

➤ Improving access and reducing costs of international remittances through branchless banking solutions

Landscaping research by Dalberg Global Development Advisers
for the CGAP Technology Program

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EXECUTIVE SUMMARY

In recent years, mobile technology and new agent networks have created opportunities for alternative delivery of international remittance services. These new service delivery models hold great promise for **improving access to services, reducing the costs** associated with service delivery, and **increasing the level of competition** in the industry.

Today there are eight live deployments that allow cash out via a customer or agent m-wallet covering only a fraction of international remittance corridors. However, at least 15 operators are planning services. Several technology providers, MTCs, MNOs & banks are also beginning to offer tech linkages or white label services that will allow future, interoperable services to be setup more quickly and cheaply.

The operations of these live services can be understood as four emerging delivery models:

- m-wallets to facilitate cash-in (four known deployments)
- Customer m-wallets to enable cash-out (eight known deployments often including agents with m-wallets)
- Agent m-wallets to enable cash-out (one known deployment using agent m-wallets for customers without m-wallets)
- Pre-paid cards that can be topped up directly from sending countries to enable cash-out (at least four known deployments)

Common challenges seem to be around market entry, setup, and initial customer acquisition which is not surprising given only two Philippines-based services have been in operation over 12 months. Specifically, interviewed operators referenced issues with (a) the maturity of branchless banking infrastructure on the receiving end, (b) establishing customer awareness of and trust in the new service, and (c) constraining regulatory environments in many countries.

Along with a rapid increase in the number of services in the market, key trends are likely to include:

1. Mobile Money providers will continue to move quickly to layer on value added services including international remittance services.
2. Tech. vendors and solutions will emerge to facilitate a transition from transfer corridors to transfer networks.
3. POS, card and mobile-based technologies will continue to converge to provide a seamless customer experience.
4. Instant transfer services will become the norm.

METHODOLOGY: DALBERG/CGAP IDENTIFIED LIVE DEPLOYMENTS AND CONDUCTED INTERVIEWS TO ESTABLISH EARLY EXPERIENCES & TRENDS

Dalberg & CGAP Research

INDUSTRY LANDSCAPING

Desk review of major MNOs with MM offerings and other key remittance providers (~100 companies reviewed)



Global landscape of live deployments*



Industry consultation

INTERVIEWS & RESEARCH

Dalberg & CGAP conducted 15 interviews with operators and technology providers to establish a detailed view of the state of the remittance market, establishing common early experiences in the design and launch of services

CGAP leveraged its research base to think through how branchless banking changes service delivery

EMERGING MODELS & TRENDS

Outputs:

Case studies of live services using branchless infrastructure in interesting ways

Typology of emerging service delivery models

Synthesis of common experiences from operators and a view of trends that are likely to shape the industry

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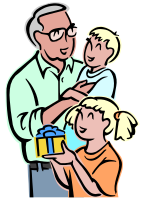
1. International remittances and branchless networks
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BRANCHLESS NETWORKS AND MOBILE TECHNOLOGY PRESENT NEW SERVICE DELIVERY OPTIONS FOR INTERNATIONAL REMITTANCES

Situation

- ~150 migrants worldwide sent approximately \$328 billion to their families in developing countries in 2008 (<1.5 billion separate financial transactions)¹
- International remittances are a key source of income for ~10% of the world's population²
- Branchless banking enabled by mobile wallets and pre-paid cards can be used to extend the reach of service delivery and reduce costs
- There are 10 live deployments of international remittances delivered through branchless networks, and at least 20 under development³
- New deployments introduce non-traditional actors in service delivery including MNO's, new mobile oriented independent MTCs and technology vendors

"150 million migrants worldwide..."



...sent approximately \$328 billion to their families in developing countries in 2008¹...

