Start-ups and Mobile in Emerging Markets:

Insights from the GSMA Ecosystem Accelerator

Issue 3, Summer 2018

Ecosystem Accelerator

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. In particular, the programme operates an Innovation Fund which supports African and Asian start-ups with direct grant funding, technical assistance, and connections with mobile operators.

Learn more at www.gsma.com/ecosystemaccelerator or contact us at accelerator@gsma.com

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Foreword

Since we first announced our Ecosystem Accelerator Innovation Fund in July 2016, we have received applications from over 1,650 start-ups and the team has conducted on-the-ground due diligence on nearly 90 of them. Based on this experience, we are more convinced than ever that start-ups in Asia Pacific and Africa are a driving force in turning social and economic challenges into opportunities. It is also still clear that mobile technology is essential to reaching users and driving growth, while partnerships with mobile operators can truly unlock scale. The traction we are seeing from our first cohort of grantees (nine companies selected in April 2017) and early results from our second cohort (15 ventures announced in February 2018) are extremely encouraging.

As of July 2018, our portfolio start-ups have collectively raised an additional GBP 16.5 million in funding, which represents 3.3 times the amount committed to these ventures by the Innovation Fund. We are hopeful this number will keep growing in the coming months as at least five of them are engaged in fundraising rounds likely to exceed GBP 1 million. This is encouraging not only because these funds will help the ventures continue developing, but because they are also validation from the investment community that their business models have the potential to generate impact at scale.

When it comes to measuring this impact, we are happy to report that **the 24 projects we have been financing have collectively had a positive impact for over one million citizens.** The type of impact varies depending on the start-up, ranging from improved access to financial services in areas previously underserved to better availability of sustainably sourced fruits and vegetables or out-of-classroom educational support.

More often than not, mobile operators are connected to these successes. Their involvement can take many forms, from co-branding and marketing (Jamii/Vodacom in Tanzania) to equity investments (Joonaak/Smart Axiata in Cambodia).

The accelerating pace at which mobile operators are launching new initiatives to support local innovation ecosystems (section two of this report) also speaks to their long-term commitment to supporting entrepreneurship. Finally, mobile operators are putting powerful tools in the hands of start-ups, starting with mobile money whose impact extends way beyond financial inclusion, in part thanks to the myriad of use cases start-ups develop (section three of this report).

We look forward to witnessing even more growth in this space, and to continue working with the rest of the ecosystem — tech hubs, investors, governments — to support these developments. Please do not hesitate to get in touch!

Max Cuvellier

Head of M4D Utilities and Ecosystem Accelerator, GSMA

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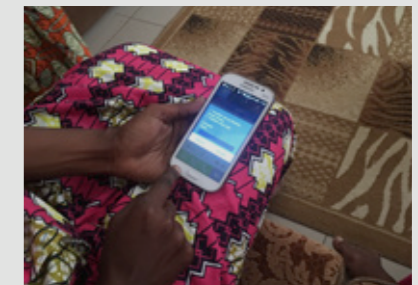How our Innovation Fund start-ups are using mobile technology to offer services with impact

Case Study 1

Jamii: Making mobile health insurance affordable for SMEs and low-income populations in Tanzania

Founding year	2016
Geography	Tanzania
Team	Lilian Makoi – Founder and CEO Rayah Ndagire – COO (GSMA Grant Manager)
Business description in a tweet:	Jamii is a mobile micro-health insurance product for SMEs[1] and individuals in the informal economy. **www.jamiiafrica.com**

In Tanzania, fewer than 30 per cent of the country's 52 million people have access to health insurance.[2] The remaining 70 per cent, who often work in the informal economy, must pay for health services every time they need them. Due to high administration costs, large insurance companies rarely serve small enterprises or Tanzanians earning less than $100 a month.

Jamii was founded in 2016 to allow low-income populations and workers in the informal sector to access affordable healthcare financing schemes.

Jamii offers micro-health insurance services with plans starting at around $1 per month per person. The start-up, in collaboration with Jubilee Insurance and Vodacom Tanzania, offers 12 different cover levels depending on the number of people in the organisation or family. When users sign up, they

are given access to hospital services that fall within their policy limit. However, there are no limitations on the type of services they can receive. The policy includes dental, eye and maternity treatment, doctor consultations, medicine and X-rays. To reduce administration costs (by up to 95 per cent), Jamii is relying on a mobile policy management platform and on mobile money to collect premiums and pay out claims.

As of July 2018, over 6,400 people have been covered by health insurance offered through Jamii and 2,900 people have made health insurance claims through the platform. Two hundred hospitals have been enrolled and this number is set to grow to 750 by March 2019. Jamii initially deployed its service in four regions of Tanzania — Mwanza, Mbeya, Arusha and Kilimanjaro. Jamii services became available nationwide in August 2018.

FIGURE 1

Number of people benefiting from health insurance provided through Jamii
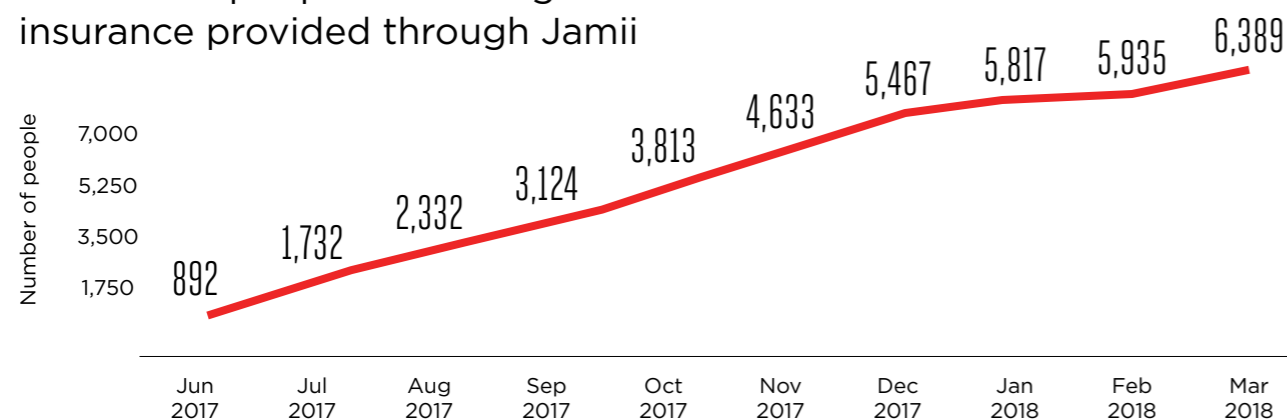
How the service works

