



The GSMA's Mobile Money for the Unbanked (MMU) programme works to accelerate the growth of commercially viable mobile money services to achieve greater financial inclusion.

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# Disclaimer

This report is based on a collection of data sources, some of which are confidential. For example, data collected through MMU's annual *Global Adoption Survey of Mobile Financial Services* was one input into this research. This report protects the confidentiality of each deployment. We only highlight individual services where the service provider has granted approval to disclose key performance information, or where the information is already publicly available.

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# Introduction

reat progress has been made in deepening financial inclusion in Latin America and the Caribbean (LAC) over the last three years, according to the most recent World Bank Global Findex statistics.<sup>1</sup> The region has seen a major increase in the number of adults with bank accounts, from 39% in 2011 to 51% in 2014.<sup>2</sup> Still, approximately half of all adults in LAC remain unbanked, ranging from more than 80% in Haiti and Nicaragua, to less than 35% in Brazil, Jamaica, and Costa Rica.<sup>3</sup>

In parallel, mobile subscriber rates across the region continue to increase and are expected to reach almost 60% of the total LAC population by 2020, broadly in line with the global average.<sup>4</sup> Mobile money services —which allow the unbanked to use basic mobile phones to make and receive payments, and which rely on a network of transactional points outside of bank branches<sup>5</sup> —are a powerful tool for deepening financial access in developing markets. Mobile money services can be offered by a range of providers, including mobile operators, financial institutions, and third parties, all of which play a critical role in building a healthy digital financial ecosystem.<sup>6</sup>

While there is no 'one-size-fits-all' commercial model for mobile money, an open and level playing field where regulation allows both bank and non-bank mobile money providers into the market is essential for mobile money to succeed. In a region where the banking sector is so deeply rooted in the economy, regulatory reform has not come easily or quickly. Nevertheless, policymakers and regulators in LAC are recognising the valuable role of mobile operators in enhancing financial inclusion, and are gradually shifting towards frameworks that allow different business models to compete.

In this context, and bolstered by the contributions of banks and non-banks in select markets, LAC has emerged as a strong mobile money newcomer. Last year the region had the fastest growth in new registered mobile money accounts in the world,<sup>8</sup> and a greater number of deployments are showing signs of reaching scale: three mobile money services have crossed the 1 million active customer milestone in diverse LAC markets and through distinct commercial models.

Although far from the levels of uptake and usage we have seen in Sub-Saharan Africa, LAC is notable for more diverse business models, a high degree of integration with the formal financial system, and a strong focus on building a mobile financial ecosystem from the start. This publication provides a snapshot of the current state of mobile financial services in LAC, analyses the commercial models being employed in different market segments, and discusses the regulatory evolution that has helped shape the industry. Despite continued regulatory and commercial challenges, the mobile money industry may be reaching a turning point in at least a subset of LAC markets.

- 1. Global Financial Inclusion Database (Global Findex) 2014, World Bank. Available at: http://www.worldbank.org/en/programs/globalfindex
- 2. The Global Findex defines this metric as the percentage of respondents (adults 15+) who report having an account (of their own or together with someone else) at a bank or other type of financial institution.
- 3. Global Financial Inclusion Database (Global Findex) 2014, World Bank. Available at: http://www.worldbank.org/en/programs/globalfindex
- 4. GSMA, 2014, "The Mobile Economy Latin America 2014". Available at: http://www.gsmamobileeconomylatinamerica.com/
- Refer to glossary for more detailed definition of mobile money. Note that mobile banking services that offer the mobile phone as just another channel to access traditional banking products, and payment services linked to
  pre-existing bank account or credit cards, are not included.
- 6. See Appendix B for more detailed information about the commercial models employed by mobile money providers in Latin America and the Caribbean.
- Simone di Castri, 2013, "Mobile Money: Enabling regulatory solutions", GSMA Mobile Money for the Unbanked (MMU).
   Available at: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU-Enabling-Regulatory-Solutions-di-Castri-2013.pdf
- 8. GSMA, 2014, "State of the Industry: Mobile Financial Services for the Unbanked". Available at: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/03/SOTIR\_2014.pdf

# Mobile money in LAC: The state of the industry

early two-thirds of markets in Latin America and the Caribbean (LAC) have at least one live mobile money service, with a total of **37 mobile money services in 19 markets**. This includes seven new services launched in Brazil, Colombia, the Dominican Republic, Ecuador, Panama, and Peru since 2014. The GSMA estimates an additional 18 planned deployments will launch in LAC, or roughly 18% of all planned deployments globally.

FIGURE 1

# LIVE MOBILE MONEY SERVICES FOR THE UNBANKED BY COUNTRY



<sup>9.</sup> GSMA, April 2015, MMU Deployment Tracker. Available at: http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker. LAC deployments are listed in Appendix A.

D. TIM Multibank Caixa and Olha Conta in Brazil, PlataMovil in Colombia, Orange m-peso in the Dominican Republic, Banco Central de Ecuador's Mobile Money Platform in Ecuador, Móvil Cash of Cable & Wireless Panama, and Movistar's Tu Dinero Móvil in Peru.

Collectively, the 37 mobile money services in the region account for roughly **14.9 million total registered mobile money accounts** and **6.2 million 90-day active mobile money accounts**. Notably, LAC witnessed a 50% growth rate in the number of new registered mobile money accounts between December 2013 and 2014, making LAC the world's fastest growing region in this area. LAC has also surpassed the global average active customer rate (42% compared to 35% globally). Most encouragingly, there are now **five deployments in LAC with over a million registered customers**. Each of these deployments counts at least half a million 90-day active customers, and together represent an extremely diverse set of markets. As of April 2015, **three of these deployments have crossed the 1 million active customer mark**.

Mobile money distribution has also expanded across LAC markets offering mobile money services. The number of registered agents more than doubled between December 2013 and December 2014, from 27,000 to 63,000 (130% increase). Over the same period the number of active agents (30-day) also grew, though at a lower rate, from 16,000 to 29,000 (81% increase). This unequal growth caused agent activity rates across LAC to drop by 13 percentage points in 2014. Thus, 46% of all registered agents in 2014 were active, as compared to 59% the year prior. This can be explained, in part, by large registration drives to enlist agents, which is common in nascent mobile money markets. A large retail chain part, partnership for mobile money distribution, for example, can also drive up agent registration rates significantly without a corresponding increase in activity rates.

How are customers in LAC using mobile money services? Person-to-person (P2P) transfers and airtime topups make up the majority of transaction volumes, which is in line with global trends, but appear to be much less pronounced in LAC than in other regions. P2P transfers and airtime top-ups in LAC represent 73% of transaction volumes, as compared to 94% of transaction volumes in East Africa (see Figure 2).

Interestingly, as of December 2014, **over a quarter of all transaction volumes in LAC were from ecosystem transactions with third parties**—such as bill payments, bulk payments, and merchant payments—up from just 14% in September 2012. By comparison, in East Africa—home of the world's most successful mobile money deployments in terms of uptake, volumes, and transactions—only 6% of all transaction volumes were considered ecosystem transactions. Ecosystem transactions are critical to realising the full potential of mobile financial services, although they are traditionally the most difficult products to gain traction in a mobile money market.

<sup>11.</sup> Customer active rate: the ratio of active customer accounts (90 day) over registered customer accounts.

<sup>12.</sup> Agent active rate: the ratio of active agent outlets (30 day) over registered agent outlets.

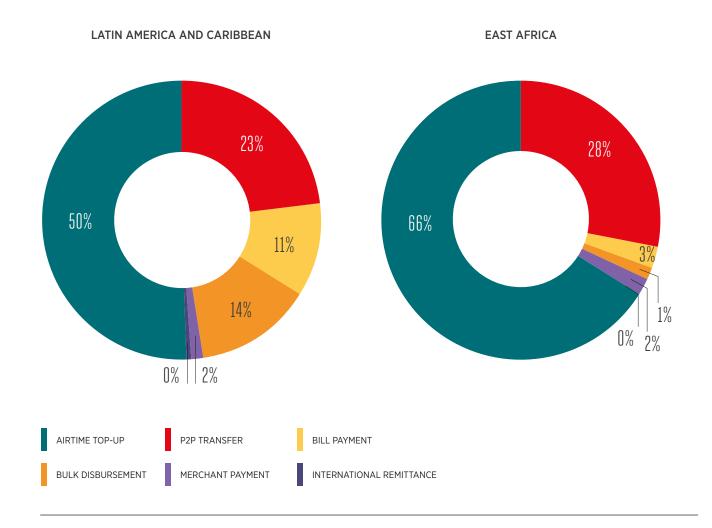
<sup>13.</sup> Throughout this paper, the term "retail chains" refers in particular to formal retail stores with a relatively large number of outlets (such as convenience stores, supermarkets, pharmacy chains, among others). These chains coexist alongside informal merchants.

