

LLDC dedicated session on the margins of the WTO Public Forum

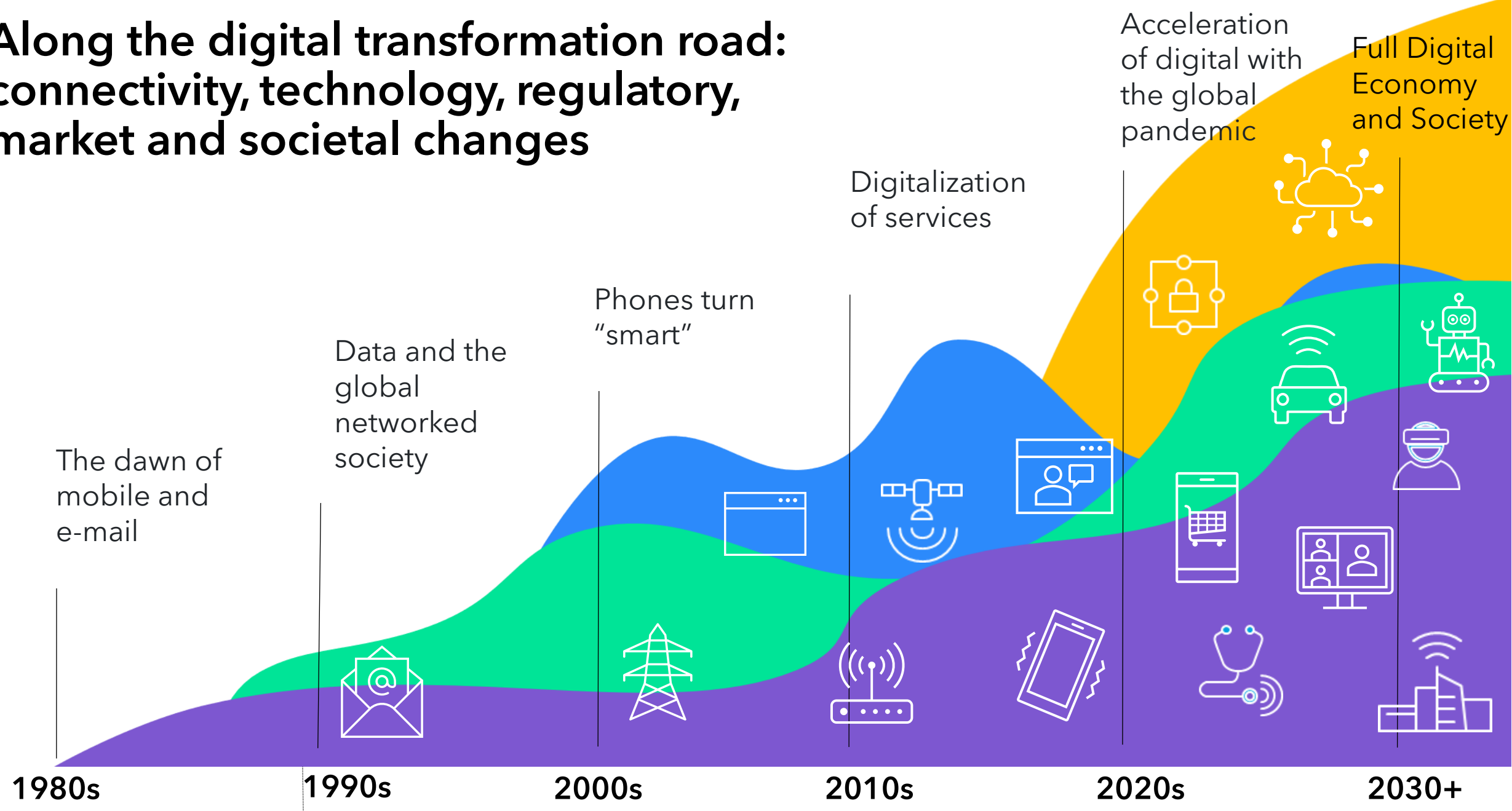
**Enhancing integration of
Landlocked Developing
Countries (LLDCs) into
global trade for sustainable
covid-19 recovery: The role
of digital technology**

29th September 2022

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ITU Telecommunications
Development Bureau



Along the digital transformation road: connectivity, technology, regulatory, market and societal changes



1980s

1990s

2000s

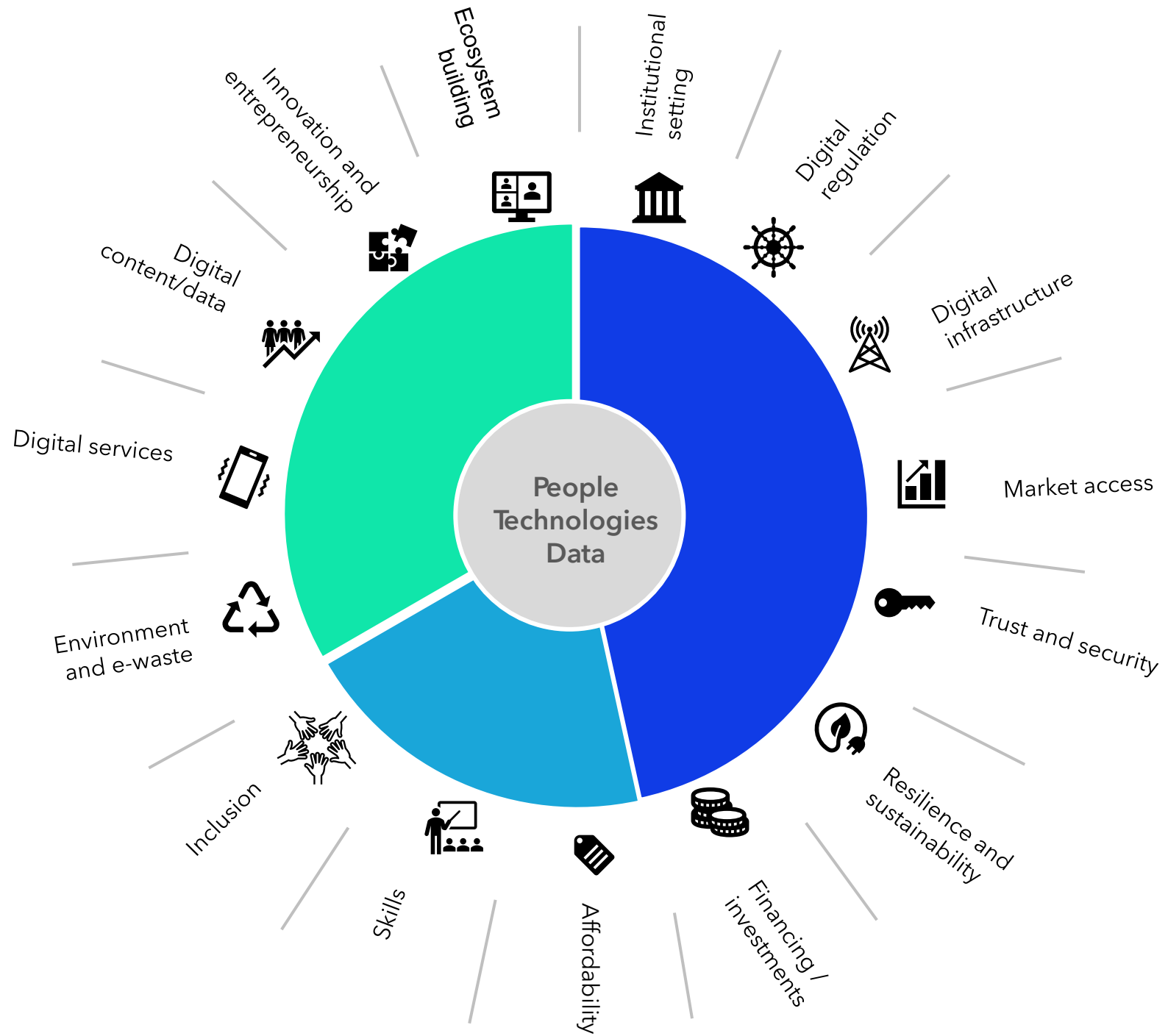
2010s

2020s

2030+

BDT established (1992)