The platform is integrated with mobile money (Vodacom M-Pesa) to provide cashless payments when the user[3] pays for the policy and when the insurer pays the hospital. Users pay for their policies on a monthly basis and Jamii retains an administration fee. The service is accessible by mobile phone through USSD. This is how the service works:

Registering with Jamii

SME customer registration (companies with fewer than 50 employees):

1 The SME representative dials the M-Pesa main menu, registers for the Jamii service (SME name, full names of employees, region), chooses a policy type and the duration of the insurance policy. The representative then selects how many members they would like to pay for.

2 Jamii's platform calculates the insurance premium for all the individuals selected by the SME and the SME representative then pays for the policy using M-Pesa (for each registered employee).

3 Jamii's agent collects employee data through the Jamii app and the SME representative receives an employee ID number allocated by Jamii for each registered employee.

4 The system sends each end user covered by the policy an SMS with the user's Jamii ID number, which benefits can be accessed, and a list of nearest hospitals that accept Jamii health insurance.

Individual/family and micro-entrepreneur customer registration:

1 User registers for the micro-health insurance by dialling the Jamii USSD short code [USSD *150*00#].

2 User selects a policy (from 12 options) and pays via mobile money (M-Pesa).

3 User is issued a unique Jamii ID number via SMS.

Access to Healthcare Benefits

1 User goes to a listed hospital with their Jamii ID.

2 Hospital attendant enters the user's Jamii ID number into the Jamii mobile application to verify the user's details (full name, date of birth, gender, policy subscribed to, up-to-date status of benefits claimed).

3 User is given access to medical services within their policy limit and can register and book an appointment with a doctor.

4 User receives an SMS with the real-time balance of health insurance and transactions of benefits claimed..

5 Jamii's insurance group partner, Jubilee Insurance, pays hospitals via mobile money (M-Pesa) within seven days of the claim being submitted and approved.

Find out more about Jamii's health cover options

1   Small and medium enterprises (SMEs)
2   Policy Forum Tanzania, 2016, "Visioning Access to Health Insurance in Tanzania: Opportunities and Challenges", https://www.policyforum-tz.org/visioning-access-health-insurance-tanzania-opportunities-and-challenges.

3   A user is defined as the policy holder, who is subscribed to and pays (directly or through an employer) for Jamii services.

Working with mobile operators

In April 2017, Vodacom Tanzania and Jamii entered a revenue-sharing partnership. Jamii is listed on Vodacom's mobile money (M-Pesa) menu, which Jamii uses to collect premiums and pay out micro insurance claims to hospitals. M-Pesa has played a significant role in cutting the administration costs of supplying insurance to Jamii's customers by 95 per cent.

Vodacom supports Jamii through co-branding and below-the-line marketing efforts. This includes cross-selling and targeted SMS campaigns to Vodacom customers on the benefits of using Jamii. The Vodacom team advises Jamii on product design and operations. Vodacom has also provided above-the-line marketing support and exposure through radio and TV adverts, billboards and online media.

Subscribe and buy a Jamii cover to take care of your health.

*Dial the M-Pesa menu (*150*00#) and pay via M-Pesa/no transaction fees.*

"As Vodacom Tanzania, we partnered with Jamii as we saw the demand in the micro health insurance space that we had not ventured into before as a telecom company. The partnership allows us to complement our existing corporate social responsibility seeing that we not only provide the usual MNO services, but are also able to avail affordable micro health insurance to the informal sector, which in turn reduces our churn rate and increases M-Pesa usage. The partnership with Jamii is rather exemplary and we are positive we will replicate the same in other countries where Vodacom is present in a bid to serve the underserved through a cashless and paperless micro health insurance product."

— **Vincent Ndekana Polycarp Head of M-Commerce Product Development and Marketing Vodacom Tanzania**

Changing lives

As of July 2018, 3,820 potentially fatal cases of curable diseases have been treated thanks to Jamii micro health insurance service. Sixty per cent of claims were for the treatment of malaria and cholera. 102 hospital births have also been covered by Jamii, reducing the risks associated with home births.

Jamii's solution empowers the underserved to stay healthy, and ultimately economically productive, through access to medical care. Jamii enables SMEs to retain their employees by providing them with affordable health insurance benefits. A survey with forty-three SMEs using Jamii has shown that employee turnover has declined by 35 per cent and productivity has increased by 22 per cent.

"Jamii helped me pay for my medical bills while I was sick with malaria and I am now able to look after my business and family. Before I used to spend money from my small business to treat myself and my son but with Jamii I paid very little money yet I have a shield over my health."

Mariam, Vegetable Cart Vendor, Mbeya region, Tanzania.

Working with the GSMA Ecosystem Accelerator

Jamii received a grant from the GSMA Ecosystem Accelerator Innovation Fund in February 2018 to expand its service nationwide with a marketing campaign, set up a dedicated call centre for SMEs and micro-entrepreneurs, improve their onboarding process and enrol more hospitals.