<sup>14.</sup> Transaction volumes exclude cash-in and cash-out. They include airtime top-ups, P2P transfers, bill payments, bulk payments, merchant payments, and international remittances.

<sup>15.</sup> The total volume of transactions in LAC in December 2014 (not including cash-in/cash-out) was 7.74 million (worth USD 208 million) whereas the total volume of transactions in East Africa in December 2014 (not including cash-in/cash-out) was 270.6 million (worth USD 3.52 billion).

# FIGURE 2

# **PRODUCT MIX BY VOLUME (DECEMBER 2014)**



Although cross-regional comparisons can be impractical due to vast differences between markets, the aggregate product mix in LAC provides a glimpse into the diversity of mobile money approaches employed. Unique supply- and demand-side factors at play in a given market influence commercial models and how the service is positioned. Therefore, the East African model for mobile money—driven by mobile operators and premised on "sending money home"—may not be relevant in many LAC markets, as is further discussed in the next section.

# Commercial models of mobile financial services in LAC

he mobile financial services industry in LAC is notable for its diverse commercial models—a reflection of varied market conditions and regulatory approaches. At one end of the spectrum are models akin to those in East Africa, where a mobile operator assumes most of the functions in the value chain (e.g. Tigo in Central and South America, Digicel in the Caribbean). At the other end of the spectrum, banks drive mobile money schemes and, in some cases, even acquire mobile virtual network operators (MVNOs) to one day offer mobile financial services independently of mobile operators (e.g. Bancolombia). Finally, new entities dedicated to mobile payments, including joint ventures between mobile operators and financial institutions or payment processing companies, are an alternative approach to mobile money in the region (e.g. Transfer, a joint venture between América Móvil and Citibank in Mexico; and MFS, a joint venture between Telefónica and MasterCard in Brazil). These commercial models are illustrated in Appendix B.

A broad and diverse region, LAC has over 30 markets with populations ranging from tens of thousands of people to 150 million. Commercial models in LAC must therefore be examined through a narrow geographical lens and by grouping markets with common characteristics. For practical purposes, analysis is limited to markets with a population of over three million, <sup>16</sup> and a GDP per capita of less than USD 15,000. <sup>17</sup> These markets are mapped according to GDP per capita and corresponding penetration rates of accounts at financial institutions. While these two variables are not independent, they provide a spectrum by which to view how specific markets are developing in the region. <sup>18</sup> Market segments emerged from this exercise and are illustrated in Figure 3 below.

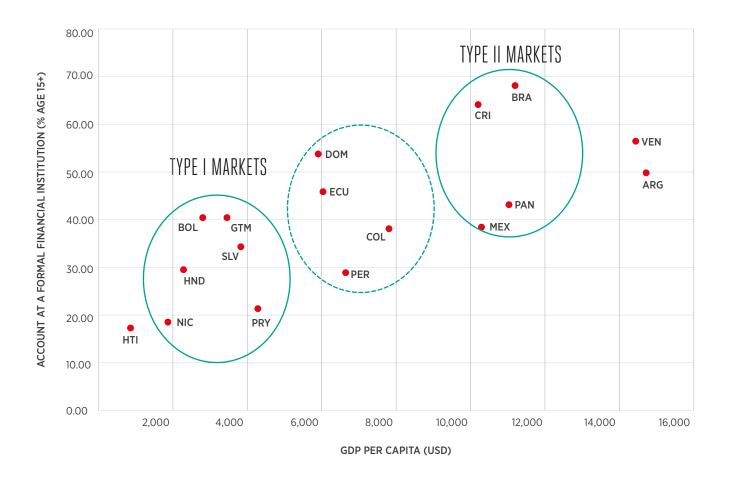
<sup>16.</sup> Belize, Jamaica, Puerto Rico, Trinidad & Tobago were omitted from analysis as total population is less than 3 million.

<sup>17.</sup> Chile and Uruguay were omitted from analysis as GDP per capita is greater than USD 15,000.

<sup>18.</sup> Research shows that strong financial systems enhance economic growth. In turn, economic growth deepens the formal financial sector. World Bank Global Financial Development Report 2014.

# FIGURE 3

# LAC MARKETS BY ACCOUNT PENETRATION AT FINANCIAL INSTITUTIONS AND GDP PER CAPITA<sup>19</sup>



DATA SOURCES: GLOBAL FINDEX 2014; WORLD BANK 2013

At the bottom left of Figure 3 are 'Type I' markets—the lowest-income markets in the region, which also tend to have the highest rates of financial exclusion on average. At the top right of the graph are 'Type II' markets—relatively high-income markets that tend to have higher rates of financial inclusion, although there are exceptions. The markets in the middle group are likely to be hybrids of Type I and Type II markets, although they are also home to unique approaches to mobile financial services. We will discuss these distinct models later in this section.

For the purpose of this analysis, the outliers at both ends of the spectrum (Haiti, Venezuela, and Argentina) have been excluded.<sup>20</sup>

<sup>19.</sup> Data sources include Global Findex 2014 and the World Bank (2013). Note that the analysis is limited to markets with populations over three million and a GDP per capita of less than USD 15,000, for which Global Findex data is available. Note that account penetration statistics for Paraguay are from 2011: Global Findex 2014 statistics are not available for Paraguay.

<sup>20.</sup> Recent economic crises in Argentina and Venezuela have made analysing financial inclusion impractical. Haiti's extreme rates of poverty and financial exclusion put it in a category of its own.

FIGURE 4

# CHARACTERISTICS OF TYPE I AND II MARKETS<sup>21</sup>

TYPE I MARKETS Low-income, low banking rates	Bolivia, El Salvador, Guatemala, Honduras, Nicaragua and Paraguay	<ul> <li>GDP per capita of USD 3,130</li> <li>33% of adults have an account at a financial institution</li> <li>57% mobile subscriber penetration rate, of total population</li> <li>9 mobile money services</li> </ul>
TYPE II MARKETS High-income, high banking rates	Brazil, Costa Rica, Mexico and Panama	<ul> <li>GDP per capita of USD 10,860</li> <li>57% of adults have an account at a financial institution</li> <li>50% mobile subscriber penetration rate, of total population</li> <li>10 mobile money services</li> </ul>

These market groupings closely correlate with CGAP's market archetypes for financial inclusion, which were adapted for this study. CGAP classifies the majority of Type I markets as "Mobile Leapfrog" markets, in which "MNOs fill a banking infrastructure gap to increase the percentage of the population that has access to services." Type II markets are classified as "Convergence Battle" markets, in which branchless banks, retailers and, to some extent, MNOs, compete fiercely for the same customer in urban areas. In all markets, rural populations are perpetually difficult to reach, although these populations are shrinking (see Box 1 below).

### BOX 1

# LAC'S RURAL-URBAN FINANCIAL SERVICES DIVIDE

LAC is no longer primarily rural. After 60 years of rapid urban development, 79% of people in LAC now live in towns or cities, compared to only 37% of Sub-Saharan Africa's population.<sup>24</sup> By 2050, urban residents will represent 90% of the region's population, and Brazil and the Southern Cone may reach this level by 2020.<sup>25</sup>

Despite being more urbanised than other regions, the urban-rural gap in access to financial services remains a significant challenge. According to the 2014 Global Findex data, Mexico, Panama, the Dominican Republic and Bolivia have struggled to improve access to finance in rural regions.

Given that commercial banking penetration in rural areas is typically low because traditional financial institutions lack the required business case for branch-based operations to be profitable, mobile money is an economically efficient way to extend the reach of financial services, particularly where mobile coverage extends to remote areas. The latest GSMA Mobile Economy Report (2014)<sup>26</sup> noted that 2G coverage is generally ubiquitous across the region, whilst considerable progress has been made to build out 3G and even 4G, which is projected to cover 76% of the population in Latin

<sup>21.</sup> Weighted averages are provided for GDP per capita, account penetration, and mobile subscriber penetration. Data sources include the World Bank (2013), GSMA Intelligence (2015) and the Global Findex (2014)

<sup>22.</sup> CGAP's global market archetypes, introduced in 2013, are based on GDP per capita relative to population density. Applying this framework to LAC markets yields a very similar set of market groupings. The rationale for modifying CGAP's approach to LAC markets was that they have similar levels of population density: most LAC markets are considered relatively low-density: only three markets have over 150 people per square kilometre. Population density metrics are most relevant when East Asia, South Asia, and the Pacific are part of the comparative analysis; no LAC market comes close to reaching the population density levels of Bangladesh, India and Indonesia. See Xavier Faz and Ted Moser, 2013, "Advancing Financial Inclusion through Use of Market Archetypes," CGAP Focus Note No. 86. Available at: http://www.cgap.org/sites/default/files/Focus-Note-Advancing-Financial-Inclusion-through-Use-of-Market-Archetypes-April-2013.pdf

<sup>23.</sup> Xavier Faz and Ted Moser, April 2013, "Advancing Financial Inclusion through Use of Market Archetypes," CGAP Focus Note No. 86. Available at:

 $<sup>24. \</sup>quad World \ Bank, \ 2013, \ Urban \ Population \ (\% \ of \ total). \ Available \ at: \ http://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS/P.URB.TOTL.IN.$ 

<sup>25.</sup> Paulo A. Paranagua, 11 September 2012, "Latin America struggles to cope with record urban growth", The Guardian.

