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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. In particular, the programme operates an Innovation Fund which supports African and Asian start-ups with direct funding, technical assistance, and connections with mobile operators. The programme is supported by the GSMA, its members, and the UK Department for International Development (DFID).

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

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This document is an output of a project funded by UK aid from the Department for International Development (DFID), for the benefit of developing countries. The views expressed are not necessarily those of DFID.

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When the term "unicorn" first emerged in 20131 to describe a privately owned start-up valued at over \$1 billion, there were no start-ups from emerging markets on the list of thirty-nine. Three years later, the list has more than quadrupled to 179, including 11 from emerging markets.<sup>2</sup> Beyond their 10-digit valuation, emerging market unicorns such as Jumia (Nigeria), Go-Jek (Indonesia), Decolar (Argentina) and Hike (India), have rapidly become major commercial and socio-economic players in their respective regions. Combined, these four unicorns have 6,500 direct employees<sup>3</sup> and several hundreds of thousands of contractors. Go-Jek alone operates a fleet of 200,000 drivers<sup>4</sup> and Jumia works with a network of 30,000 sales agents.

While start-ups are vital forces in both the innovation ecosystem and the wider economy, the majority struggle to reach scale. They are often stifled by a dearth of investment capital, lack of payment infrastructure, difficulty to reach unconnected users, a shortage of market insights and limited government support, among other challenges. A case in point is Lumkani. Founded in 2014, the South African start-up developed a networked early warning fire detection system which alerts community leaders and local fire department of fires in informal settlements. Despite being a low-priced solution to a problem in most informal settlements in emerging markets, Lumkani has only distributed 7,000 devices across South Africa so far.<sup>5</sup>

Likewise, in emerging markets, **mobile operators** have touched the lives of billions and reached impressive scale across all population segments. Emerging markets represent 75% of the world's 4.8 billion unique mobile subscribers.<sup>6</sup> Behind this growth is the pervasiveness of mobile phones, which provide widespread access to easy-to-use forms

of communication (voice, SMS, or USSD). They are also the main channel for accessing the internet and other important services, and provide a vital lifeline in natural disasters. On the ground, mobile operators have deployed powerful distribution networks that employ millions. With mobile money services, they offer a payment solution with close to 150 million active accounts worldwide,<sup>7</sup> addressing the shortcomings of many local banking systems.

Nevertheless, these mobile operators face a plethora of challenges. Sustainable competitive advantage in the telecommunications sector is becoming increasingly difficult to achieve. Digital disruption has made it difficult for mobile operators to keep up with the accelerating pace of innovation.

Today in emerging markets, more than anywhere else, there are opportunities for mobile operators and start-ups to collaborate. Mobile operators have reached the scale that start-ups lack, while start-ups have the local innovation mobile operators need.