Beyond funding, the Ecosystem Accelerator supports Jamii in deepening its partnerships with mobile operators in Tanzania and facilitating more partnerships with mobile operators abroad. By the end of the project in March 2019, Jamii plans to cover more than 100,000 people with health insurance — over 49,000 of whom would be women — and give them access to a network of 750 hospitals and 375 pharmacies across Tanzania.

Case Study 2

Joonaak: Helping small merchants navigate logistics challenges and benefit from e-commerce in Cambodia
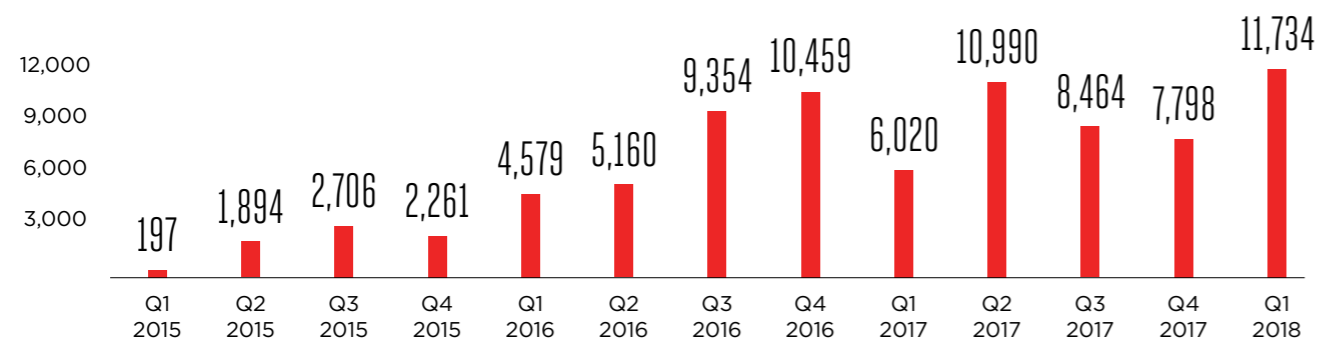
Founding year	2015
Geography	Cambodia
Founding team and GSMA grant manager	Soliya Kong – CEO Leakhena Long – COO
Tweet pitch	Joonaak is a last-mile delivery solution for SMEs and e-commerce merchants. **www.joonaak.com**

E-commerce in Cambodia has experienced serious growth over the last few years, due in large part to growing smartphone penetration, which currently stands at 43 per cent, up from 13 per cent just five years ago. Despite this progress, Cambodia ranked just 115 out of 144 in the UNCTAD B2C E-commerce Index 2017, lagging behind other countries in the region, such as Indonesia (49), Vietnam (74) and Thailand (101). Meanwhile, microbusinesses (those with under 10 employees, mainly small merchants) account for almost 97 per cent of businesses in Cambodia. One of the most significant bottlenecks these small merchants face in Cambodia is 'last-mile' logistics, due to the lack of an established postal service and an inconsistent address system.

To tackle this problem, Joonaak launched a web-based last-mile delivery service for small merchants in March 2015. The start-up uses web and mobile technology, a fleet of motorcycles and warehousing facilities to help small merchants solve their logistics issues. Joonaak's solution allows merchants to track sales and generate reports through a web-based order management system. Joonaak also provides a holistic logistics solution to merchants through packaging and warehousing services. As of June 2018, Joonaak had 12 drivers, 167 active small merchants on its platform and was delivering more than 3,000 packages per month.

FIGURE 2

Joonaak: Delivery packages per quarter

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018
	197	1,894	2,706	2,261	4,579	5,160	9,354	10,459	6,020	10,990	8,464	7,798	11,734

4   GSMA Intelligence data, https://www.gsmaintelligence.com/
5   UNCTAD B2C E-commerce Index 2017
6   EMC (March 2017) "Unlocking the Potential of the Cambodian Private Sector", http://www.mekongbiz.org/wp-content/uploads/2017/07/Cambodia-private-sector-assessment-report.pdf

How the service works

Joonaak has developed a mobile service for small merchants and their customers to request and track deliveries. This is Joonaak's user journey:

1 Merchant submits a request through Joonaak's mobile-responsive website or mobile app to have their inventories picked up.

2 Joonaak's driver picks up the inventory at the small merchant's shop or home. The inventories are then taken to Joonaak's fulfilment centre for warehousing and packaging.

3 When the merchant sells an item online, they create a delivery request in the mobile application by either selecting an existing customer from the database or filling in new customer details (name, customer's mobile number and address).

4 Joonaak packages the item(s). If the merchant does not store their inventory with Joonaak, they have the option to print the delivery request summary using Joonaak's subsidised Bluetooth printer and attach it to the package. This allows Joonaak's driver to identify the package easily during pick-ups.

5 Once a delivery request from a merchant is received, Joonaak initiates contact with the merchants' customer via SMS or a voice call to agree on a delivery time and place.

6 The merchant and the customer can track the parcel through Joonaak's mobile platform.

7 Joonaak's delivery driver transports the item(s) to the customer, collects a cash payment and provides them with a receipt.

8 The delivery status is updated by the driver on the mobile platform as 'Delivered' after payments are collected and receipts are printed.

9 Joonaak bills the user a service fee based on the location of the delivery.

10 Joonaak transfers the balance collected from the customer (minus a service fee) to the merchant via cash or bank transfer on a weekly basis.

Working with mobile operators

In 2017, Joonaak raised an undisclosed amount of equity funding from the Smart Axiata Digital Innovation Fund (SADIF), a $5 million venture capital fund of Smart Axiata in partnership with investment consultancy Mekong Strategic Partners, to expand into new cities across Cambodia.

In addition to this investment, Joonaak has a delivery contract with Smart Axiata. The start-up is one of the mobile operator's delivery service providers for its monthly post-pay bills and express documents. As of June 2018, Joonaak had made approximately 600 deliveries for Smart Axiata.

