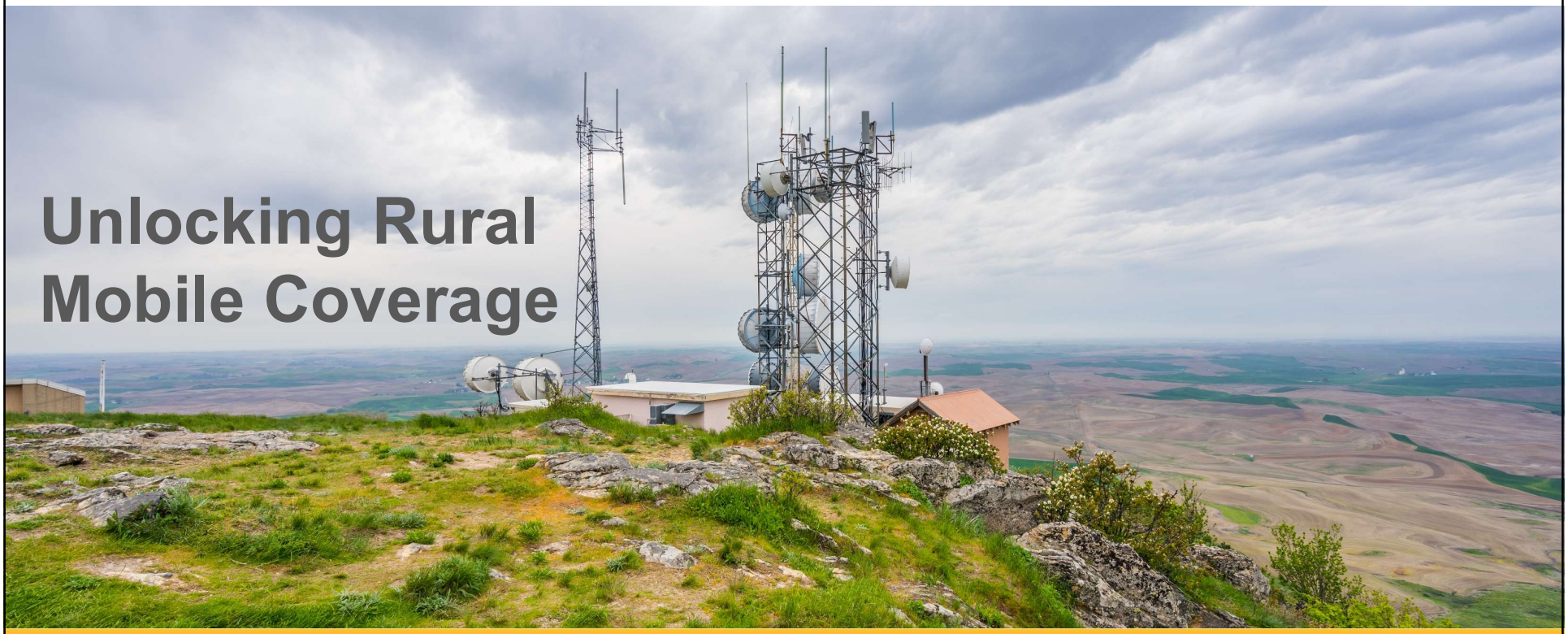
GSMA Capacity Building

Unlocking Rural Mobile Coverage



Capacity Building

4

SESSION 4

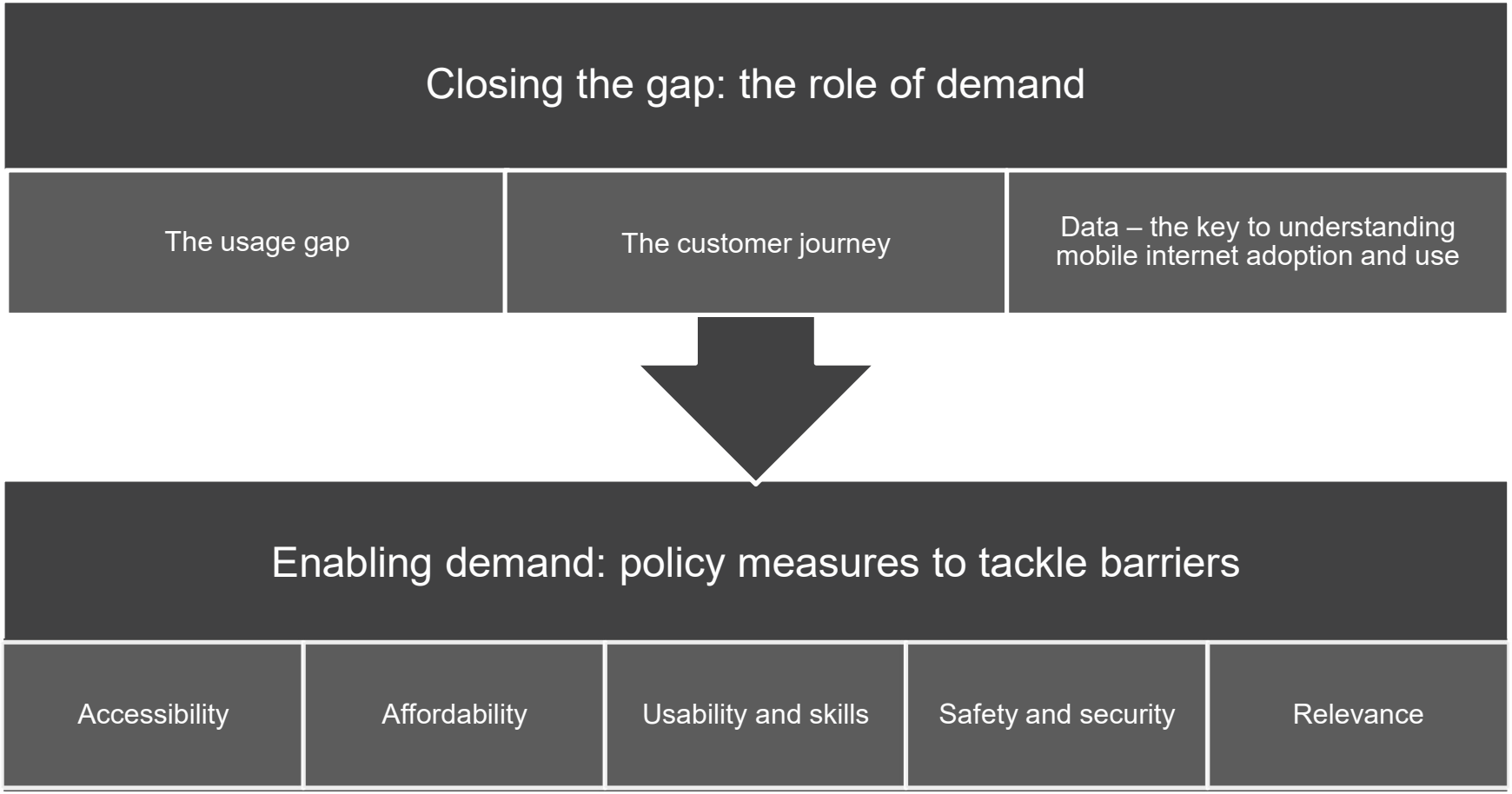
Closing the gap: the role of demand

GSMA Capacity Building

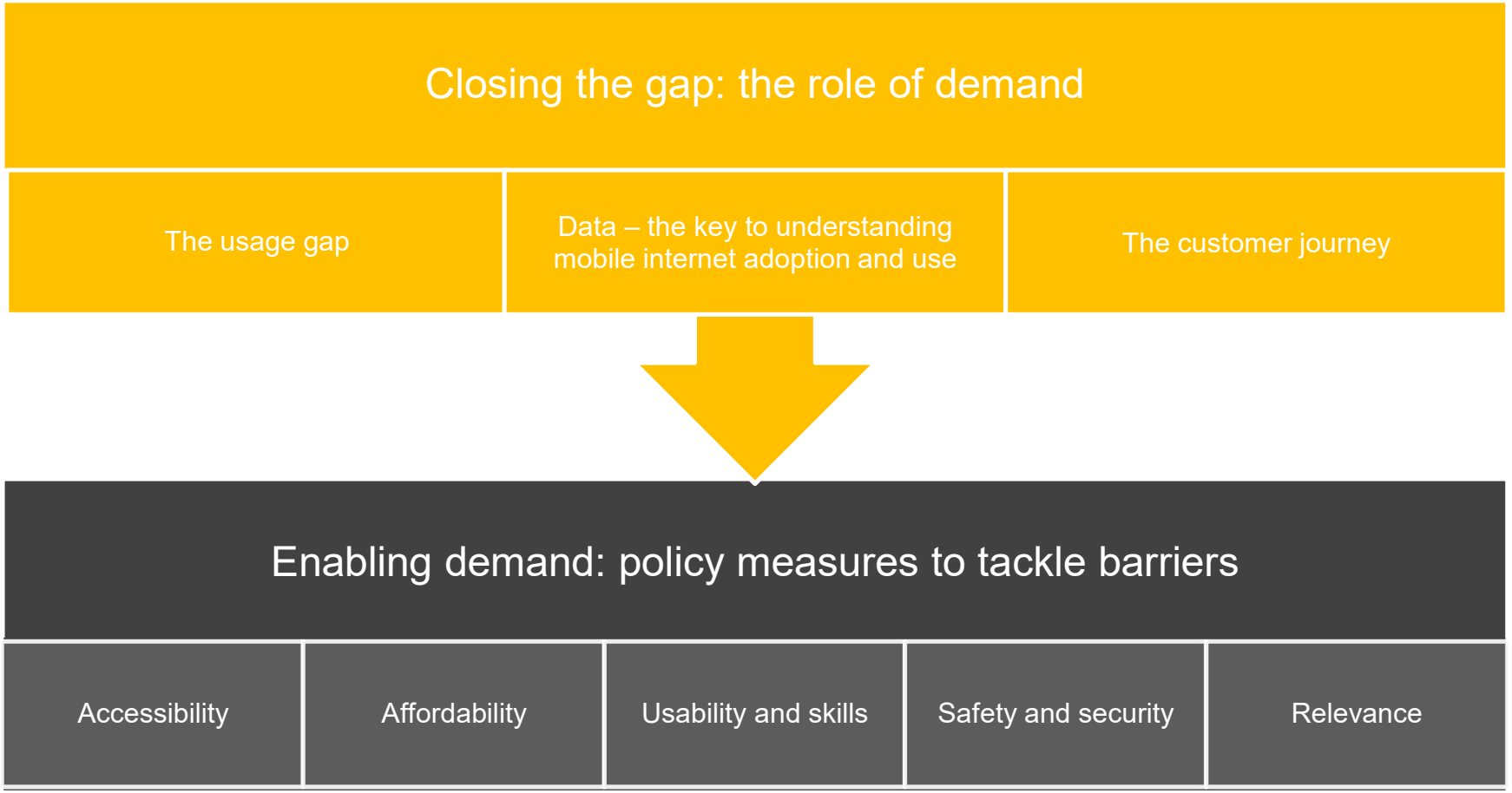
Unlocking rural mobile coverage course outline

