BARRIERS TO MOBILE INTERNET ADOPTION AND USE

The State of Mobile Internet Connectivity 2025

GSMA Mobile for Development

M4D

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BARRIERS TO MOBILE INTERNET ADOPTION AND USE

Of the 3.4 billion people not using mobile internet, just over 90% live in an area covered by mobile broadband but are not using it (the usage gap). Addressing this is critical to bridging the digital divide. However, based on current connectivity trends, it is projected to take more than 30 years to close the usage gap. While the usage gap has been shrinking slowly, there remain 3.1 billion people (38% of the global population) living in areas covered by mobile broadband but not using it.

Significant barriers to mobile internet adoption persist beyond broadband network coverage. This report looks at the barriers people face to adopting mobile internet and using it more, as well as how these differ by country and whether they live in a rural or urban area.

1. AN OVERVIEW OF THE BARRIERS

Understanding the barriers to mobile internet adoption and further use is key to tackling the usage gap and ensuring more inclusive digital connectivity

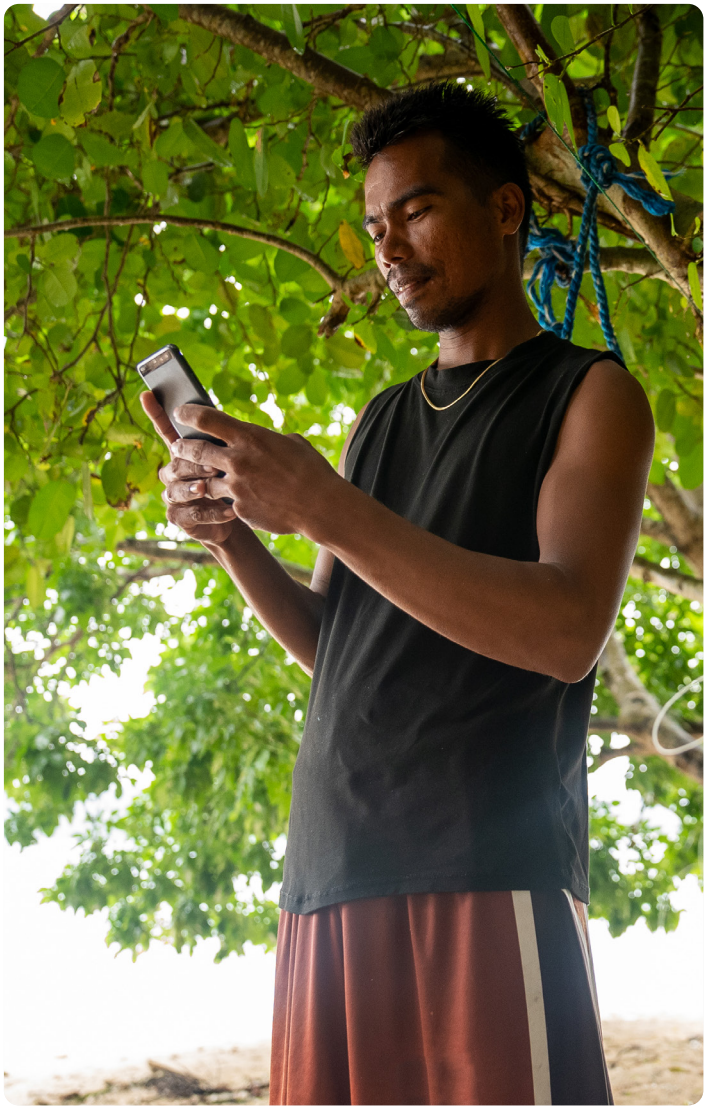
Key barriers to mobile internet adoption include a lack of awareness of mobile internet and, once aware, not being able to afford an internet-enabled phone, and a lack of literacy and digital skills. Even among existing mobile internet users, many want to use the internet more but face barriers. These include safety and security concerns, affordability and the connectivity experience. Lack of perceived relevance also contributes to limited use.

Many underserved populations, such as women and persons with disabilities, tend to experience these barriers more acutely due to structural inequalities such as disparities in access to education and income, as well as restrictive social norms. For example, even when women have similar levels of education, income, literacy and employment to men, they remain less likely to use mobile internet.[1] This points to deeper, systemic issues – such as gender-based discrimination and restrictive social norms – that continue to limit equitable digital participation.

Understanding the barriers to mobile internet adoption and further use is key to formulating effective strategies to reduce the usage gap and ensure more inclusive digital connectivity. Figure 1 summarises these barriers. While affordability is examined in this report as a barrier to mobile internet adoption and use, further detailed analysis is provided in the dedicated report, Affordability of internet-enabled handsets and data.

This report uses the results of the GSMA Consumer Survey. The survey aims to understand access to – and use of – mobile and mobile internet in low- and middle-income countries (LMICs). During 2017–2024, the GSMA has conducted nationally representative face-to-face surveys in 30 low- and middle-income countries, accounting for 79% of the population in LMICs. This included 15 LMICs in 2024.[2]

More information on the GSMA Consumer Survey can be found in Appendix 1.



1 "Does just being a woman reduce the likelihood of using mobile?", GSMA Mobile for Development, August 2020

2 Countries surveyed in 2024 include: Bangladesh, Egypt, Ethiopia, Guatemala, India, Indonesia, Kenya, Mexico, Nigeria, Pakistan, Philippines, Rwanda, Senegal, Tanzania and Uganda.

Figure 1: Barriers to mobile internet adoption and use

Affordability	Knowledge and skills	Safety and security	Relevance	Fundamental enablers
Inability to afford internet-enabled handsets and other costs beyond ownership, such as data plans and service fees	Lack of awareness and understanding of mobile internet, its benefits and uses, as well as lack of literacy, digital skills and confidence	Concerns about the negative aspects and risks of the internet, including issues such as harassment, identify theft, harmful content and information security	Lack of relevant content, products and services that meet users' preferences and needs, including those that are accessible, easy to use and in local languages	Lack of access to networks and enablers, such as electricity, formal ID, devices and customer-service touch points (e.g. agents), as well as restrictive social norms

In most countries surveyed, the majority of the population lives in rural areas, and a significant rural-urban gap exists in mobile internet adoption. This means millions more people living in rural areas experience these barriers than those living in urban areas. There is also a substantial mobile internet gender gap, meaning millions more women than men face these barriers.[3] Addressing the barriers is therefore likely to disproportionately enable more women and rural populations to go online.

To understand how the barriers are experienced, this study looks at how people in different contexts progress along the journey to mobile internet adoption, and then regular and diverse use.

3 The Mobile Gender Gap Report 2025, GSMA, 2025

2. THE MOBILE INTERNET USER JOURNEY

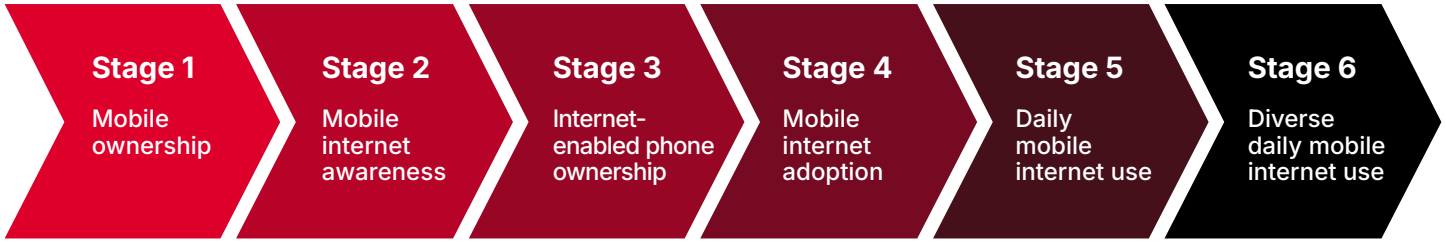
Users drop off at every stage of the journey to mobile internet use, with sharper declines seen in particular countries and among specific demographics

While no two people have the same experience of adopting and using mobile technology, there are common milestones on the mobile internet user journey. The journey often starts with owning a handset (stage 1), progresses to being aware of mobile internet (stage 2) and then owning an internet-enabled phone (stage 3).[4] See Figure 2. There are several reasons why awareness often precedes owning an internet-enabled phone, such as being unlikely to invest in these more sophisticated and expensive devices without first knowing about mobile internet and its benefits. Internet-enabled phone ownership is typically followed by mobile internet adoption (stage 4), daily mobile internet use (stage 5) and diverse daily mobile internet use (stage 6).[5]

At each stage, users encounter barriers that hinder progress, leading to drop-offs along the way. Even in countries with high rates of mobile internet adoption, levels of regular and diverse use of mobile internet can be much lower.

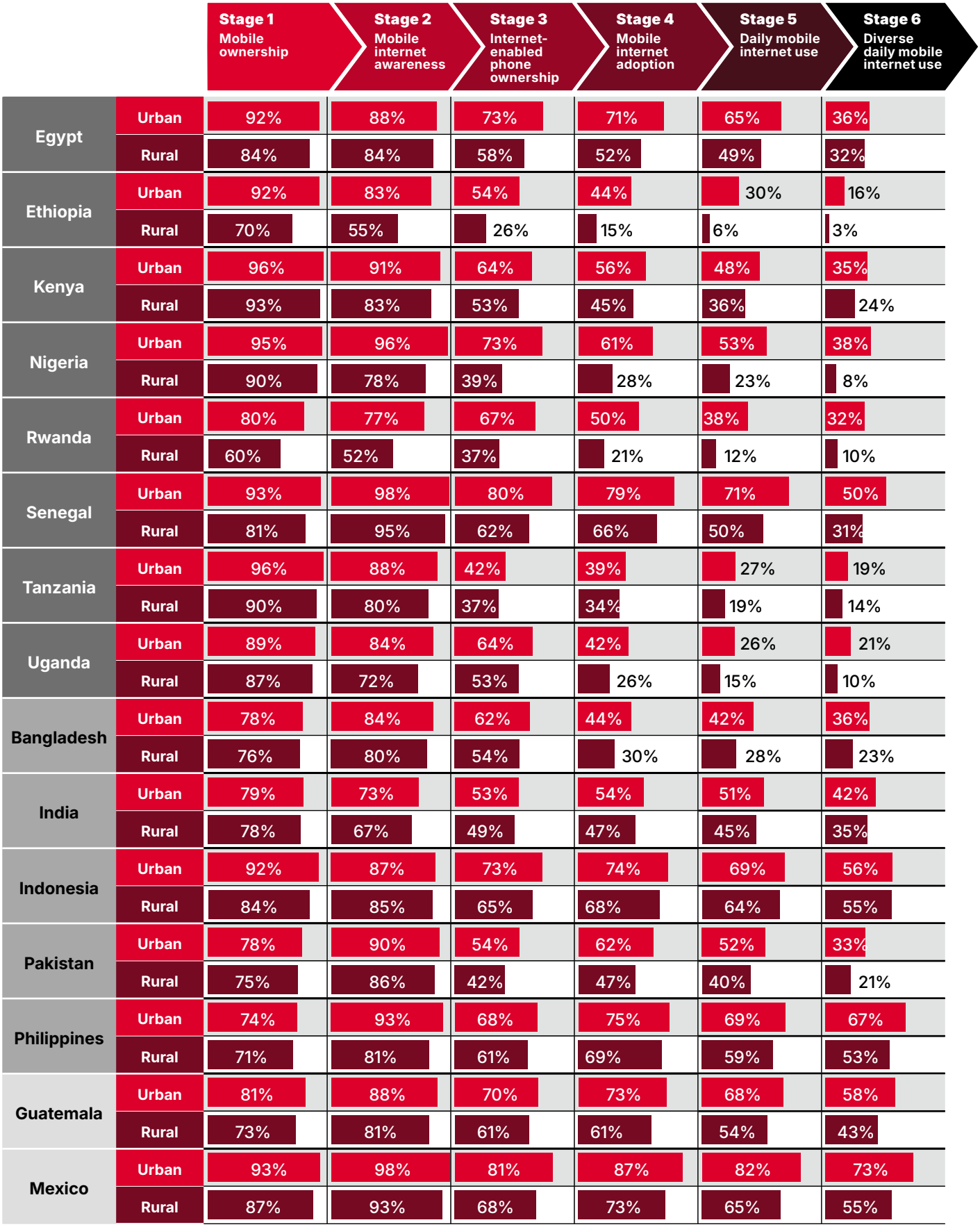
Progress along this journey also varies by demographic group (see Figure 3). For instance, across all 15 survey countries, urban respondents were more likely to be using mobile internet than their rural counterparts, with the urban-rural gap widening at each subsequent stage.[6] A similar pattern is observed in terms of gender disparities. Men are consistently more likely than women to advance along the mobile internet journey, and the gender gap tends to increase with each step.[7]

