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The GSMA Ecosystem Accelerator programme focuses on bridging the gap between mobile operators and start-ups, enabling strong partnerships that foster the growth of innovative mobile products and services. These partnerships bring impactful mobile solutions to the people and places that need them most, generating the greatest socio-economic impact. The programme is supported by the GSMA, its members, and the UK Foreign, Commonwealth and Development Office (FCDO)

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Executive summary

Digital platforms disrupt traditional value chains across different sectors

Traditional business models resemble a linear value chain, with producers at one end and consumers at the other. In recent years, however, platform-based models have disrupted such value chains by enabling the exchange between two or more interdependent groups. These can help to eliminate inefficiencies and extend the reach of services to a greater number of customers.

The potential for digital platforms to reach scale depends on several enabling factors, from adoption of digital payments and mobile internet services to increased investment levels in local tech start-ups.

Digital platforms utilise a range of strategies to scale their user base

Strategies to grow the number of users include an initial focus on growing users on only one side of the platform and providing additional services related to the platform's core functionality. These approaches are often used in parallel with other strategies, such as entering international markets.

Digital platforms also regularly form partnerships with other players in the tech ecosystem to grow the number of platform users. For example, some digital platforms partner with financial service providers to improve conditions for suppliers on the platform by offering benefits such as insurance and credit. On the demand side, partnerships allow digital platforms to reach new consumers, for instance by plugging into existing platforms or ecosystems.

Strong synergies and opportunities for collaboration between mobile operators and digital platforms

Mobile operators have several assets that digital platforms can leverage in order to scale. This includes large customer bases, well-recognised and trusted brands, a range of physical and online distribution points, market expertise, and relevant payment and communication channels.

Conversely, digital platforms can help mobile operators appeal to individuals that do not currently use mobile internet. Digital platforms can also stimulate mobile data usage, helping operators to boost their core revenues while providing opportunities to capture adjacent sources of revenue in fast-growing sectors.

A successful partnership needs to work for all parties involved

Digital platforms and mobile operators need to identify their own 'haves' and 'needs' before exploring potential partnerships. This will help both parties understand the value they can provide to each other and where they need assistance.

Partnerships between mobile operators and digital platforms must provide value to both parties, as well as platform users. It is therefore important that the commercial objectives of operators and digital platforms align and that realistic targets are set, so that the partnership model works for everyone involved.

Scaling digital platforms during the pandemic

Digital platforms across several sectors have experienced an uptick in users during the COVID-19 pandemic, as individuals and businesses have become more receptive to online transactions. However, the impact of the virus has also disrupted investments in tech start-ups, meaning that digital platforms are having to adjust their growth plans amid continued uncertainty.

Interviews with digital platform experts, which helped to shape this report, highlight further challenges that digital platforms encounter when trying to reach scale in developing countries. Identifying a suitable business model, establishing trust among users and overcoming regulatory hurdles were identified as the three biggest challenges facing digital platforms.

Research objectives

Objectives and scope

Our research aims to reveal the transformative impact that digital platforms can have in developing countries. This report analyses the key enablers required to scale this type of business. It also looks at strategies used by digital platforms to scale in developing countries, with a particular focus on the role of partnerships. To do this, the GSMA's haves/needs framework is applied to six examples of partnerships between mobile operators and digital platforms. The report concludes with strategic recommendations for platform economy stakeholders.

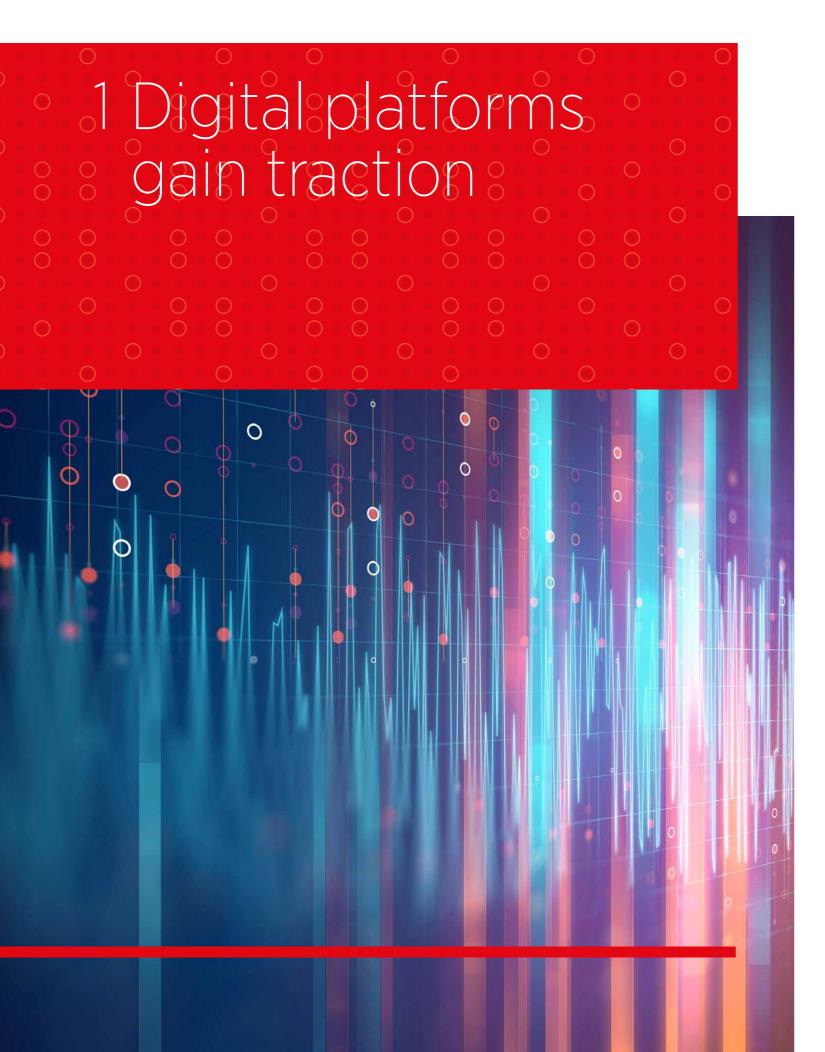
Summary of methodology

The information collected, analysed and presented in our research came from two sources:

- 26 key informant interviews (KIIs) with digital platform start-ups, investors, tech hubs, mobile operators and other digital platform experts, covering developing countries in Asia and Africa. Key informants were asked questions on viable strategies for scaling digital platforms, the value of partnerships between digital platforms and other ecosystem players, and challenges facing digital platforms. KIIs were conducted in October and November 2020; and
- Desk-based research on digital platforms in developing countries.



A Executive summary



1.1 DEFINING DIGITAL PLATFORMS

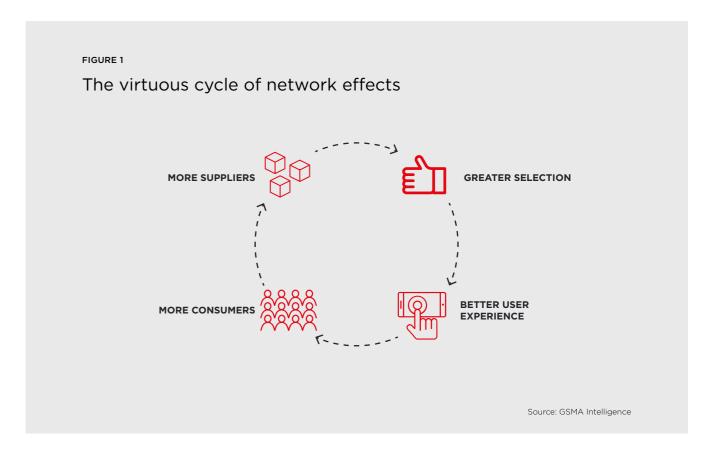
Traditional business models resemble a linear value chain, with producers at one end and consumers at the other. In recent years, however, such value chains have been disrupted by digital platforms, which can be defined as technology-enabled business models that create value by facilitating exchanges between two or more interdependent groups.¹

Digital platforms eliminate inefficiencies and extend the reach of services to a greater number of customers. As a result, the platform-based business model is gaining popularity in today's tech ecosystem and has become integral to the day-to-day lives of millions of people. Most often, platforms enable interactions between two sides, such as in e-commerce marketplaces, which bring together consumers and suppliers. Other types of digital platforms involve transactions between multiple sides, as in the case of food-delivery platforms, which convene riders, restaurants and consumers.

In Southeast Asia, platforms such as Grab and Gojek match consumers with a range of services, including taxis, restaurants and medical care. Digital platforms also connect individuals to financial service providers. For example, Migo is a platform in Nigeria that allows companies to offer credit to their customers. There are also digital platforms which cater to the needs of specific workers, such as farmers. For instance, Milkbasket and Ninjacart help smallholder farmers in India to get better prices by connecting them directly with local buyers.

A key characteristic that separates digital platforms from traditional businesses is the potential to generate network effects, whereby an additional user on a digital platform increases the value of the platform to other users.² Most commonly, this occurs when the number of suppliers on a platform increases, making the platform more attractive to consumers. This is referred to as a cross-side network effect. In contrast, same-side network effects occur when a growing number of users attracts more users on the same side of the platform, as seen on social media platforms.

^{2.} Platform Revolution: How Networked Markets are Transforming the Economy, Geoffrey G Parker, Marshall Van Alstyne, and Sangeet Paul Choudary, 201



^{1.} Accentu

Propelled by network effects, digital platforms have been able to scale within many sectors of the economy. Many start-ups born at the beginning of the last decade have grown exponentially. In 2010, mPharma, Ruangguru and Twiga Food did not exist.³ However, as of December 2020, mPharma works with 200 pharmacies across five countries in Sub-Saharan Africa (distributing medicine to 400,000 patients),⁴ Ruangguru connects 15 million learners with 300,000 teachers, and Twiga matches 4,000 agricultural suppliers with more than 35,000 vendors.⁵

Not only are digital platforms having a significant commercial impact, but they are also driving socioeconomic improvements. Studies highlight that digital platforms can increase firm and worker productivity (e.g. through better market access) and they can also provide an entry point for formalising firms.⁶ A growing number of digital platforms also distribute financial services, helping to drive financial inclusion.7 Moreover, digital platforms are helping to deliver better-quality education, improved health outcomes and other positive societal contributions for millions of people. The importance of such platforms has been underlined by the COVID-19 pandemic. However, the pandemic has also emphasised the digital divide, with the unconnected less able to mitigate the disruption to their lives.

