5</sup> Safaricom fiscal year 2013 results, available at: [http://www.safaricom.co.ke/images/Downloads/Resources\\_Downloads/FY\\_2013\\_Results\\_Presentation.pdf](http://www.safaricom.co.ke/images/Downloads/Resources_Downloads/FY_2013_Results_Presentation.pdf)



- Finally, Telesom managed to reduce customer churn from 5% before the launch of Telesom ZAAD to 2% in 2013.

Given the fierce competition over price for voice and SMS, indirect revenues have become essential and Telesom ZAAD is giving Telesom an important competitive distinction.

**SHOULD MORE MOBILE MONEY PROVIDERS BE OFFERING THEIR SERVICES FOR FREE?**

Although it might seem attractive given Telesom ZAAD’s success, offering mobile money for free is not enough to drive customer adoption by itself, and mobile money providers need to carefully weigh the pros and cons before adopting this business model.

Fierce competition and price wars over voice and SMS strongly influenced Telesom’s decision to build Telesom ZAAD as a retention tool and to offer it for free. While this certainly contributed to the quick uptake of the service, other factors contributed to Telesom’s success as well: Telesom is one of the most recognisable and trusted brands in Somaliland and one of the biggest employers.

Telesom is not the only provider to offer mobile money for free. Services in other regions of Somalia have also adopted this strategy. Other African providers also currently offer or have offered free P2P transfers: Stanbic in Nigeria, yu in Kenya, and Airtel in Tanzania, among others.

**CUSTOMER DUE DILIGENCE PROCEDURES IN SOMALILAND**

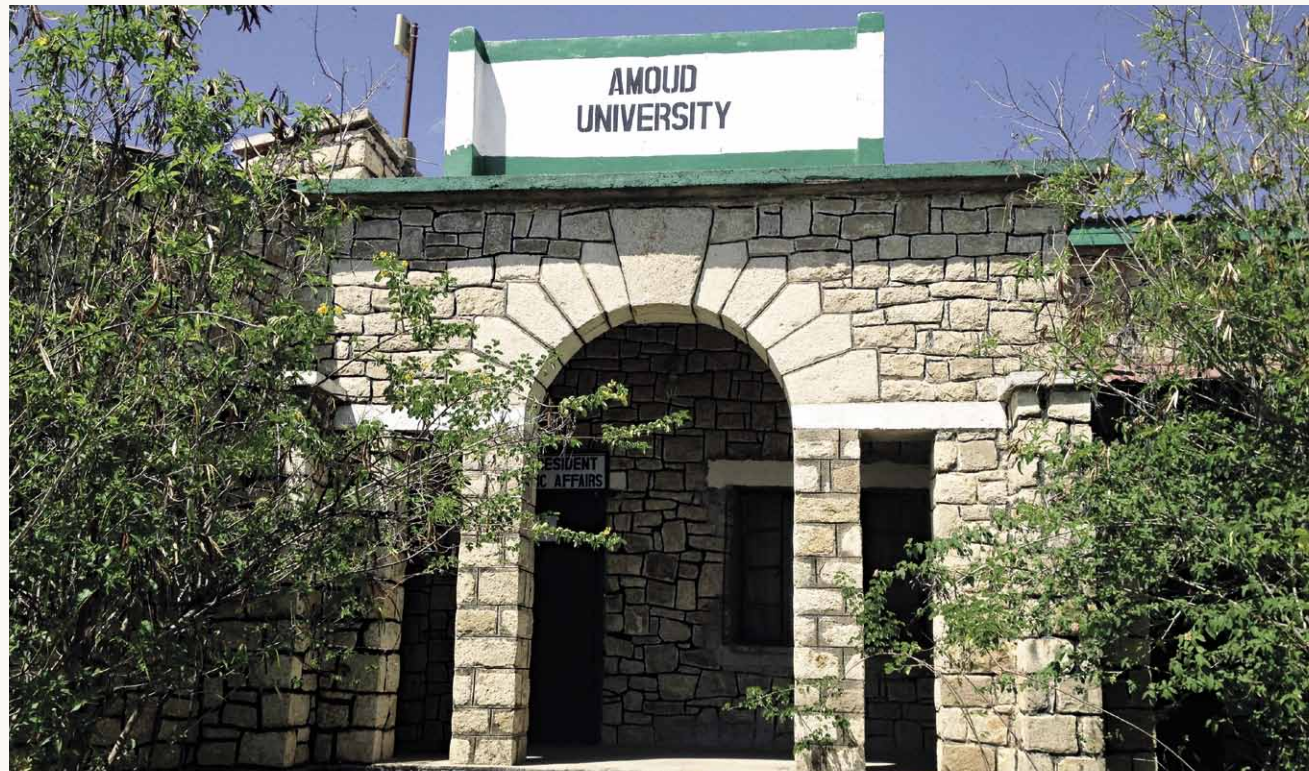
The Central Bank of Somaliland was inaugurated in 1994. When Telesom ZAAD was launched in 2009, there was no e-money regulation in place and Telesom was granted a remittance license. Since the remittance regulation does not provide specific guidelines on the provision of mobile money services, Telesom decided to take a proactive approach to identifying and implementing customer due diligence (CDD) procedures. To mitigate the risk of the service being used for financial crime, Telesom adopted CDD procedures that are compliant with the international guidelines issued by the Financial Action Task Force (FATF).

All Telesom ZAAD customers are subject to identification procedures that confirm their identity. If the customer is a company or firm, Telesom ensures it is properly constituted and that all direct and ultimate shareholders or beneficiaries are identified as fit and proper persons with whom to do business.

Following the FATF recommendation to adopt a risk-based approach to customer due diligence, Telesom created two types of ZAAD customer accounts: ordinary accounts with a balance limit of US\$2,000 and high-value accounts. To open an ordinary account, a customer must visit one of Telesom’s stores and show an identity document, such as a passport, driving licence, or other valid identification document. Since there is no formal nationally issued ID in Somaliland, many customers do not have an identification document. Those customers can sign up for the service if they are referred by a local chief or well-known businessperson, who must provide written confirmation of their identity.

Every customer’s proof of identity is copied and stored digitally by Telesom, together with a photo of the customer. This allows all agents to check the identity of any registered Telesom ZAAD customer every time the customer performs a cash-in or a cash-out, when their image appears on the agent’s computer screen. All agents have a personal computer connected to a central database and are also able to tag any new customer they register as “low risk” or “high risk”, based on an interview during the registration process. The transactions of high-risk customers are closely monitored by Telesom ZAAD, which verifies the source of funds to ensure they match the customer’s information, business, and risk profile.

Telesom ZAAD has appointed an AML reporting officer and deputies who are responsible for ensuring that Telesom ZAAD agents and the rest of Telesom staff are vigilant in detecting and preventing illegal activities. Telesom ZAAD regularly monitors and reviews the appropriateness, effectiveness, and adequacy of its KYC compliance policy and procedures. All Telesom ZAAD agents and Telesom staff are trained at least once a year on KYC compliance to ensure that they understand and are committed to upholding Telesom ZAAD’s compliance policy and procedures.



## PART 2

# Implementing an effective distribution strategy and creating the mobile money ecosystem

Understanding the socio-economic characteristics and status of Somalilanders was an important starting point in the development of Telesom ZAAD's distribution strategy. In order to realise their vision of delivering financially inclusive services, Telesom chose to use a wallet-based mobile money service with a focus on keeping cash in the system. To do this, they focused on developing a strong mobile money ecosystem around the service, which has informed its approach to both products and distribution.

### COMMITMENT TO MERCHANT PAYMENTS AND SALARY PAYMENTS

Telesom ZAAD was launched with a focus on salary payments and merchant payments. The idea was to create a mobile money system that did not require service users to repeatedly cash-in and cash-out. Instead, Telesom ZAAD users would regularly receive money in their wallet (their salary, for example), maintain a small balance, and use it for daily transactions, such as paying for goods and services. In order to promote both products successfully, Telesom concentrated its efforts on two target groups: merchants and employers.

### CONVINCING MERCHANTS AND INSTITUTIONS TO MAKE AND ACCEPT PAYMENTS USING TELESOM ZAAD

#### Kaah Electric Power Company

Kaah is the main electricity provider in Somaliland. Before the launch of Telesom ZAAD, Kaah employed 50 bill collectors who collected payments door-to-door. This system was not only unsafe for the bill collectors, it also lacked the traceability and transparency the company needed to monitor its payments properly. Kaah's customers could also go to the company office to pay their bill with cash, but this was not a convenient solution. Soon after Telesom ZAAD launched in 2009, Kaah allowed its customers to pay their electricity bill with mobile money. Today, 85% of Kaah's 12,000 customers use Telesom ZAAD to pay their electricity bill.