Figure 2: The mobile internet user journey



4 Either a feature phone or a smartphone.
5 Diverse daily mobile internet use is defined as performing at least three mobile internet use cases daily.
6 The 'urban-rural gap' refers to how much less likely a person living in a rural area is to do 'X' than a person living in an urban area. It is calculated as follows: Urban-rural gap = (% of urban - % of rural) / % of urban
7 The Mobile Gender Gap Report 2025, GSMA, 2025

Figure 3: The mobile internet user journey
Percentage of total adult population



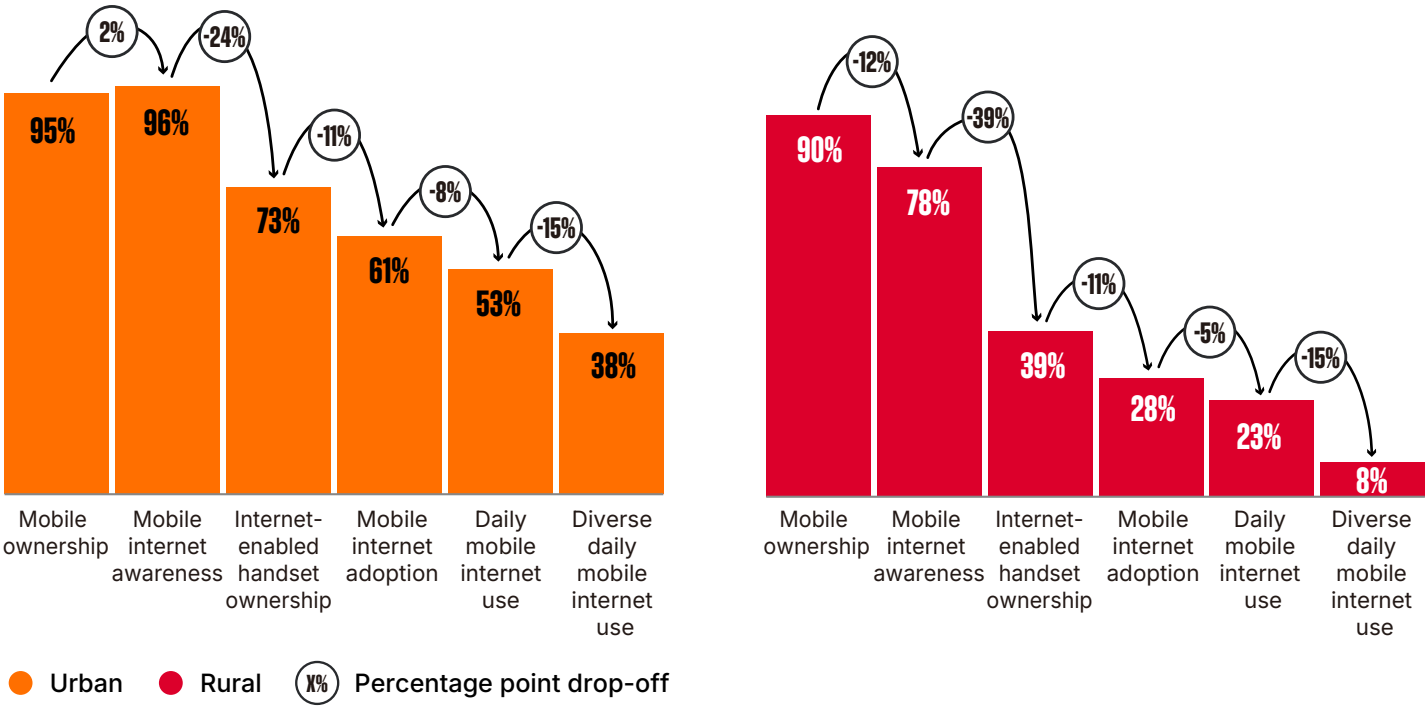
		Stage 1 Mobile ownership	Stage 2 Mobile internet awareness	Stage 3 Internet-enabled phone ownership	Stage 4 Mobile internet adoption	Stage 5 Daily mobile internet use	Stage 6 Diverse daily mobile internet use
Egypt	Urban	92%	88%	73%	71%	65%	36%
	Rural	84%	84%	58%	52%	49%	32%
Ethiopia	Urban	92%	83%	54%	44%	30%	16%
	Rural	70%	55%	26%	15%	6%	3%
Kenya	Urban	96%	91%	64%	56%	48%	35%
	Rural	93%	83%	53%	45%	36%	24%
Nigeria	Urban	95%	96%	73%	61%	53%	38%
	Rural	90%	78%	39%	28%	23%	8%
Rwanda	Urban	80%	77%	67%	50%	38%	32%
	Rural	60%	52%	37%	21%	12%	10%
Senegal	Urban	93%	98%	80%	79%	71%	50%
	Rural	81%	95%	62%	66%	50%	31%
Tanzania	Urban	96%	88%	42%	39%	27%	19%
	Rural	90%	80%	37%	34%	19%	14%
Uganda	Urban	89%	84%	64%	42%	26%	21%
	Rural	87%	72%	53%	26%	15%	10%
Bangladesh	Urban	78%	84%	62%	44%	42%	36%
	Rural	76%	80%	54%	30%	28%	23%
India	Urban	79%	73%	53%	54%	51%	42%
	Rural	78%	67%	49%	47%	45%	35%
Indonesia	Urban	92%	87%	73%	74%	69%	56%
	Rural	84%	85%	65%	68%	64%	55%
Pakistan	Urban	78%	90%	54%	62%	52%	33%
	Rural	75%	86%	42%	47%	40%	21%
Philippines	Urban	74%	93%	68%	75%	69%	67%
	Rural	71%	81%	61%	69%	59%	53%
Guatemala	Urban	81%	88%	70%	73%	68%	58%
	Rural	73%	81%	61%	61%	54%	43%
Mexico	Urban	93%	98%	81%	87%	82%	73%
	Rural	87%	93%	68%	73%	65%	55%

Base: Total population aged 18+. N = from 220 to 1,493 for rural and from 292 to 848 for urban.

Note: A mobile owner is defined as a person who has sole or main use of a SIM card (or a mobile phone that does not require a SIM) and uses it at least once per month. Mobile internet users do not have to personally own a mobile phone. Diverse daily mobile internet use is defined as performing at least three mobile internet use cases daily.

Source: GSMA Consumer Survey, 2024

Figure 4: The mobile internet user journey in Nigeria
Percentage of total adult population at each stage



Urban Rural X% Percentage point drop-off

Base: Total population aged 18+. N = 523 for rural and N = 480 for urban.

Note: A mobile owner is defined as a person who has sole or main use of a SIM card (or a mobile phone that does not require a SIM) and uses it at least once a month. Mobile internet users do not have to personally own a mobile phone. Diverse daily mobile internet use is defined as performing at least three mobile internet use cases daily. Data labels are rounded.

Source: GSMA Consumer Survey, 2024

In the majority of the countries surveyed, the largest drop-off tends to take place between mobile internet awareness (stage 2) and internet-enabled phone ownership (stage 3), particularly for rural respondents and women.[8] For example, in Nigeria, 78% of rural respondents are aware of mobile internet (stage 2), but only 39% own an internet-enabled phone (stage 3) – a drop-off of 39 percentage points (pp). See Figure 4. This drop-off is also significant for urban respondents but is smaller, at 24 pp.

Once people own an internet-enabled phone (stage 3), most use mobile internet (stage 4).[9] This is also the case for those living in rural areas and women. In Nigeria, 28% of rural respondents use mobile internet – representing a drop of just 11 pp between owning an internet-enabled handset and using mobile internet (there was also an 11-pp drop among urban respondents). Focussing efforts on improving internet-enabled phone ownership among rural populations and women who are already aware of it (at stage 2) could be the most effective way to close the mobile internet urban-rural gaps and gender gaps in countries where there is a similar trend.

While most people who use mobile internet (stage 4) access it from their own internet-enabled phone, this is not always the case, particularly for women in settings with more restrictive social norms[10] and, in some contexts, rural populations (see *Spotlight – Not all mobile internet users are accessing it on their own device, limiting their internet experience*). However, for those who own an internet-enabled phone, particularly a smartphone, both the urban-rural and gender gaps are much narrower at each subsequent stage of the journey. For example, among smartphone owners in Bangladesh, 95% of urban respondents and 85% of their rural counterparts use mobile internet (stage 4), with 93% and 83%, respectively, using it every day (stage 5), and 81% and 68% using it daily for three or more use cases (stage 6).[11]

In addition, adoption of mobile internet among smartphone owners is significantly higher than those owning feature phones. This is true across different demographics and underscores the importance of ensuring underserved populations are able to own an internet-enabled phone, especially a smartphone.