1.2 DIGITAL PLATFORM ENABLERS

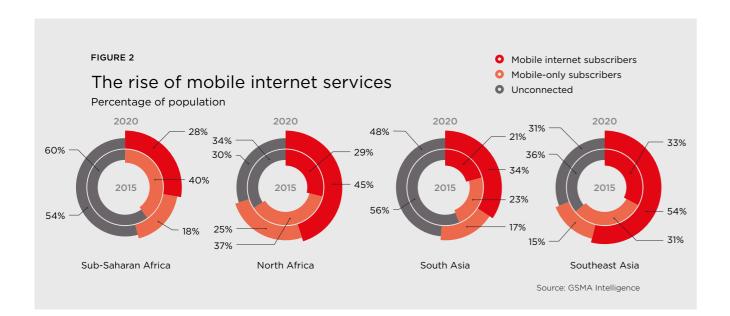
The potential of digital platforms to reach scale depends on several enabling factors. From our research, we have identified six key enablers of digital platforms in any given market environment.

1. Mobile internet access

The expansion of mobile internet has fuelled the growth of digital platforms by enabling subscribers to perform a wide range of tasks on their devices. This growth is set to continue, with GSMA Intelligence predicting that almost 40 per cent of people in Sub-Saharan Africa will subscribe to mobile internet by 2025.

Unstructured supplementary service data (USSD) channels allow digital platforms to reach mobile subscribers who do not have internet access; however, there are often restrictions on capabilities, such as limits on character count and audio-visual functionalities. Digital platforms that can be accessed via USSD are most prevalent in sectors such as agriculture, as these platforms tend to operate in rural areas where mobile internet adoption is lower.

- 3. Ruangguru and Twiga Foods have received grant funding through the GSMA's Ecosystem Accelerator programme
- 4. Official company website (correct as of 1 December 2020)
- 5. Official company websites (correct as of 1 December 2020)
- 6. Digital Platforms in Africa: the "uberisation" of informal work, German Institute of Global and Area Studies, 2019; and How online marketplaces can power employment in Africa, BCG, 2019
- Africa's digital platforms and financial services: An eight-country overview, Insight2Impact, 2019



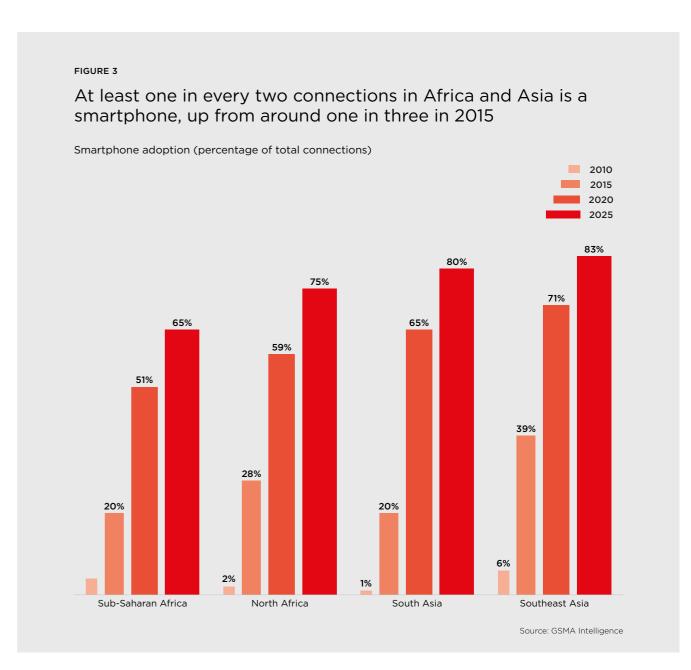
2. Smartphone penetration

Although there are some digital platforms that are designed for feature phones, the rich interface of smartphones broadens the scope for product innovation and provides a much more user-friendly experience. 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.⁸ As a result, user engagement and activity rates tend to be much higher when digital platforms are accessed via a smartphone.

3. Digital payments

Digital payments help to reduce the problems associated with cash transactions, such as the higher risk of fraud and delays to transaction fulfilment. As a result, the experience of using digital platforms tends to be enhanced when digital payments are used, helping platforms to scale. In Asia, the shift towards digital payments is being driven by several players, including banks, fintechs and mobile money providers. Some of the region's largest digital platforms, such as Grab, are also offering their own payment solutions.

^{8.} The impact of smartphones on financial inclusion, CGAP, 2017



8 Digital platforms gain traction 9

In Sub-Saharan Africa, where mobile money has been driving financial inclusion, providers are transitioning towards a 'payments as a platform' approach to connect consumers with third-party services.9 The M-Pesa payment platform has over 40 million users and processes over 1 billion transactions every month.¹⁰ Further, mobile money usage has accelerated in 2020, bolstered by the decision by operators to waive transaction fees in order to reduce cash handling during the pandemic.11

4. Venture capital funding

The rapid growth in tech investment across Africa, South Asia and Southeast Asia is fuelling the expansion of startups into scaled digital platforms. Access to capital is vital in order to attract and retain the brightest talent, diversify into new product areas and expand into new markets.

5. Youthful population

Regions across Africa and Asia have growing populations of young urban consumers. The expansion of this social group, who are more tech-savvy and have a higher amount of disposable income, has led to changing consumption patterns. A plethora of digital platforms are now emerging to meet the needs of these individuals.

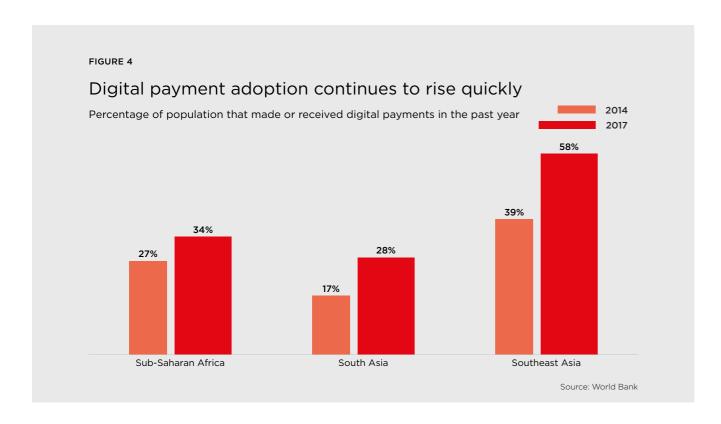
6. Digital talent

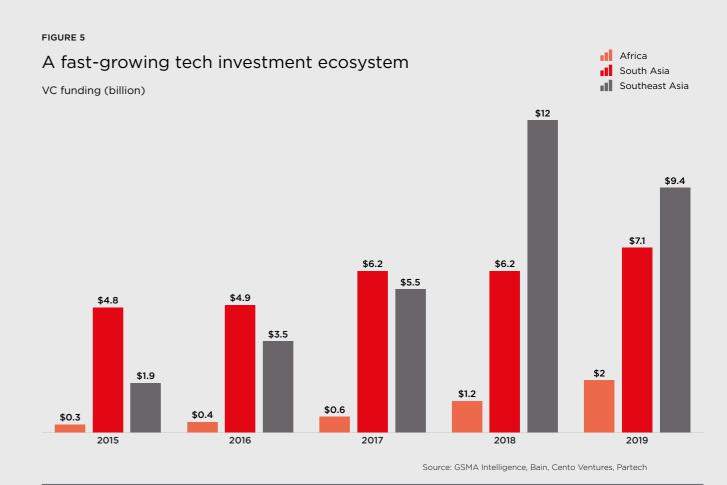
Given the complexity involved in connecting two or more interdependent groups through a single interface, digital platforms often require data scientists, user experience designers, developers and other technical staff to succeed. The number of employees with these skills is growing quickly. There are nearly 700,000 professional developers across Africa, with more than 50 per cent concentrated in five key African markets: Egypt, Kenya, Morocco, Nigeria, and South Africa.¹² However, there is still more work to be done to ensure workers have the right skills. For this reason, several tech companies in developing economies have launched upskilling programs.



^{10. &}quot;Safaricom, Vodacom acquires M-Pesa Payments Platform", PYMNTS, April 2020.

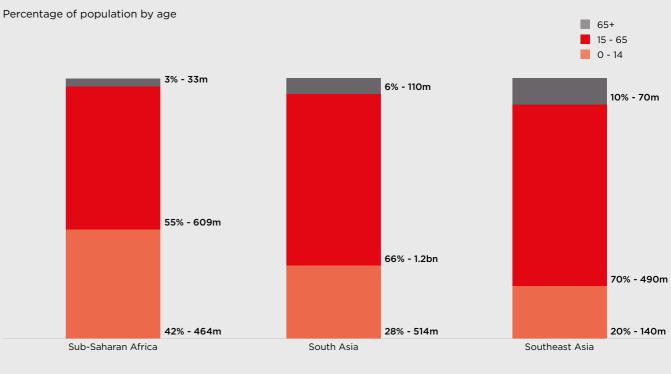
^{12.} e-Conomy Africa 2020, Google and IFC, a member of the World Bank Group, 2020