...as digital impacts all sectors and aspects of people's life



REGULATORS



Enablement of a digital single market

Consumer protection

Norms

Enablement of cross national technologies

Enablement of international digital spaces

Control

Syndicates

Labor protection

Protection of traditional market players

Protection of privacy

Protection of society

Protection of assets

Cyber-crime

Cyber-war

Risk management

Law

Rules

Security

DIGITAL



Entrepreneurship

Innovation

Global village

Connectivity

Flexibility

New ways of working

New ideas

Open government

Open economy

Open society

Money

Freedom of ideas

High rewards

Business opportunities

Full transparency

Boundless communication

Free economy

Regulation in the digital ecosystem



Mobile broadband generates a **larger economic contribution** than fixed broadband, when examined globally.



Developing countries **benefit more from mobile broadband** than industrialized countries.



Developed countries with high penetration of fixed broadband enjoy **larger benefit from the technology** than developing nations.



The **economic contribution of digitization** is higher in advanced economies than in emerging countries.



Digitization contributes significantly to **labour** and total **factor productivity**.



The development of digitization is driven by **institutional and regulatory factors** and not only by variables such as economic development.

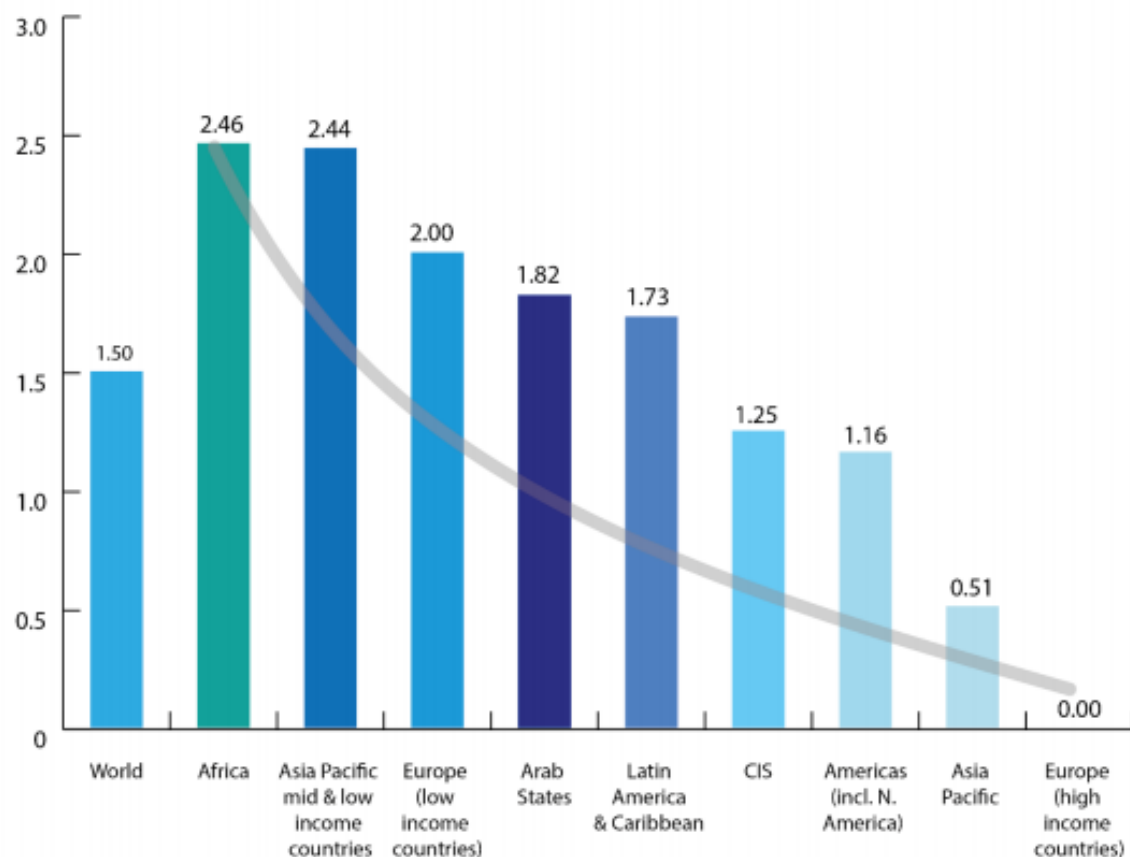


Digitization accelerates when a country introduces **structural changes in policy and institutions** which are related to digital technologies - after a time lag.

The economic impact of broadband at global level



Regional GDP growth impact of an increase in 10% of mobile broadband penetration (in per cent)



Source: ITU Report How broadband, digitization and ICT regulation impact the global economy - www.itu.int/go/Economic-Contribution

The impact of broadband at global level

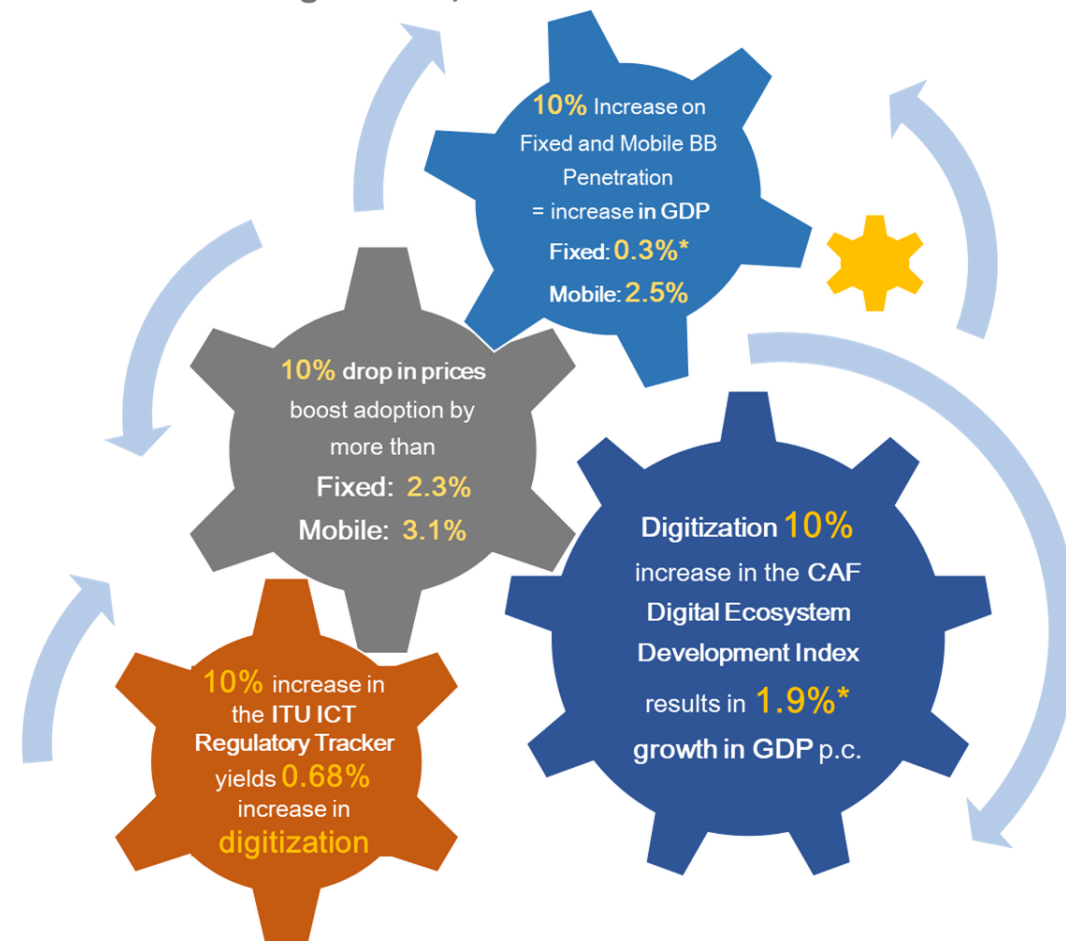
The broadband econometric impact models confirm that:

- At the aggregate level, **mobile broadband appears to have a higher economic impact than fixed broadband**;
- The economic **impact of fixed broadband is higher in more developed countries** than in less developed;
- On the opposite, the economic **impact of mobile broadband is higher in less developed countries** than in more developed.

The economic contribution of broadband, digitization and ICT regulation

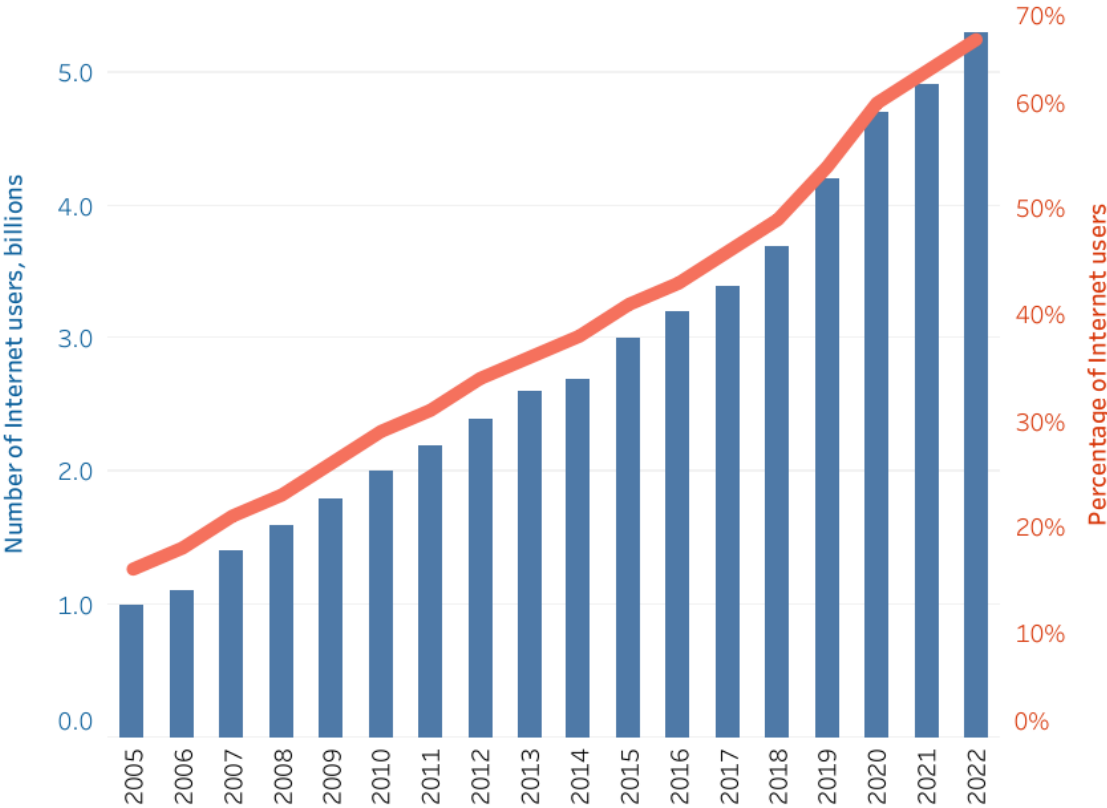
Econometric modelling results for Africa

Africa: Economic Impact of Fixed and Mobile Broadband and Digitization, 2019



Connectivity: a prerequisite

Individuals using the Internet



Source: ITU

[ITU Statistics](#)

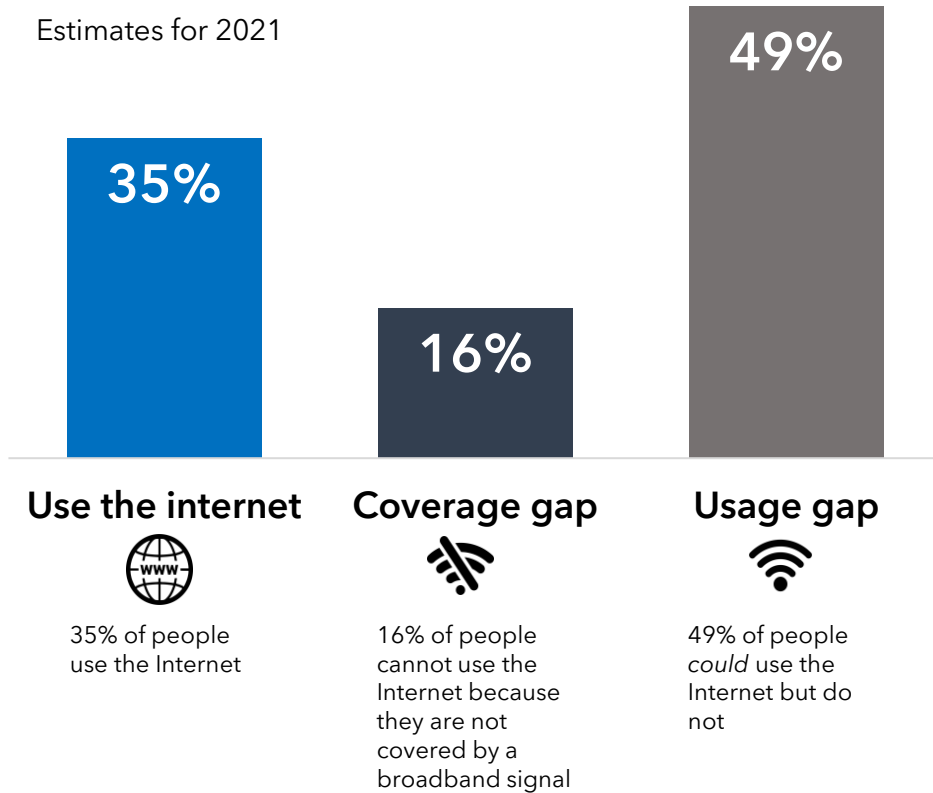
Note: being online means having used the Internet in the last three months.