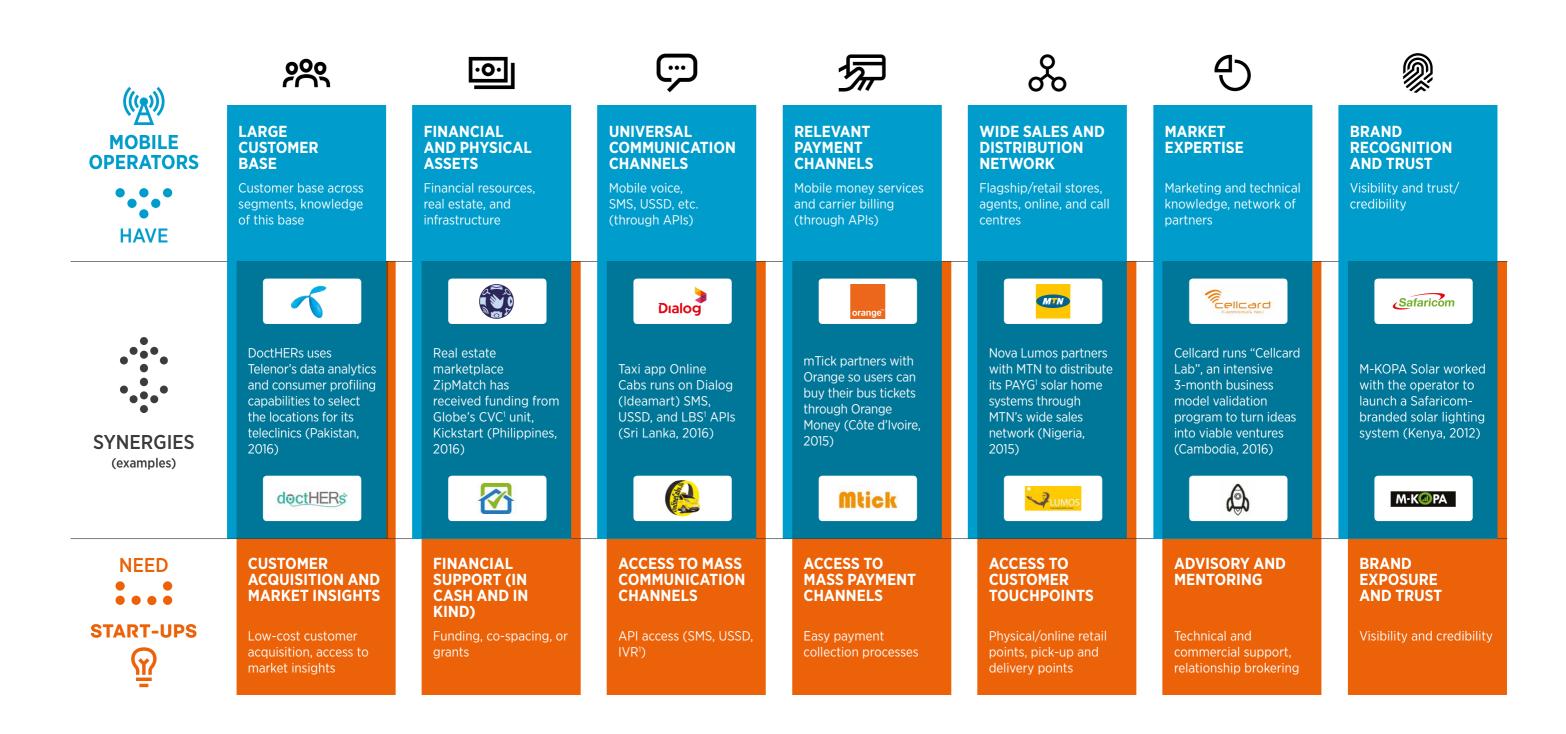
Mobile operators have reached the scale that start-ups lack, while start-ups have the local innovation mobile operators need.

### 1 Identifying synergies: a framework for mobile operators and start-ups

When it comes to **scale** and **innovation**, mobile operators and start-ups have certain "haves" and "needs". As we looked at examples of collaborations between mobile operators and start-ups in emerging markets, it became clear that these haves and needs primarily determine the synergies, or opportunities for collaboration.

FIGURE 1

A synergies framework for mobile operators and start-ups in emerging markets: Part 1 - mobile operators' haves and start-ups' needs