"As Cambodia's leading mobile operator, our goal of providing our subscribers with more innovative products and lifestyle solutions makes partnering with a 'last mile' delivery service provider like Joonaak a natural fit. Joonaak offers an important service to the country's growing e-commerce sector that is unmatched by any other player. The founders' energy and drive is truly inspiring for many young start-ups! I can't wait to see SADIF's investment in Joonaak taking shape and bringing this impressive start-up to the next level."

— **Thomas Hundt
CEO of Smart Axiata**

Changing lives

8 DECENT WORK AND ECONOMIC GROWTH

Given that last-mile delivery is the most challenging and expensive component of Cambodia's e-commerce value chain, Joonak's mobile solution allows merchants to focus on their core business, leaving Joonaak to handle their delivery and logistics needs. On average, small merchants have seen a drop in cancelled orders and an increase in sales of about 30 per cent a year after signing up for Joonaak's service. By eliminating logistics worries, Joonaak empowers and supports these small merchants to scale faster. On the delivery side, Joonaak offers its drivers stable jobs in the formal sector as well as training opportunities.

"Joonaak helps me a lot in my business. I can now focus more on my product quality and most importantly our marketing strategy. I don't have to deal with complex requests, such as time or delivery location changes. Joonaak sorts out most of my customer concerns and addresses most of the issues that arise without needing too much direction, which is a huge cost and time saver for me."

Sodalis Phin, Owner of Jong-Sart Shop, beauty products and accessories shop

"I previously worked as a night security guard. It was a tough job and there was no room for me to grow, but after joining Joonaak, I've grown in many areas. My life has changed. I am earning a good living while progressing in my career. I now specialise in corporate delivery for Joonaak."

Seyha Sorn, Joonaak Driver

Working with the GSMA Ecosystem Accelerator

In February 2018, Joonaak received a grant from the Ecosystem Accelerator Innovation Fund to expand its operations and customer base, as well as to design and launch a mobile app version of their web based application. The mobile app allows Joonaak, merchants and their end-users to monitor and track orders more seamlessly.

By the end of the grant in April 2019, the project aims to deliver direct economic benefits to about 650 merchants and their families, in addition to around 100,000 e-commerce shoppers. Beyond the funding, GSMA will also support Joonaak in strengthening relationships with mobile operators in Cambodia.

Mobile operators in the News

How mobile operators are collaborating with local start-ups

The map below is a snapshot of mobile operator and startup initiatives launched between January and June 2018. Each initiative has been mapped against a framework we developed in our 2017 report, *Building Synergies:*

How Mobile Operators and Start-ups Can Partner for Impact in Emerging Markets, including investments, competitions, APIs, commercial agreements and tech hub initiatives. In the report, we dive deeper into six of the initiatives.

FIGURE 5

Mobile operator-startup collaborations in emerging markets (January to June 2018)

INVESTMENTS   **COMPETITIONS**   **COMMERCIAL AGREEMENTS**   **TECH HUBS**   **APIS**

AFRICA
Applications open for 8th Orange Social Venture Prize competition (March 2018)

AFRICA
Orange Digital Ventures Africa invests in mobile APIs start-up Africa's Talking (Apr 2018)

AFRICA
MTN partners with Solution Space to launch Venture Incubation Programme (June 2018)

SENEGAL
Expresso Telecom launches a start-up incubation programme: 'Innovation Hub' (Feb 2018)

BENIN
Benin communication regulator ARCEP launches competition to bolster start-up ecosystem (May 2018)

UGANDA
Uganda's BreastIT selected for Vodafone F-LANE accelerator (Apr 2018)

UGANDA
Safeboda App gets zero-rated for MTN Uganda internet subscribers (May 2018)

SOUTH AFRICA
Entrepreneur from Limpopo wins MTN award for on-demand delivery app (Jan 2018)

AFRICA
Orange and Google form new partnership to invest in and acquire EMEA start-ups (June 2018)

ALGERIA
Djezzy launches its second campaign to support start-ups (March 2018)

KENYA
Safaricom's investee m-survey raises $3.5 million from TLCom Capital to launch in South Africa (Apr 2018)

ZIMBABWE
Six Zimbabwean start-ups get funding from POTRAZ (March 2018)

INDIA
SoftBank leads US$61.6M Series E round in Indian online super market Grofers (March 2018)

SRI LANKA
Dialog Axiata, Ideamart to host South East Asia's largest Google event (May 2018)

THAILAND
dtac accelerate launches batch 6 (March 2018)

BANGLADESH
Banglalink and ICT Division launch IT Incubator 2.0" To Facilitate Digital Entrepreneurship (March 2018)

BANGLADESH
GPAccelerator launched the 5th batch of start-ups (May 2018)

INDONESIA
Indonesia's Telkom invests in Hungary-based mobile payments company (Jan 2018)

INDONESIA
Axiata Digital Innovation Fund invests in drone tech start-up Aerodyne (March 2018)

ASIA/AFRICA
Orange and Axiata API arm Apigate join forces to launch digital API hub available across Asia and Africa (Feb 2018)

PHILIPPINES
DTI, IdeaSpace launch the QBO Innovation Hub (March 2018)

PHILIPPINES
Globe myBusiness partners with Lazada (Apr 2018)

ASIA
Zain Group partners with Axiata Digital's Apigate to streamline API Hub offerings (March 2018)

INDONESIA
XL Axiata partners with Sleekr to target SMEs (Jan 2018)

INDONESIA
Australian start-up Whispir raises $10 million in a -Series B funding round led by Telkom's CVC arm MDI Ventures (March 2018)