 $<sup>26. \</sup>quad \mathsf{GSMA}, 2014, \mathsf{The\ Mobile\ Economy\ Latin\ America\ 2014}. \ \mathsf{Available\ at:\ http://www.gsmamobileeconomylatinamerica.com/decomplex and the decomplex and the dec$ 

America by 2020. Where a mobile money service can create a compelling value proposition for rural customers, as well as lower the barriers to adoption of financial services, providers can play an important role in increasing access to financial services in rural areas.

Mobile money could also help to meet a major need in urban areas: bill payment services. On average, 95% of people in LAC have access to electricity (compared to 32% in Sub-Saharan Africa).<sup>27</sup> Processing bill payment transactions for utilities and other services used by urban residents via mobile money could meet this growing demand.

# Type I markets

Type I markets in LAC have certain characteristics that make it difficult for financial services providers to reach underserved populations through traditional banking models. Comprised of the poorest countries in the region, only 33% of the adult population<sup>28</sup> has an account at a formal financial institution, including accounts through cooperatives and credit unions. Account balances are much too low for brick-and-mortar bank branches to be cost-effective, particularly in rural areas. On the other hand, 58% of the total population in these markets has access to a mobile phone, making Type I markets ideal candidates for mobile money services offered by mobile operators. These markets could adopt commercial models with simple value chains, similar to the ones that have been so successful in East Africa.<sup>29</sup>

Mobile operators are taking the lead in launching mobile money services in many of these markets, with some seeing high customer uptake. **Paraguay, El Salvador, and Honduras all feature in the top 15 mobile money markets in the world** when ranked by 90-day active accounts as a proportion of the total adult population.<sup>30</sup>

Interestingly, Millicom's LAC mobile money services are all in Type I markets. With operations in Bolivia, Guatemala, El Salvador, Honduras and Paraguay, Tigo (part of Millicom group) counts over 3.35 million active mobile money accounts in the LAC region.<sup>31</sup> Tigo Money in Honduras recently announced it crossed the 1 million active customer mark.<sup>32</sup>

<sup>27.</sup> World Bank, 2010, Access to Electricity (% of population). Available at: http://data.worldbank.org/indicator/EG.ELC.ACCS.ZS/countries/IW-ZJ-ZG?display=graph

<sup>28.</sup> A weighted average for Type I markets

<sup>29.</sup> While these services are offered by MNOs, customer funds are safeguarded in a formal financial institution under a pooled account or trust account.

<sup>30.</sup> GSMA Mobile Money analysis

<sup>31.</sup> Overview of Tigo Money: http://www.millicom.com/who-we-are/our-brands/tigo-money/

<sup>32.</sup> telecompaper, 16 February 2015, "Tigo Honduras reaches 1 mln Tigo Money users". Available at: http://www.telecompaper.com/news/tigo-honduras-reaches-1-mln-tigo-money-users--1065494

### BOX 2

# SPOTLIGHT ON MOBILE FINANCIAL SERVICES EL SALVADOR

El Salvador has made the greatest progress in closing the financial access gap, by nearly tripling the percentage of adults with an account from 14% in 2011 to 37% in 2014.<sup>33</sup> This is the highest growth in account penetration in LAC markets for which data is available. The data indicates that mobile money has played a meaningful role in this growth—Global Findex reports that 4.6% of adults in El Salvador have a mobile money account, far exceeding the regional average of 1.7%, and boasts the highest penetration rate of mobile money accounts in the region.<sup>34</sup>

In El Salvador, mobile operator Tigo has invested heavily in building an extensive distribution channel for its mobile money service, Tigo Money. Since it launched in 2011, Tigo Money has significantly expanded access, adding over 2,000 agents across the country. Today, Tigo Money in El Salvador accounts for over 20% of Tigo's mobile subscriber base and is one of Millicom's strongest deployments globally.<sup>35</sup>

Interestingly, domestic person-to-person payments have not been the key driver of growth for mobile money in El Salvador thus far. Tigo Money has gained traction through bill payments and international remittances. Most strikingly, Tigo El Salvador receives a high volume of international remittance payments—predominantly from the US—through its partnership with Western Union. This is material given that remittance flows from abroad constitute roughly 18% of El Salvador's GDP.<sup>36</sup>

\*This text box is based on a blog by Mireya Almazán, published on the MMU website in April 2015.

Available at: http://www.gsma.com/mobilefordevelopment/spotlight-on-central-america-mobile-money-enhances-financial-inclusion

Setting up a mobile money service is extremely hard work, even for mobile operators that have already managed to achieve high penetration rates on voice and data services. Operators will incur heavy losses in the early years to acquire customers and build a distribution network, and will need to invest in the service for roughly three years before breaking even. As mobile money enters a high-growth stage, when an operator acquires at least 15% of its GSM base as active mobile money customers, modest, positive profit margins of 2-5% can be expected.<sup>37</sup> However, this is usually not attractive enough financially for mobile operators, especially when compared to their core GSM business.

Only a digital ecosystem can drive healthy mobile money margins of more than 20%. This means shifting away from cash-based transactions and expanding the range of use cases for customers to keep funds digital. For deployments with high numbers of over-the-counter (OTC) transactions, the transition to digital is more complex, and heavy investments in customer acquisition are needed to drive the adoption of mobile wallets.<sup>38</sup>

Thus, the operator-driven commercial mobile money models flourishing in Type I markets would be greatly enhanced by greater ecosystem development. In particular, more collaboration between operators and traditional financial services providers could be attractive. Mobile operators' investment in building the distribution channel can be leveraged by banks to close the access gap in a way they would otherwise not be able to.

<sup>33.</sup> An account includes those at a financial institution or with a mobile money provider, as reported by Global Findex 2014

<sup>34.</sup> Global Findex 2014 defines this metric as the percentage of respondents who report personally using a mobile phone to pay bills or send or receive money through a mobile money service in the past 12 months; or receiving wages, government transfers, or payments for agricultural products through a mobile phone in the past 12 months (% age 15+). This data is only available for select markets in 2014.

<sup>35.</sup> For a description of Millicom's mobile financial services initiatives, see: http://www.millicom.com/what-we-do/mobile-financial-services/

InterAmerican Development Bank, Multilateral Investment Fund, "Remittances to Latin America and the Caribbean in 2013: Still below Pre-Crisis Levels". Available at: http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38842219

<sup>37.</sup> Mireya Almazan and Nicolas Vonthron (November 2014), "Mobile Money Profitability: A digital ecosystem to drive healthy margins", GSMA Mobile Money for the Unbanked (MMU). Available at: http://www.gsma.com/mobileforde-velopment/wp-content/uploads/2014/11/2014\_Mobile-money-profitability-A-digital-ecosystem-to-drive-healthy-margins.pdf

As we have seen in other regions, partnerships between mobile operators and financial institutions—to offer products such as mobile credit, savings, and insurance—can be a win-win. In Kenya, a savings and credit product jointly offered by the Commercial Bank of Africa (CBA) and Safaricom, M-Shwari, has made a major contribution to CBA's retail banking portfolio. In March 2015, M-Shwari reported 10 million accounts with over USD 1.6 billion in savings and over USD 300 million in loans. <sup>39</sup> This type of partnership is also yielding results in Paraguay. Tigo's partnership with Banco Familiar on a mobile credit product has attracted 50,000 new loan clients, most of whom were previously unbanked.

Account-to-account (A2A) interoperability can also be a powerful way to expand the range of use cases available to consumers, as well as to increase the size of the pie for providers. A2A interoperability enables consumers to transfer funds from one account on one platform, to another account on a different mobile money or financial services platform. Mobile operators in Paraguay, for example, are beginning to explore how to interconnect their mobile money services to jointly deepen financial inclusion.

