



GSMA Mobile Money

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Executive summary

For over a decade, mobile money has been driving financial inclusion, opening access to digital transactions and giving people the tools to better manage their financial lives. With 690 million registered accounts across 90 countries at the end of 2017, mobile money has evolved into the leading payment platform for the digital economy in many emerging markets.¹

While mobile money has taken us a long way in a relatively short time, there is still much to be done to help close the digital divide and bring more people into the financial system; globally, 1.7 billion adults remain unbanked.² Much work also remains in promoting greater use of digital financial services among those who have an account, to fully unlock the opportunities of financial inclusion.

Today, the key question is how should the mobile money business model evolve to increase the relevance of mobile money accounts and meet the changing needs of individuals and small businesses? Transitioning towards a "payments as a platform" approach that connects consumers with third-party services across a range of industries is at the heart of this evolution.

Whilst laying the groundwork for the financial service ecosystem to grow around the mobile money platform is essential, the payments as a platform approach is not only about incorporating more partners and

third parties into the platform. It is about deepening the engagement with individuals and businesses by offering a frictionless end-to-end experience.

The platform approach will not only enable mobile money providers to future-proof their service by tapping into diverse pools of revenue; it will also drive employment and stimulate economic growth. This is achieved by identifying and effectively addressing consumer needs, and enabling entrepreneurs and small businesses to participate in the digital economy.

To make the shift, providers should build on their strengths and unique assets. Although, mobile money providers already possess the necessary skills and resources to transition to a platform-based model, there are several organisational and technological challenges to overcome. In short, this will require a shift in strategy and an integrated business-wide effort addressing five fundamental pillars, as outlined in this report.

^{1.} GSMA (2018). "2017 State of the Industry Report on Mobile Money."

^{2.} World Bank (2018). "The Global Findex Database 2017."

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The rise of platformbased business models in the digital economy

Over the last two decades, platform-based business models have become a key enabler of the digital economy. Across sectors, platforms have served as intermediaries, bringing together consumers and businesses. Platforms perform a range of functions crucial to the economy, from marketplaces to search engines and application distribution (e.g. Apple's App Store).

Platforms have been instrumental in the economic growth of both start-ups and larger companies, which rely on them to provide services online. Widespread mobile access and easy distribution via mobile apps have driven consumers' adoption of platforms and altered their expectations; consumers now expect mobile phones to be a "one-stop shop" for their daily needs, including financial services.

Financial technology (fintech) companies and online platforms are increasingly recognising the opportunity to serve mobile-first and mobile-only customer segments who expect and demand higher levels of service and convenience. These companies have significant reach and scale across emerging markets and are introducing disruptive business models that may threaten the revenue margins of mobile money providers.

Processing over a billion dollars a day and generating direct revenues of over \$2.4 billion annually, mobile

money has transformed the payment landscape in many emerging markets.³ Compared to other industries, the mobile money industry has thus far avoided the same level of disruption brought about by fintech companies and online platforms. This is due to a combination of regulation and the strength and breadth of key assets such as wide distribution networks, channel access, entrenched customer relationships through trusted brands and large customer bases.

However, those assets and barriers are not impossible to circumvent. Ubiquitous mobile internet access and platform business models mean that fintechs and internet platforms can bypass the strengths of today's mobile money industry. In this competitive landscape, innovative business models are crucial to ensuring that the mobile money industry can continue to serve customers sustainably and ensure the underserved are not left behind.

The opportunities of a platform-based business model for the mobile money industry

Central to the success of digital platforms are the number and variety of partnerships they enable, which help to build a diverse and engaged user base. To transition to a payments platform, mobile operators should build on their strengths—wide distribution networks, customer reach and trusted brands—while also capitalising on innovation by incorporating external products and services into their platforms. This means laying the groundwork for the financial service ecosystem to grow around their service, expanding the range of products available to customers and spurring local entrepreneurialism and innovation.



Box 1: Core attributes and enablers of mobile money platforms

The GSMA Mobile Money team studied more than 20 platform business models led by either financial services providers (banks, payment service providers, fintechs, mobile money providers, payment schemes, etc.) or other types of providers (e-commerce, social networks, etc.). Initiatives were selected based on their success and relevance to the mobile money industry, and a desire to highlight examples of how platform models function in different regions. We found that, while digital platforms can take many forms, they tend to share certain basic characteristics.