8 The Mobile Gender Gap Report 2025, GSMA, 2025
9 Note, mobile internet use (stage 4) is not device specific. Therefore, someone may reach this stage of the journey by using mobile internet through a shared device or borrowing someone else's.
10 The Mobile Gender Gap Report 2025, GSMA, 2025
11 The 'urban-rural gap' refers to how much less likely a person living in a rural area is to do 'X' than a person living in an urban area. It is calculated as follows: Urban-rural gap = (% of urban - % of rural) / % of urban

3. BARRIERS TO MOBILE INTERNET ADOPTION AND USE AT KEY STAGES IN THE MOBILE INTERNET USER JOURNEY

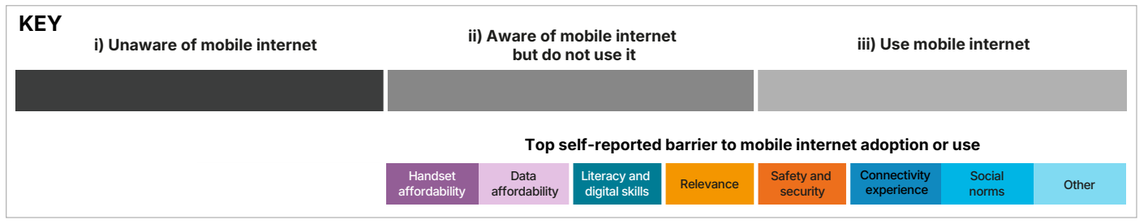
Barriers to mobile internet adoption and use differ by country, demographic and stage of user journey

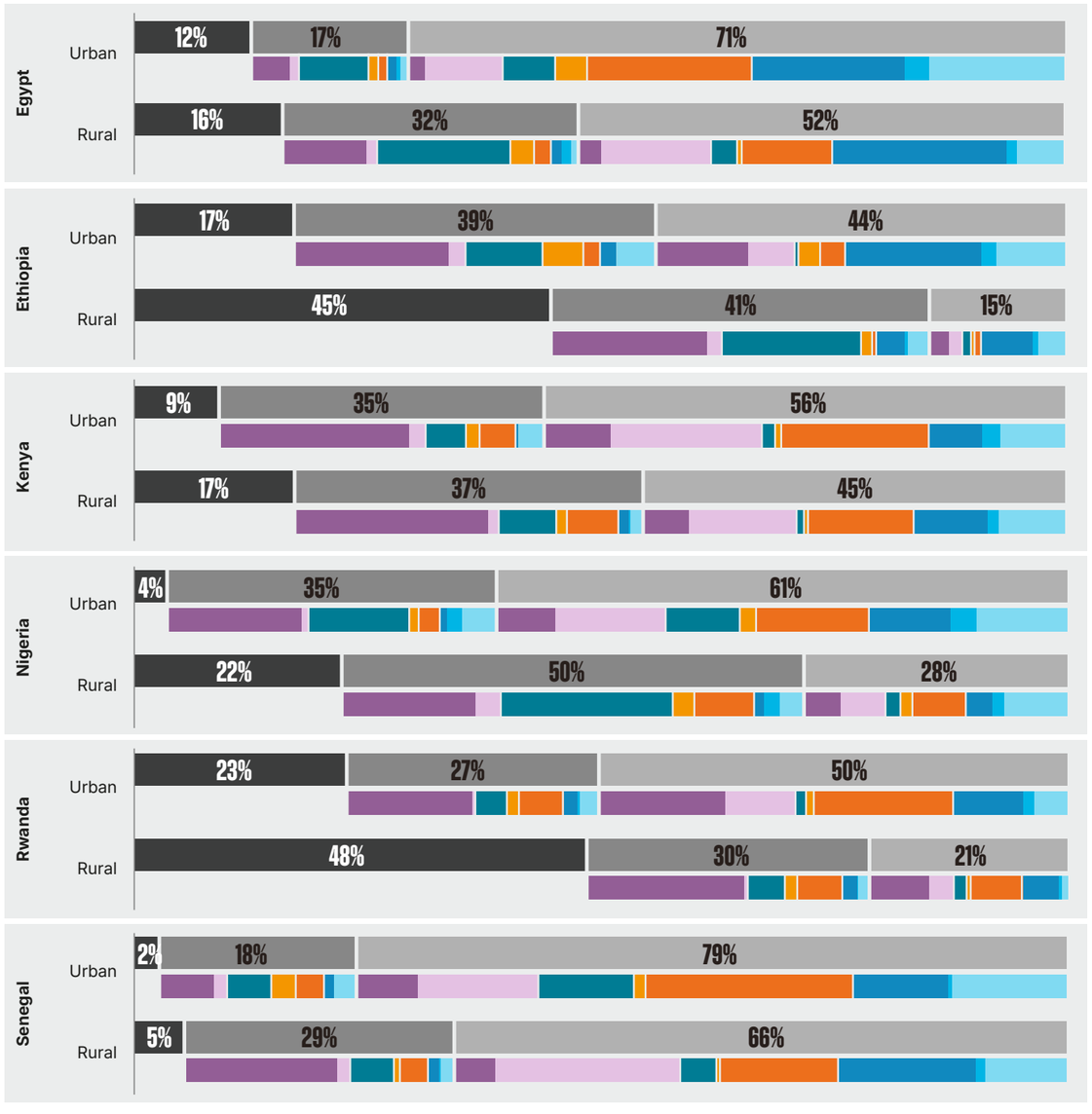
In each survey country, all respondents were asked whether they had heard of mobile internet. Those who had were asked whether certain barriers prevented them from adopting it (if they did not use it) or from using it more (if they already used it). They were then asked which barriers they felt were most important and which was the single most important barrier.

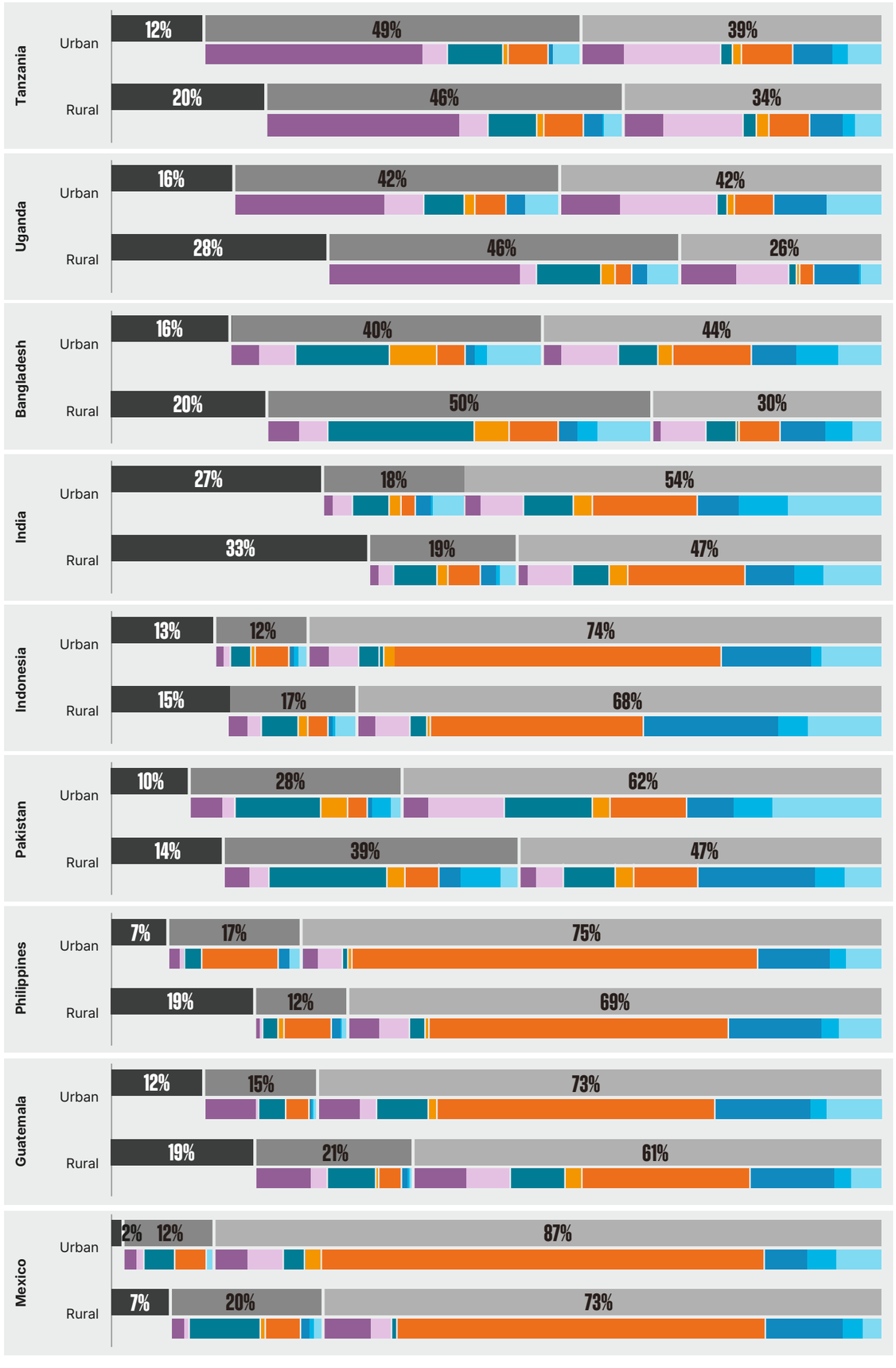
Across the countries surveyed, the top barriers to adopting and using mobile internet are mobile internet awareness, affordability (of handsets and data), literacy and digital skills, safety and security concerns, and the connectivity experience[12] (see Figure 5 and Appendices for more detail). The extent to which each is reported varies according to the stage of the user journey, as well as by country and by demographic. This report explores these nuances further.

12 Connectivity experience as a barrier represents an aggregate of those who reported "using the internet on a mobile phone is too slow (e.g. connection speeds)" or "there is inconsistent coverage (e.g. connection drops) or no coverage to access the internet in my area".

Figure 5: Barriers to mobile internet adoption and use across survey countries
Percentage of total adult population







Base: Total population aged 18+. N = from 220 to 1,493 for rural and from 292 to 848 for urban.
Source: GSMA Consumer Survey, 2024

4. AWARENESS OF MOBILE INTERNET

While overall awareness of mobile internet is relatively high, it remains a critical initial barrier to adoption in many contexts

Between 2017 and 2019, mobile internet awareness rose sharply across the low- and middle-income countries (LMICs) surveyed. Since then, the rate of growth has slowed markedly. In many cases, awareness levels tend to stall once they reach 70–80%, indicating that reaching the final segment of the population – typically the last 20–30% – is considerably more challenging.

Awareness of mobile internet is generally high, with more than 80% of the population in 11 of the 15 countries surveyed aware of mobile internet (see Figure 6). In the remaining four countries, 25–41% of the population have yet to hear of mobile internet – a significant proportion. Awareness levels also vary significantly within countries, with a number of the countries surveyed in Sub-Saharan Africa having the biggest differences in awareness levels between those living in rural versus urban areas. For example, in Nigeria, only 4% of those living in urban areas are unaware of mobile internet, compared to 22% in rural areas (see Figure 7). As many as 48% of rural respondents in Rwanda remain unaware, compared to 23% of their urban counterparts. Awareness also varies by other demographics. In Uganda, 19% of men remain unaware of mobile internet, compared to 30% of women.[13]

Given that awareness is a fundamental first step towards adoption, these persistent gaps – combined with the overall slowdown in awareness growth rates since 2019 – highlight a concerning barrier to broader mobile internet uptake.

