Africa's digital divide is closing, but participation in the digital(ised) economy remains highly uneven

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Summary

The digital economy in the Global South is a paradox. On the one hand, it holds the promise of addressing socioeconomic inequalities by allowing citizens to engage in innovative economic activities and join the global digitalised economy. On the other hand, it has the potential to widen socioeconomic gaps by relegating Global South citizens to passive consumers who do not reap the economic benefits of the Internet, widening the gap between haves and have-nots.

Since the 1990s, the rapid expansion of the Internet has been closely linked to economic growth in many countries around the world, paving the way for digital economies (Ndoya & Asonga, 2024). Especially in the Global South, the digital economy is experiencing faster growth than the rest of the economy and thus plays a significant role in creating employment opportunities (Bukht & Heeks, 2018; OECD, 2024). In Mauritius and South Africa, digital-economy leaders on the African continent, the information and communication technologies (ICT) sector makes up a sizeable portion of the countries' gross domestic products (GSMA, 2024; Mubika, 2025). But while the digital economy offers higher-than-average wages and new markets for start-ups, it also comes with an important downside: Those who are on the wrong side of the digital divide often do not have the necessary devices, reliable access to electricity and the Internet, or the skills necessary to use the Internet advantageously in the digital labour market (Ndoya & Asonga, 2024; Ragnedda & Gladkova, 2020).

Today, a combination of these barriers to entry excludes a majority of Africans not only from participating in the digital economy (e.g. provision of digital services such as website design), but also from the broader use of digital technology (e.g. collaboration via online platforms such as Zoom).

Afrobarometer Round 9 surveys conducted between late 2021 and mid-2023 in 39 countries show a substantial digital divide in Africa. While progress is being made to address this divide in some areas (e.g. investment in digital literacy programmes and the expansion of mobile network infrastructure), other structural factors, such as the limited supply of electricity, remain a drag on people's ability to participate in the digital economy (Msafiri & Adjadeh, 2024).

The data show that smartphones continue to be Africans' primary means of accessing the Internet, as access to personal computers is still limited across the continent. Four in 10 citizens report never using the Internet, with much higher rates of non-use among less educated and poorer citizens.

The digital economy readiness (DER) index developed in this paper quantifies which citizens have access to the necessary infrastructure and devices as well as whether they frequently use the Internet. Analysis of the DER index suggests a digital divide both across and within countries that replicates existing fault lines in access to infrastructure and resources.

If African governments don't provide the basic necessities for citizens to participate digitally in their economy, they will continue to hamper their people's economic opportunities and, more broadly, perpetuate the digital divide between the Global North and South.

Afrobarometer surveys

Afrobarometer is a pan-African, non-partisan survey research network that provides reliable data on African experiences and evaluations of democracy, governance, and quality of life. Nine survey rounds in up to 42 countries have been completed since 1999. Round 10 surveys are expected to be completed in mid-2025. Afrobarometer's national partners conduct face-to-face interviews in the language of the respondent's choice. Nationally representative sample of 1,200-2,400 adult citizens yield country-level results with margin of error of +/-3 to +/-2 percentage points at a 95% confidence level.

This 39-country analysis is based on 53,444 interviews. (See Appendix Table A.1 for a list of countries and fieldwork dates.) The data are weighted to ensure nationally representative samples. When reporting multi-country averages, all countries are weighted equally (rather than in proportion to population size).

Key findings

- **Accessing the digital economy**
    - On average across 39 countries, only 18% of respondents personally own a computer, and a further 15% have access to a computer in their household. Fewer than half (47%) personally own a smartphone.
    - Men, urban residents, youth, the wealthy, and well-educated people are more likely to own a computer than their peers.
    - Only 31% of respondents use the Internet on a daily basis.
- **Powering the digital economy**
    - Only 22% of households have electricity from the national grid that works "all of the time." Access to reliable electricity shows little progress over the past decade.
- **Digital participation in the economy**
    - On average across 39 countries, 42% of citizens have the necessary access to devices, electricity, and the Internet to participate effectively in the digital economy.
    - Moderate or full digital-economy readiness varies from more than three-fourths in Mauritius, Seychelles, Gabon, and Morocco to about one in 10 in Malawi and Madagascar.

Accessing the digital economy

Internet access has become what access to electricity has been for a long time – a necessity for modern living. And yet, access to both remains unequal across the continent, impacting individuals' participation in the economy. While there are ways to access digital platforms, write emails, and work efficiently without a personal computer or laptop, owning such a device clearly enhances one's ability to connect and collaborate with others (Xia, Baghaie, & Sajadic, 2023).

The extent to which citizens rely on electronic devices, electricity, and Internet connections varies widely depending on their occupation, but these can be game-changing tools no matter the sector, from commercial farmers moving toward precision agriculture[1] and traders expanding beyond local markets to companies providing website design or online education.

When considering ongoing changes across different sectors, it is useful to distinguish between three articulations of the digital economy (Figure 1). In its narrowest version, it refers to the *digital sector*, encompassing telecommunications and software companies as well as IT consulting businesses. More broadly defined, the *digital economy* also includes a wide range of ICTs, digital platforms (e.g. YouTube), goods, and services. Compared to advanced economies, the digital economy is relatively small in African countries. The concept of a digital economy sits within a *digitalised economy*, which refers to the process of how ICTs have permeated all economic fields (Bukht & Heeks, 2018). This also includes the extent to which companies and governments use online collaboration tools (e.g. Zoom), cloud storage, etc. in their day-to-day work.

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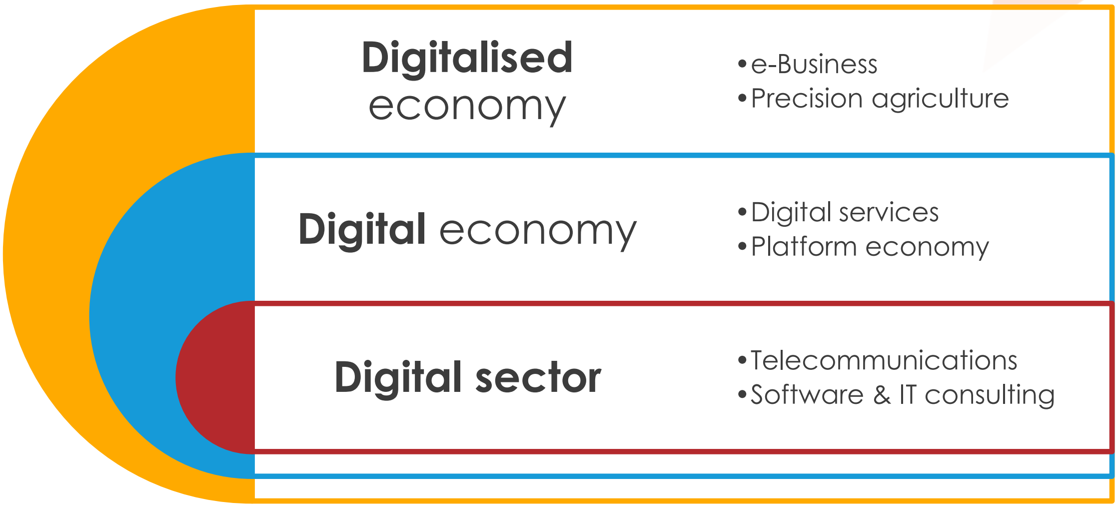
[1] Precision farming is a farming management strategy that uses technology to collect and analyse data to improve crop yields and reduce environmental impact.

The data presented here provide important information on the extent to which Africans are ready to participate in the digital and digitalised economy,[2] Meaning they have the necessary devices (i.e. laptop), skills (i.e. use the Internet regularly), and reliable electricity supply to be digitally productive.[3]

Figure 1: Conceptualising the digital economy



Source: Adapted from Heeks (2017)

Unfortunately, access to personal computers remains very limited in Africa, revealing a substantial digital divide. Across the 39 countries sampled by Afrobarometer in 2021/2023, fully two-thirds (67%) of citizens have no access to a computer at the household level.[4] Only 18% of respondents personally own a computer, and a further 15% have access through someone else in the household (Figure 2).