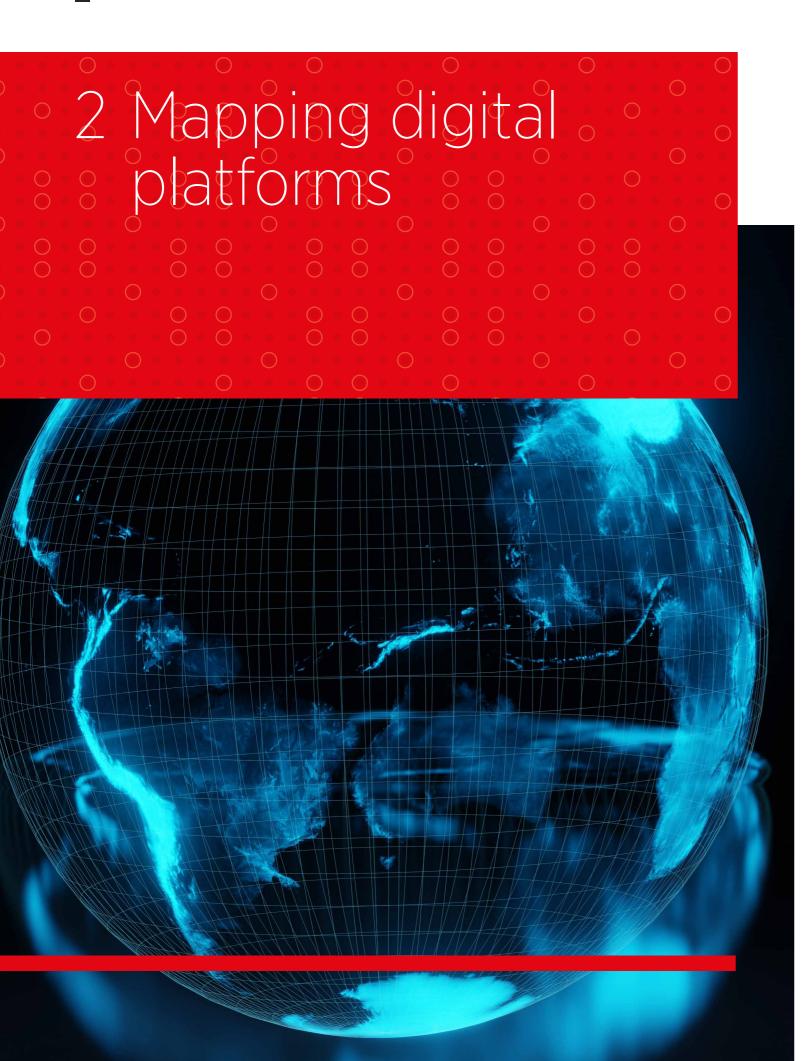
The population of Sub-Saharan Africa skews younger than regions in Asia

FIGURE 6



Source: World Bank

The Mobile Economy Sub-Saharan Africa Report 2020, GSMA, 2020

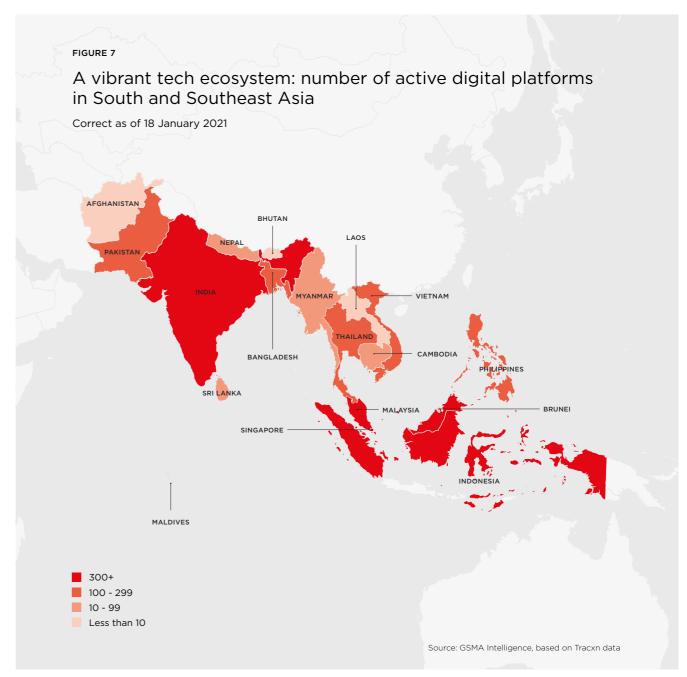


The enablers highlighted in section 1 have underpinned the rise of digital platforms across emerging markets. Based on Tracxn¹³ data, there were over 8,000 digital platforms in South and Southeast Asia, as of January 2021.¹⁴ Of these, more than 5,000 are in India. Other vibrant digital platform economies include Singapore, Indonesia and Malaysia.

Companies that connect consumers to local services such as food delivery and ride-hailing account for the

majority of digital platforms in South and Southeast Asia. E-commerce marketplaces are also pervasive, particularly in Southeast Asia, where the success of platforms such as Lazada and Tokopedia has led to a spike in activity. In South Asia, edtech and healthtech platforms account for a higher proportion of digital platforms than in Southeast Asia. Several solutions in India have scaled in recent years, including online pharmacy PharmEasy and Vedantu, an online tutoring platform.

^{14.} To quantify the number of digital platforms, we have used Tracxn data on active marketplaces, which are defined as "any product/service where the purpose of the platform is to connect third-party buyers/service receivers with third-party sellers/providers".

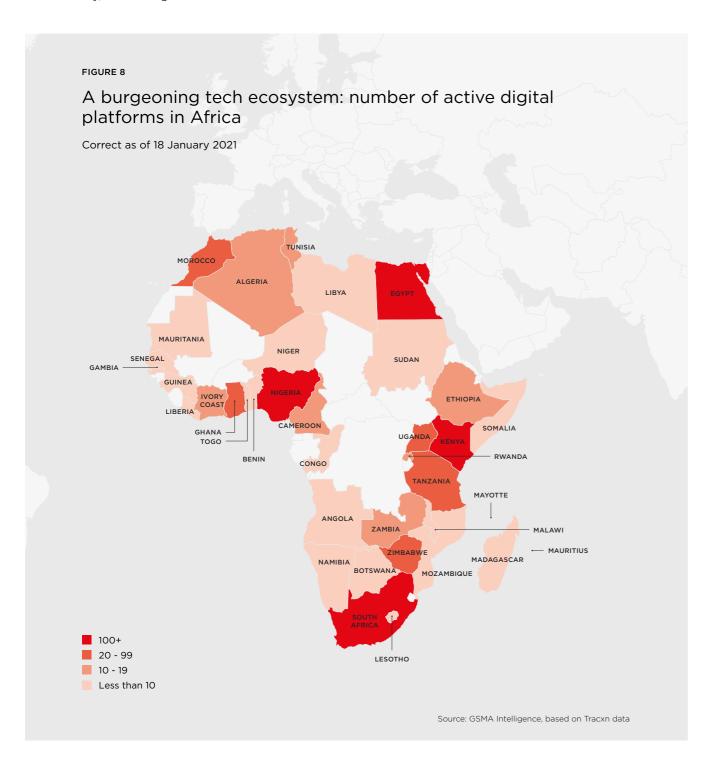


^{3.} Tracxn is one of the world's largest platforms for tracking start-ups and private companies spread across 300+ technology sectors and 800+ emerging themes, with dedicated coverage on 30+ countries.

Digital platforms are also playing an increasingly important role in Africa; they help create a wide range of locally relevant digital content and services, which in turn drives digital inclusion in the region. According to Tracxn, there are nearly 1,500 digital platforms in Africa. Five countries - Nigeria, South Africa, Kenya, Egypt and Ghana - account for 80% of these companies.

As in South and Southeast Asia, companies providing food delivery, ride-hailing and other local services

account for the majority of digital platforms in Africa. Africa also has a growing fintech sector, accounting for 15 per cent of digital platforms in the region. This includes Nigerian payment platforms Paga and Paystack, which provide payment processing solutions for businesses. E-commerce marketplaces account for a smaller proportion of digital platforms in Africa compared to South and Southeast Asia, reflecting the logistics challenges that exist in the region.







3.1 STRATEGIES FOR **SCALING THE USER BASE ON DIGITAL PLATFORMS**

Through stakeholder interviews and an analysis of scaled digital platforms, we identified several strategies that digital platforms use to drive adoption.

1. Non-platform proof of concept

When there is limited interest in a platform-based model from either consumers or suppliers, businesses can use a non-platform demonstration to prove their concept. In Singapore, Lazada operated as a traditional online retailer, buying stock and selling it on to consumers. Then, once Lazada had established a solid base of consumers, it converted to a platform business by opening its website to third-party producers. Within two years, 65 per cent of stock sold on Lazada was through third-party merchants, 15 and today it has over 50 million consumers per year.¹⁶

2. Platform niche

Some digital platforms aim to initially target just a small set of users on either side of the market, before expanding the service to a wider audience. For example, Uber began by allowing riders to hail only black luxury cars that were 1.5 times the price of a normal taxi.¹⁷ This helped the platform to prove its novel concept and build a loyal set of riders that could then be used to attract drivers of other vehicles. Approaches such as this also help platforms avoid the risk of growing users too guickly without putting the necessary quality controls in place.

3. Single-side focus

An initial focus on scaling users on one side of the platform can be an effective strategy if there are major differences between supply and demand. For example, Farmcrowdy is a crowdfunding platform that connects individual lenders to farmers in Nigeria. As Farmcrowdy can reach lenders through channels such as social

media, and onboard them online through a website or app, it is possible to quickly scale lenders at a low cost. This is different to the process for onboarding farmers, which often involves in-person visits, making it time-consuming and expensive to scale this side of the platform. This is a common problem faced by digital platforms in the agriculture space, leading many to initially focus on scaling farmers, knowing they can quickly build up the other side of the market after.

This strategy can also be effective when a digital platform operates in a market with very influential suppliers. Telemedicine platforms, for example, aim to sign up doctors first, offering them flexible hours and the chance to set their own rates, as doctors are often able to bring their offline patients onto the platform. This represents a cost-effective way for a platform to build supply and demand.

4. Platform expansion

Digital platforms look to scale by providing additional services related to the platform's core functionality. These services can be provided by the platform owner or a third-party. For instance, Grab and Gojek started as ride-hailing companies before launching their own food and e-commerce delivery services. They also partnered with healthcare companies such as Halodoc (Gojek) and Ping An Good Doctor (Grab) to deliver medication and telemedicine services to users. These new services can make the platform more attractive to riders since it allows them to meet more of their needs through a single interface. It also enhances the experience of drivers on the platform as they can replace the time spent idle between rides with delivering goods, which increases their earnings potential. For the digital platform owner, it reduces the reliance on a single revenue stream.