In most surveyed countries, more than

80%

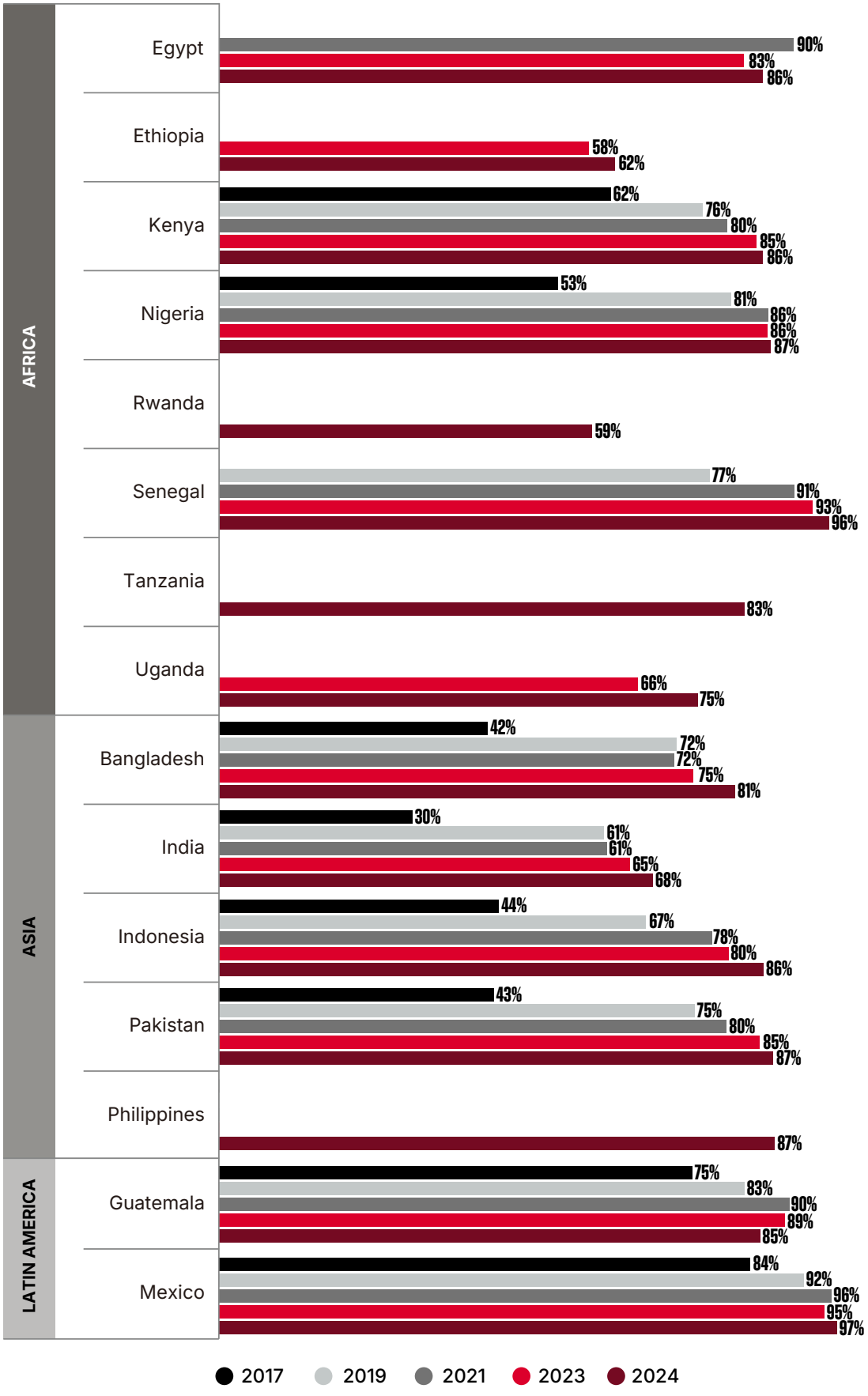
of the population are **aware of mobile internet,** but **awareness is lower for**

women and those living in

rural areas, and remains a **significant barrier in some countries**

13 The Mobile Gender Gap Report 2025, GSMA, 2025

Figure 6: Mobile internet awareness, 2017–2024
Percentage of total adult population

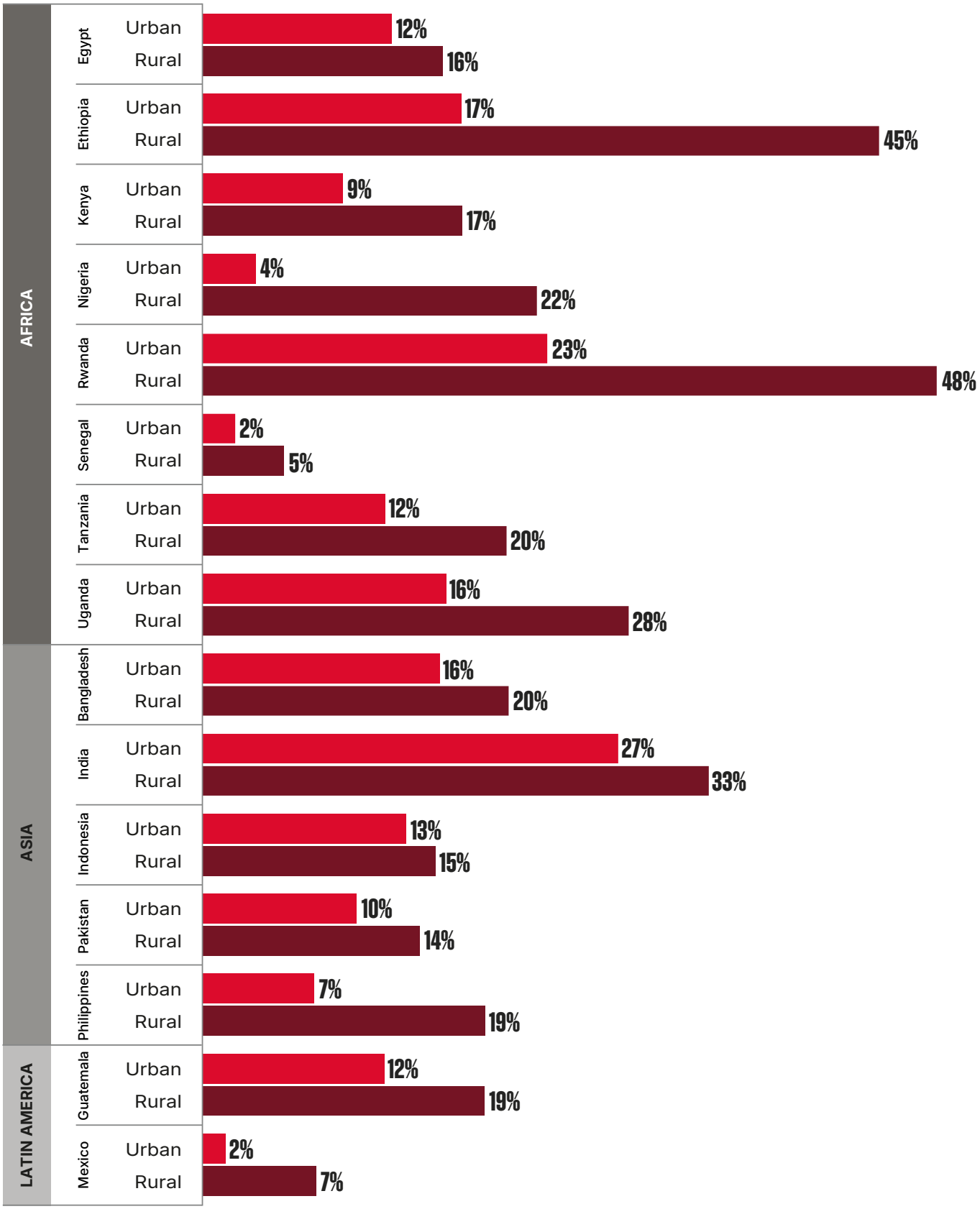


Base: Total population aged 18+. N= from 1,000 to 2,378.

Note: A person is considered aware of mobile internet if they have either used mobile internet before or have not used mobile internet but are aware they can access the internet on a mobile phone.

Source: GSMA Consumer Survey, 2017–2024

Figure 7: Unaware of mobile internet 2024, urban/rural
Percentage of total adult population



Base: Total population aged 18+. N = from 220 to 1,493 for rural and from 292 to 848 for urban.

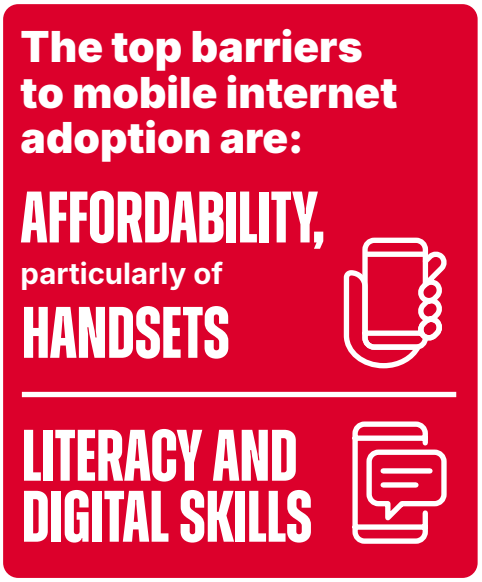
Note: A person is considered aware of mobile internet if they have either used mobile internet before or have not used mobile internet but are aware they can access the internet on a mobile phone.

Source: GSMA Consumer Survey, 2024

5. BARRIERS TO MOBILE INTERNET ADOPTION AMONG THOSE WHO ARE AWARE OF IT

Handset affordability and literacy & digital skills remain the top barriers to mobile internet adoption among those aware of it

Among individuals who are aware of mobile internet but have not yet adopted it, two key barriers consistently emerge: affordability (particularly of internet-enabled handsets) and limited literacy & digital skills. These challenges are cited most frequently across both urban and rural populations (see Table 1), as well as among both men and women. While mentioned less often, concerns about safety and security also remain a significant deterrent, ranking as the third most commonly reported barrier overall.



There are distinct regional patterns in how the top barriers to mobile internet adoption are reported. In the Sub-Saharan African countries surveyed, handset affordability was most often reported as the top barrier. In contrast, across most surveyed Asian countries, limited literacy and digital skills were identified as the primary challenge. These regional trends align with findings from previous years. In the Latin American countries surveyed, safety and security concerns have historically been the most commonly reported top barrier.[14] Interestingly, recent data suggests a shift. Affordability (primarily of internet-enabled handsets) and literacy & digital skills are becoming more prominent concerns than before, with safety and security the third most commonly reported barrier in Guatemala and the second most common in Mexico.

Certain barriers are particularly pronounced in specific contexts. In Pakistan, for example, restrictive social norms – such as family disapproval – play a significant role,[15] especially in rural contexts and for women. Meanwhile, the connectivity experience was a particularly substantial barrier among rural respondents in Ethiopia and Philippines.

14 The safety and security barrier encompasses concerns relating to unwanted contact online, concerns relating to being exposed to harmful content online, and concerns relating to identity and other private information being stolen or misused.