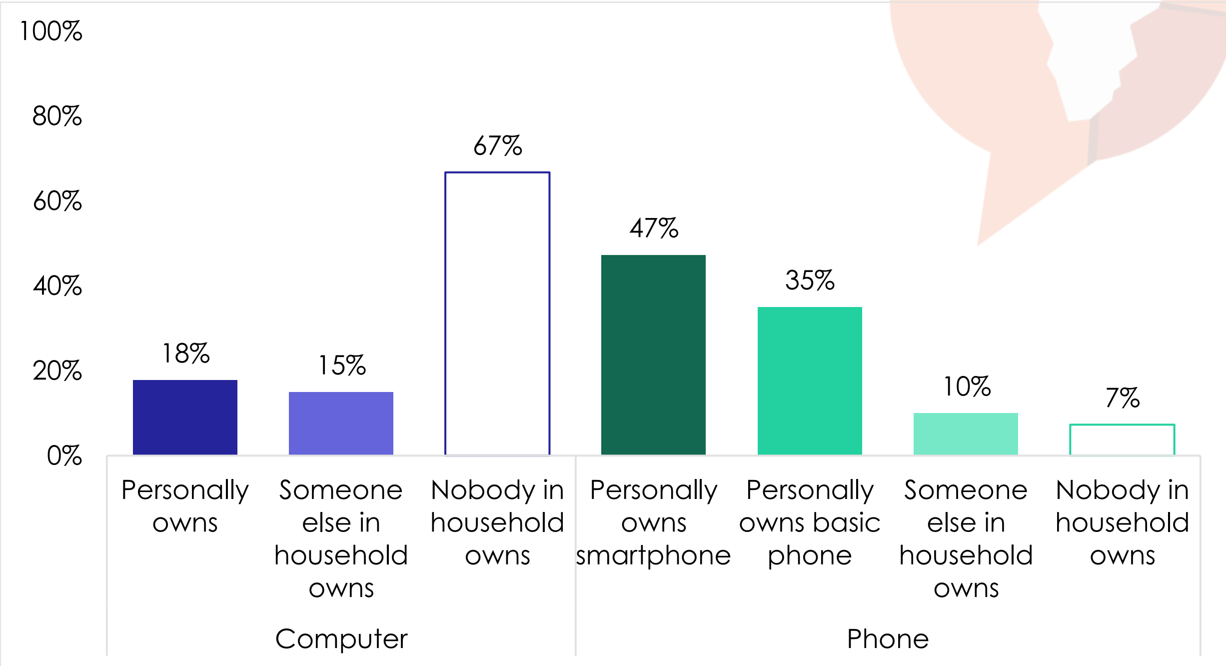
Phones are more widely accessible, as 82% of respondents say they personally own a mobile phone. However, fewer than half (47%) of citizens report owning a smartphone, while the rest (35%) have a basic phone. Basic phones are cheaper and fulfil elementary communication needs. But they do not have online connectivity, and thus their owners have less access to information or important online services such as email, online collaboration tools, and productivity apps. In short, they miss out on economic opportunities, and it is difficult for them to participate meaningfully in the digitalised and digital economy.

[2] For stylistic purposes, this will be referred to as the *digital(ised) economy*.

[3] For the majority of this analysis, the focus is on laptops or desktops rather than smartphones as necessary devices for the digital(ised) economy. Although the latter become increasingly capable, laptops/desktops are still much better suited for executing complex tasks, such as data analysis in a spreadsheet, and for multitasking or collaborating virtually on a document during an online meeting.

[4] Although citizens might be able to access computers at an Internet café, at a local library, at a community centre, or via friends and family, this analysis focuses on household-level access. This is because in most cases, effective participation in the digital economy requires frequent and reliable access to at least a smartphone and usually to a desktop or laptop computer.

Figure 2: Own computer and smartphone | 39 countries | 2021/2023



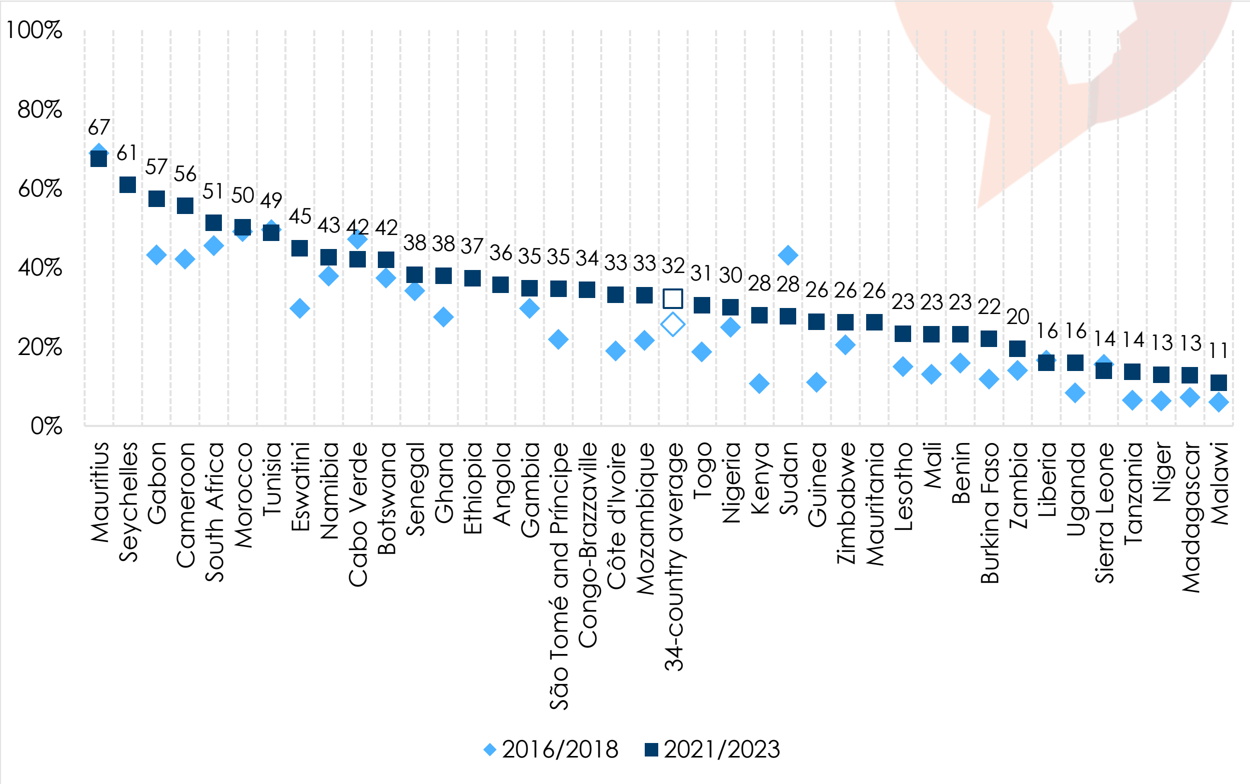
***Respondents were asked**: Which of these things do you personally own: Computer? Mobile phone? [If no:] Does anyone else in your household own one? [If yes to personally owning a mobile phone:] Does your phone have access to the Internet?*

Although computers remain beyond the reach of the majority of citizens in the surveyed countries, there is substantial cross-country variation (Figure 3). In seven out of 39 countries, at least 50% of citizens have access to a computer in their household: Mauritius, Seychelles, Gabon, Cameroon, South Africa, Morocco, and Tunisia. But in seven countries, fewer than 20% of households own such a device: Malawi, Madagascar, Niger, Tanzania, Sierra Leone, Uganda, and Liberia.[5]

Nevertheless, on average across 34 countries surveyed in both 2016/2018 and 2021/2023, household-level ownership of computers increased by 6 percentage points over the period, from 26% to 32%. Huge gains were recorded in Kenya (+17 percentage points), Guinea (+15) and Togo (+12). Other countries have experienced virtually no change (e.g. Morocco, Tunisia, Liberia, and Sierra Leone). The substantial country-level variation in computer ownership, as well as the different rates of change in device ownership, suggest that the digital divide is proceeding unevenly and is likely to continue for the foreseeable future.

[5] This state of affairs is corroborated by other data. For example, Malawi's Ministry of Information and Digitalization (2025) reports that Malawi's Internet penetration stands at 28%, but only 15% actively use mobile Internet, leaving the vast majority of the population offline.

Figure 3: Computer ownership | personally/someone in the household | 39 countries* | 2016-2023



***Respondents were asked**: Which of these things do you personally own: Computer? [If no:] Does anyone else in your household own one? (% who say they personally own a computer or someone else in the household owns one; data labels show % for the most recent survey round (2021/2023).)*

**** Note**: Seychelles, Ethiopia, Angola, Congo-Brazzaville, and Mauritania were not surveyed in 2016/2018 and are excluded from the 34-country average.*