FIGURE 6

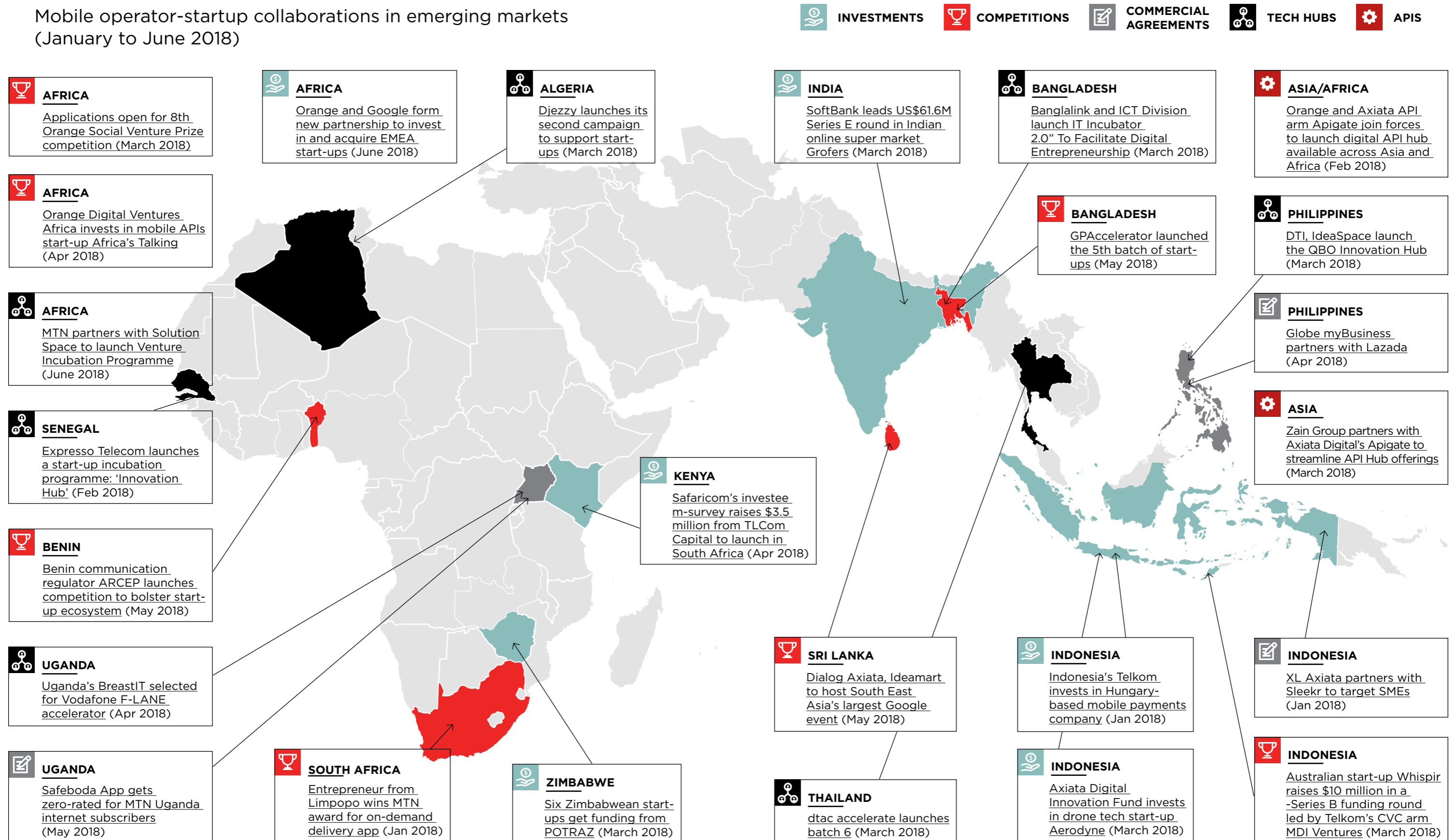## dtac Accelerate launches batch 6 of its accelerator programme

TECH HUB

dtac Accelerate, the Thai mobile operator's start-up accelerator programme, announced the selection of 11 start-ups (out of 500 applicants) for the sixth round of its programme. Launched in 2013, dtac Accelerate seeks to support local start-ups with seed funding, office space and mentoring.

The finalists for the sixth batch include travel and transportation start-up Kohlife, artificial intelligence start-up Zwiz.AI, travel tech PenguinT, gaming platform Kochii, property tech start-ups Event Banana and Somjai Home Loan, beauty tech start-up GoWabi, health tech start-ups Ooca and Doctor A-Z, edtech and job platform CareerVisa, and fintech start-up Noburo.

The selected start-ups will receive seed funding of THB 500,000 to 1.5 million ($15,000–46,000) per team. They will also receive some support from dtac and the Telenor group for their commercialisation efforts, as well as access to the other 13 Telenor Group markets (where relevant). The start-ups will participate in an intensive bootcamp from May to August 2018, with the final pitch and winner announced at a demo day event in August 2018.

Axiata Digital's API arm Apigate joins Orange to launch API hub

APIS

Apigate, Axiata Digital API subsidiary, and Orange's new API platform for Africa and Middle East, Bizao, have entered a partnership — announced at Mobile World Congress — that will allow them to leverage each other's geographical footprint in the Middle East and Africa (Orange) and Asia (Axiata) to provide streamlined and efficient access to both operators' APIs.[13]

The partnership will enable start-ups connected to Orange MEA's and Axiata's APIs to use their combined mobile payment, communication and identity infrastructure. The partnership will see Apigate delivering a Digital Enablement Hub to Bizao, as well as a hub-to-hub connection for the two operators' API platforms, to facilitate a single technical, commercial and financial integration.

Expresso Telecom launches a start-up incubation programme: 'Innovation Hub'

TECH HUB

In February 2018, Expresso Telecom (Senegal), one of Senegal's three mobile operators, launched a start-up incubation programme called Innovation Hub. The programme aims to reward innovative technology and ideas, and empower promising tech entrepreneurs to become key actors in the information technology industry while equipping them to move their start-ups to scale.