15 The Mobile Gender Gap Report 2025, GSMA, 2025

Table 1: Top barriers to mobile internet adoption for those aware of mobile internet[16]
Based on the single most important reported barrier to adopting mobile internet

	Urban			Rural		
	1	2	3	1	2	3
ALL COUNTRIES	**Affordability**	**Literacy and digital skills**	**Safety and security**	**Affordability**	**Literacy and digital skills**	**Safety and security**
Egypt	Literacy and digital skills	Affordability	Relevance	Literacy and digital skills	Affordability	Relevance
Ethiopia	Affordability	Literacy and digital skills	Relevance	Affordability	Literacy and digital skills	Connectivity experience
Kenya	Affordability	Literacy and digital skills	Safety and security	Affordability	Literacy and digital skills	Safety and security
Nigeria	Affordability	Literacy and digital skills	Do not have time to use mobile internet	Literacy and digital skills	Affordability	Safety and security
Rwanda	Affordability	Safety and security	Literacy and digital skills	Affordability	Safety and security	Literacy and digital skills
Senegal	Affordability	Literacy and digital skills	Safety and security	Affordability	Literacy and digital skills	Safety and security
Tanzania	Affordability	Literacy and digital skills	Safety and security	Affordability	Literacy and digital skills	Safety and security
Uganda	Affordability	Literacy and digital skills	Safety and security	Affordability	Literacy and digital skills	Do not have time to use mobile internet
Bangladesh	Literacy and digital skills	Affordability	Relevance	Literacy and digital skills	Affordability	Safety and security
India	Literacy and digital skills	Affordability	Connectivity experience	Literacy and digital skills	Safety and security	Affordability
Indonesia	Safety and security	Literacy and digital skills	Affordability	Literacy and digital skills	Affordability	Safety and security
Pakistan	Literacy and digital skills	Affordability	Relevance	Literacy and digital skills	Affordability	Social norms
Philippines	Safety and security	Literacy and digital skills	Affordability	Safety and security	Literacy and digital skills	Connectivity experience
Guatemala	Affordability	Literacy and digital skills	Safety and security	Affordability	Literacy and digital skills	Safety and security
Mexico	Literacy and digital skills	Safety and security	Affordability	Literacy and digital skills	Safety and security	Affordability

Base: Adults aged 18+ who have not used mobile internet in the past three months on any device, despite being aware of mobile internet (excludes those not aware of mobile internet). N = from 35 to 366 for rural and from 51 to 171 for urban.

Note: The barriers in the above table are composite barriers. These composite barriers are aggregates (not averages) of the responses for between two and five sub-barriers (see Appendix 1). Fundamental enabler-related barriers are not grouped as a composite since they cover a disparate range of topics. Rankings indicate the relative aggregated proportion of respondents who answered, "This is the most important reason stopping me" to the question, "Which one of those factors would you say is the single most important reason stopping you from using the internet on a mobile phone?"

Source: GSMA Consumer Survey, 2024

16 See The Mobile Gender Gap Report 2025 for a gender disaggregated table.

Tackling handset affordability must remain a key focus for closing the usage gap

Among those aware of mobile internet, affordability (particularly of handsets) remains the most commonly reported top barrier to mobile internet adoption across the countries surveyed. Across LMICs, the median cost of an entry-level internet-enabled handset increased from around $50 in 2023 to around $54 in 2024, while median affordability remained relatively unchanged at just under 16% of average monthly income (see the report Affordability of Internet-Enabled Handsets and Data for more detailed analysis).

In Sub-Saharan Africa, where affordability remains the top reported barrier among those aware of mobile internet in all seven survey countries, an entry-level internet-enabled device represents 87% of average monthly income for the poorest 20% and 32% for women.

Around two thirds (68%) of the world's population who live within a mobile broadband network but are not using it do not own a mobile phone. GSMA analysis shows that a device of $30 could make handsets affordable to 1.6 billion individuals in the usage gap, highlighting the importance of increasing handset affordability.

Lack of affordability of devices could also be playing a significant role in the extensive use of handsets that use older technologies. Even among the 58% of the world's population who are using mobile internet on their own device, a significant proportion are using internet on feature phones or 3G-enabled smartphones, reaching as high as 60% of those using mobile internet in Sub-Saharan Africa. As operators look to retire legacy networks, this reliance on older technology devices could hinder their ability to migrate consumers and businesses to 4G or 5G devices, since many of those may be at risk of losing access when faced with the need to purchase a more expensive 4G or 5G device to continue using mobile internet (see the report Network Coverage and Infrastructure for more information on network sunsets).

For detailed analysis related to the findings above, see the report Affordability of Internet-Enabled Handsets and Data.

Across LMICs,

affordability of entry-level handsets has remained relatively unchanged at

16%

of monthly income

Affordability of

devices and data continues to disproportionately impact the underserved

A device of

$30

could make handsets affordable to up to

1.6 BILLION PEOPLE

who live within mobile broadband coverage but are not using mobile internet

Limited literacy and digital skills continue to pose a major barrier to mobile internet adoption

Across the countries surveyed, limited literacy and digital skills was overall the second most commonly reported top barrier to mobile internet adoption among those aware of mobile internet. It was identified as the leading barrier in most of the Asian countries included in the study. Those most likely to cite literacy and digital skills as the top barrier are typically women, individuals living in rural areas, persons with disabilities, people over the age of 35 years old, and those from lower-income backgrounds. These groups are often disproportionately affected by structural inequalities, such as limited access to quality education or opportunities to learn digital skills.

The literacy and digital skills barrier encompasses illiteracy as well as four digital skills-related barriers: not knowing how to use a mobile; not knowing how to access the internet on a mobile; not having the time to learn how to use the internet on a mobile; and insufficient support for learning how to use the internet on a mobile.

Illiteracy was a more frequently reported top barrier in eight of the 15 countries surveyed (Egypt, Nigeria, Rwanda, Senegal, Bangladesh, India, Pakistan and Guatemala), while other digital skills barriers were cited more often in three countries (Tanzania, Philippines and Mexico). In the remaining four countries, both illiteracy and a lack of digital skills were reported at similar levels. Addressing this barrier will require targeted efforts to improve both basic literacy and digital skills among underserved populations.

Tools such as the GSMA Mobile Internet Skills Training Toolkit (MISTT) can help teach people the basic digital skills needed to access and use mobile internet. MISTT is a set of free resources using a 'train the trainer' approach. It consists of short lessons available in PDF and video formats that can be easily adapted to local needs and languages. It has been used to train more than 80 million people in over 40 countries.[17, 18]

17 See also Delivering digital skills training for impact: Learnings and insights from Sierra Leone, GSMA, 2024, for a recent evaluation of the MISTT toolkit in Sierra Leone. The evaluation provides insights into the early impact of training and provides learnings on how to implement such training initiatives effectively.

18 The GSMA Mobile Internet Skills Training Toolkit (MISTT)

6. BARRIERS TO FURTHER MOBILE INTERNET USE FOR EXISTING USERS

Existing mobile internet users still face barriers to greater use of mobile internet

It is important to understand not only the barriers preventing people from starting to use mobile internet, but also those that stop existing mobile internet users using it more to meet their needs. Previous GSMA research found that a significant portion of mobile internet users want to use it more. Across the countries surveyed, an average of 43% of mobile internet users had reported wanting to use it more. The figure was even higher among women and rural users.[19] Even after adoption, many users continue to face barriers that prevent them using it to fully meet their digital needs.

Barriers to further mobile internet use among existing users vary significantly across countries

Barriers to further use of mobile internet differ more by country than the barriers seen at the adoption stage in the mobile internet user journey (see Table 2).

At this later stage of the journey, safety and security concerns become more prominent. These concerns are the most frequently cited top barrier to further use among urban users across all surveyed countries and are second most reported among rural users. The concerns tend to be related to scams, fraud and information security, followed by harmful content, unwanted contact and the reliability of information online. High levels of reported safety and security concerns tend to correlate with high levels of mobile internet adoption. This is likely because as more people come online, digital threats become more common and increase both awareness of these harms and concerns about them. For example, the two countries with the highest levels of mobile internet adoption in the sample are Mexico and the Philippines. These are also the countries with the highest proportions of mobile internet users reporting safety and security concerns as their top barrier to further use. As more people come online, addressing these concerns is essential to ensure they feel confident that they can keep themselves, families and personal information safe, and reap the full benefits of mobile internet.

Affordability also continues to be a major challenge – but the nature of the concern varies depending on stage of the mobile internet user journey. While handset cost is a major obstacle to initial adoption, data affordability emerges as a more pressing concern for those already using mobile internet in most countries surveyed. In Kenya, Nigeria, Senegal and Tanzania, data costs were a particularly significant issue, ranking as the top reported barrier to further use among both urban and rural respondents. While handset affordability still limits further use in some contexts,[20] it is generally associated more with adoption than continued usage.

19 The State of Mobile Internet Connectivity Report 2024, GSMA, 2024
20 Notably, in Ethiopia, Rwanda and Uganda

The connectivity experience also becomes a much more significant barrier in both urban and rural settings as users progress on their mobile journey. It is the third most significant barrier to further use in both urban and rural settings overall.[21] In rural areas of Egypt, Ethiopia and Pakistan, it is the top reported barrier to further mobile internet use. Although 96% of adults in low- and middle-income countries (LMICs) lived within the footprint of a mobile broadband network in 2024 (and 93% were covered by 4G), many users still face connectivity challenges. This can be for a variety of reasons. For example, in most survey countries, 4G coverage is at more than 85%, but a significant proportion of internet users still use a feature phone or 3G smartphone, which would limit their connectivity experience. In Egypt, 29% of current mobile internet users identify the connectivity experience as the top barrier to using it more. Although 99% of Egypt's population is covered by 4G, nearly half of all mobile broadband connections are still on 3G. In addition to device limitations, network performance may impact user experience. Although network quality has improved across LMICs, it still lags that of high-income countries (see Network Coverage and Infrastructure).

Digital skills are reported much less often as a major barrier to further use than as a barrier to adoption.

21 Connectivity experience as a barrier represents an aggregate of those who reported: "Using the internet on a mobile phone is too slow (e.g. connection speeds)" or "There is inconsistent coverage (e.g. connection drops) or no coverage to access the internet in my area".

Table 2: Top barriers to further mobile internet use for existing mobile internet users[22]
Based on the single most important reported barrier to using mobile internet more

	Urban			Rural		
	1	2	3	1	2	3
ALL COUNTRIES	**Safety and security**	**Affordability**	**Connectivity experience**	**Affordability**	**Safety and security**	**Connectivity experience**
Egypt	Safety and security	Connectivity experience	Affordability	Connectivity experience	Affordability	Safety and security
Ethiopia	Affordability	Connectivity experience	Do not have time to use mobile internet	Connectivity experience	Affordability	Internet drains my battery
Kenya	Affordability	Safety and security	Connectivity experience	Affordability	Safety and security	Connectivity experience
Nigeria	Affordability	Safety and security	Connectivity experience	Affordability	Safety and security	Do not have time to use mobile internet
Rwanda	Affordability	Safety and security	Connectivity experience	Affordability	Safety and security	Connectivity experience
Senegal	Safety and security	Affordability	Literacy and digital skills	Affordability	Connectivity experience	Safety and security
Tanzania	Affordability	Safety and security	Connectivity experience	Affordability	Safety and security	Connectivity experience
Uganda	Affordability	Connectivity experience	Safety and security	Affordability	Connectivity experience	Safety and security
Bangladesh	Safety and security	Affordability	Connectivity experience	Affordability	Connectivity experience	Safety and security
India	Safety and security	Affordability	Literacy and digital skills	Safety and security	Affordability	Connectivity experience
Indonesia	Safety and security	Connectivity experience	Affordability	Safety and security	Connectivity experience	Affordability
Pakistan	Affordability	Literacy and digital skills	Safety and security	Connectivity experience	Safety and security	Literacy and digital skills
Philippines	Safety and security	Connectivity experience	Affordability	Safety and security	Connectivity experience	Affordability
Guatemala	Safety and security	Connectivity experience	Affordability	Safety and security	Affordability	Connectivity experience
Mexico	Safety and security	Affordability	Connectivity experience	Safety and security	Connectivity experience	Affordability

Base: Mobile internet users aged 18+. N = from 88 to 524 for rural and from 74 to 427 for urban.

