

## Digital Development in Africa – What is Working and What Isn't

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Information and Communication Technology (ICT) policies are a key driver of 'digital development' – the extent of integration of a country or region into the global digital world and digital economy. This is because communication, information flows, trade, business, education, finance, industry and even government are today inextricably founded in the digital world

The 'digital divide' refers to the gulf between developed and developing nations in terms of digital penetration in countries and regions. However, the digital divide does not only refer to the divide between regional aggregates and countries, but to the divide that is found within countries too. Several African countries have 'dualistic' economies, characterised by a modernised urban sector and poor and underdeveloped rural sector. This economic dualism extends as well to digital penetration, with urban areas covered by fixed and mobile broadband, while many rural areas have little to no connectivity at all. Today, Africa lags behind the global aggregate in terms of digital development and the digital divide, but its rate of improvement is such that it is converging to global aggregates at an admirable pace.

Two important indicators of progress with digital development are the prices of broadband and the extent of broadband penetration among the population. Regarding pricing, ITU data<sup>1</sup> shows that mobile broadband bundle prices have dropped more in Africa than in any of the other major regions (for the period 2012-2020). Not only that, but aggregate mobile broadband prices in Africa are absolutely lower (in US\$) than for any of the other regions.

These falling prices for mobile broadband are associated with rapid uptake of mobile broadband services, with subscriptions growing over the 2010-2020 period at rates of 2690%, 906% and 209% for Africa, non-Africa developing and the developed country aggregates respectively. Africa has grown off

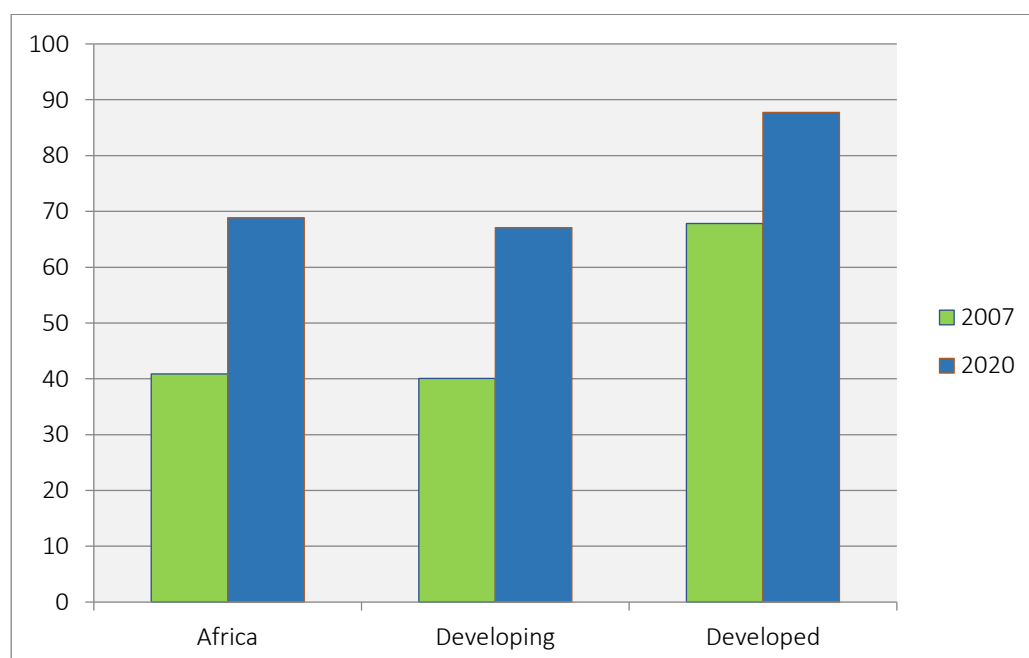
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<sup>1</sup> <https://www.itu.int/itu-d/sites/statistics/>. Note that the author has made additional calculations and interpolations using this data as described in the tralac trade brief '[ICT Policy Choices and Digital Development in Africa](#)'.

a very low base however and ended the period with actual mobile broadband subscriptions per 100 inhabitants at only 63% of the figure for the rest of the developing world<sup>2</sup>. This indicates that work still needs to be done to further extend digital inclusion in Africa, mostly now into rural areas. In addition, mobile broadband is not equivalent to fixed broadband (provision of fibre optic connectivity to workplaces and residences). The latter extends the utility derived from connectivity in that it opens up new forms of enterprising online activity such as for programming, content creation, knowledge services and web management.

