

GSMA

Digitalisation and the Africa We Want

Introducing the GSMA
Digital Africa Index





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Executive summary



Assessing digital development

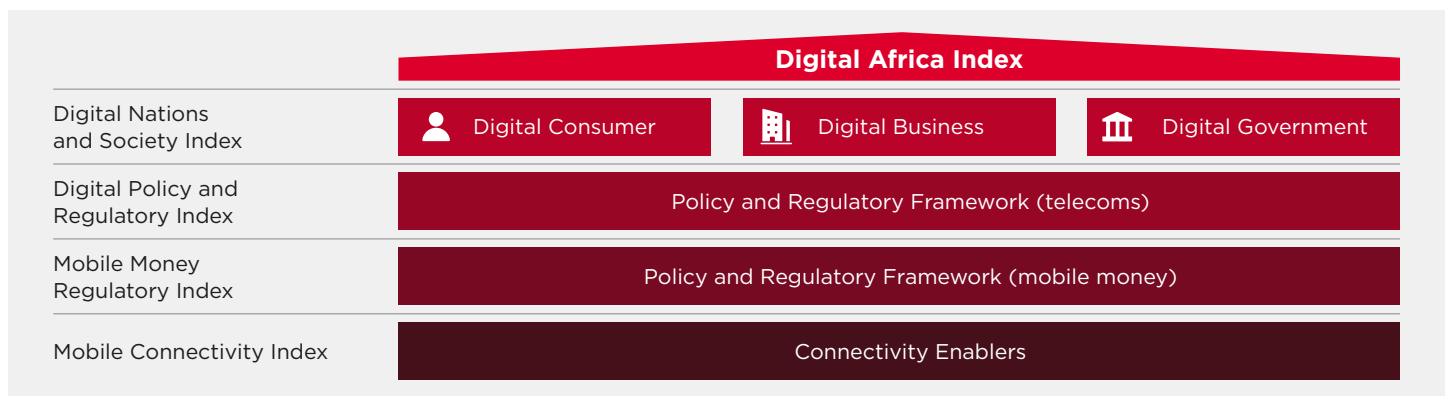
While the transformative socioeconomic impacts of digital technologies are well established, a digital divide persists in Africa, where around two thirds of the population do not currently use mobile internet. Based on recent connectivity trends, it will take another 30 years for the usage gap in mobile internet connectivity to close in Africa.

The economic benefits of accelerating connectivity in Africa are clear. Closing the usage gap across the continent by 2030 could add around \$700 billion in additional GDP during 2024–2030.¹

Against this backdrop, the GSMA has published the Digital Africa Index – an interactive web tool to support policymakers and regulators. Its objective is to enable and promote progressive policies and regulations that will accelerate inclusive digital citizenry and innovation, and spur Africa’s digital economies to overcome the macroeconomic challenges.

The web tool consists of two composite indices: the Digital Nations and Society Index (DNSI) and the Digital Policy and Regulatory Index (DPRI).² The two new indices serve complementary but distinct purposes. The DNSI provides a comprehensive assessment of the adoption of digital technologies and use by consumers, businesses and governments. The DPRI provides an evidence-based assessment of the policy levers governments can pull to accelerate their objectives for the adoption of digital technology. By using the two indices together, policymakers, operators and other stakeholders in Africa can identify which areas of digital adoption and usage are lagging, and pinpoint the policy bottlenecks. The indices will also provide benchmarks for countries that would like to better understand how their counterparts are performing.

The indices complement existing GSMA indices – specifically, the Mobile Connectivity Index³ and the Mobile Money Regulatory Index,⁴ to provide greater insights into how to realise digital and financial inclusion goals in the region.



¹ The State of Mobile Internet Connectivity Report 2024, GSMA, 2024

² Both indices are available at the following link: <https://www.gsma.com/digital-africa-index>. The web tool provides overall index scores as well as the underlying score for each indicator and a market comparison tool.

³ <https://www.mobileconnectivityindex.com/>

⁴ <https://www.gsma.com/mobilemoneymetrics/#regulatory-index>

Analysing the scores

Results from the first edition of the DNSI and DPRI provide clear evidence that countries with enabling policies and regulations are more likely to have higher levels of digital development, brought about by high mobile broadband adoption. However, only four countries (Kenya, Mauritius, Seychelles and South Africa) have a DNSI and DPRI score above 50 (the maximum scores being 100). The vast majority of countries in Africa have DNSI and DPRI scores below 50, meaning they have significant scope to accelerate digital transformation with a more enabling policy framework.

Political goodwill is a crucial consideration for countries looking to improve their DNSI and DPRI scores. While developing supportive policies and regulations is important, their implementation is even more essential to unlock the full impact of mobile broadband connectivity.

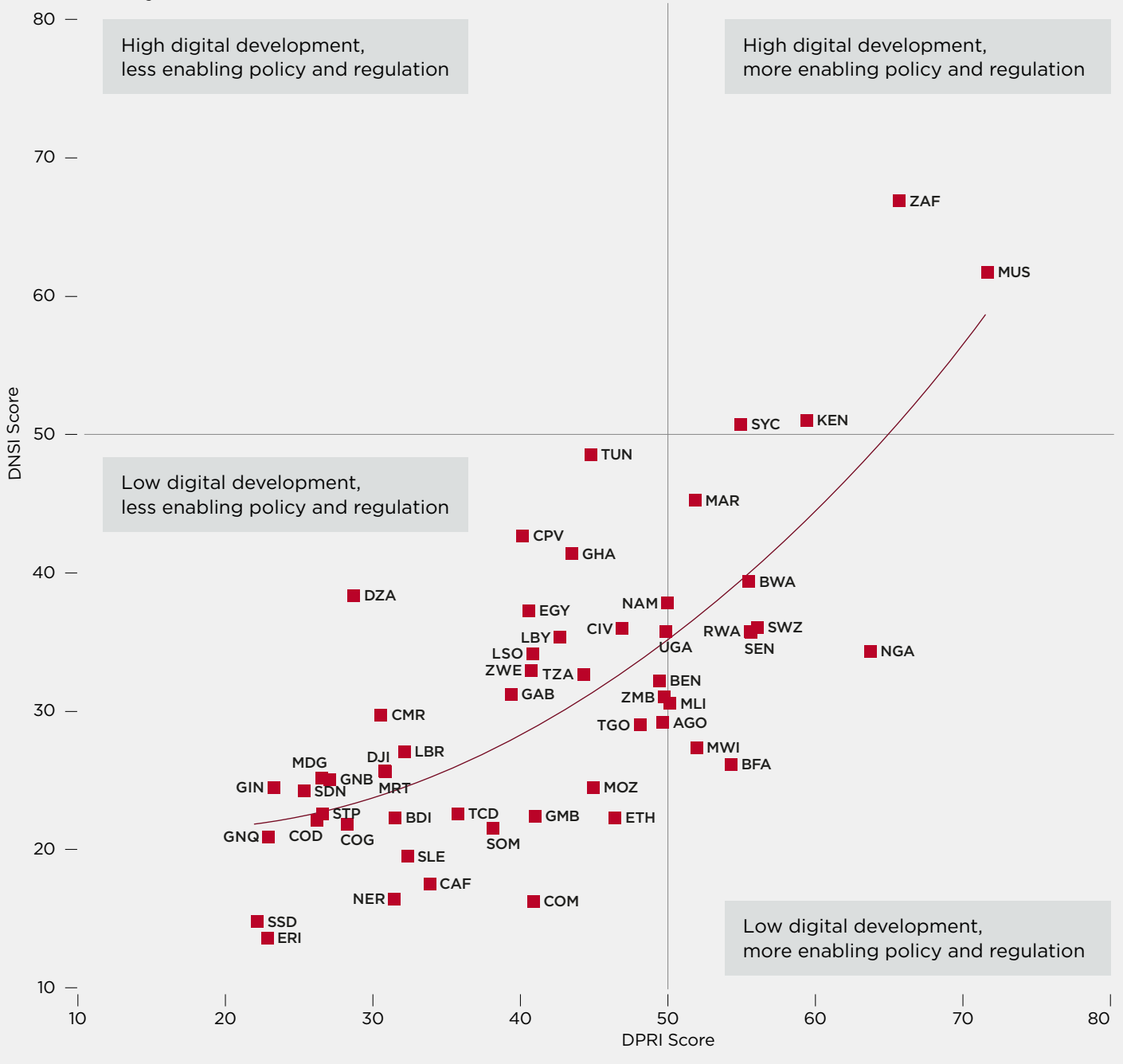
On the consumer side of the DNSI, the results show there is widespread adoption of mobile voice, SMS and digital financial services in many countries. However, use of 4G/5G remains limited in most markets. The majority of consumers are therefore unable to realise the full benefits of the latest generation of mobile technologies. Furthermore, adoption of mobile broadband is not keeping pace with coverage rollout, which is widening the technology divide.

