Profitability 2.0:

Ecosystem-driven business modelling & the future of mobile money margins

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Executive Summary

The increasing number of mobile money providers (MMPs) that have achieved profitability in recent years proves that **financial services targeted at low-income populations can be viable**. This has primarily been driven by overcoming heavy initial expenditure, as well as growing revenues, particularly from cash-out and person-to-person (P2P) transaction fees.

While this transactional model has enabled many MMPs to become profitable, it has its limitations in the longer term, particularly in a market saturation context. An increasingly competitive environment or other regulatory forces may challenge MMPs' reliance on transaction fees, particularly P2P. Moreover, the gradual shift to digital transactions over cash-in/cash-out (CICO) (highlighted in our **State of the Industry Report**) – though overall a positive evolution – will likely reshape MMPs' revenue makeup.

In light of these trends, both of which have been accelerated by the COVID-19 pandemic, our current modelling shows that **MMPs relying on purely transactional models will face declining average revenue per user (ARPU), and eventually stagnating profitability**. Such models are likely to leave MMPs vulnerable to disruption stemming from competition or other factors.

The following deep-dive assessment of mobile money business models and sustainability finds that, in order to maintain profitability and competitive advantage, **it is essential that MMPs diversify their offerings beyond the transactional model**. MMPs have an opportunity to mitigate this risk by transitioning to a 'payments-as-a-platform' model – leveraging adjacent revenues from non-transactional products, and building an ecosystem through partnerships and integrations that can drive exponential revenues with limited cost increases.

Building on previous work by the GSMA on mobile money profitability, we present a three-tier pro form a business model – including the characteristics of each tier, and consolidating implications into 'industry trends' and 'key profitability findings' for each.

1. In the **Maturing Transactional Stage**, trends indicate that a purely transactional model leads to a profitability ceiling and decline in per-user revenues, leaving MMPs susceptible to disruption. In order to maintain profitability, innovation beyond payments is imperative, and can be achieved by leveraging existing assets specific to the MMP model.

2. During the **Business Diversification Stage**, we see that the introduction of strategically selected 'pillars' (e.g. financial services, MSME-centric features, payment APIs) can alleviate Stage 1's ARPU gap, and can do so with outsized profit margins that can be used to invest in further innovation. The opportunity to maximise these benefits is time sensitive, and also subject to decisions by the MMP to build or partner in providing these services.

3. At the **Ecosystem Innovation Stage**, MMPs already share strong alignment on strategic fit and the practical feasibility of these areas of innovation, and today's advanced MMPs have begun to see this investment pay off. In particular, those who have prioritised innovations that rely on existing infrastructure (e.g. agent networks, open APIs) can reduce costs and time-to-market, and roll profits into market expansion (e.g. deployments to other geographies, financial inclusion efforts in existing markets).

Introduction

The past decade has seen mobile money providers (MMPs) across the globe achieve profitability at scale, enabling them to continue investing in expanding their services to the 'last mile', and reaching financially excluded populations. In some instances, this has also helped them improve their product offering, to meet the evolving demands of their customers.

Profitability has been achieved through **high uptake and growing fee-generating transaction volumes/values.**[1] Indeed, over one billion mobile money (MM) accounts now exist globally, and the industry as a whole is processing about US$2B per day.[2]

Over this same period, we have also seen an accompanying **set of key trends** that indicate a likely disruption to MMP's prevailing transactional make-up. The first trend is that **MM transactions are increasingly digital**, with their total value exceeding that of cash-based transactions globally.[3] The second is that the **circulating digital value on MMP networks has now surpassed outgoing value**. Additionally, the latest market data[4] suggest that not only has this transition continued, but that these trends are likely to accelerate due to ever greater network effects, as well as the COVID-19 pandemic's digitisation push.

While many MMPs have reached a mature transactional stage, the share of non-transactional revenue remains low for most of them.

Moreover, 85-90% of global MM revenues continue to be driven by cash-out and person-to-person (P2P) fees, which, as this report details, leaves **business models vulnerable to disruption** in the face of these trends.

Growing pressure also exists on revenues due to transactions fees being challenged by multiple factors, such as an increasingly competitive environment, or regulatory requirements, especially in light of the COVID-19 pandemic.[5] As these revenue and cost drivers shift, MMPs must **expand their business models** beyond transactional fees, paving the way for their transition to a 'payments as a platform model'[6] – a strategic shift whereby more value remains digital while revenue sources are increasingly diversified. The trends toward digitisation can serve to facilitate or even accelerate a desirable outcome so long as MMPs **financially prepare for this shift** in order to remain commercially sustainable and competitive in the medium term.

Building on previous GSMA outputs[7] and new data, this report revisits the economics of mobile money businesses. We demonstrate the case and timeliness[8] for a transition to a more resilient ecosystem-centric profitability model through three stages, and formulate **key recommendations** on opportunities and risk mitigation.

[1] GSMA 2014. "Mobile money profitability: A digital ecosystem to drive healthy margins" provides a detailed analysis of the transactional case.
[2] GSMA. "State of the Industry Report (SOTIR)"
[3] Digital transactions represent 57% of all mobile money transactions globally, per SOTIR 2019
[4] Global Mobile Money Dataset from the Mobile Money Metrics portal for 2012-2019, Results from GSMA 's 2019 Global Adoption Survey on Mobile Money, and ongoing conversations to validate with MMPs into 2021 [5] GSMA 2020, "Tracking Mobile Money Regulatory Responses to COVID-19
[6] GSMA 2019, "Embracing payments as a platform for the future of mobile money"
[7] GSMA 2014. "Mobile money profitability: A digital ecosystem to drive healthy margins"; GSMA 2019, "Embracing payments as a platform for the future of mobile money"
[8] A view broadly supported by industry evidence, e.g. Nicholas Nganga, Chairman of Safaricom PLC, who stated "We believe that the pandemic has made embracing shared value thinking and sustainable business practices even more imperative." Safaricom, 2021.

Methodology: The "Profitability 2.0" Model

Drawing data from the *2019 GSMA Global Adoption Survey on Mobile Money* and direct inputs from a range of MMPs[9], we **document the current and future profitability of MMPs, along with their envisioned business model innovations and adaptation strategies**. To account for varying levels of maturity and specialisation, we base our analysis on three representative MMP archetypes, which disaggregate and extend the final "mature, ecosystem-based" scenario defined in GSMA's 2014 "Mobile money profitability" publication.

These archetypes capture critical financial features such as transactional volumes and values, distribution over various channels, Gross Margin (GM), Operating expenses (OPEX, including Commercial Costs), Earnings before interest, taxes, depreciation and amortisation (EBITDA), Capital expenditures (CAPEX), and Operating Free Cash Flow (OFCF), among others. Refer to the Annexes for definitions and quantitative details of these modelled values for each archetype.

Beyond our summarisation and recommendations presented in this report, we also provide the model itself as **a practical tool for MMPs**. Thus, the model structure also focuses on several secondary priorities:

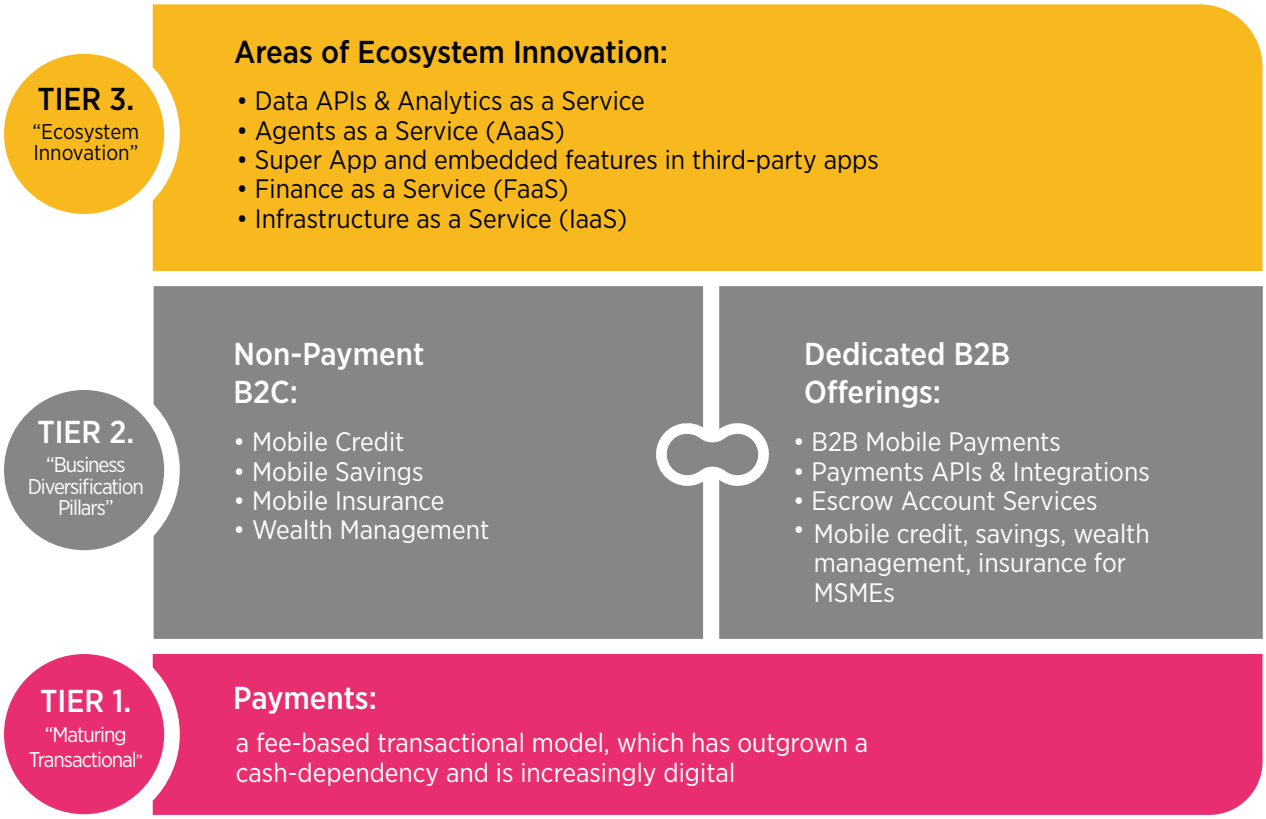
- **Flexibility in the inputs**, such that one can provide real data to go beyond the pro forma archetypes and represent characteristics and dynamics of a specific market or MMP offering
- **Configurable timing and modularity of new MM offerings** to allow for modelling scenarios based on actual strategic fit and practical feasibility
- The **ability to project cumulative effects given various scenarios**, while also tracking contributions from individual MM features or over-the-top products

