



Country overview: Ghana

Driving mobile-enabled digital transformation

Mobile industry and government together supporting social and economic progress

Ghana has played a proactive role in the UN's Sustainable Development Goals (SDGs) which aim to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. Internationally, the country is a member of the Open Working Group (OWG) tasked with proposing a set of goals for approval by the United Nations General Assembly (UNGA). Nationally, the government incorporated the SDGs into the country's national development agenda as of 2016, with progress tracked by a committee overseen by the President.

Government commitment to the SDGs reflects the fact that, while Ghana is a fast growing economy (GDP growth has been an impressive 7% per year over the last 10 years), development challenges and gaps in access to basic services persist. Income inequality continues to increase, with the bottom 20% income segment of the population controlling only 5% of national wealth. Poverty levels remain high, with 25% of the population below the national line, and regional rates are significantly higher. Some 85% lack access to clean sanitation and 36% lack access to electricity. Moderate or severe food insecurity affects half the population and, although maternal mortalities have reduced over the last five years, they are still five times the SDG target.

Mobile – as a technology and as an industry – is uniquely placed to support the SDGs and development outcomes through the multiplier effect that comes from providing connectivity. In the 25 years since mobile was established in Ghana, the industry has connected 67% of the population, which amounts to 19 million individuals. To date, it has connected nearly half the population to the internet through their mobile phone.

Beyond core connectivity to a network, mobile operators in Ghana have also created the means for citizens to access other core services, including the following:

- Providing **financial services** via a mobile platform, particularly mobile money, which is relevant to 11 of the SDGs. Mobile money is one of the most dynamic innovations in the industry and has provided significant social and economic benefits for users. At the end of 2016, there were more than 8 million active mobile money accounts in Ghana.¹
- Facilitating the provision of **digital forms of identity**. The ability to prove identity is critical to accessing a wide range of services such as healthcare, education, employment, financial services and voting. In Ghana, birth registration is approaching 70%, having risen somewhat since the introduction of Tigo's mBirth programme in May 2016.
- Improving **productivity for farmers**. Mobile platforms provide farmers and agricultural firms with up-to-date information on market prices, production techniques and weather forecasts through services such as the Vodafone Farmers' Club.
- Expanding **healthcare access**. Programmes such as the Mobile Technology for Community Health (MOTECHE) have helped demonstrate the potential of mobile to increase demand for and access to health information and services among rural communities, while also providing data on health service delivery and outcomes to the Ghana Health Service.
- Increasing **water and energy efficiency** through the Internet of Things (IoT) and machine-to-machine (M2M) solutions. M2M and IoT solutions have the potential to impact many of the SDGs: for example, by monitoring air quality, climate change and water & energy efficiency; by improving the productivity of manufacturing and industrial processes; and by monitoring marine, coastal and forest ecosystems.

1 (90 days) Bank of Ghana

WHAT INDUSTRY HAS ALREADY DONE

In the 25 years since mobile was established in Ghana:



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FINANCIAL SERVICES



DIGITAL FORMS OF IDENTITY



IMPROVING PRODUCTIVITY FOR FARMERS



EXPANDING HEALTHCARE ACCESS



INCREASING WATER AND ENERGY EFFICIENCY

BUT THERE IS MUCH MORE TO DO

The Ghanaian government's active engagement in the SDGs and proclaimed support for private sector initiatives clearly marks it as one open to enabling sustainable business that can progress development as well as commercial objectives. Mobile operators, coming together as the first industry to commit to the SDGs, have committed to continued advancement of social and economic development within communities where they operate. Closer collaboration between government and mobile operators offers substantial opportunities to unlock digital transformation for millions of Ghanaians. Key areas of opportunity include:



CLOSING INFRASTRUCTURE GAPS



CLOSING THE MOBILE GENDER GAP



INCREASING FINANCIAL INCLUSION



ACCELERATING DIGITAL IDENTITY



SUPPORTING START-UPS AND ENTREPRENEURSHIP

Accelerating impact through closer collaboration

Despite the progress made, significant challenges remain to realising the potential of mobile to support socio-economic development. Many of these require collaboration between the public and private sectors. We highlight several areas in this report that would benefit from such interaction between mobile operators and government departments.

Closing infrastructure gaps: Mobile network coverage is weakest in rural areas, which have challenging rollout economics, especially in areas where towers are at risk of vandalism or 'galamsey' (illegal mining). Industry-specific taxes exacerbate the problem by reducing the capital available for network investment. Mobile network operators can continue to engage in voluntary network sharing, which the government can support by establishing a regulatory framework for active infrastructure sharing.

Another area of opportunity is the Universal Access Fund regime operated by the Ghana Investment Fund for Electronic Communications (GIFEC), set up to address the gap between commercially viable areas of the country and unserved, rural parts. The sustainability of GIFEC's projects can only be secured when there is an incentive for the private sector to go into the unserved markets, via tax rebates or holidays, coupled with new models for universal service funds. Greater collaboration in this area has the potential to significantly increase investment by the mobile operators, driving improved coverage. Ecosystem partnerships for alternative connectivity (such as satellite) also offer opportunities for greater coverage and therefore greater digital inclusion.

