

A photograph of a woman in the foreground talking on a mobile phone. In the background, two children are sitting on a sofa, playing with a ball. The entire image is overlaid with a semi-transparent blue filter.

Digital Regulation for Digital Transformation and Access for All

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ITU-BDT





01

Background

Impact of International and Regional Commitments

- Countries (and Regions) made global and regional commitments to open their telecommunications markets to:
 - harmonize local legislation with that of other countries in similar geographic or economic situations;
 - Encourage foreign investment in the sector;
 - Leverage investment in downstream sectors relying on ICT (e.g. banking, knowledge-based services sector)
- Such commitments serve to accelerate regulatory reform, with specific focus on:
 - facilitating global or regional best regulatory practices, and
 - providing telecommunications investors with a level of certainty and predictability



GATS Commitments

- When 69 Member Nations of the World Trade Organization (WTO) agreed to open their markets to companies from other WTO Members in 1997 they also adopted a document that was unique in the annals of international trade negotiations – the [Reference Paper on Regulatory Principles](#).
- The **Annex** establishes that each WTO member shall ensure that service suppliers of any other member are accorded access to and use of public telecom transport network and services on reasonable and non-discriminatory terms and conditions “for the supply of a service included in its Schedule.”
- The **Reference Paper** was negotiated based on an understanding of the nature of telecommunications markets – in particular that, even when opened to competition, it is essential that the market be regulated in order to allow new entrants to compete with entrenched incumbent operators (referred to in the Reference Paper as “major suppliers.”)



Reminder:

Key Principles - Reference Paper

- Establish a regulatory authority that is **independent** of all suppliers of telecommunications services and networks
- Maintain measures that prevent and safeguard against **anti-competitive practices** by major suppliers
- Require major suppliers to **interconnect** other suppliers at any technically feasible point on a non-discriminatory, cost-oriented basis following transparent procedures and subject to dispute settlement by an independent body
- **Ensure public availability of licensing criteria.** The Reference Paper does not, however, specify whether those licenses must be issued on an individual, case-by-case basis, or with “class licenses” for entire classes of carriers.
- Administer **universal service** programs in a transparent, non-discriminatory, and competitively neutral manner
- **Allocate and assign use of scarce resources,** including the radio spectrum, numbering blocks, and rights of way, in an objective, timely, transparent, and non-discriminatory manner

* A major supplier is defined as a supplier that, through control of essential facilities or use of market position, can materially affect the price and supply in the relevant market.



Regional Commitments

- Regional institutions can be useful for:
 - Policy making
 - Training
 - Technical assistance
 - Research
 - Advocacy
- Regional institutions have been key to regional harmonization



Regional Commitments

Regional integration of regulation, combined with regionalisation of regulated firms:

- assists developing countries in overcoming national limits in technical expertise
- enhances national capacity to make credible commitments to stable regulatory policy
- facilitates the introduction of competition into historically monopolised markets
- improves the efficiency of infrastructure industries by allowing them to grow without respecting economically artificial national boundaries, and
- increases infrastructure investment

Key Elements for success:

- Clear mandates
- Political support from member governments
- Adequate financial and human resources



Enhancing competitiveness in the Caribbean through the harmonization of ICT Policies, Legislation and Regulatory Procedures





02

Why is regulation
important?

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.