A three-tier business model

As a basis for the model, we segmented market data into **three tiers of MM offerings**, including revenue drivers, costs, and relevant financial statements, like profit and loss statements (P&Ls), etc. The proposed families of offerings can be incorporated modularly[10] into our pro forma model, and strategically rolled out such that profits from each tier drive investment in the subsequent tier. The tiers, illustrated in the schematic below and treated in detail in Annex D, are referred to throughout the report as follows: **Maturing Digital Transactional ("T1")**, **Business Diversification Pillars ("T2")**[11], and **Areas of Ecosystem Innovation ("T3")**.

Figure 1

Three tiers of the Profitability 2.0 business model



Three corresponding stages of modelled archetypes

We map a MMP's adoption of the model's three tiers directly to the evolution between **three archetypical MMP stages**. These archetypes are summarised below as the maturing transactional stage, the diversification stage, and the ecosystem stage. In the remainder of the report, we dedicate to each of these stages a section that highlights key features, trends, and recommendations in more depth.

[9] Refreshed data includes the aforementioned aggregated Global Adoption Survey results from 2019 and completed worksheets from MMPs around the envisaged areas of innovation and/or current state of their financials. Additionally, interviews were conducted in early 2021 with MMPs at both group and service levels, both telco- and bank-led. In all, these MMPs represent over 40 countries across SSA, Middle East & North Africa, and Asia.

[10] I.e., a feature in a given tier can be added to the model at a given point over the next 10 years, or left out of the model entirely to see the effects

[11] Partially based on the GSMA's 2019 Payments as a Platform report, noting that we've generalised "Online Merchant Payments" to curated partnerships on a Payments API, as defined on pp. 7-10 of FSD Kenya's "Open APIs: what, why, and for whom?"

Table 1

Three Stages of modelled MMP archetypes

	STAGE 1. MATURING TRANSACTIONAL MODEL (Year 0 of the model) [12]	STAGE 2. LAUNCHING DIVERSIFICATION PILLARS (Years 2-4)	STAGE 3. EMBRACING ECOSYSTEM INNOVATION (Years 5-10)
TRANSACTIONAL & REVENUE CHARACTERISTICS	• Cash-in/cash-out (CICO) dominant in transactional value, volumes, and revenues • Digital share of total transaction values is approximately just over 30%, but rising • Less than 12 transactions per 30-day active account per month • Average transaction value of nearly US$25 (including CICO) • Expansion into the addressable market is unconstrained • Less than half of customers are 30-day active	• Circulation increasing with P2P network effects, increased adoption of merchant payments • Digital transactions constitute the majority (>50%) of total transactions value • Approximately 20 transactions per 30-day active account per month • Average transaction value decreasing, as a result of increased market penetration, higher volume, reaching new customer segments, and competition • Most of the addressable market is being served • Most customers are 30-day active	• Transactions increasingly digital as a result of launching Business Diversification Pillars • Digital transactions constitute 65% of total transactions value • At least one transaction per day for 30-day active accounts • Average transaction value further decreased • Expansion into the addressable market for purely transactional use cases slowing due to saturation • Most customers are 30-day active
BUSINESS PRIORITIES	• Have invested in an expansion away from a cash-heavy model via digitisation of endpoints (e.g. bulkpay, bank-to-mobile (B2M), mobile-to-bank (M2B), billpay)	• Have invested in piloting and launching at least a subset of the diversification pillars (e.g. B2C credit, B2B escrow services), leveraging the increased value circulating on-network and otherwise remaining digital	• Have invested in areas of ecosystem innovation, powered by competitive advantages developed in Tiers 1 & 2
RESULTING MODEL DYNAMICS	• ARPU is still relatively high but at risk due to digitisation trends and pressure on margins • EBITDA has just hit break-even, but steadily increasing with transactional fees constituting 90% of the revenue • Commercial costs and CAPEX largely for building out agent, customer networks Mobile-to-bank transfers and bulk payments begin to drive revenue	• ARPU resulting from "traditional" transaction types decreasing, increased volumes, and lower average value • Purely transactional EBITDA margin still growing but showing signs of stagnation • Positive effects of Business Diversification Pillars on ARPU and EBITDA allow for a gradually decreased reliance on per-transaction fees • Transactional CAPEX lower as network matures. Low CAPEX for Business Diversification Pillars as they build on existing infrastructure • P2P and merchant revenues, plus those from initial pillars, means less dependency on CICO revenues	• Continued ARPU and EBITDA growth due to Business Diversification Pillars enables lower fees to stay competitive • Transactional ARPU has stabilised • Purely transactional EBITDA has plateaued • Tier 1 & 2 offerings are augmented by network effects from MMP's facilitation of ecosystem partners' transactions (e.g. fintechs, digital commerce providers, superplatforms[13], government / NGO programmes, other third parties) • Non-transactional revenues fully overcome the pressure on the transactional margins, and constitute a newly sustainable model for profitability

Model assumptions & limitations

The modelling focuses **on the MMPs as standalone businesses**, treated in isolation from other aspects of the business. Thus, it is agnostic toward bank-led, MNO-led, or other models. The key characteristics of the transactional model are illustrated in Figure 2 below.

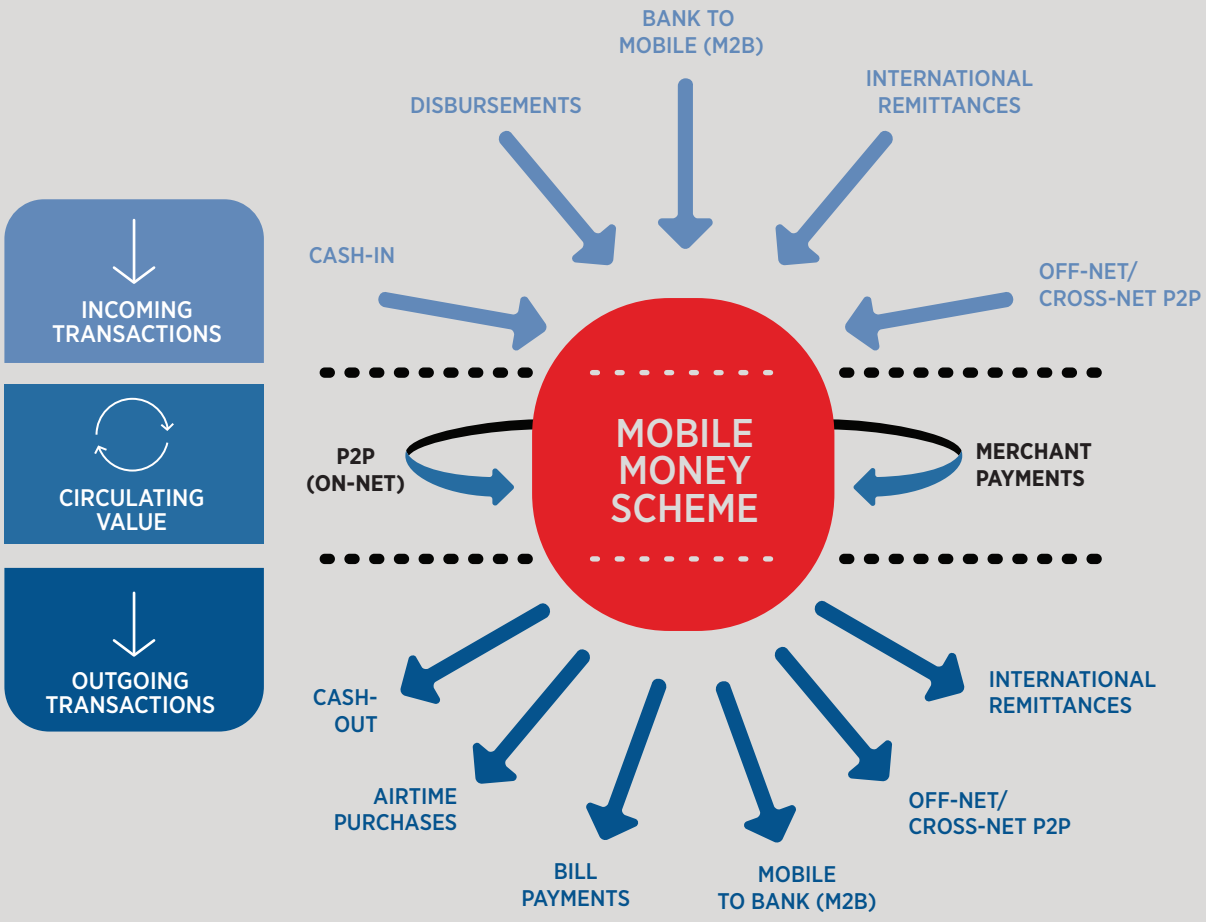
Our **modelled archetypes** assume the MMP at year 0 has matured beyond the startup phase, and has not settled into any long-term over-the-counter-centric (OTC) model. Our analysis focuses on MMPs that have at least begun to invest in digitising inflows and outflows, with enough circulating value to offer a strong model for P2P, merchant payments, and pillars. [14]

We take an evidenced-based, but relatively conservative approach to **timing the introduction of new MM features**. For example, Tier 2 is introduced in the second year of the model and reaches maturity only by the fifth year, while Tier 3 is launched at the fifth year and reaches maturity only at the seventh year. In practice, some MMPs have been more aggressive in investing to accelerate this transition.