1. Introduction: The mobile broadband coverage gap
2. Closing the gap: the role of the industry
3. Closing the gap: the role of government
4. Closing the gap: the role of demand
5. Extending coverage beyond the market frontier

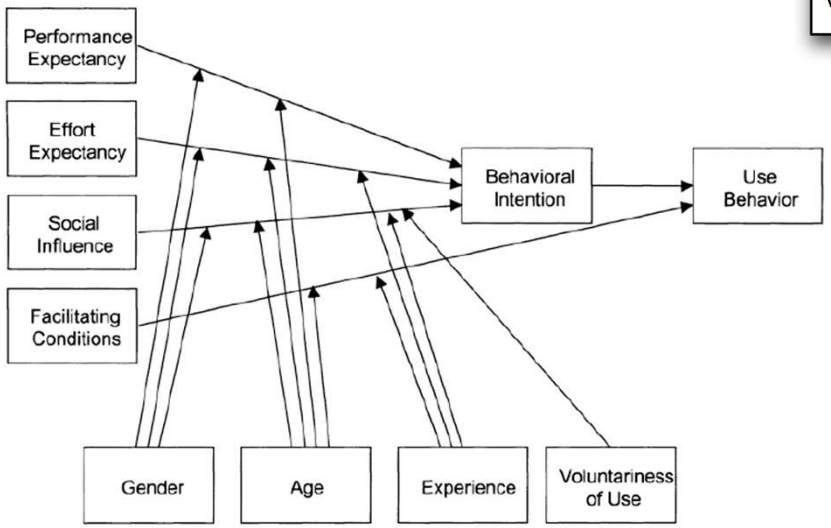
Session four outline



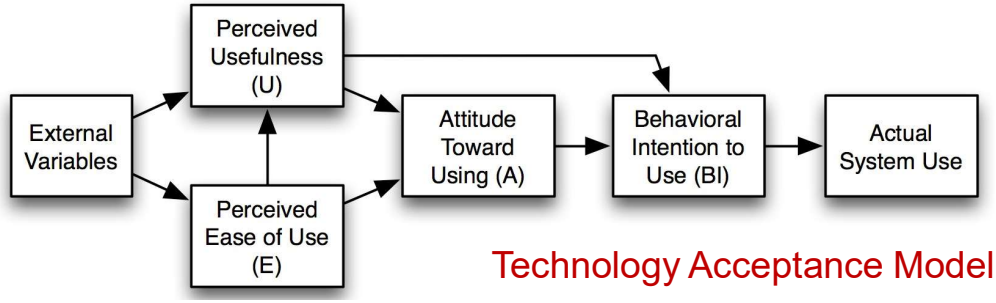
Closing the gap – the role of demand



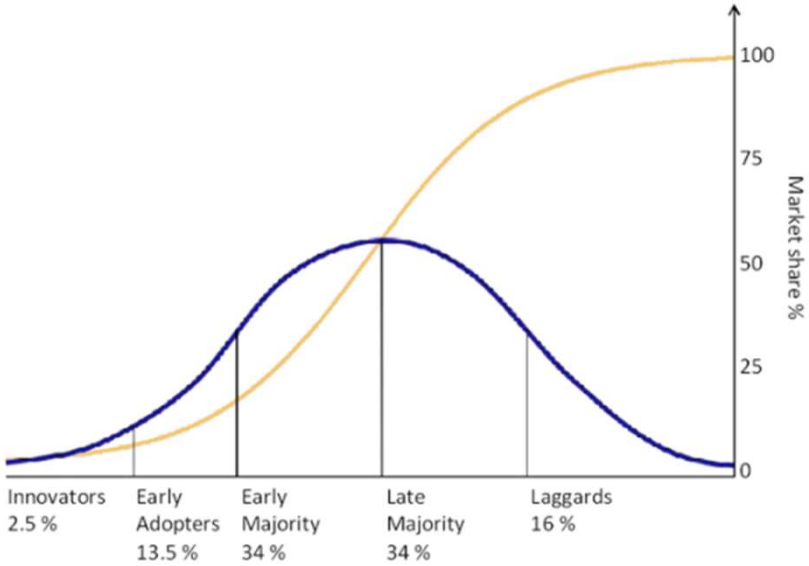
Demand can be a very wide-ranging concept…