Note: The barriers in the table above are composite barriers. These composite barriers are aggregates (not averages) of the responses for between two and five sub-barriers (see Appendix 1). Fundamental enabler-related barriers are not grouped as a composite since they cover a disparate range of topics. Rankings indicate the relative aggregated proportion of respondents who answered, "This is the most important reason stopping me" to the question, "Which one of those factors would you say is the single most important reason stopping you from using the internet more on a mobile phone?".

Source: GSMA Consumer Survey, 2024

22 See The Mobile Gender Gap Report 2025 for a gender disaggregated table.

SPOTLIGHT: NOT ALL MOBILE INTERNET USERS ARE ACCESSING IT ON THEIR OWN DEVICE, LIMITING THEIR INTERNET EXPERIENCE

In all the countries surveyed, the vast majority of mobile internet users own an internet-enabled phone, particularly a smartphone, and are accessing the internet on their own device. For example, in Bangladesh, 94% of urban mobile internet users and 96% of their rural counterparts also own an internet-enabled phone.

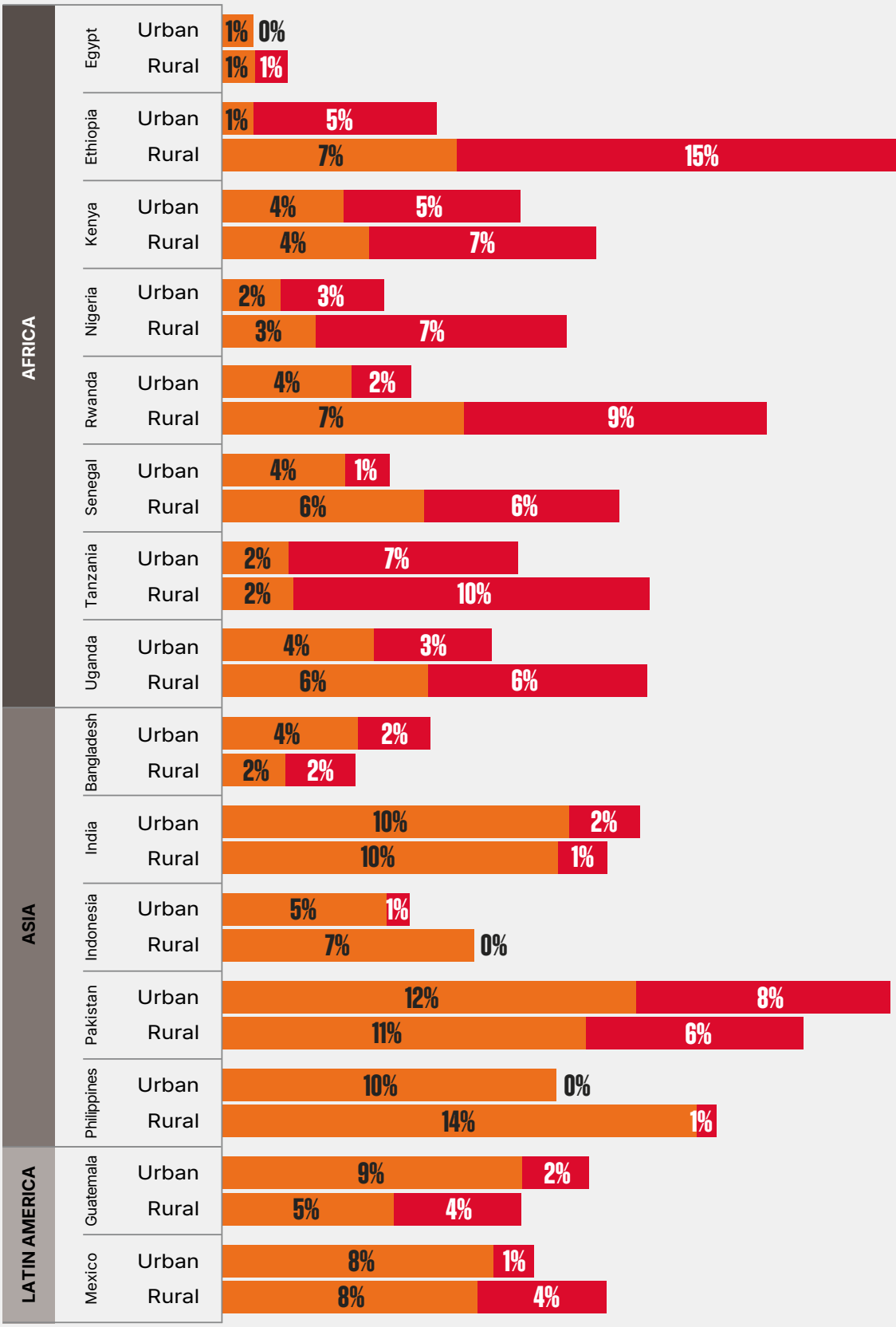
However, some mobile internet users do not own an internet-enabled phone and must therefore be accessing it from someone else's device. In some contexts, users accessing the internet on someone else's mobile phone are more likely to be women or rural respondents. The trend is especially pronounced among women in Pakistan and India, where 35% and 18% of women mobile internet users respectively rely on borrowing someone else's internet-enabled phone, compared to 6% and 7% of their male counterparts. It is also evident among rural users in Ethiopia and Rwanda, where 22% and 16% of rural mobile internet users respectively rely on borrowing someone else's internet-enabled phone, compared to 6% of their urban counterparts in both countries (see Figure 8).

While phone sharing enables access to some services, it limits the ability of borrowers to use life-enhancing services and gain digital literacy skills. Sharing devices does not provide the privacy required for some mobile services, such as maternal health apps, which female users may not feel comfortable accessing on a shared phone. Borrowing also prevents service providers from accurately providing information to an end user.[23] In contrast, accessing mobile internet on their own device means people can use the internet with greater privacy, more conveniently, regularly and in more ways to meet their needs.

For example, in Pakistan, 91% of women who own an internet-enabled phone access mobile internet every day, compared to just 54% of women who only use mobile internet on someone else's phone. Mobile internet users who own an internet-enabled phone also engage in, on average, a greater number and variety of mobile internet use cases every day than those who borrow a mobile phone to use the internet.[24]

23 Bridging the gender gap: Mobile access and usage in low- and middle-income countries, GSMA, 2015
24 The Mobile Gender Gap Report 2025, GSMA, 2025

Figure 8: Mobile internet users who do not own an internet-enabled phone
Percentage of mobile internet users



Source: GSMA Consumer Survey, 2024

Base: Mobile internet users aged 18+. N = 113 to 736 for rural and N = 129 to 734 for urban.

Note: Respondents are categorised according to the most advanced device they own and can only be included in one category. Therefore, if someone owned a smartphone and a basic phone, they would be categorised as a smartphone owner and not captured in this data. Data labels are rounded.

Perceived lack of relevance is not a top reported barrier but does play an important role in preventing people from adopting and using mobile internet

While relevance was not among the top reported barriers to adoption and further use of mobile internet, it remains an important underlying factor. It is commonly reported as a barrier more generally among survey respondents.

The perception of relevance depends on a respondent's awareness of all the various uses of mobile internet. Across the countries surveyed, almost all mobile internet users were aware of the most common use cases: online calls, video calls, instant messaging, social media and watching online videos. However, awareness dropped off for less frequently used use cases, particularly among respondents who were rural, women, aged over 35 years old and with lower literacy (see the report Understanding How People are Using Mobile Internet in Low-and Middle-Income Countries for more details).

Availability and awareness[25] of online content and services that meet users' preferences and needs, including those that are accessible, easy to use and in local languages, are key enablers of mobile internet adoption and usage. Without them, people will not have a compelling reason to invest time and resources into accessing the internet.

Furthermore, relevance intersects with other major barriers. For example, it influences perceived value and willingness to pay – both of which directly impact affordability.[26]

Key to providing locally relevant content is ensuring that a broad range of languages are covered to make content accessible.[27] Of the more than 4 million mobile apps active and available on the Apple App Store, Google Play and other app platforms, 70% are available in English. The next most popular mobile app language is Spanish, with around 15% of mobile apps. In the top 10 languages in which mobile apps are available, only three are non-European-based languages – Japanese, Indonesian and Mandarin.

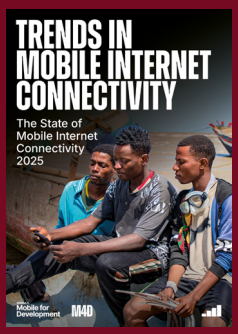
25 Being aware of mobile internet does not necessarily translate to being aware of services that may be relevant to people's lives
26 Making internet-enabled phones more affordable in low- and middle-income countries, GSMA, 2022
27 The State of Mobile Internet Connectivity Report 2023, GSMA, 2023. See Spotlight: The impact of digital language support.

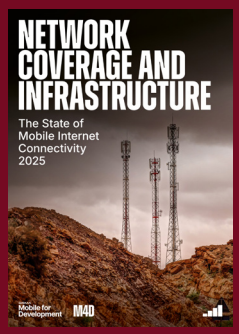
PEOPLE WILL FACE VARIOUS BARRIERS AT THE DIFFERENT STAGES OF MOBILE INTERNET ADOPTION AND USE

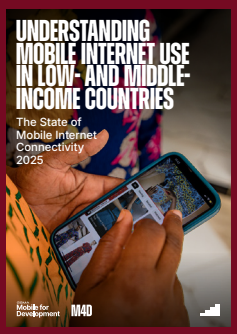
It is important to understand and address the barriers people face at each stage to ensure they can use the internet to meet their needs. These barriers include affordability, knowledge and skills, safety and security concerns, relevance and other fundamental enablers to access. These barriers are interconnected and complex. They cannot be addressed in isolation. A holistic approach is needed – one that takes into account the different barriers, as well as the complex social, economic and cultural factors that underpin them.

For detailed recommendations, see The State of Mobile Internet Connectivity 2025 Overview Report.

This research is part of The State of Mobile Internet Connectivity 2025 report series. The other reports can be accessed below:







APPENDICES

APPENDIX 1: THE GSMA CONSUMER SURVEY

This report uses the results of the GSMA Consumer Survey. As part of the survey, the GSMA conducted face-to-face interviews in 15 LMICs in 2024, 12 LMICs in 2023, 12 LMICs in 2022, 10 LMICs in 2021, eight LMICs in 2020, 15 LMICs in 2019, 18 LMICs in 2018 and 24 LMICs in 2017.