This strategy is also used by digital platforms in other sectors. For example, e-commerce marketplace Jumia launched JumiaPay in 2016 to reduce the prevalence of the payment-on-delivery method. 18 Through partnerships, JumiaPay allows users to make payments, play games, apply for loans and purchase insurance. Providing multiple services can enhance the user experience, which improves user acquisition and retention and subsequently attracts more partners, further enhancing the user experience in a virtuous cycle.

[&]quot;Lazada says it is e-commerce leader in Southeast Asia with more than 50 million buyers". South China Morning Post. 2019

[&]quot;The history of how Uber went from the most feared startup in the world to its massive IPO", Business Insider, May 2019

3.2 INTERNATIONAL **EXPANSION: SCALING DIGITAL PLATFORMS IN NEW COUNTRIES**

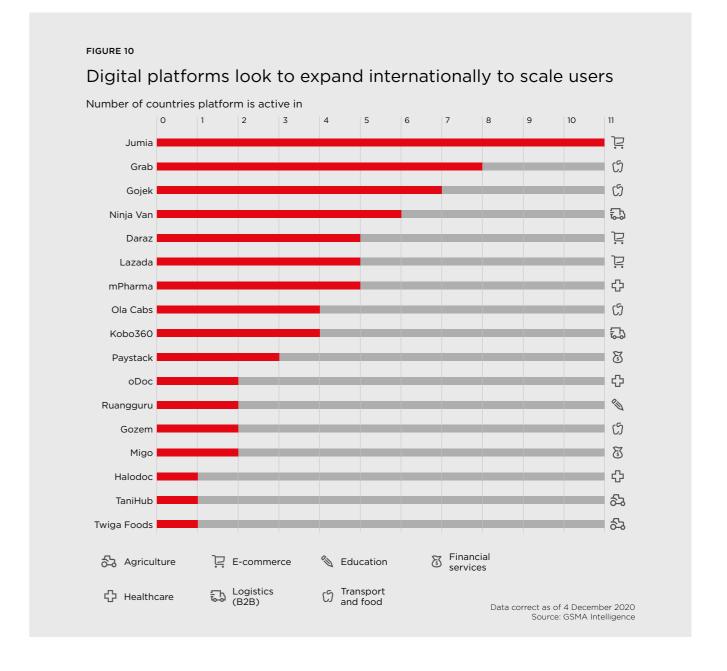
Most digital platforms start off with a solution to a local problem, before expanding into other parts of the country. When the domestic market nears saturation, digital platforms often consider international expansion, particularly when the domestic addressable market is relatively small. This is the case in Sub-Saharan Africa, where only five countries (Democratic Republic of Congo, Ethiopia, Kenya, Nigeria and South Africa) out of 47 have over 15 million mobile internet subscribers.¹⁹

While it is most common for digital platforms to expand into neighbouring countries, the critical factor

is identifying markets with similar sets of users. For example, following its launch in Nigeria, credit platform Migo is expanding to Brazil because both markets have many consumers with smartphones but no access to loans. On the other side of the platform, both countries have several large businesses that want to offer credit to their customer base but lack the right skills to do so. Migo can therefore leverage its experience from Nigeria to scale both sides of its platform in Brazil.²⁰

Scaling a digital platform requires that both sides of the market grow proportionally. However, a digital platform might only be able to scale one side of the market in its home country, making international expansion an attractive strategy for achieving a better balance of users. For example, e-commerce marketplaces that have successfully added local merchants to their platforms might use international expansion to attract buyers in new markets, as the digital nature of platforms makes it easier to match users across different geographies.





3.3 PARTNERSHIPS **AND M&A: QUICK WAYS TO SCALE DIGITAL PLATFORMS**

Digital platforms do not need to own all aspects of value creation, as long as they have access to them through partnerships. Consequently, most digital platforms provide plug-and-play access through APIs that allow them to grow quickly and be nimble to evade business disruptions.

Partnerships can be broadly split into two groups: those designed to scale supply and those designed to scale demand. Partnerships that aim to scale supply focus on improving conditions for suppliers on the platform, such as by helping suppliers to solve specific problems (e.g. partnership agreements between digital platforms and logistics companies to improve the delivery of goods). Partnerships can also allow suppliers to access financial services. For example, digital platforms have data on a supplier's transaction history on the platform, which can validate attempts to get a loan or insurance.

On the demand side, partnerships allow digital platforms to reach new consumers, for instance through

Scaling digital platforms: strategies and business models 10 18 Scaling digital platforms: strategies and business models

¹⁹ As of Q3 2020



plugging into existing platforms or ecosystems. This includes partnerships with mobile operators, social media platforms and device makers, which enable digital platforms to reach millions of potential new

users. Partnerships can also be used to provide specific benefits to consumers, such as agreements between platforms and financial service providers to give consumers access to credit.

- 21. "PalmPay launches in Nigeria on \$40m round led by China's Transsion", TechCrunch, November 2019
- 2. "Gozem teams up with Ogar insurance and Togo Assistance to cover its taxi and moto drivers, in Lomé", Togo First, December 2018
- 23. oDoc has received grant funding through the GSMA's Ecosystem Accelerator programme
- 24. "Twiga Foods signs deal with Jumia to distribute fresh produce", Business Daily Africa, April 2020

FIGURE 11

Digital platforms can scale supply and demand through a broad range of partnerships

PARTNER

EXAMPLE

Device makers



PalmPay is an Africa-focused payment platform. Through agreements with third parties, it supports bill payments, airtime purchases, and movie and event ticket sales. To make it easier for individuals to sign up to PalmPay, the app is pre-installed on Tecno, Infinix and Itel devices.²¹ This could help to increase adoption and usage, which in turn could help PalmPay attract new suppliers to its platform.

Financial service providers



Gozem, which provides transportation and delivery services in West and Central Africa, partners with insurers to cover its drivers.²² This makes working on the Gozem platform a better experience for drivers, helping to improve driver acquisition and retention. With a larger pool of drivers, Gozem can also offer a better customer experience to riders, helping to initiate the virtuous cycle of network effects.

Governments



A partnership with the Ministry of Health and the Government Medical Officers' Association helps telemedicine platform oDoc bring government doctors onto its platform.²³ This can help oDoc build the demand side of its platform, with doctors telling their offline patients about oDoc.

Mobile operators



In Benin, MTN zero-rates the Gozem application, enabling drivers and riders who have subscribed to a data package to use the Gozem platform without using up any of their mobile data allowance. This helps Gozem grow both sides of its platform by appealing to MTN subscribers on limited data packages.

Other platforms



Twiga Foods, which connects agricultural suppliers and vendors in Kenya, signed a partnership agreement with e-commerce platform Jumia in April 2020 to allow consumers to buy fresh produce and processed foods distributed by Twiga Foods on Jumia's platform. ²⁴ The agreement lets Twiga Foods reach new buyers, boosting the demand side of its platform, which makes Twiga Foods more attractive to prospective agricultural suppliers. For Jumia, it gets a major new supplier, which could attract new buyers to its platform.

Source: GSMA Intelligence

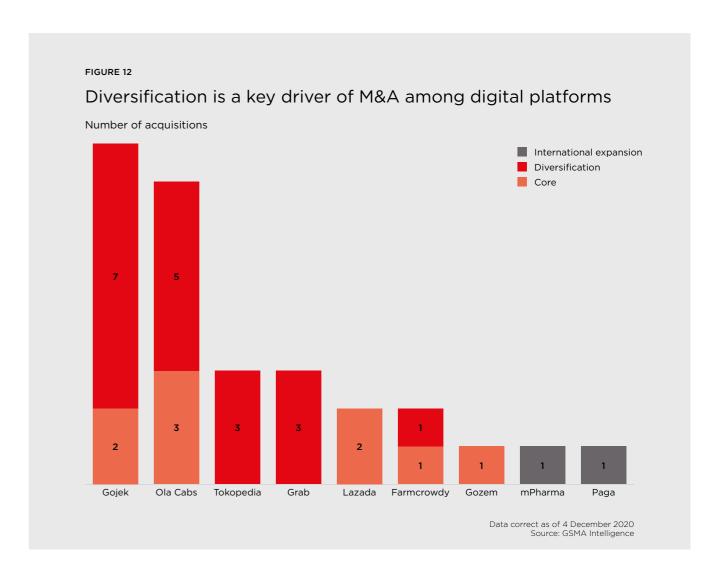
With the platform model designed to support varied partnerships, digital platforms often avoid acquiring other companies. Moreover, given the capital constraints of start-ups, M&A activity tends to be concentrated among larger digital platforms. Gojek and Ola Cabs, both unicorn companies, 25 have a history of deal-making. Most of their acquisitions have been made as part of platform expansion strategies. For example, Gojek has acquired four payments companies and Ola Cabs has used M&A to make inroads into public transport ticketing, trip planning and food delivery.

Other digital platforms use M&A as part of a strategy to expand internationally. For example, mPharma expanded its operations outside of Ghana and into Kenya when it purchased Haltons in March 2019,²⁶

and Nigerian payments platform Paga plans to launch in East Africa following its acquisition of Apposit in January 2020.²⁷ This type of deal is most common in regulated industries, in which an acquisition enables a platform to gain the necessary licensing requirements to enter a new market.