The Unified Theory of Acceptance and Use of Technology

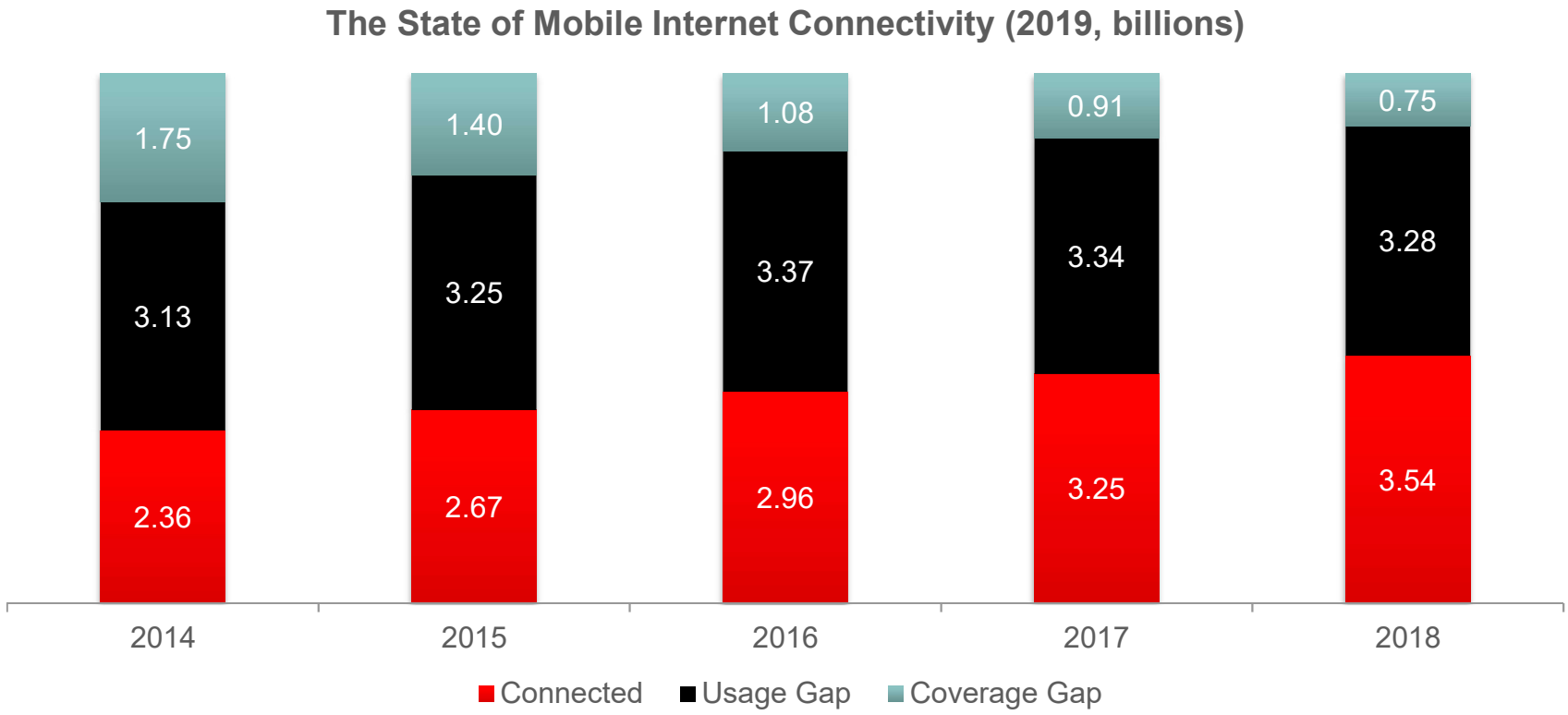


Technology Acceptance Model



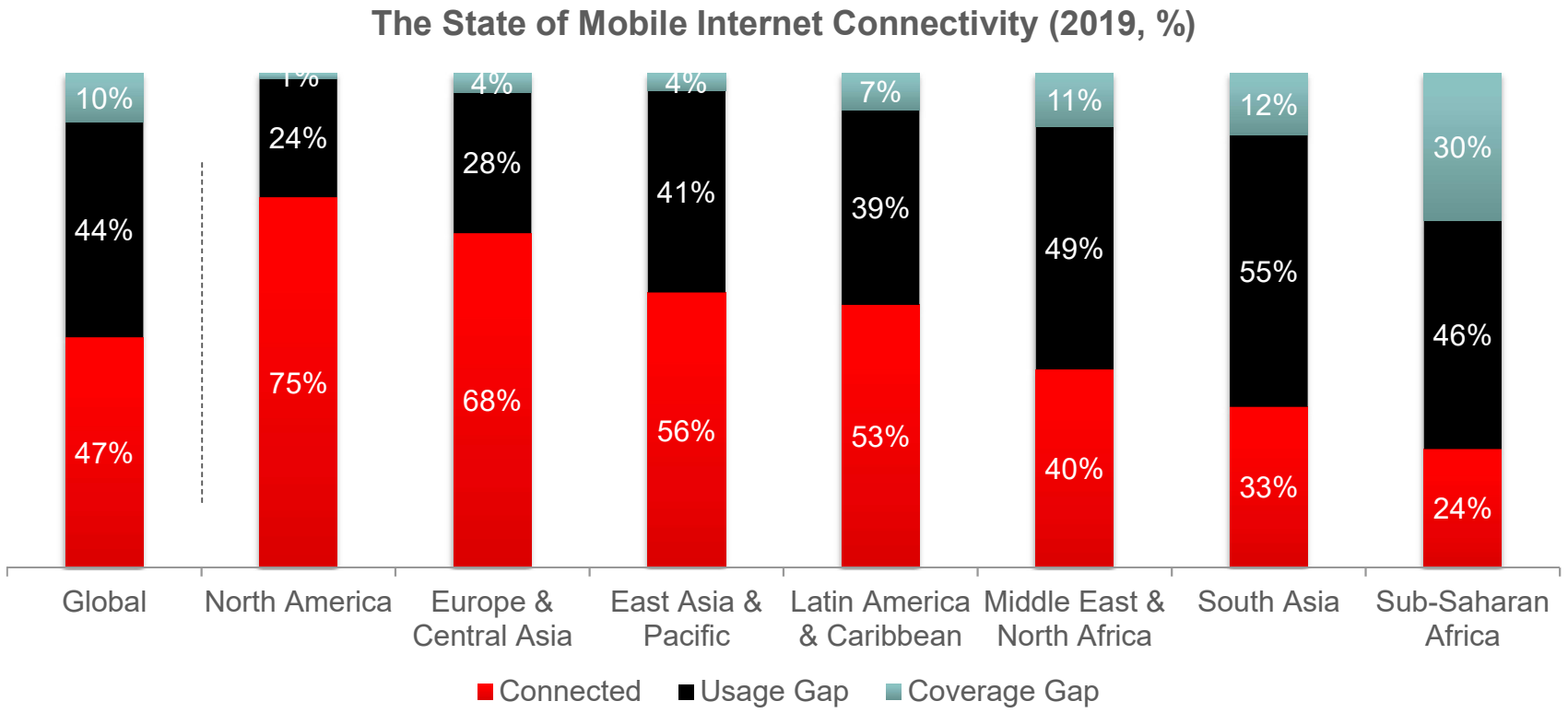
Technology Adoption Lifecycle

Understanding demand: the usage gap



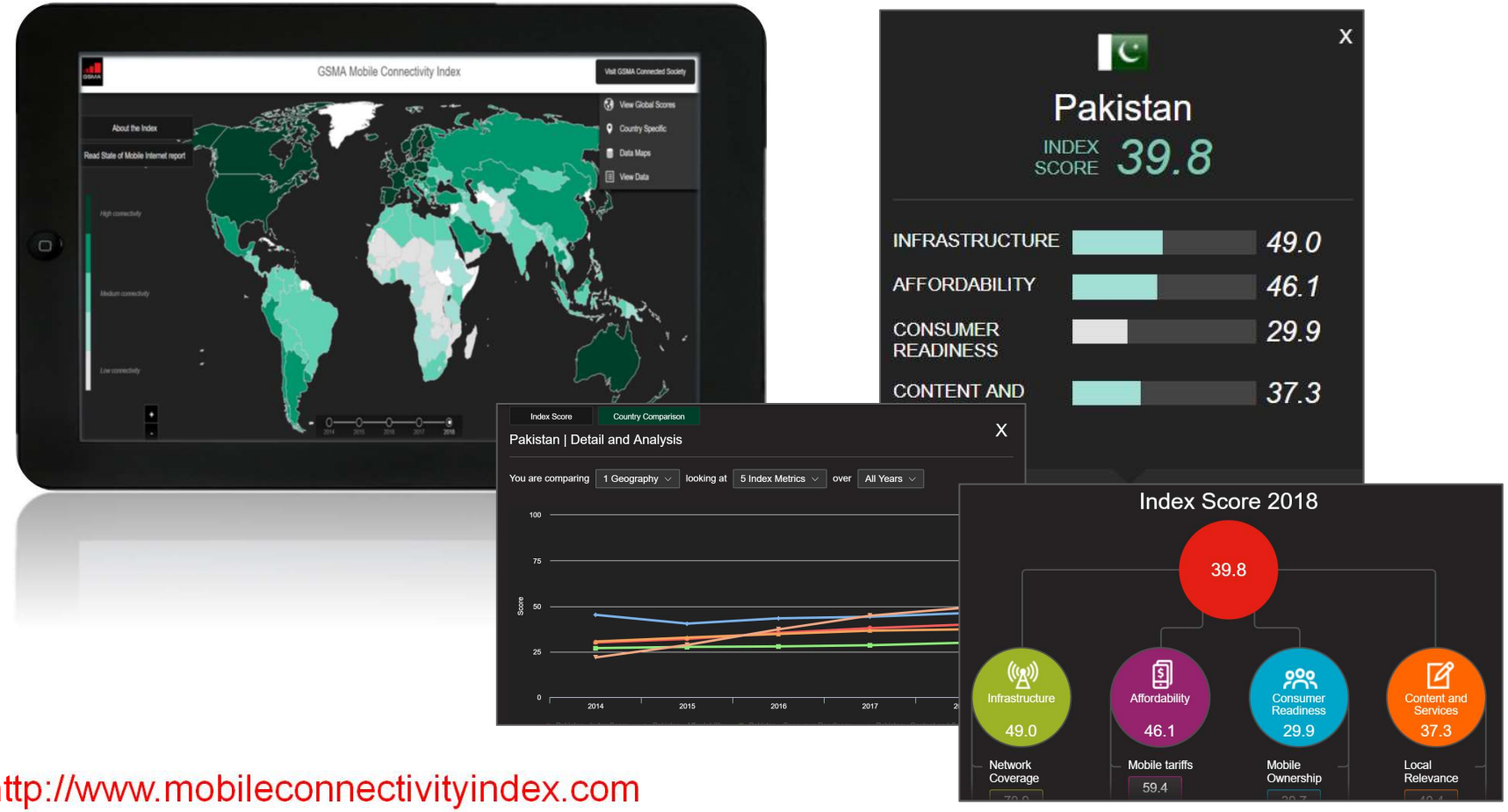
Source: The State of Mobile Internet Connectivity

The usage gap varies between region, and within regions



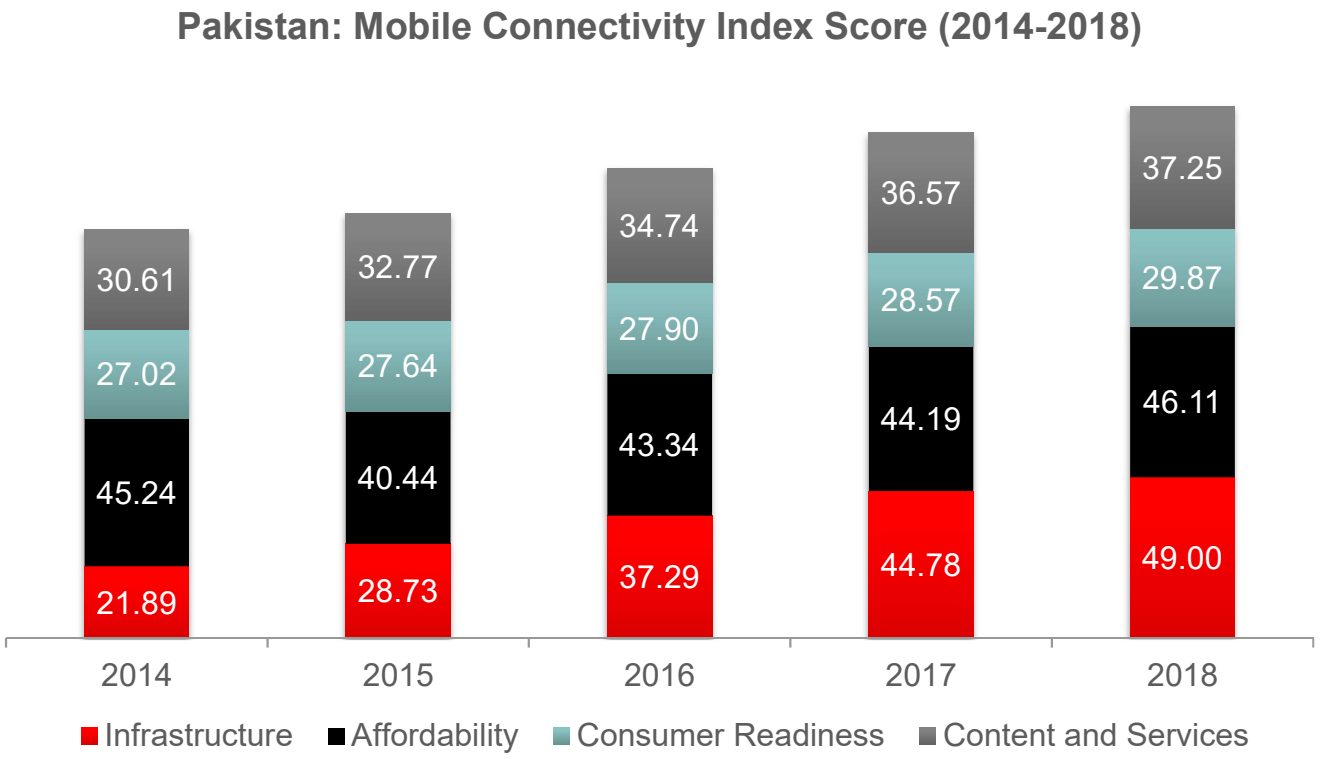
Source: The State of Mobile Internet Connectivity

