

Meaningful connectivity: Insights from Brazil

Workshop on measuring universal and meaningful connectivity

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Hybrid meeting



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Summary

Measuring UMC in practice

Initial remarks

Case study: Brazil

How does Brazil fare regarding its connectivity enablers?

Universality metrics

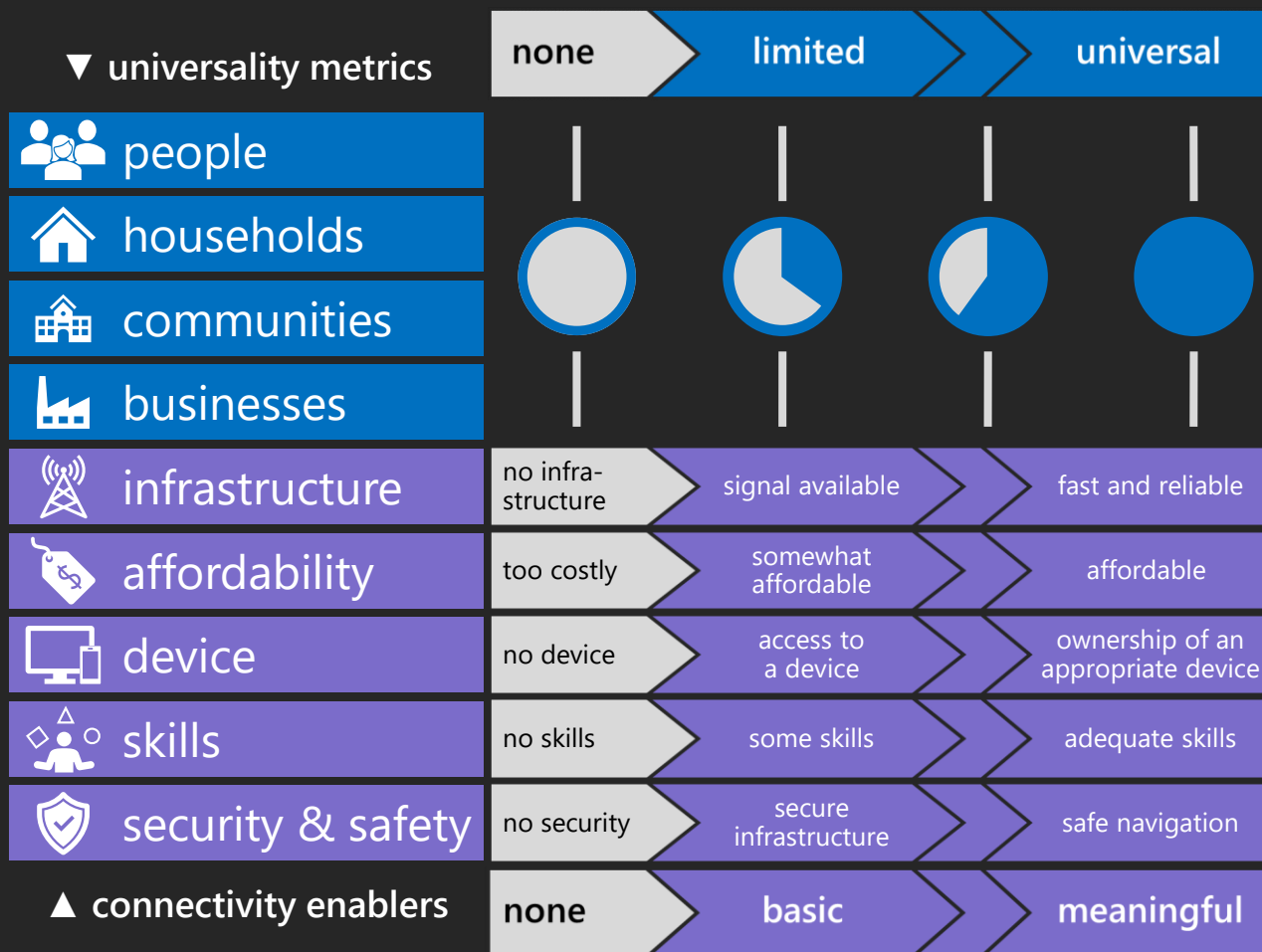
- People
- Households
- Communities
- Businesses

Connectivity enablers

- Infrastructure
- Affordability
- Device
- Skills

Final remarks

Measuring UMC in practice



Binary
Fixed target

Scale
Moving target?