Mobile operators in Type I markets have made exciting progress and boast mobile money penetration rates that are amongst the highest in the world. However, there is still a long way to go to make the overall mobile money proposition more attractive for consumers and providers alike.

Banks invest in agent banking to grow revenue in a capital-efficient manner, to bring greater convenience to current customers, and to add new customers from among the emerging lower-middle income class. 42

# Type II markets

Type II markets are much wealthier than Type I markets, with average national GDPs exceeding Type I countries by roughly 3.5 times. Type II markets tend to share two major features. First, banks are deeply rooted in the economy and are strong contenders to become mobile financial services leaders in their respective countries. Brazil and Costa Rica, for example, have bank account penetration rates that are significantly above average for the region.<sup>41</sup> Branchless banking models have contributed to the reach of the banking sector in Type II markets.

Second, mobile operators and retailers have achieved high penetration levels and built strong customer relationships in their core business. With the exception of Mexico, all Type II markets have mobile subscriber penetration rates that are above the regional average.<sup>43</sup> Similarly, retail chains are well established, with thousands of outlets across Type II markets.

Thus, multiple strong contenders emerge for the provision of financial services. In some markets, mobile operators, banks and retailers willingly partner to leverage each other's assets. In others, strong lobbying by industry associations or regulatory restrictions result in partnership models not all parties approve of. Regardless of particular market dynamics, the upshot is that Type II markets tend to be more integrated with current financial and retail infrastructure: existing distribution networks are leveraged for cash-in/cash-out, companion cards are introduced to tap into point-of-sale infrastructure, and back-end interconnections can be made with national clearing and settlement systems. In this way, many mobile money deployments in Type II markets are born interoperable with the banking sector and begin to develop an ecosystem from the start.

<sup>39.</sup> ICapital News, 6 March 2015, "M-Shwari hits 10 million accounts, advancing Sh29B in Ioans". Available at: http://www.capitalfm.co.ke/business/2015/03/m-shwari-hits-10-million-accounts-advancing-sh29b-in-loans/

<sup>40.</sup> nter-American Development Bank, 29 October 2014, "Institutions from Brazil, Ecuador and Paraguay win the IDB's Inter-American Awards for Financial and Entrepreneurial Innovation". Available at: http://www.iadb.org/en/news/news-releases/2014-10-29/inter-american-awards-foromic-2014,10964.html

<sup>41.</sup> Global Findex 2014

<sup>42.</sup> Xavier Faz and Ted Moser, 2013, "Advancing Financial Inclusion through Use of Market Archetypes," CGAP Focus Note No. 86. Available at: http://www.cgap.org/sites/default/files/Focus-Note-Advancing-Financial-Inclusion-through-Use-of-Market-Archetypes-April-2013.pdf

### PARTNERSHIP MODELS TO INTEGRATE WITH EXISTING FINANCIAL INFRASTRUCTURE

It is not surprising that many mobile money schemes in LAC are leveraging existing banking infrastructure, particularly in Type II markets. LAC enjoys relatively more developed banking infrastructure, with higher numbers of branches and ATMs per capita than other developing regions. Type II markets have an average of 27 commercial branches per 100,000 adults, compared to 17 in Type I markets, and 3.8 in Sub-Saharan Africa.<sup>44</sup>

The region is also home to extensive agent or correspondent banking networks. These networks help to extend the reach of the banking sector, although they are often part of bank branch decongestion strategies, rather than a tool for new customer acquisition.<sup>45</sup> Nevertheless, these networks are becoming distribution points for mobile money services, particularly in Brazil, where banking correspondents are located in every municipality in the country. Approximately 150,000 correspondents are authorised to open mobile money accounts and perform cash-in/cash-out transactions on behalf of banks. The vast majority (over 90%) of these full-service outlets are agents for three prominent banks with mass market strategies: Banco do Brasil, Caixa Economica Federal, and Banco Bradesco.<sup>46</sup> These banks have entered into commercial partnership agreements with mobile operators for mobile money services.

Even though Brazilian regulation allows non-banks to issue e-money on their own, the significant depth of the banking system makes for nearly compulsory partnerships. Mobile operators can take advantage of their banking partners' infrastructure and footprint, while also obtaining regulatory cover—to avoid applying for a payments license directly. Banks, on the other hand, obtain access to the mobile subscriber base of the operator, and new revenue streams that come from transactions on their switching and acquiring networks. The advantage of this arrangement is the potential to exploit the combined assets of these major institutions, including national clearing and settlement systems. The disadvantage is that no single party is fully accountable for putting its weight and resources behind the mobile money scheme, with the risk of the service getting stuck in the start-up phase.

Remarkably, all but one mobile money deployment within Type II markets are integrated with banking infrastructure for distribution, either through agent banking networks or ATMs. By comparison, only three of nine deployments in Type I markets use existing banking infrastructure for distribution.

In addition to leveraging agents and ATM networks for cash-in and cash-out, many new mobile money deployments in LAC are tapping into card acceptance infrastructure. Again, this is particularly widespread in Type II markets; Brazil alone has over 3.4 million POS devices<sup>47</sup> and Mexico has at least half a million.<sup>48</sup> Mobile money deployments are tapping into these networks in several different ways. One way is by issuing companion cards for mobile money accounts, providing customers with another channel to access their electronic funds. Another way is by entering into commercial agreements with acquiring networks to allow mobile money purchases through the installed base of POS devices.

**Nearly a third of all deployments in LAC offer companion cards**, compared to just 16% of services in East Africa. Notably, close to 80% of deployments within Type II markets offer companion cards. For example, Zuum, a mobile money service offered through a joint venture between Telefónica and MasterCard in Brazil, offers companion cards for customers to access 1.8 million merchants that accept MasterCard and thousands of Cirrus ATMs across the country.

<sup>44.</sup> World Bank 2013

<sup>45.</sup> Ignacio Mas and Mireya Almazán, Winter 2011, "Banking the Poor through Everyday Stores" in Innovations, 6 (1), 119–128. Available at: http://www.mitpressjournals.org/doi/abs/10.1162/INOV\_a\_00062#.VUNg1vIVhBc

<sup>46.</sup> Banco Central do Brasil, April 2015, http://www.bcb.gov.br/?CORPAIS.

<sup>47.</sup> World Bank, 2011, "Payment Systems Worldwide: A Snapshot. Outcomes of the Global Payment Systems Survey 2010".

<sup>48.</sup> Committee on Payment and Settlement Systems, 2011, "Payment, clearing & settlement systems in Mexico," in CPSS Red Book, Volume 1.

### BOX 3

# COMPANION CARDS AND MOBILE MONEY

Several mobile money deployments across the region are offering companion cards for their mobile money accounts. This is usually a debit or pre-paid card tied to a customer's mobile money account. A subscriber to one of these deployments can use either a phone or card to pay for goods in stores, make purchases online, or withdraw cash at ATMs, all funded by her mobile money account.

Although deployments around the world are beginning to experiment with this approach, it is a particular trend in large Latin American markets. Four mobile money deployments in Brazil—Zuum, Oi Carteira, Meu Dinheiro Claro, and TIM/Caixa Multibank—offer either a Visa or MasterCard-branded companion card. In Peru, a new companion card deployment, Tu Dinero Móvil, was launched in the last six months as a joint venture between MasterCard and Movistar.

Since companion cards for mobile money are relatively new, little has been documented on uptake and usage, or how they have affected customer acquisition. Moreover, each deployment views the role of its physical card differently depending on its market and digital payments strategy. It is therefore too early to assess the impact companion cards are having on mobile money in general.

However, the recent wave of companion card launches is a sign that more mobile money providers are leveraging existing card acceptance networks to fast-track merchant payments. It also indicates that providers are finding it appealing to provide a channel that is familiar—and often aspirational—to consumers. Companion cards also require less investment in customer education than a strictly mobile proposition.

However, several mobile money deployments have found it costly to issue and distribute cards, and replace lost or stolen cards, particularly if they are EMV-compliant. In part to mitigate these costs, most mobile money schemes have started to charge card-issuance fees ranging from USD 2 to USD 6, although customers are often offered airtime bonuses or initial e-value to offset the one-time fee.

Companion cards create unique marketing challenges for mobile money deployments. Not only do customers need to understand the concept and relative value of both channels, but a plastic card and mobile money wallet may have different value propositions for customers, which can affect a deployment's segmentation strategy and marketing tactics. For example, while both channels allow value to be stored and require cash-in/cash-out mechanisms, the mobile wallet is best suited to P2P/remote payments and bill payments that allow customers to initiate transactions from wherever they are. A card, on the other hand, is optimised mainly for merchant payments at retailers. Creating awareness and communicating the distinct functions of each form factor can be a challenge, especially in young mobile money markets.