In terms of **model dynamics,** while transactional revenues vary as the MMP matures (e.g., reduction of P2P fees as the provider scales), we fix transactional costs[15]. We also recognise that this model is a global aggregate, and have intentionally taken conservative estimates for growth of ecosystem innovations wherever such a choice was to be made.

Figure 2

Transaction flows in a Mobile money system. Definitions of each flow can be found in Annex E



[12] To reiterate, this model picks up after the startup and early growth stages of an MMP – so year 0 in the model represents a relatively mature transactional MMP who is seeing increased digital share of transactions, including higher circulating value, Also note that while the timing outlined here are based on the global data enumerated in the methodological overview above, the model itself treats this as a configurable option.

[13] NextBillion 2018. "The Superplatforms are Coming ... And They Will Transform Financial Inclusion"

[14] Insights focused on early stage MMPs can be found in GSMA 2014

[15] As with GSMA 2014 (Annex A) we assume that transaction costs do not vary over time and do not consider the potential efficiency gains that may be introduced to reduce transaction costs throughout the life of a deployment

Tier 1: Challenges for a Maturing Transactional Model

The first tier is modelled on the corresponding MMP archetype that has reached a relatively mature transactional state[16], featuring an uptick in digital activity compared to cash-based transactions, without yet diversifying its offering beyond payments. Having successfully built an agent network and customer base, and sustained the necessary corresponding investments, this MMP archetype has reached its EBITDA breakeven point. However, a purely transactional model is likely to face plateauing margins and declining per user revenue. Thus, MMPs should look into diversifying their revenue sources from this point on in order to remain sustainable and less vulnerable to market disruptions.

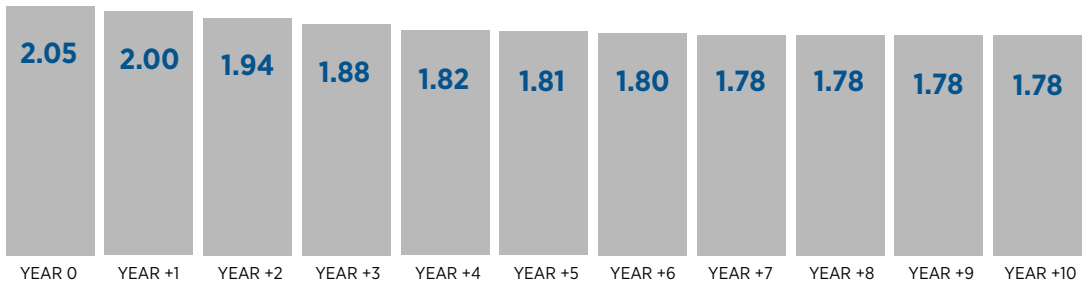
A purely transactional model will see ARPU decrease at scale

While growing market penetration and resulting overall transactions volumes positively contribute to profitability, MMPs are subject to decreasing ARPU in a purely transaction model. This is driven by two distinct features in our model:

- Increased usage of digital transactions over CICO. Digital transactions typically generate lower revenue per value transacted, compared to cash-out transactions.
- Potential pressure on transaction fees in some markets, for example due to growing competition, particularly for P2P.

Figure 3

Transactional ARPU (expressed in US$ per month) evolving from the current state of the business (CSB) through the next 10 years



[16] i.e. is beginning to see an uptick in digital activity and P2P transactions, and has successfully avoided being stuck in the long-term OTC/Remittances phase, as identified in Box 4 of the GSMA 2014 report.

Table 2

Transactional ARPU (expressed in US$ per month) at selected years in the model, corresponding to the stages listed in Table 1, but only including transactional revenue

	MATURING TRANSACTIONAL MODEL (Year 0)	WITHOUT DIVERSIFICATION PILLARS (Year 4)	WITHOUT ECOSYSTEM INNOVATION (Year 7)
ARPU (US$/month)	2.05	1.82	1.78

A purely transactional profit model is susceptible to disruption

Gross Margin (GM), EBITDA margin and Operating Free Cash Flow (OFCF) increase as overall revenue outpaces overall costs, but level off as this model reaches its limits. The market addressable by this offering is gradually saturated.

Figure

Evolution of Gross Margin (GM) and EBITDA margin for a purely transactional model

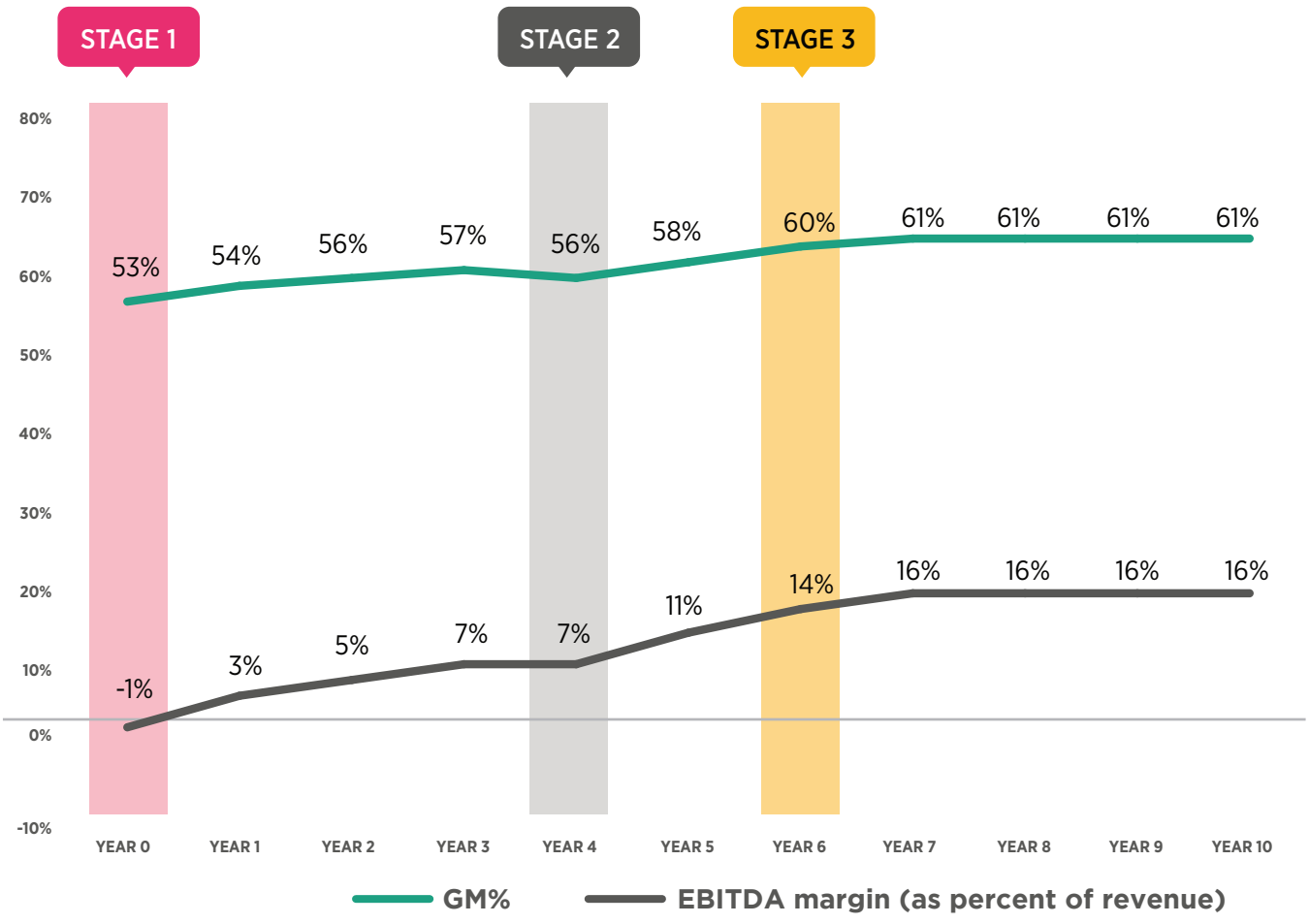


Table 3

Gross Margin (GM), EBITDA, and Operating Free Cash Flow (OFCF) at selected years in the model, corresponding to the stages listed in Table 1, but only including transactional revenue

	MATURING TRANSACTIONAL MODEL (Year 0)	WITHOUT DIVERSIFICATION PILLARS (Year 4)	WITHOUT ECOSYSTEM INNOVATION (Year 7)
GM	53%	56%	61%
EBITDA	-1%	7%	16%
OFCF	-9%	1%	13%

Innovation beyond payments is inevitable

This purely transactional model will stall out after several years, as market penetration reaches saturation. This invites innovative competitors, like those providing value-add ecosystem services with differing business models (e.g. venture capital funded fintechs that can zero-rate certain transactions virtually indefinitely) to challenge the traditional transactional MMP model.