Digitalisation of businesses is a particular challenge in much of Africa, with few countries home to thriving start-up ecosystems or the large-scale use of IoT solutions for businesses.

Countries have seen greater progress with regards to digitisation of government. Many have rolled out digital ID programmes and created an enabling environment for digital health services. However, there remains scope to improve e-government services, to enable greater use of person-to-government/ government-to-person (P2G/G2P) payments and to scale up govtech solutions to enhance service delivery and support government systems.

Figure i
DNSI and DPRI scores by country

Source: GSMA Intelligence

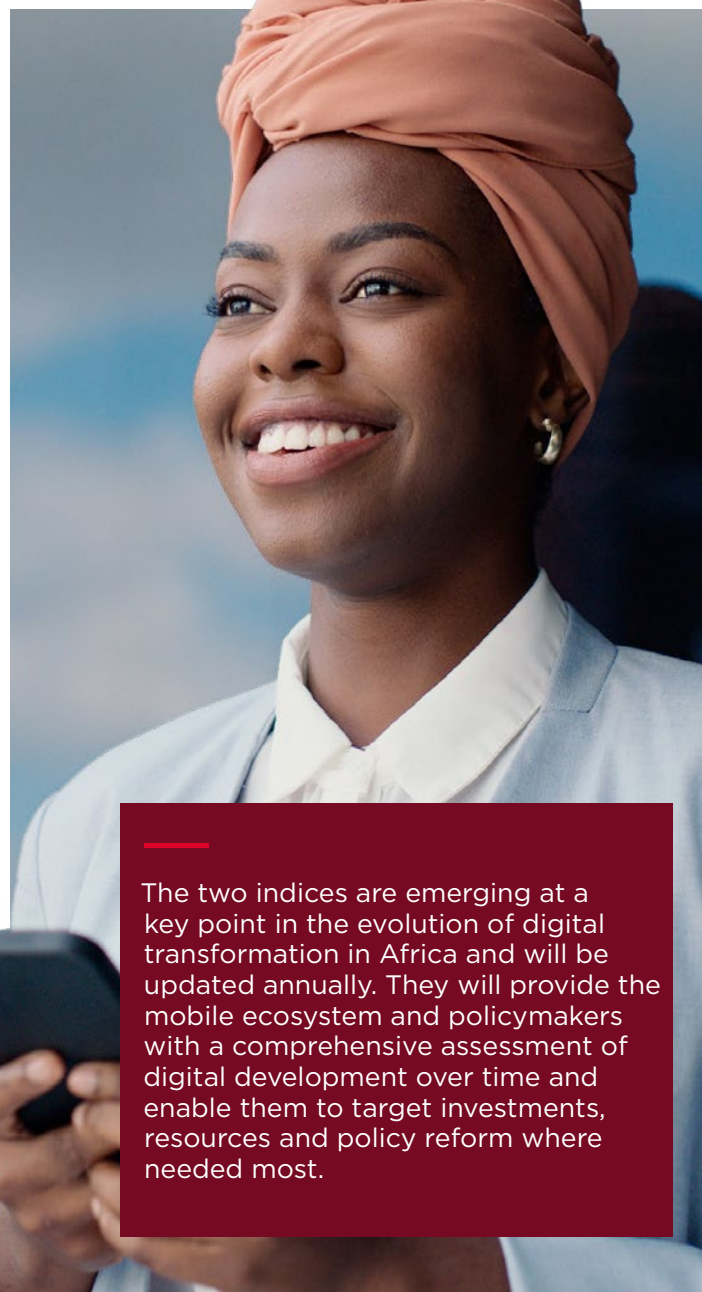


Policy challenges in focus

Most countries in Africa have the opportunity to unlock their potential with better policies. While each market will have its own unique challenges, the results from the DPRI highlight several high-priority policy challenges to address across most of the continent.

These include the following:

- Assigning all available spectrum bands on a technology-neutral basis, at affordable prices.
- Removing distortive sector-specific taxes on consumers and operators.
- Establishing comprehensive consumer and data protection frameworks that strengthen consumer confidence, safety and trust but do not disincentivise investment.
- Incentivising investment by harmonising deployment regulations within countries, promoting regulatory parity between digital service providers, and ensuring quality-of-service policies and coverage obligations are fit for purpose and achieve the right balance between empowering consumers and sustainable investment in digital technologies.
- Reforming universal service funds (USFs) to ensure more efficient, transparent, effective and sustainable delivery of projects to deploy infrastructure and increase connectivity in remote and underserved locations.



The two indices are emerging at a key point in the evolution of digital transformation in Africa and will be updated annually. They will provide the mobile ecosystem and policymakers with a comprehensive assessment of digital development over time and enable them to target investments, resources and policy reform where needed most.

01 Introduction



A digital divide remains

The transformative impacts of digital technologies on the economy and society are well established. Mobile internet has revolutionised how we carry out our day-to-day activities. It has dramatically altered how we communicate, shop and obtain news and information. It has enhanced access to educational and financial services, health information, clean energy and water.

Mobile also has broader socioeconomic benefits. For example, at a macro level, the mobile industry contributed \$5.7 trillion to global GDP (or 5.4%) in 2023.⁵ At the micro level, mobile broadband has been shown to reduce poverty⁶ and improve well-being.⁷ A number of studies have shown that a 10% increase in mobile broadband penetration can increase GDP by 1.0–2.5%.⁸ This reflects how it is a general-purpose, enabling technology that improves the productivity of firms and workers. It lowers search and information costs for consumers and producers, enabling new transactions and improving existing ones, thereby stimulating further trade and competition.

However, a digital divide persists that is most pronounced in Africa, where around two thirds of the population do not currently use mobile internet (see Figures 1 and 2). The region also accounts for nearly half of the 350 million people around the world who do not live in areas covered by mobile broadband networks.

Within the continent, mobile internet use is highest in Northern Africa. The coverage gap is notably larger in Central Africa, and the usage gap is highest in Eastern Africa (Figure 2). There is also a significant digital divide within countries. For example, rural populations in Sub-Saharan Africa are 54% less likely than urban populations to use mobile internet, while women are 32% less likely than men to use mobile internet.⁹

5 [The Mobile Economy 2024](#), GSMA, 2024

6 [The welfare effects of mobile broadband internet: Evidence from Nigeria](#), Kalvin Bahia, Pau Castells, Genaro Cruz, Takaaki Masaki, Xavier Pedrós, Tobias Pfitze, Carlos Rodríguez-Castelán, Hernán Winkler; and [Mobile Broadband, Poverty, and Labor Outcomes in Tanzania](#), Kalvin Bahia, Pau Castells, Genaro Cruz, Takaaki Masaki, Carlos Rodríguez-Castelán, Viviane Sanfelice; [The Economic Impact of Internet Connectivity in Developing Countries](#), Hjort and Tian, 2024; and [Growth and Transformative Effects of ICT Adoption: A Survey](#), Vergara Cobos and Malasquez, 2023

7 [The Impact of Mobile on People's Happiness and Well-Being](#), GSMA and Gallup, 2018

8 For example, see [How broadband, digitization and ICT regulation impact the global economy](#), ITU, 2020; [Socioeconomic benefits of high-speed broadband availability and service adoption: A survey](#), Research Paper, No. 24, EcoAustria - Institute for Economic Research, 2023