In 2010, Kaah began paying the salaries of its 400 employees through Telesom ZAAD. Abdirahman Farah Jama from Kaah's finance department told us that employees were very satisfied with this new system as they no longer need to go to the headquarters to pick up their salaries every month, and can use Telesom ZAAD to make payments and transfers remotely when they work in other areas of the country.

#### Amoud University

Amoud University in Boroma is Somaliland's oldest university and one of the most reputable. Amoud only accepts Telesom ZAAD as a means of payment for the tuition fees of its 3,000 students. Three hundred of Amoud's 450 employees receive 100% of their salary through Telesom ZAAD and all suppliers to the university are paid using Telesom ZAAD.

According to Ahmed Abdullahi Boqorre, the VP of Administration at Amoud, "Using Telesom ZAAD has saved us time and money and added traceability and transparency to our accounting systems. Students pay fees in installments so we can quickly track payment, which we could not before." Amoud required their suppliers to move to Telesom ZAAD for payment and the larger suppliers, in turn, have required their suppliers to convert to Telesom ZAAD as well.

#### Approach to corporate users

Acquiring Kaah and Amoud as corporate users was strategically very important to Telesom, as their reach and influence would filter down to others through suppliers, employees, and customers.

Telesom is committed to working closely with their corporate clients and has developed customised platform features for their business. For example, when Amoud University asked Telesom ZAAD to develop a new feature on their web-based interface, they were quick to react. As Ahmed Abdullahi Boqorre explained, "We requested a filter feature to allow us to search via student number and pull up all transactions. This was not a field Telesom ZAAD offered as standard but they turned it around very fast for us."

In the beginning, the team spent a lot of time educating merchants about the service. Telesom also offered free handsets to new merchants as an incentive to accept payments via Telesom ZAAD, but they quickly halted this program as merchants started to come to Telesom ZAAD even without the incentive. When Telesom ZAAD was launched in June 2009, 170 merchants had already agreed to accept payments via mobile money. Merchants were encouraged to use the e-money in their account to buy Telesom products instead of cashing out, which has helped to keep money in the system. Many mobile money services struggle to get customers to maintain a balance, but Telesom have been very successful.

Today, two members of the Telesom ZAAD team are dedicated to merchant supervision and monitor their activities on a daily basis. They also identify merchants with limited activity and visit them to understand why.





TELESOM ZAAD'S CURRENT PRODUCT OFFERINGS	
Payments and disbursements:	Transfers:
<ul style="list-style-type: none"><li>• P2B – purchases (shopping); educational institutions (school fee payments); health service providers (charge collection); utility providers (monthly bills for electricity, water, waste, TV, etc.)</li><li>• B2B – businesses (purchases and bill payments)</li><li>• B2P – payroll and bulk payments, expenses</li><li>• Airtime, Internet data recharges</li></ul>	<ul style="list-style-type: none"><li>• Domestic money transfer</li><li>• Inter-network money transfer</li><li>• International money transfer</li></ul>
	Conversion transactions:
	<ul style="list-style-type: none"><li>• Cash-ins and cash-outs</li></ul>

The Telesom ZAAD team knew that convincing employers to pay salaries through mobile money would be particularly challenging since mobile money was so new to Somaliland. Telesom decided to lead the way, and two months before the commercial launch of Telesom ZAAD, it started to pay its 1,430 employees exclusively with mobile money. This was a bold decision – most mobile money providers that want to push salary payments start by paying only a small percentage (usually between 5% and 10%) of their employees’ salaries using mobile money. This helped to convince other companies to start paying their employees using Telesom ZAAD.

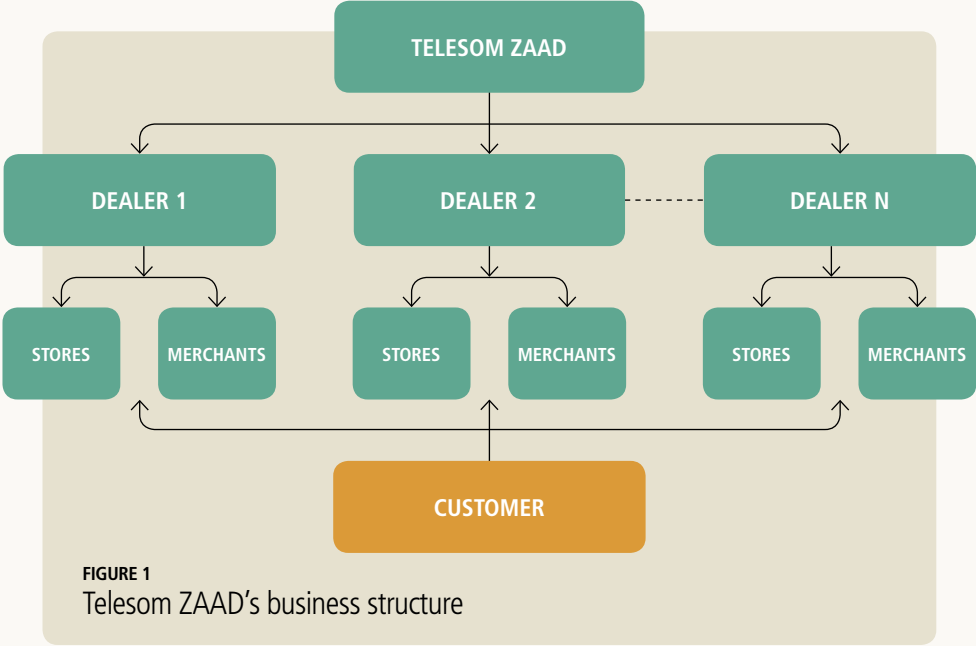
Telesom also wanted their employees to become brand ambassadors and to start using Telesom ZAAD to pay their rent, buy goods and services, and transfer money. As relatively high net-worth customers to their local businesses, Telesom employees promoted the service very effectively. To encourage uptake by word-of-mouth, Telesom trained all its employees on Telesom ZAAD so that they were fluent in using and promoting the new service.

**MOBILE MONEY DISTRIBUTION**

Telesom ZAAD has taken a unique approach to mobile money distribution by not relying on external agents. Telesom decided to use its own retail stores exclusively to register new customers and offer cash-in and cash-out services. As mentioned earlier, this approach has been possible due to the unique market conditions in Somaliland and Telesom’s strong presence and brand recognition.

Telesom operates 178 of its own retail outlets distributed around Somaliland, which has been sufficient to reach its subscriber base. The 20 largest stores, which Telesom calls “dealers”, are responsible for managing the liquidity of the smaller stores. In the Telesom ZAAD model, people who work for stores that facilitate cash-ins and cash-outs, as well as dealers who supervise smaller stores, are all Telesom employees. As such, they receive a monthly salary from Telesom. Offering a high-quality mobile money service is one of their objectives and their bonus depends on whether or not they are able to reach their mobile money targets.

Interestingly, dealers are also responsible for recruiting and supervising merchants. This reflects the importance of merchants in Telesom ZAAD’s business structure. For Telesom, agents and merchants are the two ways customers can directly interact with the company, and both groups are seen as equally important. All Telesom ZAAD staff are trained to use the service when they are hired and then given refresher training every following year. This training has ensured that staff knowledge and customer service levels are kept very high.



Weak links in the value chain are also discovered and identified quickly which, in addition to the in-house distribution system, preserves trust in the Telesom ZAAD brand.

**THE WIDER ECOSYSTEM**

Focusing on the ecosystem has meant that Telesom ZAAD has had to connect with other key financial service stakeholders, including money changers (also called currency ex-changers) and neighbouring mobile money services.

Because the Telesom ZAAD platform uses only US dollars, money changers are an important part of the extended mobile money ecosystem. Telesom ZAAD customers often need to change Somaliland shillings into dollars before they can perform a cash-in into their Telesom ZAAD account. Telesom ZAAD users can either go to a Telesom store to do this, or they can go to one of Somaliland’s 6,500 money changers. When they go to a money changer, Telesom ZAAD users simply have to bring Somaliland shillings and ask for the equivalent amount in US dollars to be deposited into their account. This is performed as a traditional P2P transfer since money changers also have standard customer accounts. Every time they put dollar value into a Telesom ZAAD wallet, money changers are helping to facilitate and expand mobile money transactions.