Leverage MMP assets to diversify via sustainable pillars

MMPs seeking to grow beyond this profit plateau must leverage their key competitive advantages: their customer base, agent network, infrastructure, and channels. Capitalising on these competitive advantages, MMPs can begin to plan and pilot Tier 2's Business Innovation Pillars and start supplementing their transaction-based revenue.

Consideration of Agent Business Models

The trends in digitisation and circulation can also pose a potentially disproportionate risk for agent networks - one of the key strengths of the mobile money model. Indeed, our model indicates that despite a continued overall increase in total CICO transaction value, they represent a decreasing percentage of overall transaction value relative to digital transactions. Moreover, the number of agents needed to serve a rapidly growing customer base increases at a rate faster than the total CICO revenue, due to the increased prevalence of digital transactions. The combination of these effects can result in a decreasing per-agent share of CICO transaction value over time, and in turn their corresponding agent commissions, potentially jeopardising the MMP's footprint.

MMPs can address these risks by expanding the agent's role and adjusting their core value proposition by training agents and promoting their involvement in newly monetisable models, such as those described in Tiers 2 and 3 in this report. In particular, MMPs have demonstrated an interest[17] in an "Agents-as-a-Service (AaaS)" model, in which the MMP facilitates agent engagement with ecosystem players like digital commerce platforms and fintechs. Agents can earn additional commissions by playing a key role in these additional use cases while MMPs grow additional revenues. Examples include acting a as an e-commerce pickup location, facilitating transactions on behalf of a fintech/MMP, or selling a financial service.

[17] See Annex D

Tier 2: Diversifying the Revenue Model

The Tier 1 transactional model ultimately reaches its limits in terms of profitability, but it does lay the groundwork via a set of competitive advantages for the Tier 2 Business Diversification Pillars, namely:

- **MM-based financial services for customers**, including mobile credit and savings, insurance, and wealth management
- **Proven, dedicated products for businesses**, like B2B mobile payments, escrow account services, and dedicated versions of the aforementioned MM-based financial services, tailored for businesses
- **Payments APIs**, based on standardised specifications[18] and evolving according to the state of the market, partner demand, and MMP strategic appetite for investment. MMPs establishing plug-and-play access for third parties will drive additional transactions, such as merchant and bill payments or bulk disbursements.

[18] e.g. those built on GSMA's MM API specification, allowing third parties to integrate and initiate, settle, and check status of mobile money payments [19] e.g., per the framework expressed on p. 11 of in "Payment APIs: What, Why, and for Whom?" FSD Kenya, 2016.

Table 4

Examples of use cases, addressable market, and revenue streams for Tier 2 diversification pillars

	Non-transactional B2C services	Dedicated B2B products	Payments APIs
USE CASES	• Credit • Savings • Insurance • Wealth Management	• Dedicated business accounts • Financial services (credit, savings, insurance) • Mobile payments	• Merchant payments, online and offline, delegated authentication • Bill payments w/ instant notification • Interoperability between MM and banks, and between MMPs • Basic account management • International transfers • Bulk disbursements
ADDRESSABLE MARKET	• Individuals • Some micro and small enterprises that may not need a dedicated B2B account, and who use B2C services instead	• Large enterprises and MSMEs, including those who previously used B2C transaction accounts and those new to MM	• Large enterprises, billpay recipients, and utility providers • Digital commerce platforms • Other financial service providers • MSMEs and fintechs
RESULTING MODEL DYNAMICS	• Credit: Revenue share with partner bank/financial institution • Savings: discovery fee • Insurance: revenue share • Wealth management: percentage of assets under management	• Credit, savings, insurance: same model as B2C offering, but with rates tailored to businesses and partners serving those businesses • Transaction fees from B2C payments, and also payments to suppliers, logistics providers, sales agents, licensing authorities, etc. • Cross-sell opportunities: increased fee revenue from MM-based salary payments, business employees, vendors, customers opening new accounts	• Transactional fees from areas not previously served by MM (online transactions, fintech apps, etc) • Cross-sell opportunities: incremental fee revenue from digital commerce clients opening their first MM accounts

These are considered pillars for three reasons:

1. On a **practical** level, these are products that have already been tested in adjacent sectors (e.g. banks) and by a number of MMPs

2. From a **strategic** perspective, they produce revenues at relatively low cost, and thus produce free cash that can be invested in the Tier 3 Areas of Innovation and further expansion.

3. From a **competitive** standpoint, MMPs at this stage already have all the ingredients – agents, channels, and data – needed to integrate these pillars.

In modelling the pillars based on input data[20] and MMP validation, we analysed their modular contributions to revenue (ARPU) and profitability (EBITDA) beyond the transactional model. In calculating this, we also attributed to Tier 2 any cross-pillar cost efficiencies and second-order effects of added activity on the underlying transactional model.

Diversification can alleviate the ARPU gap

Based on the aforementioned industry data[19], pillars are introduced in the second year of the model. Examining combined ARPU (US$ per month) from that point forward, we note the revenue from pillars can in fact make up for the loss of traction in transactional ARPU.

Table 5

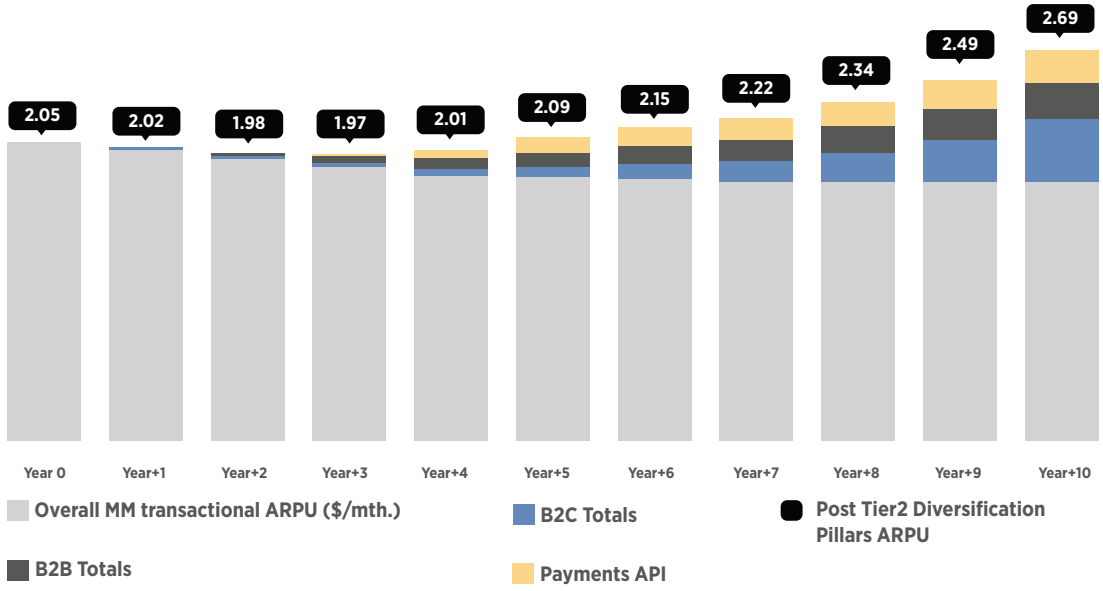
ARPU of the purely transactional model, ARPU of Tier 2 diversification pillars, and percent boost in ARPU provided by the pillars

	LAUNCH OF PILLARS (Year 2)	PILLARS GROWING (Year 4)	PILLARS AT SCALE (Year 10)
TIER 1 Transactional ARPU	1.94	1.82	1.78
+ TIER 2 Pillars	1.98	2.01	2.69
TIER 2 Pillars ARPU Contribution [20]	2%	9%	34%

[19] e.g. for the B2C pillars these include: year each product is launched, % of 30-day active accounts using each product, and CAGR of % of active accounts using each product. For B2B pillars these include size of addressable MSME market, % of active B2B accounts, and CAGR of adoption by addressable MSME market.
[20] I.e., the ARPU generated by Tier 2 alone, expressed as a percentage of the total ARPU for both tiers

Figure 5

Evolution of Tier 1 and Tier 2 ARPU contributions from the current state of business (CSB) through the next 10 years. Tier 2 contributions are broken down into the components described in Table 4 above