9 [The State of Mobile Internet Connectivity Report 2024](#), GSMA, 2024

Figure 1

Mobile internet connectivity by region, 2023

Source: The State of Mobile Internet Connectivity Report 2024

■ Mobile internet subscribers ■ Usage gap ■ Coverage gap

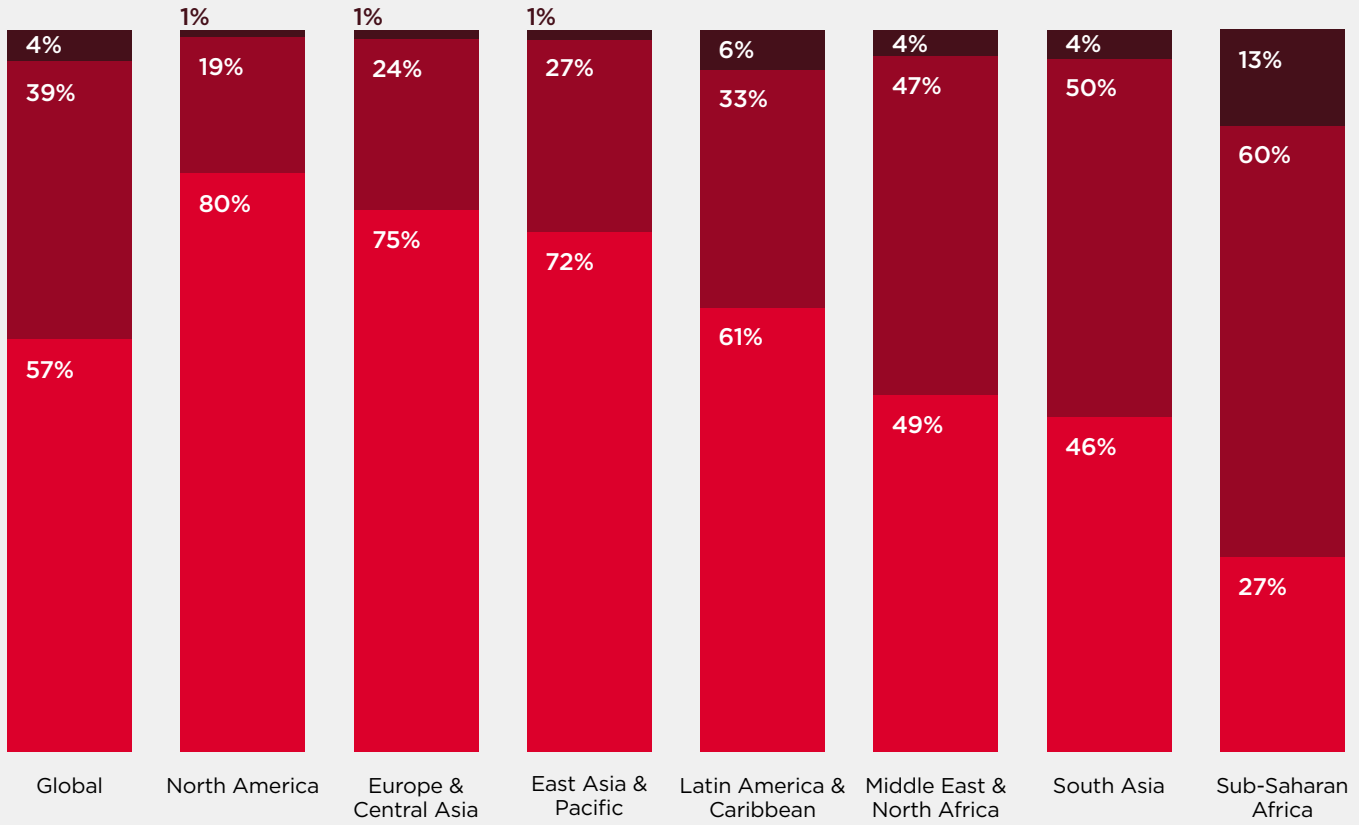
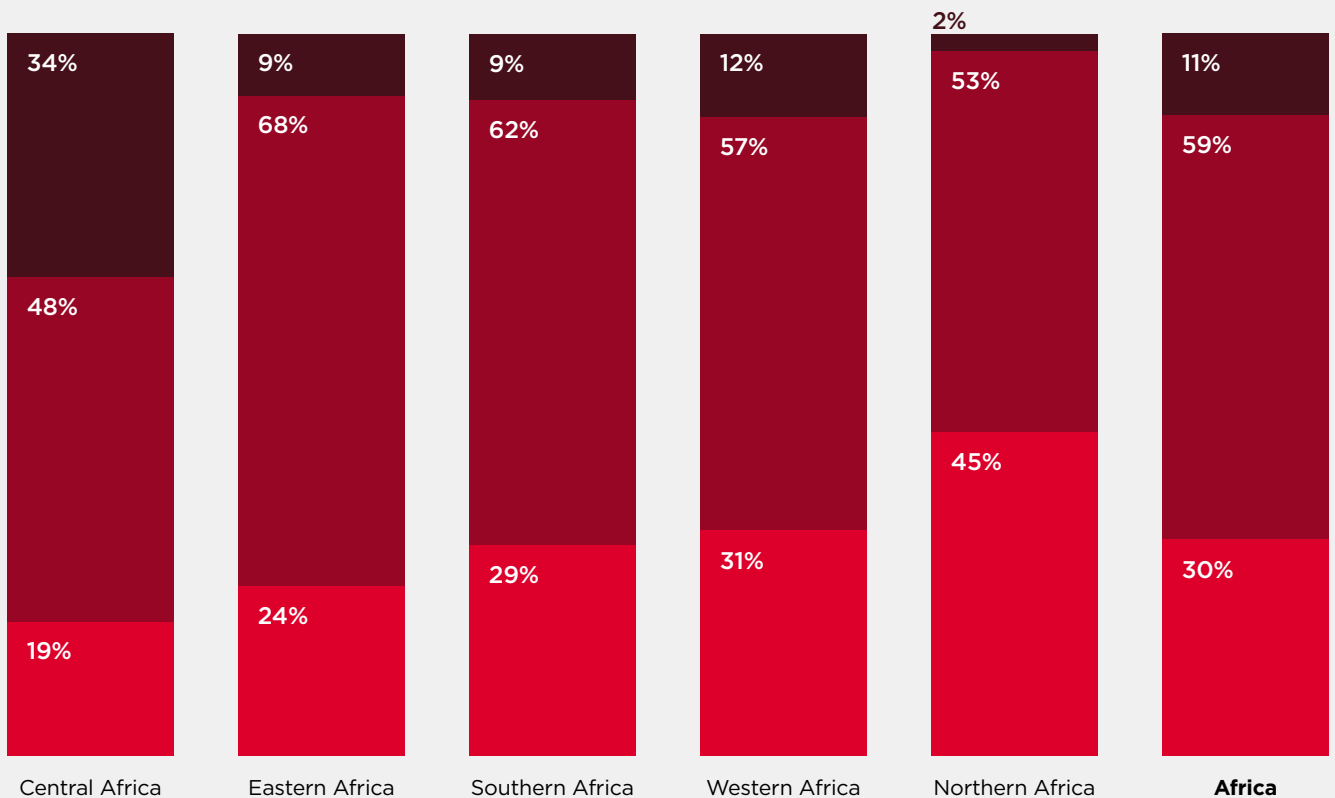


Figure 2

Mobile internet connectivity in Africa, 2023

Source: The State of Mobile Internet Connectivity Report 2024

■ Mobile internet subscribers ■ Usage gap ■ Coverage gap



Based on the connectivity trends over the past decade (see Figure 3), it would take another 30 years for the usage gap to close in Africa. The digital divide will only widen as many Africans remain unconnected, while the majority of people in the rest of the world benefit from 4G and 5G technologies.

Figure 4 shows that the majority of mobile users in Africa are still using 2G or 3G technologies, with just over a third of mobile connections using 4G/5G, even though 4G coverage reached 73% at the end of 2023.¹⁰ The use of 4G/5G is predominant in Southern and Northern Africa but not in Central, Eastern or Western Africa. With the underutilisation of 4G investments, the slow adoption of newer technologies by consumers, businesses and governments in these regions poses a challenge

for sustaining continued private capital investment for the new technologies that will help drive developments in artificial intelligence, automation, robotics and other areas.

The economic benefits from accelerating connectivity in Africa are clear. Analysis by GSMA Intelligence shows that closing the usage gap in the continent by 2030 could add around \$700 billion in additional GDP during 2024–2030.¹¹ Digital transformation will also be at the heart of the African Union’s “Agenda 2063: The Africa We Want”, which is the continent’s blueprint and masterplan to deliver inclusive and sustainable development. 2023 marked the end of the first of five, ten-year implementation plans to realise Agenda 2063.¹²