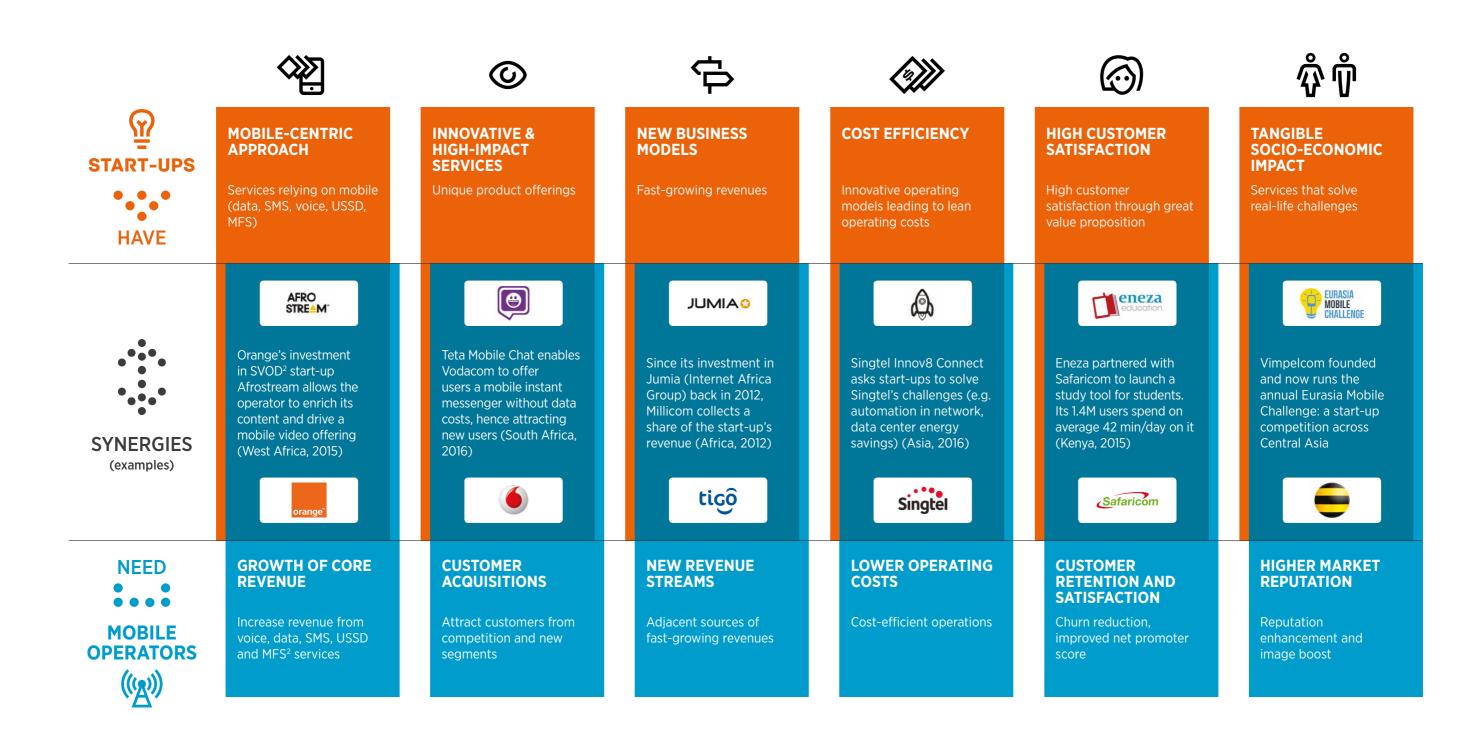


Sources: GSMA Ecosystem Accelerator, mTick8 ,ZipMatch9 ,Online Cabs10, Nova Lumos11, DoctHers12, M-Kopa13 1. CVC: Corporate Venture Capital; LBS: Location Based Services; PAYG: Pay-As-You-Go; IVR: Interactive Voice Response

6 7

FIGURE 1

A synergies framework for mobile operators and start-ups in emerging markets: Part 2 - start-ups' haves and mobile operators' needs



Sources: GSMA Ecosystem Accelerator, Afrostream14, Teta Mobile Chat15, Jumia16, Singtel Innov8 Connect17, Eurasia Mobile Challenge18 2. SVOD: Subscription Video on Demand; MFS: Mobile Financial Service

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Our analysis of the synergies between mobile operators and start-ups in emerging markets yielded four main takeaways:

- 1. Any collaboration between a mobile operator and a start-up needs to be balanced. Both parties need to benefit from the collaboration for it to make sense and be sustainable.

  Therefore, before going ahead with a partnership, mobile operators and start-ups need to clearly assess their haves and needs, and then use the framework above to identify specific opportunities for collaboration. However, it is important to note that a "have" on one side can fulfil different "needs" on the other side. For instance, the innovative and high-impact services
- a start-up provides can help a mobile operator with customer acquisition and customer retention. In Nigeria, when eCommerce start-up Jumia offers exclusive discounts to MTN customers, it not only generates new customers on the operator's side, but also increases the satisfaction and loyalty of its existing customers.
- 2. Mobile operators have a range of tools to accelerate a start-up's growth. Financial support is only one of these tools. Mobile operators can also support start-ups with customer acquisition and market insights, brand exposure and trust, advisory and mentoring, and providing access to customer touchpoints, mass communication, and payments channels (see Figure 2).

### FIGURE 2

### What support do start-ups need from mobile operators in emerging markets?

In the first round of the Ecosystem Accelerator Innovation Fund,<sup>19</sup> we received more than 400 applications from start-ups in 41 countries across Asia and Africa. We asked the applicants to tell us the kind of support they would require from mobile operators. The graphic below shows the most common answers among the top 100 applicants. More than half (52%) said they wanted to integrate or further integrate with mobile operator local APIs, whether SMS, USSD, mobile money, or billing (i.e. "Access to mass communication channels" and "Access to mass payment channels" in our framework).