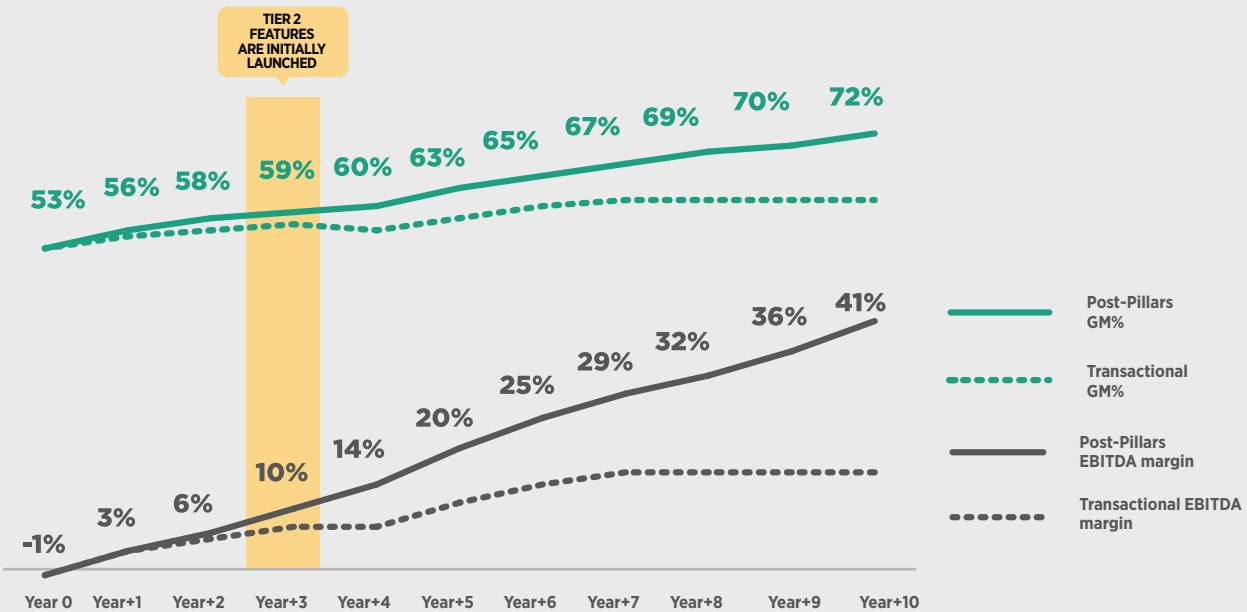


Diversification pillars can have outsized profit margins

It is also important to note that the pillars' ARPU has a greater relative contribution to profitability (EBITDA) than transactional ARPU, given that the network (i.e., infrastructure, agents, digital channels) is already paid for by the core transactional business. Looking at EBITDA we see an even greater contribution and a reacceleration of an otherwise flattening model.

Figure 6

Evolution of gross margin (GM) and EBITDA margin for Tiers 1 and 2 ("post-pillars"), versus the same figures for Tier 1 alone ("transactional")



This distinction is perhaps even more prominent when we look at free cash flow, noting that an archetypical MMP's transactional CAPEX drops from 8% (Year 0) to 3% of revenue (Year 7) over this period (as detailed in Annex C). Not only are pillars making up for the transactional EBITDA stall, but their contributions are also generating disproportionate amounts of free cash that can be converted to CAPEX, perhaps most notably for the over-the-top ecosystem innovation areas in Tier 3.

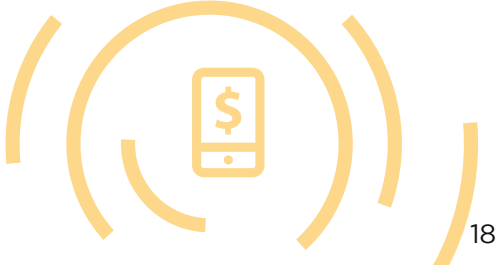
Table 6

Gross Margin (GM), EBITDA, Operating Free Cash Flow (OFCF), as percentage of total revenue, for Tier 1 alone, and Tiers 1 and 2 together

	LAUNCH OF PILLARS (Year 2)	PILLARS GROWING (Year 4)	STAGE 3. PILLARS AT SCALE (Year 10)
TIER 1 Transactional GM	56%	56%	61%
+ TIER 2 Pillars	58%	60%	62%
TIER 1 Transactional EBITDA	5%	7%	16%
+ TIER 2 Pillars	6%	14%	41%
TIER 1 Transactional OFCF	-1%	1%	13%
+ TIER 2 Pillars	0%	9%	38%

Launch pillars and diversify as soon as is feasible

Providers that launch these services without delay stand to benefit from the additional profits and free cash available, which can be invested in launching further pillars. Based on our data and input from MMPs, we have noted that they typically start piloting B2C Credit/Savings and Dedicated B2B Mobile Money Accounts at the midpoint between Stages 1 and 2 (i.e. years 0 and 5 of our model), and launch within a year or two of piloting. Insurance is typically added shortly thereafter. Wealth management solutions are currently not as common in the industry, but where they do appear they are put in place only after Step 2.



Make a "buy vs build" assessment for financial services

When providing B2C and B2B financial services, MMPs may take two different approaches: launching a bank, or developing partnerships with an existing bank that already has the necessary licenses to underwrite loans and offer savings products. The financial modelling on which this report is based assumes that the MMP is taking a partnership approach. However, as an increasing number of leading MMPs look at purchasing banking licenses, it is important to evaluate both approaches, as they have varying revenue, cost and risk implications.

PARTNERSHIP MODEL

In this model, a MMP will partner with a licensed lender (e.g. bank, microfinance institutions, saving and credit co-operative). MMPs are responsible for customer management, marketing and communications, and distribution. Product development is typically developed jointly with the lending institution along with data protection and regulatory compliance. The lending institution is responsible for developing the credit scoring model and taking on the risk. MMPs will receive a commission or processing fee for every loan originated through its channel, and/or a share of interest earnings or fees charged on the loan.

While this model is more agile, it is important to note that traditional processes and underwriting norms are unlikely to be adapted for the targeted customer segments. Lending partners will need to modify their loan parameters and processes to serve low-income customers.

BANK MODEL

A number of MMPs have for regulatory or strategic purposes chosen to acquire banking licenses, enabling them to hold deposits on behalf of customers, underwrite loans, and develop a comprehensive suite of savings and payments services.

In terms of revenues, MNOs with a banking license are able to take full benefit of net interest earned on loans and can monetise the float from holding customer deposits (in this case, MNOs are typically required by the regulator to hold such funds in low-risk products).

In addition to the implied risk, this model also has additional costs. At a high level, holding a banking license may involve higher technology costs, resulting in significant additional CAPEX. In addition, banks also face capital requirements proportionate to risk-weighted assets, as well as substantial compliance costs.

Tier 3: Unlocking the Ecosystem via Innovation

With the Tier 1 Transactional ARPU gap addressed via Tier 2 diversification, and some additional free cash to work with, MMPs will be less constrained in exploring more progressive areas of innovation, involving slightly higher risk but with potential for significant reward.

We have seen the case for ecosystem/platform-based engagement – and subsequent increasing ARPU highlighted across adjacent sectors (e.g., Apple Pay, Google Pay, Facebook ads, Twitter data licensing) as well as those closer to the MM industry (e.g., WeChat, JIO, OPay, Cellulant). So in Tier 3 we assess the opportunities for MMPs to attain digital platform levels of ARPU and beyond via increased activity and growth in user base.

Assessing innovation areas' strategic fit and practical feasibility

We asked MMPs to share a 1-5 rating on six areas of ecosystem innovation, for both strategic appeal and feasibility. The table in Annex D summarises this feedback in aggregate. Noting that the lower-ranking choices remain as compelling areas of future exploration, we have selected the top two to model in the main body of this report:

- **Data APIs & Analytics-as-a-Service.** A web-based service with tiered pricing for third parties to retrieve historical data and/or summary analytics on behalf of a mobile money account holder.
- **Agents-as-a-Service.** A two-sided match-making model in which the MMP earns revenue by making connections between their agent network and third parties who can benefit by leveraging agent services. Potential examples include e-commerce platforms, fintechs or other MMPs.

Investing pillar profits into ecosystem innovation pays off

Each of the above areas of innovation was modelled as consisting of an initial CAPEX and ongoing OPEX[21], and a percentage of 30-day active B2C or B2B accounts using each feature. The outputs were combined with Tiers 1 and 2 for presentation, but can be broken out as (a) modular, direct contributions to revenue (ARPU) and profitability (EBITDA) over the basic transactional model, and the (b) effects of additional transactional behaviour on underlying transactional model.

More specifically, we highlight in Table 7 and Figure 7 below that over the course of five years, just two examples of Tier 3 ecosystem-driven use cases can contribute ARPU equal to that of the Tier 2 diversification pillars. The introduction of additional areas of innovation, such as a Super App and others listed in Annex D, can serve to extend this effect significantly.