GSMA Mobile Connectivity Index

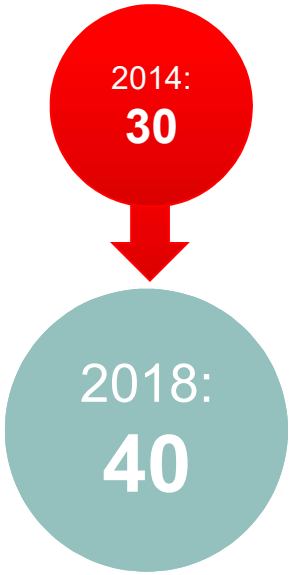


http://www.mobileconnectivityindex.com

Pakistan has made strong progress in recent years

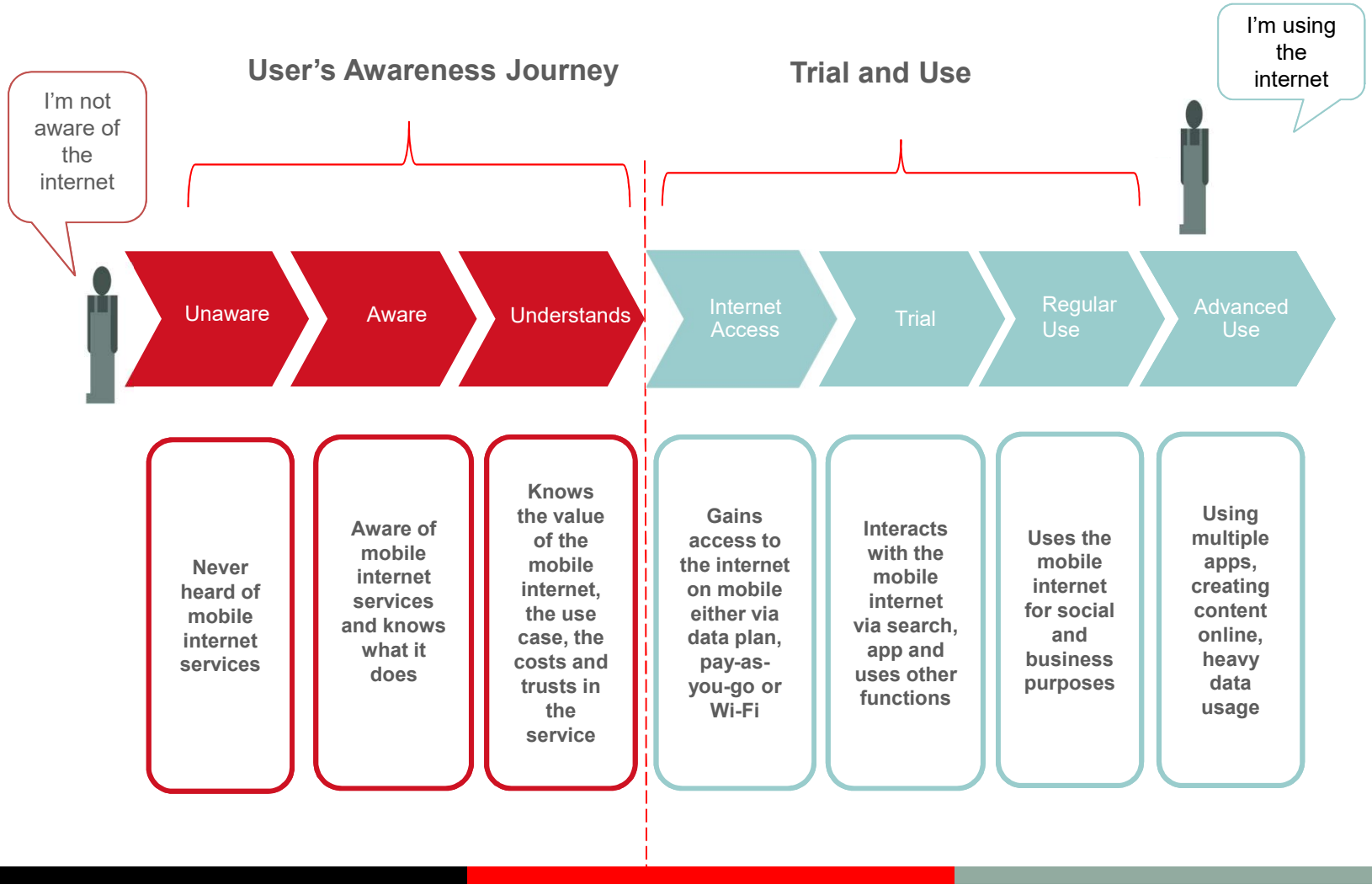


Progress in Mobile Connectivity Index score



Source: GSMA Intelligence

Breaking demand down - the customer journey

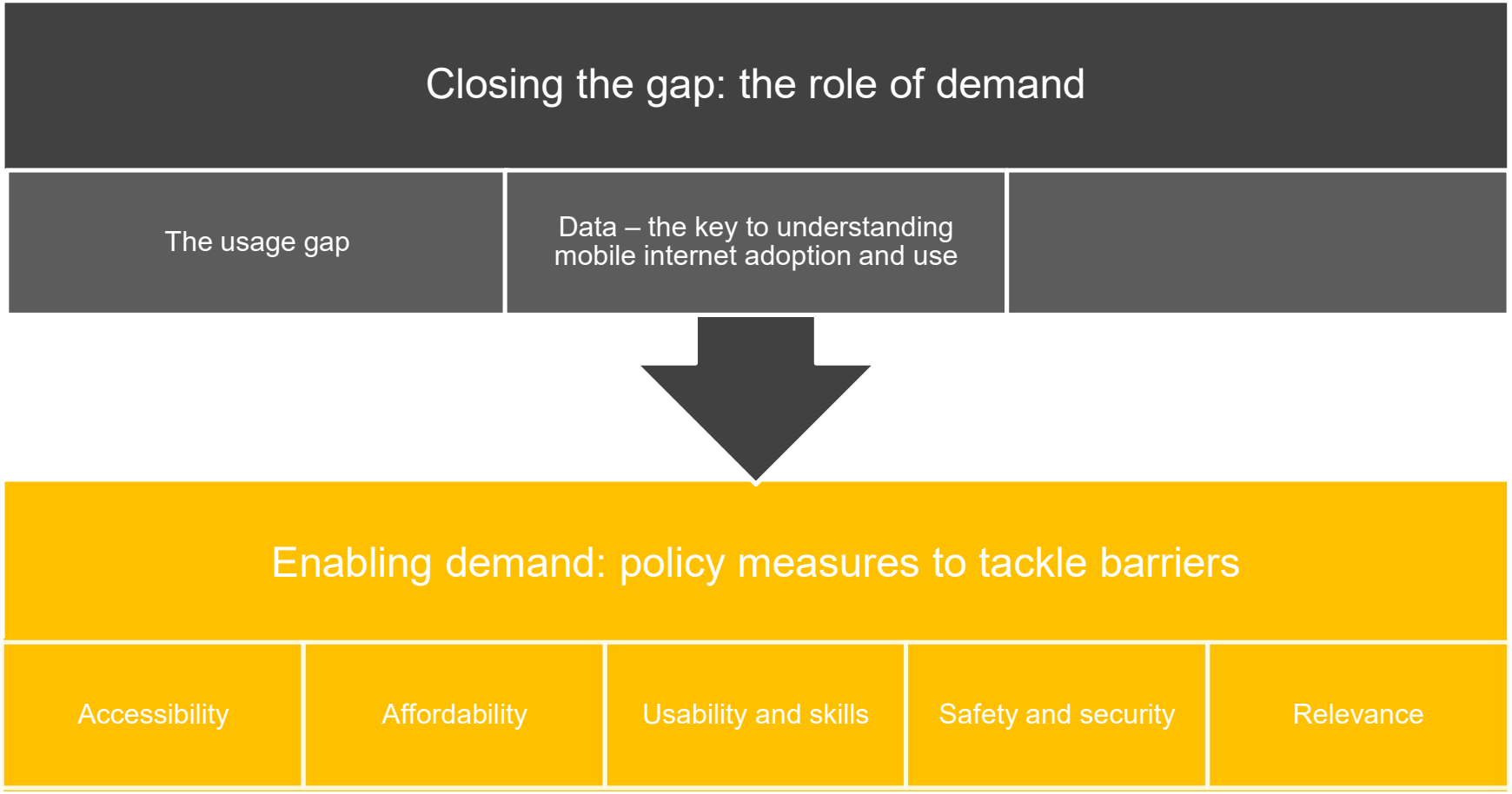


Capacity Building

4 Group Brainstorm

- What have been particular drivers of mobile internet usage in Pakistan?
- Why do citizens living in areas with mobile internet coverage not subscribe to mobile broadband services?
- Which factors have the greatest influence on mobile internet uptake for men and women (and how do they differ)?
- What are the biggest triggers of mobile internet adoption?

Session four outline



There are five key barriers to driving demand of mobile internet

Accessibility

Policies, programmes, and efforts to ensure equitable and feasible access to mobile devices and services for everyone

Key areas:

- Quality network coverage
- Access to handsets
- Access to network processes (agents etc.) and to key enabling factors (electricity, ID)

Affordability

Handsets, tariffs, and data should be affordable – enabling users to build digital skills, and ensuring a central role for mobile in daily life

Key areas:

- Handsets
- Tariffs
- Data plans
- Transaction fees
- Sector-specific taxation

Usability and skills

A lack of literacy and digital skills is the top reason preventing consumers in low- and middle-income countries from using the internet

Key areas:

- Awareness
- Understanding
- User experience
- Digital literacy

Safety and security

Consumers need to be protected when online, and not prevented from accessing all of the benefits of mobile internet coverage

Key areas:

- Harassment
- Theft
- Fraud
- Data protection
- Digital literacy
- Wider factors ('Fake News')

Relevance

Providing local, tailored, and applicable content and services is essential in building long-term mobile internet use

Key areas:

- Policies
- Content
- Products
- Services

What: Accessibility

Policies, programmes, and efforts to ensure equitable and feasible access to mobile devices and services for everyone.

This can be wide-ranging, including ensuring the:

- Provision and availability of quality mobile internet coverage
- Availability of relevant handsets, tariffs, and data plans
- Existence of wider enabling factors – including electricity, identification, and MNO processes (including an agent network)

N.B. This is not about 'assistive tech' – covered later.