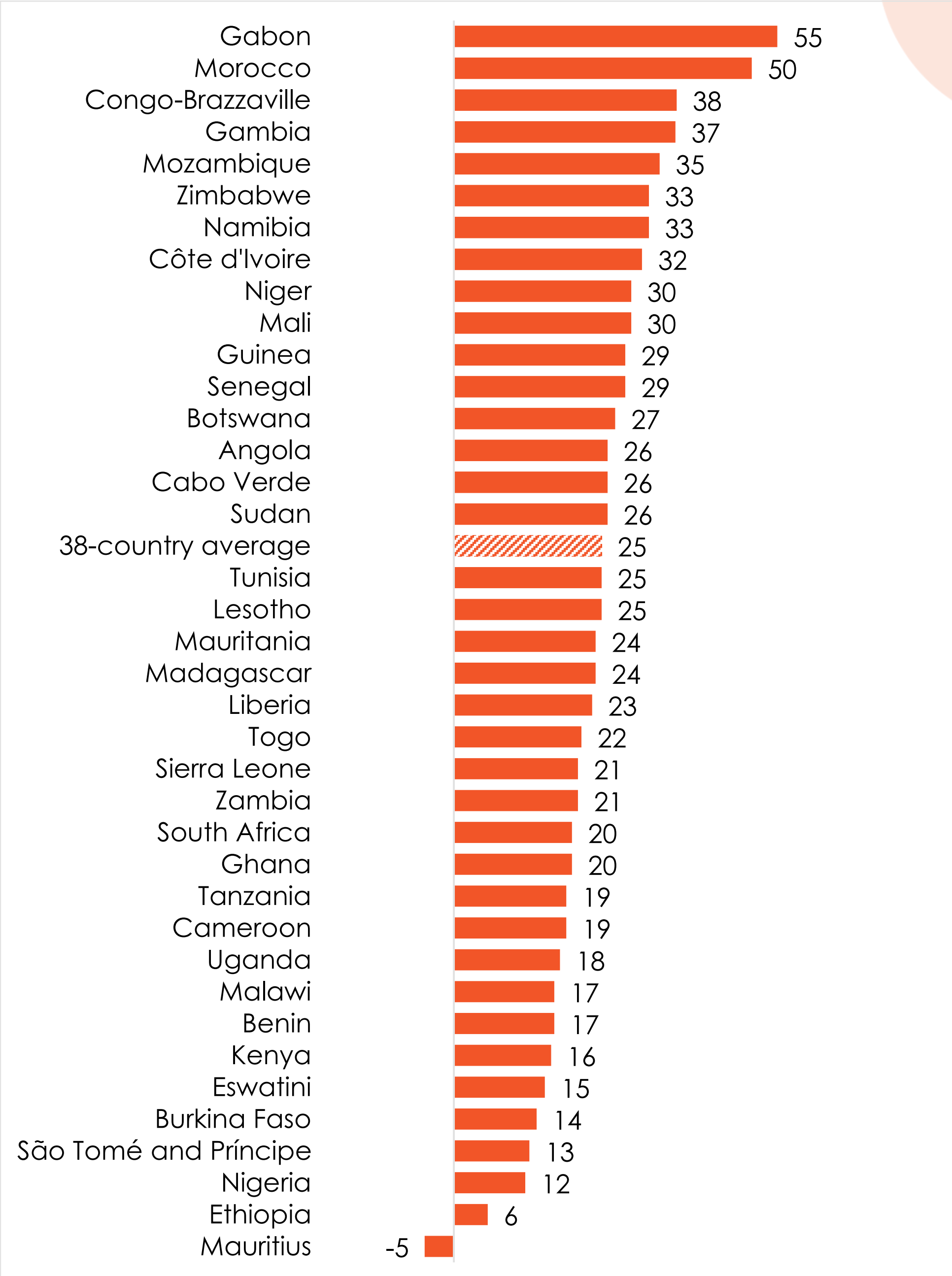
Anyone who wants to increase digital processes, products, and services in African economies, whether through government interventions or non-governmental programmes, also needs to account for several structural challenges.

One is the long-standing "urban bias" in economic development that continues to disadvantage rural areas (Dahlman, Mealy, & Wermelinger, 2016). On average across 38 countries, city dwellers are more than twice as likely to have access to a computer in the household than rural residents (45% vs. 20%). With the exception of Mauritius, all surveyed countries have higher rates of computer ownership in urban compared to rural areas (Figure 4).

Gabon and Morocco not only have high levels of overall computer ownership, but also the largest urban bias – 65% and 68% in urban areas vs. 10% and 18% in rural areas, respectively. In contrast, Nigeria and Ethiopia have the smallest urban-rural divide (12 and 6 percentage points, respectively).

In Mauritius, the second-smallest country in the sample, the high rate of computer ownership in rural areas could be explained at least in part by their proximity to urban areas. Seychelles, the smallest country in the sample, is excluded from this analysis because no urban-rural distinction was made in the survey.

Figure 4: Computer ownership | urban-rural difference in percentage points | 38 countries* | 2021/2023



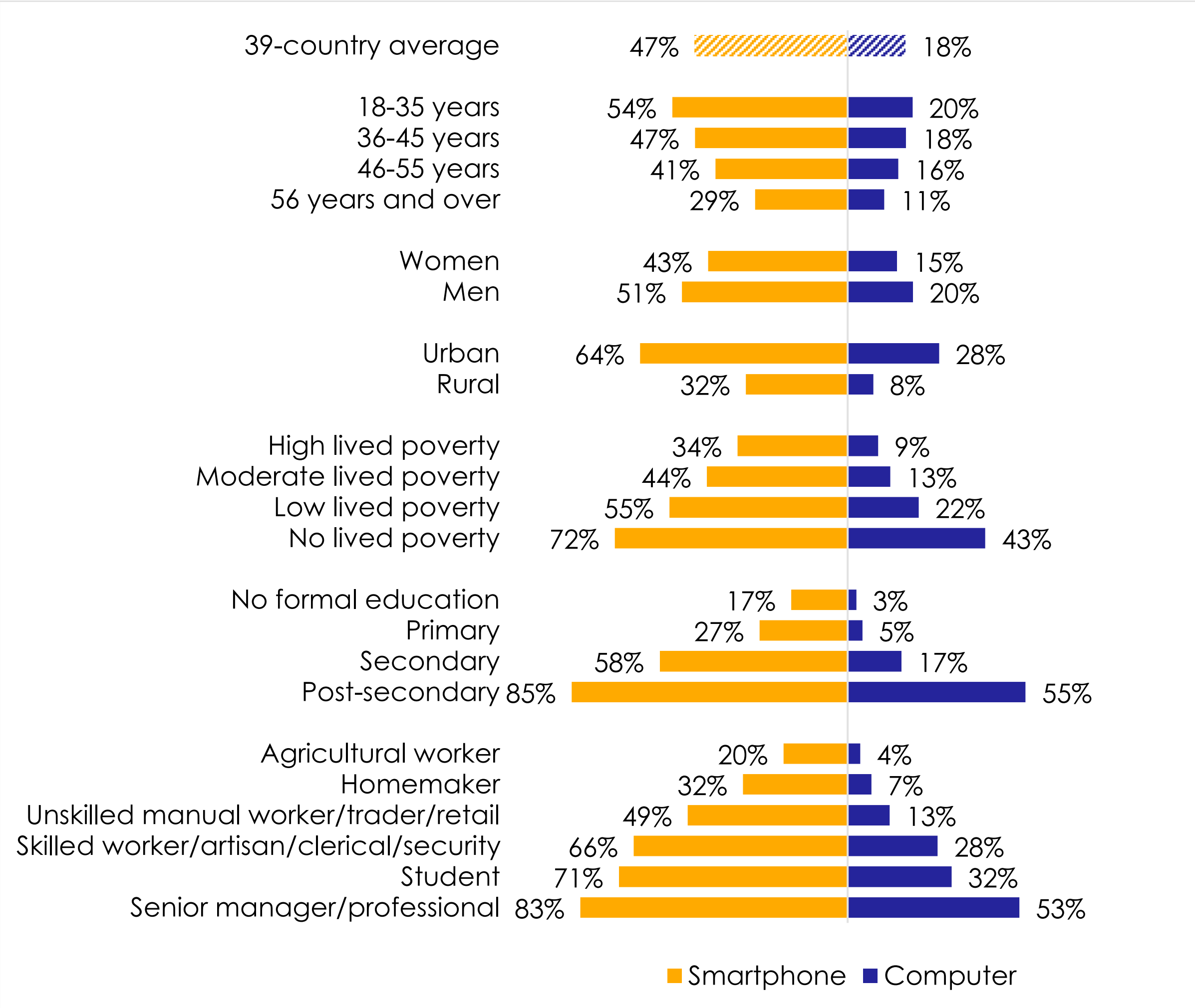
***Respondents were asked**: Which of these things do you personally own: Computer? [If no:] Does anyone else in your household own one? (Figure shows the difference, in percentage points, between urban and rural respondents who say they personally own a computer or someone else in the household owns one. Positive numbers indicate that more urban than rural households have a computer.)*

** Seychelles is excluded because the entire survey sample was considered urban.*

Computer ownership varies not only by geography, but also along several other dimensions. Perhaps unsurprisingly, the patterns largely mirror those of smartphone ownership in Africa.

Students and those working in middle- and upper-level managerial positions are more likely to own computers than unskilled manual workers and homemakers (Figure 5). Agriculture ranks as the lowest sector in terms of ownership of both smartphones and computers. This might, at least in part, be due to the fact that most people in the agriculture sector are subsistence farmers (Savage, 2019), who would be less likely than commercial farmers to have the incentives and/or the means to integrate digital technology in their work. For example, digital technology such as the 4Harvest (2024) app, which allows farmers to monitor active fields and track and coordinate crop movements with other farmers in real time, is less useful for farmers who do not have large enough fields or significant excess produce that could be sold commercially.