...and estimates are that international remittances will continue to grow"

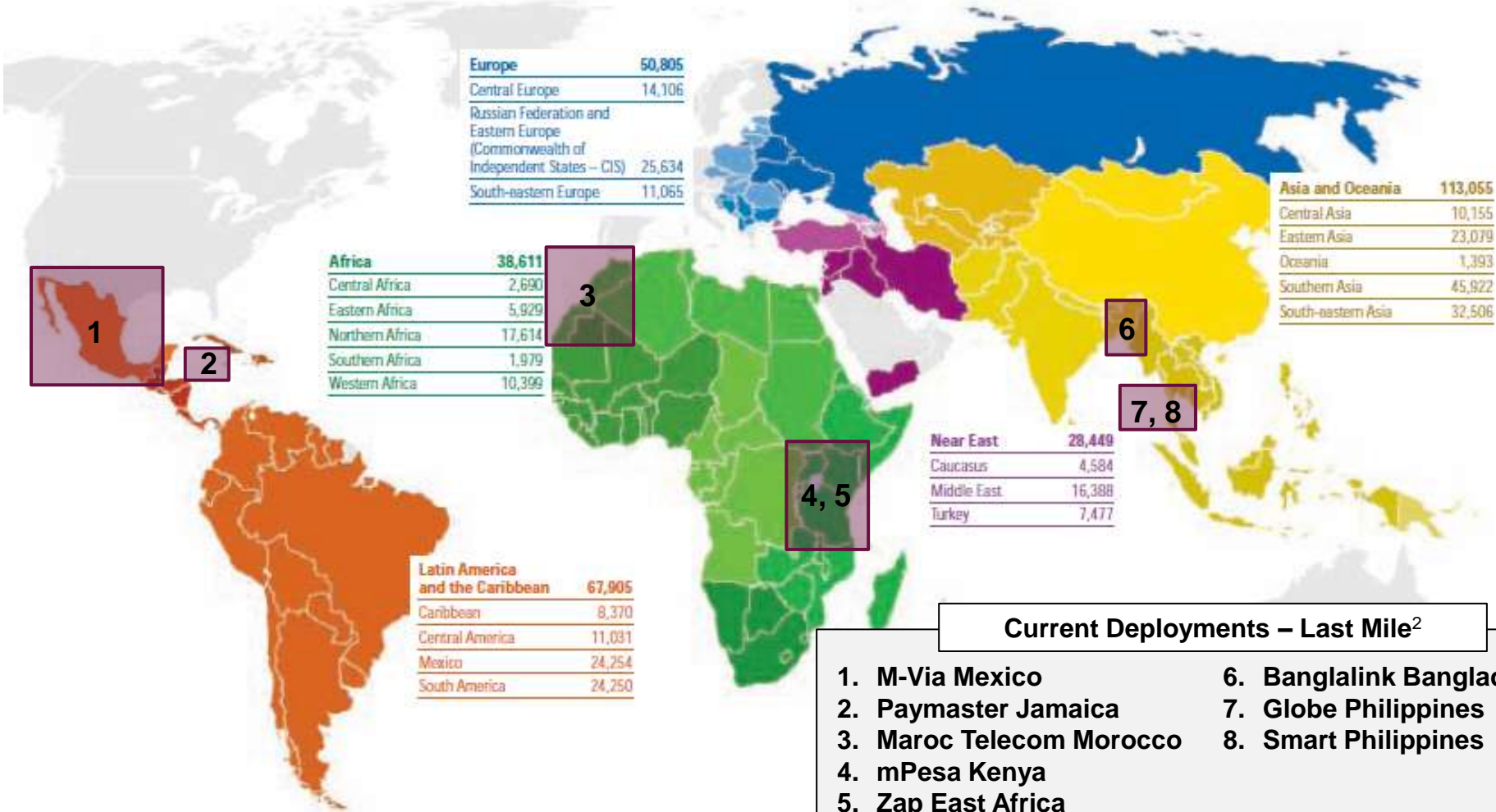
1. Outlook for Remittance Flows 2009-2011, World Bank, July 2009

2. IFAD Sending Money Home, 2009

3. CGAP Research: Deployments included: i) are in developing markets; ii) are live; and iii) move beyond traditional banking infrastructure

CURRENT INTERNATIONAL REMITTANCE DEPLOYMENTS USING BRANCHLESS NETWORKS TODAY COVER ONLY A FEW KEY CORRIDORS...

