

GSMA

The State of Mobile Internet Connectivity Key Findings 2023



Key findings

- ➔ **Mobile internet adoption continues to increase, with 57% of the global population (4.6 billion people) now using mobile internet – but the growth rate at which people are adopting mobile internet slowed in 2022.** Only 200 million people started using mobile internet in 2022, compared to 300 million in 2021 and in 2020. Just over three quarters of the growth in mobile internet adoption in 2022 came from low- and middle-income countries (LMICs), where 95% of the unconnected population live. In least developed countries (LDCs), almost 30 million additional people started using mobile internet in 2022, meaning one in four people in LDCs are using mobile internet.
- ➔ **Mobile broadband coverage has remained relatively unchanged, with 95% of the global population living within the footprint of a mobile broadband network.** With only marginal growth in coverage in 2022, the coverage gap – those living in areas without mobile broadband coverage – stands at almost 400 million people (5% of the global population). The remaining uncovered communities, which are predominantly rural, poor and sparsely populated, are the most challenging to reach.
- ➔ **Most of those not using mobile internet live in areas covered by mobile broadband.** In 2022, 3 billion people (38% of the global population) lived in areas covered by mobile internet but did not use it. With mobile internet adoption outpacing network expansion, this usage gap has been shrinking slowly in recent years, from 40% in 2021 to 38% in 2022. However, the usage gap remains almost eight times the size of the coverage gap. Considering only adults aged 18 and above, 23% are still not using mobile internet despite being covered by a mobile broadband network. The majority of those living within mobile broadband coverage but not using it do not yet own a mobile phone.
- ➔ **Connectivity varies significantly between and within regions and countries, with 95% of the unconnected living in LMICs.** Sub-Saharan Africa remains the region with the largest coverage and usage gaps. In LMICs, adults in rural areas are still 29% less likely to use mobile internet than those in urban areas, while women are 19% less likely to use mobile internet than men. In LDCs, only 25% of the population use mobile internet, compared to 52% across LMICs overall and 85% in high-income countries (HICs).
- ➔ **The majority of the global population now own a smartphone, which is how most people are accessing mobile internet.** At the end of 2022, 54% of the global population (4.3 billion people) owned a smartphone. Of the 4.6 billion people using mobile internet, almost 4 billion do so using a smartphone (49% of the global population) and around 600 million people do so using a feature phone (8% of the global population). There are also 350 million people who own a smartphone but do not use mobile internet.

➔ **4G and 5G continue to expand, but 2G and 3G remain important sources of coverage in LMICs.** While the overall broadband coverage gap has remained broadly unchanged since 2021, the deployment of 4G and 5G continues to expand. Globally, 90% of the population is now covered by 4G, and 32% by 5G (up from 25% in 2021). Almost three quarters of the 5G network expansion in 2022 was in Asia-Pacific, and there was particularly strong growth in 4G network expansion in Sub-Saharan Africa. However, most mobile operators will continue to maintain 2G and 3G networks for the foreseeable future, with a significant portion of users continuing to use these networks, particularly in LMICs.

➔ **Data usage and network quality continue to increase but significant differences remain between HICs and LMICs.** Monthly global mobile data traffic per user increased from 8.4 GB in 2021 to 11.3 GB in 2022 – the largest absolute increase since it was first tracked in 2015. Network quality improved across all regions, driven by improved networks and consumers migrating to 4G or 5G. For the first time, all regions now have average download speeds of at least 10 Mbps, while the global average download speed increased from 27 Mbps to 34 Mbps. HICs record download speeds four times greater than those in LMICs.

➔ **Awareness of mobile internet continues to grow but has slowed significantly since 2019.** In nine of the 12 countries surveyed, more than 80% of the population was aware of mobile internet in 2022. However, women and those living in rural areas remain less likely to be aware of mobile internet, and lack of awareness remains a critical initial barrier to mobile internet adoption in some countries.

➔ **Affordability and skills remain the two greatest barriers to mobile internet adoption and use.** Across the countries surveyed, for mobile users who are aware of mobile internet but don't use it, the top reported barriers to adopting it remain affordability (particularly of handsets)

and literacy/digital skills. Safety & security concerns and lack of perceived relevance were reported less often but are also important barriers. For example, among smartphone owners, lack of perceived relevance is often cited as a top barrier to mobile internet adoption in several countries.