Connectivity in LLDCs

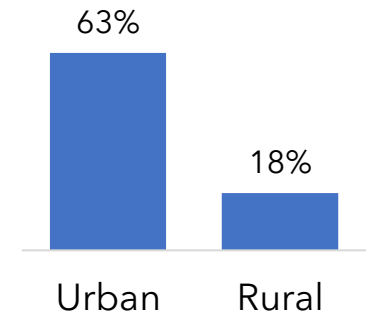
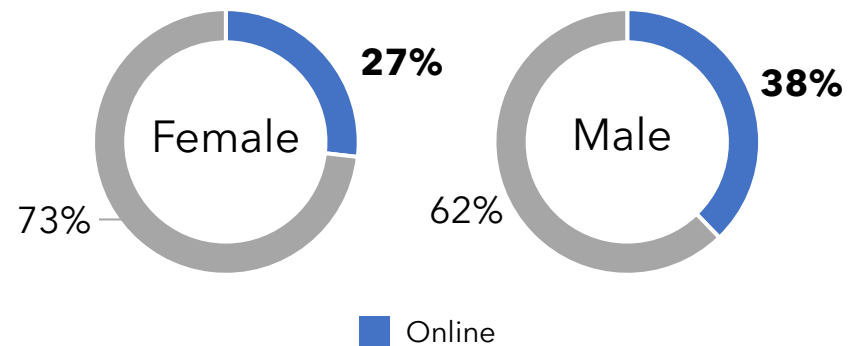
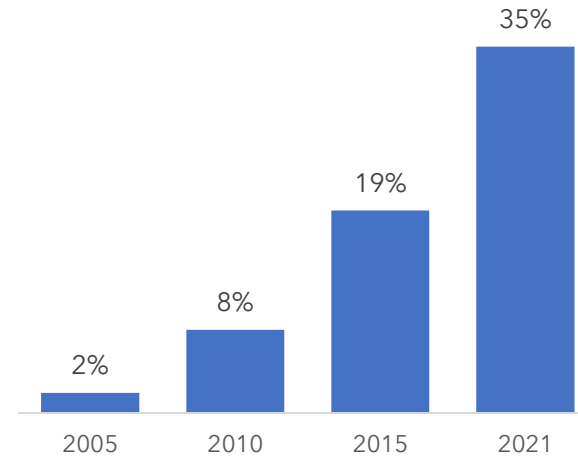
Connectivity gaps

Estimates for 2021



Share of online population

Estimates

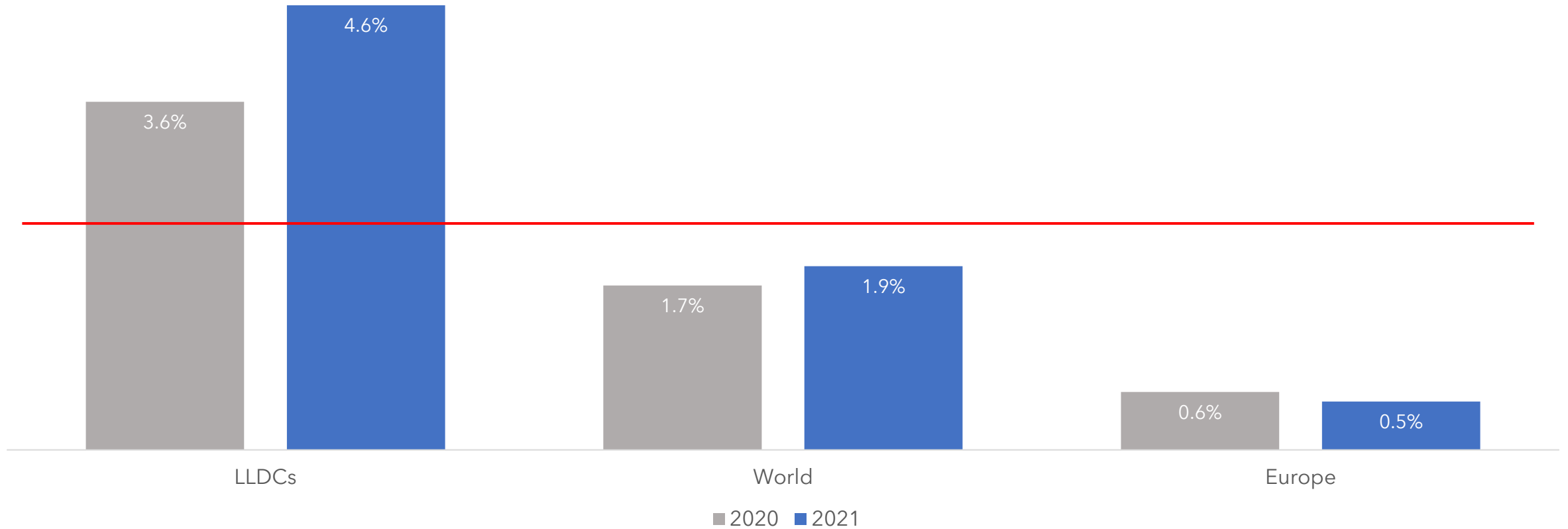


Estimates for 2020

Connectivity in LLDCs

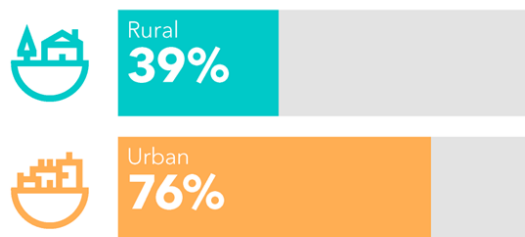
Data-only mobile broadband subscription

Median price, % of GNI per capita, 2021



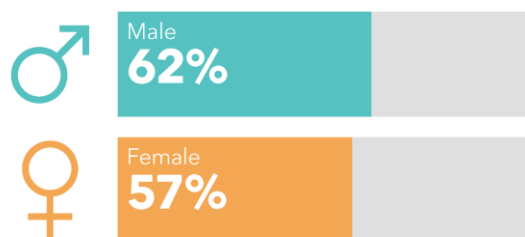
Global urban/rural divide

Individuals using the Internet in 2020



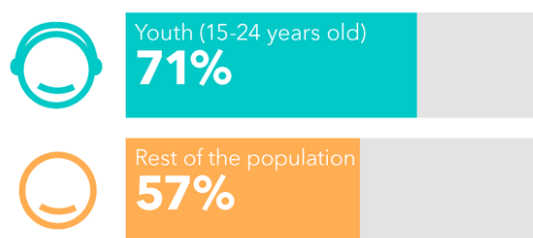
Global gender gap

Individuals using the Internet in 2020



Global generational gap

Individuals using the Internet in 2020



The journey to universality: the 5 divides

Income divide: The level of Internet use in low-income countries (22 per cent) remains far below that of high-income countries, which are close to universal usage (91 per cent).

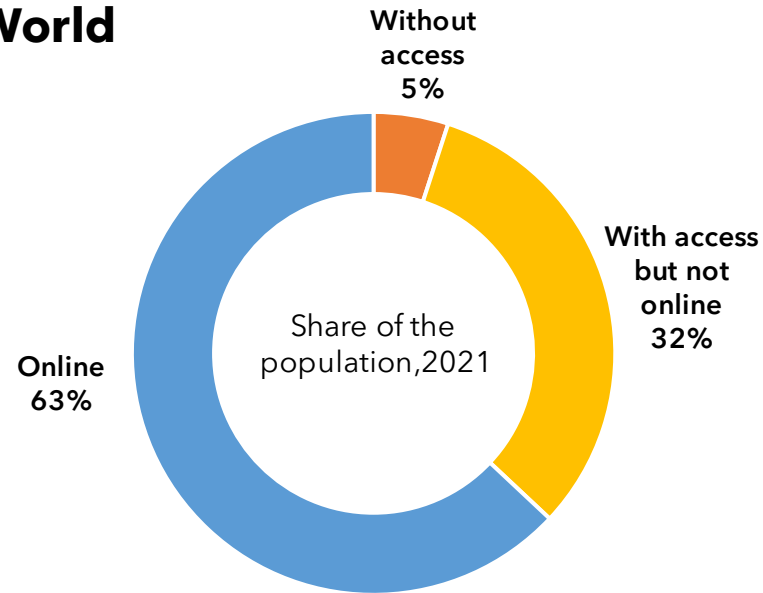
Urban-rural divide: The share of Internet users is twice as high in urban areas as in rural areas.