Case study: Brazil

Increased Internet use

▼ universality metrics

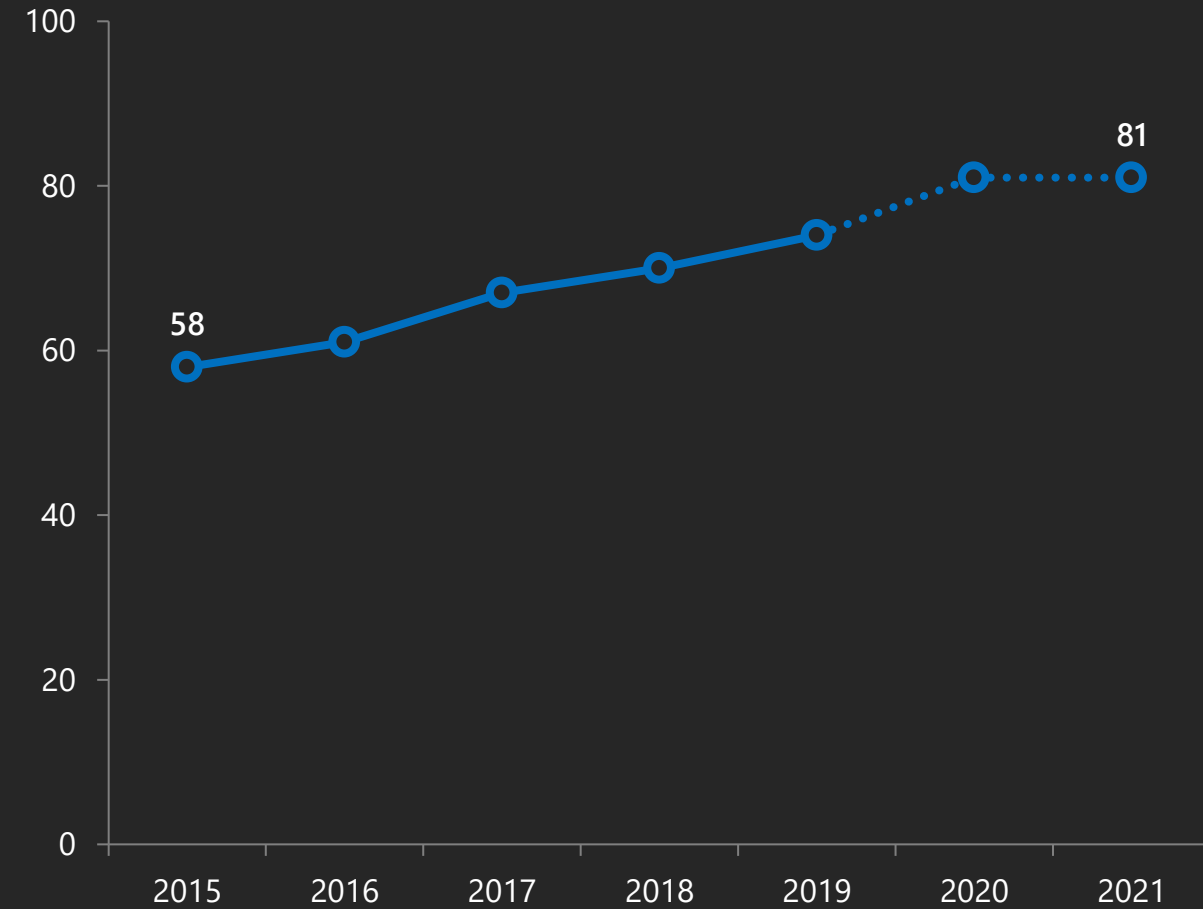
people



▲ connectivity enablers

Internet users (2015-2021)

Total population (%)



Case study: Brazil

▼ universality metrics

people



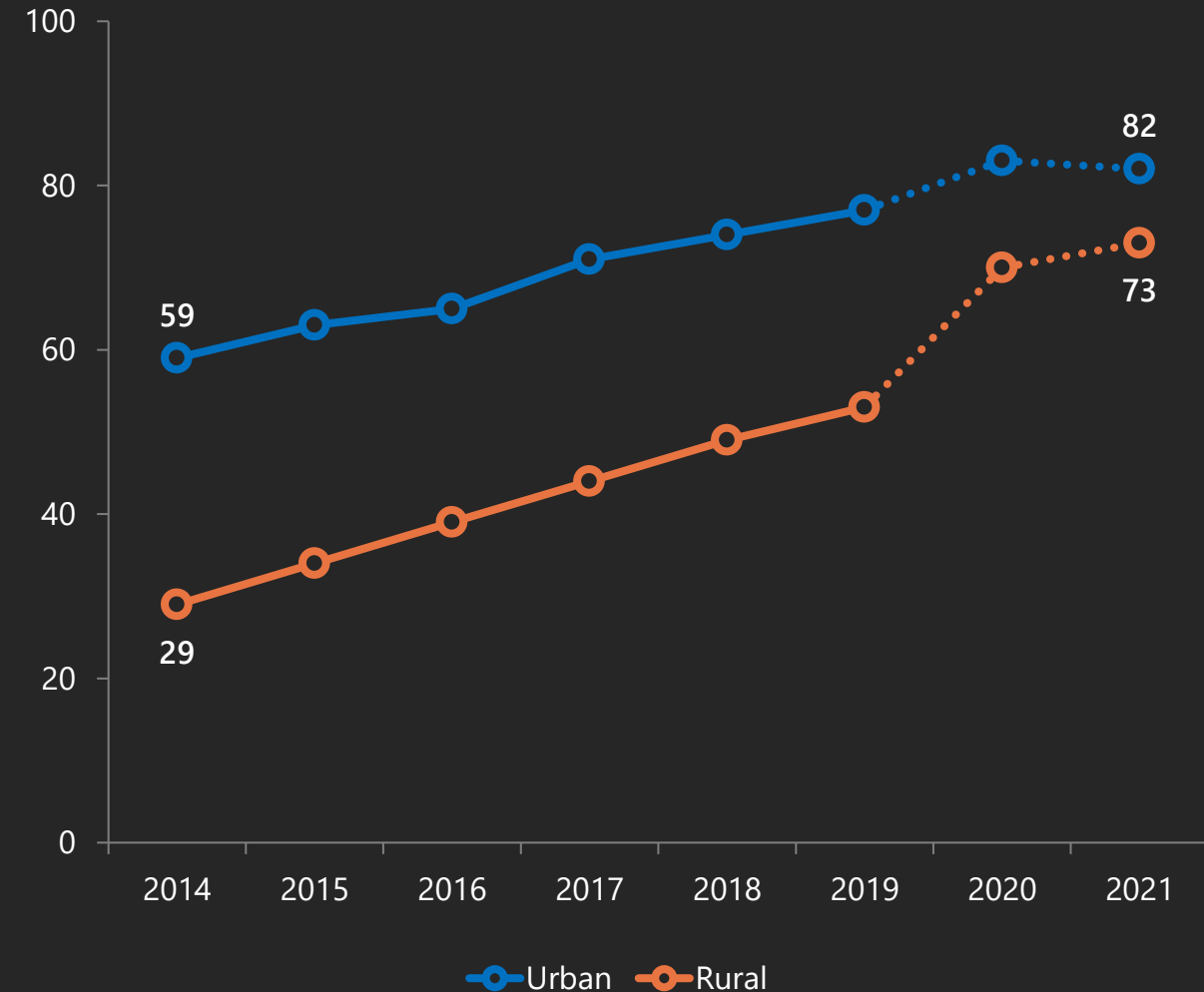
▲ connectivity enablers

Increased Internet use

Urban-rural gap closing

Internet users by area (2015-2021)

Total population (%)