### Type of support **Examples** "With the technical assistance and support from API integration 52% (Mobile money, USSD, mobile operators, we would be able to fimprove our SMS, Billing, Location) operations by using USSD communication... Resources "Zero-rating of our mobile site", "Any subsidy on 31% (discounted rates) & data or access fees' financial support Guidance & "Technical support to better understand the level of mentorship bandwidth availability in rural areas. "Sales and distribution Integration across Africa", Customer 20% "Have our application pre-installed in mobile touchpoints devices sold to corporate clients. Exposure & "Advertising and promoting our services to increase credibility the number of service providers and users' Access to "Access to anonymised demographic information customer insights about patients to better understand our client base." "Having our data hosted at mobile operators' data Others centres for countries we operate in.' Source: GSMA Ecosystem Accelerator Innovation Fund 20

- 3. Mobile operators are uniquely positioned to create additional value across a range of industries. For example, education (Safaricom and Eneza), transportation (Orange and Mtick), energy (MTN and Lumos), or others. The ability of mobile operators to drive scale across other industries gives them an edge over other potential corporate partners.
- 4. Start-ups can help to address some of a mobile operator's key challenges. In the face of decelerating revenues and increasing competition in the telecommunications sector, start-ups can provide a way for mobile operators to stay relevant. The examples in the synergies framework

(Figure 1) demonstrate that start-ups can help mobile operators grow core revenue, create new revenue streams, or lower costs. They can also boost a mobile operator's value proposition, leading to higher customer retention, customer acquisition, and better reputation.

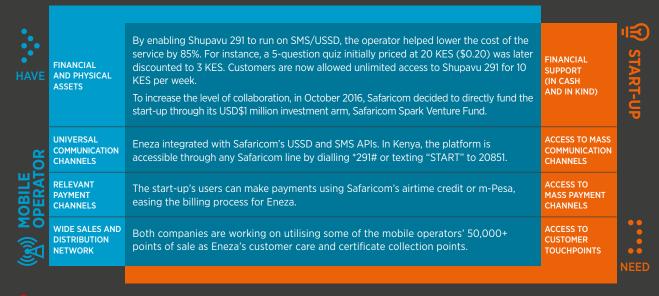
The **three case studies** captured in this report illustrate these points, showcasing collaborations between mobile operators and start-ups in emerging markets. The case studies cover start-ups at three different stages (early stage to unicorn) in three markets (Pan-Africa, Kenya and Pakistan), operating in three different segments (EdTech, eCommerce, and HealthTech).



CASE STUDY 1

### Eneza Education and Safaricom: unlocking mobile education opportunities in East Africa

In 2012, Kenya-based Edtech start-up <u>Eneza-Education</u> teamed up with Safaricom to launch Shupavu 291, an SMS-based service. Accessed through a feature phone, its "Ask a Teacher" feature allows students to ask teachers questions in real time.