Among the 500 applications received during the call for projects, 10 local tech start-ups were selected to join the first cohort. Selected start-ups include student job-matching platform Gajoka Teck, VR edtech solution Jang, digital saving platform Nate-Bi, fraud detection solution Xquantum, agritech smart storage solution EcoBuilders, remote irrigation start-up Ayyanna Tech, health tech solution SenVitale, talent training start-up Mjangale, transport booking solution EasyTicket and bus tracking solution SunuBus.

The companies received business coaching, mentoring and workshops (some through Expresso's staff), as well as office space to execute their ideas during the eight-week accelerator programme.

FIGURE 7

Solution Space and MTN Group partner to run a 12-week mentor-led incubation programme

TECH HUB

The 12-week Venture Incubation Program is designed to provide a supportive environment for entrepreneurial teams to test and validate their business models. The programme is run by the University of Cape Town Graduate School of Business co-working space Solution Space, with support from MTN Group, and starts 3 September 2018.

Start-ups have access to a range of resources, including co-working space, practical learning clinics, mentors, weekly check-ins and staff advisors. Start-ups are also offered proof-of-concept collaboration opportunities with MTN Group. The pan-African mobile operator is specifically looking to work with start-ups that are building a sustainable Africa through digital solutions for health, education, agriculture, fintech, energy and IoT, or enabling businesses through digital solutions for religion, sport, news and e-commerce.

Start-ups need to have at least a working prototype, two co-founders with the right balance of skills and an understanding of the problem and market need or opportunity. Selected start-ups will gain access to MTN APIs, MTN Service Delivery Platform, MTN technical experts and mentors to provide feedback and guidance and a package of support from technology partners.

Banglalink and Bangladesh's government launches the second phase of start-up incubation programme

TECH HUB

Bangladesh mobile operator, Banglalink, launched the second phase of its IT Incubator in March 2018 after completing the first phase in 2016. The incubation programme is designed to identify and grow innovative digital ventures in the country. It was launched in cooperation with the Bangladesh Hi-Tech Park Authority, an arm of the Bangladesh government's ICT Division.

Applications were open from 19 March to 5 April 2018. The programme is open to all digital start-ups registered in Bangladesh that have a minimum of two full-time co-founders. Successful start-ups will be selected based on their uniqueness and commercial viability. They will then be incubated for a year with free workspace at the Software Technology Park. These start-ups will receive guidance from domain experts, a masterclass from Banglalink CXOs, and customer access, distribution and marketing support from the mobile operator.

Orange Digital Ventures Africa invests in mobile APIs start-up, Africa's Talking

INVESTMENT

Orange Digital Ventures Africa (ODVA), Orange's €50 million corporate venture fund in Africa, announced its first investment on the continent in April 2018. ODVA invested in Kenyan-headquartered mobile communication and payment API start-up, Africa's Talking in a round led by the International Finance Corporation (IFC). Africa's Talking raised a total of $8.6 million in that round.

As of April 2018, Africa's Talking had more than 15,000 developers on its platform. It provides them with access to mobile operator APIs, enabling them to build SMS, voice and USSD based solutions. Headquartered in Kenya, Africa's Talking also has a presence in Uganda, Rwanda, Tanzania, Malawi, Nigeria and Ethiopia.

The funds raised will be used to set up the company's headquarters in Nairobi. They will also be used to expand the company's presence and developer community, with plans to start work in an additional 20 countries, including in the Francophone Africa region, where Orange has a strong footprint.

13   GSMA, 11 July 2016, "APIs: A bridge between mobile operators and start-ups in emerging markets",
      https://www.gsma.com/mobilefordevelopment/programme/ecosystem-accelerator/apis-bridge-mobile-operators-start-ups-emerging-markets/

Mobile Technologies for the SDGs

How start-ups in emerging markets are using mobile money to tackle the SDGs

In the space of a decade, mobile money has evolved into a sustainable industry processing a billion dollars a day.[14] With approximately 247 million active accounts worldwide, mobile money is the leading payment platform across most emerging markets.

The socio-economic impact of mobile money is felt most strongly in developing markets, where cash is still dominant and credit card penetration is low. Three-quarters of low- and lower-middle-income countries have active mobile money services, accounting for the lion's share of the 90+ countries where mobile money is present. In emerging markets, mobile operator-led mobile money services have led the way in extending financial inclusion to those living at the base of the pyramid.

FIGURE 8

Mobile Money Active Accounts (90 days), 2017, in millions[15]
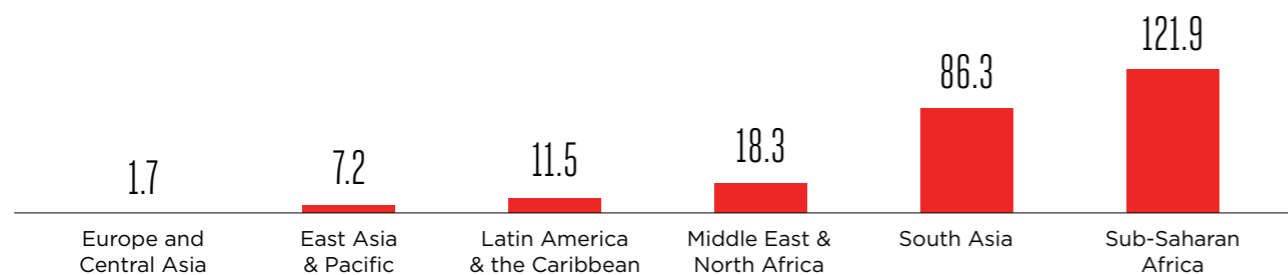
The main characteristics of mobile money — convenience, privacy and reach — make it particularly attractive to start-ups in emerging markets. For one, the pervasiveness of mobile money in several markets offers the opportunity to scale like no other digital channel. Furthermore, mobile money is often associated with major national brands of mobile operators, which conveys trust, a quality new start-ups often lack.