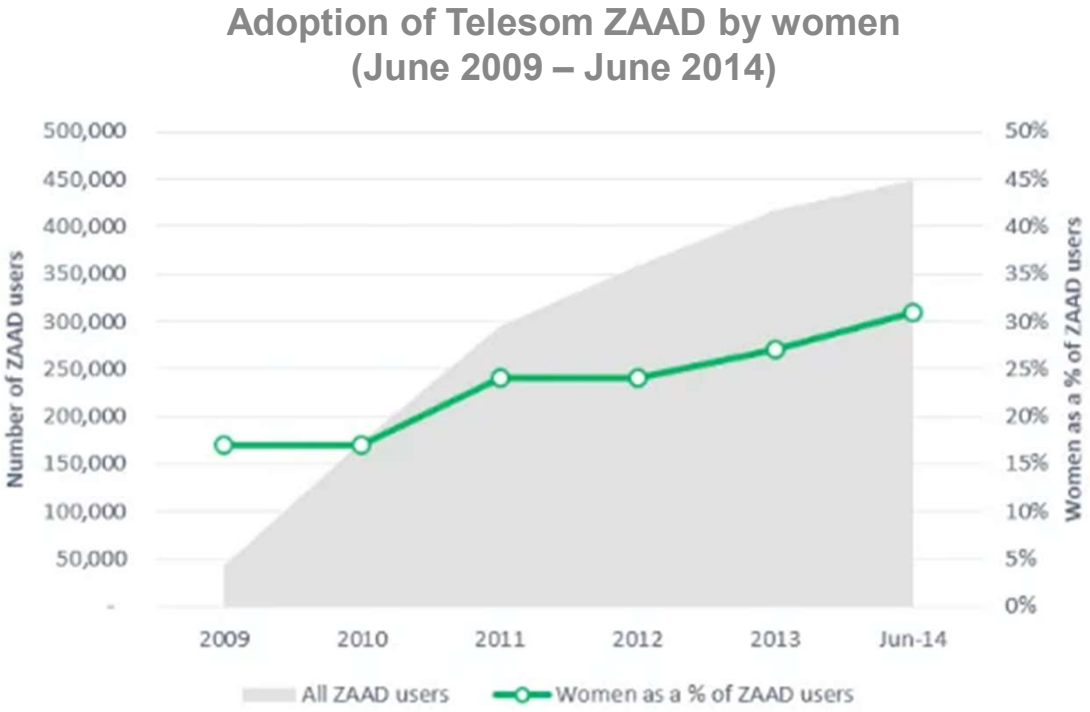
Accessibility is essential in driving the uptake and usage of all mobile-delivered services

However, understanding how people find, access, and use devices can be difficult. **All of these factors have a strong gender dimension.**

- **Access may not be linear, or binary:** loss of smartphone ownership, sharing, and 'gifting' smartphones, access to electricity
- **Maintaining access can present challenges:** relying on friends or family as informal credit networks, building relationships for access
- **Multiple devices and SIMs is common:** overcoming cost, battery, signal issues with different handsets; swapping SIMs to get the best tariff and/or coverage.

Ensuring accessibility can have a very real, and highly positive, commercial impact

Female agent recruitment, introduction of a simplified KYC account, and a focus on relevant use-cases increased female Telesom Somaliland customers from 17% in 2010 to **31%** in 2014 (2018: 35%).



Source: "Accessibility": How mobile operators can improve the accessibility of their services for women to help close the mobile gender gap, GSMA Connected Women blog - https://www.gsma.com/mobilefordevelopment/blog/accessibility-how-mobile-operators-can-improve-the-accessibility-of-their-services-for-women-to-help-close-the-mobile-gender-gap/

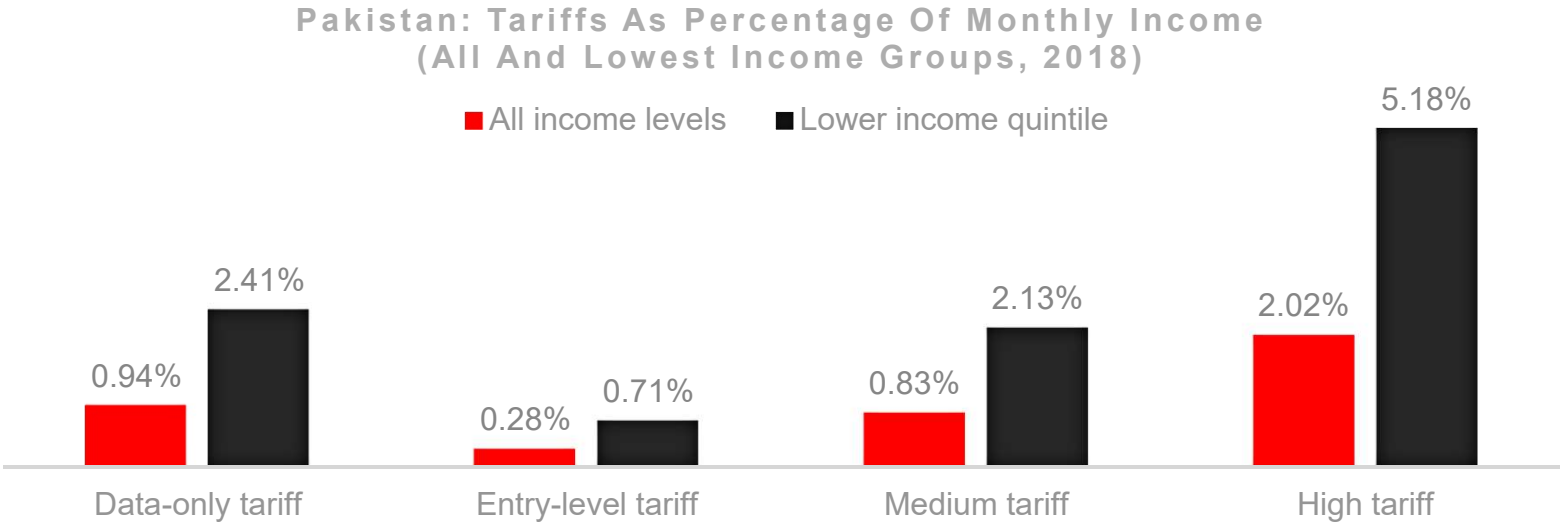
Making it happen: policies and other priorities to ensure accessibility

Reflecting the wide relevance of accessibility, policy and other recommendations are similarly expansive:

- **Enable high network quality:** driving uptake and usage through coverage-driven spectrum policies, and providing regulatory certainty to incentivise investment in high-quality coverage provisions
- **Build a wider enabling environment:** decrease administrative costs, ensure diverse provision of electricity (for mobile phone users, and network operators), and ensure that KYC requirements are not onerous – or exclude women and other marginalised populations – and promoting national ID initiatives where they do not currently exist.

What: Affordability

Handsets, tariffs, and data should be affordable – enabling users to build digital skills, and ensuring a central role for mobile in daily life.



*Tariff details: '**data-only**' refers to a package with 1GB of data without any voice or SMS; '**entry-level tariff**' refers to a prepaid package with 100MB of data, and a 2G, 3G, or 4G device; '**medium tariff**' refers to any package with 500MB of data, and a 3G or 4G device; whilst '**high tariff**' refers to any package with 250 minutes, 100 SMS, 1GB of data and a 3G or 4G device.*

Data and devices need to be affordable in order to drive widespread uptake

Affordability is a key barrier to adoption of the mobile internet – particularly impacting those on lower incomes. Women are often disproportionately impacted by affordability issues.

- **Access to mobile technology may not be prioritised:** particularly in comparison to essential daily household priorities
- **Affordable devices and data plans may be rare:** this difficulty can be compounded by a lack of relevant financing mechanisms
- **Affordability is a key aspect of digital literacy:** users need to have the financial freedom to explore devices, functionality, and the mobile internet – without fears of over-spend.

The industry has a wide range of interventions, initiatives, and options to increase affordability

For **handsets**:

- Lower-cost devices, bundling, and efficient distribution
- Credit, asset financing, and smartphone loans
- Third-party payment to reduce cost burden
- Savings schemes, relevant for customer circumstances

For **data**:

- WiFi hotspots at key locations
- Freemium services
- Sponsored and earned data
- Time-capped data plans
- Tailored data packages.