The 15 LMICs surveyed in 2024 were Bangladesh, Egypt, Ethiopia, Guatemala, India, Indonesia, Kenya, Mexico, Nigeria, Pakistan, Philippines, Rwanda, Senegal, Tanzania and Uganda. The countries included in the survey across all years account for 79% of the population in LMICs.

Survey methodology

In all countries, a nationally representative sample of around 1,000 adults aged 18 years old and above was surveyed – with the exception of India and China,[28] where the sample was around 2,000, and Ethiopia, where a full nationally representative sample was not achievable due to local conflict and security concerns.[29] The sampling frame was predominantly based on data from national statistics offices, including census data where possible and a range of other sources. Sampling points where interviews were conducted were distributed proportionately between urban and rural areas in accordance with census data and national statistics offices. To ensure a wide geographical coverage and to reduce the effects of clustering, a minimum of 100 sampling points were used in each country (200 in India). However, very remote areas or those with security concerns were excluded.

The research used a mix of purposive and random sampling approaches. Depending on the country, sampling points were either randomly distributed – with an administrative area's probability of selection proportionate to the size of its population (random sampling) – or selected to reflect the linguistic, cultural and economic variations of each country (purposive sampling).

Local experts and national statistics offices checked the sampling frames to ensure they were valid and representative.

Survey interviews were conducted under the direction of Ipsos with individuals in their local language(s) by both male and female interviewers. Data was collected using computer-assisted personal interviewing (CAPI). In more remote rural areas in countries such as Bangladesh, India and Pakistan, local teams tried to ensure female interviewers conducted the survey for female respondents, where practical. Interviews were conducted at respondents' homes. Within sampling points, systematic random routes were used for residence selection.

Weights were applied to the data using a random iterative method (RIM) whereby several non-interlocking quotas were applied in an iterative sequence and repeated as many times as needed for the quotas to converge. This corrected any imbalances in the profiles, although weightings (and the resulting impact on effective sample sizes) were minimised as much as possible by controlling key quota variables over the course of the fieldwork.

28 China was included in the 2017 and 2018 Consumer Surveys.

29 No interviews were conducted in the Amhara region, Western Tigray, Metekel-Zone (Benishangul Gumz), Zone 2 (Afar) and Guji-Zone (Oromia) due to local conflict and security concerns. These areas represent 27% of the population in Ethiopia, so the sample was representative of the remaining 73% who live outside these areas.

Question on mobile internet use

Survey respondents were asked **"Have you ever used the internet on a mobile phone?"** and to select from one of the following answers:

- Yes, I have used the internet on a mobile phone in the last three months
- Yes, I have used the internet on a mobile phone longer than three months ago
- No, I have never used the internet on a mobile phone
- Don't know

In this report, a respondent to the GSMA Consumer Survey is considered a mobile internet user if they have used the internet on a mobile phone in the last three months.

To identify regular users of mobile internet, these mobile internet users were then asked, **"How frequently do you use the internet on a mobile phone?"** and to select from one of the following answers:

- At least once a day
- At least once a week
- At least once a month
- Less than once a month

In this report, a respondent to the GSMA Consumer Survey is considered a regular mobile internet user if they use the internet on a mobile phone at least once a day.

Question on smartphone ownership

Survey respondents were asked **"Do you have a mobile phone that you have the sole or main use of? This may be a handset that you carry with you most days"**.

They were then asked a follow-up question, **"What type of mobile phone is that?"** and to select from one of the following answers:

- A basic mobile phone
- A feature mobile phone
- A smartphone

Prompts were provided to help identify the handset according to these three categories. In this report, a respondent to the GSMA Consumer Survey is considered a smartphone owner if they have a smartphone that they have sole or main use of.

Question on mobile internet awareness

Survey respondents were asked **"Which of the following best describes your knowledge of accessing the internet on a mobile phone?"** and to select from one of the following answers:

- I was not aware it is possible to access the internet on a mobile phone
- I was aware it is possible to access the internet on a mobile phone

In this report, a respondent to the GSMA Consumer Survey is aware of mobile internet if they have ever used the internet on a mobile phone, or are aware it is possible to access the internet on a mobile phone.

Questions on barriers to mobile internet adoption and further use

Survey respondents who were aware of mobile internet but had not used it in the previous three months were asked what stops them from using the internet on a mobile phone. Survey respondents who had used mobile internet in the previous three months were asked what stops them from using the internet more on a mobile phone.

These questions were asked in three stages:

1. For each of the possible reasons, please indicate whether this is something that stops you at all from using the internet [more (if existing user)] on a mobile phone.

2. Which, if any, of those factors would you say are the most important reasons stopping you from using the internet [more (if existing user)] on a mobile phone?

3. Which one of those factors would you say is the single most important reason stopping you from using the internet [more (if existing user)] on a mobile phone?

For the purposes of analysis in this report, responses were grouped into similar categories. Below are the barriers listed in the survey, along with the relevant categorisation.

Barriers to mobile internet adoption:

Literacy and digital skills
- I don't feel confident or know how to use the internet on a mobile phone
- I have difficulties with reading and writing
- I find it difficult to use a mobile in general (calling, texting or mobile internet)
- There is not always someone available to teach or help me to use the internet on a mobile phone

Relevance
- There is not enough in my own language on the internet
- I do not find the internet relevant enough for me (not useful or not interesting)

Affordability
- The cost of buying a [better quality (if internet-enabled phone owner)] mobile phone that can access the internet is too high for me
- The cost of buying data to use the internet on a mobile phone is too high for me

Safety and security
- I am concerned about receiving unwanted contact from people online (e.g. scam emails or unwanted messages on social media)
- I am concerned that it might expose myself or my family to harmful content
- I am concerned that my identity or other private information will be stolen or misused
- I don't trust information on websites or apps
- I am concerned about falling victim to scams or fraud on the internet

Fundamental enablers
- There is inconsistent coverage (e.g. connection drops) or no coverage to access the internet
- Using the internet on a mobile phone is too slow (e.g. connection speeds)
- My family does not approve of me using the internet on a mobile phone
- It is not always easy for me to find or get to a suitable mobile phone agent or representative to buy mobile internet data from
- Using the internet on a mobile phone uses too much battery
- I do not have time to use the internet on a mobile phone
- The phone that I could use to access the internet is used by other people

Barriers to further mobile internet use:

Literacy and digital skills
- I don't always feel confident or know how to use the internet on a mobile phone
- I have difficulties with reading and writing
- I find it difficult to use a mobile in general (calling, texting or mobile internet)
- There is not always someone available to teach or help me to use the internet more on a mobile phone

Relevance
- There is not enough in my own language on the internet
- I do not find the internet relevant enough to use it more (not useful or not interesting)

Affordability

- The cost of buying a [better quality (if internet-enabled phone owner)] mobile phone that can access the internet is too high for me
- The cost of buying data to use the internet on a mobile phone is too high for me

Safety and security

- I am concerned about receiving unwanted contact from people online (e.g. scam emails or unwanted messages on social media)
- I am concerned that it might expose myself or my family to harmful content
- I am concerned that my identity or other private information will be stolen or misused
- I don't always trust information on websites or apps
- I am concerned about falling victim to scams or fraud on the internet

Fundamental enablers

- There is inconsistent coverage (e.g. connection drops) or no coverage to access the internet
- Using the internet on a mobile phone is too slow (e.g. connection speeds)
- My family does not always approve of me using the internet on a mobile phone
- It is not always easy for me to find or get to a suitable mobile phone agent or representative to buy mobile internet data from
- Using the internet on a mobile phone uses too much battery
- I do not have time to use the internet more on a mobile phone
- I am only allowed to use the internet on a mobile phone for specific reasons
- I am only allowed to use the internet on a mobile phone for a limited amount of time or at certain times of the day
- The phone I use to access the internet is often used by other people

APPENDIX 2: ADDITIONAL FIGURES

In the GSMA Consumer Survey 2024, respondents who were aware of mobile internet were asked to identify the barriers preventing them from using mobile internet. Respondents were first asked to identify all relevant barriers, then to identify those that were most important and, finally, the single most important barrier. Strongly related or thematically overlapping barriers were grouped into composites. Figure 9 shows the top barriers reported by urban and rural respondents in surveyed markets in 2024. This approach was also taken to identify the barriers to further use of mobile internet for respondents using mobile internet. Figure 10 shows the top barriers reported by urban and rural respondents.

Figure 9: Top barriers to mobile internet use

Percentage of mobile users who are aware of mobile internet but do not use it, and who identified the following as the single most important barrier to using mobile internet