Figure 5: Personally own smartphone and computer | by demographic group | 39 countries | 2021/2023



***Respondents were asked**: Which of these things do you personally own: Computer? Mobile phone? [If yes to personally owning a mobile phone:] Does your phone have access to the Internet? (% who say they personally own smartphones and computers)*

Figure 5 also shows that younger (20% of 18- to 35-year-olds), more educated (55% of those with post-secondary qualifications), and wealthier respondents (43% of those experiencing no lived poverty) are more likely to personally own a computer than their peers.[6] Several of these factors often overlap. For example, more educated respondents are also more likely to earn more and to work in roles requiring them to use technology or to work in companies

[6] Afrobarometer's Lived Poverty Index (LPI) measures respondents' levels of material deprivation by asking how often they or their families went without basic necessities (enough food, enough water, medical care, enough cooking fuel, and a cash income) during the preceding year. For more on lived poverty, see Mattes and Lekalake (2025).

that provide such devices (Ingram, 2021). The gender gap, though real and in men's favour, is less salient than the other demographic differences, especially for computer ownership.

Further analysis of the data reveals that among those who own a smartphone, one-third (33%) personally own a computer, and a further 18% have access to a computer in their household (Table 1). Among respondents who do not own a phone, 85% do not own or have access to a computer in their household. Put differently, smartphones may often serve as a first step toward digital inclusion, providing access to information and services for individuals who may not have access to computers. But while smartphones can be valuable tools (e.g. provide crucial information about changing rainfall patterns), computers are better suited for most of the more complex tasks, such as data analysis, document creation, remote collaboration, etc.

Table 1: Computer ownership | by smartphone ownership | 39 countries | 2021/2023

	Computer ownership		
	No one in household	**Someone else in household**	**Personally own**
No phone	85%	11%	3%
Basic phone	82%	13%	5%
Smartphone	49%	18%	33%

Internet usage

As mentioned earlier, on average, only about one in five citizens across the 39 countries personally own a laptop or desktop computer. However, owning such a device meets only one of the basic requirements to effectively participate in the *digitalised* economy. Even if everyone owned a computer and a smartphone, this would not automatically remove related barriers, such as access to the Internet and digital literacy.

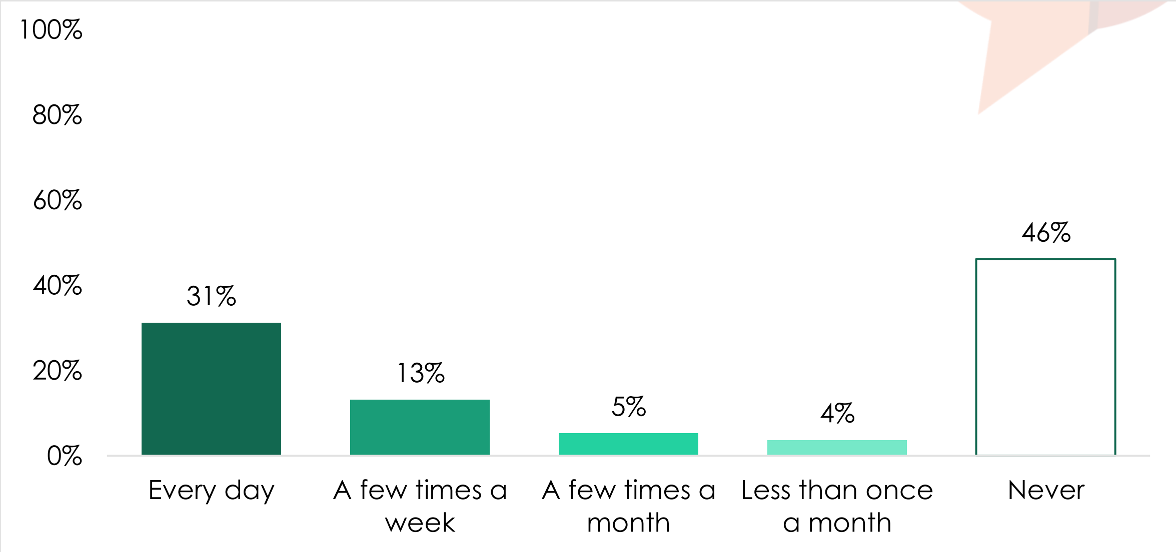
Although Afrobarometer data do not allow us to comprehensively measure digital literacy – the ability to use technology critically, confidently, and creatively – we can employ self-reported Internet usage as a proxy. There are good reasons to believe that those who use the Internet on a daily basis are not only able to increase their digital literacy through self-study (e.g. reading online blogs and watching videos to learn new skills) but are also more likely to be familiar with a wider range of digital processes and opportunities to participate in the digital economy.

Unfortunately, limited Internet usage is still the reality for most Africans. Almost half (46%) of adults report never using the Internet, while fewer than one-third (31%) use the Internet daily (Figure 6). A smaller percentage (13%) of individuals use the Internet a few times a week. In short, more than half of adults use the Internet infrequently or not at all.

As is the case with computer ownership, the proportion of individuals who use the Internet a few times a week or every day increased between 2016/2018 and 2021/2023 (Figure 7). On average across 34 countries, frequent Internet usage rose from 32% to 45%. We take this as an indication that more people access information online, and probably more use and maybe even offer digital services. The declining cost of Internet access and the proliferation of mobile devices are probably two of the biggest drivers behind the growth in Internet usage.

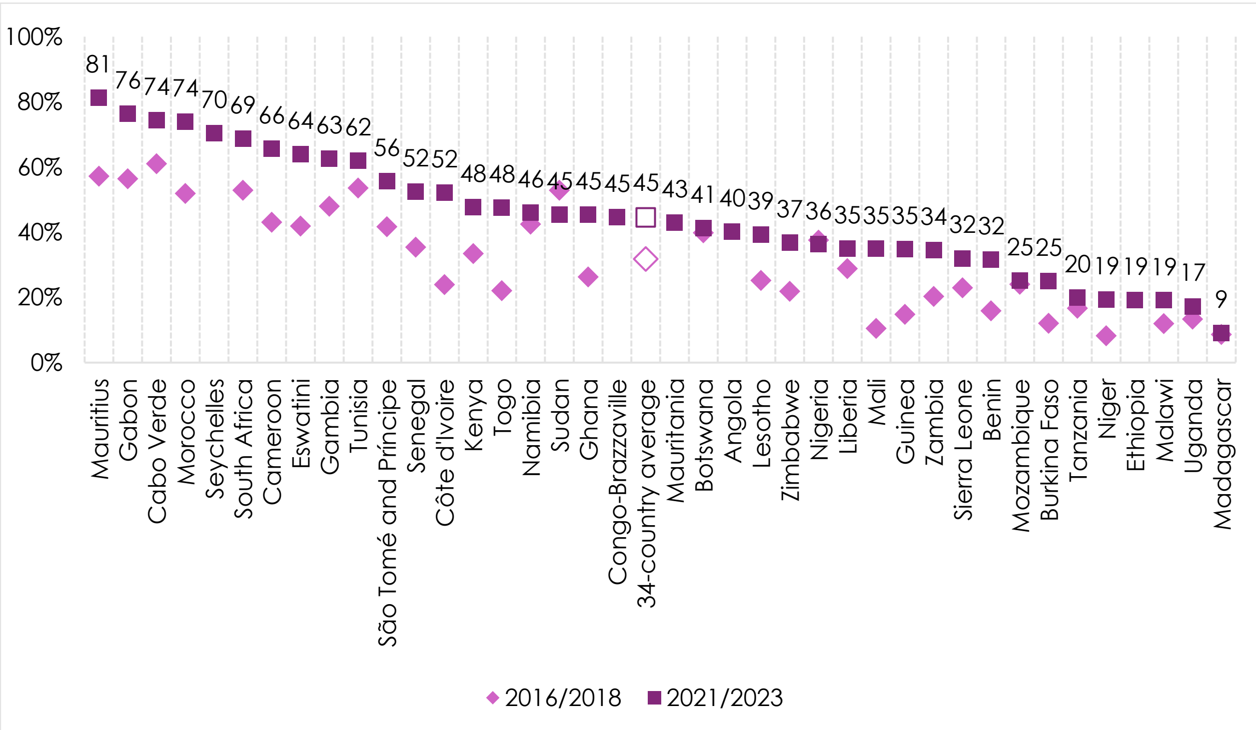
In Round 7 (2016/2018), Internet usage was already comparatively high in Mauritius (57%), Gabon (56%), and Cabo Verde (61%), and it increased further to 81%, 76%, and 74%, respectively, in Round 9 (2021/2023). At the other end of the spectrum, even in Round 9, only one in 10 Malagasy use the Internet daily or a few times a week. Similarly, in Tanzania, Niger, Ethiopia, Malawi, and Uganda, not more than 20% of adults regularly use the Internet.