### PART 3

## Results of the strategy

#### BUILDING AN ACTIVE SUBSCRIBER BASE

Telesom has put a lot of focus into building an active subscriber base for both customers and merchants. These efforts were quickly rewarded – just one year after the launch of Telesom ZAAD, over 70% of subscribers were actively using the service. The active subscriber rate has remained at the same level ever since and has never fallen below 70 percent.

It is interesting to note that both the customer base and the merchant base have always grown hand-in-hand. Since the launch of Telesom ZAAD in June 2009, Telesom has maintained a ratio of approximately 43 registered customers per registered merchant. In April 2013, over 368,000 customers and 8,600 merchants were registered on Telesom ZAAD and 275,000 of these were active. This represents 35.6% of Telesom's GSM base.

#### GROWING TRANSACTION VOLUMES (JUNE 2009 TO APRIL 2010)

Figures 3 and 4 show the growth in volume of Telesom ZAAD's major products: P2P transfers and bill and merchant payments.<sup>6</sup> Both charts show a similar growth curve and there is a noticeable point of inflection in April 2010.

The service was launched in June 2009, and by April 2010 awareness of the service had reached a tipping point. The impact of its marketing campaigns in rural villages became noticeable and the service began to take off. Telesom was also agile enough to respond to changing market conditions: a drought in Somaliland during this period prompted various emergency response NGOs to use Telesom ZAAD to disburse payments. This flexibility combined with extensive marketing campaigns produced exponential growth in April 2010 (this tipping point is visible in Figures 3 and 4). Anecdotal evidence suggests that

<sup>6</sup> P2P transfers and salary payments have the same identification codes in Telesom ZAAD's platform, which does not allow these types of transactions to be differentiated in the database. The same applies for bill payments and merchant payments.

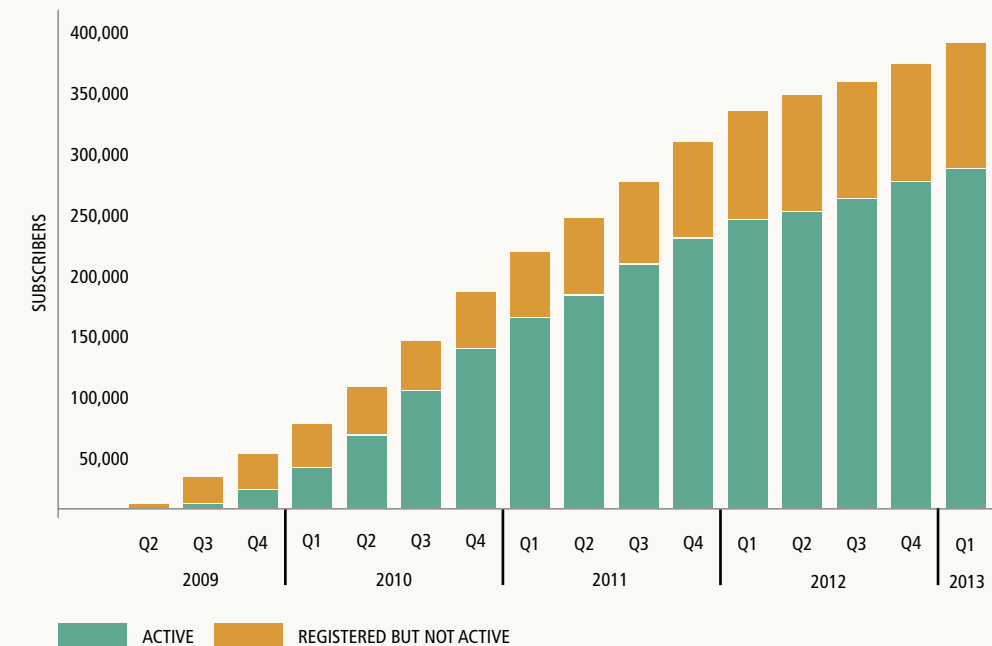


FIGURE 2

Subscriber growth over time

customers and merchants began to come to Telesom ZAAD naturally, indicating that their strategy to develop an ecosystem was starting to pay off.

At the end of March 2010, less than a year after launch, Telesom ZAAD had already reached usage levels that were either slightly higher than global averages for transfers, disbursement, and payment transactions, or in line with global averages for cash-ins and cash-outs (see Figure 5).

**35.6%**  
PERCENTAGE OF  
TELESOM GSM  
SUBSCRIBERS WHO  
ARE ACTIVELY  
USING ZAAD

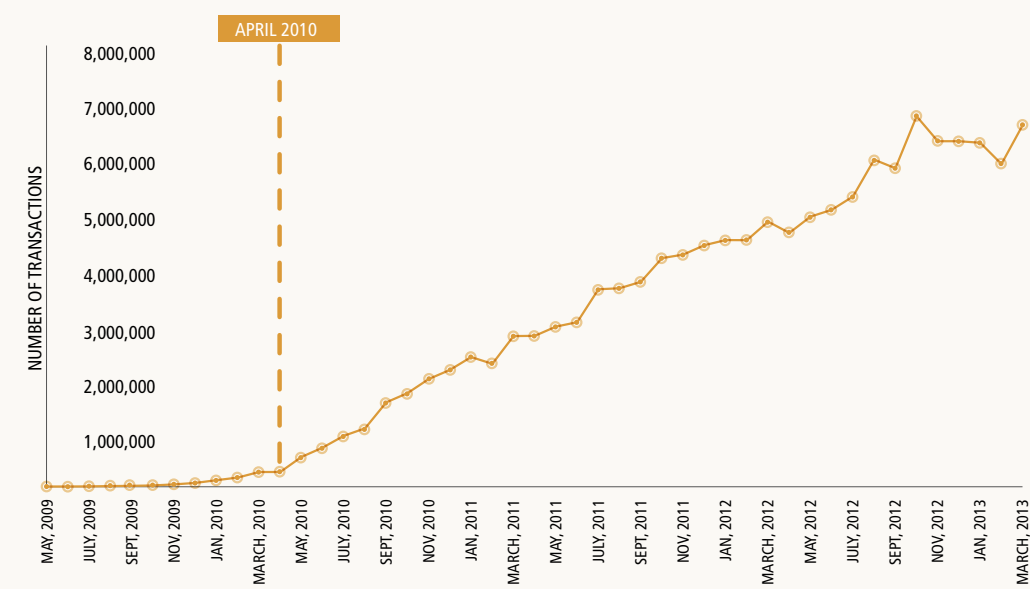
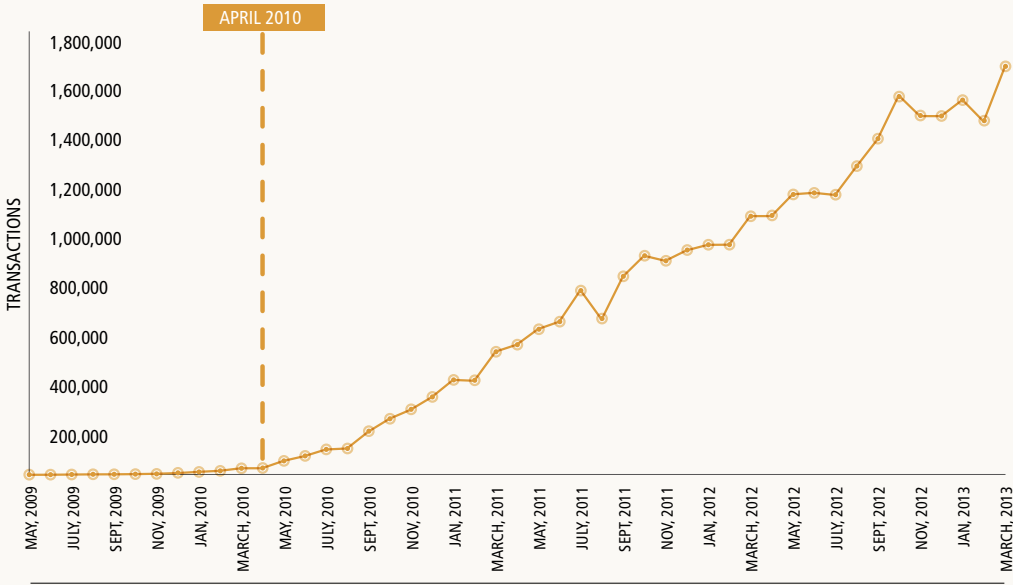