Case study: Brazil

▼ universality metrics



households



▲ connectivity enablers

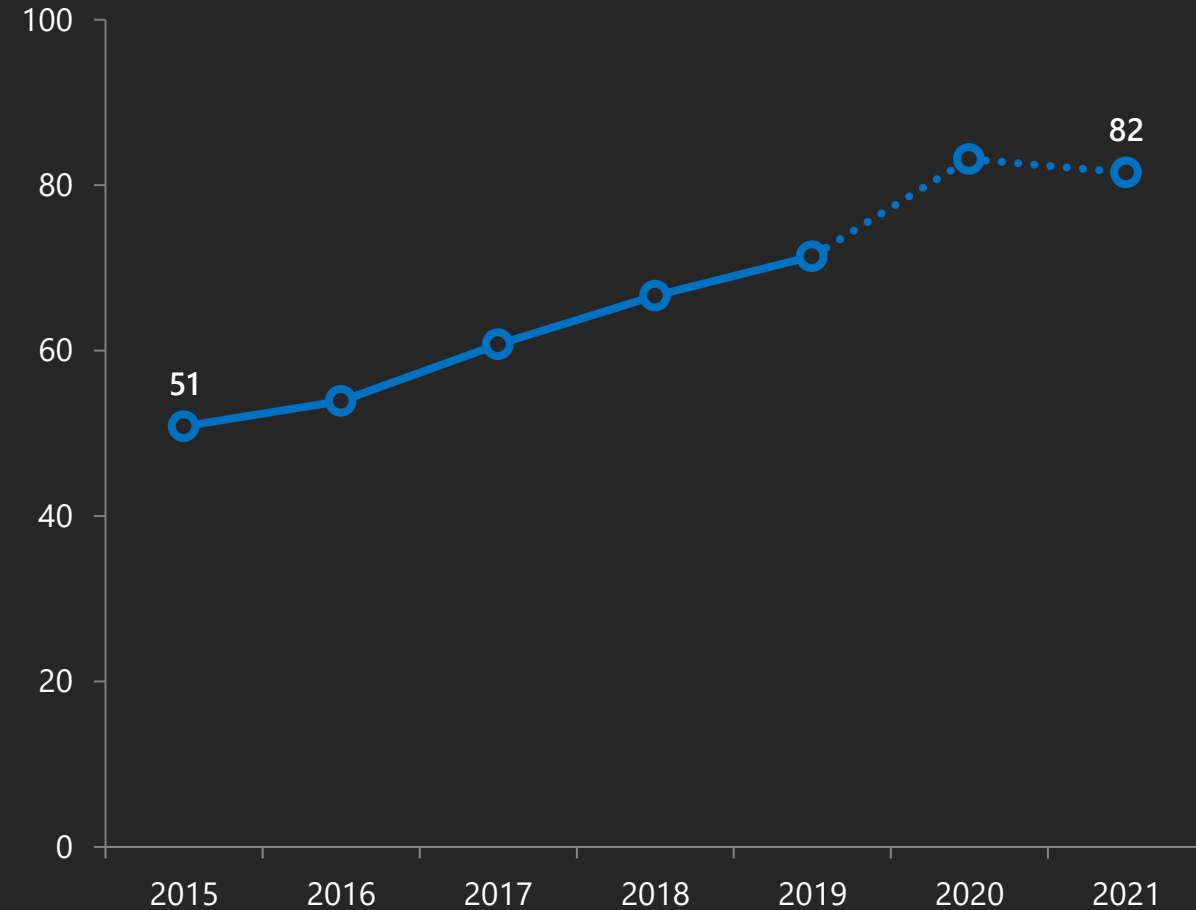
Increased Internet use

Urban-rural gap closing

Increased connectivity in households

Households with Internet access (2015-2021)

Total number of households (%)