\*This text box is based on a blog by Mireya Almazán and Gerald Rasugu, published on the MMU website in August 2014. Available at: http://www.gsma.com/mobilefordevelopment/companion-cards-and-mobile-money-sticking-with-plastic

# LARGE RETAIL CHAINS CAN BOOST MOBILE MONEY DISTRIBUTION

Many LAC financial institutions and mobile money providers have been able to take advantage of large national or regional retail chains to boost their physical presence in their countries. The retail sophistication of Type II markets, in particular, has driven this trend.

OXXO, a franchised chain of convenience stores, has over 11,000 outlets in Mexico and is planning to expand into Colombia. As such, OXXO is an attractive commercial partner for mobile money deployments. In January 2014, Citibank's Mexican subsidiary, Banamex, introduced a new debit product in partnership with Visa and OXXO: Saldazo. A Saldazo account can be opened at any OXXO store in Mexico, where customers can also conduct cash-in/cash-out transactions, and can be linked to Banamex's mobile money service, Transfer.

Big box retailers can also play a role in mobile money distribution. Wal-Mart, for instance, is building a strong presence in Latin America, with more than 3,900 retail outlets. While more than half of its outlets are in Mexico, it also has a sizeable presence in Brazil, Chile, Costa Rica, and Guatemala.<sup>49</sup> Commercial agreements with Wal-Mart are being sought for mobile money companion card sales and cash-in/cash-out transactions.

However, large retailers can often drive commercial arrangements that end up raising the prices of agent transactions. Large retailers are also less nimble in their ability to change operating procedures or update software to accommodate for mobile money. At OXXO stores, for example, a cash-in without a Saldazo account costs roughly USD 0.5. OXXO also initially limited cash-out for mobile money accounts, presumably for competitive reasons. Therefore, mobile money providers cannot rely solely on the reach of large retail networks to succeed—they must still do the hard work of building and managing a distribution network.

# Unique approaches to mobile financial services in LAC

While Type I and Type II markets in the region have commonalities, they do not capture the full variety of market dynamics and MFS initiatives in LAC.

Two LAC markets in particular are introducing unique approaches to mobile financial services: Peru and Ecuador. In Peru, based on an initiative of the Association of Banks (ASBANC), a group of more than 30 e-money issuers are preparing to launch an open and interoperable e-money platform. In Ecuador, the central government is the only issuer of e-money, as established by a legal framework issued in 2014.<sup>50</sup> While both are in early stages, these two approaches have already attracted international attention, and are described in further detail below.

# **OPEN E-MONEY PLATFORM IN PERU**

Banks, non-bank financial institutions, the newly created e-money issuing entities (*Entidades Emisoras de Dinero Electrónico* or EEDE) and the Peruvian Association of Banks are creating a unified value proposition for low-income consumers through a shared platform. Partnering with Ericsson, this group of e-money issuers is developing the platform. At a technical level, the aim is to create an e-money account-hosting environment that would service the accounts of all participating institutions in a central location. To facilitate the implementation and future administration, these partners have created a new company, Pagos Digitales Peruanos (PDP) S.A.

For cash-in and out, PDP will leverage Peru's existing network of banking agents, in addition to building more service points. Merchants and agents will be fully interoperable, and the goal is to reach about 20,000 shared agents.

The head of ASBANC has been quoted in the press as saying their target is to help the national efforts towards financial inclusion by developing this new transactional channel. PDP is fully financed by its partners, which mobilised an initial investment of USD 10 million.<sup>51</sup> The project manager has shared that ASBANC expects to reach five million Peruvians within five years of launching.<sup>52</sup>

ASBANC expects to go live at the beginning of the third quarter of 2015. Once launched, this multi-tenant interoperable financial industry-led scheme would be a world first.

<sup>49.</sup> http://corporate.walmart.com/our-story/our-business/locations/

<sup>50.</sup> Resolución No.005-2014-M de la Junta de Política y Regulación Monetaria y Financiera

<sup>51.</sup> ASBANC's foundation, Centro de Estudios Financieros (CEFI), is contributing 51% of the project's budget.

<sup>52.</sup> Perú 21, 14 November 2014, "Dinero electrónico será usado en el Perú desde abril de 2015". Available at: http://peru21.pe/economia/dinero-electronico-usado-peru-desde-abril-2015-2204039

### A GOVERNMENT-LED E-MONEY MODEL IN ECUADOR

The Ecuadorian approach to mobile financial services is a policy approach rather than a commercial approach: the Central Bank of Ecuador (CBE) established itself as the sole e-money issuer in the country.<sup>53</sup> Central banks do not normally offer retail banking services, but customers in Ecuador will now be able to open an e-money account at the CBE.

Ecuadorian e-money accounts can be opened remotely using any mobile phone provider and national identity number. All customer fees and tariffs have been set unilaterally by the CBE. A website explaining the service offering, pricing, and agent locations is now available for consumers.<sup>54</sup>

Setting up e-money distribution is expected to be a collaborative effort of the public and private sector. Namely, financial cooperatives, credit unions, payment networks, and local mobile operators will be contracted by the CBE to build out agent networks.

Why did Ecuador adopt this unique and curious approach to mobile money? One reason is tied to the fact that since 2000, the US dollar has been the legal tender in the country. This means that the CBE incurs heavy cash management costs to maintain the nation's dollar supply and renew old bills. Should e-money become widely used and accepted, the government's cash management burden would diminish while CBE reserves could potentially increase.

Nevertheless, there are many open questions regarding this approach. These include: (1) the incentive structure for private sector players to invest in building out a healthy cash-in and -out network for the national service, (2) the implications of pulling cash-in circulation into the CBE instead of prudentially regulated financial institutions, and (3) oversight and compliance mechanisms in place for an e-money issuer that is also a regulator and financial authority.

Over the last year, a variety of pilot programmes have been conducted by the CBE to test the new service and raise customer awareness. As many as 13,000 e-money accounts are reported to have been opened.<sup>55</sup> However, it is early days and the success of this initiative is yet to be seen.

This emerging e-money model in Ecuador demonstrates the complex interplay between commercial and government interests. An enabling policy and regulatory environment is critical for mobile financial services to flourish.

<sup>53.</sup> Resolución No.005-2014-M de la Junta de Política y Regulación Monetaria y Financiera

<sup>54.</sup> http://www.dineroelectronico.ec/

<sup>55.</sup> Information reported by CBE's Electronic Money Director, Fausto Valencia to the president of Ecuador, Rafael Correa, in a Presidential Broadcast published by the CBE on 23 Mar 2015, available here (minute 3:55): https://www.youtube.com/watch?v=-e4Nd2R6Txo

# The evolution of the policy and regulatory environment for MFS in LAC

onsiderable progress has been made in creating policy and regulatory frameworks that allow both bank and non-bank mobile money providers in LAC to introduce new business models. Anecdotal evidence, commercial lessons, and international regulatory principles all support opening the market to providers with different value propositions. Global best practices are already well established at both the regulatory and commercial level to ensure that mobile money schemes are sound and contribute to the integrity and stability of the financial system.<sup>56</sup>

# BOX 4

# AN ENABLING REGULATORY APPROACH FOR MOBILE MONEY

When mobile operators are allowed to provide sustainable mobile money services, they can play a critical role in the development of more efficient and inclusive financial sector. Regulators that have created a 'window' for non-banks to enter the mobile money market under their guidance have taken an important first step.

Allowing for competition in the provision of mobile money services is necessary, but not sufficient. Our analysis of service providers, based on data from the GSMA's *Global Adoption Survey*, has identified the additional elements required to unleash the potential of non-banks and enable the mobile money market to grow.

By 'enabling regulatory approach', we mean that by implementing the recommendations of global Standard-Setting Bodies (SSBs), such as the Bank for International Settlements (BIS) and the Financial Action Task Force (FATF), the regulator has taken a functional and proportional approach that allows banks and non-bank providers to compete, as well as establish different types of partnerships for the provision of mobile money services. More specifically, the rules established by the regulator:<sup>57</sup>

- Permit non-banks to issue electronic money (or equivalent)<sup>58</sup> by allowing them to:
  - be licensed directly, OR

Simone di Castri, 2013, "Mobile Money: Enabling regulatory solutions", GSMA Mobile Money for the Unbanked (MMU).
 Available at: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU-Enabling-Regulatory-Solutions-di-Castri-2013.pdf

<sup>57.</sup> These rules may be codified or may be outlined in individual letters of no objection.

<sup>58.</sup> In some cases, regulators authorise providers to offer such services under a different name, such as 'mobile money', 'mobile payment', or 'electronic deposit'.