Gender divide: Globally, 62 per cent of men are using the Internet, compared with 57 per cent of women.

Generation divide: In all regions, young people aged between 15 and 24 are more avid Internet users (71 per cent of them are online) than the rest of the population (57 per cent).

Education divide: In nearly all countries where data are available, rates of Internet use are higher for those with more education, far higher in many cases.

World



Connectivity in the Decade of Action

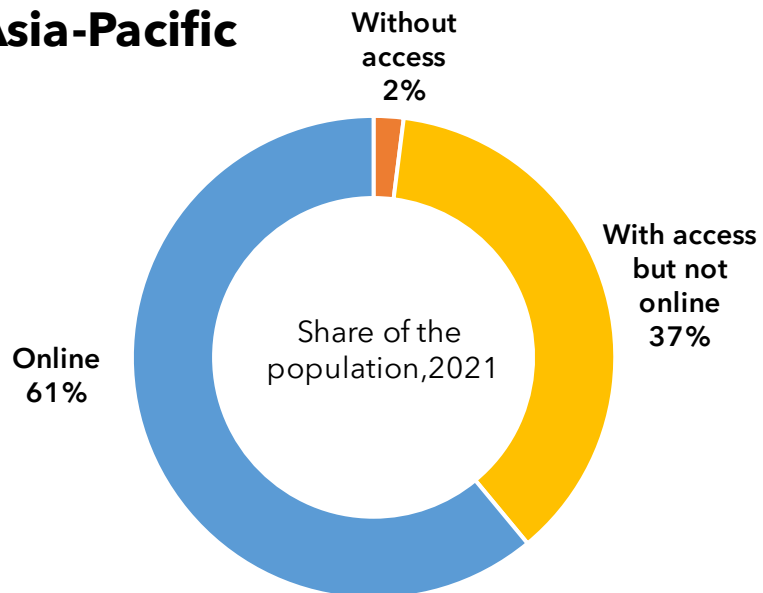
The three challenges of the 2020-2030 decade:

Closing the coverage gap: even though 95 per cent of the world population is now within range of a mobile broadband network, at least 390 million people have no possibility to connect to the Internet.

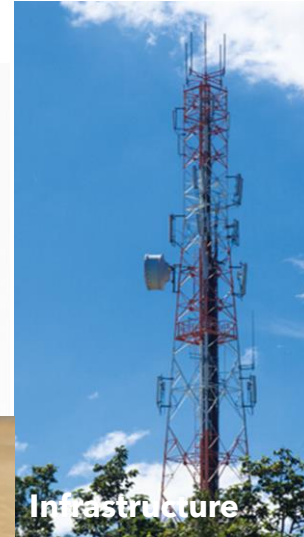
Closing the usage gap: one in three individuals who could go online choose not to, mainly due to prohibitive costs, lack of access to a device, and/or lack of awareness, skills, or purpose.

Achieving meaningful connectivity for all: For many Internet users, connectivity is not good enough to do online what they want whenever they want.

Asia-Pacific



How to achieve universal & meaningful connectivity



Connectivity is no longer enough, it must be "meaningful"

Universal and meaningful connectivity (UMC)

Defined as **the possibility for everyone to enjoy a safe, satisfying, enriching, productive, and affordable online experience.**

Has become the new imperative in the 2020-2030 Decade of Action.

Need to upgrade connectivity from basic to meaningful for all.

Only by achieving UMC will the world fully realize the promise connectivity holds for digital transformation and for socio-economic development.

Universal & meaningful connectivity: aspirational targets for 2030



Universality targets

100%	of population aged 15+ uses the Internet
	of households have Internet access
	of businesses use the Internet
	of schools are connected to the Internet
	of population aged 15+ owns a mobile phone
>70%	of population aged 15+ has basic digital skills
>50%	of population aged 15+ has intermediate digital skills
Gender parity	for Internet use, mobile phone ownership and use, and digital skills



Technology targets

100%	of fixed-broadband subscriptions are 10 Mb/s or faster ²
20 Mb/s	of population is covered by a mobile network of the latest technology ¹
20 Mb/s	Minimum download speed at every school
50 kb/s	Minimum download speed available per student
200GB	Minimum data allowance for every school



Affordability targets

2%	Entry-level broadband subscription costs less than 2% of gross national income per capita
2%	Entry-level broadband subscription costs less than 2% of average income of the bottom 40% of population

Note: 1 *Mobile network of the latest technology* is the most advanced technology available in the country with at least 40% of the population already covered.

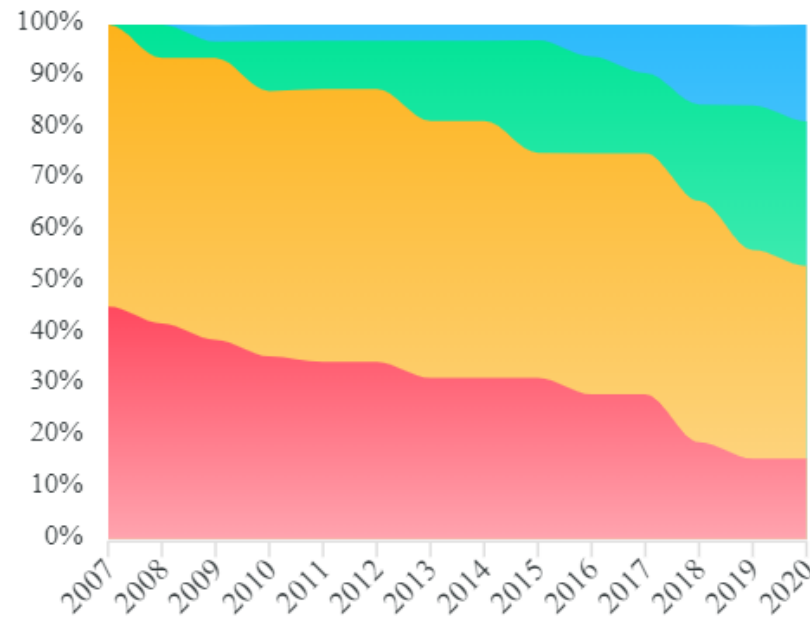


The impact of regulation

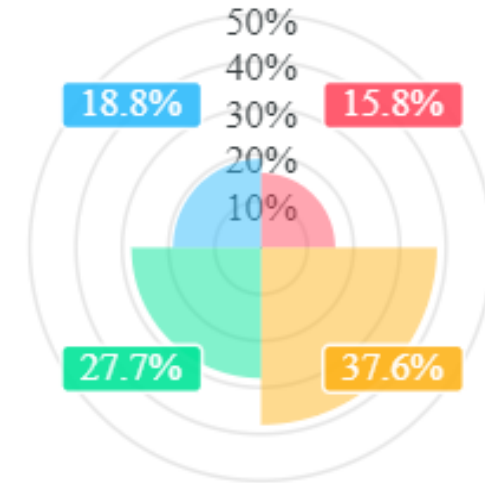
- Regulatory and institutional frameworks are essential **in driving digital ecosystem growth** and the effect builds up over time
- **The connectivity of digital services** is significantly and positively correlated with the level of advancement of ICT policies and regulations, and competition frameworks in particular
- **Investment and development of infrastructure in the digital ecosystem** are directly and positively influenced by the maturity of ICT regulatory frameworks and by competition in ICT markets.
- Level playing field in the digital marketplace is hard to achieve.
- **New policies and regulations need to be built in and onto existing ones** in order to increase their relevance and impact on the development of the digital ecosystem.