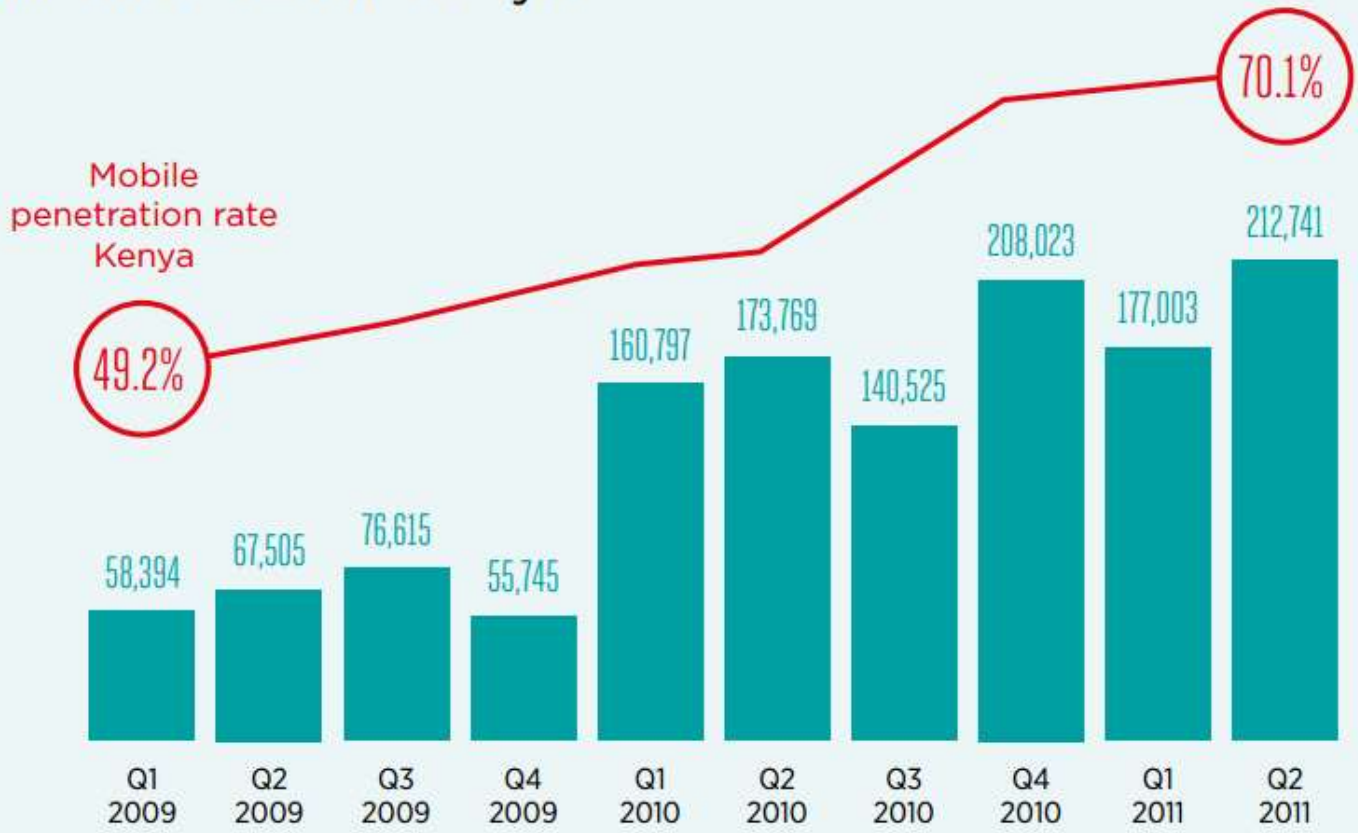
All efforts need to be founded on customer understanding of the benefits and value of mobile internet access and use

Making it happen: policies and other priorities to deliver affordable handsets and data

Governments can play an important role in ensuring that everyone can benefit from the potential of mobile internet:

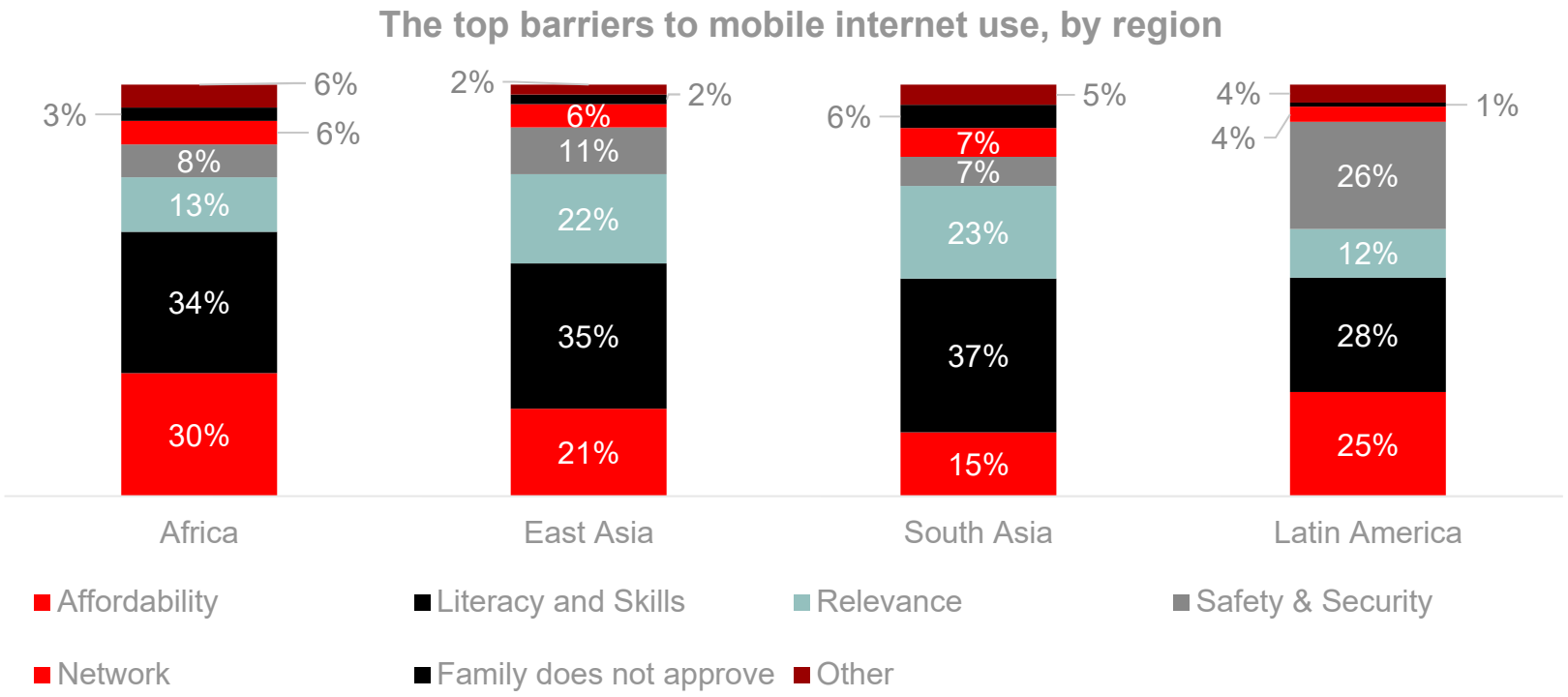
- **Ensure affordability from the outset:** avoid mobile sector-specific taxes, fees, and other levies – including the upfront and recurring costs of mobile spectrum
- **Support wider initiatives:** including providing supporting regulation, frameworks, and recognition for savings groups, credit products, and other approaches to improve access to financing mechanisms.

Increase in mobile penetration and handset sales following removal of VAT in Kenya



What: Usability and skills

A lack of literacy and digital skills is the top reason preventing consumers in low- and middle-income countries from using the internet

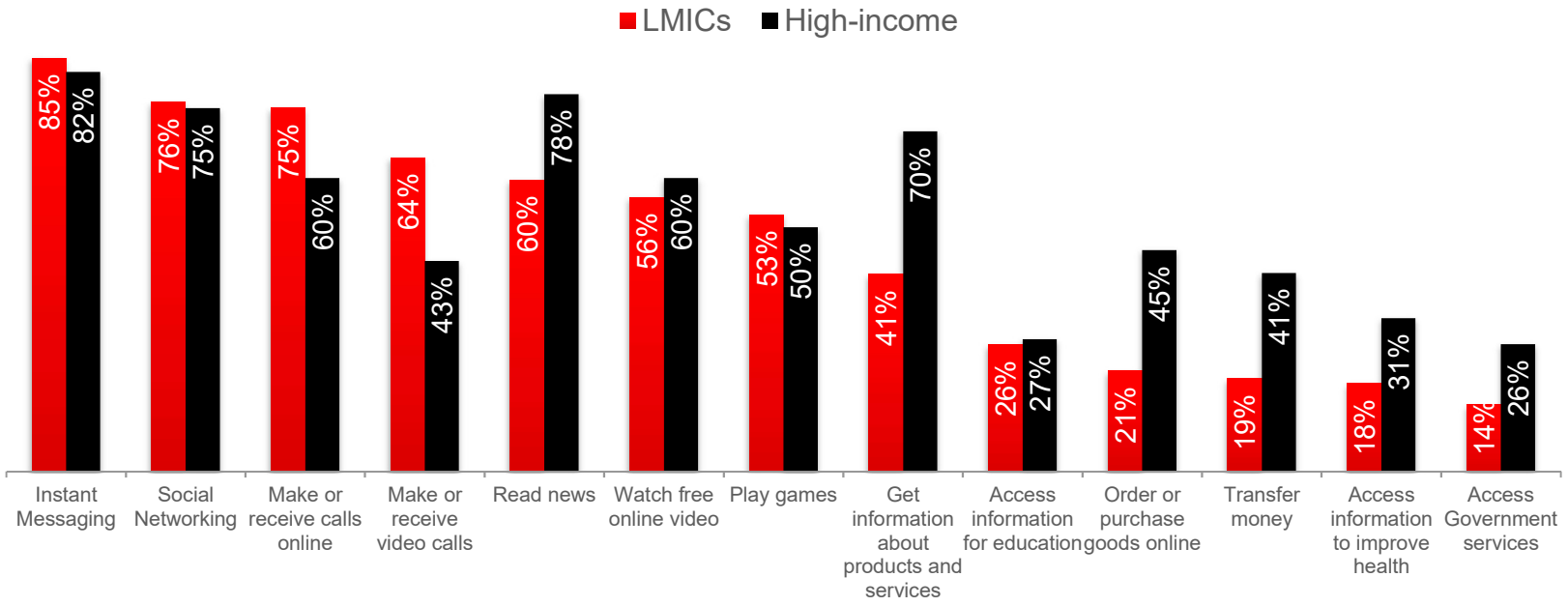


Source: The State of Mobile Internet Connectivity

Commercially sustainable mobile internet rollouts are founded on a wide network of digitally literate consumers…