Case study: Brazil

▼ universality metrics



households



▲ connectivity enablers

Increased Internet use

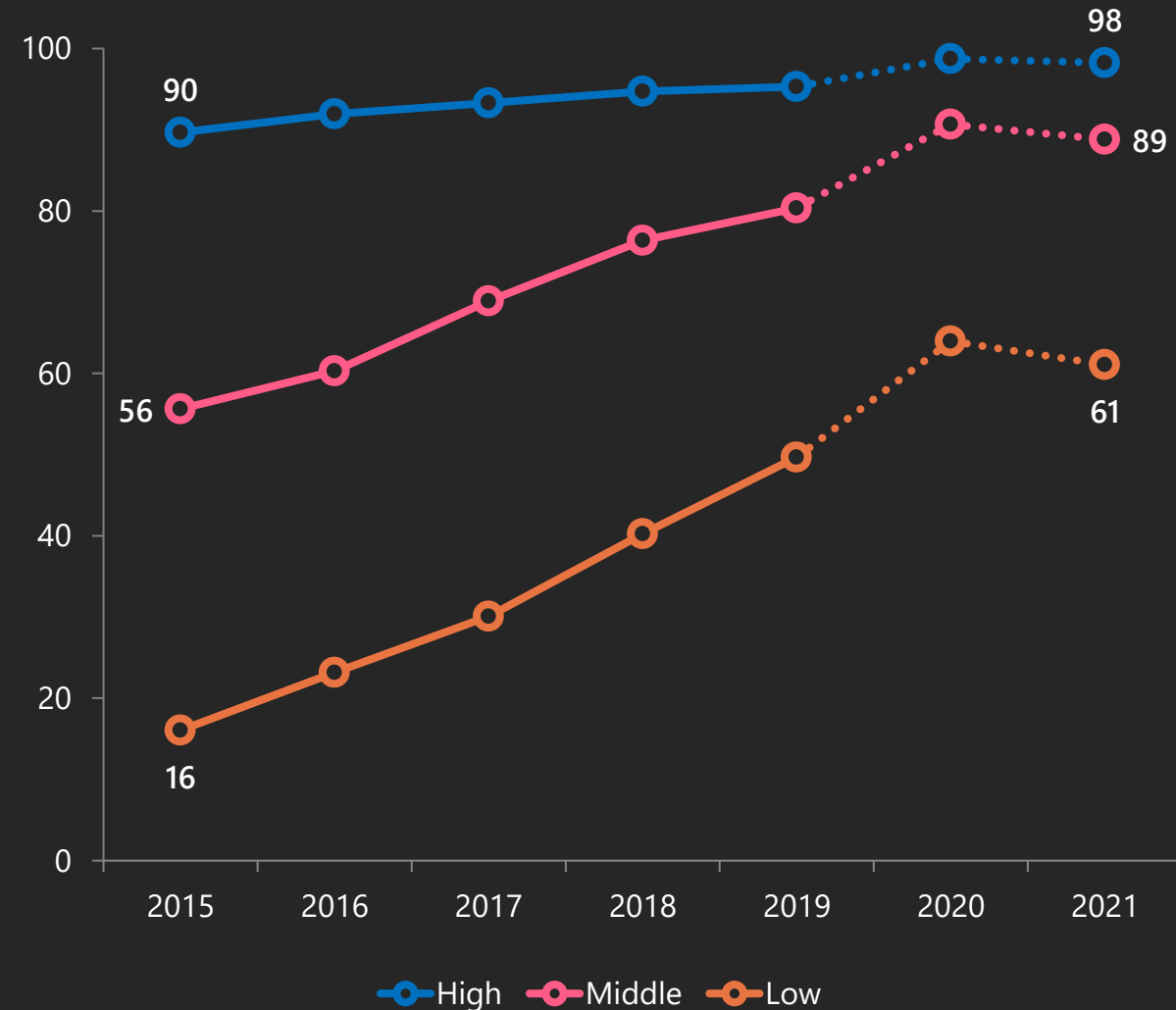
Urban-rural gap closing

Increased connectivity in households

SES gap closing

Households with Internet access by SES (2015-2021)

Total number of households (%)



Case study: Brazil

▼ universality metrics



households



infrastructure

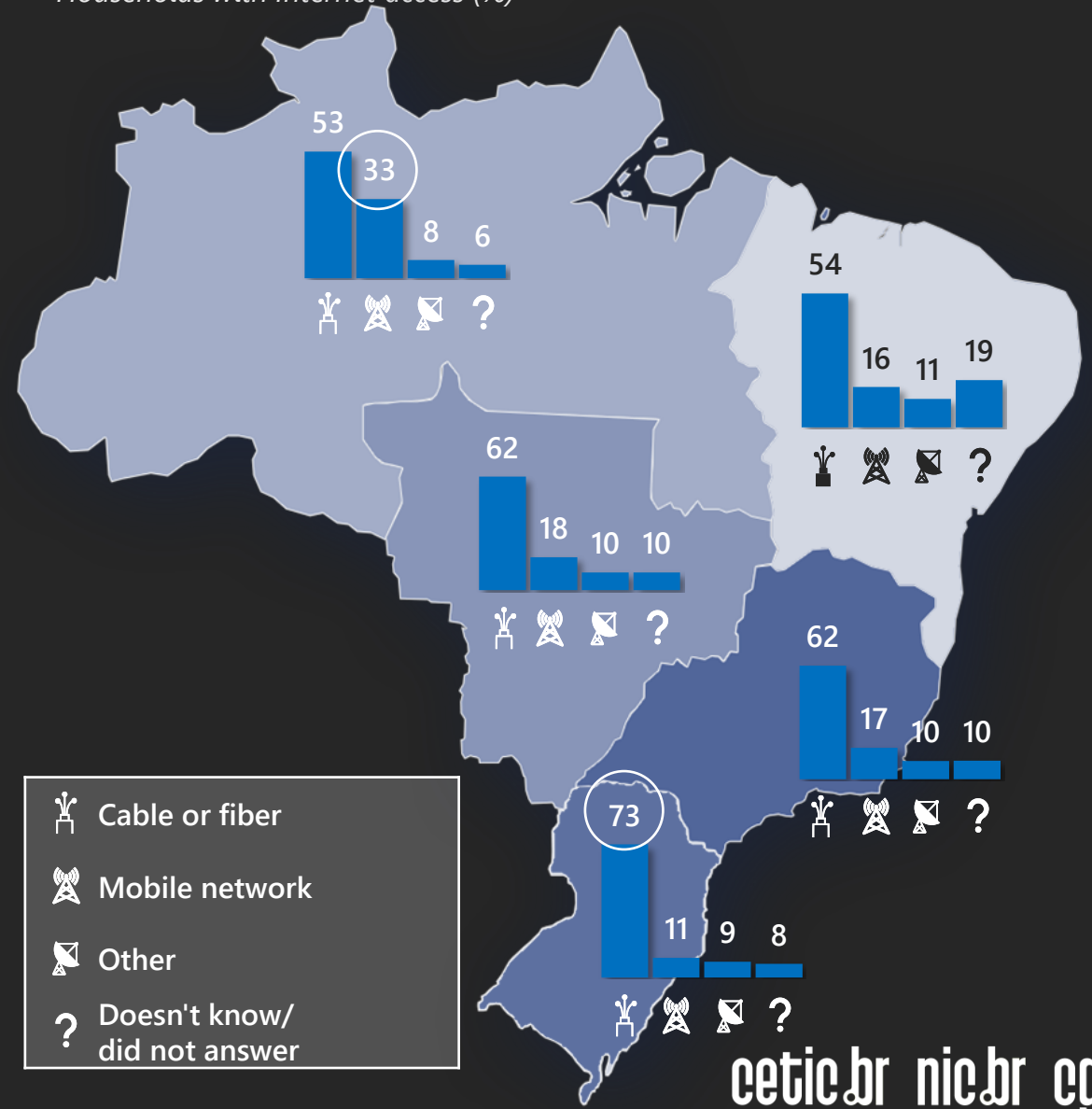


▲ connectivity enablers

Unequal penetration of fixed broadband in households

Type of main connection by region (2021)

Households with Internet access (%)