Evolution of Generations of Regulation

LLDCs, 2007 - 2020



LLDCs, 2020



- G1
- G2
- G3
- G4

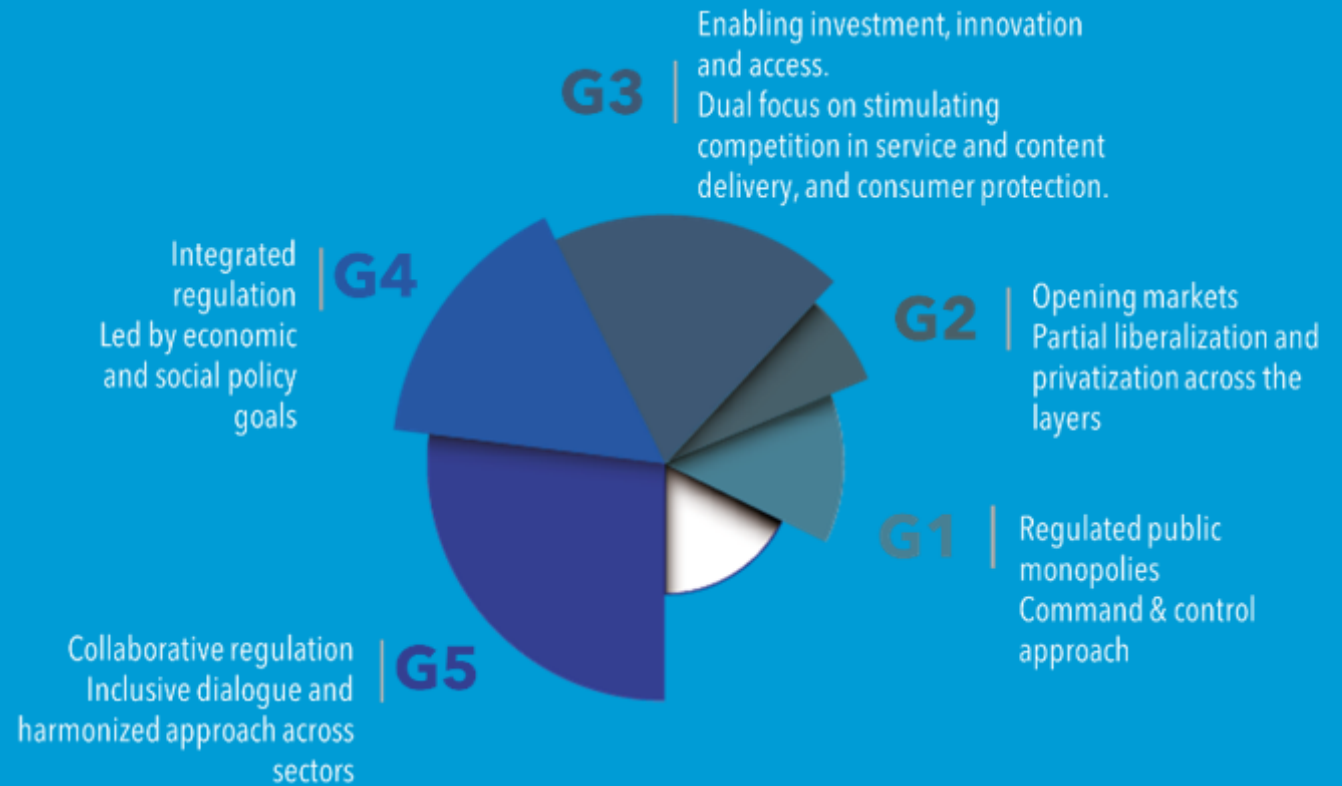
Source: ITU



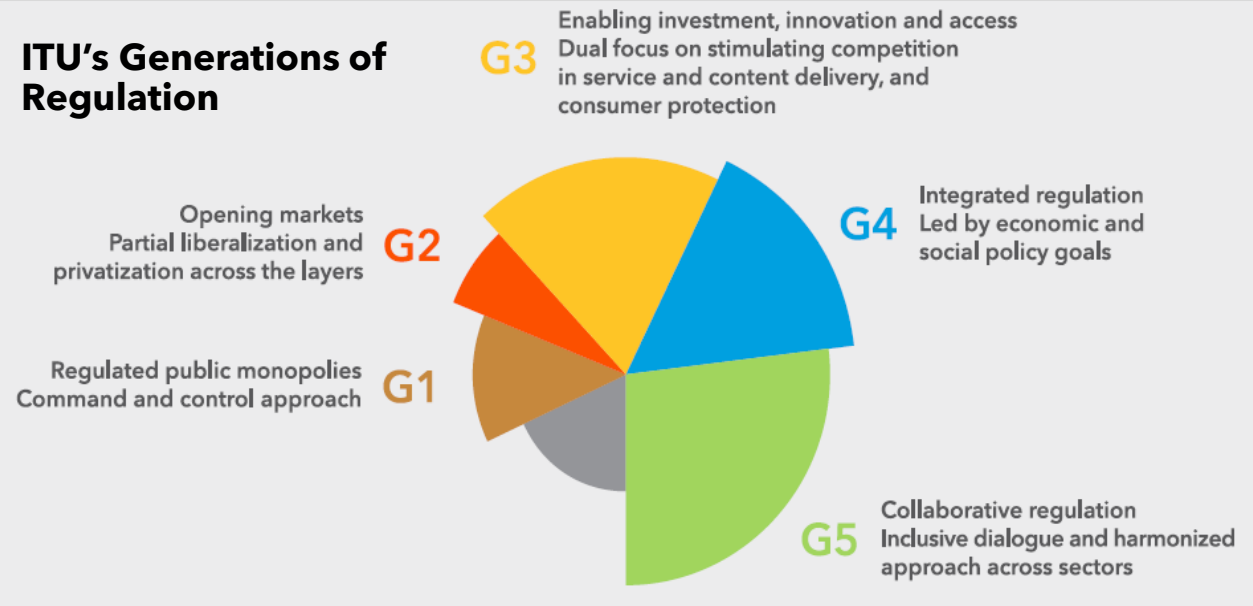
How has regulation evolved?

For two decades, ITU has been investing in global tools that chart the development of regulatory regimes, identifying five distinct generations of regulatory regime - G1 to G5, each more sophisticated than the previous - and analysing their interplay with national economies.

As a result of this analysis and the striking insight it has yielded, ITU is unequivocally advocating for a fifth-generation collaborative approach to ICT regulation as the fast-track for developing countries wishing to build vibrant, inclusive digital economies.



ITU's Generations of Regulation



Policy and regulatory strategies that drive digital transformation

- Build ambidextrous leadership
- Bridge silos and break through insularity
- Develop a common language across stakeholder groups
- Reframe and operationalize policy agendas
- Skill up, and up again

Moving away from fragmentation at all levels

G5 Benchmark 2021 Edition: findings

Two-thirds of countries are in their early digital days:

with only partially adequate legal instruments in place and underdeveloped collaborative governance practices.

Climbing up the digital development ladder will require consistent effort by government and active involvement of all stakeholder groups aligned around key policy priorities.

One-third of countries have progressive digital policy and regulatory frameworks:

They form the Advanced group of countries on their digital transformation journey

Their population is more likely to enjoy digital dividends, rather than suffer digital divides.