FIGURE 3

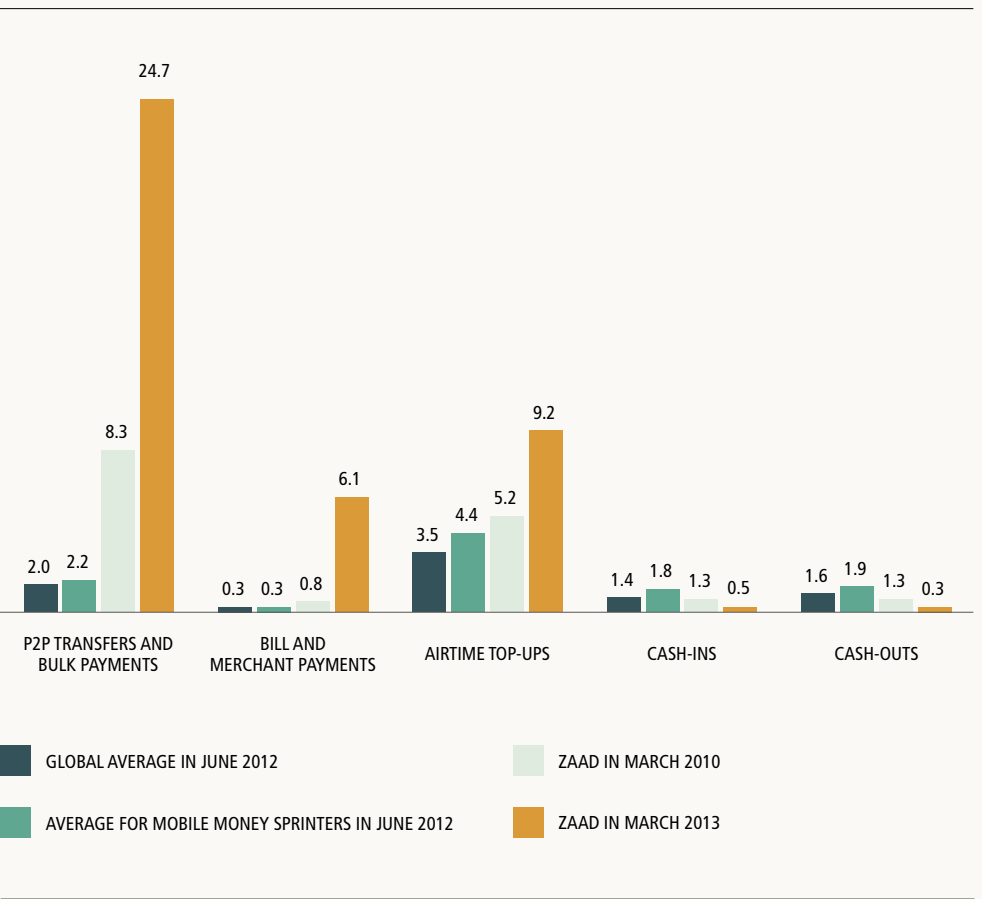
Growth in Telesom ZAAD customer-initiated P2P transactions over time





**FIGURE 4**  
Growth in Telesom ZAAD bill and merchant payment transactions over time

**41**  
NUMBER OF  
TRANSACTIONS PER  
ACTIVE USER OF  
ZAAD IN MARCH  
2013



**FIGURE 5**  
Average number of Telesom ZAAD transactions per active user<sup>7</sup>

<sup>7</sup> Global averages and averages from Mobile Money Sprinters come from the GSMA 2012 Global Mobile Money Adoption Survey.

### CASH REPLACEMENT

Mobile money services all over the world have struggled to develop their service into something more than a simple remittance tool. However, Telesom has succeeded in getting their customers to keep money in their Telesom ZAAD wallets and to use mobile money instead of cash for a variety of everyday transactions.

What benefits does cash replacement actually bring?

For customers, mobile money offers a secure and convenient alternative to cash. By giving consumers secure and immediate access to all of their funds on demand, Telesom has significantly improved the ability of consumers from Somaliland to make better buying decisions. For the private sector, mobile money has improved the ease of business transactions, particularly by improving traceability and giving merchants access to a large pool of customers with a means of easy payment. Finally, for central banks, digitising transactions brings increased transparency, reduced production costs, and better visibility into the economic environment.

### TELESOM ZAAD AS A CASH REPLACEMENT TOOL (APRIL 2010 TO MARCH 2013)

In March 2013, customer usage of the service had surpassed the averages of mobile money sprinters. Each active customer on average performed almost 25 P2P transfers and just over six bill payments in March 2013 alone. Meanwhile, the frequency of cash-ins and cash-outs declined from 1.3 to 0.5 respectively in March 2010 and 1.3 to 0.3 in March 2013. These are clear signs that Telesom ZAAD is evolving into a cash replacement tool.

Telesom ZAAD's ecosystem strategy and focus on salary payments and merchant payments have clearly worked. Customers are getting money into the system through other means than just cash-in, and the money is staying in the system. Instead of cashing out, Telesom ZAAD users keep a balance in their account and use this balance to conduct transfers or

TRANSACTION TYPE	TOTAL NUMBER OF TRANSACTIONS	TOTAL NUMBER OF TRANSACTIONS PER ACTIVE SUBSCRIBER <sup>8</sup>	TOTAL NUMBER OF SUBSCRIBERS PERFORMING A TRANSACTION	PERCENTAGE OF SUBSCRIBERS PERFORMING A TRANSACTION <sup>9</sup>
P2P TRANSFER INITIATED BY A CUSTOMER	6,507,315	24.2	244,405	66.4%
P2P TRANSFER INITIATED BY A MERCHANT AND SALARY PAYMENT	294,912	46.8	5,162	59.9%
AIRTIME TOP-UP	2,478,010	9.2	184,796	50.2%
CUSTOMER BILL PAYMENT AND MERCHANT PAYMENT	1,652,150	6.1	160,548	43.6%
MERCHANT TO MERCHANT PAYMENT	29,593	4.7	3,825	44.4%
CUSTOMER CASH-IN	147,479	0.5	53,558	14.6%
CUSTOMER CASH-OUT	78,359	0.3	28,956	7.9%
MERCHANT CASH-OUT	3,435	0.5	755	8.8%

**TABLE 2**  
Total transactions on Telesom ZAAD in March 2013

<sup>8</sup> In March 2013, there were 275,382 30-day active Telesom ZAAD subscribers, including an estimated 269,079 active customers and 6,303 active merchants.

<sup>9</sup> There were 368,023 registered customers and 8,620 registered merchants in March 2013.

make payments. This point is confirmed upon examination of the cash-in and cash-out curves that appear in Figure 6.

While customer cash-ins have continued to increase in volume since April 2010, the rate of increase has slowed down and, almost three years on, the total volume is 250% greater. Customer cash-outs, on the other hand, have increased just 50% since May 2010.

Evidence of the success of Telesom ZAAD as a cash replacement can be encapsulated neatly by examining the average balances of customers' accounts. On 31 March 2013, 59% of customers had a positive balance in their Telesom ZAAD account, \$37 on average. Telesom's analysis of account balances over time indicates that customers are now comfortable maintaining balances, as they understand there are multiple ways to use the funds. Retail merchants are also keeping money in the system – 83% maintain a positive balance of \$352 on average.

One way to assess the extent to which a mobile money service has been adopted is to look at how money flows into, through, and out of the system. In the case of Safaricom's M-PESA, from October 2012 to March 2013, US\$5.3 billion entered the system through cash-ins and \$4.6 billion exited through cash-outs. The total value of all transactions in the system (transfers and payments excluding cash-ins and cash-outs) during this period was \$6.2 billion. This means that every dollar cashed in moved through the system 1.2 times as a transfer or a payment before exiting the system. As a comparison, that ratio was just over 4.1 for Telesom ZAAD during the same period.

All evidence seems to indicate that Telesom is the first mobile money provider to create a mobile money system that is functioning effectively as a cash replacement tool.