Based on these benchmark studies, we identified the core attributes of a mobile money platform:

- (1) Multi-sided model Platforms rely on an ecosystem of partners to serve end users. They do this by connecting producers (supply side) to users (demand side) through, for example, a digital interface and mutually agreed rules that enable parties on both sides of the platform to interact efficiently and with trust. Some platforms have even expanded their value proposition to producers of the platform. For instance, in Southeast Asia, ride-hailing start-up Grab is offering its drivers credit or insurance services.
- (2) Built upon numerous partnerships with producers on the supply side For many digital platform players, the number and variety of partnerships have been integral to their success. In China, for instance, Ant Financial has built an ecosystem of partners including over 100 asset management partners, banks, insurance companies and tens of millions of brick-and-mortar merchants. This breadth and scale across the financial services spectrum has enabled Ant Financial to build a diverse and engaged user base, with eight in ten of their users using more than two categories of services.
- (3) Providing access to mass user base on the demand side Network effects allow platforms to recruit massive populations of users when new services are launched. In South Korea, Kakao Bank, led by Kakao Corp., leveraged the reach of messaging app KakaoTalk's 42 million users to sign up one million banking clients within the <u>first five days of launch</u>.
- (4) Efficiently matching supply and demand side using data analytics Data and intelligence are pivotal for platforms, and valuable insights from existing activities pave the way for the ecosystem to expand. Most platforms use data analytics to better understand users' needs, which allows them to (a) reduce the risks of offering unprofitable services; (b) increase existing revenue sources by maximising sales; and (c) add additional revenue streams by offering suitable new services and products to users. This also creates a more customised, personal experience for their customers.

Platform model core attributes
Multi-sided model
Built upon numerous partnerships with producers on the supply side
Providing access to mass user base on the demand side
And efficiently matching supply and demand side using data analytics

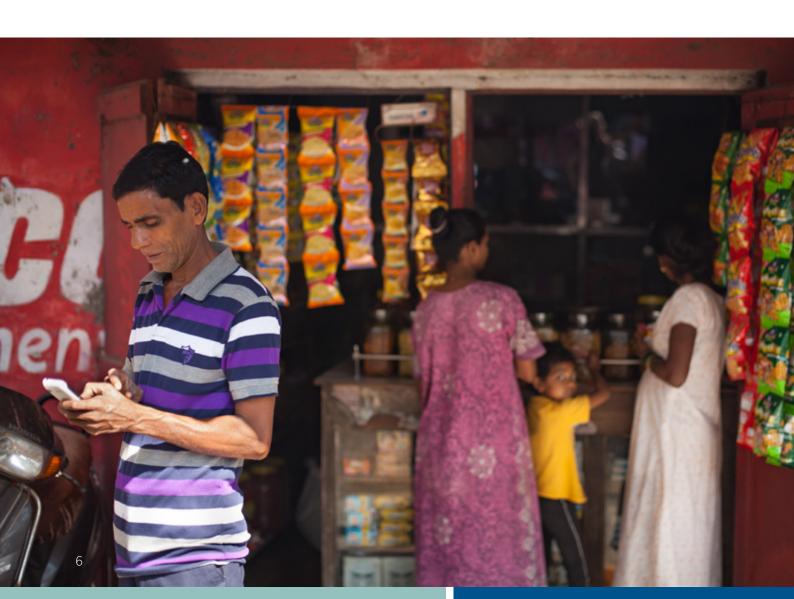
Mobile money providers already possess the skills and resources to execute this vision of building a payments platform. However, our research shows that to make this shift, providers will need to confront a number of organisational and technological challenges. We have grouped these technological and organisational aspects into five key pillars.

Five pillars of technological and organisational challenges to address

Establish **plugand-play access** to mobile money system Manage organisational change and introduce new business models Optimise user experience (UX) and user interface (UI)

Enable
third parties to
develop new
relationships via
the front end

Adopt a personalised approach to product design



Pillar 1: Establish plug-and-play access to the mobile money system

The payments as a platform model relies on participation in broader financial services and technology ecosystems. Therefore, a crucial step toward the platform-based approach is providing plug-and-play access to a mobile money service through APIs. This allows local entrepreneurs and start-ups to focus on building innovative products and services for various market niches, rather than recreating infrastructure or navigating customer authentication and Know Your Customer (KYC) regulations. The mobile money provider would collaborate on product innovation and in parallel would oversee authentication and authorisation, manage secure data sharing and ensure compliance with relevant regulations.

Industry-wide initiatives play a key role in enabling plug-and-play access. Some are already underway, such as the GSMA Mobile Money API,⁴ which streamlines and standardises third party connections to mobile money services. The GSMA Mobile Money Certification⁵ articulates a vision of excellence in mobile money consumer protection. When connecting to a certified provider, third parties can

be assured they are integrating with an entity which upholds industry-leading risk management practices.

For mobile money providers, providing plug-andplay access will completely transform their service. First, it will significantly reduce the time it takes to link with partners (which can take several months). Second, it will significantly increase the range of services available to customers, from pay-as-yougo solar and real-time agricultural market data to personal financial management solutions.