It is also common for digital platform owners to sell their companies to a buyer who either partly or wholly acquires the platform. This normally precedes a move by the acquirer to expand the platform into new territories, most often when an international company acquires a digital platform in Asia or Africa in order to grow its presence in the region. For example, Stripe acquired Paystack in October 2020 to capitalise on the growing digital payments opportunity in Africa.²⁸

- 25. A private company with a valuation over \$1 billion
- 26. "Ghanaian startup mPharma is buying Kenya's second-largest pharmacy chain", Quartz Africa, March 2019
- 27. "Nigerian payments company, Paga acquires long-term Ethiopian software partner, Apposit", Techpoint Africa, January 2020
- 28. "Strike acquires Nigeria's Paystack for \$200m+ to expand into the African continent", Tech Crunch, October 2020



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3.4 SCALING DIGITAL **PLATFORMS DURING THE PANDEMIC**

Digital platforms across several sectors have seen demand increase during the COVID-19 pandemic. In Indonesia, online learning platform Ruangguru saw the average number of users increase from 7.5 million a month before the pandemic to over 11 million.²⁹ Digital platforms in e-retail and healthcare have also witnessed demand surge as consumers have become more receptive to online transactions.³⁰ Some platforms have also experienced an increase in supply as non-digital companies have become more open to partnerships. Examples include restaurants and merchants coming onto food delivery and e-commerce platforms for the first time.³¹

However, the pandemic is having an adverse impact on growth for some digital platforms, particularly those with a significant offline element, such as ridehailing platforms. To avoid drivers leaving the platform, ride-hailing companies have launched new services to appeal to riders. For example, Gozem expanded into e-commerce and food delivery when lockdown restrictions slowed its ride-hailing service.³²

Moreover, the economic and social impacts of COVID-19 have been vast. The IMF expects global GDP to fall by 4.9% in 2020 (the largest contraction since the Great Depression), driven by the disruption to production and demand due to the pandemic.³³ The economic shock threatens to undermine the progress made across many developing countries in recent years, both in terms of growing economic output and reducing poverty levels. This adds to the challenge of scaling a digital platform, with business and consumer spending likely to suffer.

The COVID-19 pandemic has also raised concerns about the ability of tech start-ups to attract investment in the short term. While the full impact of COVID-19 remains unknown, investors are likely to become more risk-averse amid economic uncertainty. As a result, the landscape will likely shift away from early- and seedstage investments towards more established companies with clearer paths to profitability.³⁴ This could increase the time it takes for digital platforms to reach scale while also increasing the value of partnerships, which can help platforms to accelerate growth without venture capital funding.

However, early signs highlight the resilience of the African tech ecosystem, which raised \$1.43 billion in venture funding in 2020. Although this represents a decline of 29 per cent compared with 2019 investment levels, the number of deals completed by the African tech ecosystem went up. In 2020, Partech tracked a total of 359 equity rounds raised by 347 start-ups, compared to 250 rounds by 234 start-ups in 2019.35

⁴ The challenges of scaling digital platforms

^{29.} Education for All in the Time of COVID-19: How EdTech can be Part of the Solution, GSMA, 2020

^{30.} e-Conomy SEA 2020, Google, Temasek, Bain & Company, 2020

^{31. &}quot;Grab's Ken Mandel on how its ad business has softened the blow of Covid-19". The Drum. October 2020: "Jumia sees high numbers of active vendors, onsite customers during COVID-19 lockdown months". BusinessDay, June 2020

^{32. &}quot;Transport app Gozem launches e-commerce delivery options in Togo and Benin", Disrupt Africa, July 2020

^{33.} A Crisis Like No Other, An Uncertain Recovery, World Economic Outlook Update, 2020

^{34.} e-Conomy Africa 2020, Google and IFC, a member of the World Bank Group, 2020

To understand the specific problems faced by digital platforms in trying to reach scale, we asked key informant interviewees (KIIs) the following question: "What are the major challenges of scaling digital platforms in developing countries?". The results show that digital platforms face a multitude of challenges in trying to reach scale, with a relatively equal spread of responses from platform experts.

The top challenges in scaling digital platforms as identified by experts were as follows.

1. Business model

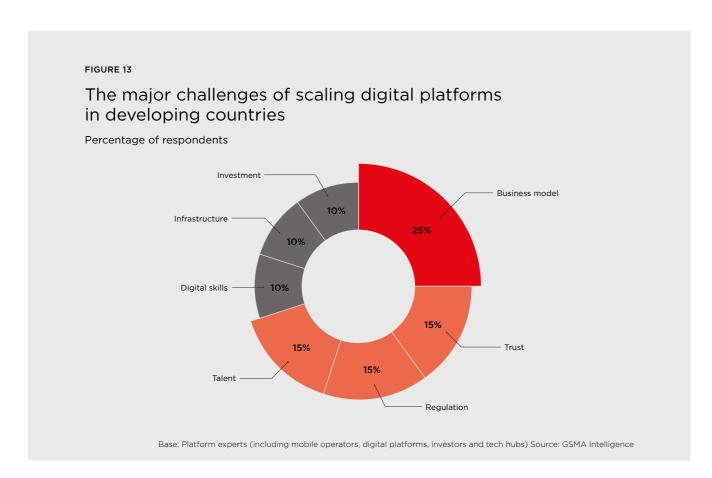
In order to scale, digital platforms must overcome a 'chicken and egg' problem: when both sides of the platforms are essentially equal, it is hard to scale one group of users without the other group already being on the platform. For example, without suppliers on an e-commerce marketplace, buyers have no reason to visit the platform; but without buyers, suppliers are unlikely to list their products on the marketplace. To overcome this problem, some digital platforms offer incentives to one set of users. For instance, it is a common tactic for ride-hailing platforms to offer riders

a discount on their first trip. Although this can be an effective strategy to attract riders, it can lead to the platform making a loss on each trip, with no guarantee that the users will make full-priced transactions on the platform in the future.

2. Trust

The role of digital platforms as facilitators of transactions between two or more parties creates unique challenges when it comes to user trust. For example, it is sometimes unclear for a buyer who is accountable when they have a complaint. Depending on the issue, it could be either the seller or the platform that is responsible, creating doubt and mistrust. It can also be hard for users to understand who they are interacting with on the platform due to the number of parties involved in some transactions. The platform might also require data sharing and legal agreements to cover multiple parties, adding to complexity and trust concerns.

To address this, digital platforms take several steps to ensure user data remains safe, such as by verifying individual accounts, ensuring the legitimacy of user reviews and adopting good cybersecurity practices.



These steps are vital in developing countries, where trust in online transactions remains relatively low. This is especially true in sectors such as healthcare, given the confidential nature and importance of interactions on these platforms.

3. Regulation

As digital platforms have only recently emerged in many sectors, the regulatory environment for these companies can be unclear. There may be a lack of guidelines when it comes to data privacy and consumer protection, among other issues. In addition, there can be tension when digital platforms threaten to disrupt regulated industries.

In Nigeria, these tensions led the Lagos State Government to propose a ban on ride-hailing platforms for motorcycles at the start of 2020.³⁶ Following negotiations between the respective parties, new guidelines were agreed. However, the uncertainty facing digital platforms in the sector remains. This type of regulatory intervention can deter further investment, preventing digital platforms from reaching scale.

4. Talent

It can be difficult for digital platforms to attract employees with technical skills due to the global shortage of graduates with science, technology, engineering and mathematics (STEM) degrees. Digital platforms must compete for this talent with global tech firms, such as Facebook and Google, which can afford to pay higher wages. As a result, digital platforms may look to attract talent by emphasising the benefits of working at a smaller company, such as higher levels of employee autonomy and responsibility.

5. User digital skills

Digital platforms require users on either side of the market to possess the literacy and digital skills needed to make online transactions. However, as this is a

new way of doing business for many people, some users lack these skills. Because of this, some digital platforms employ field agents or partner with third-party organisations to recruit and train users in person. This is a common tactic used by platforms that work with farmers, ³⁷ though platforms in other sectors such as e-commerce and ride-hailing also utilise offline acquisition. This helps to add new users, but it incurs significant costs, which limits the ability of the platform to scale.

6. Infrastructure

Despite significant recent improvements, there were still around 600 million people living in areas not covered by mobile broadband networks at the end of 2019.³⁸ Most of these individuals live in remote areas of low-income countries, which can limit digital platforms to operating in urban and suburban areas, making it harder to reach scale. Furthermore, even in areas with mobile internet coverage, individuals can be prevented from accessing digital platforms due to the cost of device ownership and mobile data.

In addition to connectivity, digital platforms also require other types of national infrastructure, such as grid electricity and reliable logistics networks. While payas-you-go (PAYG) solar models are helping to improve energy access in off-grid areas, the distribution of physical goods remains a problem due to poor roads, ports and air transport systems.

7. Investment

As outlined in Figure 5, investment in tech start-ups across Africa, South and Southeast Asia has risen over the last five years. Nonetheless, venture funding remains concentrated in western markets, with start-ups in the US accounting for half of the global capital raised.³⁹ Moreover, Africa still receives less than 1 per cent of the global share of VC funding.⁴⁰ A lack of access to funding limits the ability of digital platforms in Africa and Asia to implement growth strategies.

24 The challenges of scaling digital platforms 25

^{36. &}quot;After VCs spend millions Nigeria restricts ride-hail motorbike taxis", TechCrunch, February 2020

^{37.} E-commerce in agriculture: new business models for smallholders' inclusion into the formal economy, GSMA, 2019

State of Mobile Internet Connectivity Report 2020, GSMA, 2020
 NVCA Yearbook 2020, National Venture Capital Association, 2020

^{40.} State of Tech Innovation in Africa, AfricArena, 20



5.1 AN UPDATE TO THE HAVES/NEEDS FRAMEWORK

In 2017, the GSMA Ecosystem Accelerator programme established a framework to show that mobile operators and start-ups possess certain 'haves' and 'needs' when it comes to scale and innovation.⁴¹ These determine the

synergies and opportunities for collaboration between mobile operators and start-ups.

Based on interviews conducted with digital platform experts and our own desk research, we provide an update to the framework in this section. This considers how the haves/needs structure can be applied to digital platforms in developing countries. Through the updated framework, we illustrate how mobile operators can help digital platforms overcome the challenges (see section 4) to reach scale.