Figure 6: Internet usage | 39 countries | 2021/2023



***Respondents were asked**: How often do you use the Internet?*

Figure 7: Use the Internet a few times a week or every day | 39 countries | 2016-2023



***Respondents were asked**: How often do you use the Internet? (% who say "every day" or "a few times a week"; data labels show % for the most recent survey round (2021/2023).)*

**** Note**: Seychelles, Ethiopia, Angola, Congo-Brazzaville, and Mauritania were not surveyed in 2016/2018 and are excluded from the 34-country average.*

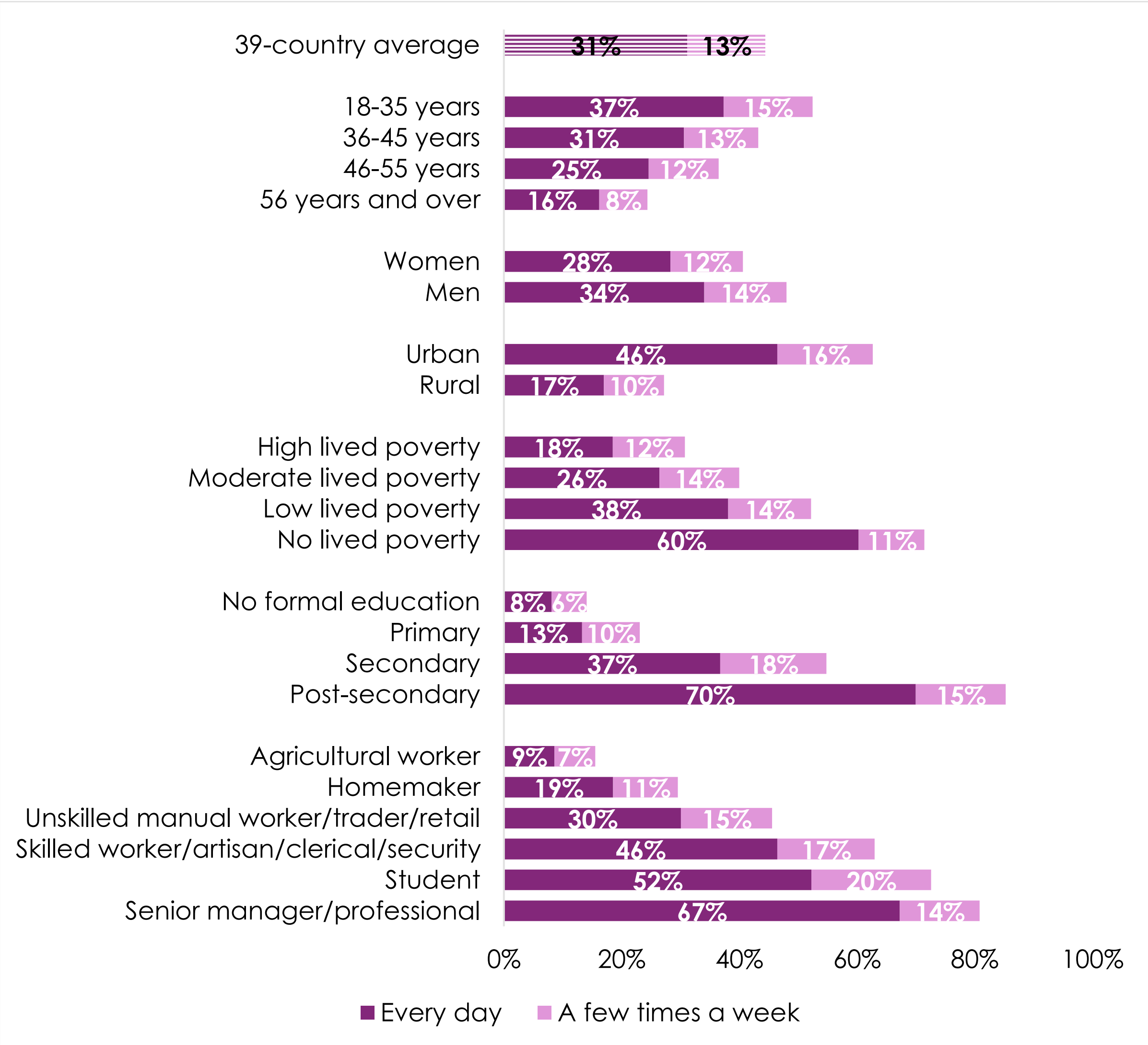
In addition to country-level differences, what can demographic characteristics tell us about who is most likely to use the Internet?

As one might expect, those who suffer little or no material deprivation have higher rates of Internet usage than their counterparts who experience moderate or high levels of lived poverty (Figure 8).

But citizens with post-secondary education report the highest frequent Internet use (85%), while those with no formal schooling report the lowest usage across key demographic groups (14%). Relatedly, eight in 10 senior- and upper-level professionals (81%) frequently use the Internet, compared to 16% of agricultural workers, 30% of homemakers, and 46% of unskilled manual workers and traders.

Interestingly, when compared to occupation and level of education, the differences in regular Internet usage are smaller across age groups (28 percentage points) and genders (7 percentage points).

Figure 8: Use the Internet a few times a week or every day | by demographic group | 39 countries | 2021/2023



***Respondents were asked**: How often do you use the Internet? (% who say "every day" or "a few times a week")*

Powering the digital economy

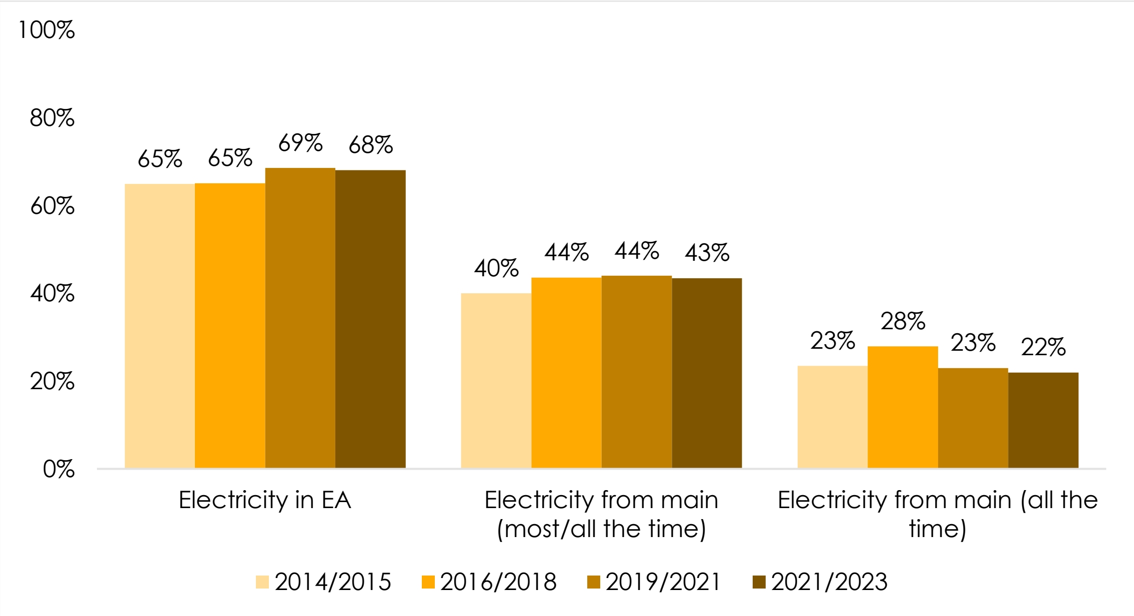
A third factor influencing digital participation in the economy is the availability and reliability of electricity infrastructure. As the World Bank (2020) notes, expanding access to electricity is critical for digital transformation, especially in sub-Saharan Africa, where electricity access remains at one of the lowest levels in the world. Similarly, the International Energy Agency (2021) highlights that achieving universal electricity access is fundamental to meeting broader development goals.

On average across 33 countries surveyed consistently between Round 6 (2014/2015) and Round 9 (2021/20230, Afrobarometer survey teams found that around two-thirds of people (68% in the most recent survey) lived in enumeration areas (EAs) with electric grids "that most houses could access" (Figure 9).

However, when we look at household-level access to electricity from the main grid, the numbers dwindle. Only about four in 10 individuals enjoyed electricity from the main grid that was actually available "most of the time" or "all of the time," and just two in 10 had electricity supply "all of the time" from the main grid.

There has been little significant change in electricity infrastructure across all three categories over the past decade (2014-2023). These findings suggest that a significant portion of the population still lives in energy poverty, lacking consistent access to reliable electricity from the national grid.