Case study: Brazil

▼ universality metrics



households



infrastructure

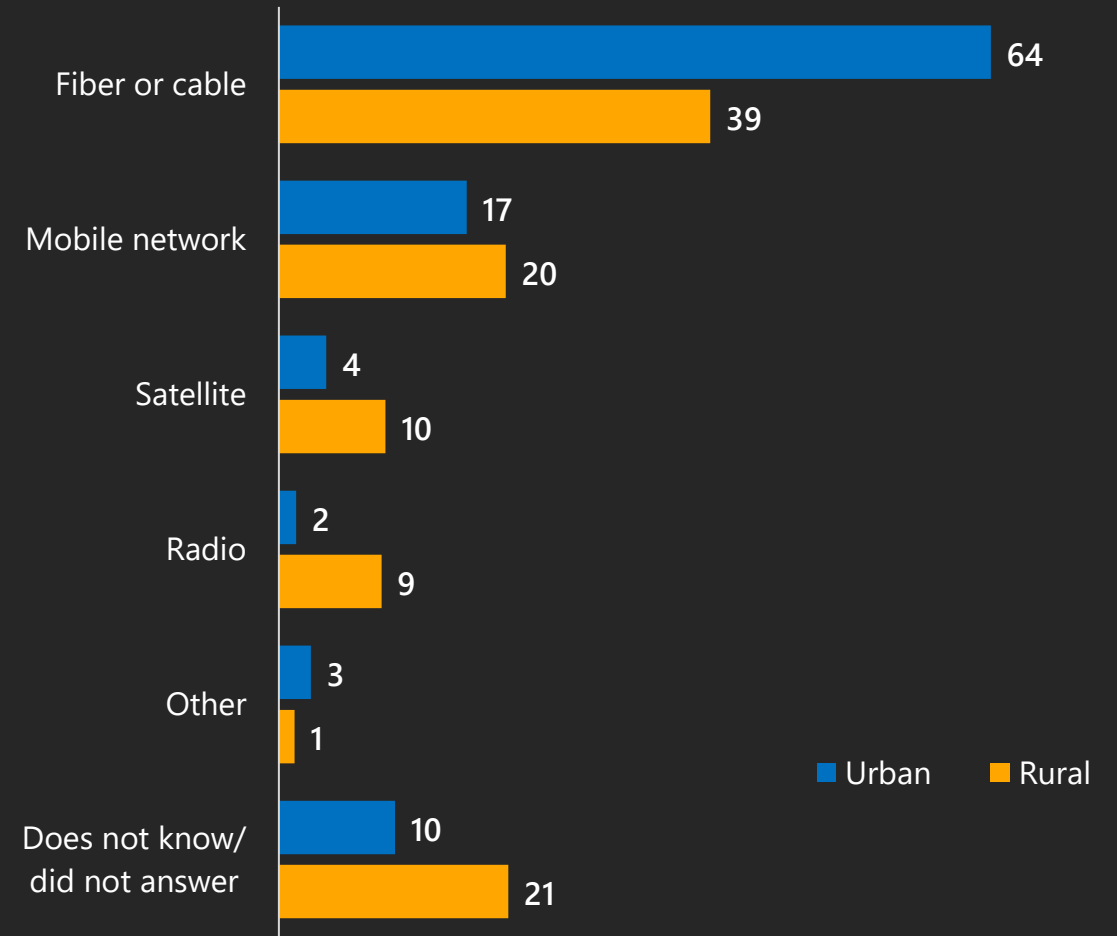


▲ connectivity enablers

Unequal penetration of fixed broadband in households

Type of main connection by area (2021)

Households with Internet access (%)



Case study: Brazil

▼ universality metrics

 people



 affordability



▲ connectivity enablers

Fixed-broadband basket (5 GB): **3.49%** of GNIpc*

Data-only mobile-broadband basket (2 GB): **0.63%**

Higher-income individuals spend over 30x on ICT services than lower-income ones**

What is the minimum service quality expected to meet the affordability threshold?

* 2021 data from ITU's ICT Price Baskets (IPB), <https://www.itu.int/en/ITU-D/Statistics/Dashboards/Pages/IPB.aspx>

** Instituto Locomotiva, with data from the Brazilian household income survey (POF/IBGE). See PwC's report *O abismo digital no Brasil*, <https://www.pwc.com.br/pt/estudos/preocupacoes-ceos/mais-temas/2022/o-abismo-digital-no-brasil.html>