users

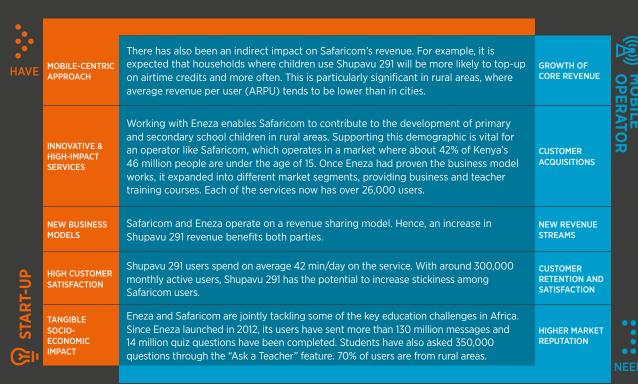




of users from rural areas



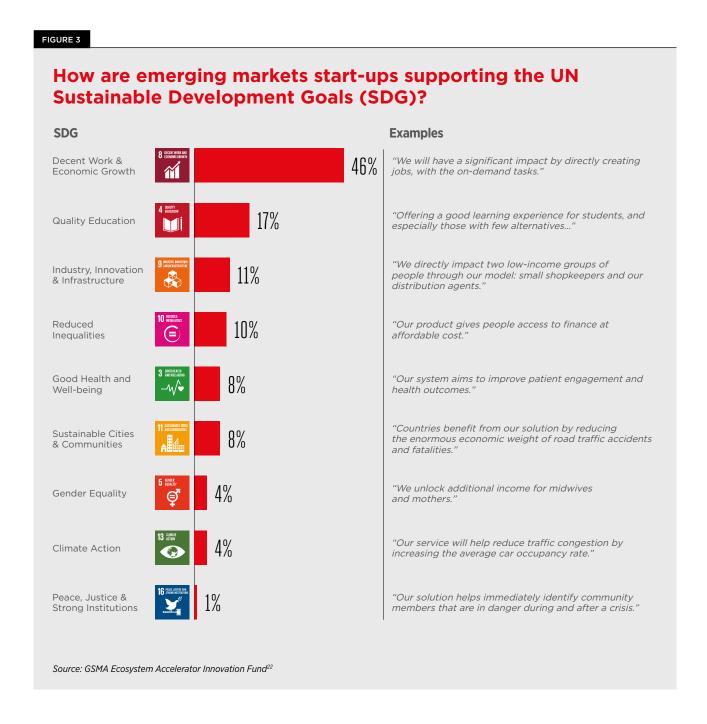
new markets planned for expansion



Sources: Eneza Education, Safaricom

Beyond the benefits for start-ups and mobile operators, collaborative ventures in emerging markets often have long-lasting effects on the local economy. Mobile operators can mitigate the route-to-market challenges for start-ups by providing the platform, customer relationship, and resources to drive their mobile innovation to scale. The socio-economic benefits are apparent: in the first round

of our Innovation Fund in 2016, we discovered the top 100 start-up applicants were already tackling or planning to tackle at least nine of the 17 UN Sustainable Development Goals (SDGs).<sup>21</sup> Nearly half stated the positive impact their business was having on employment and economic growth (SDG #8) while a third highlighted their contribution to improving education (SDG #4) and industry (SDG #9).



CASE STUDY 2

### Jumia and MTN: the synergies behind Africa's leading eCommerce venture

In December 2013, MTN, together with Millicom and Rocket Internet, became a 33.3% stakeholder in Africa's e-commerce and digital services company Jumia Group (formerly Africa Internet Group (AIG). MTN has since invested an additional \$143 million in Jumia Group, increasing its stake to 41.4 percent. Jumia's services include Jumia (e-Commerce), Jumia Market, Jumia Travel, Jumia Food, Jumia Deals, Jumia House, Jumia Car, Jumia Jobs, and Jumia Services.

HAVE	FINANCIAL AND PHYSICAL ASSETS	investors, such as Orange, AXA, Goldman Sachs, and CDC.			
((公)) MOBILE OPERATOR	RELEVANT PAYMENT CHANNELS	MTN Mobile Money APIs were integrated across Jumia's platforms to help the eCommerce firm overcome the challenges of low credit card penetration. The integration accelerated the share of mobile payment users in Jumia's customer base.	ACCESS TO MASS PAYMENT CHANNELS	٦	
	WIDE SALES AND DISTRIBUTION NETWORK	Jumia has been able to take advantage of MTN's broad range of flagship stores and retail outlets as delivery points in Nigeria, Ivory Coast, and Cameroon.	ACCESS TO CUSTOMER TOUCHPOINTS		
	BRAND RECOGNITION AND TRUST	The companies have combined efforts to launch joint marketing and cross-promotion initiatives. In Nigeria, for example, two TV campaigns were launched.  The companies have also pursued a series of below-the-line (BTL) marketing campaigns via SMS, giving MTN customers access to Jumia discounts.		• • • • • • • • • • • • • • • • • • •	