Leading mobile money providers are already taking steps to make the mobile money environment more accessible to third parties. Safaricom's Daraja,⁶ an API portal for businesses to integrate their services with M-Pesa, is a great example. The portal hosts several APIs, including business-to business (B2B), business-to-consumer (B2C) and reversals, allowing a fast and simplified on-boarding process. Another example is the recent announcement by MTN⁷ that it will open its mobile money platform in Uganda to third-party developers - a first for Uganda and MTN Group.

^{4.} GSMA (2019). Mobile Money: Building the ecosystem. See: https://www.gsma.com/mobilefordevelopment/mobile-money/building-the-ecosystem/

^{5.} GSMA (2019) GSMA Mobile Money Certification. See: http://www.gsma.com/mmc

Daraja, Safaricom (2019). Homepage. See: www.developer.safaricom.co.ke

^{7.} IT News Africa (2018). "MTN opens Mobile Money API as it unveils fund for Ugandan startups."

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Pillar 2: Manage organisational change and introduce new business models

Creating a more accessible environment for third parties is not just a technical challenge: managing the organisational change involved is the most demanding aspect of shifting to a platform model. In short, it requires an integrated effort spanning the business, from strategy and governance to legal contracting, data protection,8 enterprise customer support and customer experience management.

Introducing new business models and cost structures, including monetisation strategies, is an integral step in this process that enables providers to tap into new revenue streams from adjacent services, enterprise solutions and personalised services. This means transitioning away from a revenue model heavily reliant on customer fees to a diversified revenue model stemming from businesses and governments.

Implementing this new strategy may involve embracing a combination of approaches, such as partnerships, incubators, direct investment in or acquisition of fintechs or other innovators, and fostering innovation internally. The key difference between this new approach and the legacy approach is that barriers are lowered to enable

the entire ecosystem to develop innovative products and services, rather than focusing on selected external partners, one-on-one negotiations and integration.

The breadth and scale of the financial services⁹ offered by Ant Financial exemplifies successful implementation of technical solutions and strategies that foster partnerships, including revenue models. Ant Financial focused on the number and variety of their partnerships and has built an ecosystem of partners, including over 100 asset management partners, banks, insurance companies and tens of millions of brick-and-mortar merchants.

Meanwhile, Alipay has leveraged a free person-to-person (P2P) transfer between buyers and sellers, using personal account QR codes as a stepping stone to convert merchants to formal merchant accounts. Merchants can open formal merchant accounts that charge payment fees of just 0.6 per cent¹⁰ - a much lower rate than that charged by banks. This has led to impressive growth of their merchant proposition, with consumer-to-merchant transactions accounting for 70 per cent of all Alipay transactions.¹¹



- 8. Maina, J. (2018). "Guidelines on mobile money data protection." GSMA.
- 9. Alibaba Group (2017). "2017 Investor Day: Financial Services for Consumers and Small Businesses."
- Alloade Godp (2017). 2017 Investor Bay: I marketal Services for Consumers and Small Businesses.
 Tencent Customer Service (2017). "Rates and settlement cycles for different kinds of merchants."
- 11. Ibid.

Pillar 3: Optimise user experience (UX) and user interface (UI)

Today, USSD remains the dominant channel for accessing mobile money services, ¹² evidence that the industry is continuing to reach those at the base of the economic pyramid. However, USSD protocol was not originally designed for customer-facing applications and therefore has restricted capabilities, such as limits on character count and a narrow range of languages. This hinders the ability of providers to share content and information, on-board customers digitally and offer locally relevant content.

With basic/feature phones accounting for more than half of mobile connections (54 per cent) in Sub-Saharan Africa in Q4 2018¹³ and with sales predicted to grow, it is safe to assume that a considerable proportion of low-income individuals will continue to use feature phones in the coming years. Mobile money providers must therefore focus on optimising the user experience via feature phones and offering the benefits of a payment platform to this large customer segment.

While designing a user-friendly USSD interface should be a top priority, providers should not ignore the other opportunities that feature phones present. Feature phones currently run on a myriad of operating systems, drastically limiting the ability of third parties to innovate and create new apps that can be deployed on these phones. Recognising

this gap, Google has recently invested in KaiOS,¹⁴ a company that has built an operating system for feature phones and intends to integrate Google services such as search, maps, YouTube and voice assistance into KaiOS devices.

The majority of future growth in mobile internet and smartphone adoption is projected to come from regions with high mobile money uptake.¹⁵ This means that social interactions which previously took place in the analogue world will increasingly happen online, through social and messaging platforms.

Mobile money providers must therefore also cater to the evolving needs of customers and offer them a similar level of user experience to which they are accustomed. They will increasingly need to move at two speeds, simultaneously innovating for feature phone and smartphone customers, and ensuring that UI and UX are optimised.