International Remittance Flows and Branchless Banking Service Delivery: 2006¹



Current Deployments – Last Mile²

- 1. M-Via Mexico
- 2. Paymaster Jamaica
- 3. Maroc Telecom Morocco
- 4. mPesa Kenya
- 5. Zap East Africa
- 6. Banglalink Bangladesh
- 7. Globe Philippines
- 8. Smart Philippines

1. IFAD Sending Money Home, 2009
 2. CGAP Research: Deployments included: i) are in developing markets; ii) are live; and iii) move beyond traditional banking infrastructure

...WITH 8 LIVE DEPLOYMENTS ALLOWING CASH OUT VIA CUSTOMER OR AGENT MWALLET – ONLY 3 HAVE >5,000 AGENTS, ONLY 2 LIVE >12 MONTHS

Cash out via customer/agent mWallet¹

Deployment	Corridors	Launched	Technology	# Agents
M-Via (Mexico)	Single	2009	In-house proprietary	~25,000
Mpesa (Kenya)	Single	2009	In-house proprietary	~19,000
ZAP (East Africa)	Many	2010	Unknown	Unknown
G-Cash (Philippines)	Many	2004	In-house proprietary	~15,000
Smart (Philippines)	Many	2006	In-house proprietary	~4,000
Banglalink (Bangladesh)	Many	2010	In-house proprietary	~800
Maroc Telecom (Morocco)	Single	2010	BICS	Unknown
Paymaster (Jamaica)	Many	Unknown	Unknown	Unknown

Observations

- Three major deployments are yet to open their service up to multiple remittance corridors
- Only two deployments have been in operation for longer than 12 months
- All but one deployment is based on a closed-loop proprietary technology solution
- Three deployments have over 5,000 agents through which to deliver services

NOTE: See Annex for information on 15+ planned deployments identified during landscaping exercise

Source: CGAP Research: Deployments included: i) are in developing markets; ii) are live; and iii) move beyond traditional banking infrastructure

¹ CGAP Research: Deployments included: i) are in developing markets; ii) are live; and iii) move beyond traditional banking infrastructure

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1. International remittances and branchless networks