TELESOM IS THE FIRST MOBILE MONEY PROVIDER TO CREATE A MOBILE MONEY SYSTEM THAT IS FUNCTIONING AS A CASH REPLACEMENT TOOL

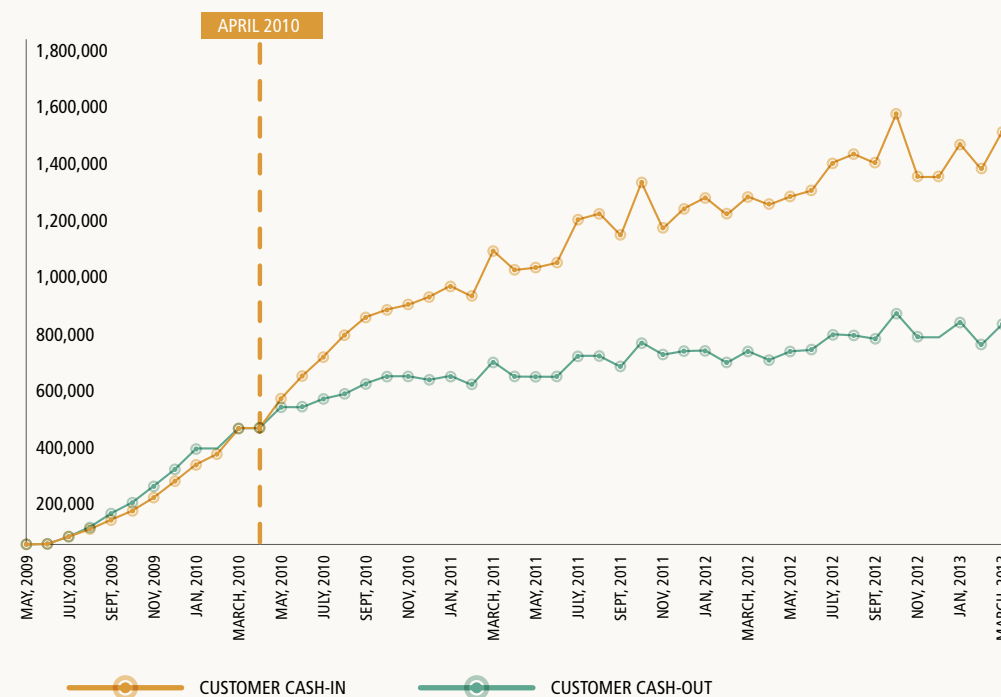
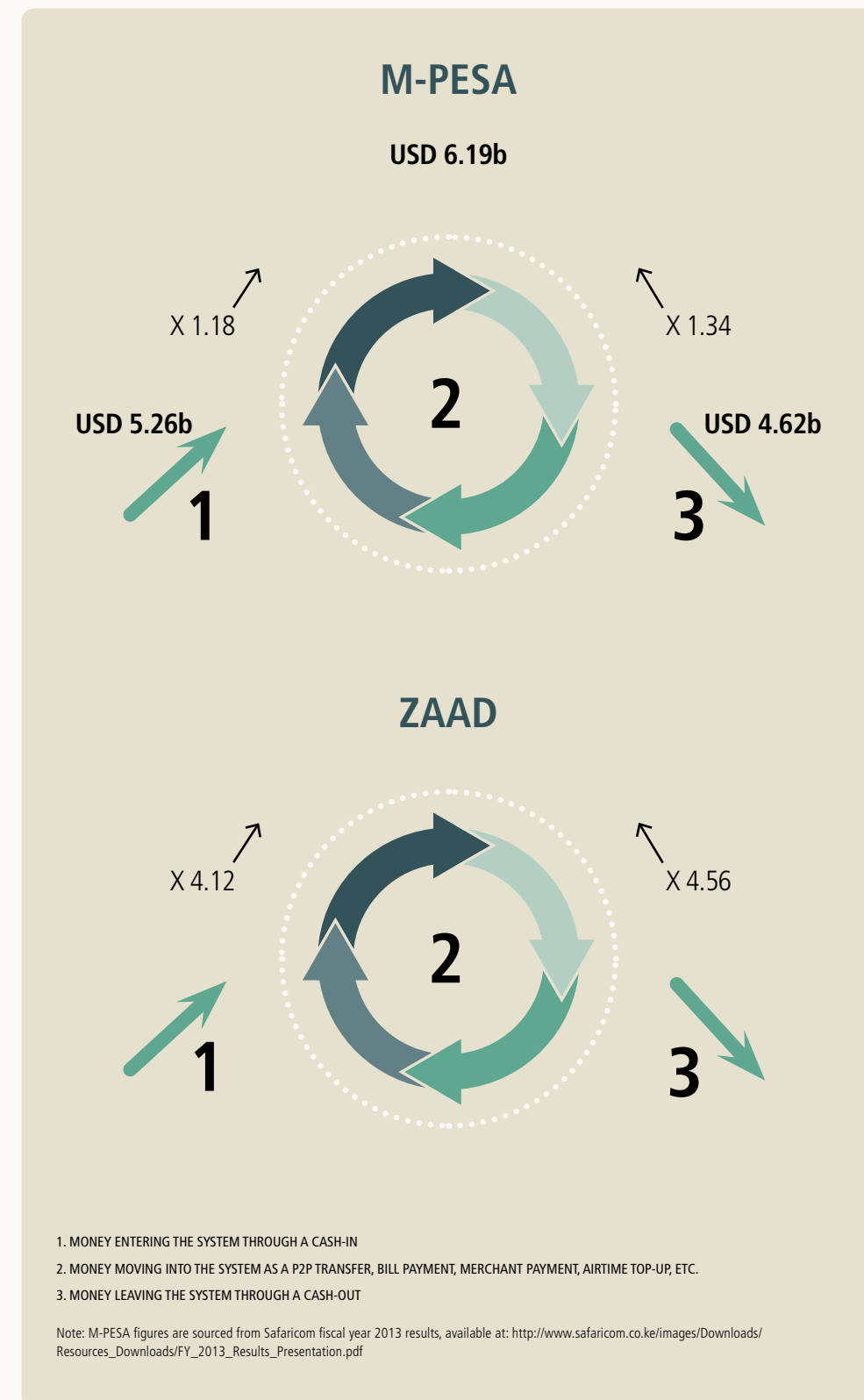


FIGURE 6

Growth in cash-in and cash-out volumes over time



**4.1**  
RATIO OF AMOUNT OF MONEY BEING TRANSACTED TO AMOUNT BEING CASHED-IN

FIGURE 7

M-PESA and Telesom ZAAD usage (October 2012 – March 2013)





# Conclusion

Telesom has learned from the experiences of successful mobile money services in neighbouring countries and applied these lessons to Somaliland’s unique cultural and socio-economic context. Apart from the no-fee business model and internal distribution network, the major difference in Telesom’s approach is its commitment to salary payments and merchant payments. The results have been extremely encouraging; Telesom has created a new model for mobile money whereby customers are encouraged to keep money in the system rather than cashing it out.

Telesom ZAAD will soon be facing some major challenges, however.

First, Telesom ZAAD’s active customer base recently reached 40%, and its initial plan was to revise the free-to-use business model once customer usage reached this level.

- Should Telesom start charging customers to use the service?
- What could Telesom do to mitigate possible customer drop-off once charges are introduced?

Second, although the number of Telesom ZAAD customers and customer usage continue to increase, the pace has started to slow. Telesom ZAAD now must answer the same questions that many other mobile money services are asking:

- How can mobile money usage be increased among existing customers? What new services would attract new customers?
- How can new segments of the GSM subscriber base be reached?

Telesom is also discussing how they could increase their footprint in the market by extending their network of cash-in/cash-out points and recruiting external agents, which prompts these questions:

- What kinds of challenges would managing external agents create, given Telesom ZAAD’s current business structure?
- How could Telesom leverage the ecosystem around Telesom ZAAD to create new cash-in/cash-out points?

Telesom ZAAD has clearly been very successful in bringing financial services to unbanked people. Its mobile money service has changed the way people do business in Somaliland by making transactions easier, faster, and more secure. The MMU team will continue to work closely with Telesom ZAAD and to learn from them as they continue to grow and overcome new challenges.