Their legal and regulatory frameworks are fit-for-purpose and are rich in best practice.

Only 9 leading countries are reaping the full benefits of the digital transformation:

Australia, Canada, Estonia, Finland, Germany, the Republic of Korea, the Netherlands, Singapore and the United Kingdom

All leverage strong cross-sectoral policies and deliver on digital development objectives.

Collaborative regulation

Inclusive dialogue and harmonized approach across sectors

G1

G2

G3

G4

G5

A man with a grey beard and a red turban is smiling and holding a smartphone in his right hand. He is also giving a thumbs up with his left hand. The background is a blurred green field. The entire image has a blue overlay.

The road to digital transformation
How to engage with us

Digital transformation

Users	Digital society
Technology	Digital economy
Data	Digital nation

Harnessing of ICTs for enhanced well-being, prosperity and sustainability.

DT is not a state to be achieved, but a process to be sustained.

A means to accelerate sustainable development.

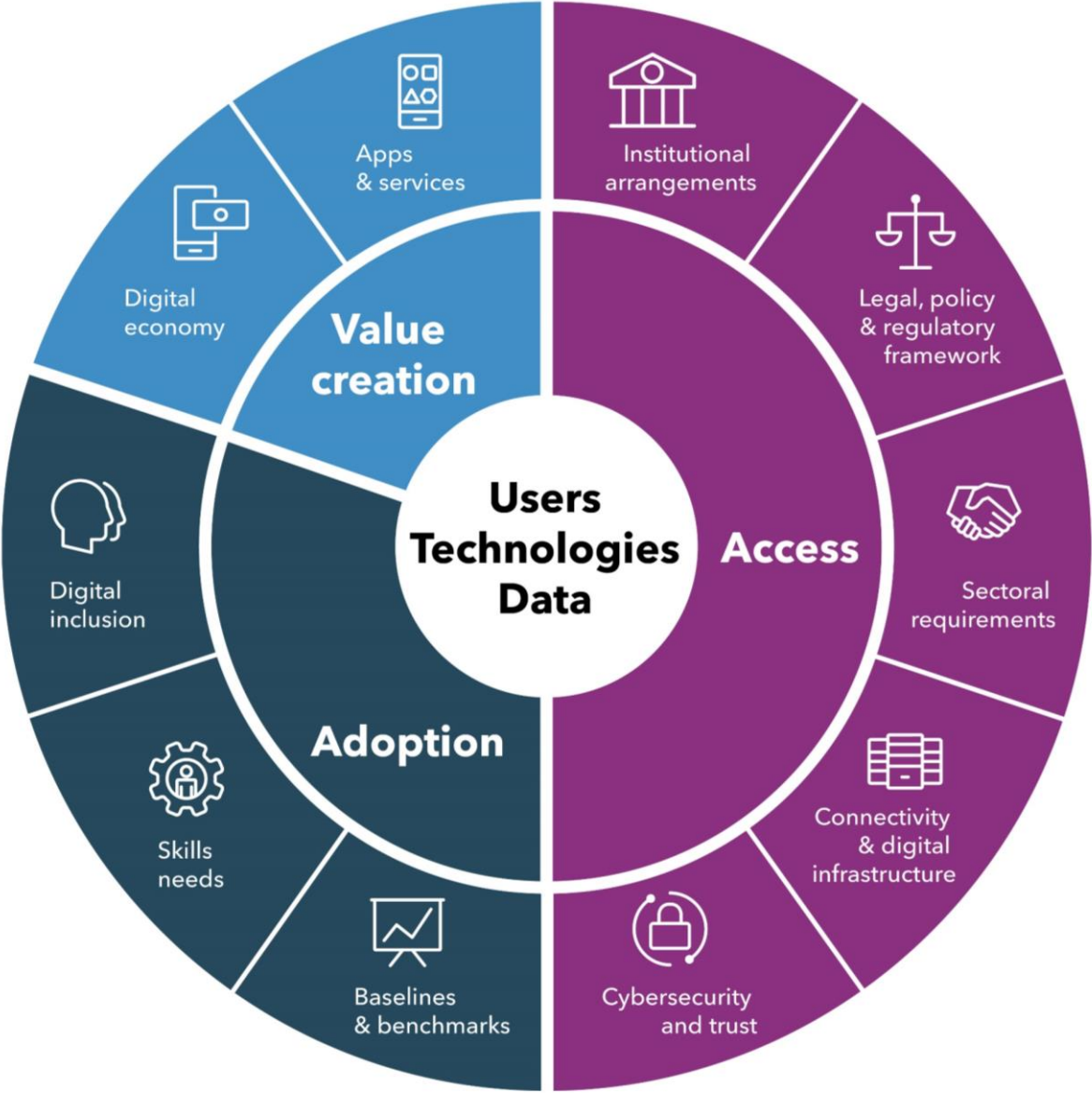
By improving a country's performance on the three dimensions of sustainable development: human well-being, economic prosperity and environmental sustainability.

Efforts to achieve UMC directly help sustain digital transformation.

As more people go online and users enjoy better connectivity, the ability of a country to sustain digital transformation inevitably increases, leading to the realisation of a digital economy, digital society and ultimately, a **digital nation**.



The BDT Wheel of Digital Transformation

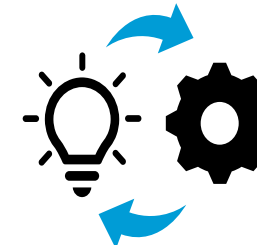
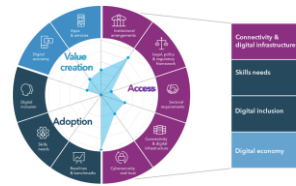


BDT's 6-step approach to digital transformation



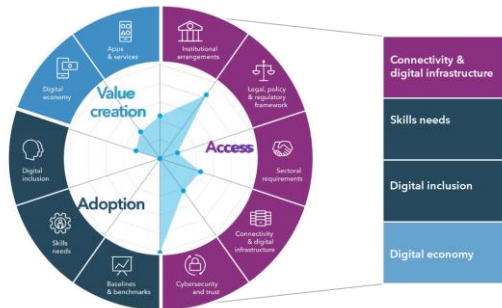
1
Diagnostic Assessment
 360 Country Digital Landscape assessment based on Access, Adoption, Value Creation streams (HQ and Regional Office)

3
Deep Dive
 In depth analysis and recommendations based on designated priority building blocks



5
Implementation
 in close coordination with the country and partners

2
Validation and Prioritization
 Setting of priorities areas - and country validation



4
Identifying intervention
 Based on ITU's products and tools

- Direct assistance / Advisory
- Project implementation
- Capacity & skills development
- Guidelines and best practices
- Analysis/Toolkits
- Knowledge exchange & dialogue platforms
- Special Initiatives



6
Monitoring and Evaluation
 Impact stock-taking



ITU BDT 360 Assessment

200 indicators

Applications and services:

GovTech Maturity Index

Digital economy:

UN e-Government Knowledgebase

Global Innovation Index

Global e-Waste Monitor

Digital inclusion:

ICT Eye

Skills:

ICT Eye

Baselines and benchmarks:

ICT Eye



Institutional arrangements:

ITU Regulatory Tracker

Authority score

Mandate score

G5 Benchmark: Policy design principles score

Legal, policy and regulatory framework:

ITU Regulatory Tracker

Regime score

Competition score

G5 Benchmark: Digital development score

Sectoral requirements:

G5 Benchmark

National collaborative governance score

Digital economy policy score

Connectivity & digital infrastructure:

Infrastructure mapping data

ICT Eye

Tariff Survey

Cybersecurity and trust:

Global Cybersecurity Index (GCI)

In the Africa Region

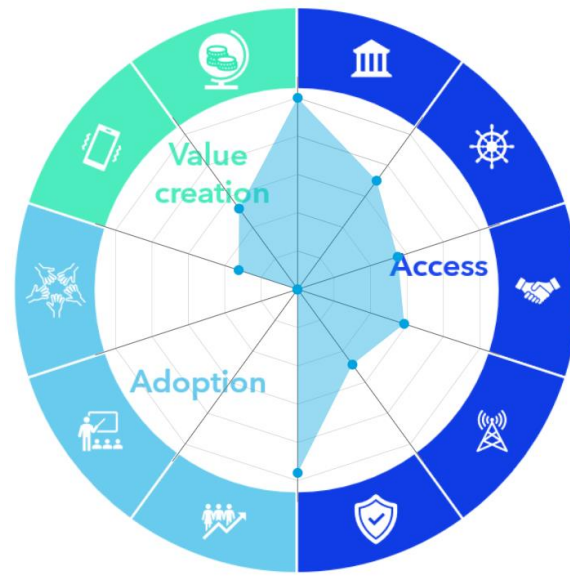
Land-locked developing countries (LLDCs)



Most room for improvement:

- Affordability (Mobile) and (BB)
- Cybersecurity
- Infrastructure

Least developed countries (LDCs)



Most room for improvement:

- Affordability (Mobile) and (BB)
- Cybersecurity
- Infrastructure

Small island developing states (SIDS)



Most room for improvement:

- Affordability (Mobile))
- Cybersecurity

In the Asia Pacific region

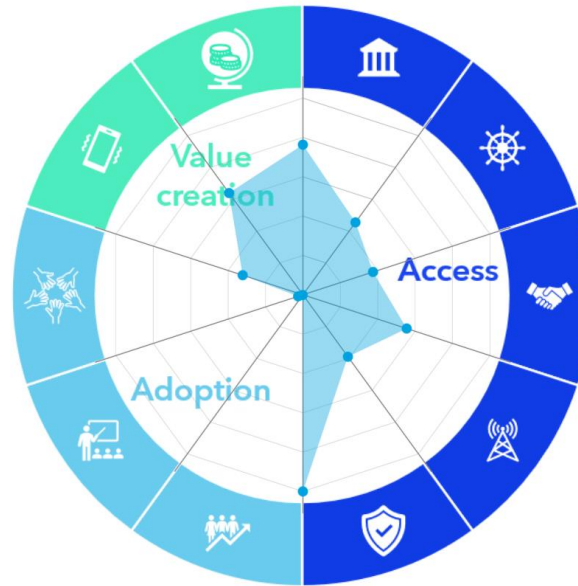
Land-locked developing countries (LLDCs)



Most room for improvement:

Cybersecurity

Least developed countries (LDCs)



Most room for improvement:

Sectoral requirements

Small island developing states (SIDS)



Most room for improvement:

Cybersecurity



 **DECADE OF >>> ACTION**

Is there a silver bullet?

Know where you are. Need sufficient data to support evidence-based policy, regulatory and programmatic interventions.

Create a conducive ecosystem. Upgrade regulatory and legal framework.

Build the foundations:

UMC
Middle mile

Invest in people

Focus on disadvantaged groups
Anticipate future skills needs

Establish partnerships

→ **kickstart and sustain digital transformation.**

| The **Partner2Connect Digital Coalition**

- Launched by ITU in close cooperation with the [Office of the Secretary-General's Envoy on Technology](#),
- In line with [the UN Secretary General's Roadmap for Digital Cooperation](#),
- Aligned with the [WSIS Action Lines](#) and the [SDGs](#),
- To foster meaningful connectivity and digital transformation in the hardest-to-connect communities,
- With a focus on, but not limited to, Least Developed Countries (LDCs), Landlocked Developing Countries (LLDCs) and Small Island Developing States (SIDS)



Objective

To serve as a leadership level platform to engage all stakeholders to mobilize and announce new resources, partnerships, and commitments to foster meaningful connectivity and digital transformation globally, with a focus on but not limited to hardest-to-connect communities in Least Developed Countries (LDCs), Landlocked Developing Countries (LLDCs) and Small Island Developing States (SIDS)



As part of the UN's vision and the ITU's core mandate to close the digital divide...

Partner2Connect is an initiative pursuant to the World Telecom Development Conference 2017:

Resolution 71:

Strengthening cooperation between Member States, Sector Members, Associates and Academia of the ITU Telecommunication Development Sector and the evolving role of the private sector in the ITU Telecommunication Development Sector

Partner2Connect has been discussed with Membership at the BDT Telecom Development Advisory Group and at the ITU Council, and endorsed as a new Resolution at WTDC-22:

Requests the Secretary-General and the Director of the Telecommunication Development Bureau:

- *to continue to follow up on the work of the Telecommunication Development Bureau on bridging the digital divide, and by catalysing concrete joint efforts to accelerate connectivity and mobilizing resources across the four focus areas through the P2C Coalition and the multistakeholder partnership model it represents;*
- *to ensure that BDT continues to play a central role in this initiative and actively monitors and tracks commitments and engagements, and reports over time against the overall objective of achieving universal connectivity, in addition to maintaining an active communication channel among strategic stakeholders;*



Focus Area 1 - Access



Focus Area 2 - Adoption



Focus Area 3 – Value Creation



Focus Area 4 – Acceleration

[Partner2Connect Action Framework](#)

Partner2Connect Digital Coalition

FIRST UN Global Pledging conference for connectivity!

P2C was set-up to **accelerate efforts to connect the unconnected and bridge the digital divides.**

Multistakeholder partnership model.

Based on **pledges** to be **tracked, monitored and reported** regularly.

Four types of pledges: financial, policy, advocacy and programmatic.



P2C Roundtable at the World Telecommunication Conference, June 2022, Kigali, Rwanda

Over 150 speakers in 10 panels

425

Pledges

\$26.06bn

Estimated financial value (USD)

221

Entities

104

Countries of pledge-makers

Next steps:

Digital **reporting dashboard**

Gap analysis and new pledge mobilization

Annual reporting meeting in Q4

Catalysing **in-country implementation** of digital transformation strategies



An inclusive digital nation needs digital transformation for the people

DT is neither the panacea nor an end in itself, but a catalyst of sustainable development.

DT must serve first and foremost, the people.

DT must be supported and complemented by 'analogue complements'.

Thank you!

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www.itu.int/TREG



Use our data to inform your decisions & track your growth



ICT Regulatory Tracker
G5 Benchmark
ICT Policy Impact Lab
ITU [DataHub](#)



Share your experiences and see what works and where



REG4COVID

FIGI | Financial Inclusion Global Initiative

Regulatory Associations Portal

ITU Digital Ecosystem Portal

ITU Infrastructure Development and Connectivity Portal

Read our research on best practices related to all current and future challenges
Opportunities of broadband, regulation of 5G, digital identity, ICT infrastructure, ICT investment needs...





Global Connectivity Report 2022

- Potential of the Internet for social and economic good remains largely untapped: 37% of humanity is still offline and many users only enjoy basic connectivity.
- *Universal and meaningful connectivity* has become the new imperative in this Decade of Action.

The Report:

- takes stock of the progress over the past three decades.
- provides a detailed assessment of the current state of connectivity and how close the world is to achieving universal and meaningful connectivity
- showcases solutions and good practices to accelerate progress.
- features seven thematic deep dives on infrastructure, affordability, financing, the pandemic, regulation, youth, and data.

www.itu.int/GCR2022