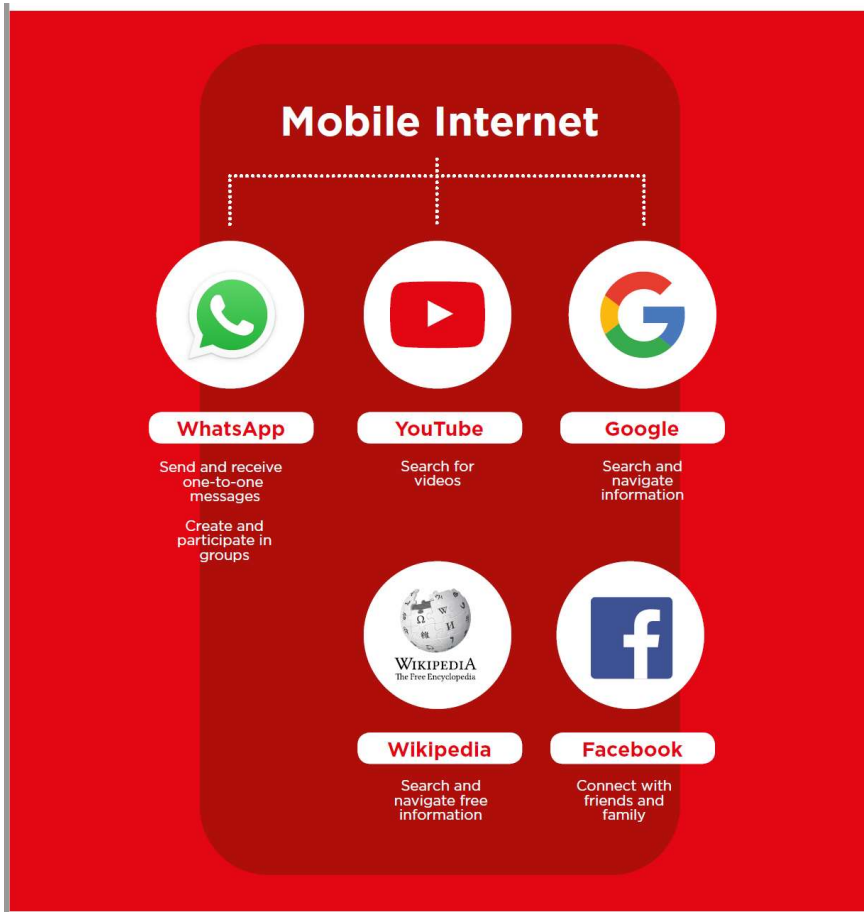
…however, the extent of internet skills varies considerably.

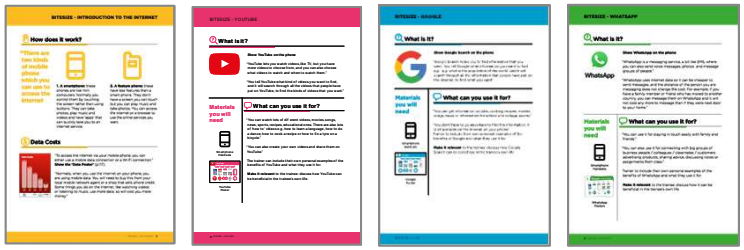
Activities undertaken on mobile internet, based on usage surveyed in LMICs and high-income countries



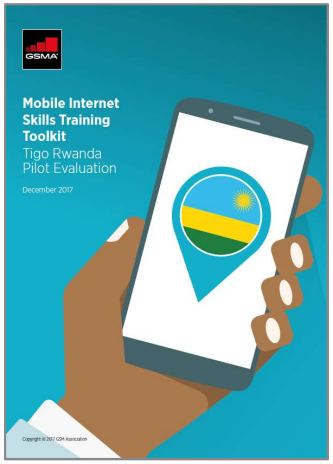
Source: The State of Mobile Internet Connectivity

Building digital literacy through the Mobile Internet Skills Training Toolkit (MISTT)





Banglalink pilot evaluation



Tigo Rwanda pilot evaluation

Making it happen: building digital literacy for today, and for future generations

Governments can play an important role in ensuring that everyone can benefit from the potential of mobile internet:

- **Literacy and digital skills education:** including bringing ICT into the school curriculum, guarantees that the citizens of tomorrow have the skills for the modern economy. Today's users must also be included
- **Leverage tools such as MISTT:** government is uniquely positioned to drive digital skills initiatives to reach the largest scales
- **Leave no one behind:** important to not build – or exacerbate – any digital (and digital gender) divide, including through supporting Assistive Tech, and ensuring that eGovernment services work for all.

What: Safety and security

Consumers need to be protected when online, and not prevented from accessing all of the benefits of mobile internet coverage.

		Africa							Asia						Latin America				
		Algeria	Ivory Coast	Kenya	Mozambique	Nigeria	South Africa	Tanzania	Bangladesh	China	India	Indonesia	Myanmar	Pakistan	Argentina	Brazil	Dominican Republic	Guatemala	Mexico
Harmful content (self/family)	M	14%	3%	8%	9%	11%	10%	2%	2%	10%	9%	6%	19%	7%	9%	26%	18%	26%	18%
	F	13%	5%	4%	11%	3%	10%	1%	9%	13%	6%	1%	14%	9%	8%	10%	30%	39%	23%
Strangers contacting me	M	4%	7%	7%	8%	7%	13%	5%	5%	12%	9%	9%	13%	4%	9%	19%	16%	14%	17%
	F	8%	7%	7%	5%	5%	16%	2%	7%	20%	7%	5%	7%	5%	9%	15%	18%	37%	12%
Information security	M	2%	5%	8%	4%	11%	18%	2%	4%	23%	10%	10%	10%	5%	13%	38%	18%	28%	24%
	F	6%	4%	4%	8%	6%	10%	1%	6%	16%	9%	3%	6%	4%	15%	22%	30%	35%	12%

Source: The Mobile Gender Gap Report 2019

Making mobile internet safe and secure is essential for building and growing total mobile internet users

Safety and security are wide-ranging issues, that can have a very real and negative impact on user experience, revenue, and mobile internet rollout.

- **Harm is a factor online and offline:** theft, harassment, domestic violence; unwanted calls and SMS, online bullying and misuse of data
- **Harm has a real impact on mobile internet usage:** due to concerns, fewer people may use the internet, churn increases as users change numbers, and ARPU (including handset and data spend) can fall
- **Potential for harm can increase:** particularly as mobile internet services become more complex, and essential for daily life. Interventions must be proportionate and targeted.

A framework to understand women's mobile-related safety concerns in low- and middle-income countries

Type of safety concern	Safety concerns arising from mobile ownership and use			General safety concerns
Category	Physical world	Voice and SMS	Online	Not mobile-related
Examples of the safety concern	Example: harassment at points of sale or as a result of using phone in public	Example: unwanted calls or messages	Example: harassment on social media, misuse of personal data or images	Example: harassment in public (e.g. on street or public transport), assault, theft
Types of initiative that address safety concerns	1 **Anonymous top-up services**: SMS-based, scratch cards, ATM top-up, online top-up, e-vouchers, mobile money top-up services, top-up machines		4 **Web filtering services and online security**	7 **Emergency call services**: emergency credit and helplines
	2 **Female-friendly distribution models**: female agents, female-focused retail stores	3 **Call and message blocking services**: network-level services, device-level services	5 **Online service provider security settings and policies**	8 Harassment mapping
				9 Panic button apps
				10 Wearables
	6 **Educational initiatives**: face-to-face initiatives, digital initiatives			

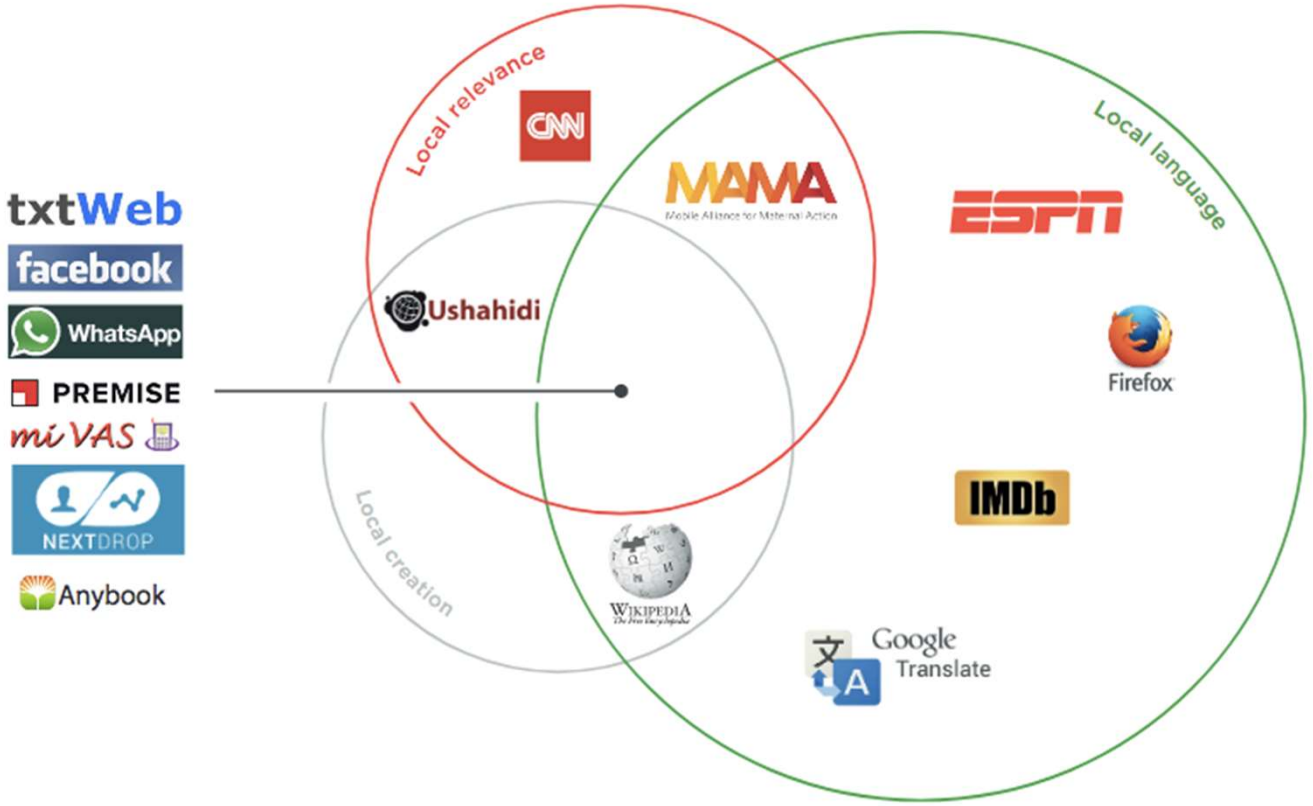
Making it happen: improving safety and security to drive mobile internet uptake and usage

Governments can play a unique role in ensuring that everyone can benefit from mobile internet.