## The rise of eZ Cash:

Enabling mobile money policies in Sri Lanka

Author: Simone di Castri



Enabling Mobile Money Policies in Sri Lanka

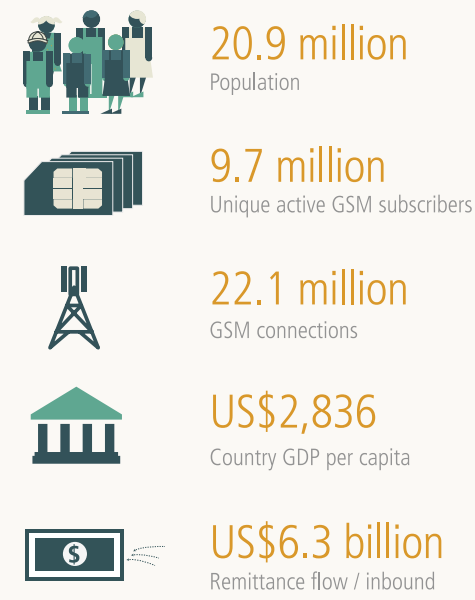
# The Rise of eZ Cash

ez Cash  
MOBILE MONEY

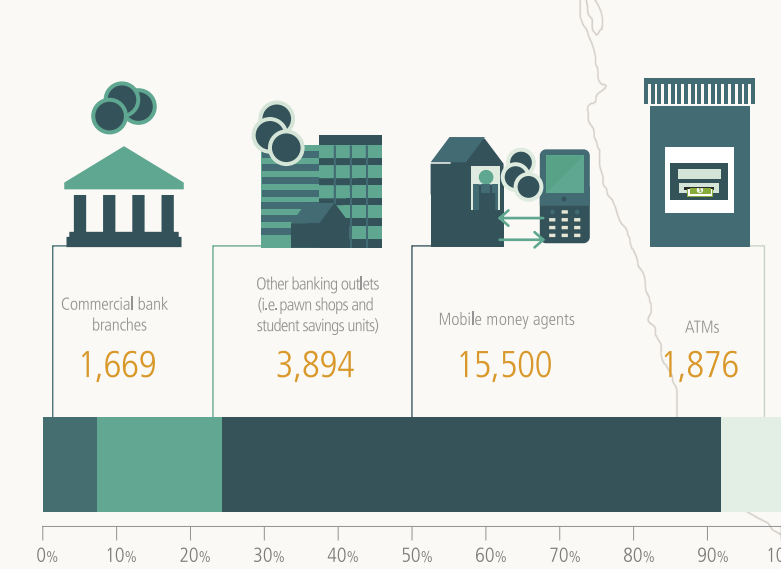
POLICY

ez Pay  
MOBILE BANKING

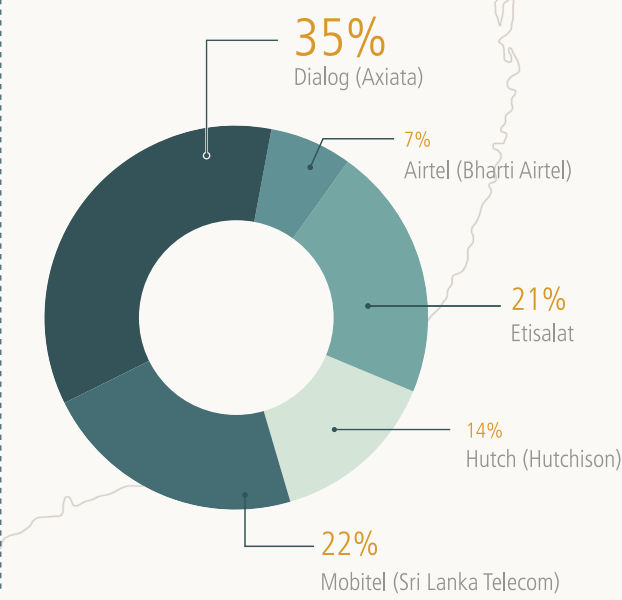
Sri Lanka at a glance



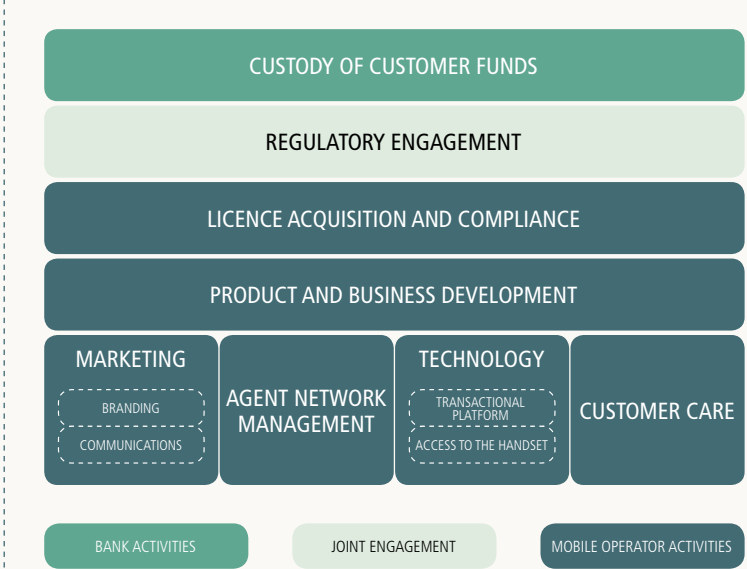
Financial sector touchpoints



Telecom market share



The Sri Lankan custodian bank account model



CBSL grants a licence to Dialog and agrees on proportional risk-based KYC requirements

In June 2012, Dialog launches its mobile money service, eZ Cash

In June 2013, one year after launch, Dialog reaches 1m registered eZ Cash users, 20% of which are active

Payments and Settlements Systems Act

CBSL issues Service Providers of Payment Cards Regulations No.1 of 2009

CBSL issues draft Mobile Payments Guidelines No. 1 for public review

CBSL issues two distinct guidelines for regulating bank-led and telco-led models of mobile payment systems:

- Mobile Payments Guidelines No. 1 of 2011 for Bank-led Mobile Payment Services
- Mobile Payments Guidelines No. 2 of 2011 for Custodian Account Based Mobile Payment Services

National Development Bank and Dialog launch eZ Pay, a mobile banking product



# Introduction

For the Central Bank of Sri Lanka (CBSL), 2012 was the culmination of a 5-year effort to establish an enabling regulatory framework for mobile money that opened the market to both bank and non-bank providers and extended services to Sri Lanka’s unbanked population. Marking this shift was the launch of eZ Cash, a new mobile money service that has signed up over 1 million customers in just one year. eZ Cash is operated by Dialog Axiata PLC (Dialog), a mobile network operator (MNO) that was awarded a licence to operate as a payment services provider following revisions to the central bank’s regulations.<sup>1</sup>

As Ajith Nivard Cabraal, Governor of the Central Bank of Sri Lanka, explains, “Achieving financial inclusion through progressive regulation and innovation has been a principal and consistent ethos of the Central Bank of Sri Lanka.” The Sri Lankan case offers important lessons for both regulators and MNOs working to achieve the dual objectives of financial inclusion and economic growth.

Lessons for regulators:

- Enabling regulatory frameworks play a fundamental role in expanding the reach and improving the efficiency of the financial sector.
- Building an inclusive digital financial system requires a level playing field where both banks and non-banks, particularly MNOs, can provide mobile money services.
- Developing mobile money requires leveraging the value-added proposition for MNOs.
- Regulators are more likely to achieve their objectives if they are open-minded, test their policy approach, and cultivate a dynamic of mutual learning with private sector players.
- There is likely no need to reinvent the wheel: some of the policy and regulatory solutions to enable mobile money have already been tested successfully in a number of countries where MNOs are providing sound and secure mobile money services.

Lessons for MNOs:

- Be proactive with the regulator. Engaging in transparent, constructive dialogue helps to build a more enabling regulatory environment.
- Launching several types of accounts with different KYC requirements can ease registration requirements for low-income users while satisfying the heavier transactional needs of power users.
- Use SIM registration data to support KYC whenever possible.



## PART 1 Testing and learning

In August 2007, the CBSL authorised the National Development Bank (NDB), a licensed commercial bank, to launch a mobile banking service called eZ Pay. The regulatory framework required customers to have a bank account to sign up for the service. NDB partnered with Dialog, a major MNO in Sri Lanka with over 7.5 million GSM subscribers. eZ Pay was subsequently extended to include another bank, Seylan Bank PLC, and a microfinance institution, Lanka ORIX Leasing Company PLC. However, the service never gained traction. By March 2012, Dialog had only registered about 13,000 eZ Pay customers in Sri Lanka. Meanwhile, there were at least 50 mobile money deployments worldwide with 100,000 registered customers each, 60% of which had more than 80,000 active users.