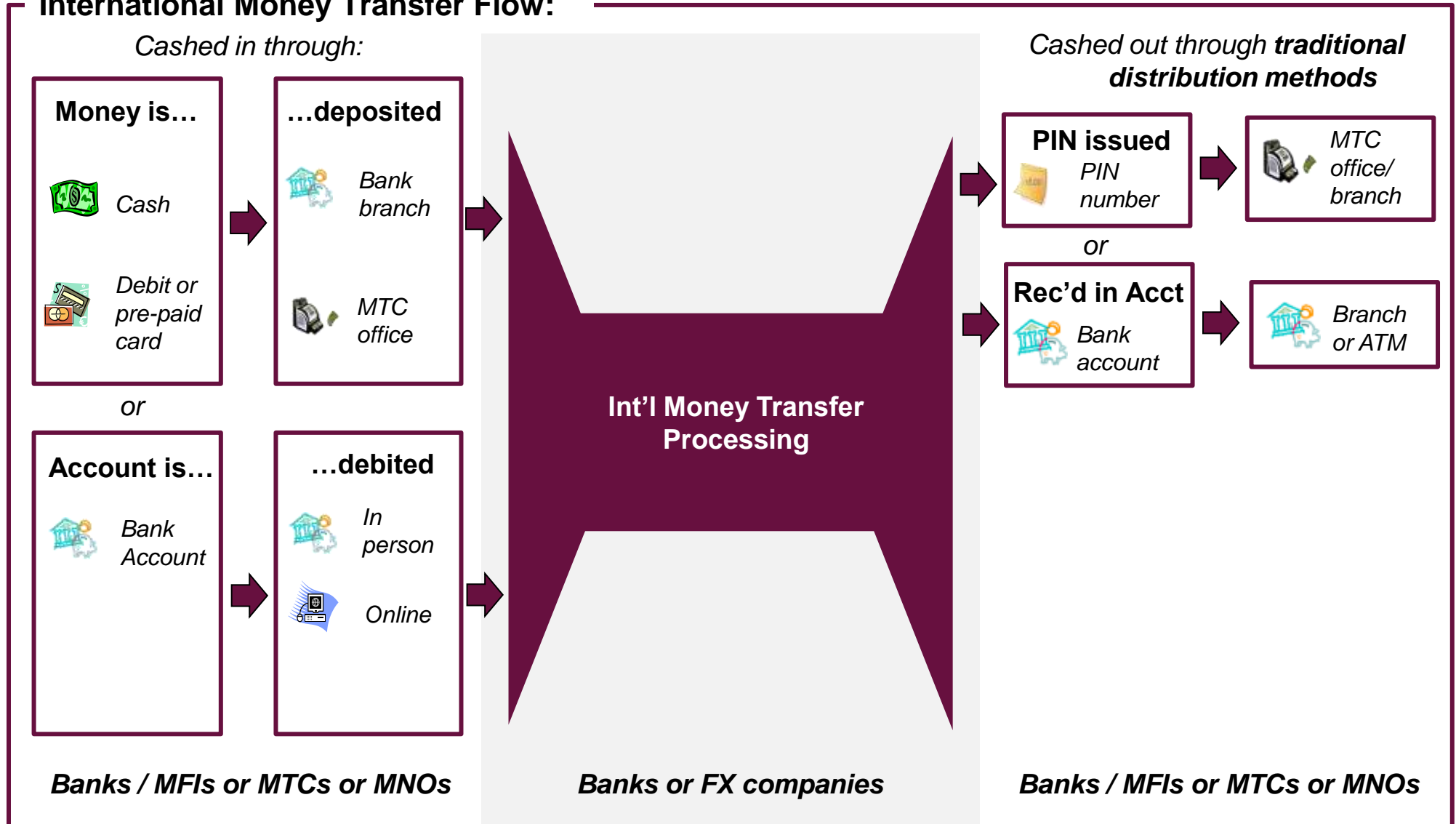
2. Business models integrating branchless network service delivery

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INT'L REMITTANCES CAN BE DELIVERED THRU A VARIETY OF CHANNELS...

International Money Transfer Flow:



...WITH RESEARCH IDENTIFYING SIX KEY DIMENSIONS ALONG WHICH INT'L REMITTANCE SERVICES ARE MOST LIKELY TO VARY

Dimensions along which studied Int'l Remittances Services are most likely to vary:



Cash In



Cash Out

1. Regulatory KYC requirements¹

- Identification required
- Record keeping /reporting required
- Entities allowed to conduct KYC
- Methods of verification allowed

2. Available methods cash in

- Cash - Agent
- Card – Phone, agent, web
- eTransfer – Web, smart-phone based applications

3. Counterparty settlement risk

Settlement design:

- *Settlement after disbursement (real time processing)*: delayed settlement risk incurred by sending bank/entity
- *Settlement prior to disbursement*: risk incurred by receiving bank/entity

4. Settlement processing/EFT transfers

Settlement processed through:

- On-us clearing (intra-bank)
- Bilateral clearing (2 different banks with settlement arrangements)
- Third party clearance arrangements
- Multilateral clearance arrangements