Table 7

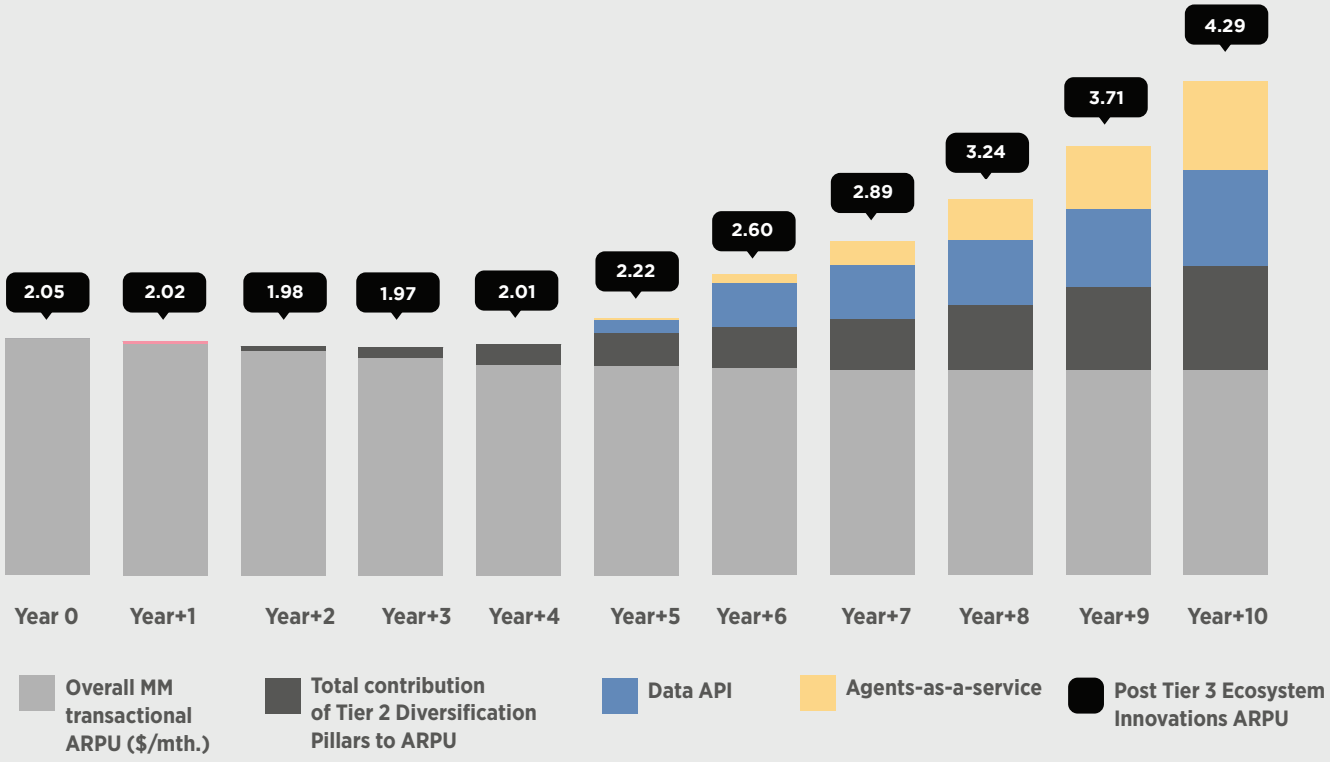
ARPU of Tier 1 purely transactional model, ARPU inclusive of Tier 2 diversification pillars, and ARPU inclusive of Tier 3 ecosystem pillars

	LAUNCH OF ECOSYSTEM INNOVATIONS (Year 5)	ECOSYSTEM GROWING (Year 7)	ECOSYSTEM AT SCALE (Year 10)
TIER 1 TRANSACTIONAL ARPU	1.81	1.78	1.78
+ TIER 2 PILLARS	2.09	2.22	2.69
+ TIER 3 ECOSYSTEM	2.22	2.89	4.29
TIER 2 PILLARS + TIER 3 ECOSYSTEM CONTRIBUTION[22]	18%	28%	59%

[21] Note that there are some costs already borne by the transactional model that provide efficiencies in launching pillars. The costs referenced here are any additional OPEX and CAPEX needed beyond Tier 1.
[22] The ARPU generated by Tiers 2 and 3 together, expressed as a percentage of the total ARPU for all tiers

Figure 7

Evolution of Tier 1, Tier 2, and Tier 3 ARPU contributions over 10 years



In terms of profitability, we see (in Figure 8 and Table 8 below) that where Tier 2 diversification recovered the previous Tier 1 transactional growth trajectory, the Tier 3 ecosystem features actually accelerate that growth.

Figure 8

Evolution of gross margin (GM) and EBITDA margin for all tiers ("post-ecosystem innovation") versus the same figures for Tiers 1 & 2 alone ("post-pillars")

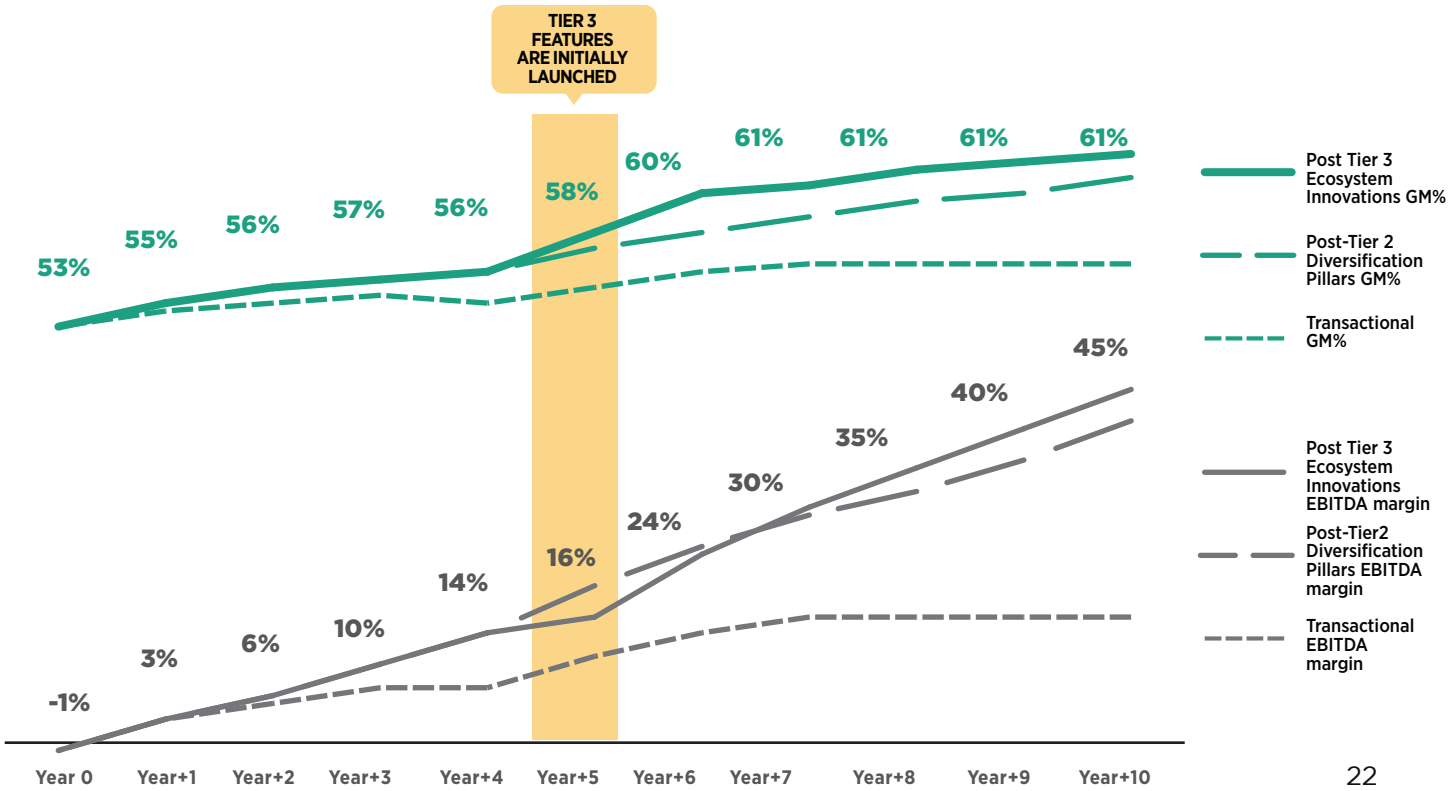


Table 9

Gross Margin (GM), EBITDA, and Operating Free Cash Flow (OFCF) for Tier 1 alone, for Tiers 1 and 2 together, and for all tiers together

	LAUNCH OF ECOSYSTEM (Year 5)	ECOSYSTEM GROWING (Year 7)	ECOSYSTEM AT SCALE (Year 10)
TIER 1 TRANSACTIONAL GM	58%	61%	61%
+ TIER 2 PILLARS	63%	67%	72%
+ TIER 3 ECOSYSTEM	65%	71%	75%
TIER 1 TRANSACTIONAL EBITDA	11%	16%	16%
+ TIER 2 PILLARS	20%	29%	41%
+ TIER 3 ECOSYSTEM	16%	30%	45%
T1 TRANSACTIONAL OFCF	6%	13%	13%
+ TIER 2 PILLARS	16%	26%	38%
+ TIER 3 ECOSYSTEM	15%	21%	29%

Strategise in advance to maximise ROI

MMPs can take advantage of synergies with Tiers 1 and 2 to build and develop Tier 3 features. Some of these Tier 3 areas build directly on infrastructure with costs previously borne by either the transactional model or by Tier 2's Business Diversification Pillars, and thus primarily incur additional costs only in the form of marketing and training. For example:

- For the **Agents-as-a-Service model**, the MMP's agents are already in place for CICO operations and thus represent a direct OPEX efficiency, aside from initial training and marketing costs. Beyond that, if designed and executed with agents in mind, this could also serve to benefit the agents themselves, who otherwise also potentially face transactional revenue pressure.