Case study: Brazil

▼ universality metrics

people



device

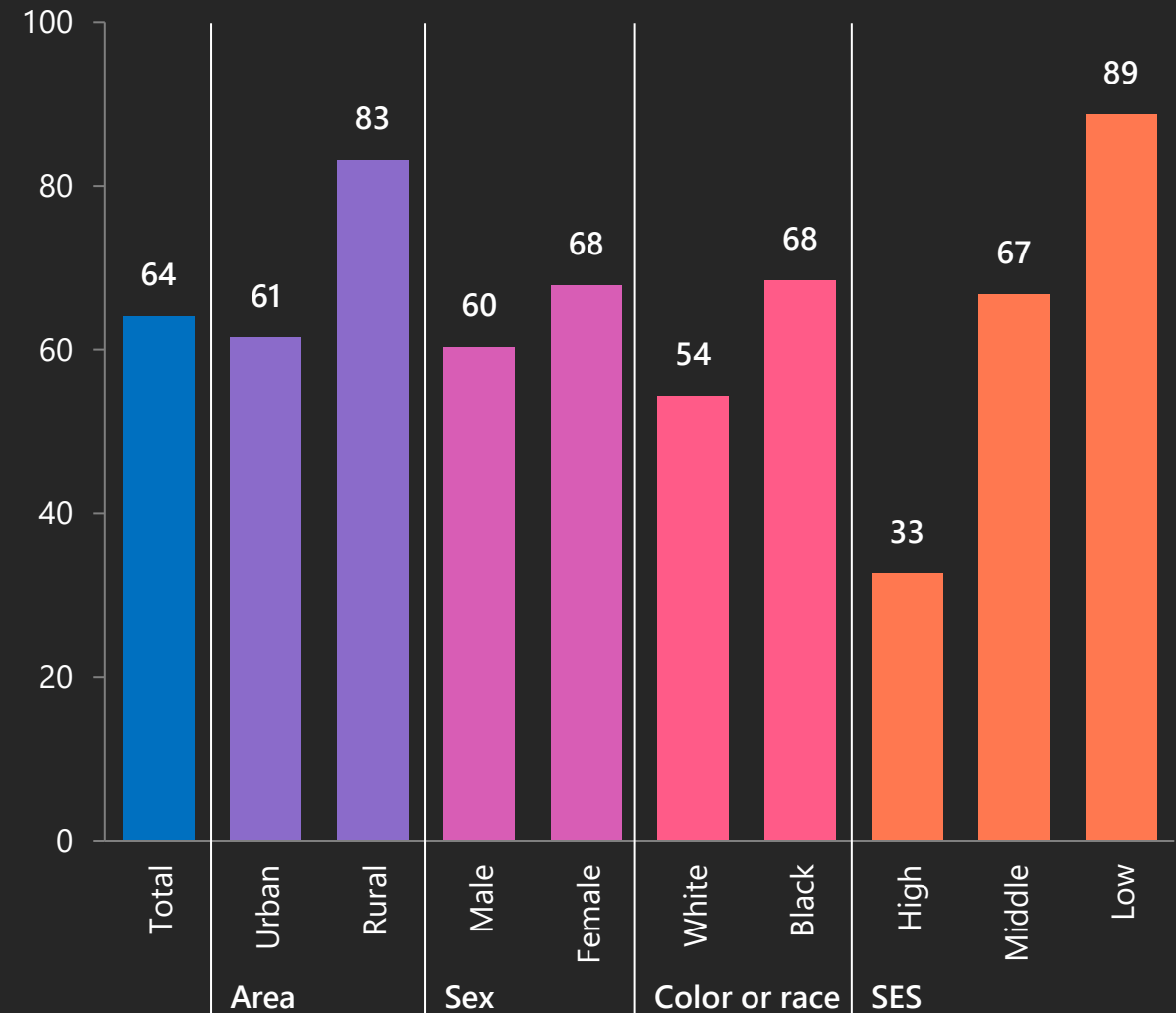


▲ connectivity enablers

Majority of users are mobile-only

Internet users by access exclusively via mobile phone (2021)

Internet users (%)



Case study: Brazil

▼ universality metrics



households



device



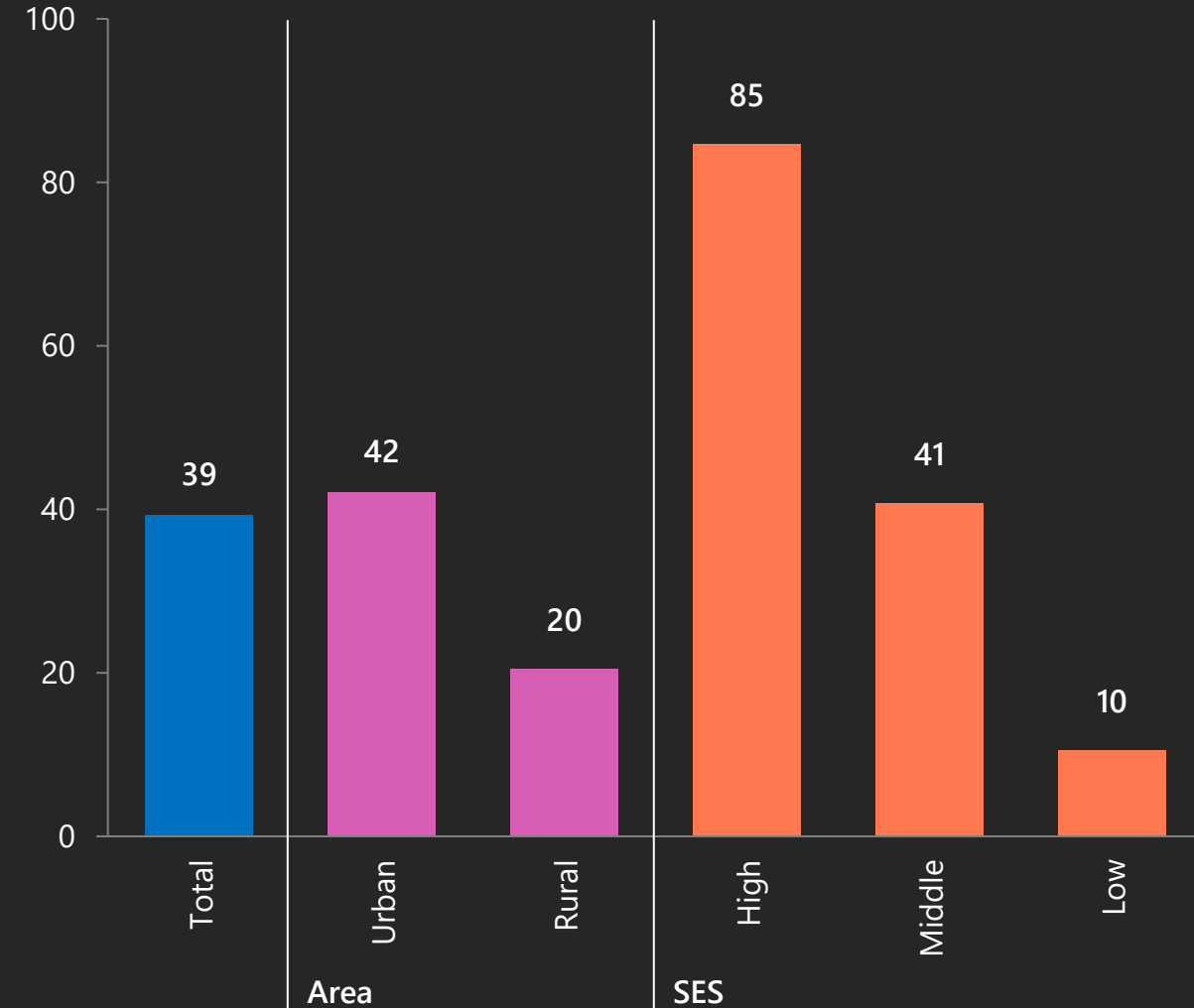
▲ connectivity enablers

Majority of users are mobile-only

Majority of low-SES households w/o computers

Households with computers (2021)

Total number of households (%)