5. Degree automation & technology

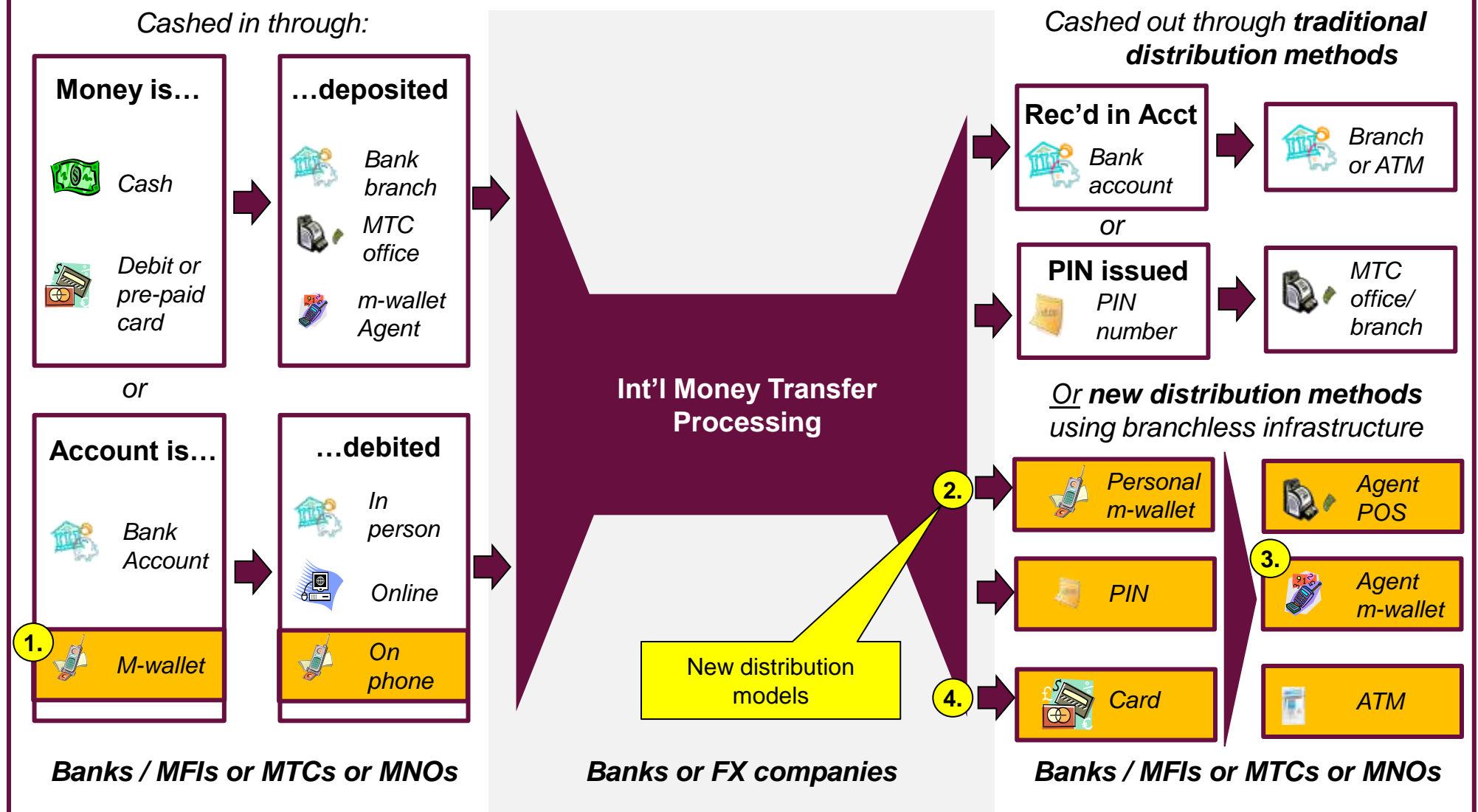
- Proprietary in house solutions vs. outsourced provision
- Degree and scope of automation
- Degree of integration with banks

6. Agent settlement

- MTC/Bank internal liquidity management arrangements and processes

BRANCHLESS BANKING SOLUTIONS CURRENTLY EXTEND MONEY IN AND OUT OPTIONS USING FOUR MODELS...

International Money Transfer Flow:



...THREE MODELS USE M-WALLETS TO SEND/RECEIVE & STORE MONEY, WHILE THE FOURTH USES PRE-PAID CARDS TO ENABLE CASH OUT

Model & Description

Examples

1. Cash in via m-wallet

- Customers in remitting countries use m-wallet to send remittance
- Customers can use agents or bank association to load m-wallet
- m-Wallet can be used to store e-Cash

- Celcom
- Maxis
- Ping-Ping
- EnStream (planned)
- Zain

2. Customer m-wallet cash-out

- Customer m-wallet is credited with e-cash
- Customers can withdrawal cash at an agent, ATM, or make a purchase through a MM-enabled vendor
- m-Wallet can be used to store e-Cash