The rich interface of smartphones not only opens avenues for innovation in product and enhancing UI and UX design, but can also dramatically increase user engagement and activity rates. For instance, focus group research by CGAP in Kenya has shown that low-income, first-time users learned how to navigate a smartphone on their own in just 20 minutes.¹⁶

^{12.} Baah, B. and Naghavi, N. (2018). "Beyond the basics: How smartphones will drive future opportunities for the mobile money industry," GSMA

^{13.} GSMA Intelligence, Basic or feature phone connections, expressed as a percentage of total connections

^{14.} Tech Crunch (2018). "Google invests \$22M in feature phone operating system KaiOS."

^{15.} Baah, B. and Naghavi, N. (2018). "Beyond the basics: How smartphones will drive future opportunities for the mobile money industry." GSMA.

^{16.} CGAP (2017). "The impact of smartphones on financial inclusion."

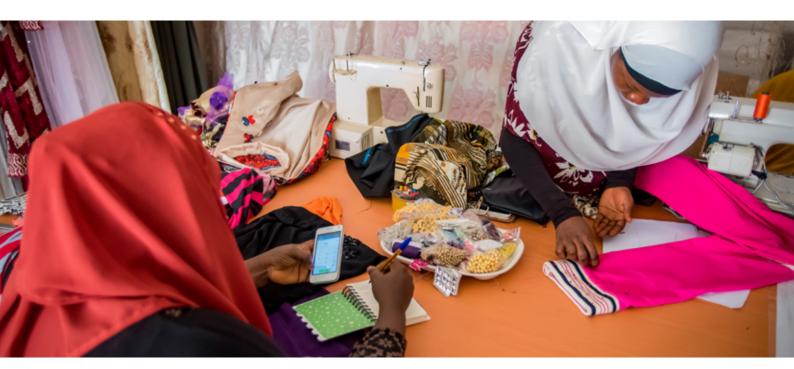
Pillar 4: Enable third parties to develop new relationships via the front end

Most user interactions with third parties via mobile money apps are currently limited to checkout. Third-party relationships with customers are also primarily established outside the mobile money interface. Mobile money users are therefore not typically able to discover new services or change a subscription package via the mobile money app. For instance, an electricity provider's existing customer can pay outstanding bills via the USSD menu, but cannot change their package or switch to a new electricity provider that they discover in the mobile money app.

Digital platforms can address these limitations, empowering third parties to create value for customers with discovery functionality¹⁷ and enabling them to implement their full catalogue of services. To expand the value proposition of the mobile money platform to third parties, providers will need to enable third parties to embed their content or functionalities directly onto the platform.

The app-within-an-app model of WeChat is a great example, having enabled millions of lightweight apps—from banks, media outlets and fashion brands to hospitals, drug stores, car manufacturers and internet startups—to offer new content and features within WeChat and establish new relationships with WeChat users.¹⁸

How will this look in the context of mobile money services? Like the WeChat model, customers will have access to a digital app store-like environment, similar to an app store, where they can select from a range of services - anything from pay-as-yougo solar and real-time agricultural market data to personal financial management solutions - knowing that their selected service has been vetted by the mobile money platform. This will enable customers to customise and personalise their mobile money service based on their needs.



- 17. 'Discovery functionality' refers to functionality which enables customers to find niche, undiscovered products created by independent, underrepresented innovators and new venture business entrepreneurs.
- 18. Andreessen Horowitz (2015). "When One App Rules Them All: The Case of WeChat and Mobile in China."

Pillar 5: Adopt a personalised approach to product design

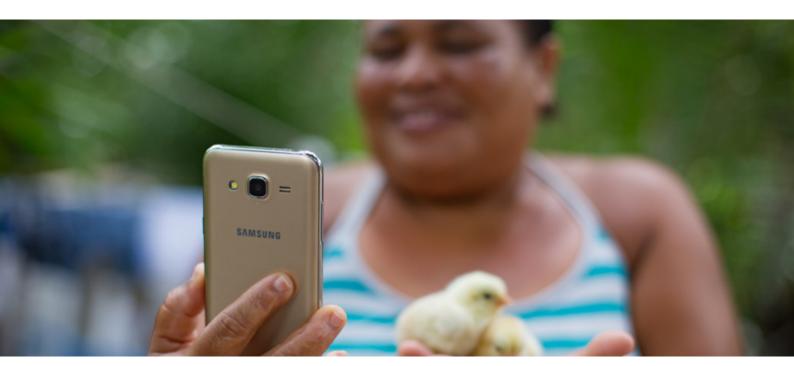
Plug-and-play access allows mobile money providers to participate in the data-sharing ecosystem and unleash the inherent potential of combining data sources. This will enable them to create a single view of their customers and to customise products and services more effectively than with call detail record (CDR) and mobile money transactional data alone. Getting this right requires significant investment in data tools (collection, storage and analysis) as well as in talented staff to leverage these assets.