Case study: Brazil

▼ universality metrics

people



device



▲ connectivity enablers

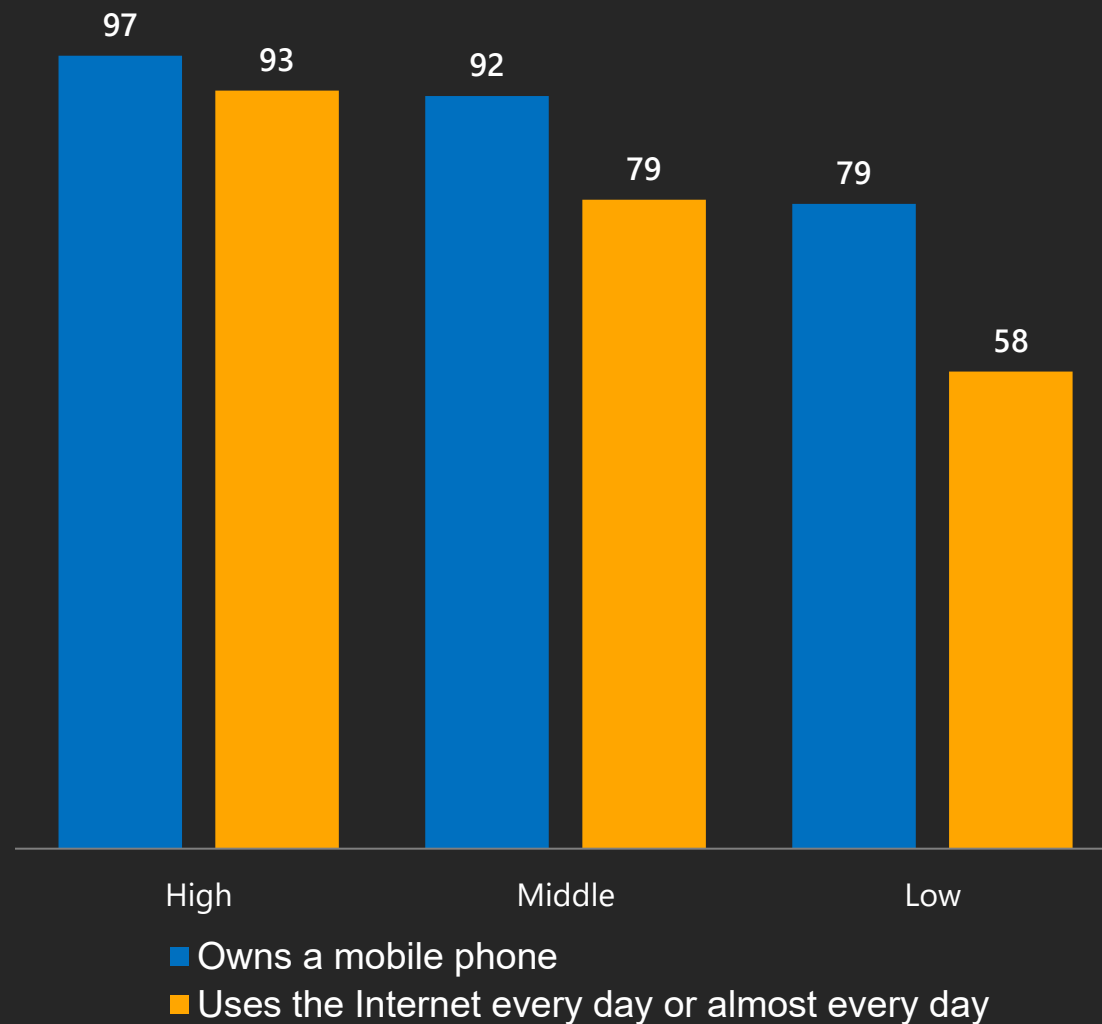
Majority of users are mobile-only

Majority of low-SES households w/o computers

Ownership vs. frequency of use

Ownership and frequency of use by SES (2021)

Total population (%)