Increasingly, start-ups are opting for mobile money over cash, which must be manually collected, counted, verified, recorded, stored, secured and transported, making it inherently expensive and risky.

Insights from the 699 applications received from Africa and Asia Pacific for the third round of the Ecosystem Accelerator Innovation Fund in March and April 2018, show that at least 15 per cent (100 start-ups) of all applicants have already incorporated at least one mobile operator-led mobile money service in their solution.

Our findings also show that 35 per cent of all applicants (244 start-ups) across Africa and Asia Pacific revealed an interest in integrating mobile money solutions with their offerings.

Mobile money: Moving towards full financial inclusion

Access to basic mobile money services can be the first step towards using other financial services (such as insurance, credit, savings and international remittances) that are critical to the financial health of an individual. Start-ups and mobile money providers are working together to deliver a more comprehensive suite of financial services to mobile money customers, with start-ups complementing mobile money providers' solutions to advance financial inclusion.

FIGURE 9

Some examples include:

	FINANCIAL SERVICES				
	Payment	**Insurance**	**Credit/Loans**	**Remittancces**	**Savings**
Kamworks (Cambodia)	✔		✔		
Farmerline (Ghana)	✔		✔		
MaTontine (Senegal)	✔	✔	✔		
KlickEx Pacific (Pacific)	✔			✔	
ClinicPesa (Uganda)	✔				✔

Kamworks (Cambodia) received a seed grant from the Mobile for Development Utilities Innovation Fund in November 2013.[16] Kamworks offers a range of solar energy products, such as solar pumping, custom-designed solar home systems and 'pay-as-you-go' (PAYG) solar home systems. It also offers off-grid customers pre-paid solar home systems through a 24-month loan term or a perpetual rental, payable through WING, a third-party mobile money operator.

Farmerline (Ghana) provides information services, weather forecasts, and savings and credit services to farmers, payable through mobile money.

MaTontine (Senegal) received a grant from the GSMA Ecosystem Accelerator Innovation Fund in February 2018[17] to provide a mobile-based automated platform for local 'tontines', or rotating savings and credit associations (ROSCA). By digitising the tontines, the start-up allows users to gradually build their credit score to access other financial services, such as insurance and microloans. Most of the payments made to and from the platform are mobile money-based.

KlickEx Pacific (Pacific) is a multi-currency platform that connects bank accounts, mobile wallets, agent networks and merchants. Through KlickEx, individuals can send money from New Zealand, Australia and the UK to Digicel Mobile Money wallets in Tonga, Samoa and Fiji.

ClinicPesa (Uganda) is a micro-savings platform that helps users who do not have access to traditional health insurance to set aside dedicated healthcare funds. Individuals can use the Airtel Uganda and MTN Uganda mobile money services to save money for healthcare while businesses can save on behalf of their employees.

14   GSMA, 2018, "2017 State of the Industry Report on Mobile Money", https://www.gsma.com/mobilefordevelopment/sotir/
15   GSMA Mobile Money Metrics, https://www.gsma.com/mobilemoneymetrics/#global?y=2017?v=registered_accounts?g=global

16   GSMA, 12 May 2016, "Lessons learned from our grantees: Kamworks", https://www.gsma.com/mobilefordevelopment/programme/m4dutilities/lessons-learned-grantees-kamworks/
17   GSMA, 26 February 2018, "Ecosystem Accelerator Innovation Fund Start-up Portfolio",
      https://www.gsma.com/mobilefordevelopment/programme/ecosystem-accelerator/ecosystem-accelerator-innovation-fund-start-portfolio/

Start-ups, mobile money and the Sustainable Development Goals (SDGs)

Mobile technology continues to make a significant contribution to meeting the UN Sustainable Development Goals (SDGs). Beyond increasing financial inclusion, mobile money services enable start-ups to tackle several SDGs, either directly or indirectly. Here are a few examples:

START-UPS	SUMMARY	SDGs
ZigWay (Myanmar)	A mobile platform that connects low-income families to formal lenders that provide flexible micro-loans (about $5 to $50) at industry-regulated prices. **Use of mobile money:** ZigWay is integrated with local mobile money service, Wave Money (owned by Telenor/Yoma Bank), allowing users to access loans and pay them back through Wave Money.	1 NO POVERTY
Lynk* (Kenya)	A mobile and web platform that links households and businesses with verified domestic workers, artisans and blue-collar workers. **Use of mobile money:** Lynk uses Safaricom's mobile money solution, M-Pesa to pay domestic workers, artisans and blue-collar workers.	
Twiga Foods* (Kenya)	A mobile- and web-based B2B supply chain platform that connects smallholder farmers to small- and medium-sized fruit and vegetable vendors. **Use of mobile money:** Twiga Foods pays smallholder farmers with Safaricom's M-Pesa. Vendors also pay Twiga Foods for fruits and/or vegetables via M-Pesa (for more details, read our case study on Twiga Foods).	2 ZERO HUNGER
Jamii* (Tanzania)	A mobile micro-health insurance solution for MSMEs and socio-economic groups in the informal sector. Jamii's case study can be found on pages 7–11 of this report. **Use of mobile money:** Jamii's users pay for insurance premiums using Vodacom Tanzania's mobile money platform M-Pesa.	3 GOOD HEALTH AND WELL-BEING