- M-Via
- Mpesa
- Zap
- Smart
- Banglalink
- Globe
- Maroc Telecom

3. Agent m-wallet used to facilitate cash-out

- Agents with m-wallet extend network beyond bank branches and agents with POS devices
- Customer presents unique transfer code to agent; agent verifies through mobile based application and disburses cash for e-cash

- Globe (initial deployment)

4. Customer pre-paid cash-out

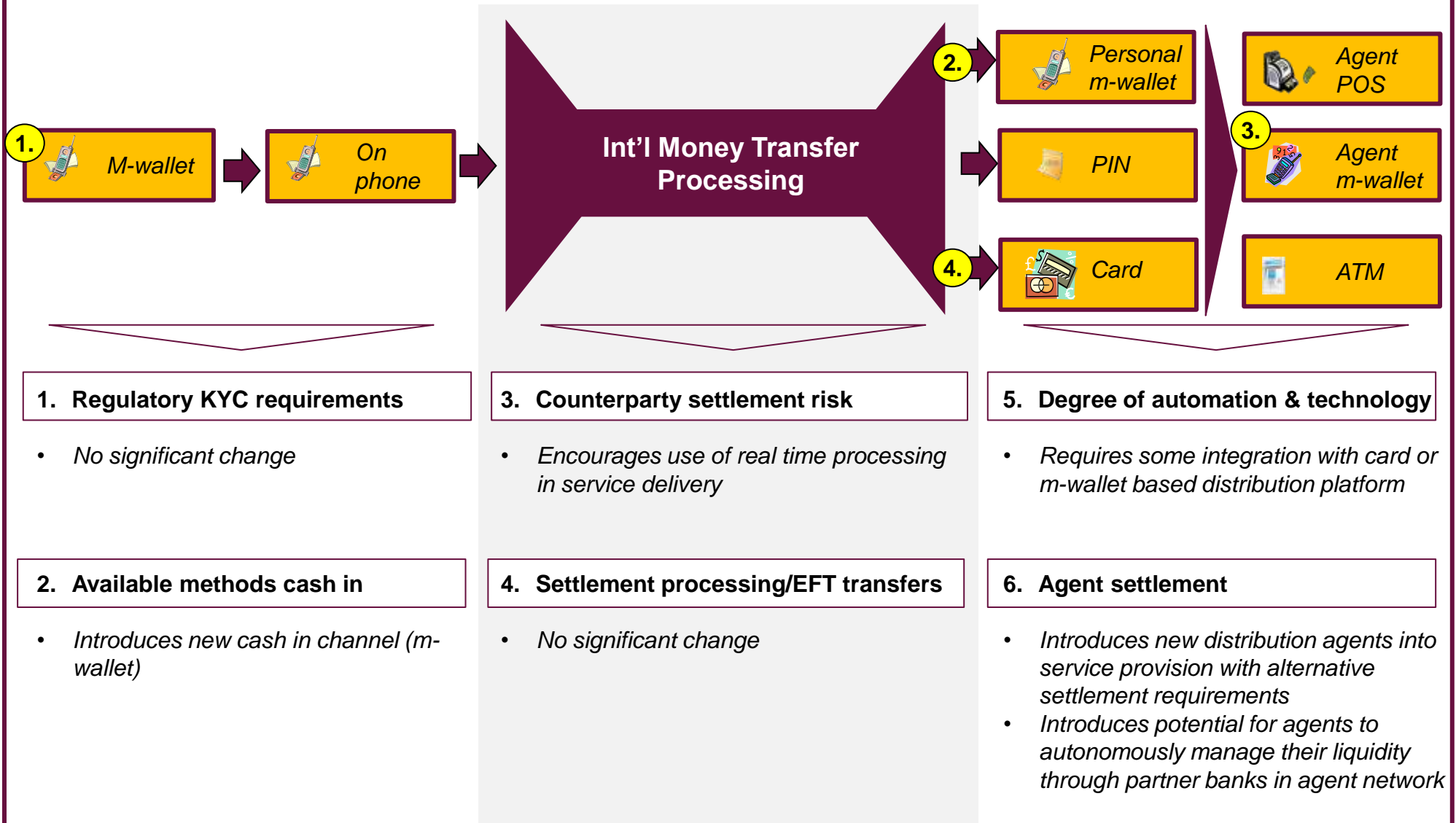
- Customer prepaid card is credited
- Customers can withdrawal cash at an agent with a POS machine or an ATM as well as make a purchase through a vendor that accepts cards
- Cards can be used to store e-Cash