This progress in advancing the accessibility of mobile broadband in many parts of Africa is attributable both to the investment and business activity of the private sector as well as the policy and regulatory environment created by the authorities. ICT policy has the goal of creating an environment conducive to investment, profitable economic activity, competition and competitively-priced services. The ITU has developed a way of measuring and scoring ICT regulatory performance via its *policy regulatory tracker*<sup>3</sup>. Scores for regulatory performance for 2007 to 2020 period for three main country aggregates are given in Figure 1.

**Figure 1: ITU Regulatory tracker composite score: change from 2007 to 2020: main aggregates**



Source: Author's calculations using ITU data<sup>3</sup>

<sup>2</sup> Note however, that the aggregate for non-African developing countries includes countries such as China, which perhaps have more in common with developed than developing countries.

<sup>3</sup> ITU 2022. The ITU Regulatory Policy Tracker. [Accessed 1st February 2022] <https://app.gen5.digital/tracker/about>

Of interest is the fact that Africa and the rest of the developing world score almost exactly the same, with both country aggregates showing large improvements in their regulatory scores relative to the developed country aggregate. In addition, Africa's ending (2020) score is slightly higher than the starting (2007) score for the developed aggregate.

This data can be further broken down by African sub region and regional economic community (REC)<sup>4</sup>. By far the most outstanding African regional grouping, when it comes to regulatory performance, is the East African Community (EAC), which scores higher than the ROW aggregate by approximately 10%. The EAC members have clearly produced a superior regulatory environment for ICTs and this sets them above their regional peers. In fact, the EAC has multiple REC-level ICT-related policy frameworks, including the ICT Policy and Harmonisation Framework<sup>5</sup>, which although it is not binding, provides direction and guidance on how policies could be harmonised.

At the individual country level, EAC member Rwanda is a good example of effective and coordinated ICT policy that is reflected in a rapid rollout of broadband and sharp increase in internet access. In 2001, Rwanda released the first five-year National Communication Infrastructure Policy (NICI), which was followed by three additional frameworks, the final plan being renamed '*Smart Rwanda*'<sup>6</sup>.

The policies recognise, promote and incentivise broadband uptake, e-government, electronic transactions, e-commerce, data protection and cyber security. The policies include tax incentives and special economic zones (SEZs) in order to promote the competitiveness of services. Besides this, the policy is coordinated across government silos, is comprehensive and incorporates mechanisms to enhance consultation and collaboration with private sector and other bodies (ITU 2021b)<sup>7</sup>.

Rwanda's policies have led to some of the cheapest mobile broadband prices in Africa, and rapid uptake of broadband, yet prices are still quite high relative to per capita incomes. Like South Africa, Rwanda has a relatively dualistic economy, with the rural poor still on the other side of the digital divide. The

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<sup>4</sup> This data is provided in the tralac trade brief by the author: '[ICT Policy Choices and Digital Development in Africa](#)'.

<sup>5</sup> <https://www.eac.int/about-eac/94-sector/infrastructure/communications>

<sup>6</sup> Ministry of ICT and Innovation 2022. *MINICT Organised a cluster review meeting to validate SRMP report*. [Accessed 1st February 2022]

<https://www.minict.gov.rw/news-detail/minict-organized-a-cluster-review-meeting-to-validate-srmp-report>

<sup>7</sup> ITU Publications 2021b. *Switching on Smart Rwanda: Digital inclusion, collaboration and a G5 mindset*. Geneva: International Telecommunication Union.

next step is to broaden digital literacy so that digital tools for entrepreneurship and self-starting activities are more broadly accessible.

Another EAC member making good progress in digital development is Tanzania. In 2020, Tanzania had the second cheapest mobile broadband offering in Sub-Saharan Africa, eclipsed only by Burundi; however, its rate of broadband uptake over the previous years was not as impressive as Rwanda's. Its ICT policy approach is defined by the National ICT Policy (NICTP) of 2016, which recognises the critical role of ICTs in broader economic development. The policy encompasses fintech, cyber security, cyber-crime and e-government.