- set up a subsidiary for this business, OR
- apply for a payments bank (or equivalent) license, OR
- provide the mobile money service under a letter of no-objection to the non-bank or its partner bank, pending the approval of a specific regulation.
- · AND impose initial and ongoing capital requirements proportional to the risks of the e-money business
- AND permit them to use agents for cash-in and cash-out operations
- AND do not prescribe the implementation of specific interoperability models without allowing for a market-led approach.

Adapted from Simone di Castri, 2015, "Is regulation holding back financial inclusion? A look at the evidence", GSMA Mobile Money for the Unbanked (MMU). Available at: http://www.gsma.com/mobilefordevelopment/is-regulation-holding-back-financial-inclusion-a-look-at-the-evidence

Greater regulatory clarity has contributed to the growth of e-money services in LAC in recent years, though there's still a long way to go. In a region where money transaction services have traditionally been the business of banks, this requires a major shift in the mind-set of regulators and industry players.<sup>59</sup> As of April 2015, six<sup>60</sup> of 19 (32%) mobile money markets in LAC have an enabling environment for mobile money, up from only two in 2012 (Nicaragua and Peru). By comparison, ten of 13 (77%) East African mobile money markets and 47 of 89 (53%) live mobile money markets globally are considered 'enabling'.

This means that, of the approximately 420 million adults in the region's 19 mobile money markets, 231 million live in markets where regulation is not enabling.<sup>61</sup>

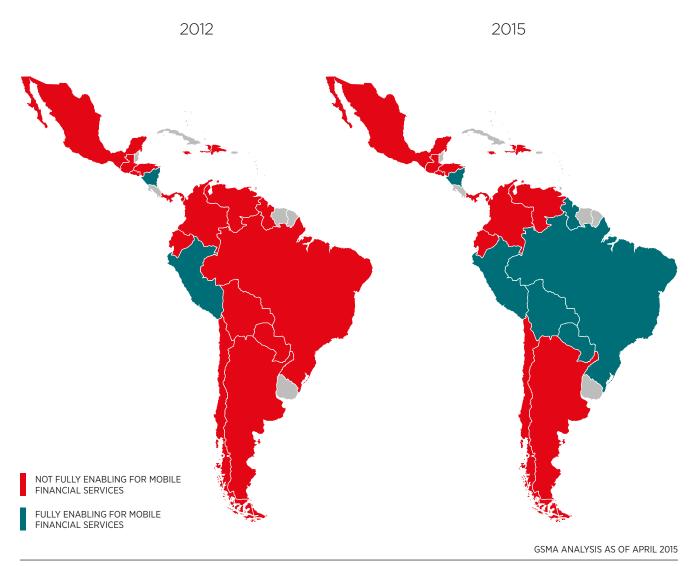
<sup>59.</sup> Xavier Faz, 2013, "A New Wave of E-Money in Latin America", CGAP. Available at: http://www.cgap.org/blog/new-wave-e-money-latin-america

<sup>60.</sup> These include Bolivia, Brazil, Guyana, Nicaragua, Paraguay and Peru. Uruguay also has an enabling regulation for mobile money and in fact issued the nation's first e-money license to Redpago in April 2015. As Redpago has not formally launched, it is not yet included in the GSMA MMU Tracker. Thus, Uruguay is not categorised as a "mobile money market" in this analysis.

<sup>61.</sup> GSMA Mobile Money analysis

# FIGURE 5

# **ENABLING REGULATION IN LAC MARKETS**



The 2014 Global Microscope provides a similar assessment of the regulatory environment for mobile financial services in LAC. LAC was ranked the lowest region in the world in terms of regulation of electronic payments. Central American countries (with the exception of Nicaragua) and Haiti were at the bottom of the regional and global rankings.<sup>62</sup>

Not all is dim, however. Taking a broader look at the enabling environment to achieve financial inclusion, beyond mobile money, five LAC markets rank in the global top 10 on overall scores in the Global Microscope: Peru, Colombia, Chile, Mexico and Bolivia. In addition, many financial institutions in LAC markets are beginning to innovate and close the financial access gap (i.e. Bancolombia and Davivienda in Colombia). Additionally, a few markets are allowing mobile operators to operate mobile money services sponsored by banking partners, or under domestic remittance licenses, in the absence of e-money regulation (i.e. El Salvador). Collectively, these factors explain why we see strong mobile money activity in markets that have not yet adopted enabling regulatory frameworks.

<sup>62.</sup> Simone di Castri, 2013, "Mobile Money: Enabling regulatory solutions", GSMA Mobile Money for the Unbanked (MMU).

Developed by the EIU in collaboration with the Multilateral Investment Fund (a member of the Inter-American Development Bank Group) and CAF (the development bank of Latin America), and with additional support from the Center for Financial Inclusion at Accion and Citi Microfinance, the Global Microscope scores countries as a way of benchmarking their progress toward a financially inclusive environment for those at the bottom of the pyramid. See https://centerforfinancialinclusionblog.files.wordpress.com/2014/11/eiu\_global\_microscope\_2014.pdf

Nevertheless, more enabling regulatory frameworks and greater regulatory certainty across the region could boost investment, promote competition among different business models, and introduce new products and services—all of which could greatly benefit consumers.

Brazil is a case in point, where three mobile money schemes were launched within six months of the central bank issuing a mobile payments bill (in May 2013) that allowed new and specialised legal entities for e-money issuers to be created under a license from the financial sector authority.<sup>64</sup> While only one Brazilian deployment actually required the new payments license, the others only launched partnership models when the potential for competition from non-banks became a reality.

Creating specialised non-bank legal entities is therefore one regulatory approach to enabling e-money. These new legal entities are usually referred to as 'payments companies' or 'e-money issuers'. In line with global best practices in safeguarding customer funds, licensees must set up a trust account equal in value to the amount of money issued electronically, and non-bank e-money issuers are not allowed to intermediate funds. In addition to Brazil, Bolivia, Paraguay and Peru have also modified their legal frameworks to allow new non-bank institutions to enter the payments market. Similarly, Colombia has modified its legal framework to allow non-banks to issue electronic deposits, akin to e-money that can accrue interest and is subject to deposit insurance.<sup>65</sup> The minimum required capital to acquire a dedicated e-money or e-deposit license varies across markets, but it is below USD 3 million.<sup>66</sup>

### FIGURE 6

# SAMPLE REGULATORY AND POLICY APPROACHES FOR MOBILE FINANCIAL SERVICES IN LAC<sup>67</sup>



Other markets have taken a more bank-centric approach to mobile money, whereby only banks can issue electronic deposits or payment instruments. Provisions in banking laws have allowed specialised financial institutions to be created, although they are still considered banks. For example in Mexico, non-banks can obtain a special banking license for issuing payment instruments, becoming a 'niche bank' or 'payments bank' that integrates seamlessly with the rest of the banking infrastructure (card/ATM switches, electronic funds transfer). Less capital is required of payments banks under this license, and they have a lighter reporting burden than full-fledged banks.<sup>68</sup>

Minimum capital requirements for this type of limited bank are approximately USD 14 million in Mexico, which is more than four times what is required of e-money issuers in other LAC markets.<sup>69</sup>

Several other countries are likely to adopt regulations enabling mobile money-specific licenses in the near future. For example, a financial inclusion bill has been drafted and presented to Congress in both El Salvador and Honduras. This will bring legal stability to the mobile money services already deployed in these markets and promote even more expansion.

<sup>64.</sup> Mireya Almazán, 2013, "Mobile Money Regulation in Latin America: Levelling the playing field in Brazil and Peru".

Available at: http://www.gsma.com/mobilefordevelopment/mobile-money-regulation-in-latin-america-leveling-the-playing-field-in-brazil-peru

<sup>65.</sup> While Colombia has modified its legal framework to allow non-banks to issue electronic deposits, the new regulation has yet to be issued, as discussed in Box 5.

<sup>66.</sup> Minimum capital requirements for e-money licenses tend to be in the order of USD 1 million. Colombia's specialized electronic deposit license has a minimum capital requirement of approximately USD 3 million.

<sup>67.</sup> Sources: Xavier Faz, 2013, "A New Wave of E-Money in Latin America," Global Microscope 2014, and GSMA analysis

<sup>68.</sup> Xavier Faz. 2013. "A New Wave of E-Money in Latin America". CGAP, Available at: http://www.cgap.org/blog/new-wave-e-money-latin-america

<sup>69.</sup> The relatively high capital requirements for payments banks in Mexico is a key consideration for GSMA's regulatory assessments. Mexico's regulatory environment is not considered fully enabling for mobile money services.