Accelerating digital identity: Mobile is a powerful tool in enhancing people's lives by enabling them to access personalised, value-added services. As the Ghanaian government expands its National Identity rollout programme, an increasing number of people will be able to register their mobile SIM cards in their own names. This will also enable mobile operators to offer robust, digital identities that unlock several life-enhancing services while at the same complying with mandatory SIM registration requirements. Tigo's mBirth programme in Ghana is an example of a mobile-enabled digital identity service that highlights the potential benefits of the mobile industry and government collaborating to address the challenge of unlocking access to basic services for a significant number of Ghanaians.

Closing the mobile gender gap: There is a gender gap in Ghana of approximately 16% in mobile phone ownership and 17% in the use of mobile money services. The gap is much higher, at 56%, in the use of the internet, with 2.5 million fewer women online than men. This is the lesser told story of an otherwise encouraging rise in ICT use across the country. Given that mobile and the internet are the two most basic building blocks of a digital society in countries lacking prevalent fixed line infrastructure, gender disparities merit urgent consideration and action to avoid the opportunity cost of lost female engagement, empowerment and productivity gains. Mobile operators can actively track and take action to close the gender gaps in their user bases, as MTN Ghana and Tigo Ghana have pledged in relation to their mobile money services by 2020. The root causes of gender disparities are many and complex, often going beyond the presence of network access and even affordability into issues of relevance, safety and cultural acceptance. This requires joined-up discussion and action between mobile operators, policymakers and the development community.

Increasing financial inclusion: Increasing the number of mobile money users is of course vital, but the real gains in the future will come from expanding the range of services on the platform. Mobile-centric savings products, digitised bill payments, person-to-government (P2G) or government-to-person (G2P) payments and mobile-enabled international remittances all offer significant commercial and social opportunities. Focussing on payments in specific sectors such as agriculture provides operators with inclusive business opportunities and government with a means to increase efficiencies.

In Ghana, it is estimated that 16% of total annual production is sold through formal procurement channels. Some 3.5 million new mobile money accounts could be added by 2020 from digitising business-to-person (B2P) and G2P payments, depending on the number of farmers engaged in formal value chains. Mobile operators could derive an estimated \$13 million for B2P payments and \$1.1 million for G2P payments in 2020.

Digitising agricultural payments not only benefits mobile operators, but government too – for example, by lowering the cost of distributing payments, by facilitating real-time and scalable payments to smallholder farmers across multiple locations and by mitigating cash-handling risks, such as theft and fraud, and enabling transparent and traceable transactions.

Supporting start-ups and entrepreneurship: For a healthy start-up ecosystem to develop in the digital era, it is crucial that start-ups can incorporate mobile services such as SMS or mobile money into their products. Without access to mobile solutions such as inclusive payment mechanisms, start-ups serving the masses struggle to scale. Key action areas for operators to consider include the following:

OPEN UP Depending on their in-house capabilities and market coverage, operators have three main options for their API go-to-market and sales approach:

- 1 In-house API programmes
- 2 Partnerships with a third-party API management software provider such as Apigee or WSO2
- 3 Wholesale models with an API aggregator (local/regional, such as Africa's Talking, or global such as Twilio). This last option is probably more relevant for operators with smaller market shares and limited in-house resources to drive an API programme.

HARMONISE The heterogeneity of APIs remains a key pain-point for start-ups and developers. Mobile operators can harmonise at a group or industry level by adopting a common platform or standards for specific APIs (e.g. mobile money).

COLLABORATE APIs should not be seen as end products but as enablers of innovation. The competitive differentiation between mobile operators should not be the APIs themselves, but rather their efforts to engage with start-ups and support them.

OUTREACH TO DEVELOPERS This is crucial to a successful API programme: developers will only use APIs if they know they are there and they are willing and able to use them.

The Ghanaian Government, led by President Nana Akufo-Addo, has signalled its willingness to seize the SDG opportunity for the benefit of Ghanaian society. The mobile industry too, has committed to the SDGs and connecting everyone and everything to a better future, being the first industry to formally do so. Therefore, closer collaboration between government and mobile operators offers exciting opportunities to unlock mobile-enabled digital transformation across Ghana.



2006

2015

GH¢483m

GH¢3.1bn

2.2% GDP

How the mobile industry contributes to the SDGs

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



This graph shows, from top to bottom, which SDGs the mobile industry impacts the most, starting from the most at the top, to the least at the bottom. Read [the report](#) for more details

15 LIFE ON LAND



5 GENDER EQUALITY



4 QUALITY EDUCATION



1 NO POVERTY



10 REDUCED INEQUALITIES



3 GOOD HEALTH AND WELL-BEING