		AFFORDABILITY				LITERACY AND DIGITAL SKILLS								RELEVANCE				SAFETY AND SECURITY										FUNDAMENTAL ENABLERS											
		Handset cost		Data cost		Reading/ writing difficulties		Difficulties using a mobile in general		Not confident using mobile internet		Not sufficient support in learning to use the internet		Internet is not relevant for me		Insufficient content in local language		Strangers contacting me		Harmful content (self/family)		Information security		Do not trust information on websites or apps		Scams or fraud		Inconsistent/ no coverage		Slow connection speeds		Internet drains my battery		Access to agent support		Do not have time to use mobile internet		Shared phone access		Family does not approve	
		U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R
AFRICA	Egypt	26%	29%	6%	4%	26%	28%	13%	9%	4%	3%	2%	5%	3%	5%	3%	3%	2%	1%	3%	1%	2%	1%	0%	0%	0%	3%	3%	3%	0%	1%	0%	1%	0%	0%	5%	1%	0%	1%	3%	3%
	Ethiopia	42%	41%	5%	4%	3%	22%	3%	5%	15%	8%	0%	1%	11%	3%	0%	1%	4%	0%	0%	0%	0%	0%	1%	0%	0%	0%	2%	5%	3%	2%	1%	2%	1%	1%	9%	3%	0%	0%	0%	1%
	Kenya	58%	55%	5%	3%	5%	8%	0%	2%	5%	6%	2%	1%	3%	3%	2%	0%	5%	2%	2%	2%	2%	3%	0%	1%	2%	7%	1%	2%	0%	0%	2%	0%	3%	0%	2%	2%	2%	0%	0%	0%
	Nigeria	41%	29%	2%	6%	24%	27%	2%	3%	3%	5%	2%	2%	3%	3%	0%	1%	0%	3%	3%	2%	1%	2%	1%	2%	1%	4%	2%	2%	0%	0%	0%	2%	1%	0%	7%	2%	2%	2%	4%	3%
	Rwanda	50%	56%	1%	1%	12%	8%	0%	1%	1%	1%	0%	3%	1%	1%	4%	3%	0%	2%	9%	4%	1%	2%	4%	0%	4%	8%	3%	4%	3%	1%	0%	1%	0%	1%	4%	2%	4%	1%	1%	0%
	Senegal	28%	57%	7%	5%	17%	13%	4%	1%	1%	2%	0%	0%	11%	2%	1%	0%	2%	2%	1%	1%	1%	2%	5%	2%	4%	5%	2%	3%	3%	1%	4%	1%	0%	0%	5%	4%	3%	0%	0%	1%
	Tanzania	58%	54%	7%	8%	5%	3%	3%	2%	5%	3%	2%	6%	0%	1%	1%	1%	0%	1%	4%	1%	0%	2%	0%	2%	6%	5%	0%	2%	1%	4%	3%	2%	0%	0%	3%	3%	1%	1%	0%	0%
	Uganda	46%	54%	12%	5%	8%	8%	1%	2%	3%	5%	1%	3%	2%	4%	1%	0%	2%	2%	2%	1%	1%	0%	0%	0%	4%	2%	5%	4%	1%	1%	1%	0%	1%	2%	4%	5%	5%	2%	0%	0%
ASIA	Bangladesh	9%	8%	12%	7%	23%	24%	3%	6%	1%	4%	3%	3%	14%	7%	1%	2%	2%	3%	3%	5%	0%	3%	1%	2%	3%	1%	1%	4%	2%	1%	2%	5%	5%	4%	2%	3%	8%	3%	4%	5%
	India	7%	7%	13%	10%	11%	20%	7%	3%	5%	2%	3%	3%	7%	4%	1%	3%	0%	4%	4%	2%	3%	5%	0%	2%	4%	8%	6%	5%	4%	5%	8%	3%	2%	2%	3%	2%	9%	4%	2%	3%
	Indonesia	9%	14%	8%	11%	13%	12%	4%	10%	3%	3%	2%	4%	3%	6%	2%	2%	2%	3%	10%	0%	6%	6%	2%	0%	15%	7%	4%	4%	0%	0%	0%	0%	2%	2%	2%	9%	4%	6%	5%	2%
	Pakistan	15%	9%	6%	6%	31%	31%	5%	2%	2%	3%	2%	4%	10%	5%	2%	1%	0%	1%	6%	5%	2%	5%	1%	0%	0%	0%	0%	2%	2%	5%	1%	0%	0%	1%	2%	3%	2%	2%	9%	14%
	Philippines	8%	5%	3%	3%	5%	4%	3%	3%	5%	6%	1%	4%	0%	6%	0%	1%	7%	7%	3%	1%	14%	18%	12%	0%	21%	25%	5%	5%	3%	4%	1%	1%	1%	0%	6%	3%	1%	1%	0%	1%
LATIN AMERICA	Guatemala	44%	35%	2%	11%	12%	24%	6%	5%	2%	2%	5%	0%	0%	1%	0%	0%	2%	5%	0%	1%	6%	3%	3%	0%	10%	6%	2%	4%	0%	0%	1%	0%	0%	0%	2%	2%	2%	0%	2%	1%
	Mexico	10%	9%	5%	3%	6%	18%	5%	12%	13%	11%	10%	6%	3%	3%	0%	0%	4%	12%	4%	0%	14%	0%	0%	8%	8%	3%	3%	3%	0%	3%	2%	0%	0%	0%	7%	3%	3%	3%	1%	3%

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Least frequently cited barrier in that country — Most frequently cited barrier in that country

Base: Adults aged 18+ who have used a mobile phone in the last three months but have not used mobile internet in the last three months, despite being aware of mobile internet (excludes mobile users who are not aware of mobile internet). N = from 35 to 366 for rural and from 51 to 171 for urban.
Note: Percentages indicate the proportion of respondents who answered, "This is the most important reason stopping me" to the question, "Which one of those factors would you say is the single most important reason stopping you from using the internet on a mobile phone?"
Source: GSMA Consumer Survey, 2024

Figure 10: Top barriers to further mobile internet use

Percentage of mobile internet users who reported the following as the single most important barrier to using mobile internet more

		AFFORDABILITY				LITERACY AND DIGITAL SKILLS								RELEVANCE				SAFETY AND SECURITY										FUNDAMENTAL ENABLERS													
		Handset cost		Data cost		Reading/ writing difficulties		Difficulties using a mobile in general		Not confident using mobile internet		Not sufficient support in learning to use the internet		Internet is not relevant for me		Insufficient content in local language		Strangers contacting me		Harmful content (self/family)		Information security		Do not trust information on websites or apps		Scams or fraud		Inconsistent/ no coverage		Slow connection speeds		Internet drains my battery		Access to agent support		Do not have time to use mobile internet		Shared phone access		Family does not approve		Only allowed to use mobile internet for specific reasons		Only allowed to use mobile internet for a limited amount of time or at certain times of the day	
		U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R
AFRICA	Egypt	2%	5%	12%	23%	5%	4%	0%	1%	2%	0%	1%	1%	4%	1%	1%	0%	4%	5%	5%	3%	8%	3%	2%	2%	6%	6%	16%	32%	7%	4%	10%	2%	1%	0%	10%	8%	0%	0%	1%	1%	0%	2%	2%	0%
	Ethiopia	22%	14%	12%	10%	0%	4%	0%	1%	1%	2%	0%	0%	2%	2%	4%	1%	2%	1%	1%	2%	0%	1%	1%	0%	2%	1%	23%	22%	11%	16%	3%	9%	0%	0%	13%	6%	1%	5%	1%	3%	0%	0%	3%	1%
	Kenya	13%	11%	29%	26%	1%	0%	0%	0%	1%	0%	1%	2%	1%	0%	0%	1%	8%	4%	4%	4%	3%	7%	3%	2%	10%	8%	7%	10%	4%	7%	5%	7%	1%	1%	4%	5%	3%	3%	0%	0%	2%	1%	2%	1%
	Nigeria	10%	14%	19%	17%	9%	3%	0%	1%	3%	1%	0%	0%	2%	2%	1%	2%	6%	5%	2%	1%	0%	3%	3%	1%	9%	10%	12%	7%	2%	3%	9%	9%	1%	1%	6%	11%	1%	2%	1%	0%	1%	2%	3%	2%
	Rwanda	27%	30%	15%	13%	2%	1%	0%	1%	0%	1%	0%	4%	1%	1%	1%	1%	3%	1%	6%	7%	13%	9%	3%	3%	5%	6%	10%	12%	4%	6%	0%	1%	0%	0%	3%	1%	4%	1%	0%	2%	0%	0%	2%	0%
	Senegal	9%	7%	17%	30%	11%	5%	1%	0%	1%	0%	0%	0%	1%	0%	1%	0%	6%	3%	3%	2%	5%	5%	3%	1%	12%	9%	9%	17%	4%	5%	8%	3%	1%	0%	7%	9%	1%	2%	0%	1%	0%	0%	0%	1%
	Tanzania	14%	15%	32%	31%	1%	1%	2%	2%	0%	0%	1%	2%	2%	3%	1%	2%	3%	5%	3%	4%	2%	3%	1%	2%	8%	3%	11%	5%	2%	8%	6%	6%	1%	0%	4%	3%	0%	1%	2%	2%	2%	1%	1%	1%
	Uganda	19%	28%	30%	26%	2%	2%	0%	0%	2%	1%	0%	1%	2%	0%	0%	1%	4%	1%	1%	1%	1%	2%	1%	0%	6%	3%	12%	19%	4%	3%	8%	3%	0%	1%	5%	3%	4%	3%	0%	1%	0%	0%	0%	0%
ASIA	Bangladesh	5%	4%	17%	19%	1%	3%	5%	1%	3%	6%	2%	3%	4%	1%	0%	0%	2%	2%	8%	4%	7%	4%	2%	4%	4%	4%	1%	1%	12%	18%	7%	8%	0%	0%	4%	4%	1%	1%	7%	5%	3%	2%	3%	5%
	India	4%	3%	10%	12%	3%	4%	4%	2%	3%	3%	2%	2%	3%	3%	2%	2%	5%	5%	3%	4%	4%	7%	2%	3%	11%	14%	4%	5%	5%	8%	10%	7%	3%	2%	6%	5%	3%	3%	1%	3%	6%	2%	5%	3%
	Indonesia	4%	4%	5%	7%	2%	1%	2%	1%	0%	0%	0%	1%	0%	0%	1%	1%	7%	7%	8%	8%	15%	10%	2%	2%	24%	12%	12%	19%	4%	6%	4%	2%	1%	1%	2%	7%	3%	4%	0%	0%	1%	3%	1%	3%
	Pakistan	5%	4%	16%	8%	15%	10%	1%	1%	1%	1%	0%	3%	2%	3%	2%	2%	3%	2%	2%	4%	6%	6%	1%	2%	4%	4%	3%	9%	7%	23%	6%	4%	0%	1%	11%	4%	6%	1%	1%	2%	3%	3%	4%	3%
	Philippines	3%	6%	4%	6%	0%	1%	0%	0%	0%	1%	0%	1%	0%	1%	1%	0%	11%	9%	8%	6%	12%	10%	7%	4%	32%	28%	6%	9%	6%	8%	2%	3%	0%	1%	2%	3%	3%	2%	1%	1%	1%	1%	1%	1%
LATIN AMERICA	Guatemala	7%	11%	3%	9%	5%	7%	0%	2%	2%	2%	2%	0%	1%	2%	1%	2%	5%	6%	7%	5%	14%	8%	2%	2%	20%	15%	14%	14%	3%	4%	3%	1%	1%	1%	4%	4%	2%	1%	0%	0%	1%	1%	2%	3%
	Mexico	5%	9%	5%	4%	1%	0%	1%	1%	1%	0%	1%	0%	1%	0%	1%	0%	10%	8%	15%	16%	20%	15%	3%	5%	18%	21%	4%	13%	2%	1%	2%	0%	2%	1%	2%	1%	1%	2%	0%	0%	2%	1%	2%	3%

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Least frequently cited barrier in that country — Most frequently cited barrier in that country

Base: Mobile internet users aged 18+. N = from 88 to 524 for rural and from 74 to 427 for urban.

Note: Percentages indicate the proportion of respondents who answered, "This is the most important reason stopping me" to the question, "Which one of those factors would you say is the single most important reason stopping you from using the internet more on a mobile phone?"

Source: GSMA Consumer Survey, 2024

APPENDIX 3: GLOSSARY

Connected	'The connected' or 'connected population' refers to people who use mobile internet. 'The unconnected' refers to those who do not use mobile internet.
Coverage	'Population coverage' is the share of the population that lives in an area where the signal provided by a mobile network is strong enough to use telecoms services (voice, SMS, data).[30] The coverage levels provided by 2G, 3G or 4G networks are independent from each other.
Coverage gap	Populations who do not live within the footprint of a mobile broadband network.
Feature phone	A mobile handset that allows basic access to internet-based services but on a closed platform that does not support a broad range of applications. The handset supports additional features such as a camera and the ability to play multimedia files such as music and video.
Low- and middle-income country (LMIC)	A country classified as low income, lower-middle income and upper-middle income by the World Bank Country and Lending Groups.
Mobile broadband	3G, 4G or 5G technologies.
Mobile internet user	A person who uses internet services on a mobile device. Mobile internet services are defined as any activities that use mobile data.
Smartphone	A mobile handset enabling advanced access to internet-based services and other digital functions. Smartphone platforms, such as Android and iOS, support a broad range of applications created by third-party developers.
Usage gap	Populations who live within the footprint of a mobile broadband network but do not use mobile internet.

30 For further details on different technologies, see ITU-R FAQ on International Telecommunications (IMT), ITU, 2022.

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