

# Connected Society The State of Mobile Internet Connectivity

# MOBILE FOR DEVELOPMENT

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

www.gsma.com/mobilefordevelopment/10yearsofm4d



# **GSMA Connected Society Programme**

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:**



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



MISTT: Tigo Rwanda pilot evaluation



Accelerating affordable smartphone ownership in emerging markets



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



- 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	Measuring enablers of mobile internet
2. Selection of Indicators	38 indicators (almost 100 considered)
3. Data treatment	Treat skewed data and impute missing data
4. Multivariate Analysis	Check statistical coherence
5. Normalisation	Normalise data into consistent units (0-100)
6. Weighting and Aggregation	Weight indicators, dimensions and enablers
7. Robustness and Sensitivity	Check robustness of index scores
8. Back to Indicators	Confirm value of indicators in the Index
9. Association with other variables	Correlation with other metrics
10. Presentation and dissemination	Report and interactive webtool



### **Mobile Connectivity Index Structure**





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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



# 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





# 3G and 4G coverage has accelerated in Sub-Saharan Africa

# Sub-Saharan Africa Connected and Unconnected (2014-2018)



- 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)



# There is a persistent rural-urban gap in LMICs

Rural-urban gap in mobile internet use



■2017 ■2018



## There is a persistent gender gap in LMICs



■2017 ■2018



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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





# The cost of internet-capable devices has not significantly decreased

Cost of entry internet-enabled device (as percentage of monthly income) 48.4% 41.6% 41.8% 23.7% 23.0% 21.7% 2016 2017 2018 Sub-Saharan Africa ..... Average for high-income countries LMICs

- 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)



# Instant messaging and social media are the most popular online activities

Percentage of mobile internet users engaging in each activity



#### ■LMICs ■High-income

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	<ul> <li>Reduce deployment costs and investment risks, particularly through deploying innovations and smart investment tools</li> <li>Create enabling regulatory and policy frameworks</li> </ul>
Closing the Usage Gap	<ul> <li>Make efforts to increase awareness and relevance of mobile internet</li> <li>Improve affordability of devices and data for consumers</li> <li>Improve digital skills and confidence to use the internet</li> </ul>





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### **GSMA Mobile Connectivity Index**



www.mobileconnectivityindex.com



# Any questions?

www.gsma.com/mobilefordevelopment/res ources/the-state-of-mobile-internetconnectivity-report-2019/



Connected Society The State of Mobile Internet Connectivity 2019