- In rolling out a **Data API**, MMPs can directly leverage many of the prior investments in the transactional data infrastructure and in the Payments API. Critical items like a developer portal, onboarding, administration, and security of third party integrations will already be in place.

- Similarly, **Finance-as-a-Service** builds on any Payments and Data API investments along with prior rollout of B2C and B2B credit/savings, insurance, and wealth management products.

- Furthermore, **Super Apps** build on Payments and Data APIs, and/or FaaS services, listing them alongside their own products in an aggregated interface.

It is never too early to plan. For instance, it may not be feasible for a leading MMP in a smaller country with limited smartphone uptake to evolve directly into these areas in the immediate term. However, they might consider starting with the Tier 2 pillars that can generate more immediate revenue, while accounting for these and other efficiencies in their future rollouts of Tier 3 components.

Invest tier 3 profits in expanding the market

This level of Tier 3 profitability quite obviously has the potential to open new opportunities in terms of reach. In a market where an MMP is already operating, for instance, these profits can be leveraged to fund inclusion efforts, expanding their customer reach to previously financially excluded segments. MMPs operating across national borders, such as at group level, may also consider leveraging these outsized profits to supplement challenges in less mature markets where they are still starting up or actively investing in network growth.

Direct Emergency Response Measures [23]

While the digitisation push triggered by the COVID-19 pandemic could be positive for the mobile money industry in the long run, the pandemic has been heavily disruptive in the short run, affecting corporate revenue, service continuity, and agents' livelihoods alike. A number of emergency responses can be considered with regards to future pandemics and similar shocks, which could be implemented with relatively low costs. The purpose of these measures is to ensure service continuity and prevent acutely negative effects on revenue, while respecting sanitary measures and safeguarding both customers' and agents' livelihoods.

First, we have seen that it is imperative [24] to **provide up-to-date information to agents, customers,** and the rest of the network to avoid misinformation and panic in favor of promoting a sense of trust and security in the system. These measures have included the implementation of a toll-free COVID-19 hotline, training for customer service representatives, and online information centers. MNO-led MMPs have provided increased bandwidth for home internet to encourage social distancing while accessing the latest news.

Measures to **encourage safe environments and resulting service continuity** for customers – either directly or via corporate social responsibility funds and NGO partnerships[25]. For example, MNOs/MMPs and fintechs[26] alike have provided personal protective equipment, hand sanitisers, cleaning products, masks, and signage to agents. In terms of less-direct but critical support through partnerships, key focuses have included donation of food, thermal cameras to ministries of health [27], partnerships with water and sanitation services [28], and support of e-learning programmes to offset school closures by offering free bandwidth for accessing these sites in addition to financial support for low-income families [29].

All of these indicate a willingness and necessity by the industry to look beyond short-term reduced revenues, and at the longer-term resilience and growth of the network. The past year has seen several notable **accelerations in business model and product innovations.** For example, loyalty points can be used for merchant payments, utility bills (which was previously just for MNO services), and for food purchases through a transfer system.

Increased transaction and account balance limits, along with transaction fee waivers, can drive usage of digital transactions relative to cash, reducing unnecessary physical contact and alleviating cost of living pressures on mobile money users. This promotion of digital channels can also serve to spur adoption of any areas of innovation already available [30]. However, some of these measures are at best temporary, as they may impair the long-term sustainability of the mobile money business.

[23] This box treats the steps MMPs can and have taken to mitigate the negative effects of COVID-19 while harnessing the acceleration of mobile money trends to spur growth. Beyond these direct measures, MMPs should internalise any regulatory measures being recommended and/or undertaken, and recognise any resulting challenges to the current model and accelerants toward a future model. More information on this topic can be found in GSMA's 2020 Recommendations to Central Banks and corresponding tracker of regulatory responses.

[24] E.g. "Keeping the world connected." GSMA, 2020.
[25] E.g. "Partnering During Crisis" GSMA, 2020.
[26] E.g. "Agility Breeds Resilience," Accion Center for Financial Inclusion, 2020.
[27] E.g. Safaricom's 2020 Sustainability Report for more examples of these efforts.
[28] E.g. "An effective response to COVID-19 requires innovative water and sanitation services" GSMA, 2020.
[29] E.g. "UNICEF and Airtel Africa announce partnership"
[30] E.g. "When digital payment goes viral" NextBillion, 2020.

Closing Remarks

While a purely transactional revenue model has proven successful in getting MMPs from the startup stage to a level of maturity, it presents limitations in light of the trends identified in this report. Challenges may arise on several fronts, including profitability, competitive risks, and agent commission models. Therefore, it is imperative for MMPs to consider diversification strategies as they begin evolving their business models beyond payments and into their own "Profitability 2.0" approaches.

Fortunately for MMPs at this stage, they have several key assets already at hand – a strong customer base, digital infrastructure and channels, and an agent network – which allow for a more viable path forward.

Providers should leverage these advantages to diversify their offerings by including non-transactional products and dedicated B2B account features which can generate additional revenues with only marginal costs beyond their transactional model. This allows for not only increased profitability, but also gives flexibility in fees to remain competitive, while providing additional opportunities for reinvigorating the agent model.

Finally, providers can invest these increasingly sustainable profits from the diversification efforts into additional areas of ecosystem innovation. Though these may be more challenging and resource-intensive to launch as compared to the pillars described above, there exists strong potential for a payoff in both sustaining profitability and meeting the evolving needs of mobile money users.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Annex A: Modelled Transactions Value Distribution

	STAGE 1	STAGE 2	STAGE 3
AS A PERCENTAGE OF INCOMING VALUE			
Cash-Ins	88.30%	71.90%	53.10%
Bulk Payments	1.20%	6.80%	20.90%
Bank to Mobile (B2M) Transfers	5.80%	16.40%	20.90%
Inbound Off-Net/Cross-Net Transactions	0.60%	1.80%	2.00%
International Remittances (Received)	4.00%	3.00%	3.00%
AS A PERCENTAGE OF CIRCULATING VALUE			
On-Net P2P Transfers	93.30%	87.70%	75.00%
Merchant Payments	6.70%	12.30%	25.00%
AS A PERCENTAGE OF OUTGOING VALUE			
Cash-Outs at Agents	79.3%	57.7%	50.0%
Bill Payments	2.0%	19.9%	19.9%
Mobile-to-Bank (M2B) Transfers	12.7%	13.5%	21.2%
Airtime Top-Ups	2.9%	2.4%	1.9%
Outbound Off-Net/Cross-Net P2P	0.8%	4.0%	4.0%
International Remittances (Initiated)	2.3%	2.0%	2.0%
Cash-Outs at ATM	0.0%	0.5%	1.0%

Annex B: Modelled Transactional Revenues & Costs

REVENUE AS A PERCENTAGE OF TRANSACTIONAL VALUE FOR:	STAGE 1	STAGE 2	STAGE 3
CIRCULATING VALUE			
Cash-Ins	0.00%	0.00%	0.00%
Bulk Payments	0.09%	0.09%	0.09%
Bank to Mobile (B2M) Transfers	0.00%	0.00%	0.00%
Inbound Off-Net/Cross-Net Transactions	0.00%	0.00%	0.00%
International Remittances (received)	0.00%	0.00%	0.00%
CIRCULATING VALUE			
On-Net P2P Transfers	0.42%	0.20%	0.20%
Merchant Payments	0.50%	0.50%	0.50%
OUTGOING VALUE			
Cash-Outs at Agents	1.85%	1.85%	1.85%
Bill Payments	1.89%	1.89%	1.89%
Mobile-to-Bank (M2B) Transfers	1.00%	1.00%	1.00%
Airtime Top-Ups	0.00%	0.00%	0.00%
Outbound Off-Net/Cross-Net P2P	1.00%	1.00%	1.00%
International Remittances (Initiated)	1.32%	1.33%	1.33%
Cash-Outs at ATM	1.85%	1.85%	1.85%

Annex B: Modelled Transactional Revenues & Costs (cont'd)

COST AS A PERCENTAGE OF TRANSACTIONAL VALUE FOR:	STAGE 1	STAGE 2	STAGE 3
CIRCULATING VALUE			
Cash-Ins at Agent	0.30%	0.30%	0.30%
Bulk Payments	0.00%	0.00%	0.00%
Bank to Mobile (B2M) Transfers	0.50%	0.50%	0.50%
Inbound Off-Net/Cross-Net Transactions	1.00%	1.00%	1.00%
International Remittances (Received)	0.50%	0.50%	0.50%
CIRCULATING VALUE			
On-Net P2P Transfers	0.00%	0.00%	0.00%
Merchant Payments	0.00%	0.00%	0.00%
OUTGOING VALUE			
Cash-Outs at Agents	0.65%	1.85%	1.85%
Bill Payments	0.00%	0.00%	0.00%
Mobile-to-Bank (M2B) Transfers	0.00%	0.00%	0.00%
Airtime Top-Ups	0.00%	0.00%	0.00%
Outbound Off-Net/Cross-Net P2P	1.00%	1.00%	1.00%
International Remittances (Initiated)	0.00%	0.00%	0.00%
Cash-Outs at ATM	0.33%	0.33%	0.33%