➔ **Affordability of devices and data continues to disproportionately impact the underserved.** Across LMICs, affordability of an entry-level, internet-enabled handset remained relatively unchanged, while affordability of data continues to improve across most regions. However, while the affordability of an entry-level device across all LMICs is equivalent to 16% of average monthly income, this increases to 40% for the poorest 40% of the population and 55% for the poorest 20%. Across LMICs, it is equivalent to 24% of average monthly income for women, compared to 13% for men.



KEY FINDINGS

CONNECTED:

57% of the world's population are now **using mobile internet**

4.6bn people

But the rate of mobile internet adoption slowed over the past year



COVERAGE GAP:

5%

of the world's population are still not covered by mobile broadband

almost **400m** PEOPLE

USAGE GAP:

38% of the world's population live within the footprint of a mobile broadband network but are not using it

3bn people

2/3 of these do not own a phone

JUST OVER

3/4 of the growth in mobile internet adoption in

2022 came from LMICs

WHERE **95%** OF THE UNCONNECTED POPULATION LIVE

In LDCs, only

25% of the population use mobile internet

compared to

52% across LMICs overall

and

85% across HICs

54% of the world's population (4.3bn people) own a smartphone



But **350m** people who own a smartphone don't use mobile internet



4G/5G coverage is expanding

But

2G/3G networks remain important in many LMICs

← →

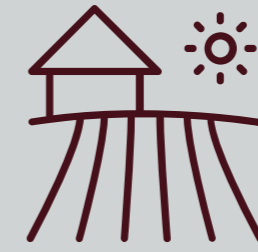
← GLOBAL NETWORK COVERAGE →

2018				2022			
2G: 96%	3G: 92%	4G: 80%	5G: 0%	2G: 98%	3G: 95%	4G: 90%	5G: 32%

IN LOW- AND MIDDLE-INCOME COUNTRIES

Adults living in rural areas are

29%



less likely than those living in urban areas to use mobile internet...

WOMEN ARE **19%**



LESS LIKELY THAN MEN TO USE MOBILE INTERNET

IN MOST SURVEYED COUNTRIES

>80% of the population are aware of mobile internet



but awareness is lower for women and those living in rural areas



The top barriers to mobile internet adoption and use:



Affordability, particularly of handsets



A lack of literacy



and digital skills



AFFORDABILITY of entry-level handsets has remained generally unchanged at

16%

of monthly income

AFFORDABILITY of entry-level data plans continues to improve across most regions



AFFORDABILITY of devices and data continues to disproportionately impact the underserved



GSMA

The GSMA is a global organisation unifying the mobile ecosystem to discover, develop and deliver innovation foundational to positive business environments and societal change. Our vision is to unlock the full power of connectivity so that people, industry and society thrive. Representing mobile operators and organisations across the mobile ecosystem and adjacent industries, the GSMA delivers for its members across three broad pillars: Connectivity for Good, Industry Services and Solutions, and Outreach. This activity includes advancing policy, tackling today's biggest societal challenges, underpinning the technology and interoperability that make mobile work, and providing the world's largest platform to convene the mobile ecosystem at the MWC and M360 series of events.

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The data is used as an industry reference point and is frequently cited by the media and by the industry itself.

Our team of analysts and experts produce regular thought-leading research reports across a range of industry topics.

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Published: October 2023

GSMA Connected Society

The Connected Society programme works with the mobile industry, technology companies, the development community and governments to increase access to and adoption of mobile internet, focusing on underserved population groups in developing markets.

For more information, please visit
www.gsma.com/connected-society

To get in touch with the Connected Society team, please email connectedsociety@gsma.com

This material has been funded by UK Aid from the UK Government; however, the views expressed do not necessarily reflect the UK Government's official policies.



This document has been financed by the Swedish International Development Cooperation Agency, Sida. Sida does not necessarily share the views expressed in this material. Responsibility for its contents rests entirely with the authors.



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