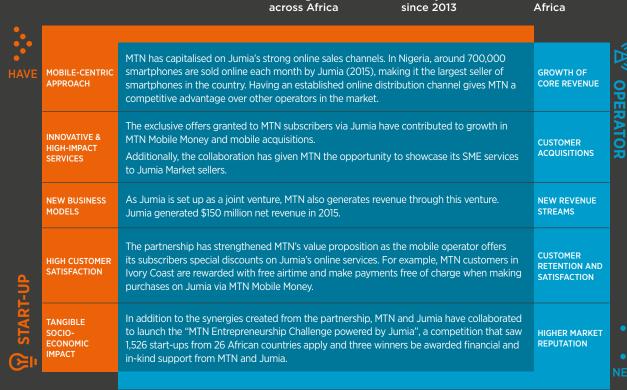
active customers

sales agents network

direct jobs crea

countries across

direct jobs created countring since 2013 Africa



Sources: Jumia, MTN

## Collaboration models for mobile operators and start-ups

Depending on the types of potential synergies identified between a mobile operator and a start-up, different models of collaboration may apply. In the matrix thereafter we have attempted to map some of these options based on the depth of collaboration and the financial commitment required from the mobile operator. While this analysis is relevant to operators, start-ups in emerging markets should also understand the variety of ways they can engage and collaborate with a mobile operator. The range of options will naturally vary significantly from one market to another.

FIGURE 4

### Engagement and collaboration models for mobile operators and start-ups



& M&A

The mobile operator acquires a start-up in order to integrate it with its own operations.

**Example:** Airtel & YTS Solutions (India)

### JOINT VENTURE

The mobile operator and the start-up set up a joint venture run by both entities.

**Example:** MTN & Rocket Internet (Africa)



### CVC INVESTMENT

The mobile operator makes an investment in a start-up through its corporate venture capital fund (investment vehicle).

**Example:** Safaricom & mSurvey (Kenya)



The mobile operator invests in a start-up directly through its main entity and balance sheet (not through a separate entity).

Example: MTN & Snapp (Iran)



### **INTEGRATION**



### **≥** HACKATHON OR COMPETITION

The mobile operator engages with start-ups by hosting a competition for local entrepreneurs. This often opens the door to collaborating with the winners.

The mobile operator supports a strong local tech hub

**Example:** Orange (CIPMEN) & Tech-Innov (Niger)

(incubator or accelerator) through funding, API access, or

mentoring, for instance, to gain access to local start-ups.

**Example:** Etisalat & DTMD (Nigeria)

■ PARTNER TECH HUB

**≥** DIRECT INVESTMENT

### ■ IN-HOUSE TECH HUB

The mobile operator runs its own tech hub (often accelerators) to source cohorts of start-ups and provide them with in-house support and opportunities for collaboration.

**Example:** Telenor (Velocity) & DoctHers (Pakistan)



### COMMERCIAL AGREEMENT

The mobile operator and the start-up work out a more traditional commercial buyer/supplier deal based, for instance, on a revenue share.

**Example:** Globe & Bustayo (Philippines)



### **OTT RESELLING**

Specifically with content start-ups (video on-demand (VoD), music, games, etc.), a mobile operator may resell a start-up's content in an over-the-top deal.

**Example:** Vodacom & Teta (South Africa)



### ✓ CSR/GRANT

The mobile operator's foundation or CSR team engages with start-ups purely from a CSR (not a business) angle through challenges, prizes, etc.

**Example:** Millicom & Shule Direct (Tanzania)



**DEPTH OF COLLABORATION** 



Traditionally in emerging markets, most mobile operators have supported local start-ups in three ways: CSR activities (grants, prizes, etc.), start-up competitions (such as hackathons), and external tech hub partnerships. Research we published in August 2016, "A few things we learned about tech hubs in Africa and Asia", <sup>31</sup> found that 13% of the 600+ active tech hubs we identified had a partnership with a mobile operator.

However, while these efforts are needed and provide opportunities for start-ups and mobile operators to engage, they too rarely lead to durable collaborations. When a start-up wins a competition organised by a mobile operator, collaboration rarely follows. Some competitions are held for public relations reasons rather than a real desire to engage in long-term partnerships, while start-ups often only focus on seeking funding, not opportunities to collaborate.