Annex C: Tier 1 Profit After Non-Transactional Costs

	STAGE 1	STAGE 2	STAGE 3
TRANSACTIONAL GROSS MARGIN (GM)	**53%**	**56%**	**61%**
COMMERCIAL COSTS AS A PERCENTAGE OF TOTAL REVENUE	**29.00%**	**27.00%**	**25.00%**
Customer Registration	9.00%	6.00%	3.00%
Agent Acquisition and Management Costs	8.00%	7.50%	7.00%
Ecosystem Acquisition and Management Costs	2.00%	6.00%	10.00%
Marketing Costs	10.00%	7.50%	5.00%
OPERATING COSTS AS PERCENTAGE OF TOTAL REVENUE	**25%**	**23%**	**20%**
Personnel	10.00%	9.00%	8.00%
Fraud & Settlement	1.00%	1.00%	1.00%
Technology	8.00%	6.50%	5.00%
General & Administrative	3.00%	3.00%	3.00%
Customer care	3.00%	3.00%	3.00%
EBITDA	**-0.70%**	**7.00%**	**16.00%**
CAPEX	**8.00%**	**5.50%**	**3.00%**
Network & IT	5.00%	3.50%	2.00%
Other	3.00%	2.00%	1.00%
CASH FLOW FROM OPERATIONS (OFCF)	**-8.70%**	**1.50%**	**12.80%**

Annex D: Ecosystem Innovation Survey Results

We asked MMPs to give ratings for each of the six areas listed below, relating to both strategic appeal and feasibility.

Data APIs & Analytics-as-a-Service. A web-based service allowing third parties to retrieve historical data on behalf of a mobile money account holder. This could include access to some default granular data (e.g., via a Data API), a premium tier for accessing higher volumes or frequency of data access (e.g., Data Licensing), and/or access to computed metrics that consume but do not expose the raw transactions/account data (i.e., Analytics-as-a-Service).

Finance-as-a-Service (FaaS). An open, web-based service allowing third parties to integrate and perform non-payments financial functions, such as those relating to savings, credit, and/or insurance purposes.

Super Apps. A model in which the mobile money provider allows and encourages third party developers (e.g., partnered via either a curated or openly documented process) to publish applications that are deeply integrated with Open Payments APIs, Data APIs, and/or FaaS services listed above, and lists them alongside their own products in an aggregated interface.

Agents-as-a-Service. A two-sided match-making model in which the MMP earns revenue by making connections between their agent network and third parties who can benefit by leveraging agent services.

Infrastructure-as-a-Service. Primarily for MNO-based MMPs, a model that allows Micro, Small and Medium Enterprises as well as other businesses to pay for enterprise services such as data transfer, cloud storage, computing resources, information security services, and more.

Summary of industry reactions

Data APIs & Analytics as a Service are considered top priorities, with Stage 2 companies either having already launched them, or planning to do so in the very near term. There are, however, notable constraints expressed around regulation of data and how that might affect which data and analytics can be provided.

While **Agents-as-a-Service (AaaS)** is considered very appealing, two notable constraints come along with this model. For Stage 1 MMPs, investment is still targeted toward growing agent networks, thereby constraining them in allocating any additional costs on that model. Stage 2 and 3 MMPs, while free of those cost constraints, are hesitant due to ambiguities or fears of overly strict pricing regulation.

For **Super App** innovation, there is a stark difference in prioritisation between Stage 1 and Stage 2 & 3 MMPs, with the latter group having a strategy in the works to launch over the next several years. The main benefits of a Super App include keeping these interactions on-platform, a strong partnership demand from third parties, and the value of an aggregated one-stop-shop for the customer. Expressed constraints for Super Apps are primarily technical (e.g. only a few developers can provide such a solution).

Finance-as-a-Service is considered strategically appealing, in particular the potential for higher margins relative to a purely transactional model. Stage 2 and 3 MMPs tend to have at least conducted limited pilots with plans to launch FaaS, while Stage 1 companies do not yet see strong demand for these features.

Annex E: Glossary

Agent outlet	In the case of mobile money, an agent outlet is a location where one or several provider-issued tills are used to conduct transactions for clients. 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. In some markets, an agent outlet can also operate tills issued by several providers; these are generally referred to as shared or non-exclusive outlets. Agents usually earn commissions for performing these services. As they are the human touchpoint for the mobile money service, they also often provide frontline 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 smallscale traders, microfinance institutions, chain stores and bank branches serve as agents in some markets. Some industry participants prefer the term "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 where any of the tills were used to facilitate at least one transaction within the last 30 days. Agent tills are provider-issued "lines", which can be SIM cards or POS machines, authorised and used to facilitate mobile money transactions.
Airtime top-up	Purchase of airtime via mobile money, funded from a mobile money account.
ARPU	Average revenue per active user. ARPU is calculated based on active accounts, by dividing mobile revenue by the number of active accounts during the 30-day period.
Bank account-to-mobile money account transfer (B2M)	A direct transfer of funds made from a customer bank account to a mobile money account. This transaction typically requires a commercial agreement and technical integration between the bank and the mobile money provider to allow direct transfers.

Bill payment	A payment made by a person from either their mobile money account or over-thecounter to a biller or billing organisation via a mobile money platform in exchange for services provided.
Bulk disbursement	A payment made by an organisation via a mobile money platform to a person's mobile money account. For example, salary payments made by an organisation to an employee's mobile money account, payments made by a government to a recipient's mobile money account or payments made by development organisations to beneficiaries.
Capital expenditure (CAPEX)	Funds used by a company to acquire or upgrade physical assets such as property, industrial buildings, or equipment. In the case of mobile money, CAPEX is often tied to the acquisition of platforms and data centres.
Cash flow margin	Cash flows from operating activities divided by net sales. In this analysis we use EBITDA minus CAPEX as a proxy for cash flow.
Cash-in	The process by which a customer credits their mobile money 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 their 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.
EBITDA	Net income with interest, taxes, depreciation, and amortisation added back to it, and can be used to analyse and compare profitability between companies and industries because it eliminates the effects of financing and accounting decisions.
E-money	Short for "electronic money," e-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 per cent of the value stored in their accounts. That said, bank deposits can earn interest, while e-money traditionally cannot.
EBITDA margins	The ratio of net profits to revenues that shows how much of each dollar earned by the business unit is translated into profits. Also known as net margins.

Float	The balance of e-money, physical cash or money in a bank account that an agent can immediately access to meet customer demands to purchase (cash-in) or sell (cash-out) electronic money.
Gross margin (GM)	The ratio of transaction profits to revenues that shows how much of each dollar earned by total transactions is translated into profits. Also referred to as Transaction Margin.
Incoming transactions	Incoming flows of value come from cash-in, bulk payment disbursements, incoming international remittances, and transfers from the banking system or alternative mobile platform to a mobile wallet.
International remittance enabled by mobile money	Cross-border fund transfer from one person to another person. This transaction can be a direct mobile money remittance, or can be completed using an intermediary organisation.
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.
Know Your Customer (KYC)	Financial institutions and regulated financial service providers are obligated by regulation to perform due diligence to identify their customers. The term is also used to refer to the regulation which governs these activities. The FATF recommends a risk-based approach to due diligence for AML/CFT 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 money account via a mobile money platform to a retail or online merchant in exchange for goods or services.

Mobile money	A service is considered a mobile money service if it meets the following criteria: • A mobile money service includes transferring money and making and receiving payments using the mobile phone. • The service must be available to the unbanked, for example, people who do not have access to a formal account at a financial institution. • The service must offer a network of physical transactional points which can include agents, outside of bank branches and ATMs, that make the service widely accessible to everyone. The agent network must be larger than the service's formal outlets. • Mobile banking or payment services (such as Apple Pay and Google Pay) that offer the mobile phone as just another channel to access a traditional banking product are not included. • Payment services linked to a traditional banking product or credit card, such as Apple Pay Google Pay and Samsung Pay, are not included.
Mobile money account (registered/active)	An e-money account which is primarily accessed using a mobile phone and which 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.
Mobile money account-to-bank account transfer	A direct transfer of funds made from a mobile money account to a customer bank account. This transaction typically requires a commercial agreement and technical integration between the bank and the mobile money provider to allow direct transfers.
Off-net transfer	Transfers which are initiated by registered mobile money users to unregistered users are typically referred to as off-net (off-network) transfers. Some deployments may refer to an off-net transfer as a voucher, coupon or token. In this case, the e-money must be cashed out at an agent of the sender's agent network. Transfers between two accounts of different, but interconnected, mobile money schemes are also sometimes referred to as "off-net transfers".
Operating expenditure (OPEX)	A category of expenditure that a business incurs as a result of performing its normal business operations. Also known as operating expenses.

Operating free cash flow (OFCF)	A measure of financial performance calculated as operating cash flow minus capital expenditures. In this analysis we use EBITDA minus CAPEX as a proxy for cash flow.
Outgoing transactions	Outflows of value from the mobile money system include off-net P2P transfers, bill payments, airtime purchases, mobile wallet-to-bank transfers, cross-net transfers, and cash-out. These transactions cause value to exit the system, either when it is converted to cash, used to make a purchase, or transferred to a different system (e.g., the banking system or an alternative mobile money platform).
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.
Profit and Loss Statement (P&L)	A financial statement that summarises the revenues, costs, and expenses incurred during a specific period of time — usually a fiscal quarter or year.

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