41. Building synergies: How mobile operators and start-ups can partner for impact in emerging markets, GSMA, 2017





FIGURE 14

A synergies framework for mobile operators and digital platforms in developing countries: Part 1 - mobile operators' haves and digital platforms' needs



EXAMPLES

DIGITAL PLATFORMS

NEED

COMMERCIAL EXPERTISE			
Financial assets Financial resources	Market knowledge Market understanding, knowledge of customer base, network of partners		
Orange Digital Ventures invested in South African financial platform Yoco	Reliance Jio's start- up accelerator, JioGenNext, provides workshops and channel partnership support for platforms in India		
Access to capital	Advisory services		

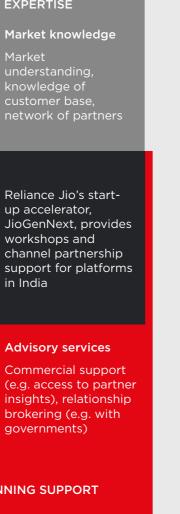
governments)

BUSINESS PLANNING SUPPORT

Funding or grants

expansion

to support business



TECHNICAL INFRASTRUCTURE			
Technical tools Tools to optimise the platform for user needs	Relevant payment channels Mobile money services and carrier billing (through APIs)	Universal communication channels Mobile voice, SMS, USSD, etc. (through APIs)	
MTN Benin zero- rates the Gozem app, helping drivers and riders to not use up their data allowance	In Kenya, Safaricom's Daraja API simplifies Twiga Foods' transaction process	Operator APIs enable Trotro Tractor to connect farmers and tractor owners in Ghana via a USSD menu	
Suitable connectivity Increased platform activity	Access to mass payment channels Easy payment collection processes	Access to mass communication channels API access (SMS, USSD, IVR)	

CUSTOMER RELATIONSHIPS				
Below-the-line and trust Strong brand affinity and visibility Distribution channel Retail stores, mobile money agents, call centres, websites, apps and platforms				
Through an API, Migo offers co-branded credit services to 9mobile's subscriber base in Nigeria	Airtel Kenya offers free Jumia shopping vouchers on selected purchases	In Indonesia, Telkomsel promotes the edtech platform Ruangguru in its retail stores		
Low-cost user acquisition	Brand exposure and trust	Access to user touchpoints		
Low-cost acquisition of users on both sides of the platform	More brand awareness and credibility, especially among new segments	Greater reach of users through partner channels		
USER ACQUISITION				

Source: GSMA



FIGURE 15

A synergies framework for mobile operators and digital platforms in developing countries: Part 2 - digital platforms' haves and mobile operators' needs

ENGAGEI Innovative and high-impact services Unique product offering	High customer satisfaction Loyal users, strong value proposition
By allowing Sheba.xyz to promote its household service marketplace in Robi Bangladesh stores, the mobile operator encourages new customers to enter its shops	IM3 Ooredoo offers a special mobile package for Gojek drivers in Indonesia
Customer acquisition Individuals that do not use mobile and customers from competitors	Customer retention Churn reduction, improved customer satisfaction levels
	Innovative and high-impact services Unique product offering By allowing Sheba.xyz to promote its household service marketplace in Robi Bangladesh stores, the mobile operator encourages new customers to enter its shops Customer acquisition Individuals that do not use mobile and customers from competitors

DIGITAL E	XPERTISE
Mobile-first approach User experience designed for mobile (data, SMS, voice, USSD, MFS)	Non-telecoms services Fast-growing revenues from digital services
In Sri Lanka, oDoc enables patients to connect to doctors remotely via video, stimulating mobile data usage	MTN reported net proceeds of \$142 million from selling its stake in Jumia
Growth of core revenues	Revenues beyond connectivity
Higher revenues from voice, data, SMS, USSD and MFS	Adjacent sources of fast-growing revenues
REVENUE	E GROWTH
REVENUE	E GROWTH

FLEXIBLE BUSINESS MODELS			
Openness to partnerships Openness to different	Agile business cultures Business cultures		
modes of cooperation	that adapt quickly to market changes		
As well as investing in Sendy, Safaricom uses the logistics platform to lower its transportation costs in Kenya	With retail stores closed as a result of the pandemic, Telenor Pakistan partnered with e-commerce marketplace Daraz to sell prepaid top-ups		
Lower cost base	Faster innovation		
Improved cost efficiency of business operations	New propositions brought to market more quickly		
DIGITAL TRAI	NSFORMATION		

During the COVID-19 pandemic, Telkomsel provided customers with free data to use on Halodoc, a health tech platform in Indonesia

Sustainable solutions
Sustainability incorporated into core values

SUSTAINABLE BUSINESS

Source: GSMA

The value of mobile operator partnerships 31

Our analysis of the synergies between mobile operators and digital platforms yielded the following key takeaways:

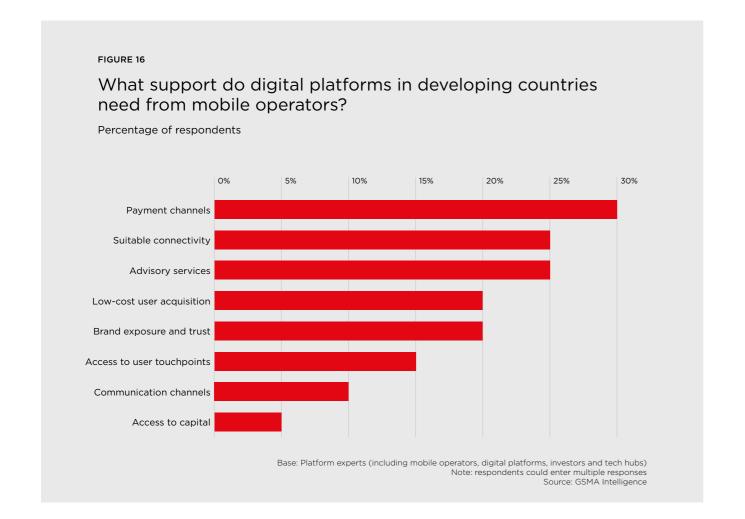
- Partnerships between mobile operators and digital platforms need to provide value to both parties, as well as the platform users. It is therefore important that the commercial objectives of operators and digital platforms align, so that the partnership model works for everyone involved;
- Mobile operators have several assets that digital platforms can leverage in order to scale. This includes large customer bases, well-recognised and trusted brands, a range of physical and online distribution points, market expertise, and relevant payment and communication channels;

 Digital platforms look for support from mobile operators in a range of areas (see Figure 16).

This speaks to the breadth of sectors in which digital platforms operate, their different stages of development and their countries of operation. The low proportion of respondents that said digital platforms require support in the form of access to capital highlights that mobile operators have much more to offer digital platforms than just access to finance. Operator investments in digital platforms are still common though – for example, Telkomsel's investment in Gojek in November 2020;⁴² and

 Digital platforms can help operators meet their commercial objectives. For example, partnering with a digital platform can enable operators to grow their subscriber base. It can also boost revenues by allowing operators to increase their presence in digital services and encouraging subscribers to use more data.

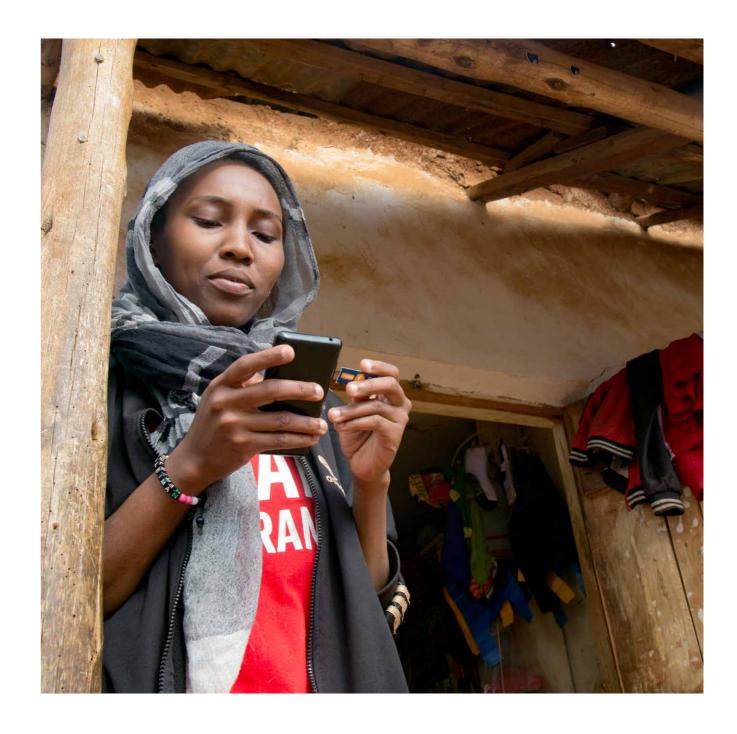
^{42. &}quot;Super app Gojek gets \$150m investment to help drive Indonesia's digital economy", PhocusWire, November 2020



5.2 CASE STUDIES TO SHOW COLLABORATION BETWEEN MOBILE OPERATORS AND DIGITAL PLATFORMS

The six case studies outlined below highlight the value of collaboration between mobile operators and digital platforms. The case studies cover digital platforms operating in different parts of Africa and Asia across six different segments (agriculture, education, e-commerce, financial services, healthcare and ride-hailing). 43

43. Information in the case studies is correct as of December 2020



The value of mobile operator partnerships 33

CASE STUDY 1

Globe Telecom and Lazada: Building one of Southeast Asia's biggest e-commerce marketplaces

Lazada Group is an e-commerce marketplace operating in five Southeast Asian countries, founded with the backing of Rocket Internet in 2012 and now owned by Alibaba Group.