The number of customers using eZ Pay was very low compared to the potential market. Sri Lanka has a population of 20 million people and 9.3 million GSM unique subscribers. According to an International Finance Corporation (IFC) report,<sup>2</sup> Sri Lanka has high penetration of bank accounts, but low access to electronic payments like debit and credit cards due to the slow rollout of ATMs and Point of Sale (POS) devices. The IFC report attributed this in part to Sri Lanka’s relatively inefficient banking sector. The report pointed out that only a small number of transactions were going through the eZ Pay system, primarily because there was minimal marketing and no clear value proposition to the consumer.

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BECAUSE THE REGULATOR ONLY ALLOWED A BANK-LED MODEL, DIALOG WAS NOT ABLE TO MAKE THE RIGHT LEVEL OF INVESTMENT IN THE PRODUCT AND BRING IT TO SCALE. ALSO, REQUIRING CUSTOMERS TO HAVE A BANK ACCOUNT - AND IMPOSING BURDENSOME KNOW-YOUR-CUSTOMER REQUIREMENTS - DID NOT ENCOURAGE PEOPLE TO SIGN UP.

FARIQ CADER  
SENIOR GENERAL MANAGER  
DIALOG



<sup>1</sup> Dialog was awarded a licence to operate as a Service Provider of Payment Cards under the Payments and Settlements Systems Act No. 28 of 2005.

<sup>2</sup> International Finance Corporation (IFC), 2011.





## PART 2

# Rethinking the business model, product features, and policy approach

While eZ Pay was struggling to take off, CBSL regulators, Dialog management, and the officers of Hatton National Bank PLC, another commercial bank, were working together to understand the barriers that were keeping the service from succeeding and to identify solutions that would harness the potential of mobile money while still safeguarding customer funds. The regulator and the provider analysed the experiences of countries where mobile money was thriving and learned how to design the business model and the product in a way that provided customers with a life-enhancing service. “In this phase it was very important to have a supportive banking partner that would help us to establish a constructive dialogue with the Central Bank, and was actually proactive in building that engagement,” points out Trinesh Fernando, General Manager, Group Legal and Regulatory, Dialog.

In 2010, the CBSL issued the draft Mobile Payments Guidelines No. 1 and solicited public feedback. In 2011, two guidelines were issued regulating two distinct mobile money products:

- an e-wallet linked to a bank account (regulated by the Mobile Payments Guidelines No. 1 of 2011); and
- an e-wallet provided by a non-bank (including an MNO) that must have equivalent funds held in a custodial account in one (or more) licensed commercial bank(s) (regulated by the Mobile Payments Guidelines No. 2 of 2011).

A licence to provide mobile money products under the custodian account model can be granted to any “Licensed Service Provider”, which is any mobile payment service provider licensed under the Service Providers of Payment Cards Regulations No. 1 of 2009. Four types of entities qualify for this licence:<sup>3</sup>

- any licensed commercial bank
- any licensed specialised bank
- any registered finance company
- any public company with unimpaired capital of at least 75 million rupees (Rs).

Dialog and other MNOs that fit the criteria qualify based on the last requirement.

In April 2012, Dialog was awarded a licence to provide mobile money services under the Payments and Settlements Systems Act No. 28 of 2005. The CBSL agreed to let Dialog register clients without requiring them to have a bank account. CBSL also established proportional risk-based KYC requirements for new customers. The evolution of CBSL’s approach created an open playing field for banks and non-bank providers, allowing MNOs to launch their own mobile money deployments with a competitive set of products.

This enabling regulatory environment also extended the benefits of sending and receiving money electronically to a broad segment of society that had previously been excluded. As the Governor of the Central Bank of Sri Lanka explains, “Over the past decade, the mobile phone has no doubt transformed the lives of millions of Sri Lankan citizens from across all parts of the country. Now with the facility to transfer money and make payments direct from the mobile phone, a vast majority of our population would be further empowered with the power and efficacy of electronic transactions.”

### EZ CASH LAUNCHES AND TAKES OFF

In June 2012, Dialog launched its telco-led mobile money service under the name “eZ Cash”. In the first month, over 300,000 customers signed up. One year after launch, eZ Cash had more than 1 million customers, 20% of which were active, having conducted at least one transaction in the past 30 days. As a comparison, in June 2012 only 16 mobile money deployments globally reported having more than 200,000 active customers.

In May 2013, 330,535 transactions were conducted through eZ Cash, exceeding Rs 435 million. Dialog is currently the only MNO licensed under the Service Providers of Payment Cards Regulations No.1 of 2009.



THE USE OF THE MOBILE PHONE TO SEND AND RECEIVE MONEY AND ENGAGE IN TRANSACTIONS WITH THE BROADER RETAIL AND ENTERPRISE SECTORS OF THE ECONOMY HAS INCREASED EFFICIENCY AND EXPEDITED THE TIME TAKEN TO CONCLUDE A BUSINESS TRANSACTION, THEREBY GIVING A BIG BOOST TO THE NATIONAL ECONOMY.

ANUSHA PALPITA  
DIRECTOR GENERAL  
TELECOMMUNICATIONS  
REGULATORY COMMISSION OF  
SRI LANKA (TRCSL)

<sup>3</sup> According to Section 5a, Service Providers of Payment Cards Regulations No. 1 of 2009





PART 3

# Regulation, features and security of eZ Cash

eZ Cash customers can transfer money, pay utility bills, and make other types of payments to merchants and institutions<sup>4</sup> through a user-friendly, trilingual menu (English, Sinhala, and Tamil).

TECHNOLOGY STANDARDS

A USSD communication channel is used to process transactions, and each transaction is protected by a subscriber-defined PIN and 3DES authentication and transaction security protocols. Dialog is the first Licensed Electronic Payments provider in Sri Lanka to receive PCI-DSS certification.<sup>5</sup>

SAFEGUARDING CUSTOMER FUNDS

In compliance with the regulatory requirements CBSL set up to safeguard customer money, e-money accounts are updated in real time, and any transaction processed by eZ Cash is backed 100% by pooled accounts held in a commercial bank. The equivalent of the e-money in circulation is held by Hatton National Bank PLC (HNB), which acts as a custodial bank for eZ Cash. According to HNB CEO, Rajendra Theagarajah, “this solution will provide the platform for financial inclusion of all Sri Lankans and is part of the overall development roadmap envisioned for the country’s electronic payments landscape. HNB is confident that this would herald the much aspired new chapter in inclusive payment solutions venturing beyond the traditional methods, and empowering people with the combined resources of the mobile telephony and banking sectors.” The interest received on custodial accounts is below market rate and is treated by Dialog as revenue.

<sup>4</sup> For example, recurring payments such as insurance premiums, charitable donations, or subscriptions and membership payments to clubs and professional bodies.

<sup>5</sup> Payment Cards Industry – Data Security Standard.

eZ Cash is further secured through a trust instrument administered by Deutsche Bank AG. Therefore, the e-float backing customer funds in an HNB account is out of Dialog’s reach; it cannot intermediate the funds nor use them for security, collateral, or operational needs. If Dialog were to cease operations, its creditors would not have access to the pooled funds held by Deutsche Bank.

TRANSACTION LIMITS AND KYC PROCEDURES: A PROPORTIONAL RISK-BASED APPROACH

Customers can activate eZ Cash simply by dialling a number from their mobile phone, and Dialog uses the KYC information already stored in its database from the SIM card registration to verify their identities. The SIM card registration process includes making a physical copy of the customer’s original national identity card (the photocopy is later digitised and uploaded to the internal database), which is stored with the signed contract. All Sri Lankans are required to apply for their national identity card on their sixteenth birthday and to carry it with them at all times.

The maximum amount that a new eZ Cash customer can add to their e-wallet is Rs 10,000 (US\$80). This “Classic Account” allows them to send money (up to Rs 5,000 per transaction), pay utility bills (up to Rs 10,000), and conduct other transactions such as online payments or microinsurance, microfinance loan, or subscription payments.

If customers want to conduct transactions that exceed these limits, they can activate a “Power Account” with a top-up limit of Rs 25,000 (US\$200) and higher transaction limits. To activate a Power Account, a customer must visit a Dialog Customer Care Centre to confirm his/her identity. As of today, 5,000 customers have signed up for a Power Account and usage rates are growing at a pace comparable to registrations.