Figure 9: Electricity infrastructure | 33 countries | 2014-2023



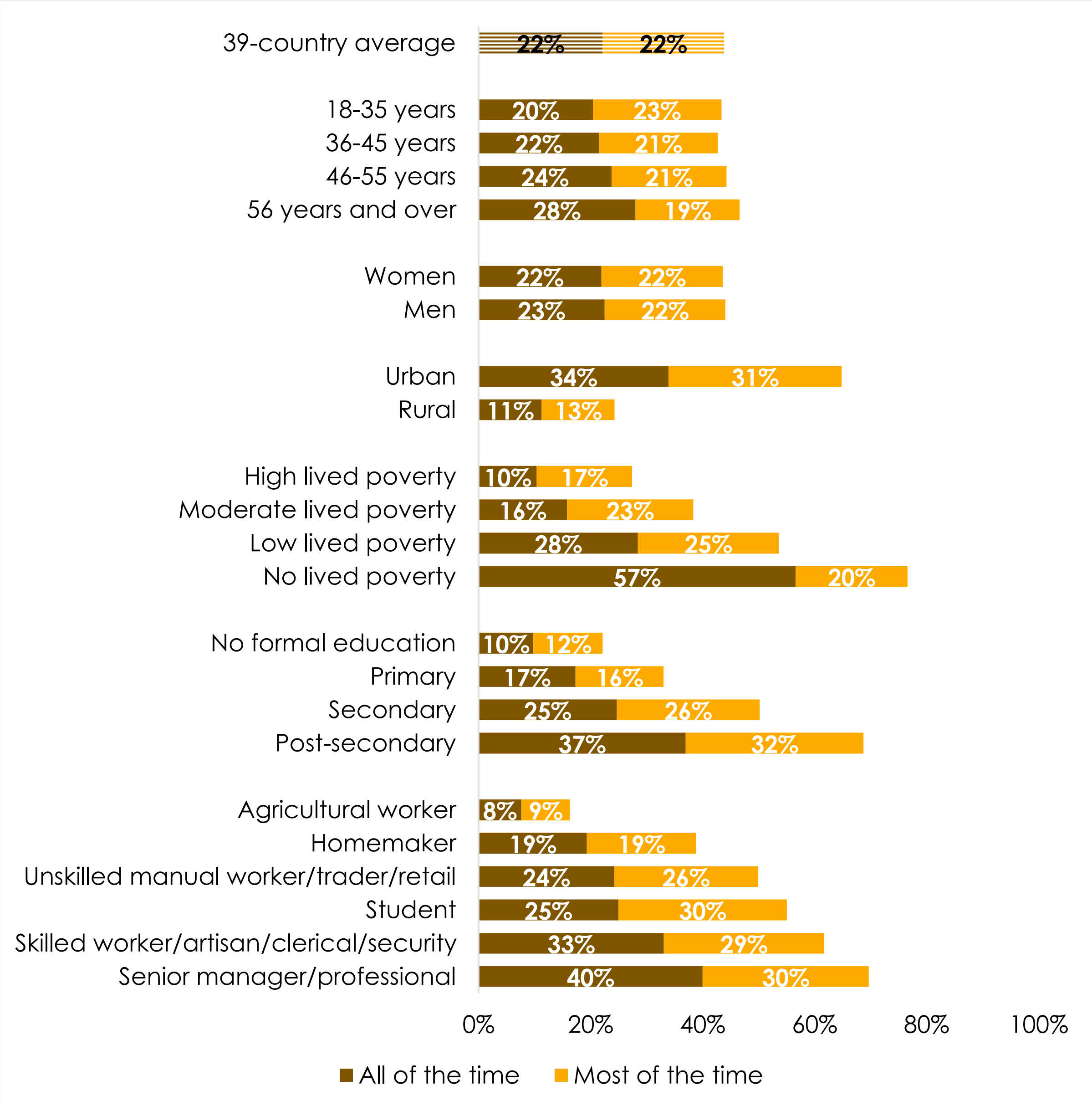
Surveyors recorded *whether enumeration areas had an electricity grid that most houses could access. (% "yes")*
Respondents were asked*: Do you have an electric connection to your home from the [main grid]? [If "yes":] How often is electricity actually available from this connection?*
Note*: No data for São Tomé & Príncipe and Madagascar for Round 8.*

Analysis of electricity access across demographic groups reveals significant socioeconomic disparities. Households experiencing high levels of poverty have notably lower access (10% who report electricity that works "all of the time") compared to those with no lived poverty (57%) (Figure 10). Similarly, respondents who completed post-secondary education (37%) and those in managerial jobs (40%) are more likely to live in households with reliable electricity than agricultural workers and those with no formal education (10%).

Given the lack of progress in expanding national grids, an analysis of previous Afrobarometer data shows that especially rural and poorer households have invested in other sources of electricity, particularly solar panels (Lee, Kim, Kang, & Han, 2022). For example, in three countries (Burkina Faso, Mali, and Zimbabwe) in which only a minority of the population have access to the national grid, at least four out of 10 citizens use electric power from sources other than the national grid.[7] Overall, in 11 of the 34 countries surveyed in Round 8 (2019/2021), at least 20% of households reported having alternative access to electricity. While this suggests that some people could participate in the digital(ised) economy even if they do not have a household connection to the main grid, their numbers are difficult to assess, as the survey did not ask how much electricity these sources produce and how reliable the supply is.

To arrive at a reliable approximation of who can realistically engage in digital work, the remainder of this analysis focuses on Round 9 (2021/2023) data, which has information on the accessibility and reliability of electricity from the national grid.

Figure 10: Electricity available from mains | by demographic group | 39 countries | 2021/2023



***Respondents were asked**: Do you have an electric connection to your home from the [main grid]? [If "yes":] How often is electricity actually available from this connection?*

[7] Only 3%-5% of respondents in these countries report having access to both the national grid and alternative sources of electricity.

Are Africans able to participate in the digital economy?

In an effort to determine to what extent Africans can participate in the digital(ised) economy, we have developed a digital economy readiness (DER) index that combines information from the three variables discussed above:

- Do citizens have a computer in the household (1) or not (0)?
- Do citizens use the Internet every day (1), a few times a week (0.75), a few times a month (0.5), less than once a month (0.25), or never (0)?
- Do citizens have reliable access to electricity at the household level all the time (1), most of the time (0.75), half the time (0.5), occasionally (0.25), or never (0)?

The DER index is calculated by averaging scores across these three variables. For ease of interpretation, we then create four categories: 0-0.24=not ready for digital work; 0.25-0.49=low readiness, 0.5-0.74=moderate readiness; 0.75-1=ready to engage in digital work.

In Figure 11, we show the share of each group within each country. At the forefront of digital readiness is Mauritius, where 61% of the population is prepared for participation in the digital(ised) economy while the rest of the population have some level of readiness (either low or moderate). The island nation is closely followed by Gabon and Seychelles, with 53% and 52% of the population being categorised as ready to engage in digital work. In contrast, Madagascar and Malawi find themselves at the other end of the spectrum, with only 4% of their populations ready for digital work while an overwhelming majority (73%) are not ready at all.

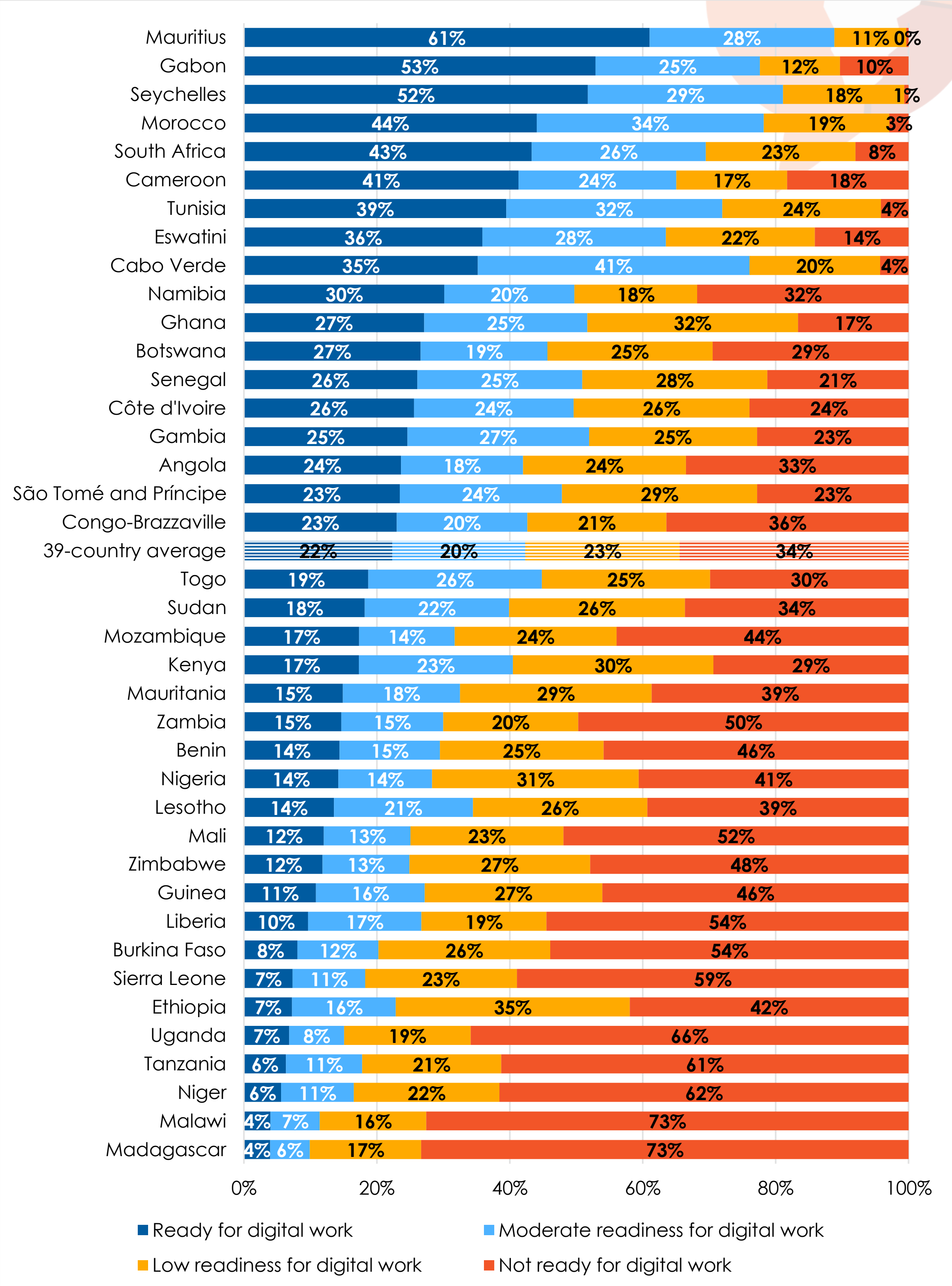
On average across all 39 countries, only 22% of the population are considered ready for digital work, while one-third (34%) are not ready at all. It's also worth noting that in 10 of the 39 surveyed countries, at least half of the population are categorised as "not ready for digital work," underscoring the magnitude of the digital divide.