Building comprehensive data and analytics capabilities will enable mobile money providers to better support both third parties and customers on their platforms. Third parties will benefit from being able to reach new customers with targeted products. Customers will not only gain access to a mobile money account, but to a full suite of services that are relevant to their daily lives. This is a crucial development, as it will encourage customers to keep their funds in digital form and build resilience to financial shocks. Beyond this, enhanced data and analytics capabilities will help providers

further strengthen their KYC practices and identify fraudulent behaviour.

A great example of how plug-and-play access to the service can be complemented by enhanced data and analytics is how Mercado Libre¹⁹ has been leveraging these two assets. Mercado Libre, the largest e-commerce company in Latin America, has provided APIs to third parties who offer a range of customised services to businesses. This has enabled MOON Money Online, a lending fintech in Argentina, to offer credit to small businesses by analysing transactions on the Mercado Libre platform and calculating a credit score.

Another example is Paytm, India's leading mobile-first financial services and commerce platform, which in 2018 announced plans to launch a credit-scoring product. Paytm Score will be based on a pool of customer transaction data across the company's multiple offerings, including wallet, e-commerce and booking platforms.²⁰ Paytm is already offering short-term, interest-free digital credit to its customers in partnership with ICICI Bank.²¹



- 19. Mercado Libre (2018). "Financial Summary: 2017 Highlights."
- 20. The Economic Times (2018). "Paytm to launch own credit scoring product 'Paytm Score'."
- 21. Paytm (2017). "Buy today and pay next month with Paytm ICICI Bank Postpaid."

Potential scenarios for business model

innovation

After studying various initiatives, we have identified three scenarios that would help providers transition from the current mobile money business model to a more diversified revenue model. Each of these scenarios addresses the key technological and organisational considerations identified in the previous section.



Three scenarios for business model innovation

Use Cases

- Credit
- Savings
- Insurance
- Wealth management

Scenario B

- · Dedicated B2B account
- Online payment gateway
- Escrow account services
- Credit, savings, wealth management and insurance for businesses

- · Messaging platform
- · Advertising services
- · An array of use cases enabled by chatbots and plug-ins

Addressable market



- Individuals
- Might also include SMEs and merchants
- · Individuals including digital shoppers
- · Digital merchants
- MSMEs

- Individuals
- MSMEs/merchants

Key partnerships



- · Financial institutions: banks,
- MFIs, insurance companies, investment funds
- · Online merchants, billers
- Banks, payment schemes, payment service providers
- App developers
- Content providers
- Enterprises

Direct revenue streams



- Revenue share on loan interest rates, insurance premium fees and wealth management fees
- Discovery fees for new savings accounts
- · Transaction fees from payment of suppliers and authorities
- Merchant fees (mobile money and credit/debit card)
- Subscription fees of online payment gateway
- Revenue share on loan interest rates, insurance premium fees and wealth management fees
- · Advertising revenues

· Advertising revenues

Source: GSMA / Sofrecom

Scenario A: Adjacent B2C services

The third Global Findex²² shows transformative progress in financial inclusion around the world, with 515 million more adults reporting account ownership in 2017 than in 2014. Beyond access to financial services, saving money, accessing credit and managing financial risk are key aspects of financial inclusion. While account ownership has seen remarkable growth, little progress has been made in access to savings and credit services.

In fact, the percentage of adults in developing countries who reported saving or setting aside money dropped from 53 per cent in 2014 to 43 per cent in 2017. Nearly 44 per cent of all adults in developing countries reported borrowing money, a slight decline from 48 per cent in 2014. Interestingly, fewer than 10 per cent of them borrowed formally, nearly the same percentage as in 2011. In addition, traditional insurance providers have yet to reach 3.8 billion customers in emerging markets.²³ This gap can lead to acute vulnerability to financial shocks with serious short-term and long-term consequences.

Against this backdrop, there is a significant opportunity for mobile money providers to offer

adjacent services to help protect the underserved against unexpected emergencies and financial shocks. Adjacent services such as **credit**, **savings**, **insurance and wealth management** will also help mobile money providers to reduce their reliance on revenues from customer fees by tapping into new revenue opportunities. In fact, 22 per cent of mobile money providers taking part in our 2017 Global Adoption Survey already offered a mobile moneyenabled savings, pensions or investment product, with an additional 39 per cent planning to roll out similar products in 2018.²⁴