Figure 3
Mobile internet connectivity in Africa, 2015–2023

Source: The State of Mobile Internet Connectivity Report 2024

■ Mobile internet subscribers ■ Usage gap ■ Coverage gap

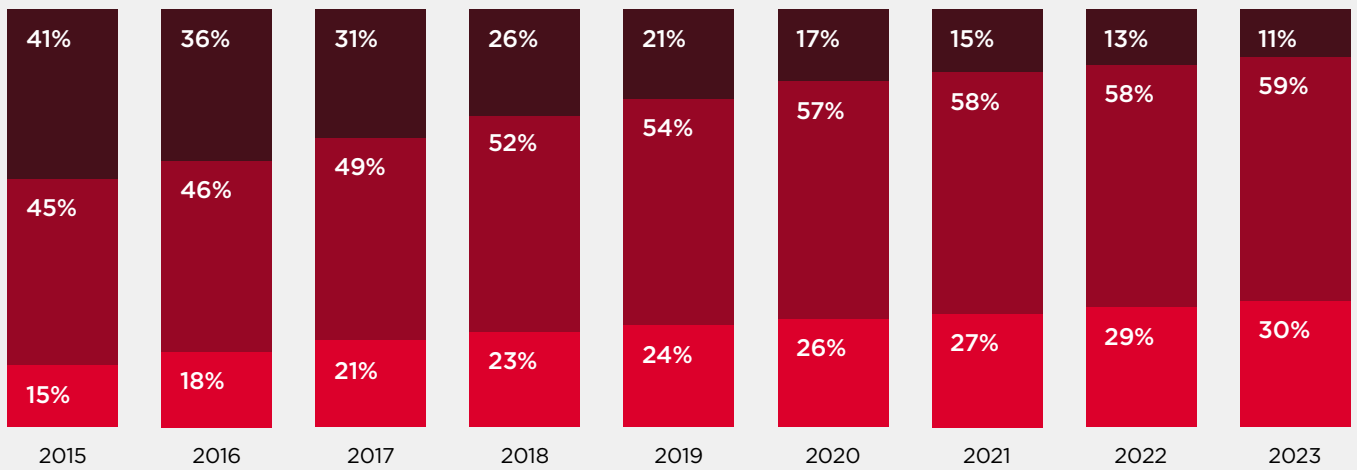
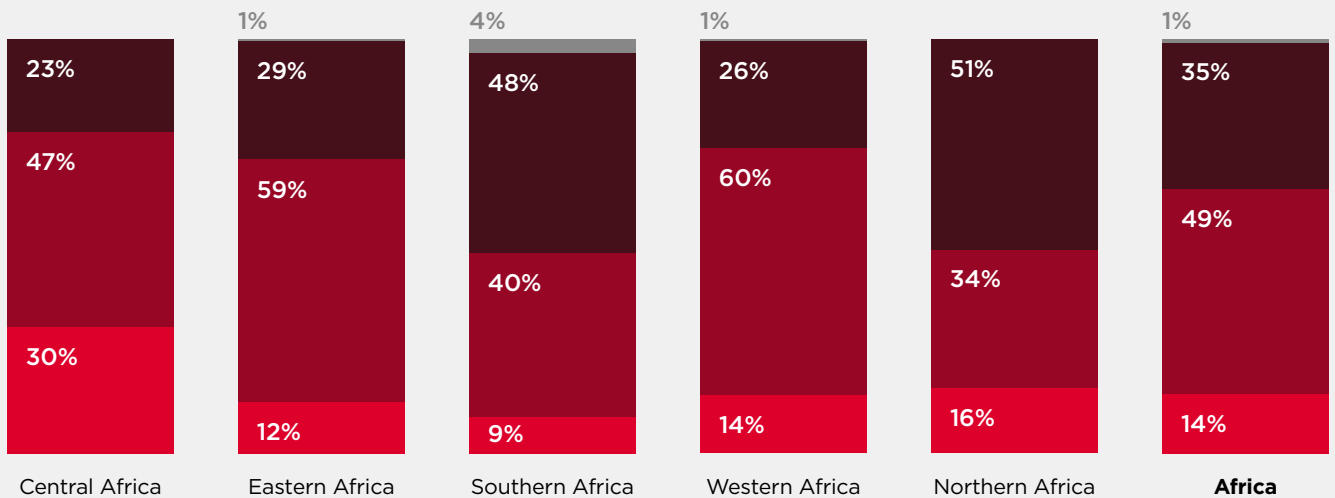


Figure 4
Total mobile connections by technology, 2023

Source: GSMA Intelligence

■ 2G ■ 3G ■ 4G ■ 5G



¹⁰ The State of Mobile Internet Connectivity Report 2024, GSMA, 2024

¹¹ The State of Mobile Internet Connectivity Report 2024, GSMA, 2024

¹² See <https://au.int/en/agenda2063/overview>

Realising the opportunities ahead

Unlocking Africa's vast potential through inclusive connectivity will be dependent on overcoming the investment constraints facing the continent and addressing the key barriers to the adoption of digital technologies. The barriers are digital skills and literacy, affordability (especially handsets), safety and security, and the availability of relevant online content and applications.

Addressing this will require an enabling policy and regulatory framework that incentivises sustainable investment, fosters innovation and collaboration, promotes dynamic competition, aims for regulatory parity among digital service providers and supports timely access to the right amount of affordable spectrum.

In this context, the GSMA has launched the Digital Africa Index (DAI), which consists of two composite indices: the Digital Nations and Society Index (DNSI) and the Digital Policy and Regulatory Index (DPRI).

02 The Digital Africa Index



The purpose of the indices

A broader view of digital development

The two new indices serve complementary but distinct purposes. Achieving digital transformation requires more than internet connectivity alone, which has been measured and monitored through the GSMA Mobile Connectivity Index over the past 10 years. It requires consumers having access to the applications they need (whether digital financial services, mobile education/health services, or video content) and being able to use these as much as they need to.

Beyond the consumer segment, digital transformation means the adoption of technology by businesses across sectors, allowing them to realise the commercial and productivity gains from services driven by cloud computing, the internet of things (IoT), artificial intelligence and other technologies.

The benefits of digitalisation can also extend to government by improving service delivery for citizens as well as improving efficiency (e.g. increasing tax revenue, and reducing costs and revenue leakage), transparency and accountability.

It is only by achieving digitalisation across all three economic actors (consumers, businesses and governments) that the full benefits of mobile technology can be realised, driving economic growth, social development and environmental sustainability.

To assess the level of digital integration of countries in Africa, we need to go beyond measuring network coverage and counting connections. A comprehensive assessment is required of digital adoption by consumers, businesses and government. This is the objective of the Digital Nations and Society Index, which provides a wider view of digital development in the continent.

An assessment of policy levers

For countries not achieving the level of digitalisation they would like, or those that are not seeing the desired level of progress, what can policymakers do to move the needle? This is the objective of the Digital Policy and Regulatory Index. It provides a comprehensive and evidence-based assessment of the policy levers governments can pull to promote investment in the digitalisation of businesses and governments, and bring the benefits of new digital services to underserved populations.

By using the two indices together, policymakers, operators and other stakeholders in African countries can identify which areas of digital adoption and usage are lagging, and pinpoint the policy bottlenecks. The indices also allow the sharing of experience; countries not performing well in certain areas or policies can learn from other countries that have the right enabling policies in place or have achieved greater digitalisation.

Index structure

A number of indices already exist in the digital and ICT sectors.¹³ This makes it important that new indices are designed in a manner that does not replicate others; instead, they should offer unique and relevant insights. Figure 5 presents the components of the Digital Nations and Society Index, which is an outcome index measuring digital adoption and usage among consumers, businesses and governments to capture the integration of digital technologies in Africa's economies and societies.

The DNSI comprises 15 individual indicators. There are several areas related to digitalisation that we have not been able to measure in the first version of the DNSI, due to a lack of data across countries. These include the adoption of mobile technology by businesses of different sizes (micro, small and medium) and sector, the different services used by firms (e.g. private networks, cloud computing, AI), and the different applications used by consumers (e.g. mobile health, mobile education). We will regularly assess the indicators and make improvements as data becomes available. These insights will also encourage continued private capital investment within the sector as the digitalisation of businesses and governments becomes more mainstream in the region.

Figure 6 presents the components of the Digital Policy and Regulatory Index, which is an input index measuring the effectiveness of regulations in delivering positive outcomes for consumers and businesses in digital markets (as policy and regulation impacts both the demand- and supply-side enablers of mobile technology).¹⁴

The DPRI is constructed from five pillars, which in turn comprise 30 indicators. To ensure comparability across indicators, they are normalised using the minimum-maximisation method, which transforms all indicators to lie within a range between 0 and 100, with a higher score representing stronger performance. Further detail on the indicators and the weights and aggregation used to construct the two indices are provided in the accompanying methodology document.¹⁵

¹³ See for example the GSMA Mobile Connectivity Index, the GSMA Mobile Money Regulatory Index, the ITU's ICT Development Index, the ITU Benchmark of collaborative digital regulation and the UNCDF Inclusive Digital Economy Scorecard.