Only six LAC countries (Argentina, Haiti, Nicaragua, Panama, Trinidad and Tobago, and Venezuela) have no strategies or any recent initiatives to support financial inclusion. In Nicaragua and Panama, governments have expressed interest in promoting financial inclusion in declarations and laws, but concrete plans have not materialised. In contrast, Chile, Colombia, Mexico and Peru have created inter-agency commissions that bridge sectors and levels of government to promote financial inclusion.72

While all of these approaches can create enabling environments for mobile financial services, there are many other regulatory considerations that affect whether or not new entrants can capitalise on the mobile money opportunity. For example, it is critical for regulators to adopt know-your-customer (KYC) requirements that are proportional to risks and not unnecessarily onerous for providers and consumers. Simplified or tiered KYC regimes have been embraced in Guatemala, Mexico, Paraguay and Peru. Some LAC regulators have gone an extra step and allow for paper-less self-registration. Instead of registering through an authorised agent or point of sale, customers can dial a USSD code and enter basic personal information to set up their mobile money account. Brazil, Colombia, Mexico and Paraguay allow customers to open their accounts in this manner. Of course, this method of account opening is most feasible in markets where a national identity registry exists so that customer information can be verified on the back-end. In addition, SIM registration datasets can be leveraged for this purpose in some cases.

Finally, a number of countries have implemented, or are in the process of implementing, financial inclusion strategies to align regulatory reforms with clearly defined and shared policy objectives. Government support for financial inclusion is in fact a key metric evaluated under the Global Microscope, which examines the inclusiveness of national financial sectors.

All told, the regulatory and policy environment in LAC markets is demonstrating signs of a turning tide in favour of enabling mobile financial services.

### BOX 5

# REGULATION IN COLOMBIA DRIVES COMMERCIAL MODELS

To date, mobile money in Colombia has been driven largely by traditional financial institutions. This has been due to a relatively strong financial sector, as well as regulatory restrictions for non-banks to issue e-money. Banking infrastructure in the country is extensive, with financial institutions located in 99% of municipalities and approximately 50,000 banking correspondents, yet only 38% of Colombian adults have an account at a formal financial institution.

While Colombian financial institutions have innovated to reach new customer segments and have engaged in the provision of mobile financial services, the entry of new players with new business models can help to deepen financial inclusion and complement the robust financial infrastructure already in place.

A bill to create a special license for non-bank e-money issuers was submitted to Colombia's Congress in 2012. The bill faced strong opposition from a range of players, including the banking sector. The bill was approved in late 2014 and the regulation is being drafted amidst a consultation process, as of end of April 2015.

In parallel, the Ministry of Finance and Public Credit of Colombia released a National Strategy for Financial Inclusion in March 2014. At a high level, the strategy calls for the creation of a new specialised payments license, new mobile banking products, greater access to financial services in rural areas, increased access to credit for SMEs, and financial education initiatives.

Based on the contents of the financial inclusion strategy, and the fact that the regulator is engaging in a consultative approach to issuing regulation, prospects for regulatory reform are promising.

<sup>70.</sup> Alliance for Financial Inclusion, 2014, "Regulatory Approaches to Mobile Financial Services in Latin America". Available at: http://www.afi-global.org/library/publications/regulatory-approaches-mobile-financial-services-latin-america

<sup>71.</sup> Mireya Almazán, 2014, "Remote Account Opening: Making it Work for Mobile Money". Available at: http://www.gsma.com/mobilefordevelopment/remote-account-opening-making-it-work-for-mobile-money

<sup>72.</sup> The Economist Intelligence Unit, 2014, "Global Microscope 2014: The Enabling Environment for Financial Inclusion". Available at: http://www.citi.com/latinamerica/en/community/data/2014\_Global\_Microscope-EN.pdf

# The road ahead

ommercial models for mobile money cannot be examined in isolation. Banking and mobile telephony market structures, the regulatory environment, demographics, and many other market factors play a critical role in the development of new commercial models for mobile money. By reviewing the experiences of a subset of countries in the LAC, we are beginning to see a picture emerge of what could drive mobile money growth in the region, and the hurdles providers might encounter.

Widespread adoption and usage of mobile financial services in LAC still has a long way to go, but we are encouraged by the growth of successful deployments in the region, and the range of business models they are adopting. Competition is clearly heating up, and with it, the level of investment and interest from the private sector.

Type I markets—the poorest countries in the region with relatively low banking penetration rates—are seeing some level of success with mobile operator-led models for mobile money. Nevertheless, these deployments will require new partnership development to offer an expanded range of products and services that drive value for consumers and improve the bottom line of the provider. Operators must be deliberate and intentional in building a digital financial services ecosystem and achieving interoperability with other providers in their markets.

Type II markets—relatively wealthier LAC markets with strong banking sectors—have produced a range of integrated partnership models between operators, financial institutions, retailers and others. Interoperability and ecosystem development are central to the DNA of many of these schemes. While these models have the potential to go far, they are also prone to risks relating to institutional power plays and escalating prices for consumers. It will be critical for each entity to carefully manage these risks and stay customer-centric.

Across the entire region, regulatory certainty will be essential to developing a healthy digital financial ecosystem. With adequate prudential regulations and risk-based know-your-customer procedures, mobile operators can safely issue e-money and contribute to financial integrity, stability, and growth. The industry eagerly awaits the regulatory certainty that will open the door to increased investment from banks and non-banks alike, as well as yield more valuable products and services for consumers.

# Appendix A -Deployment tracker data for LAC 73

COUNTRY	NAME OF SERVICE	ORGANISATION	LAUNCH YEAR
Argentina	Mi Billetera Movil	Grupo Sicom	2013
Bolivia	Tigo Money	Tigo (Millicom)	2013
Brazil	Oi Carteira	Oi	2013
Brazil	Zuum	Vivo (Telefónica)	2013
Brazil	Meu Dinheiro	Claro (América Móvil) & Bradesco	2013
Brazil	TIM Multibank Caixa	TIM	2015
Brazil	Olha Conta	Olha Conta	2015
Chile	Cuenta Móvil	Entel	2010
Colombia	DDDedo	VTU de Colombia SA	2009
Colombia	DaviPlata	DaviPlata	2011
Colombia	Ahorro a la Mano	BanColombia	2013
Colombia	Transfer Aval	Claro	2012
Colombia	PlataMovil	MiPlata	2014
Dominican Republic	Orange M-peso	Orange	2014
Ecuador	Dinero Electronico	Central Bank of Ecuador	2015
El Salvador	Tigo Money	Tigo (Millicom)	2011
El Salvador	m-banco mobile money	m-banco	2011
Guatemala	Bancamigo	Claro (América Móvil)	2011
Guatemala	Tigo Money	Tigo (Millicom)	2011
Guyana Mobile Money Guyana Inc		Guyana Telephone and Telegraph Company (GT&T)	2013





COUNTRY	NAME OF SERVICE	ORGANISATION	LAUNCH YEAR
Haiti	TchoTcho	Digicel	2010
Haiti	Lajancash	Haitipay	2013
Haiti	Boom	Boom Financial	2013
Honduras	Tigo Money	Tigo (Millicom)	2011
Jamaica	M3 (Mobile Money for Microfinance)	Development Bank of Jamaica	2013
Jamaica	CONEC Mobile Wallet	Jamaica Co-operative Credit Union League	2013
Mexico	Boom	Boom Financial	2012
Mexico	Transfer	Telcel (América Móvil)	2012
Mexico	MiFon	Banorte	2012
Mexico	eZuza	eZuza	2013
Nicaragua	mPeso	mPeso	2010
Panama	Movil Cash	Cable & Wireless Panama	2014
Paraguay	Tigo Money	Tigo (Millicom)	2010
Paraguay	Envios Personal	Personal (Telecom Argentina)	2013
Peru	Billetera Móvil	Scotiabank	2012
Peru	Tu Dinero Móvil	Movistar (Telefonica)	2015
Venezuela	Movilway eWallet	Movilway	2011

# Appendix B -Commercial models for mobile money in LAC

# SAMPLE COMMERCIAL MODELS FOR MOBILE MONEY

BANK ACTIVITIES

MOBILE OPERATOR ACTIVITIES

MOBILE OPERATOR-DRIVEN: MOBILE OPERATOR ASSUMES MOST FUNCTIONS OF THE MOBILE MONEY VALUE CHAIN Safeguarding Telecom channel Brand & Distribution / Product / License customer (e.g. USSD, STK) marketing agent network platform holding funds 2 PAYMENTS COMPANY-DRIVEN: DEDICATED PAYMENTS COMPANY MANAGES CORE SERVICE OFFERING Safeguarding Distribution / Telecom channel Brand & Product / License customer (e.g. USSD, STK) marketing agent network platform holding funds BANK-DRIVEN: BANK ASSUMES MOST FUNCTIONS OF THE MOBILE MONEY VALUE CHAIN Safeguarding Telecom channel Brand & Distribution / Product / License customer (e.g. USSD, STK) agent network holding marketing platform funds