START-UPS	SUMMARY	SDGs
SunCulture** (Kenya)	SunCulture runs a solar-powered irrigation system for smallholder farmers. It uses a pay-as-you-go model to ensure it is affordable and able to extend access to water pumping solutions for underserved communities. **Use of mobile money:** SunCulture's users make payments through Safaricom's mobile money service M-Pesa.	6 CLEAN WATER AND SANITATION
Electric Vine Industries** (Indonesia)	A microgrid developer that brings sustainable energy solutions to Indonesians without electricity using smart metering technology. **Use of mobile money:** Electric Vine Industries is integrating with TCASH, Telkomsel's mobile money service, to allow customers in rural communities to pay for electricity with mobile money.	7 AFFORDABLE AND CLEAN ENERGY
Fori Mazdoori (Pakistan)	A mobile-, web- and SMS-based service that helps connect skilled workers with potential employers. **Use of mobile money:** Skilled workers can register for Fori Mazdoori through Telenor Pakistan's EasyPaisa and Jazz's JazzCash (mobile money) agents. The registration fee is less than $1 and can be paid via mobile money.	8 DECENT WORK AND ECONOMIC GROWTH
Offerhut (Sri Lanka)	A USSD-based promotion platform for enterprises to advertise their offers and for consumers to query available offers in their geographic area (for more details, watch our case study video featuring the Offerhut service). **Use of mobile money:** Offerhut gives the SMEs selling on its platform the freedom to choose from different payment methods, including mobile money solution, eZ Cash.	
Sudpay* (Senegal)	TownPay is a solution developed by Sudpay to allow municipalities to automate, and later digitise, the collection of taxes from local merchants to reduce fraud and improve collection rates. **Use of mobile money:** Local merchants can use mobile money to pay their taxes through the TownPay solution.	11 SUSTAINABLE CITIES AND COMMUNITIES

*   Start-ups funded by the GSMA Ecosystem Accelerator programme.
**   Start-ups funded by the GSMA Mobile for Development (M4D) Utilities programme.

Unpacking the collaboration opportunities between mobile operator-led mobile money providers and start-ups

As we highlighted in *APIs: A bridge between mobile operators and start-ups in emerging markets*, mobile operators are increasingly opening their mobile money APIs to third parties, including start-ups. Meanwhile, mobile money providers are seeking to diversify their product portfolio to reach new customer segments. It is therefore no surprise that 49 per cent of mobile money providers participating in the GSMA Mobile Money Global Adoption Survey identified enterprise solutions as one of their top three strategic priorities for 2018. Merchant payments were rated the highest product priority for 2018 by 60 per cent of respondents.[18]

Examples of mobile operator-led mobile money API initiatives:

- **Safaricom (Kenya):** The Kenyan mobile operator launched its open API platform, Daraja in August 2017 for businesses to integrate their services with M-Pesa. The portal hosts several M-Pesa-specific APIs, including business-to-business (B2B), business-to-consumer (B2C) and reversals, allowing a fast and simplified on-boarding process.

- **Dialog Axiata (Sri Lanka):** Through Ideamart, a multi-operator API platform led by Dialog Axiata, developers and non-developers have access to eZ Cash APIs. eZ Cash is a mobile money solution that enables customers to perform a wide array of financial transactions using Dialog, Etisalat and Hutchinson SIM cards. eZ Cash services are now available to over 16 million mobile subscribers.

- **Orange (Africa):** The mobile operator runs Orange Money Web Payment Services, a dedicated solution for online merchants. Subscribed merchants can integrate Orange Money directly on their website. The service allows end users (Orange Mobile customers) to pay for their services online.

- **Telenor Group (Myanmar):** In October 2017, Wave Money, a joint venture between Telenor, First Myanmar Investment (FMI) and YOMA Bank, introduced its open API platform, Wave Money Developer Portal, which enables cashless payments between merchants and customers. Merchants can integrate Pay with Wave Money by simply uploading the necessary documents.

While the opportunities for start-ups and mobile money providers are vast, the full potential is yet to be realised. One of the biggest barriers is that start-ups must undergo a separate technical integration with every mobile operator to accept payments from their customers. For instance, the current landscape for PAYG companies to connect with mobile money is overly complex[19], which prompted the GSMA Mobile Money and Mobile for Development Utilities teams (with support from MasterCard Foundation and DFID) to create an industry asset that enables PAYG service providers to connect to and receive instant notifications of payments from multiple mobile money operators through a single integration.[20]

The Instant Payment Notification (IPN) Hub is an industry utility developed by the GSMA that provides a single point of integration between mobile money operators and service providers in the growing pay-as-you-go (PAYG) sector. The hub enables PAYG service providers to integrate easily with mobile operators. It also provides instant notifications of payments made, which is a critical requirement for PAYG service providers to serve customers in real time (for example, to turn on a light).

The IPN Hub is already live in Rwanda (connecting four entities: MTN Rwanda, Airtel-Tigo Rwanda, BBOXX and Off Grid Electric) and Uganda (MTN). Beyond PAYG solar, the Hub can also be helpful for service providers in water, sanitation, transport, school fees and other sectors that use a PAYG model.

In June 2018, the IPN Hub made its one millionth unique payment transaction. Service providers and mobile operators interested in integrating with the IPN Hub should contact jlemasagarai@gsma.com

Looking ahead: Calling on mobile operator-led mobile money providers to serve as gateways to the digital economy

The most successful mobile operator-led mobile money services are integrated with a wide range of third parties. On average, services with the highest activity rate s are integrated with seven banks, 95 billers and 31 organisations for bulk disbursements, as well as 6,500 merchants, well above the industry average.[21]

As the industry evolves, a growing number of mobile money services are shifting towards a platform business model for mobile money.

This, in turn, is driving mobile operator partnerships with start-ups. To attract the best partners, mobile operators can offer not only scaled payment services, but also data insights, easy integration, regulatory expertise and the operational excellence that has long been the hallmark of the mobile industry. The scope for deeper collaboration between mobile money services and the start-up community is therefore set to expand in the years to come.

Acknowledgements

21   GSMA, 2018, "2017 State of the Industry Report on Mobile Money", https://www.gsma.com/mobilefordevelopment/sotir/

For further information please visit
the GSMA website at www.gsma.com