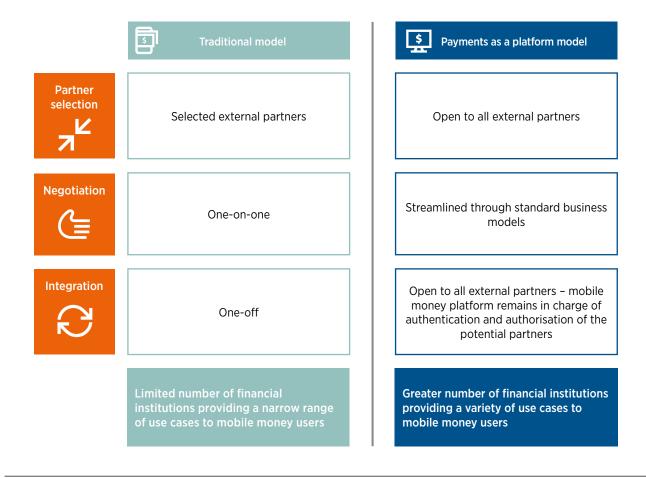
Offering adjacent services requires partnerships with third parties, particularly banks. The main difference between the legacy approach and the platform approach to providing adjacent services is mobile money providers' openness to all external third parties as potential partners. This requires a shift from a selected number of partners, one-on-one negotiations and one-off integrations to a platform which is open to all potential third parties that pass the required checks. As a result, smaller financial institutions and microfinance institutions (MFIs) with a more niche focus will also be able to offer their services to mobile money users.

^{22.} World Bank (2018). "The Global Findex Database 2017."

^{23.} Cheston, S. (2018). "Inclusive Insurance: Closing the Protection Gap for Emerging Customers."

^{24.} GSMA (2018). "2017 State of the Industry Report on Mobile Money."

Third-party integrations for adjacent B2C services: The legacy approach versus the platform approach

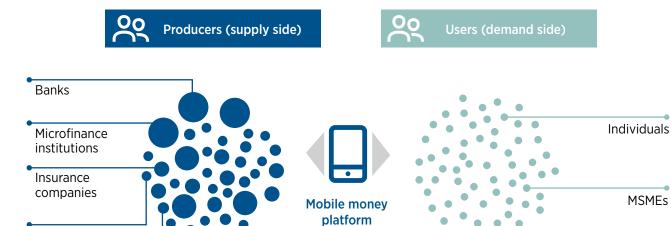


Revenues from these services are generated primarily from a percentage of interest rates charged for loans, premium fees for insurance products or management fees for wealth management products, and discovery fees for new savings accounts. However, the synergies created by offering these products are just as significant as the increased direct revenue opportunities, if not more. These new services will help providers to acquire new customers, reduce customer churn and cross-sell services.

To evaluate the impact of offering adjacent B2C services (Scenario A) on the economics of mobile money, we considered savings, credit, insurance and wealth management services. Our financial modelling shows that a typical mature mobile money provider adopting Scenario A would break even within a year of launch, and would see revenues rise by more than 60 per cent in year seven. In addition, EBITDA²⁵ would more than double in year seven.



Scenario A - Adjacent B2C services



Source: GSMA / Sofrecom

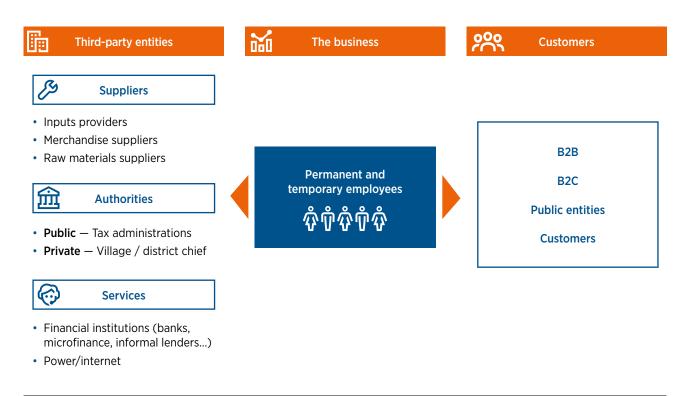
Investment funds

Fintechs

Scenario B: Dedicated B2B offering

Micro, Small and Medium Enterprises (MSMEs) play a major role in economic development, particularly in emerging markets where formal SMEs contribute up to 45 per cent of total employment and up to 33 per cent of national income. These numbers are significantly higher when informal SMEs are included.²⁶ MSMEs operate in a rich ecosystem, engaging with suppliers, public and private authorities, a broad range of services such as financial services providers and internet services, and customers.

The Micro, Small and Medium Enterprises ecosystem



Source: GSMA / Sofrecom

Mobile money services were primarily created to meet the needs of individual customers. Despite the growing use of mobile money services by businesses, we estimate that the vast majority of registered mobile money accounts are still owned by individuals.²⁷ However, 49 per cent of mobile money providers participating in our 2017 Global Adoption Survey cited enterprise solutions as one of their top three strategic priorities for 2018. This suggests that many industry players have reached sufficient maturity and scale to focus on expanding their services to enterprises.

To capture this untapped opportunity, we recommend that providers offer a **dedicated B2B account** to MSMEs to facilitate payments to suppliers and authorities. This would include escrow account services, digital mobile money accounts and other B2B payment services. Revenues would be generated primarily from transaction fees. In our financial modelling, we assume that an increasing number of

MSMEs would open their first mobile money account, some MSMEs would switch from using a personal account for business to a B2B account, and a fraction of MSMEs would continue using their personal accounts for business.

