Connected Society

The State of Mobile Internet Connectivity
10 YEARS OF
MOBILE FOR DEVELOPMENT

Our team looks back at a decade of change and discusses what’s next in our evolution

www.gsma.com/mobilefordevelopment/10yearsofm4d
The GSMA Connected Society Programme works with the mobile industry and key stakeholders to increase access to and adoption of the mobile internet, focusing on underserved population groups in developing markets.

Our Approach:

- **Insights**
  - Industry leading research, data and case studies
  - Mobile Connectivity Index and Coverage Maps

- **Support**
  - Innovation Fund for Rural Connectivity
  - Digital skills projects

- **Advocacy**
  - Capacity building with regulators and policy makers
  - Convening National Dialogues for Digital Transformation in key markets
Addressing key obstacles to adoption

Accessibility: Facilitating access to network coverage, handsets, electricity, agents and formal IDs

Affordability: Tackling affordability including handsets, tariffs, data and transactions fees

Usability and skills: Improving usability of handsets and services and building digital skills and awareness

Safety and security: Enhancing security and safety by addressing harassment, theft, fraud and data protection

Relevance: Promoting local, relevant content products and services

- Triggering mobile internet use in cote d’Ivoire and Tanzania
- Accelerating affordable smartphone ownership in emerging markets
- MISTT: Tigo Rwanda pilot evaluation
- Triggering mobile internet use among men and women in South Asia
Report background and purpose

- Annual report by GSMA Connected Society and GSMA Intelligence
- Overview of the state of mobile internet connectivity worldwide – by country, region and globally
- Identify key barriers prohibiting the spread of mobile internet adoption, particularly to underserved populations
- Identify countries or regions that have made strong progress
- Provide evidence based suggestions to accelerate mobile internet access
Presentation Structure

1. Methodology and Data
2. Research Findings – Coverage and Connectivity
3. Research Findings – Barriers and Usage
4. Considerations for accelerating digital inclusion
5. Mobile Connectivity Index – Demonstration
Findings based primarily on two bespoke analytical tools

**Mobile Connectivity Index**
Barriers to mobile internet use measured across four enablers in 165 countries over five years

**Consumer Survey**
18 low- and middle-income countries (LMICs) surveyed covering 69% of adult population
Index Methodology – Ten Steps

1. Theoretical Framework
2. Selection of Indicators
3. Data treatment
4. Multivariate Analysis
5. Normalisation
6. Weighting and Aggregation
7. Robustness and Sensitivity
8. Back to Indicators
9. Association with other variables
10. Presentation and dissemination

Measuring enablers of mobile internet
38 indicators (almost 100 considered)
Treat skewed data and impute missing data
Check statistical coherence
Normalise data into consistent units (0-100)
Weight indicators, dimensions and enablers
Check robustness of index scores
Confirm value of indicators in the Index
Correlation with other metrics
Report and interactive webtool
Mobile Connectivity Index Structure

4 Enablers

Infrastructure
- Network coverage
- Network performance
- Other enabling infrastructure
- Spectrum

Affordability
- Mobile tariffs
- Handset price
- Inequality
- Taxation

Consumer Readiness
- Basic skills
- Gender equality
- Mobile ownership

Content and Services
- Local relevance
- Availability
- Online security

14 Dimensions

38 Indicators

- The availability of high-performance mobile internet network coverage
- The availability of mobile services and devices at price points that reflect the level of income across a national population
- Citizens with the awareness and skills needed to value and use the internet
- The availability of secure online content and services accessible and relevant to the local population
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More mobile internet users than non-users, where coverage exists

Global Connected and Unconnected (2014-2018)

- 3.5 billion mobile internet users in 2018 (47% of global population)
- Coverage gap has more than halved since 2014 (from 24% to 10% of population)
- Usage gap more than 4x greater than coverage gap

Source: GSMA Intelligence. Base: Total population
Connectivity has not grown equally

- LMICs account for more than 90% of the unconnected population
- 40% of the uncovered population live in Sub-Saharan Africa
- Significant rural-urban gap in coverage – less than half of low-income rural populations are covered by 3G/4G networks

Source: GSMA Intelligence. Base: Total population
3G and 4G coverage has accelerated in Sub-Saharan Africa

- Operators accelerated 2G site upgrades in 2018
- Driven by technology (single RAN and U900) and demand for data (increased smartphone adoption)
- Mobile internet adoption stands at 24% but varies widely (e.g. 44% in Mauritius, 10% in Niger)

Source: GSMA Intelligence. Base: Total population
There is a persistent rural-urban gap in LMICs

Rural-urban gap in mobile internet use

- East Asia & Pacific: 30% (2017) vs. 23% (2018)
- Europe & Central Asia: 30% (2017) vs. 26% (2018)
- Latin America & Caribbean: 36% (2017) vs. 29% (2018)
- Middle East & North Africa: 39% (2017) vs. 36% (2018)
- South Asia: 47% (2017) vs. 45% (2018)
- Sub-Saharan Africa: 65% (2017) vs. 58% (2018)
- Global: 46% (2017) vs. 40% (2018)

Source: GSMA Intelligence and Gallup World Poll
There is a persistent gender gap in LMICs

Gender gap in mobile internet use

- East Asia & Pacific: 5% (2017), 4% (2018)
- Europe & Central Asia: 5% (2017), 4% (2018)
- MENA: 19% (2017), 20% (2018)
- South Asia: 67% (2018), 58% (2018)
- Sub-Saharan Africa: 40% (2018), 41% (2018)
- Global: 26% (2018), 23% (2018)

Source: GSMA Intelligence
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Literacy and digital skills, and affordability, are key barriers to mobile internet adoption

Source: GSMA Intelligence Consumer Survey 2018. Based on the single most important barrier to using mobile internet identified by mobile users who are aware of mobile internet but do not use it, averaged across surveyed markets.
Mobile data has become more affordable in LMICs – but it’s still above target

Cost of 1GB of mobile data (as percentage of monthly income)

Source: GSMA Intelligence calculations of data provided Tarifica.
The cost of internet-capable devices has not significantly decreased

Affordability is the main barrier to mobile ownership in LMICs

Cost of entry-level internet device is more than 20% of monthly income in most LMICs ($45-50)

Least affordable in Sub-Saharan Africa relative to income, though typical prices are $35-40

Prohibitively expensive for the poorest 20% (costs 375% of monthly income in Sub-Saharan Africa)

Source: GSMA Intelligence calculations of data provided Tarifica.
Instant messaging and social media are the most popular online activities

Source: GSMA Intelligence Consumer Survey 2018. Base: Adults aged 18+ who have used mobile internet the last three months. Percentages indicate the proportion of respondents who answered that they engaged in the relevant activity on their mobile phone at least once per month.
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Adoption of mobile internet needs to be accelerated to drive digital inclusion

Closing the Coverage Gap
- Reduce deployment costs and investment risks, particularly through deploying innovations and smart investment tools
- Create enabling regulatory and policy frameworks

Closing the Usage Gap
- Make efforts to increase awareness and relevance of mobile internet
- Improve affordability of devices and data for consumers
- Improve digital skills and confidence to use the internet
How it’s being used...
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Any questions?