Case study: Brazil

▼ universality metrics

people



skills

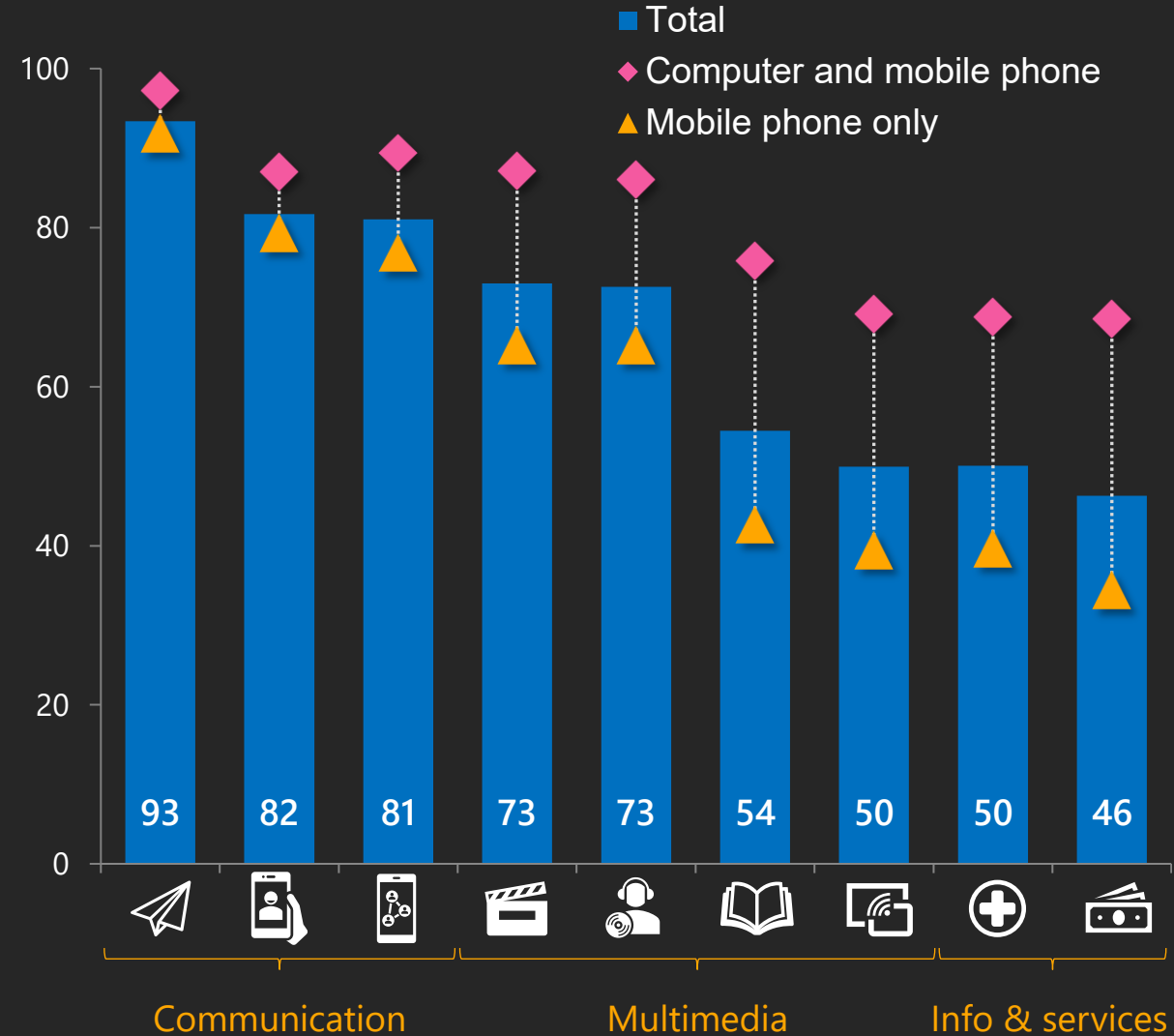


▲ connectivity enablers

Measuring skills based on activity can be affected by factors related to connection and devices

Activities carried out on the Internet by device used to access the Internet (2021)

Internet users (%) (%)



Case study: Brazil

▼ universality metrics

people



skills

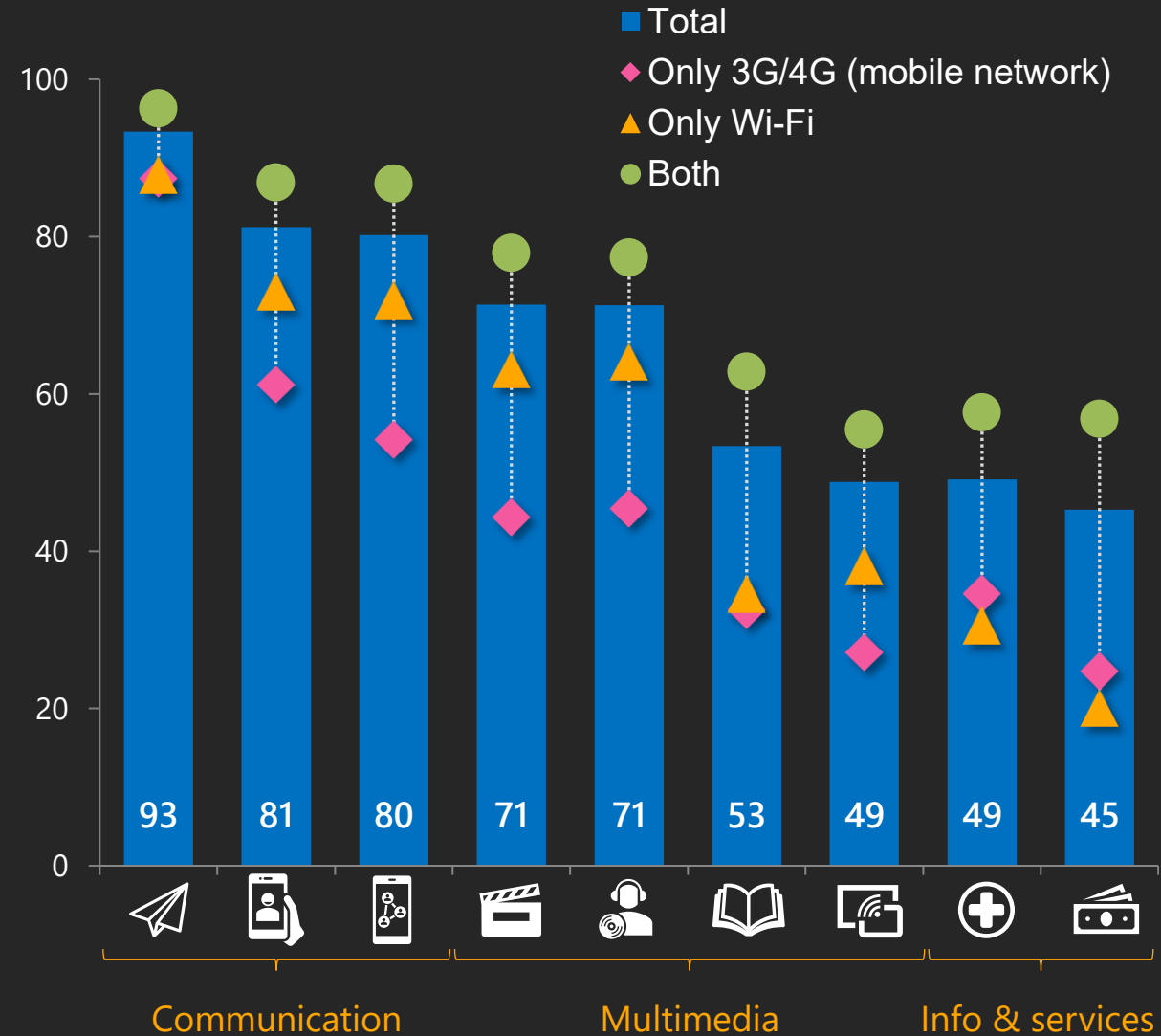


▲ connectivity enablers

Measuring skills based on activity can be affected by factors related to connection and devices

Activities carried out on the Internet by type of connection on mobile phone (2021)

Internet users via mobile phone (%)



Concluding remarks

Measuring UMC with available indicators

National averages vs. inequity

Measuring "data scarcity"

Thank you!

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