In introducing this dedicated B2B account offering, providers should also empower MSMEs to reach a broader customer base by enabling them to sell online. Launching an **online payment gateway** would enable both merchants on e-commerce platforms and MSMEs on social platforms to accept digital payments. Easypaisa is one example²⁸ of a mobile money provider having seized this opportunity. Its online payment gateway, Easypay Online Payments, allows sellers to accept online payments using credit/debit cards and Easypaisa mobile money accounts. In addition to transaction fees, providers can earn revenues from the set-up and maintenance fees of the online payment gateway.

^{27.} Nautiyal, A. (2018). "Enterprise Solutions: The next frontier for mobile money."

^{28.} Jain, A. (2017). "Unlocking the digital potential of Pakistan's e-commerce industry."

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Access to financing remains a key barrier to the growth of MSMEs in emerging economies.²⁹ The global credit gap exceeds an estimated \$2 trillion, and 200 million businesses globally are unable to get the credit they need, both for working capital and investments.³⁰ The IMF estimates that lifting credit constraints for MSMEs would be associated with higher economic growth of up to four percentage points.³¹ Given these challenges, offering MSMEs access to financing via partnerships should be a key consideration for mobile money providers. Revenues earned from these services are very similar to Scenario A, although business accounts are associated with larger-than-average loan sizes and higher insurance premiums.

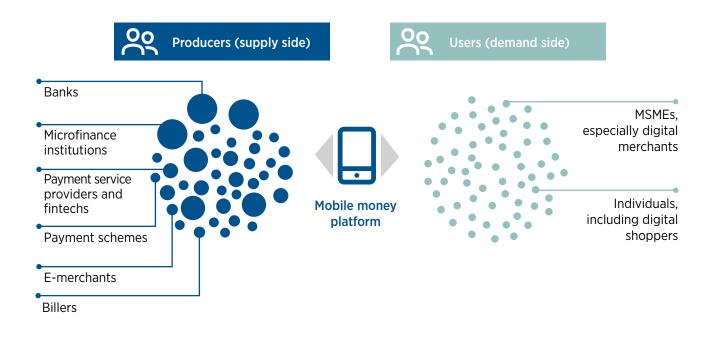
Scenario B also creates several commercial synergies, generated from salary payments by MSMEs and

the opening of new mobile money accounts by employees and users of online payment gateways. In developing economies, only around half of the adults who receive salary payments from a private sector employer receive these payments into an account³²—representing a significant opportunity for mobile money providers.

To evaluate the impact of introducing a dedicated B2B offering (Scenario B) on the economics of mobile money, we considered an online payment gateway, a dedicated B2B service and adjacent B2B services. Our financial modelling shows that a typical mature mobile money provider that adopted Scenario B would break even in year two after launch, and would increase revenues by 30 per cent in year seven. Moreover, EBITDA would increase by 50 per cent in year seven.

Figure 5

Scenario B - Dedicated B2B offering



Source: GSMA / Sofrecom

^{29.} World Bank, (2013). "Scaling-up SME access to financial services in the developing world."

^{30.} IFC (2013). "Closing the Credit Gap for Formal and Informal Micro, Small, and Medium Enterprises."

^{31.} IMF (2015). "Financial Inclusion: Can It Meet Multiple Macroeconomic Goals?"

^{32.} World Bank (2018). "The Global Findex Database 2017."

Scenario C: Social messaging platform

Over the last decade, convergence has been a driving trend in the digital space as mobile devices have come to replace many gadgets such as radios, CD players, cameras and even torches. This trend can now be observed in the app space, as apps within a mobile device are increasingly converging. In the context of payments, conversations consumers have traditionally had in person - such as how much we owe a friend after a trip, or our contribution to purchasing a gift for a family member - are more frequently taking place on social media. This has been the main driver for messaging app providers to move into the payment space and for payment providers to launch chat services.

One example is WeChat. On the Lunar New Year in 2014, WeChat launched a payment service that enabled its users to send each other cash-filled red envelopes (Hongbao) virtually. This became an instant success which has been maintained, with WeChat recently achieving 1 billion monthly active users. 33,34 Payment providers, such as Google Pay (formerly Google Tez) in India, have also entered the messaging space. In early 2018, Google added chat features to its payments app in India, allowing users to communicate with contacts while sending or requesting money. 35

The mobile money industry has not yet experienced the entrance of social messaging apps into mobile money payments. In early 2018, however, Safaricom launched Bonga, which is currently in the public beta phase. Bonga is a messaging app integrated with M-Pesa mobile money service. Through Bonga, users send, receive and request money, and chat with friends, all within one screen.