While countries like Gabon can serve as regional models for other countries as they aim to create a more conducive environment for citizens to participate digitally, it is also clear that increasing computer ownership rates, Internet usage, and the supply of reliable electricity will require significant investments from multiple stakeholders (e.g. government, citizens, and companies).

Based on results shown above, it is not surprising that senior managers and professionals have the highest level of readiness, with 58% fully ready and 22% moderately ready, while agricultural workers have the lowest readiness across occupational groups (4% fully ready and 8% moderately ready) (Figure 12). Younger age groups (18-35 and 36-45) show only modestly higher readiness than older groups.[8] Wealthier and more educated respondents are more likely to score highly on the DER index than their poorer and less educated peers.

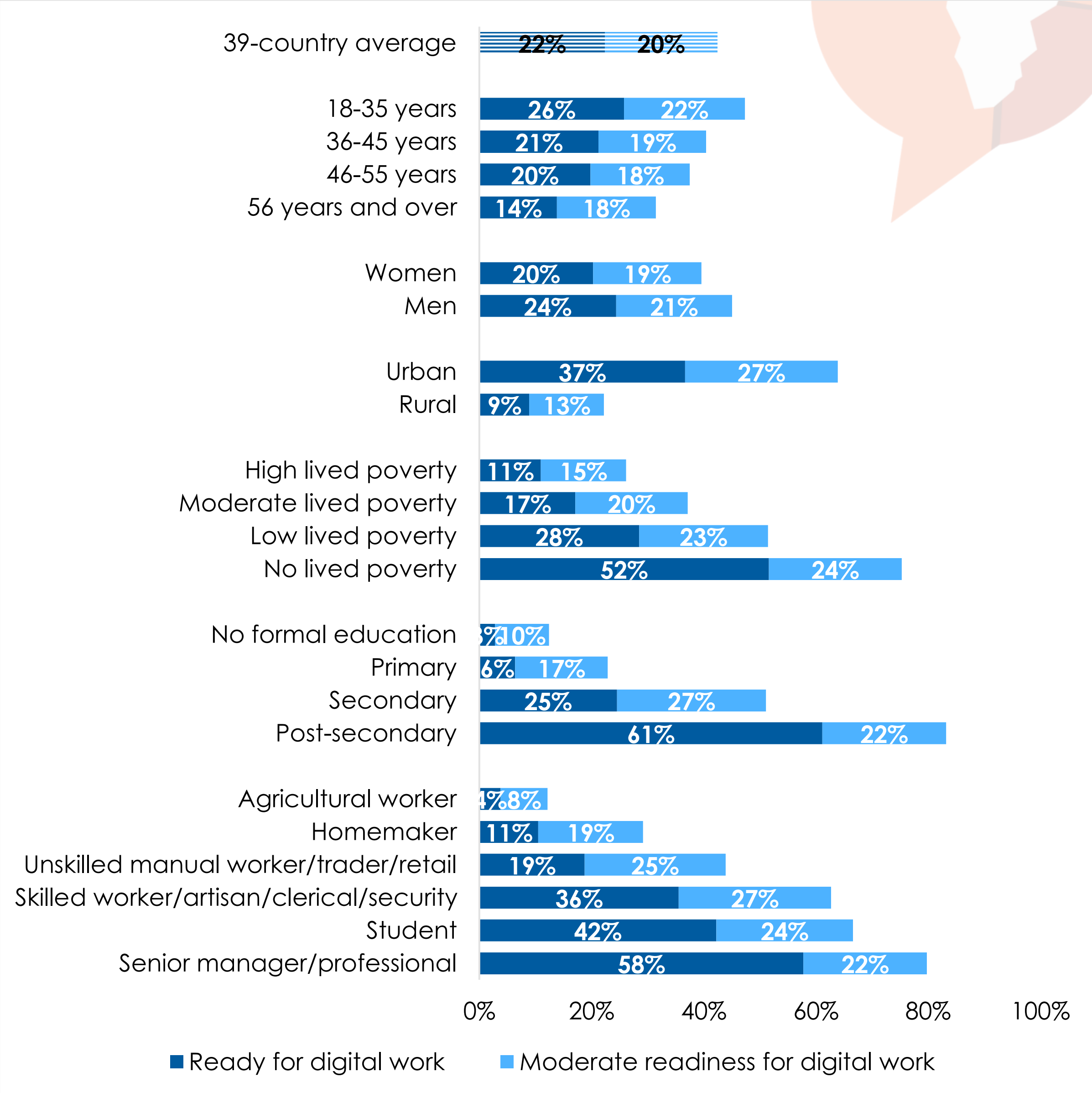
[8] At first glance, the relatively small gaps by age group might seem surprising. However, because the DER index includes household-level information (e.g. household computer ownership, access to reliable electricity), we are not only capturing younger people's inclination to use the technology, which is likely to be higher compared to older people, but also the context they live in. Hence the variation across age groups might be smaller than expected.

Figure 11: Digital economy readiness index | 39 countries | 2021/2023



***Note**: The digital economy readiness (DER) index is calculated by averaging the scores across three variables: 1) access to a computer, 2) use of the Internet, and 3) reliable access to electricity. For ease of interpretation, we create four categories: 0-0.24=**not ready for digital work**; 0.25-0.49=**low readiness**, 0.5-0.74=**moderate readiness**; 0.75-1=**ready for digital work**.*

Figure 12: DER index | by demographic group | 39 countries | 2021/2023



Ease of engagement with the broader economy

The ways in which citizens can use digital technology, and especially the Internet, to participate in the economy are nearly infinite. Nevertheless, several contextual factors likely shape the extent to which Africans can bring their digital skills to bear and engage with the broader economy. For example, most smartphones can be turned into wireless routers to allow those with laptops to work from anywhere. Meanwhile, owning a bank account and having a bank or a post office in the neighbourhood opens up new opportunities for e-commerce entrepreneurs, while having access to a nearby market can ease connections between local producers or traders and customers who are farther afield. And owning a car or motorcycle, or living in an area with paid transport, makes it easier to advertise online and then provide a service or good to businesses and consumers across town or in surrounding areas.