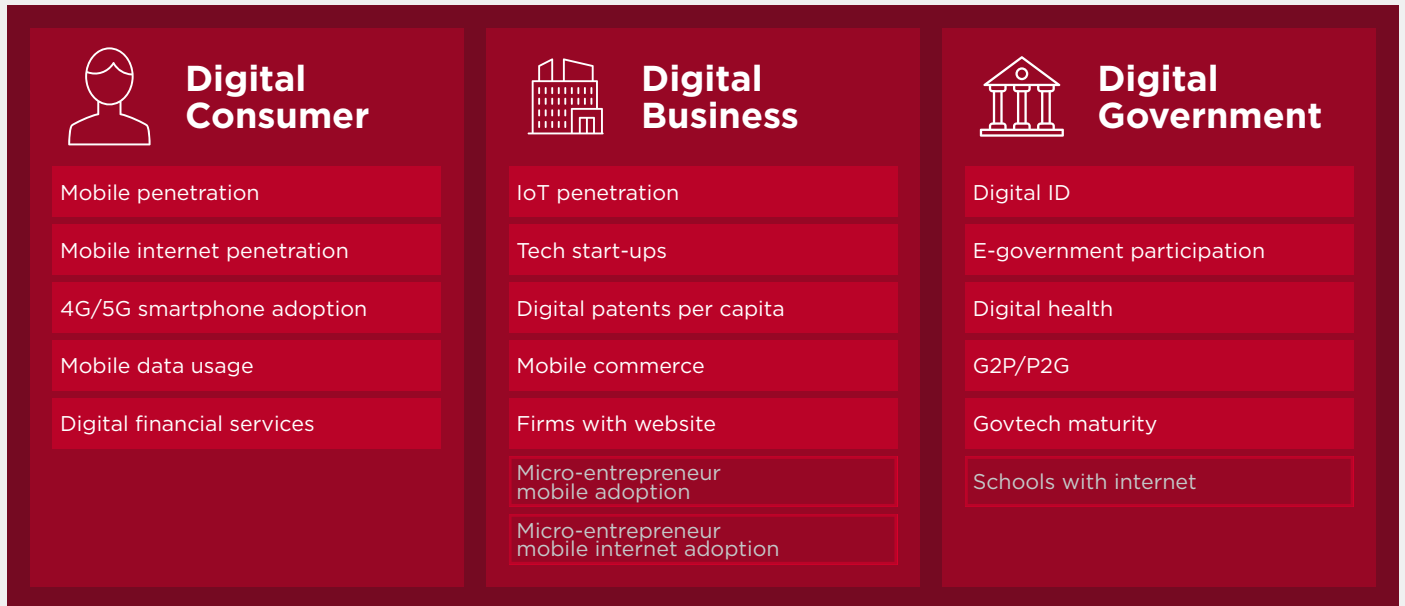
¹⁴ While the two indices could be combined into a single larger index, we have kept them separate to avoid mixing 'input' and 'output' measurements, which is poor practice when constructing indices. Our approach also allows for easier interpretation of the results.

¹⁵ Digital Africa Index Methodology, GSMA, 2024

Figure 5

Digital Nations and Society Index pillars and indicators

Source: GSMA Intelligence

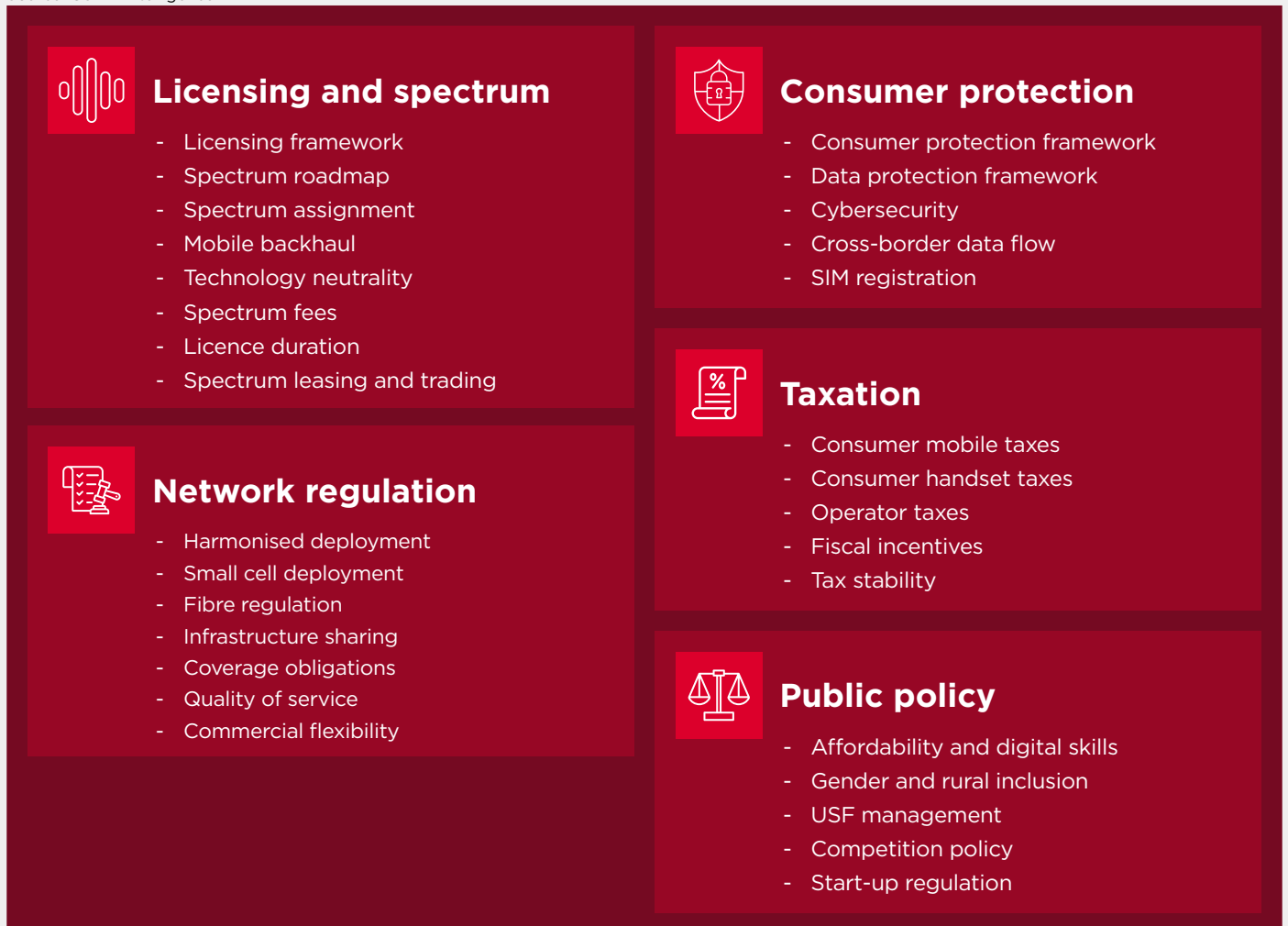


Note: There is insufficient data on the indicators in grey to include in the DNSI. However, given their importance, we include data on the DAI web platform where it is available. As more data is gathered, this will be fully incorporated into the index.

Figure 6

Digital Policy and Regulatory Index pillars and indicators

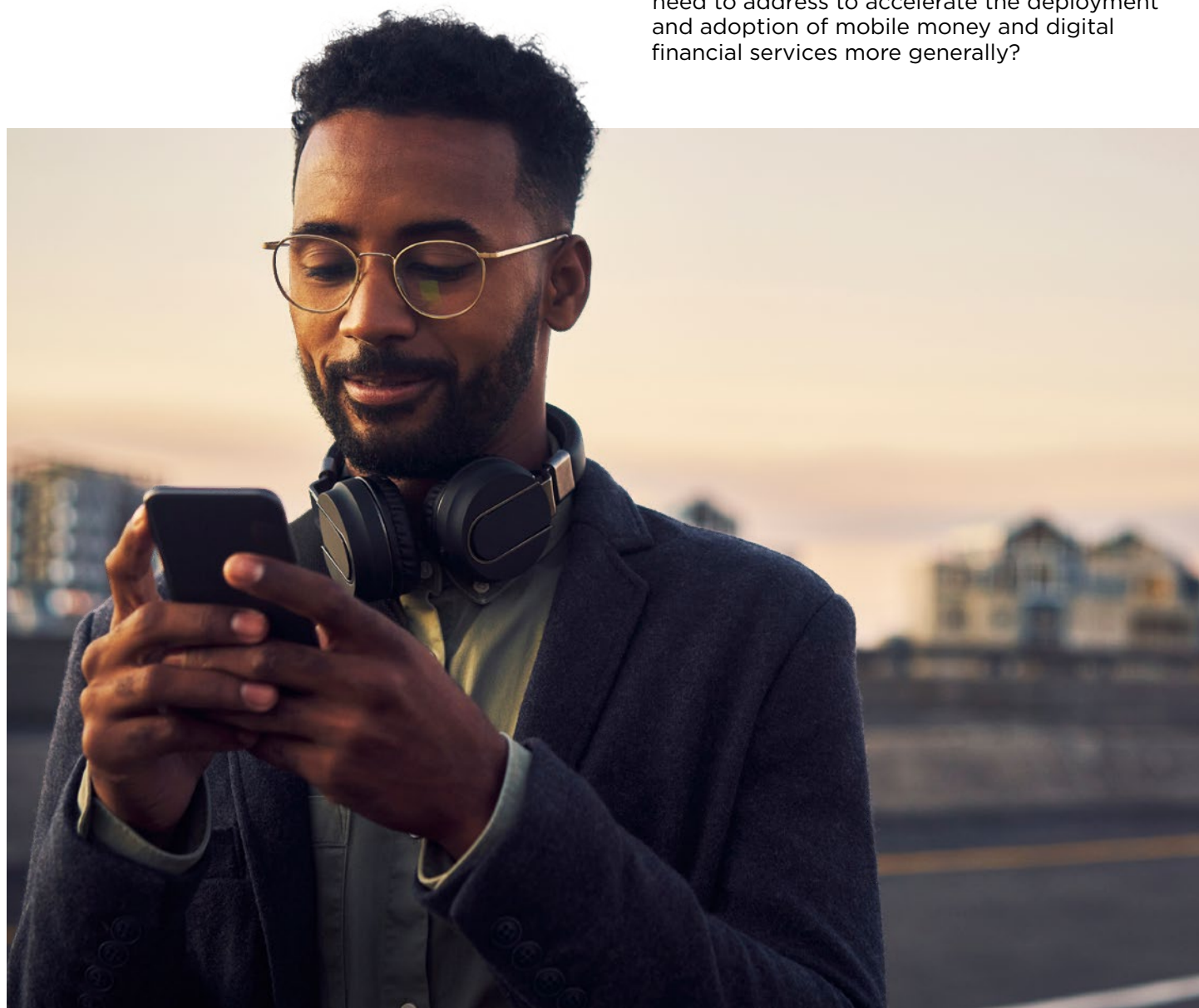
Source: GSMA Intelligence



When considering the DNSI and DPRI alongside the existing GSMA Mobile Connectivity Index¹⁶ and Mobile Money Regulatory Index,¹⁷ the four benchmarks provide a comprehensive assessment for countries in Africa to understand how advanced they are in terms of integrating digital technologies into their societies, as well as guidance on the interventions required to accelerate growth in each country.