Besides the importance of creating national-level and cross-silo policy frameworks for ICTs development, authorities must also pay close attention to the competitiveness of the industry, especially as it impacts retail clients. Due to the nature of telecommunications and the investment and infrastructure required, the inevitable market structure is that of a duopoly – a few large suppliers with millions of smaller buyers, both business and consumer. This power imbalance can lead to exploitation by the suppliers, who could gravitate towards charging either monopoly prices to consumers, or predatory (artificially low) prices to undermine competition.

By way of example, the South African Competition Commission in 2019 required the two major telecoms giants, MTN and Vodacom, to lower tariffs in independently agreed dispensations with the competition watchdog. The commission found that prices reductions in the region of 30-50% were not unreasonable<sup>8</sup>. Likewise, every competition authority or regulator in the ICT sector in Africa should be willing to critically examine pricing and other market practices of the telecoms giants, to maintain the accessibility of the digital world.

There are also examples of bad ICT policy in Africa. A thoroughly bad policy approach is to attempt to tax internet use per se. This is not referring to the (justifiable) taxation of trade in digital goods/services, which hitherto may have avoided sales tax due to the transactions being detached from the domestic retail system<sup>9</sup>. Taxation on the use of the internet was implemented by Uganda in 2018, presumably to raise revenue<sup>10</sup> (the policy was subsequently abandoned). The same year, Tanzania implemented a

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<sup>8</sup> IOL 2019. *South Africa regulator tells Vodacom, MTN to lower data prices*. [Accessed 1st February 2022] <https://www.iol.co.za/business-report/companies/south-africa-regulator-tells-vodacom-mtn-to-lower-data-prices-38489183>

<sup>9</sup> <https://www.bowmanslaw.com/insights/tax/south-africa-unilateral-measure-considered-to-tax-digital-economy/>

<sup>10</sup> <https://www.theeastafrican.co.ke/tea/business/kenya-joins-tanzania-and-uganda-digital-tax-3264326>

licensing fee for online content creators, which led to a drop in the volume of online content creation, or avoidance activities<sup>11</sup>. Nigeria has also considered a digital tax – the communication service tax – but did not bring it to the implementation phase<sup>12</sup>.

From February 2022, Ghana will implement a tax of up to 1.75% on all electronic transactions, in attempt to widen the tax net and tax the informal sector<sup>13</sup>. The obvious objection to this move, as put forward by consumer and business advocacy groups in Ghana, is that it will negatively impact digital and financial inclusion.

Another example of ill-advised ICT policy is the outright or partial banning of social media platforms and fintech providers. Nigeria, Africa's largest economy, indefinitely banned social media platform Twitter in June 2021, in response to Twitter censoring a tweet by the Nigerian President (Weetracker 2021b). The Nigerian government also announced plans to force the registration of all similar social media platforms, presumably so that their activities in Nigeria can be controlled in future. Furthermore, in June 2021 Nigeria froze the bank accounts of four fintech companies: Bamboo, Rise Vest, Chaka and Trove, on the grounds that they had been engaged in 'illegal forex trading'. This is in contrast to Tanzania's approach, which waived certain financial regulations from being applicable to new fintech platforms, in the interests of financial inclusion<sup>14</sup>.

Banning social media platforms or taxing an activity that is strongly associated with digital development, and consequently – economic development and upliftment – is not good policy. On the other hand, crafting integrated and cross-silo policies, rolling out e-government, making the market for information and communications services competitive and addressing digital literacy in schools, universities and the workplace will go a long way towards enhancing digital literacy.

Africa made greater relative progress into the digital world in the previous decade than any other region or country aggregate. By crafting and implementing good ICT policies, African countries can continue this impressive rate of digital development progress into the current decade.

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<sup>11</sup> <https://www.theverge.com/2018/7/6/17536686/tanzania-internet-laws-censorship-uganda-social-media-tax>

<sup>12</sup> <https://ifex.org/taxes-on-internet-usage-slow-down-ict-growth/>

<sup>13</sup> Weetracker 2021d. *Ghana to introduce a 1.75 per cent tax on all electronic transactions*. [Accessed 1st February 2022] <https://weetracker.com/2021/11/23/ghana-1-75-per-cent-tax-on-electronic-transactions/>

<sup>14</sup> ITU Publications 2021c. *Tanzania – A solid base for moving to G5 regulation*. Geneva: International Telecommunication Union.