To significantly increase user engagement and boost activity, mobile money providers should consider launching a **social messaging platform** that supports their core mobile money service. The GSMA Rich Communication Services (RCS) initiative³⁶ presents a compelling opportunity for operators, as it enables the expansion of existing SMS business by offering new capabilities such as chatbots, plug-ins, artificial intelligence and third-party industrial applications (see Box 2).

The convergence of messaging and payments would help providers generate revenues from advertisers seeking to reach new customer segments. The commercial synergies created by social messaging users opening mobile money accounts are considerable. Launching a social messaging platform will also increase usage of mobile money services and generate incremental revenue per user.

We evaluated the impact of building a social messaging platform (Scenario C) on the economics of mobile money. Our financial modelling shows that a typical mature mobile money provider adopting Scenario C would break even in year four after launch, and would increase revenues and EBITDA by 30 per cent in year seven.

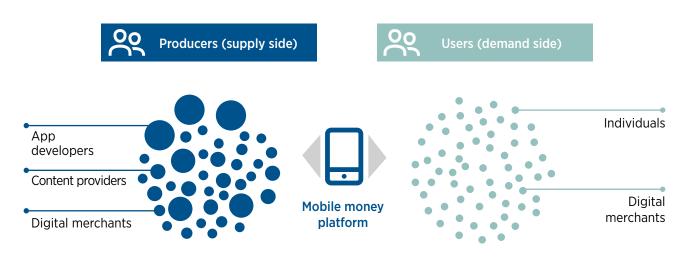
^{33.} Forbes (2015). "Tencent's WeChat Sends 1 Billion Virtual Red Envelopes On New Year's Eve."

^{34.} BBC (2018). "WeChat hits one billion monthly users - are you one of them?"

^{35.} Tech Crunch (2018). "Google is bringing messaging to Tez payment app in India."

^{36.} GSMA (2019). "Future Networks: RCS." See: https://www.gsma.com/futurenetworks/rcs/

Scenario C - Social messaging platform



Source: GSMA / Sofrecom

To fully transition away from a revenue model heavily reliant on customer fees to a diversified revenue model leveraging the payments as a platform approach, we recommend that providers launch the three scenarios together. The combined impact of adopting Scenarios A, B and C has the potential to increase revenue 2.3 times, and EBITDA 3.1 times, by year seven.

Box 2: The opportunity of Rich Communication Services (RCS) for the mobile money industry



RCS represents the next level of mobile messaging and calling on a global scale. RCS enhances traditional voice and SMS services with instant messaging, chat functionality, photo sharing, live video, video calling and file sharing across devices on any network, and strengthens customer service experience through new and richer interactions.

As messaging and payments converge, mobile money providers can leverage RCS to create a diverse ecosystem of use cases.

The RCS opportunity









- Get ahead of tech players
- Enables P2P transfers between two users having a conversation
- Make payments to businesses
- Contribute to group fundraisers and other social payment requests
- \$100bn annual global opportunity
- Massive potential reach, SMS fallback
- Trusted MNO channel
- Businesses pay to send messages and to accept and request payments from end users
- Highly accessible and easy-to-use front-end interface
- Enable third parties to develop new relationships via the front end
- Common user interface and user experience
- Open front end enabling a full catalogue of services

Through RCS, what might previously have been spread over SMS, web browser accounts and separately downloaded apps is now combined into a single user-friendly interface. For instance, instead of sending SMS reminders to pay an outstanding bill, which requires going through the USSD menu and finding the biller to pay, an alert about the outstanding payment is sent to the account holder with an image of the relevant bill. By clicking on the image, the account holder can pay using their mobile money account without the need to leave the RCS interface. This will create a seamless payment experience while providing an agile and engaging way to access goods and services.

Conclusion

We are on the cusp of the most profound change in the mobile money business model since the service was launched over a decade ago. By extending the capabilities of the traditional mobile money model, a platform approach will contribute to the economic empowerment of individuals, communities and businesses. Addressing the five fundamental pillars outlined in this paper will assist providers in making this shift, facilitating a deeper engagement with individuals and businesses by offering a frictionless experience.

For the underserved, a platform approach will increase the relevance of mobile money accounts in their daily lives. This is achieved through a proliferation of new use cases, including a full suite of services that better meet the growing needs of people in emerging markets. The benefits will also accrue to start-ups and innovators, banks, smaller financial institutions and microfinance institutions (MFIs) who will join the platform. Entrepreneurs and small businesses form the backbone of informal and local economies in emerging markets. By enabling them to participate in the digital economy via a platform approach, providers will stimulate

development in this sector, helping to drive employment and economic growth and enabling previously excluded segments to become more active in the economy.

The "payments as a platform" approach will also reduce mobile money providers' dependency on revenues stemming from customer fees. This transition will enable them to transform their revenue model and expand their value proposition to new products and adjacent revenue streams to ensure their business remains sustainable in an increasingly competitive landscape.

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