The objectives of each index can be understood based on the key questions they aim to address:

- **Digital Nations and Society Index:** to what extent are consumers, businesses and governments in Africa effectively leveraging mobile technologies to accelerate socioeconomic development? What is the level of digital development in each country?
- **Mobile Connectivity Index:** why are people and businesses unable or unwilling to adopt mobile broadband technologies?
- **Digital Policy and Regulatory Index:** to what extent are public policies and regulations facilitating the development of a digital society? Which bottlenecks do policymakers need to address to accelerate the deployment and adoption of new mobile technologies?
- **Mobile Money Regulatory Index:** to what extent do mobile money regulations and policies enable the widespread adoption of digital financial services? Which bottlenecks do policymakers need to address to accelerate the deployment and adoption of mobile money and digital financial services more generally?



¹⁶ <https://www.mobileconnectivityindex.com/index.html>

¹⁷ <https://www.gsma.com/mobilemoneymetrics/#regulatory-index>

Index results

This report accompanies the launch of the Digital Africa Index web tool, which provides overall index scores for both indices, as well as the underlying score for each pillar and indicator and a market comparison tool.¹⁸

The web tool can be accessed in English and French, and the data is available for all 54 countries on the continent. The index will be updated annually. Full details of the methodology used to construct the index, including data treatment, normalisation, weighting and aggregation, are also provided on the web tool.¹⁹

Figures 7 and 8 present the results of the DNSI and DPRI respectively.

Figure 7
Digital Nations and Society Index scores

Source: GSMA Intelligence ■ 0-20 ■ 21-40 ■ 41-60 ■ 61-100

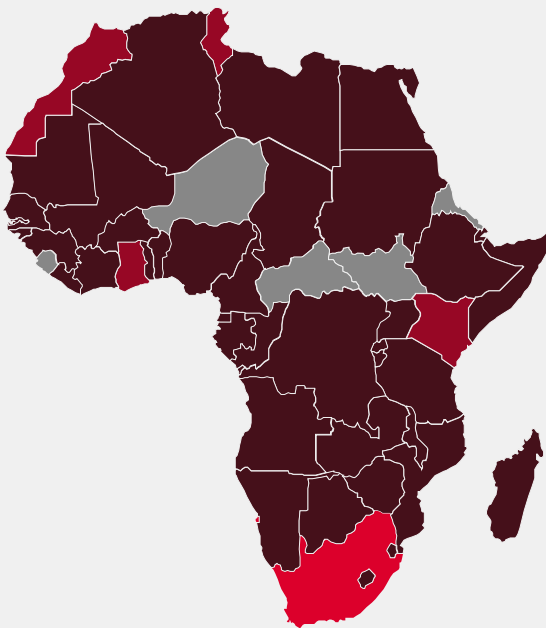
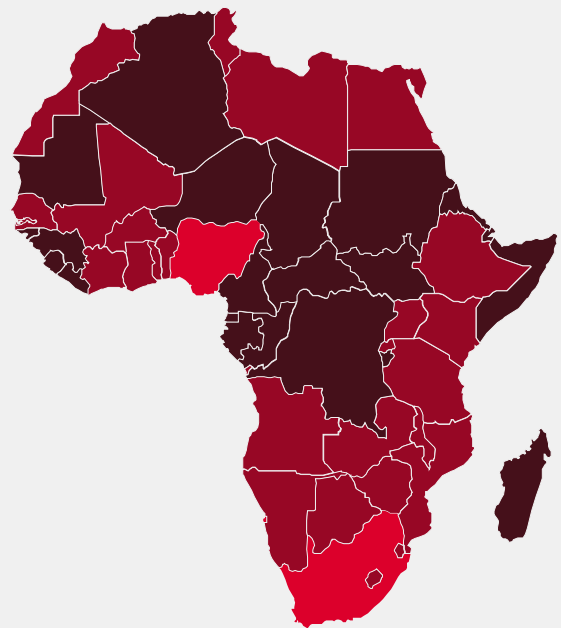


Figure 8
Digital Policy and Regulatory Index scores

Source: GSMA Intelligence ■ 0-20 ■ 21-40 ■ 41-60 ■ 61-100



¹⁸ <https://www.gsma.com/digital-africa-index>

¹⁹ It is possible that, going forward, certain data will be retroactively updated. The results presented in this report may therefore differ slightly from the data on the DAI website in the future.

03

Insights from the first DNSI and DPRI



Countries with enabling policy and regulation have achieved greater digital transformation

While the DNSI and DPRI have been constructed separately, they are related. There is an expectation that countries with an enabling policy and regulatory framework should also have higher levels of digital development. Figure 9 confirms this to be the case, demonstrating a strong, positive correlation between the two indices. Countries with lower levels of digital development have several policy levers to consider as opportunities to accelerate digital transformation.

Figure 9 highlights four clusters of countries:

- **High digital development with more enabling policy and regulation.** Only four countries have DNSI *and* DPRI scores above 50 (Kenya, Seychelles, Mauritius and South Africa), meaning they have established a relatively strong enabling policy framework that has helped drive high levels of mobile adoption and use by consumers, as well as digitalisation of businesses and government. However, they still have room for improvement on both indices. For example, Kenya has one of the lowest DPRI scores for taxation, driven by high sector-specific taxes on consumers.
- **Low digital development with more enabling policy and regulation.** Nine countries have a DNSI score below 50 and a DPRI score above 50 (Botswana, Burkina Faso, Eswatini, Malawi, Mali, Morocco, Nigeria, Rwanda and Senegal). While there are still several areas of improvement for each country on both indices, a question arises as to why these markets do not have higher levels of digital adoption and usage given they perform relatively well on the DPRI. This can be explained by a few reasons.

First, there are factors outside of regulation that can hinder the deployment and use of mobile – for example, macro-economic instability (including currency devaluation), political or civil instability (in the north east of Nigeria, for instance) or low levels of socioeconomic development. For example, Malawi's GNI per capita is a quarter of the African average, while mean years of schooling in Senegal are half the African average.²⁰

Second, there can be a lag between reforming policy and seeing changes at the market level, as it takes time for digital service providers and consumers/enterprises/government to respond. It is therefore possible these countries will see faster improvements in DNSI scores than others over the next few years.

Lastly, it is possible that some of these markets have a potential policy implementation challenge, in that they have the right policies and regulations in place, but these may not be effective on the ground. An example of this is around digital skills, which is one of the most important barriers to mobile internet adoption. Many of the 10 countries have broadband strategies that have specific policies and targets to address digital skills barriers, and some are tracking progress over time via national ICT surveys. This is reflected in their DPRI score – specifically, in the Public Policy pillar. However, such strategies or policies may not yet be effective in improving consumers' digital skills levels due to challenges in implementation. This is an example of a topic where policymakers can look to the countries with higher DNSI scores and see if they approach digital skills barriers differently and more effectively.