Recently, however, we have seen a positive shift as more mobile operators have moved towards the top right corner of the matrix (Figure 4), seeking more collaboration and investing more heavily in these efforts. For instance:

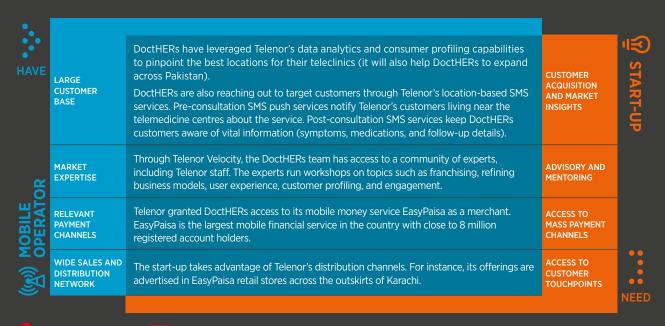
 In-house tech hubs: Several tech hubs run by mobile operators have recently been launched, including MTN Solution Space in South Africa; Orange Fabs in Côte d'Ivoire, Senegal, and Cameroon; six Telenor-owned incubators and accelerators across Asia (Velocity in Pakistan, DTAC Accelerate in Thailand, GP Accelerator in Bangladesh, Telenor Myanmar Accelerate and Digi Incub8 and Accelerate in Malaysia), and Zain Innovation Campus in Jordan. These tech hubs can be quite efficient at developing collaborations with early-stage local start-ups when they act as an intermediary between the start-ups and the mobile operator's major departments (marketing, networks, financial services, data analytics, sales, etc.).

- Investments (CVC, direct investments, and jointventures): While the synergies mentioned in Figure 1 can often be achieved through commercial models, they can multiply when coupled with a carefully managed equity investment in the start-up partner. With several start-up investments from MTN, 33 Orange, 34 and Safaricom 35 since the second quarter of 2016, these forms of collaboration are appearing to gain traction.
- Commercial agreements and OTT reselling partnerships: Although not as known as the two options above, these are often very attractive collaborations for both parties. Whether a simple API integration with a revenue-sharing component (a model gaining in popularity among mobile operators like Airtel Africa, 36 Dialog in Sri Lanka, 37 or Orange across Africa 38) or a product reselling deal (more suitable for content-focused ventures like Dobox in Nigeria 39 or B2B start-ups), these agreements often lead to strong collaboration as they come after direct negotiations between the operator and the start-up to come up with a mutually beneficial deal.

CASE STUDY 3

### DoctHERs and Telenor: collaborating to increase access to healthcare

DacHERs connects marginalised communities to health services via video consultation while re-integrating female health professionals into Pakistan's medical workforce. Doctors appear on a laptop screen in one of the DoctHERs teleclinics staffed with nurses who work with doctors to check symptoms and treat patients. This telemedicine start-up was part of the first cohort of Telenor Pakistan's six-month accelerator programme, Velocity, designed to support local start-ups through access to Telenor's customer base and distribution channels.





employed

**22k** 

tele-consultations provided

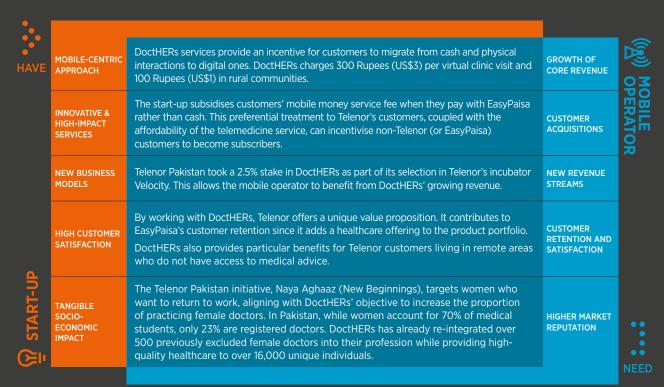
**22**16k

patients supported

U 9

teleclinics across Pakistan 2,000 clinics in 6 countries

clinics in 6 countries projected by 2020



Sources: DoctHERs, Telenor (Find out more about Telenor Pakistan initiatives in mHealth here:

http://www.asma.com/mobilefordevelopment/wp-content/uploads/2016/12/The-journey-of-Telenor-My-Health-in-Pakistan.pd)

# Calling on mobile operators and start-ups in emerging markets to explore more ways to work together

The digital economy creates many opportunities for start-ups and mobile operators in emerging markets to collaborate for mutual benefit, while also providing citizens with new products and services that have a positive socio-economic impact. The GSMA Ecosystem Accelerator programme calls on mobile operators and start-ups in emerging markets to continue seeking partnerships and opportunities for collaboration. The synergies framework provided in this report should help both parties better understand what they can contribute and clearly identify areas of potential collaboration before embarking on a partnership.