- Citibank Money Card
- Visa Direct
- MasterCard Money Send
- Transfercel

Note: Only increases access if cash out or payment options move beyond ATM network and limited POS-enabled merchants

NEW MOBILE AND AGENT-BASED MODELS CAN CHANGE THE WAY IN WHICH SERVICE DELIVERY MODELS ARE DESIGNED

International Remittances Service Delivery Model Dimensions:

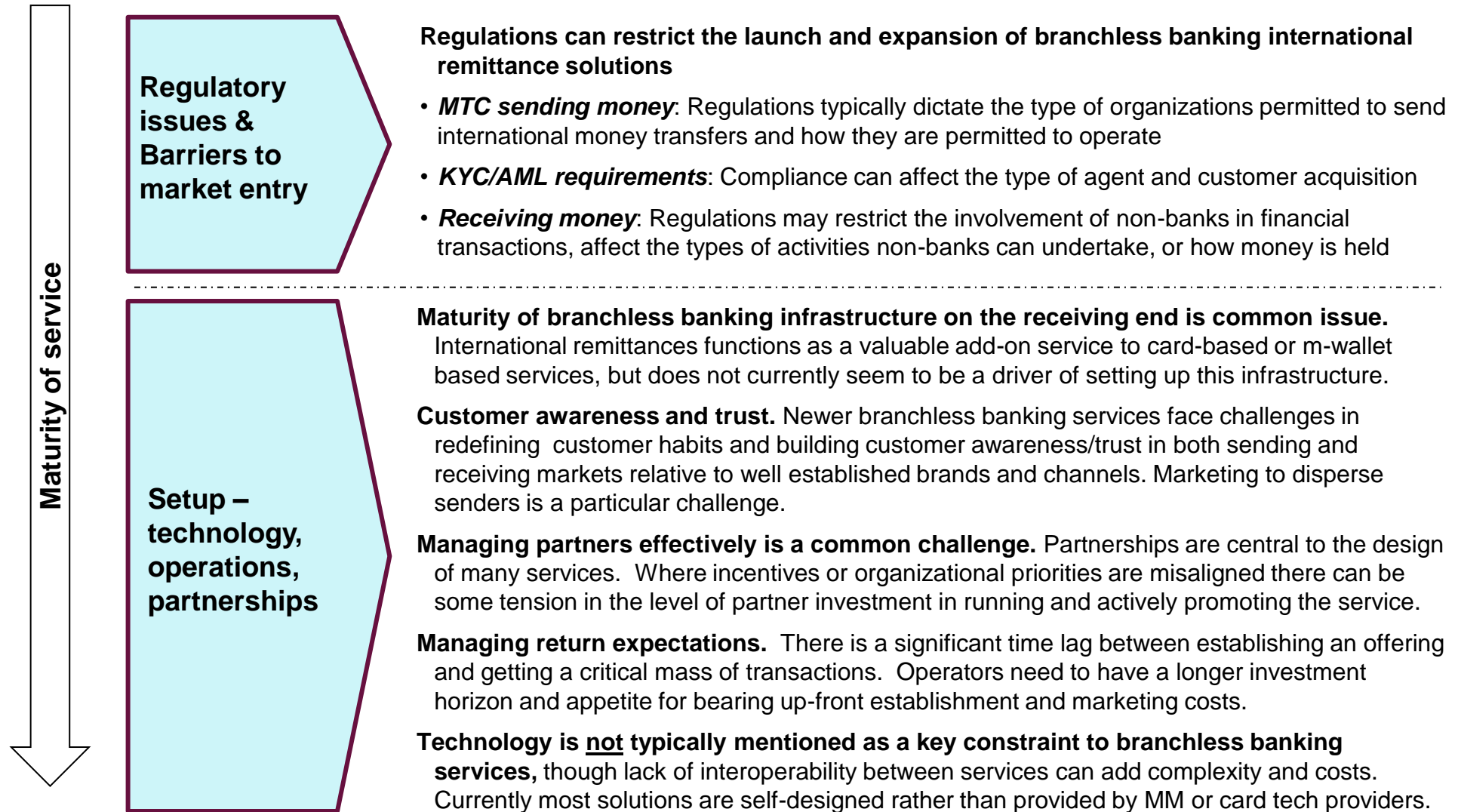


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COMMON CHALLENGES IN MARKET ENTRY AND SERVICE SETUP WERE IDENTIFIED IN INTERVIEWS WITH OPERATORS OF LIVE DEPLOYMENTS

Challenges



INTEROPERABLE TRANSFER NETWORKS WILL INCREASINGLY PROVIDE INTERNATIONAL REMITTANCE SERVICES TO INTEGRATED MM SERVICES

Key Trends

- 1. Mobile Money providers will continue to move quickly to layer on value added services including international remittance services.** As MNOs consolidate their domestic remittance services they will increasingly seek new value added service opportunities. First mover MNOs with domestic mobile money platforms have been quick to launch international remittance services. There are 20+ other MNOs with active programs to launch international remittance services in the coming 12 months and many more possible with the increased availability of white label services.
- 2. Tech. vendors and solutions will emerge to facilitate a transition from transfer corridors to transfer networks.** There are currently over 70 technology solutions supporting mobile money deployments. However, the majority of these solutions are proprietary and do not provide the functionality required to facilitate international remittance services. In the coming years we can expect to see: i) increased interoperability likely through vendors acting as a central node or network, ii) an expansion of the functionality of existing solutions; and iii) the emergence of new “white label” solutions providing end to end mobile-based solutions (including settlement management).