WHAT MOBILE OPERATORS HAVE THAT DIGITAL PLATFORMS NEED:

	WHAT MOBILE OPERATORS HAVE THAT DIGITAL PLATFORMS NEED.			
(ሳ)				
OPERATOR 🔯	MARKET KNOWLEDGE	2019, Globe Telecom organised a one-day workshop for the top Lazada online sellers, including talks from experts on topics such as accounting and social media. This highlights how Globe Telecom's experience of working with small and medium-sized businesses can help Lazada retain suppliers on its platform, providing consumers with a more extensive selection of products.	ADVISORY SERVICES	
MOBILE	BRAND RECOGNITION AND TRUST	Globe Telecom and Lazada partnered together to build a 'digital' shopping mall, allowing products from Lazada merchants to be displayed through an interactive set-up. Leveraging the Globe Telecom brand to help advertise Lazada in an offline environment helps the e-commerce platform build trust and reach new consumers. In turn, this could bring more suppliers onto the platform.	BRAND EXPOSURE AND TRUST	
	RELEVANT PAYMENT CHANNELS	Consumers can use Globe Telecom's mobile wallet solution, GCash, to purchase items on the Lazada platform. This makes it easier for users on both sides of the platform to transact business on Lazada, improving the user experience, which helps Lazada scale supply and demand.	MASS PAYMENT CHANNELS	

WHAT DIGITAL PLATFORMS HAVE THAT MOBILE OPERATORS NEED:

PLATFORM	INNOVATIVE AND HIGH- IMPACT SERVICES	Globe Telecom offers its prepaid subscribers promotional discounts on Lazada, helping the operator appeal to customer segments that regularly shop online.	CUSTOMER ACQUISITION
DIGITAL PL	HIGH CUSTOMER SATISFACTION	Globe Telecom and Lazada teamed up to offer Globe's business customers a series of benefits when selling on Lazada, such as premium placement ads and waived sales commission up to a certain value. This helps Globe Telecom to improve its customer churn.	CUSTOMER RETENTION
	A MOBILE-FIRST APPROACH	Globe Telecom's prepaid subscribers can top up their allowances through the Lazada website. Offering this functionality provides customers with more ways to top up, helping the operator grow its prepaid revenues.	GROWTH OF CORE REVENUE
	ം‰ HAVE		

CASE STUDY 2

ം‰ HAVE

Hutch and oDoc: Improving healthcare in Sri Lanka

oDoc provides mobile-based telemedicine services for low-income populations. It has accumulated over 300,000 users and has more than 600 doctors working on its platform. 44

WHAT MOBILE OPERATORS HAVE THAT DIGITAL PLATFORMS NEED:

		ENTITIONS THAT DISTINCT EATH ON IS NEED.	
(₍₀)			
OPERATOR 🔯	RELEVANT CHANNELS	oDoc leverages Hutch's mobile billing capability to make it easier for patients to subscribe to oDoc, helping the telemedicine platform to increase the number of patients on its platform. This makes oDoc more appealing to doctors.	ACCESS TO MASS PAYMENT CHANNELS
MOBILE OF	UNIVERSAL COMMUNICATION CHANNELS	oDoc integrates with Hutch's USSD and SMS APIs. For example, the platform is accessible through any Hutch line by dialling *6363#. This allows oDoc to reach patients without a mobile data connection, broadening its user base.	ACCESS TO MASS COMMUNICATION CHANNELS
	A LARGE CUSTOMER BASE	oDoc runs SMS marketing campaigns to Hutch's customer base, enabling the platform to target the subscribers that are most likely to be interested in its telemedicine service.	NEED LOW- COST USER ACQUISITION
	BRAND RECOGNITION AND TRUST	Hutch and oDoc have launched joint marketing initiatives in Sri Lanka, such as promoting the oDoc brand in Hutch reseller and partner stores. By leveraging the well-known Hutch brand, oDoc can build trust among patients who may not have tried remote healthcare solutions before.	BRAND EXPOSURE AND TRUST

WHAT DIGITAL PLATFORMS HAVE THAT MOBILE OPERATORS NEED:

PLATFORM	HIGH CUSTOMER SATISFACTION	Hutch's USSD integration with oDoc makes it easier for its customers to access the telemedicine platform. This kind of value-added service has the potential to improve stickiness among Hutch subscribers.	CUSTOMER RETENTION	œ
DIGITAL PL	A MOBILE-FIRST APPROACH	oDoc enables patients to connect to doctors remotely via video. Regular users of the service are therefore more likely to top up on airtime credits more often.	GROWTH OF CORE REVENUES	OPERATO
Δ	A TANGIBLE SOCIOECONOMIC IMPACT	Hutch and oDoc formalised their partnership during the COVID-19 pandemic. Providing a safe and easy way for its customers to get medical advice is part of Hutch's wider efforts to keep its customers safe during the pandemic.	SUSTAINABLE SOLUTIONS	
	‰ HAVE			

^{44.} See https://odoc.life/2020/11/09/hutch-odoc-partnership-revolutionizes-sri-lankan-telemedicine/



CASE STUDY 3

MTN and Gozem: Driving Africa's transportation system

Gozem is a ride-hailing platform that has recently expanded into new areas, such as food and parcel delivery. It is currently operational in Benin and Togo, and plans to soon offer services throughout Central and West Africa. Since launching in November 2018, Gozem has completed over 2 million trips.⁴⁵

WHAT MOBILE OPERATORS HAVE THAT DIGITAL PLATFORMS NEED:

((၀ှ))			
OPERATOR 🔊	TECHNICAL TOOLS	MTN Benin zero-rates the Gozem application, allowing drivers and riders to use the Gozem platform without using up any of their mobile data allowance. This helps Gozem grow its user base of drivers and riders by appealing to MTN subscribers on limited data packages.	SUITABLE CONNECTIVITY
MOBILE (RELEVANT PAYMENT CHANNELS	MTN Mobile Money APIs were integrated with Gozem's platform to help the ride-hailing company overcome the challenges of low credit card penetration in Benin. With growing acceptance of mobile money in Benin, the partnership improves the user experience of riders and drivers on Gozem, as it reduces the risk of fraud and delays to transaction fulfilment.	MASS PAYMENT CHANNELS
	BRAND RECOGNITION AND TRUST	Gozem and MTN have combined efforts to launch joint marketing initiatives on social media to promote MTN's mobile money integration with Gozem. Through brand association with MTN, a brand with a long history in Benin, Gozem can build credibility among riders and drivers that have yet to use its service.	BRAND EXPOSURE AND TRUST

WHAT DIGITAL PLATFORMS HAVE THAT MOBILE OPERATORS NEED:

			NEED %%°	
PLATFORM	HIGH CUSTOMER SATISFACTION	By offering customers zero-rated access on the Gozem platform, and by providing users a bonus when they recharge their mobile money wallet in the Gozem app, MTN's customer churn could improve among Gozem's user base.	CUSTOMER RETENTION	
DIGITAL PL	AN OPENNESS TO PARTNERSHIPS	Gozem plans to introduce new services on its platform, such as parcel delivery. This could be an area of future collaboration between Gozem and MTN as mobile operators in Sub-Saharan Africa begin to sell more devices online.	A LOWER COST BASE	ERATOR
	A TANGIBLE SOCIOECONOMIC IMPACT	Gozem trains and certifies all its drivers, helping to reduce traffic incidents in Benin. Each Gozem trip is also tracked in real time by GPS. Through its partnership with Gozem, MTN is helping its subscribers stay safe when travelling.	SUSTAINABLE SOLUTIONS	≫ MOBILE OP
	‰ HAVE			

45. "Gozem hits 2 million trips completed", TechMoran, October 2020

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CASE STUDY 4

Orange and PayJoy: Improving access to consumer finance and smartphones across Africa

PayJoy is a digital platform that helps individuals with limited access to conventional loans buy a smartphone on credit. It operates in more than 10 countries and has raised over \$40 million from top venture capital firms.⁴⁶

WHAT MOBILE OPERATORS HAVE THAT DIGITAL PLATFORMS NEED:

_		NEED °%°
FINANCIAL ASSETS	Orange Digital Ventures invested in PayJoy as part of the company's Series A funding round. This helped PayJoy expand into new countries, adding new lenders and consumers.	ACCESS TO CAPITAL
BRAND RECOGNITION AND TRUST	Orange's investment in PayJoy was covered in a press release as well as multiple news outlets. This helps to raise awareness of PayJoy while also giving it credibility through the fact that it received investment from a mobile operator. This will help PayJoy build its supply of third-party institutional lenders on its smartphone financing platform.	BRAND EXPOSURE AND TRUST
DISTRIBUTION CHANNELS	Orange pre-installed the PayJoy app onto its Sanza Touch smartphone, helping PayJoy to reach new consumers. Having an established route to consumers can help PayJoy convince new lenders to come onto its platform.	ACCESS TO USER TOUCHPOINTS
% HAVE		

WHAT DIGITAL PLATFORMS HAVE THAT MOBILE OPERATORS NEED:

PLATFORM	INNOVATIVE AND HIGH-IMPACT SERVICES	As not all of Orange's competitors offer customers a smartphone financing option, the partnership could help Orange to increase its market share through the offer of PayJoy's novel proposition. Orange bundles minutes, SMS and data with the Sanza Touch, helping it to bring new customers onto its network.	CUSTOMER ACQUISITION
DIGITAL PL	A MOBILE-FIRST APPROACH	Smartphone users typically consume more data than individuals using feature phones. As a result, Orange's tie-up with PayJoy could help it to accelerate its core revenue growth.	GROWTH OF CORE REVENUE
۵	NON-TELECOMS SERVICES	PayJoy's smartphone financing platform allows Orange to appeal to new customer segments, namely individuals that previously could not afford to buy a smartphone. This could help Orange increase its revenue from own-brand smartphone sales.	REVENUE BEYOND CONNECTIVITY
	AN OPENNESS TO PARTNER- SHIPS	By making smartphones more affordable for consumers, Orange's partnership with PayJoy allows the operator to reduce its spend on smartphone subsidies and other smartphone-related promotional activities.	A LOWER COST BASE
(% HAVE		

46. See https://www.payjoy.com/abou



CASE STUDY 5

₩ HAVE

Telkomsel and Ruangguru: Transforming education in Indonesia

Ruangguru is an online learning platform that helps students in Indonesia prepare for exams using content tailored to the national curriculum. It also helps teachers to crowdsource educational content and distribute it to students. During the pandemic, it saw the average number of users increase from 7.5 million a month to over 11 million.⁴⁷

WHAT MOBILE OPERATORS HAVE THAT DIGITAL PLATFORMS NEED:

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OPERATOR 🔯	RELEVANT PAYMENT CHANNELS	Ruangguru users can make payments using their Telkomsel airtime credit, easing the billing process on the platform. This helps Ruangguru reach learners that might not have access to other forms of digital payment. Consequently, Ruangguru can increase the number of learners on its platform, which also makes Ruangguru more appealing to teachers.	ACCESS TO MASS PAYMENT CHANNELS
MOBILE	BRAND RECOGNITION AND TRUST	As one of Indonesia's most well-known companies, Telkomsel helps Ruangguru create brand trust through co-marketing initiatives. This is particularly important in the education sector, where parents entrust digital platforms to teach their children. With greater levels of trust, Ruangguru can scale the number of learners and teachers on its platform.	BRAND EXPOSURE AND TRUST
	DISTRIBUTION CHANNELS	Telkomsel promotes Ruangguru's products through the operator's call centre, website, app and other distribution channels. This helps Ruangguru reach new learners that previously might not have been aware of the platform, which then encourages more teachers to come onto the platform.	ACCESS TO USER TOUCHPOINTS

WHAT DIGITAL PLATFORMS HAVE THAT MOBILE OPERATORS NEED

	WITAT DIGITAL I	ATTORNS HAVE THAT MODILE OF ERATORS NEED.		
			NEED %%°	
PLATFORM	HIGH CUSTOMER SATISFACTION	Telkomsel gave subscribers of its prepaid youth brand, Loop, free data to exclusively use on the Ruangguru platform, helping to reduce the operator's churn levels.	CUSTOMER RETENTION	
DIGITAL PLAT	A MOBILE-FIRST APPROACH	Telkomsel offers specific data packages to use on the Ruangguru platform, encouraging Telkomsel subscribers to spend more on mobile data.	GROWTH OF CORE REVENUES	TOR
DIG	NON-TELECOMS SERVICES	Ruangguru provides education content that feeds into Telkomsel's own education platform, Ensikloopedia, which provides an adjacent source of revenue to Telkomsel's core connectivity business.	REVENUE BEYOND CONNECTIVITY	E OPERAT
	A TANGIBLE SOCIOECONOMIC IMPACT	In response to the COVID-19 pandemic, Telkomsel gave customers 30 GB of free data each month to use on the Ruangguru platform, allowing students to continue studying effectively at home.	SUSTAINABLE SOLUTIONS	
	‰ HAVE			

CASE STUDY 6

Safaricom and iProcure: Supporting smallholder farmers in Kenya

iProcure is an agricultural supply-chain platform, which allows smallholder farmers to purchase agricultural inputs and apply for loans to buy inputs. It also provides warehousing and a last-mile distribution service.

WHAT MOBILE OPERATORS HAVE THAT DIGITAL PLATFORMS NEED

	WHAT MODILE OF	PERATORS HAVE THAT DIGITAL PLATFORMS NEED.		
OPERATOR 🔊	RELEVANT PAYMENT CHANNELS	Safaricom's M-Pesa payment platform has over 40 million users and processes over 1 billion transactions every month. 48 Through its partnership with Safaricom, iProcure gains access to M-Pesa's payments channels and agent network, which exist throughout the country.	MASS PAYMENT CHANNELS	
MOBILE OP	A LARGE CUSTOMER BASE	Safaricom's DigiFarm platform enables farmers to buy discounted inputs, receive farming advice and access loans from their mobile phones. Safaricom allows third-party service providers to plug into DigiFarm and access a subset of its data to offer services to farmers. ⁴⁹ This allows iProcure to gain a better understanding of the type of seeds and fertilisers that farmers want.	LOW-COST USER ACQUISITION	PLATFORM
	BRAND RECOGNITION AND TRUST	Through its core mobile service, M-Pesa and DigiFarm, Safaricom has strong brand awareness amongst smallholder farmers. As a younger and smaller company, iProcure can leverage these assets to improve trust in its own brand.	BRAND EXPOSURE AND TRUST	DIGITAL I
	∞ HAVE			

	WHAT DIGITAL PL			
PLATFORM	INNOVATIVE AND HIGH- IMPACT SERVICES	iProcure enables farmers to purchase seeds, fertilisers and other inputs through Safaricom's DigiFarm platform. This broadens the appeal of DigiFarm, helping to bring new users onto the platform. It might also incentivise some smallholder farmers to use a mobile phone for the first time, helping Safaricom to attract new users to its mobile service.	CUSTOMER ACQUISITION	Z.
DIGITAL	NON-TELECOMS SERVICES	By strengthening the DigiFarm proposition through its agricultural expertise, iProcure helps Safaricom to diversify beyond connectivity and grow its presence in the digital ecosystem. Safaricom's internal projections suggest DigiFarm could account for up to 10% of agricultural transactions in Kenya within five years. ⁵⁰	REVENUES BEYOND CONNECTIVITY	E OPERATOR
	A SOCIOECO- NOMIC IMPACT	Poverty among smallholder farmers in LMICs is generally high. As the main inputs provider on DigiFarm, iProcure's service helps Safaricom to support the financial needs of smallholder farmers, which are often complex and varied.	SUSTAINABLE SOLUTIONS	
	₩ HAVE			

^{48. &}quot;Safaricom, Vodacom acquires M-Pesa Payments Platform", PYMNTS, April 2020

^{50. &}quot;Credit from Safaricom's farming app sows seeds of change in Kenya", Reuters, June 2020



By eliminating inefficiencies and extending the reach of services to a greater number of people, there is a significant opportunity for digital platforms to advance local economies and wider society in developing markets. To maximise this potential, and increase the scale and sustainability of digital platforms, we highlight the following recommendations for key stakeholders.

Digital platforms

- Scale is not just about size: Even though some platforms might sacrifice profitability for user acquisition in the short term, in the long run digital platforms need to put appropriate structures in place to achieve profitability. Moreover, some solutions may achieve their appropriate scale within a market niche, reaching a relatively small number of users:
- Walk before you run: It is critical that digital
 platforms first establish a reliable service in their
 local market before attempting to scale. Word of
 mouth spreads quickly after a negative experience
 and network effects can work in the other direction;
- Understand haves and needs: Digital platforms need to recognise their strengths before starting talks with mobile operators around partnerships. This will help platforms understand the value they can provide to operators, while also helping to address the power imbalance that sometimes exists between the two parties. Digital platforms should also determine where they need assistance and consider how operators can help; and
- Plan adequately for international expansion: Digital platforms need to understand what makes them successful in their local market before moving into new countries. This will help when identifying markets with similar characteristics or customer pain points. Some form of market research is also important to understand local preferences, as is having a team of employees on the ground in the new country.

Mobile operators

 Identify your own needs: The haves/needs framework outlines how digital platforms can help mobile operators achieve their objectives. As mobile operators have different strategic priorities,

- they need to apply the framework to their own organisational context in order to understand how partnerships can help their business;
- Understand partner needs: A successful partnership needs to work for all parties involved. Operators that have formed successful partnerships with digital platforms work hard to improve the value they offer their partners, from providing clear documentation for making technical integration easier to adopting faster, more agile working practices;
- Set realistic targets: Due to the mass adoption of voice, SMS and data services, mobile operators can sometimes have unrealistic expectations for the usage of digital platforms. It is therefore important that operators benchmark performance against comparable markets to accurately judge the success of their partnerships;
- Research your market: Mobile operators need to conduct market research to understand what type of digital platforms their customers access most often. This information can be used in negotiations with potential partners. Securing a range of digital partnerships can help operators cater to different customer segments; and
- Develop a comprehensive digital platforms strategy: Partnerships provide a faster and cheaper route into digital platforms for mobile operators, compared to developing their own solutions. Nonetheless, mobile operators should not rule out building their own digital platforms, particularly if there is a lack of potential partners in their local market.

Governments

• Increase harmonisation: Rules for the protection, management and processing of consumers' personal data vary greatly by sector, technology and country. Governments must ensure data privacy frameworks provide effective protection for individuals to improve trust in digital transactions. At the same time, these must allow organisations the freedom to transfer data within and between countries so that they can innovate and comply in a way that makes sense for their businesses and secures positive outcomes for society;

- Monitor labour implications: There remains limited empirical evidence on the impacts of digital platforms on the labour market in developing countries. While these businesses provide a potential entry point for formalising firms, employees on these platforms do not always have access to the benefits and protections mandated by employment law. Governments need to monitor these developments closely to understand the implications for employee welfare;
- Improve digital talent: To increase levels of literacy and digital skills across all segments of the population requires building this into school curricula and life-long learning programmes. Such initiatives could ease the STEM skills shortage faced by digital platforms while also enabling more of the population to develop the skills needed to value and use the internet:
- Introduce enabling government policies to tackle mobile internet affordability: Reducing or removing unnecessary tax and regulatory burdens on internet-enabled devices and data services is key to enabling further digital inclusion of excluded, disadvantaged and vulnerable groups; and
- Streamline policy objectives across government **departments:** The policy issues that many digital platforms face often transcend agency boundaries, such as tax and fiscal policies, data protection and privacy laws, foreign investment and trade policies, and education and training policies. Policy changes by a department or agency in one sector, such as finance, can have a knock-on effect on digital platforms in a different sector, such as agriculture. This underlines the need for a coordinated and streamlined approach to policymaking across government.

Investors

- Capitalise on the digital platforms opportunity: There are a wide range of examples across different sectors of digital platforms reaching scale in developing countries. With growth in mobile internet penetration⁵¹ and digital payment adoption set to continue.⁵² there should be more opportunities for investors to make good returns on their investments in digital platforms;
- Adopt a long-term view: It can take time for digital platforms in developing countries to scale in order to overcome challenges such as low levels of trust and limited digital skills among certain segments of the population. Nevertheless, digital platforms have proven these barriers can be overcome, leading to significant rates of user adoption. This has been highlighted during the pandemic, during which usage of digital platforms across most sectors has risen strongly; and
- Recognise the value of partnerships: Partnerships can play a key role in scaling digital platforms, from providing access to payment channels to launching joint marketing initiatives. Investors should emphasise the value of these tie-ups to their portfolio companies. Further, given their extensive networks, investors can play a key role in facilitating new connections between digital platforms and potential partners.

^{51.} The Mobile Economy 2020, GSMA, 2020

^{52.} State of the Industry Report on Mobile Money 2019, GSMA, 2020





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