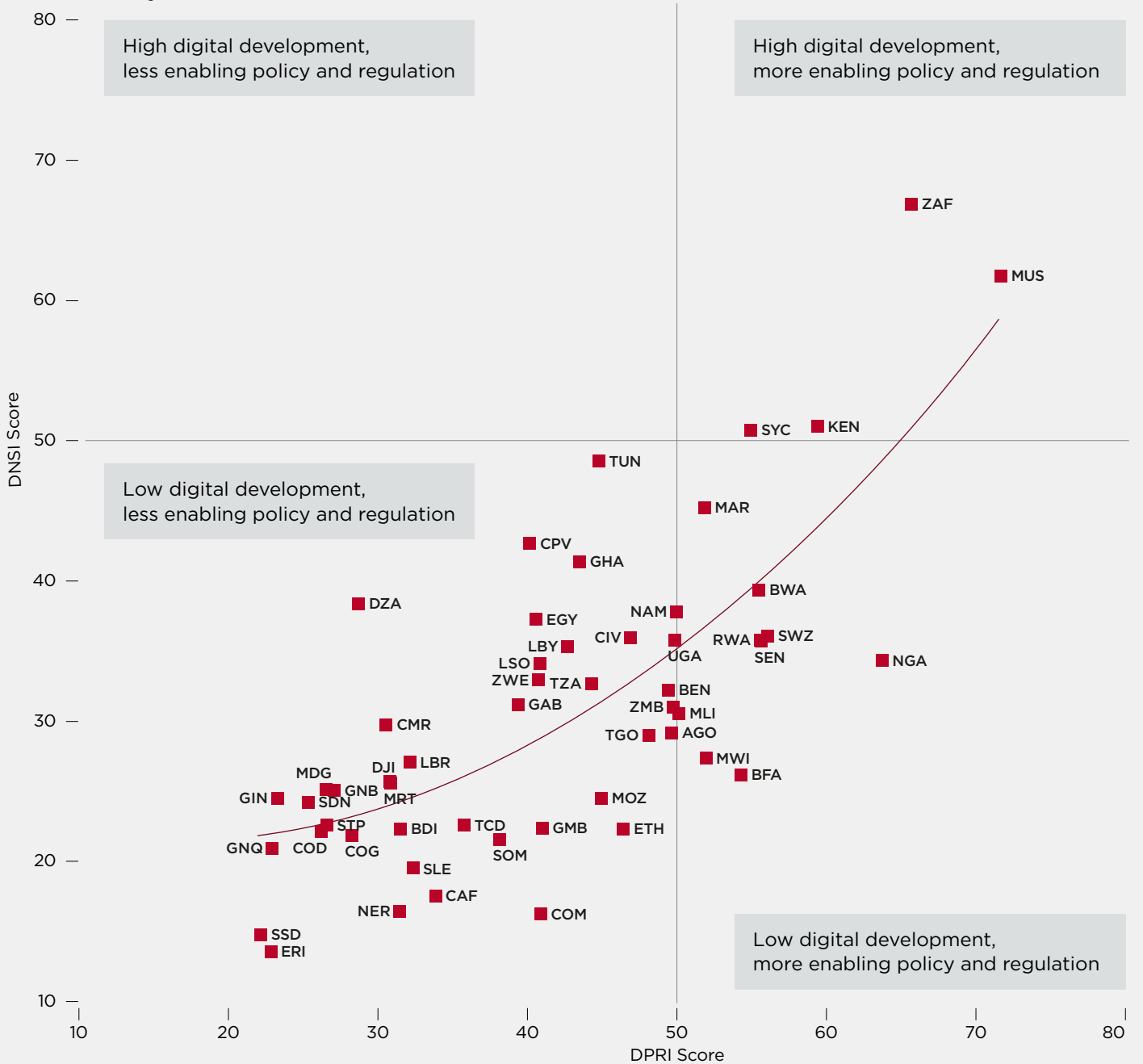
20 Source: UN Human Development Index

- **Low digital development with less enabling policy and regulation.** The vast majority of countries in Africa (41 in total) have a DNSI and DPRI score below 50. They have significant scope to accelerate digital transformation with more enabling policies and regulations.

- **High digital development with less enabling policy and regulation.** No country has a DNSI score above 50 and a DPRI score of less than 50. This could happen in the future where a country has advantages outside of policy and regulation, allowing for greater digitalisation in spite of a prohibitive framework. Such advantages could include high levels of socioeconomic development (e.g. high income and education) and a relatively stable political landscape. This applies for example to Algeria, Tunisia, Cabo Verde and Ghana, which all have higher DNSI scores than their DPRI score might suggest. All four countries score well above the African average on the UN Human Development Index.²¹

Figure 9
DNSI and DPRI scores by country

Source: GSMA Intelligence



21 See <https://hdr.undp.org/>

The majority of countries in Africa have several policy bottlenecks

Figure 10 presents the distribution of pillar scores in the DPRI. The median scores are all below 50; most countries can make substantial improvements. The average score for the public policy pillar is particularly low, primarily driven by most countries not doing the following:

- following up on their broadband strategies by measuring and tracking progress on addressing affordability and skills barriers or measuring connectivity gaps for underserved populations (particularly women and rural populations)
- having efficient, transparent and effective universal service funds
- having regulation to promote tech start-ups.

The other pillar scores are more comparable, with a median ranging from 39 to 48. However, the distribution in scores differs significantly, with Consumer Protection and Taxation having a much wider variance. There are several countries with comprehensive consumer protection frameworks, particularly in relation to data protection, cybersecurity and cross-border data transfer (e.g. Mauritius, Ghana, Benin and Kenya) but also several countries with little regulatory clarity on these areas (e.g. Burundi, Eritrea and Central African Republic). Similarly, on taxation, several countries impose significant distortive sector-specific taxes on consumers and/or operators (e.g. Tanzania, DRC and South Sudan) but some do not impose such taxes at all (e.g. Namibia, Seychelles and Senegal).

There is less variance on Licensing and Spectrum, and Network Regulation. Most countries score below 50 but few countries score very well or extremely poorly.

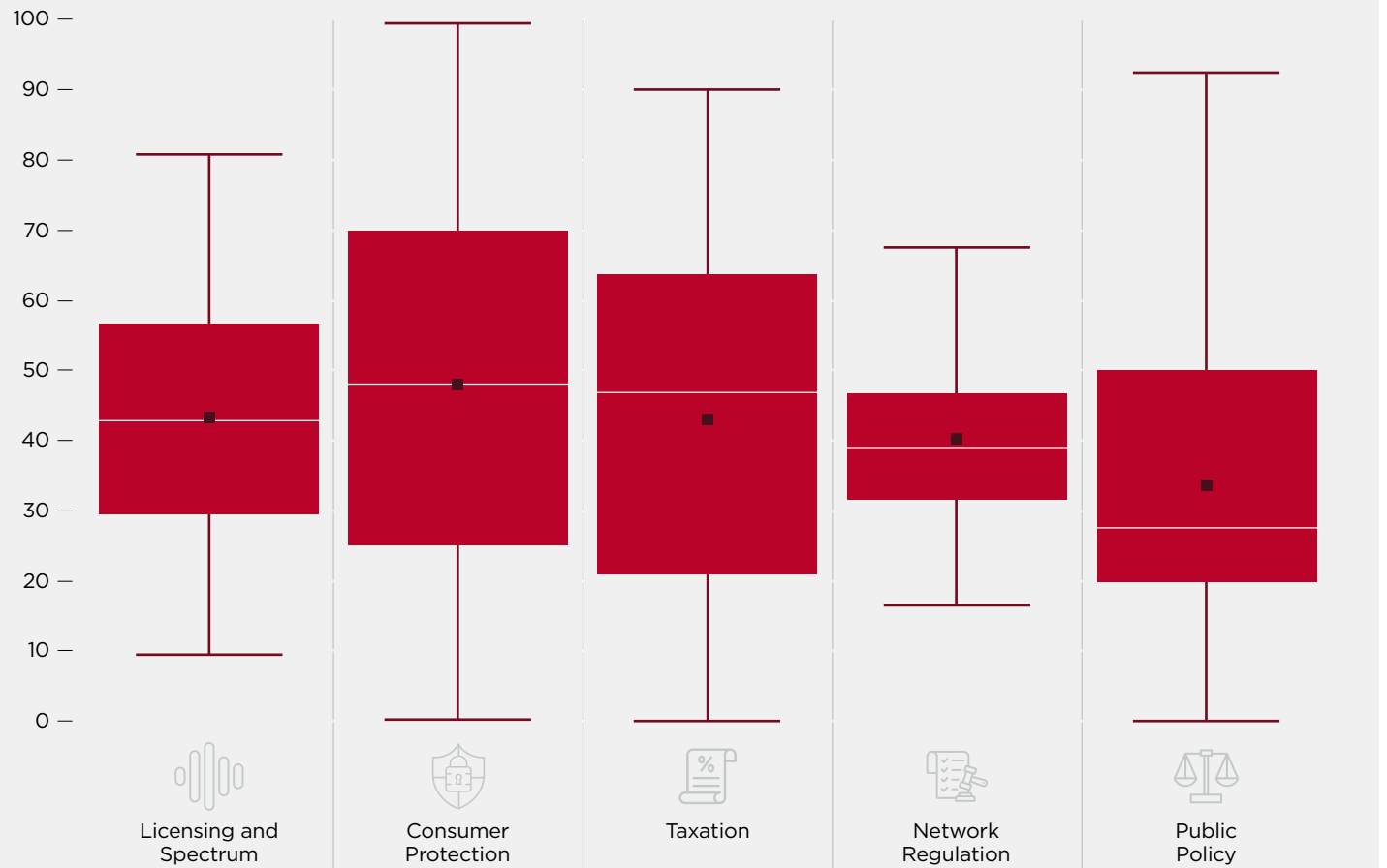
For Licensing and Spectrum, the low average score is primarily due to the majority of countries not having a published spectrum roadmap, not assigning all available IMT spectrum bands to operators and not enabling spectrum leasing and trading (with some countries also hindered by high spectrum fees and not enabling technology or service neutrality).