- 3. POS, card and mobile-based technologies will continue to converge to provide a seamless customer experience.** Early movers such as Globe, Smart and Visa already offer interchangeable mobile and card-based int'l remittance solutions. These solutions are linked into existing ATM and payment infrastructure opening up a diverse range of options for consumers. As technology converges customers will increasingly demand seamless service.
- 4. Instant transfer services will become the norm.** As the number of new instant transfer services increases, enabled by pre-funded accounts, consumers will come to expect this level of convenience. Traditional voucher based services with significant time lags in delivery will find it increasingly difficult to compete.
- 5. Evolving regulatory frameworks as international flows change.** Globally, there are now over 140 mobile money planned or active deployments. With the emergence of these services has come increasing pressure from industry and multilaterals to create conducive regulatory environments. Many countries are re-developing regulatory frameworks tailored to the demand for new mobile based financial services.

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REFERENCE: KNOWN DEPLOYMENTS

Cash-in via mWallet	Cash-out via pre-paid card
<ul style="list-style-type: none"> • Maxis – Malaysia • Celcom – Malaysia • PingPing – Belgium • Zain – Bahrain 	<ul style="list-style-type: none"> • TransferCel prepaid card- Transfercel • Visa Direct – Visa • Money Send – Mastercard • Moneycard – Citibank
<p>Cash-out via customer/agent mWallet</p> <ul style="list-style-type: none"> • M-Via - Mexico • Mpesa – Kenya • ZAP – East Africa • G-Cash – Philippines • Smart – Philippines • Banglalink – Bangladesh • Maroc Telecom – Morocco • Paymaster – Jamaica 	
<p>Live Deployments</p>	

Planned Deployments
<ul style="list-style-type: none"> • EnStream – Canada • Rev/ Yap – US • Mobilink – Asia Pacific • Dialog – MENA • MTN - SSA • Digicel Flex – Asia Pacific • Wing – Cambodia • Splash – Sierra Leone • Orange Money – Ivory Coast • Roshan – Afghanistan • Obopay – India • Express Union – Cameroon • Crystal Fund – Georgia • mikemusa Ltd – Zimbabwe • EasyPaisa – Pakistan • ABSA – South Africa