### Recommendations for emerging market MOBILE OPERATORS willing to work with local start-ups

UNDERSTAND WHAT
A COLLABORATION
WITH A
START-UP COULD
BRING TO YOUR
ORGANISATION:

Beyond financial investments, mobile operators can find valuable ways to collaborate with start-ups at multiple levels. However, they must understand their needs if they are to pick the right partners and design mutually beneficial partnerships.

2 SET UP THE RIGHT CHANNELS FOR ENGAGEMENT AND COLLABORATION WITH APPROPRIATE RESOURCES:

While some mobile operators take advantage of a full range of options when it comes to engaging with start-ups (from CSR events to investment and acquisition vehicles), each context calls for a tailored approach. It is critical that all initiatives are properly resourced, staffed, and given strong business objectives aligned with the operator's strategic activities

APPROACH THE RIGHT START-UP WITH THE RIGHT SPEECH:

Before engaging with a start-up, mobile operators should answer the following three questions:

- Will this start-up help me address my current business concerns and meet my future needs?
- Do I have someone in-house dedicated to making this a successful collaboration?
- Do I speak the start-up's language?

COLLABORATE WITH
THE WIDER START-UP
ECOSYSTEM

Mobile operators cannot work in isolation. If they are to access a broad range of start-ups in the countries where they operate, they must include the entire start-up ecosystem: tech hubs, investors, and government. We therefore call on mobile operators to build affiliations with their wider community to strengthen the start-up ecosystem.



### Recommendations for emerging market START-UPS willing to work with mobile operators

UNDERSTAND YOUR STRENGTHS ('HAVES') AND NEEDS:

Start-ups keen to partner with mobile operators need to ensure they have a robust rationale for the collaboration. If the start-up is unclear what it can offer the mobile operator, the collaboration may not be successful. This initial exercise will require the start-up to study mobile operators in its market and understand where they are located in each of the "haves" and "needs" presented in our framework.

FIND THE RIGHT CHANNEL TO ENGAGE WITH MOBILE OPERATORS:

The extent to which mobile operators are prepared to engage with start-ups varies significantly from one market to another. A "landscaping" phase is therefore essential for the start-up to understand the best way to collaborate with a local mobile operator (e.g. applying for the latest innovation prize, reaching out to the accelerator programme, or including the operator on its list of potential Series A investors)

APPROACH THE RIGHT PARTNER WITH THE RIGHT PITCH:

Before engaging with a mobile operator, start-ups should answer the following three questions:

- What are the current business concerns of this mobile operator?
- Who is the right person to talk to within the organization?
- Do I speak the mobile operator's

### **ACKNOWLEDGEMENTS**

We would like to thank the mobile operators, external consultants, start-ups, and GSMA experts who were interviewed and consulted for this report:

doctHERs	eneza education	JUMIAO	MATCH MAKER VENTURES
DoctHers	Eneza	Jumia	Match-Maker Ventures
MIN	orange™	Safaricom	telenor
MTN Group	Orange MEA	Safaricom	Telenor Pakistan
VimpelCom	GSMA*		
Vimpelcom	All our GSMA colleagues for their expertise and support		

### **FURTHER READING**

### MATCH-MAKER VENTURES:

- Innovation Quest for Telecom Operators: The heat is on! <a href="http://match-maker.ventures/telco-study/">http://match-maker.ventures/telco-study/</a>
- The Age of Collaboration <a href="http://match-maker.ventures/study/">http://match-maker.ventures/study/</a>

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 Telecom operators: Open Innovation with start-ups: http://www.adlittle.com/downloads/tx\_adlreports/ADL\_Telco\_Start-ups\_OpenInnovation.pdf

### NESTA:

- Winning Together: A guide to successful corporate-startup collaboration http://www.nesta.org.uk/blog/winning-together-guide-successful-corporate-startup-collaboration
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### 500 START-UPS AND INSEAD:

 How do the world's biggest companies deal with the start-up revolution? http://698640.hs-sites.com/500corporations

### WAMDA:

• Collaborative Entrepreneurship: The state of corporate-start up engagement in MENA https://www.wamda.com/research/collaborative-entrepreneurship-impact

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