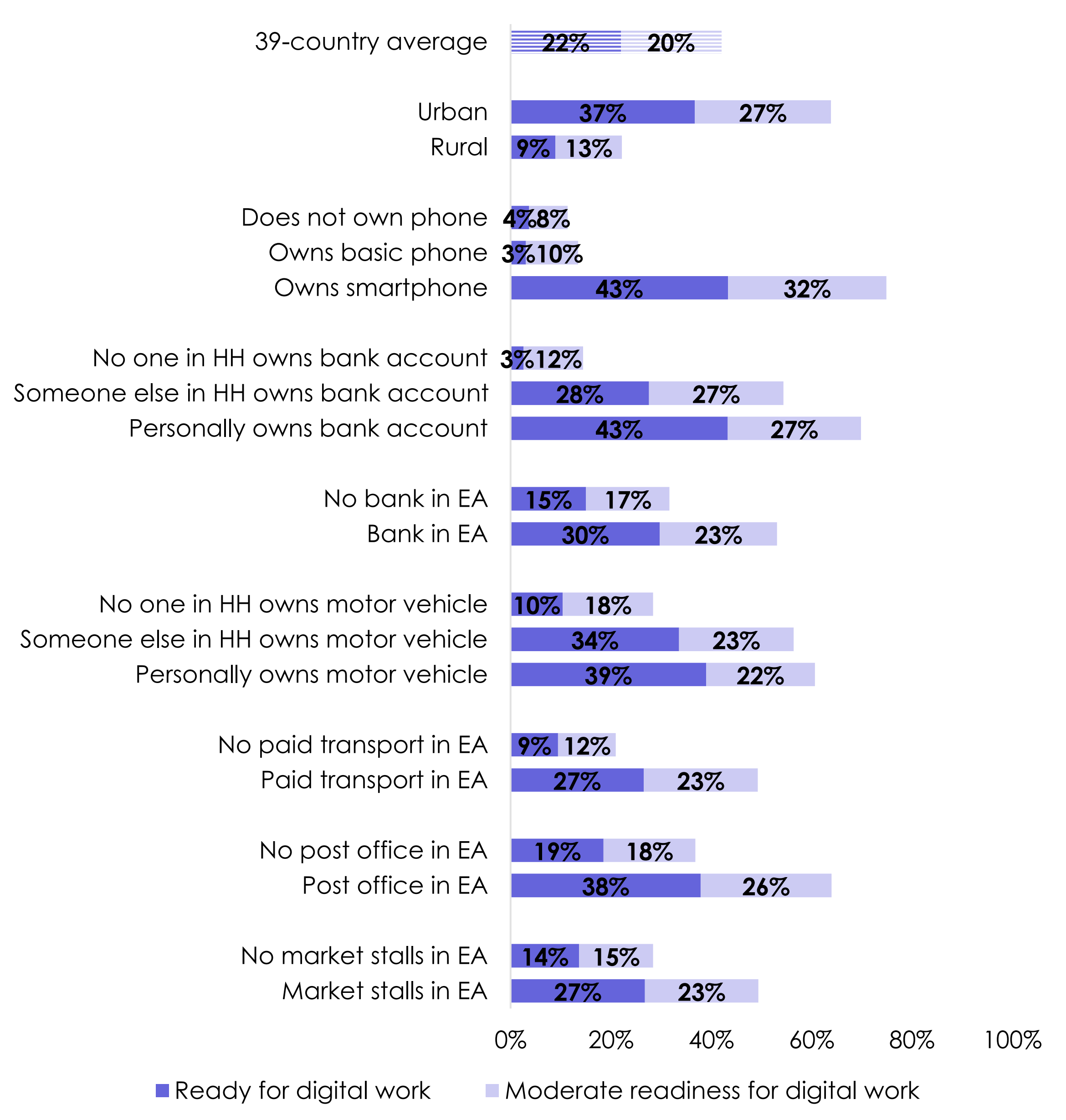
A key question, therefore, is whether those who score highly on the DER index also have access to these other resources and opportunities. By breaking down the DER index along these broader structural factors, we can analyse to what extent the digital divide maps onto existing inequalities.

Figure 13 shows that people who are better connected (i.e. own a smartphone), more mobile (have access to a car or motorcycle, or have paid transport in their area), own a bank account, and live near a market or post office are also more likely to be well equipped to participate in the digital(ised) economy.

While perhaps not surprising, it is important to bear this in mind when alluding to the potential of the digital(ised) economy to fundamentally change people's economic prospects across the continent.

As we saw in figures 2 and 6 above, the gaps in computer ownership and Internet usage are closing over time. Yet these processes are unlikely to occur randomly. Instead, the data presented here suggest that they unfold unevenly and along similar lines as the distribution of physical infrastructure such as banks, post offices, and market stalls, perpetuating existing inequalities for the foreseeable future.

Figure 13: DER index | contextual factors | 39 countries | 2021/2023



Conclusion

The potential benefits of expanding the digital(ised) economy can be observed in South Africa and Mauritius, where growing ICT sectors have established hubs of technological innovation and boosted economic growth. Yet it is often difficult to estimate the potential of these opportunities across and within countries. This analysis is an attempt to connect the promises of the digital(sed) economy to realities on the ground.

Africans' digital footprints have increased over the past decade – sometimes dramatically, as in the case of Guinea and Kenya – through the increased availability of smartphones and computers. Still, in countries such as Malawi, Niger, and Tanzania, 80% of the population do not regularly use the Internet.

We have developed a digital economy readiness (DER) index that helps to assess the extent to which people in different countries and sectors can participate in the digital(ised) economy. A key advantage of this index is that it not only captures people's behaviour (i.e. Internet usage), but also takes into account their resources (availability of computer and access to reliable electricity), and thus provides a more nuanced picture of whether and how people can engage in digital work.

Our findings suggest that urbanites and wealthier and more educated people are far more likely to be ready to engage in this type of work. Moreover, those who score highly on the DER index are also more likely to have access to other important infrastructure and resources such as banks, transportation, and markets, reinforcing existing inequalities.

The challenge of addressing the digital divide in Africa, then, is two-fold. At a structural level, governments need to ensure that citizens have reliable and affordable access to electricity and Internet connectivity, whether by providing it themselves or by creating appropriate regulatory frameworks.

At the individual level, citizens need access to a range of affordable devices that allow them to participate in the digital(ised) economy (e.g. smartphones, tablets, PCs, laptops). Although smartphones may begin to bridge the digital divide, meaningful participation often necessitates using personal computers to complete the complex tasks that digital labour entails.

In addition, citizens need affordable opportunities to upskill themselves. Whether people want to advertise a business online, collaborate on a project digitally, or better understand how to deal with the challenges and promises of artificial intelligence, they will need online education to get beyond trial and error.

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Appendix

Table A.1: Afrobarometer Round 9 fieldwork dates and previous survey rounds

Country	Round 9 fieldwork	Previous survey rounds
Angola	Feb.-March 2022	2019
Benin	Jan. 2022	2005, 2008, 2011, 2014, 2017, 2020
Botswana	June-July 2022	1999, 2003, 2005, 2008, 2012, 2014, 2017, 2019
Burkina Faso	Sept.-Oct. 2022	2008, 2012, 2015, 2017, 2019
Cabo Verde	July-Aug. 2022	2002, 2005, 2008, 2011, 2014, 2017, 2019
Cameroon	March 2022	2013, 2015, 2018, 2021
Congo-Brazzaville	June-July 2023	NA
Côte d'Ivoire	Nov.-Dec. 2021	2013, 2014, 2017, 2019
Eswatini	Oct.-Nov. 2022	2013, 2015, 2018, 2021
Ethiopia	May-June 2023	2013, 2020
Gabon	Nov.-Dec. 2021	2015, 2017, 2020
Gambia	Aug.-Sept. 2022	2018, 2021
Ghana	April 2022	1999, 2002, 2005, 2008, 2012, 2014, 2017, 2019
Guinea	Aug. 2022	2013, 2015, 2017, 2019
Kenya	Nov.-Dec. 2021	2003, 2005, 2008, 2011, 2014, 2016, 2019
Lesotho	Feb.-March 2022	2000, 2003, 2005, 2008, 2012, 2014, 2017, 2020
Liberia	Aug.-Sept. 2022	2008, 2012, 2015, 2018, 2020
Madagascar	April-May 2022	2005, 2008, 2013, 2015, 2018
Malawi	Feb. 2022	1999, 2003, 2005, 2008, 2012, 2014, 2017, 2019
Mali	July 2022	2001, 2002, 2005, 2008, 2013, 2014, 2017, 2020
Mauritania	Nov. 2022	NA
Mauritius	March 2022	2012, 2014, 2017, 2020
Morocco	Aug.-Sept. 2022	2013, 2015, 2018, 2021
Mozambique	Oct.-Nov. 2022	2002, 2005, 2008, 2012, 2015, 2018, 2021
Namibia	Oct.-Nov. 2021	1999, 2003, 2006, 2008, 2012, 2014, 2017, 2019
Niger	June 2022	2013, 2015, 2018, 2020
Nigeria	March 2022	2000, 2003, 2005, 2008, 2013, 2015, 2017, 2020
São Tomé and Príncipe	Dec. 2022	2015, 2018
Senegal	May-June 2022	2002, 2005, 2008, 2013, 2014, 2017, 2021
Seychelles	Dec. 2022	NA
Sierra Leone	June-July 2022	2012, 2015, 2018, 2020
South Africa	Nov.-Dec. 2022	2000, 2002, 2006, 2008, 2011, 2015, 2018, 2021
Sudan	Nov.-Dec. 2022	2013, 2015, 2018, 2021
Tanzania	Sept.-Oct. 2022	2001, 2003, 2005, 2008, 2012, 2014, 2017, 2021
Togo	March 2022	2012, 2014, 2017, 2021
Tunisia	Feb.-March 2022	2013, 2015, 2018, 2020
Uganda	Jan. 2022	2000, 2002, 2005, 2008, 2012, 2015, 2017, 2019
Zambia	Aug.-Sept. 2022	1999, 2003, 2005, 2009, 2013, 2014, 2017, 2020
Zimbabwe	March-April 2022	1999, 2004, 2005, 2009, 2012, 2014, 2017, 2021

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Afrobarometer, a nonprofit corporation with headquarters in Ghana, is a pan-African, non-partisan research network. Regional coordination of national partners in about 35 countries is provided by the Ghana Center for Democratic Development (CDD-Ghana), the Institute for Justice and Reconciliation (IJR) in South Africa, and the Institute for Development Studies (IDS) at the University of Nairobi in Kenya. Michigan State University, the University of Cape Town, and the University of Malawi provide technical support to the network.

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