Before CBSL revised its policy approach, Dialog customers who wanted to subscribe to eZ Pay were required to already have accounts with banks in the eZ Pay network, so the KYC check was conducted when they originally opened their bank account.

DISTRIBUTION AND OUTSOURCING OF SERVICES

A registered eZ Cash subscriber can load money into his/her e-wallet at any of the 15,000+ eZ Cash Points across Sri Lanka. Cash-in can also be conducted at supermarkets or online through many of Sri Lanka’s major financial institutions. There are no restrictions preventing merchants from acting as cash-in and cash-out agents, but Dialog must perform due diligence. All new agents are trained by Dialog. The training covers information about operational issues, AML/CFT compliance, and fraud prevention. Dialog supplies the central bank with an updated list of registered agents periodically.



	DAILY LIMIT	MAXIMUM BALANCE	REGISTRATION PROCEDURE	NUMBER OF ACCOUNTS
DIALOG CLASSIC ACCOUNT	P2P RS 5,000 PER TRANSACTION (US\$40)	RS 10,000 (US\$80)	SELF-REGISTRATION BY PHONE USING PERSONAL INFORMATION ALREADY STORED DURING SIM REGISTRATION	OVER 1 MILLION
	UTILITIES RS 10,000 (US\$80)			
DIALOG POWER ACCOUNT	P2P RS 5,000 PER TRANSACTION (US\$40)	RS 25,000 (US\$200)	REGISTRATION AT DIALOG SERVICE POINT(S) WITH ADDITIONAL KYC REQUIRED	OVER 5,000
	UTILITIES RS 25,000 (US\$200)			

TABLE 1  
Transaction and maximum balance limits for different types of accounts





In accordance with international best practices, CBSL’s guidelines require Dialog to define, at a contractual level, the duties, responsibilities, and procedures to be followed by merchants acting as agents for cash-in and cash-out transactions. Dialog is obligated to monitor its distribution network, taking necessary steps to address, mitigate, or eliminate merchant-related risks.

**CUSTOMER PROTECTION AND ASSISTANCE**

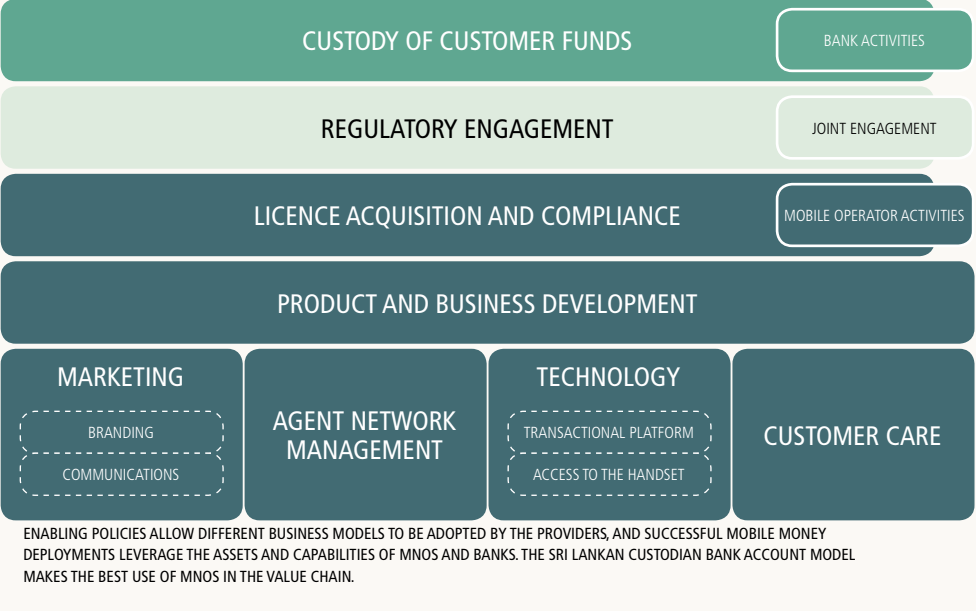
CBSL’s guidelines also cover certain aspects of business conduct. For instance, the terms and conditions for a mobile money service must be provided in Sinhala, Tamil, or English, and should include information on dispute resolution and the procedures for reporting lost or stolen mobile phones and stop payments. The eZ Cash customer care centre is housed within Dialog’s main customer care centre. Over 100 call centre operators have been trained to respond to most issues regarding eZ Cash. Customers call most often to request information about the service (4,000 calls per month), to reset their Personal Identification Number (PIN) (3,000 calls), and to ask about the details of a transaction (1,500 calls). Customers also call to report a problem with the service, such as a payment being made to the wrong account or an incomplete P2P transfer or GSM reload (through eZ Cash). If an eZ Cash customer has a problem, the customer can call, text, or email the customer care centre. The regulation requires providers to establish a customer care centre to respond to customer enquiries and complaints, and customers must be provided with a reference number and have their case resolved within three business days. Depending on the problem and type of complaint, Dialog has the authority to, for example, block the customer’s e-wallet, settle the transaction through a reversal, or involve the police or Financial Intelligence Unit (FIU) in the case.

**FRAUD AND RISK PREVENTION**

According to the guidelines, the providers must also implement a robust security risk management framework to identify, assess, reduce and monitor security risks, with the aim of protecting the confidentiality of sensitive information and the accuracy, reliability, and completeness of the information that is processed, stored, or transmitted. Providers are also responsible for properly authenticating and authorising the functions performed by agents.

**IT PLATFORM**

The business continuity plan and disaster recovery site shall be tested and reviewed periodically. In the event of a disaster or operational failure, the disaster recovery site must be capable of taking over operations without causing any inconvenience to customers.



**FIGURE 1**  
The Sri Lankan custodian bank account model

## PART 4

# Challenges and outlook

Digital financial inclusion in Sri Lanka has tremendous growth potential. Nokia Research, in estimating the total cost of mobile ownership in 77 countries in 2009, found Sri Lanka to be one of twelve countries with the most affordable mobile services. The average mobile user in Sri Lanka spends less than US\$5 per month for a standard set of telecom services, whereas the average cost of services in the 77 countries was more than twice as much (\$10.88). LIRNEasia, a regional telecom policy think tank in Asia that has surveyed telecommunications use among the poor, found that 77% of people classified as low-income had used a phone in the previous week, and 73% of low-income households had a phone. The survey revealed that 30% of respondents were aware of these services.

Cheap devices and mobile services, awareness of services among low-income households, and a regulatory framework that creates an open and level playing field for mobile money, are all necessary conditions for the development of inclusive digital financial sectors and cash-lite economies.

What’s next for Dialog? Fariq Cader, Senior General Manager at Dialog, outlines the tasks and challenges ahead: “We are speaking with new possible partners within both the telecommunications and the financial sector to identify ways to expand the mobile money ecosystem adding value to customers. Certainly bulk payments and Near Field Communication (NFC) extension for new markets such as transport are services that would benefit eZ Cash users and create efficiencies in the real economy.”

The other major challenge is to build a system to channel international remittances inwards through the mobile money wallet in a cost-effective way. Every year the Sri Lankan diaspora sends home US\$6.3 billion (equivalent to 9.7% of the country's GDP) and Dialog believes it is their responsibility to provide them with a convenient and safe service to contribute to the economic growth of the country.

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## References

Central Bank of Sri Lanka regulatory documents:

- Mobile Payments Guidelines No. 1 of 2011 for Bank-led Mobile Payment Services
- Mobile Payments Guidelines No. 2 of 2011 for Custodian Account Based Mobile Payment Services
- Service Providers of Payment Cards Regulations No.1 of 2009

Additional references:

- GSMA, 2013, "Mobile Money: Enabling Regulatory Solutions"
- International Finance Corporation (IFC), 2011, "Mobile Money Study 2011 Report – Sri Lanka"
- Consultative Group to Assist the Poor (CGAP), 2009, "Financial Access: South Asia: A Regional Snapshot"

Data sources:

- Central Bank of Sri Lanka
- Dialog Axiata PLC
- GSMA Intelligence
- International Fund for Agriculture and Development, 2013, "Sending Money Home: Asia"
- International Monetary Fund, World Economic Outlook Database
- MIX Market
- The World Bank, World Development Indicators
- The World Bank, Financial Inclusion Database
- The World Bank, 2010, "Payment Systems Worldwide"





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