PAYMENTS COMPANY ACTIVITIES

27

# SELECT LAC MOBILE MONEY DEPLOYMENTS MAPPED BY MODEL

WHO ISSUES THE MOBILE MONEY ACCOUNT?\*

	1		2 DEDICATED PAYMENTS COMPANY			3
		TELCO	TELCO + CARD COMPANY JOINT VENTURE	TELCO + BANK(S) JOINT VENTURE	THIRD PARTY (NON-TELCO)	BANK
WITO PROVIDES THE SECORE COMPRONICATIONS CHAINNEES	SINGLE-TELCO	Tigo Money BO/ GT/ SV/HN/ PY, Tcho Tcho HT (Digicel), Orange M-Peso DO (Orange/ Banco Popular)	Zuum BR (Vivo/ MasterCard), Tu Dinero Movil (Movistar/ MasterCard)	Transfer MX (Telcel/ Banamex)	eZuza MX	Cuenta Movil CL (Banco de Chile/Entel), TIM Multibank Caixa BR (TIM/Caixa)
	MULTI-TELCO				DDDedo CO	Davivienda DaviPlata CO, Bancolombia Ahorro a la Mano CO

<sup>\*</sup> The entity that issues the account may be different to the entity that holds the license. For example, Scotiabank holds the license for Tcho Tcho to operate in Haiti, but Digicel issues the product and manages the technology platform.

# Appendix C - Glossary

## **Agent outlet**

In the case of mobile money, an agent outlet is a location where one or several mobile money agents are contracted to facilitate transactions for users. The most important of these are cash-in and cash-out (i.e. loading value into the mobile money system, and then converting it back out again); in many instances, agents register new customers too. Agents usually earn commissions for performing these services. As they are the human touch point for the mobile money service, they also often provide front-line customer service such as teaching new users how to initiate transactions on their phone. Typically, agents will conduct other kinds of business in addition to mobile money. The kinds of individuals or businesses that can serve as agents will sometimes be limited by regulation, but small-scale traders, microfinance institutions, chain stores, and bank branches serve as agents in some markets. Some industry participants prefer the terms "merchant" or "retailer" to describe this person or business to avoid certain legal connotations of the term "agent" as it is used in other industries. An active agent outlet is an agent outlet that facilitated at least one transaction within the past 30 days.

## Airtime top-up

Purchase of airtime via mobile money, funded from a mobile money account.

## **Bill payment**

A payment made by a person from either a wallet or over the counter to a biller or a billing organisation via a mobile money platform in exchange for services provided.

### **Bulk payment**

A payment made by an organisation via a mobile money platform to a person's mobile wallet. For example: salary payments made by an organisation to their employees' mobile wallet (B2P: business-to-person), payments made by a government to a recipient's mobile wallet (G2P), or payments made by development organisations to beneficiaries (D2P).

### Cash-in

The process by which a customer credits his account with cash. This is usually via an agent who takes the cash and credits the customer's mobile money account with the same amount of e-money.

# **Cash-out**

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

# **E-money**

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

# **Enabling regulation**

An 'enabling regulatory approach' for mobile money is one in which the rules established by the regulator:

- Permits non-banks to issue electronic money (or equivalent) by allowing them to:
  - · be licensed directly, OR
  - set up a subsidiary for this business, OR
  - apply for a payments bank (or equivalent) license, OR
  - provide the mobile money service under a letter of no-objection to the non-bank or its partner bank, pending the approval of a specific regulation.
- AND imposes initial and ongoing capital requirements that are proportional to the risks of the e-money business
- AND permits them to use agents for cash-in and cash-out operations
- AND does not prescribe the implementation of specific interoperability models without allowing for a market-led approach.

## G<sub>2</sub>P

A payment by a government to a person's mobile money account.

# International remittance

Cross border fund transfer from one person to another person. This transaction can be a direct wallet-to-wallet transfer, or can be completed through the use of an intermediary organisation such as Western Union.

# Interoperability

The ability for customers to undertake money transfers between two accounts at different mobile money schemes, or to transfer money between accounts at mobile money schemes and accounts at banks. To date, mobile operators in four markets have interoperated their mobile money schemes.

# Know-Your-Customer (KYC)

Financial institutions and regulated financial services providers are obligated by regulation to perform due diligence in order to identify their customers. The term is also used to refer to the regulation which governs these activities. The FATF (Financial Action Task Force) recommends a risk-based approach to due diligence for AML/CFT (anti-money laundering and counter-financing of terrorism) controls. Due to the lack of formal identity documents in some markets, solutions such as tiered KYC and adjusting acceptable KYC documentation can help mobile money providers facilitate customer adoption and increase financial inclusion, especially in rural areas.

# **Merchant payment**

A payment made from a mobile wallet via a mobile money platform to a retail or online merchant in exchange for goods or services. can help mobile money providers facilitate customer adoption and increase financial inclusion, especially in rural areas.

### **Mobile credit**

Mobile credit uses the mobile phone to provide credit services to the underserved. MMU tracks mobile credit services which meet the following criteria:

- The service allows subscribers to borrow a certain amount of money that they agree to repay within a specified period of time.
- The service must allow underserved people to apply for credit and repay it more easily
  using a mobile device. Airtime credit products or services that offer the mobile phone as
  just another channel to access a traditional credit product are not included.
- The service must offer an interface for initiating transactions for agents and/or customers that is available on basic mobile devices.

# Mobile financial services (MFS)

The use of a mobile phone to access financial services and execute financial transactions. Mobile money, mobile insurance, mobile credit and mobile savings are mobile financial services.

### **Mobile insurance**

Mobile insurance uses the mobile phone to provide microinsurance services to the underserved.

MMU tracks mobile insurance products which meet the following criteria:

- The service must allow subscribers to manage risks by providing a guarantee of compensation for specified loss, damage, illness, or death.
- The service must allow underserved people to access insurance services easily using a
  mobile device. Services that offer the mobile phone as just another channel for the clients
  of an insurance company to access a traditional insurance product are not included.
- The service must offer an interface for initiating transactions for agents and/or customers that is available on basic mobile devices.

## **Mobile money**

Mobile money is a service which the underserved can use to make and receive payments using a mobile phone.

MMU tracks mobile money services which meet the following criteria:

- The service must offer at least one of the following services: P2P transfer, bill payment, bulk disbursement, merchant payment, and international remittance.
- The service must rely heavily on a network of transactional points outside bank branches
  that make the service accessible to unbanked and underbanked people. Customers must
  be able to use the service without having been previously banked. Mobile banking services
  that offer the mobile phone as just another channel to access a traditional banking product,
  and payment services linked to a current bank account or credit card such as Apple Pay and
  Google Wallet are not included.
- The service must offer an interface for initiating transactions for agents and/or customers that is available on basic mobile devices.

# **Mobile money account**

An e-money account that is primarily accessed using a mobile phone and that is held with the e-money issuer. In some jurisdictions, e-money accounts may resemble conventional bank accounts, but are treated differently under the regulatory framework because they are used for different purposes (for example, as a surrogate for cash or a stored value that is used to facilitate transactional services).

An active mobile money account is a mobile money account that has been used to conduct at least one transaction during a certain period of time (usually 90 days or 30 days).

# Mobile network operator (MNO)

A company that has a government-issued license to provide telecommunications services through mobile devices.

# Mobile network operator (MNO)

Mobile savings uses the mobile phone to provide savings services to the underserved.

MMU tracks mobile savings services that meet the following criteria:

- The service allows subscribers to save money in an account that provides principal security, and in some cases an interest rate.
- The service must allow underserved people to save money using a mobile device. Services
  that offer the mobile phone as just another channel to access a traditional savings account
  are not included.
- The service must offer an interface for initiating transactions for agents and/or customers that is available on basic mobile devices.

# Over-the-counter (OTC) services

Some mobile money services are being offered primarily over-the-counter (OTC). In such cases, a mobile money agent performs the transactions on behalf of the customer, who does not need to have a mobile money account to use the service.

# Person-to-person (P2P) transfer

A transfer made from one person to another person.

# Point of sale (POS)

A retail location where payments are made for goods or services. A "POS device" denotes a specialised device which is used to accept the payment, e.g. a card reader.

# Regulator

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

# **Unbanked**

Customers who do not have a bank account or a transaction account at a formal financial institution.

### **Underbanked**

Customers who may have access to a basic transaction account offered by a formal financial institution, but still have financial needs that are unmet or not appropriately met.



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