- **Understand the scale, impact, and drivers of these concerns:** particularly within the local context – and design, launch, and/or support effective initiatives to tackle these concerns
- **Ensure a safe and secure online experience for all users:** including through developing appropriate legal and policy frameworks
- **Raise awareness of safety and security:** across all areas – from theft to harassment, particularly amongst groups most affected (such as women).

What: Relevance

Providing local, tailored, and applicable content and services is essential in building long-term mobile internet use



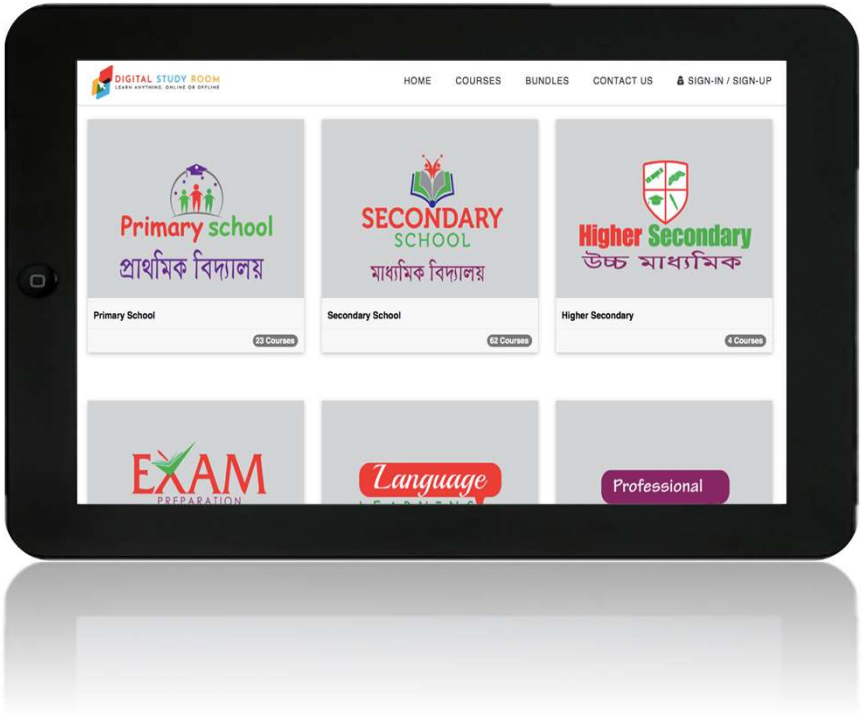
Source: GSMA Intelligence Analysis - Mobile internet usage challenges in Asia

Relevant content and services are a strong factor in increasing the usefulness and attractiveness of mobile internet

However, developing such content and services can be difficult – and is based on a number of factors:

- **Progress is happening:** there were almost 200,000 mobile applications available in local languages in 2018 (an increase of more than 200% since 2014). eGovernment is a powerful driver
- **Language in some areas is an issue:** for example, in 2018 there were around 5,500 mobile applications available in Bengali
- **Smartphones can play an important role:** with touch screens, sensors, and other features, they lower the barriers to entry for application development – and support less-literate users,

A number of operators have recognised the usefulness of supporting local content development and delivery



No use of mobile internet

Access + Need / desire + Ability

Limited uses of mobile internet

Learn what's possible + Can navigate and control + Critically assess content

Leverage

Desire to use authoring tools + Ability to use existing platforms + Inspired and confident

Creation

Source: GSMA/Mozilla – Mobile for Development Impact

Making it happen: increasing the amount of locally relevant mobile internet content

Governments can play a strong role in supporting, incentivising, and driving local content development and delivery

- **Drive interest in mobile internet:** encourage the development of relevant content and services showcasing the value of mobile internet
- **Explore digital public services:** eGovernment can be a strong catalyst for mobile internet usage, and highlight a government and public sector committed to digital transformation
- **Support the wider ecosystem:** including STEM education, training, facilities, and initiatives to build the developers of the future – particularly amongst under-served groups, such as women and girls.

Recap: There are five key barriers to driving demand of mobile internet

Accessibility

Policies, programmes, and efforts to ensure equitable and feasible access to mobile devices and services for everyone

Key areas:

- Quality network coverage
- Access to handsets
- Access to network processes (agents etc.) and to key enabling factors (electricity, ID)

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- Fraud
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- Digital literacy
- Wider factors ('Fake News')

Relevance

Providing local, tailored, and applicable content and services is essential in building long-term mobile internet use

Key areas:

- Policies
- Content
- Products
- Services

Capacity Building

4

SESSION 4

Group Review

- Which are the most challenging barriers to mobile internet use in your country?
- What measures are already being deployed to address this?
- What additional measures would be most effective?

Closing the usage gap: a policy roadmap

Regulators and policy-makers have a key role to play in stimulating demand for mobile internet services and closing the usage gap.

Step 1 –

Make digital inclusion and closing the usage gap a strategic priority

Step 2 –

Collect, analyse and track data to understand of barriers to mobile internet adoption and use

Step 3 –

Implement targeted policy and regulatory interventions to address adoption and use barriers

Step 4 –

Pay special attention to the barriers that disproportionately affect women as well as other vulnerable segments of the population

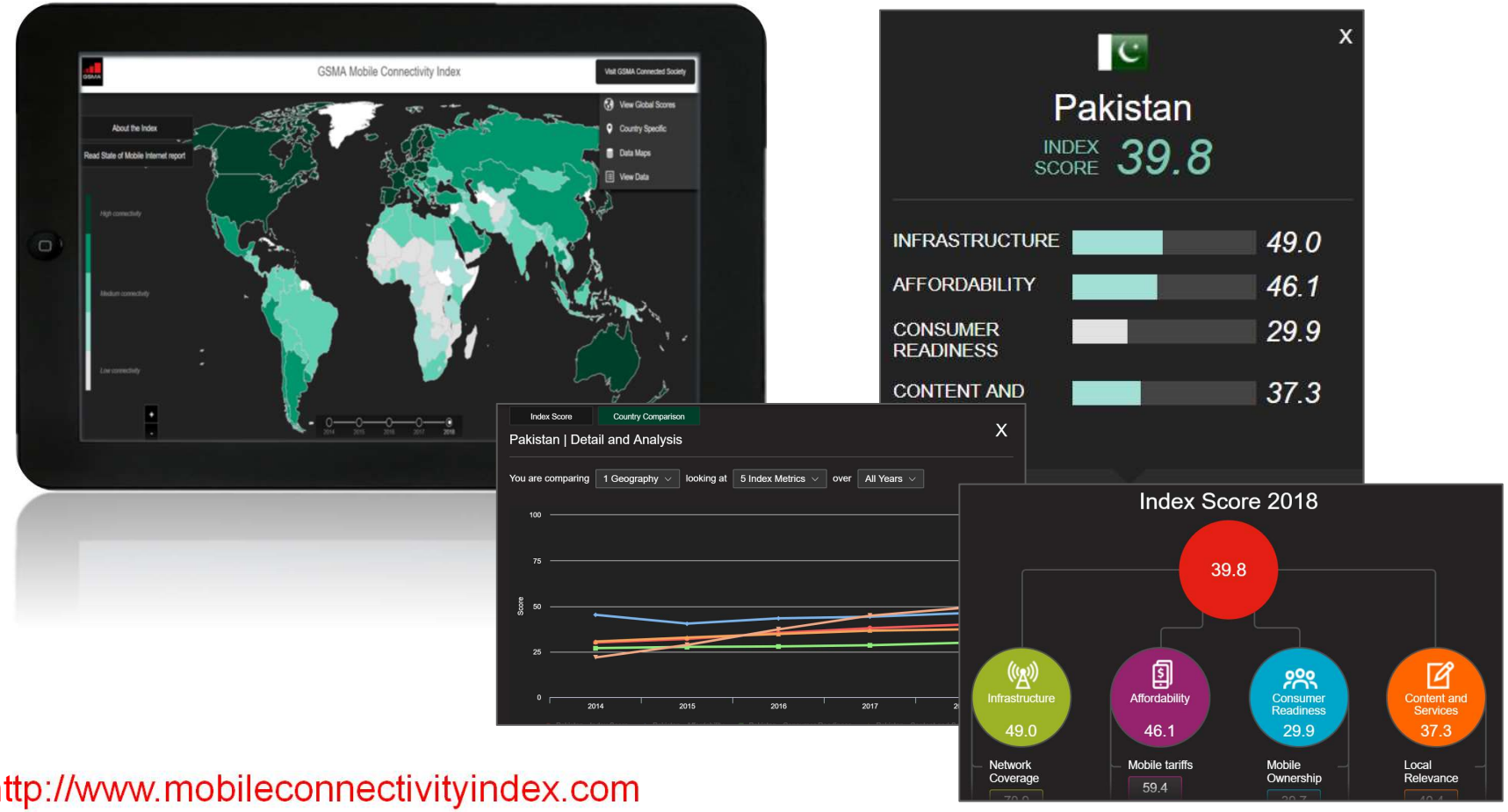
https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/03/GSMA-Connected-Women-The-Mobile-Gender-Gap-Report-2019.pdf

Conclusion

- Bringing sustainable coverage to rural areas has a positive impact on consumers, the mobile industry and the wider economy.
- Unlocking this potential requires enhancing both the coverage (supply) and usage (demand) of mobile services, thus creating a favourable environment for mobile operators to invest.
- Both operators and the government have an active role to play to create this favourable environment:

	Mobile operators	Government
Foster demand	• Affordable smartphones (in partnership with manufacturers) • Contribute to improving digital skills	• Remove taxes that affect affordability • Support the local content ecosystem • Literacy and digital skills education
Foster supply	• Infrastructure sharing in rural areas • Innovation on last mile and backhaul technology	• Remove sector-specific taxes and levies • Coverage driven spectrum policy • Decrease administrative costs • Provide regulatory certainty to incentivise investment

GSMA Mobile Connectivity Index



http://www.mobileconnectivityindex.com

Capacity Building

You have reached the end of this session