In terms of Network Regulation, most countries do not have harmonised deployment regulations, do not have streamlined regulations for small cell deployments, impose rights-of-way charges (which impacts operators' ability to deploy fibre backhaul) and often impose onerous QoS and coverage obligations with no policy or financial support.

Figure 10

Distribution of DPRI pillar scores

Source: GSMA Intelligence



Note: Box and whisker plots show the 1st quartile (bottom of red box), median (line in red box), mean (black square in the red box), 3rd quartile (top of black box) and the minimum and maximum values.

Digitalisation of government services is making good progress, but digitalisation of businesses lags

Figure 11 presents the distribution of pillar scores in the DNSI. The median scores are again all below 50, but with significant differences. Notably, countries tend to score much better on Digital Government, with many governments having rolled out digital ID programmes and creating an enabling environment for digital health services.²² There remains scope to improve e-government services, enable greater use of P2G/G2P payments and scale up govtech solutions to enhance service delivery and support government systems.

Average scores for Digital Business are among the lowest in the DNSI. Few countries have a thriving start-up ecosystem (outside of Nigeria, Kenya, South Africa, Egypt, Tunisia and Ghana). Most countries are seeing limited use of business IoT solutions and limited development of new ICT solutions. The latter is measured based on the number of ICT patents granted per capita; only Mauritius, Seychelles, South Africa, Tunisia and Morocco have achieved significant progress. Widespread use of digital technologies for commerce (e.g. digital merchant payments, online transactions) is also limited outside a few markets such as Kenya, South Africa, Mauritius, Zimbabwe and Namibia.

With regard to consumer adoption, most countries have made more progress than on the business side, particularly in terms of the adoption of mobile voice, SMS and (in several countries) digital financial services.²³ However, widespread adoption of 4G/5G smartphones remains limited in most markets (even though 4G coverage reached 73% in Africa at the end of 2023²⁴). Most consumers are therefore unable to realise the full benefits of the latest generation of mobile technologies. This is also reflected in most African countries having lower levels of data usage compared to other countries. Average data per connection in Africa was just over 2.5 GB at the end of 2023, compared to almost 13 GB worldwide.²⁵ Only seven countries in Africa (including Morocco, Algeria, Tunisia and Ghana) have average usage per connection above 5 GB. It is worth emphasising that such averages will not reflect typical usage by consumers as they are skewed by heavy users; the majority of users will actually consume much less data.²⁶

22 See <https://monitor.digitalhealthmonitor.org/map>

23 In the DNSI, the use of digital financial services in the Digital Consumer pillar refers to the use of a mobile for any financial service, including mobile money, P2P transfers and payments banking. This is broader in scope than the mobile commerce indicator in the Digital Business pillar, which only refers to the use of mobile for merchant payments or buying goods or services.

24 See The State of Mobile Internet Connectivity Report 2024, GSMA, 2024.

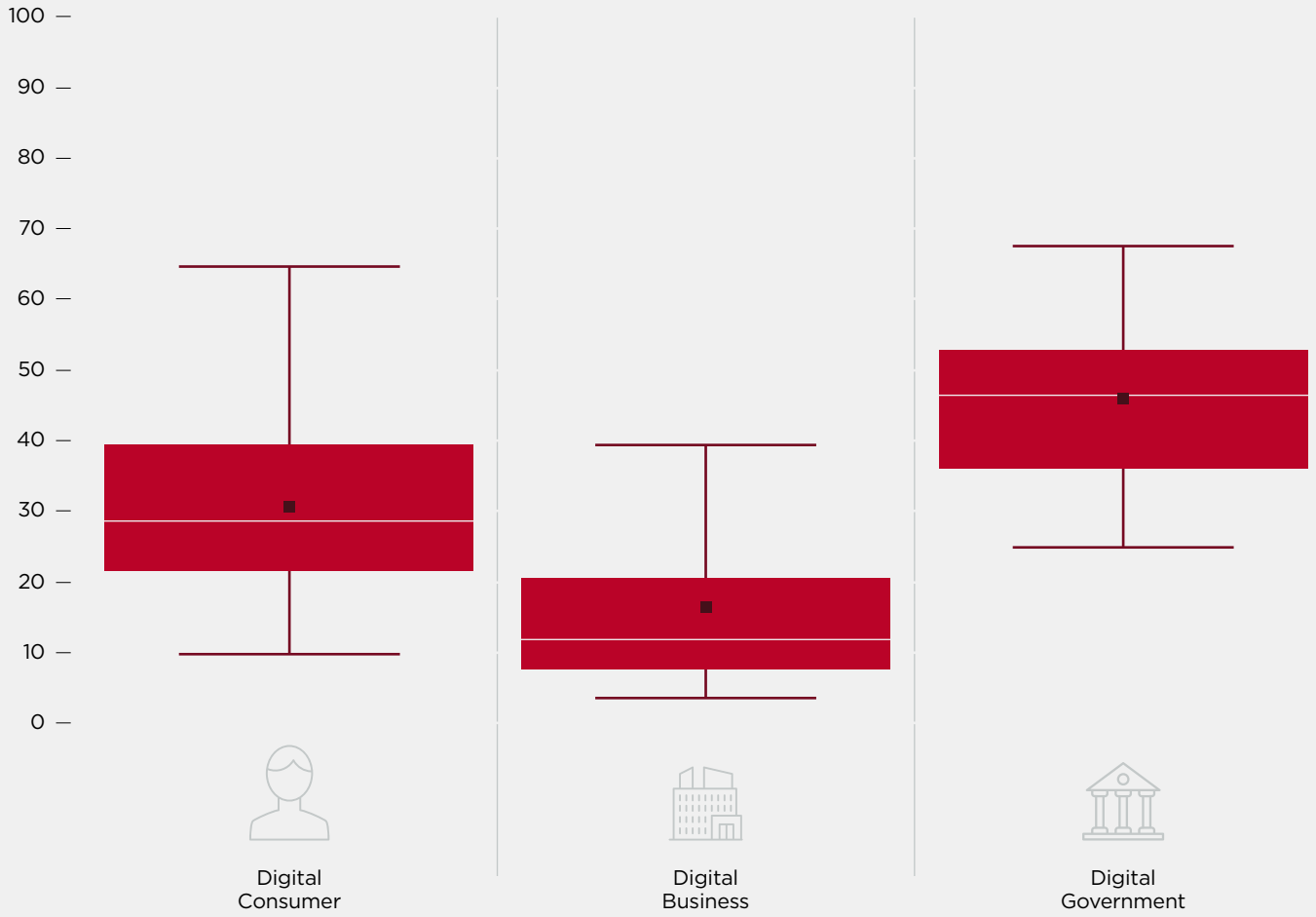
25 Source: GSMA Intelligence

26 For further discussion and data on this, see The State of Mobile Internet Connectivity Reports 2022 and 2023.

Figure 11

Distribution of DNSI pillar scores

Source: GSMA Intelligence



Note: Box and whisker plots show the 1st quartile, median, mean, 3rd quartile and minimum and maximum values.

Turning insights into action

The above insights only scratch the surface with respect to the amount of data and information available in the DNSI and DPRI. The GSMA will publish further studies based on the two indices and the existing MCI and MMRI. It will also work with governments, regulators, operators and other stakeholders to turn the results of the DNSI and DPRI into actionable and effective measures. The ultimate objective is to accelerate digital transformation in every country.

The results from the index highlight a number of high-priority policy challenges to address in the region:

- Assigning all available spectrum bands on a technology-neutral basis and at affordable prices. This will drive greater coverage and higher network quality for mobile users, as well as enhanced provision of networking and digital solutions for businesses to support increased efficiency and productivity.
- Removing sector-specific taxes on mobile services and handsets. This will increase network investment and make new technologies more affordable and accessible for consumers.
- Reducing regulatory uncertainty. This will support risk allocation for private capital investments and incentivise continued investment in the technologies for the future. This can be done by harmonising network deployment regulations, promoting regulatory parity between digital service providers, and ensuring quality-of-service policies and coverage obligations are fit for purpose and achieve the right balance between empowering consumers and promoting digitalisation.
- Reform universal service funds to ensure more efficient, transparent, effective and sustainable delivery of inclusive connectivity in remote and underserved locations. This will spur greater adoption of digital services for these initial investments to in turn attract relevant local digital content, critical to driving our digital economies.

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