Economic Impact of Fixed and Mobile Broadband and Digitization, 2019

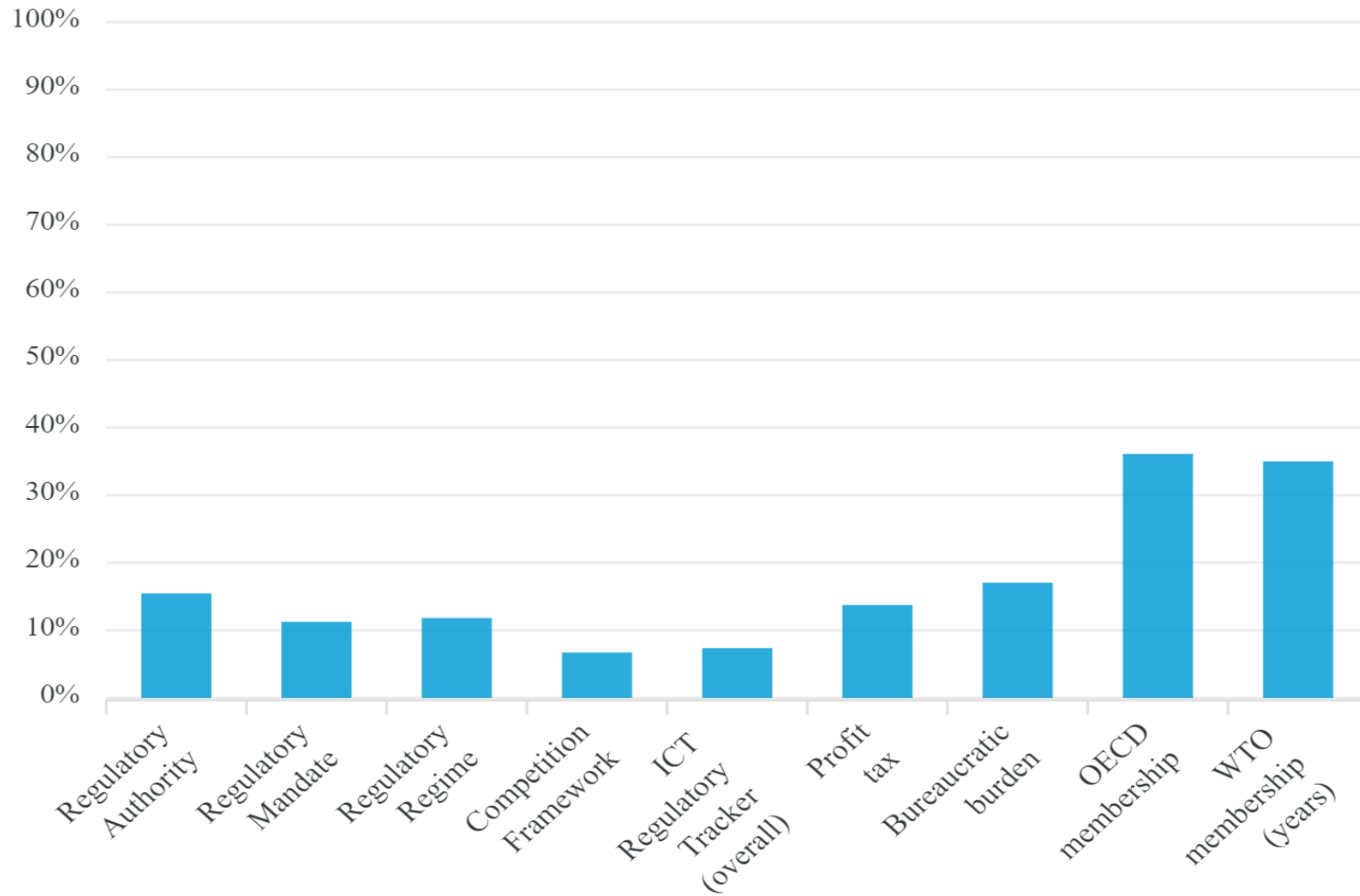


At global level
10%
increase in
fixed
broadband
penetration
yielded
0.8%
increase in GDP



At global level
10%
increase in
mobile
broadband
penetration
yielded
1.5%
increase in GDP

Impact of overall telecom investment after a % change in the selected policy variable/s



Source: ITU

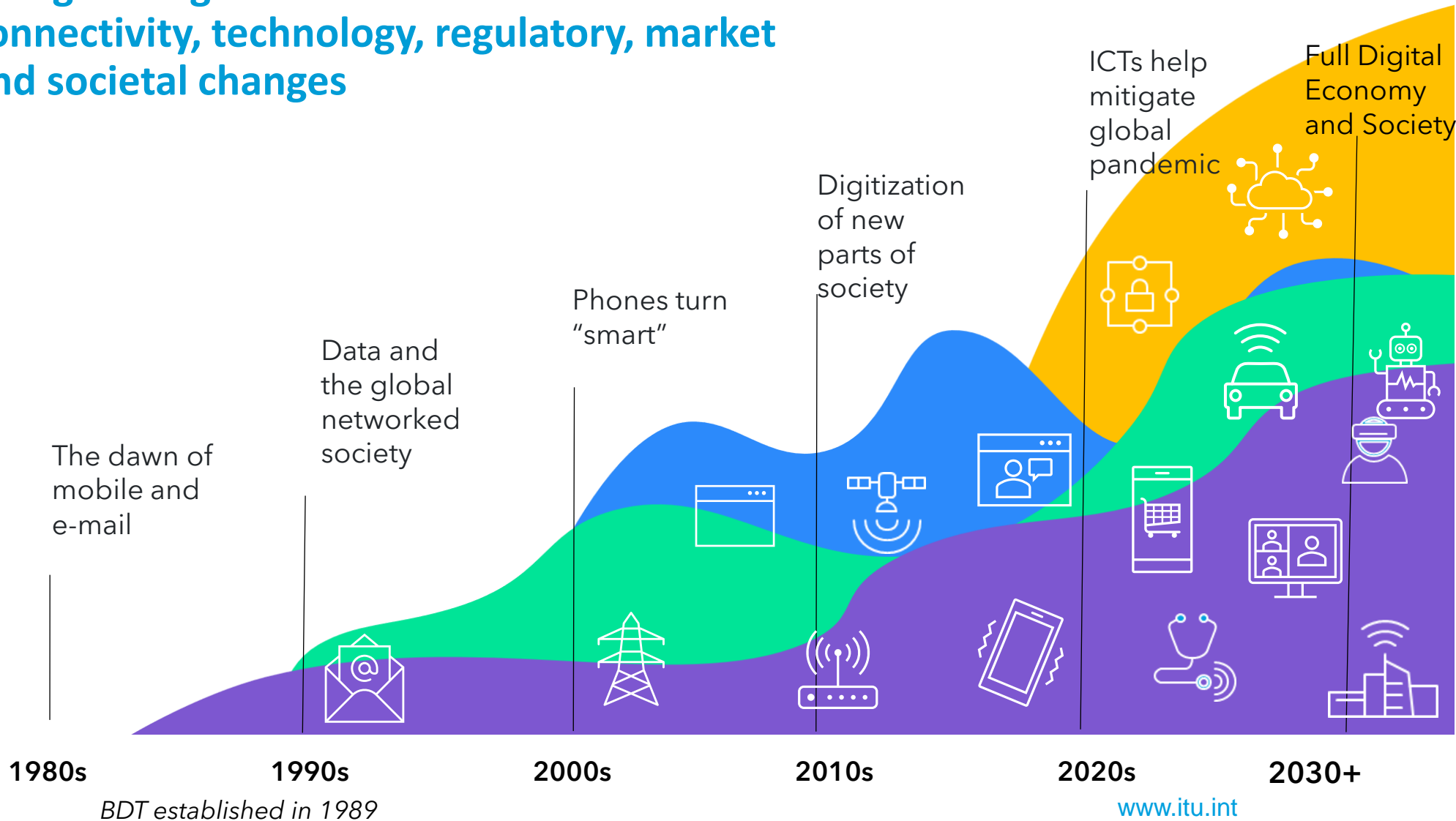




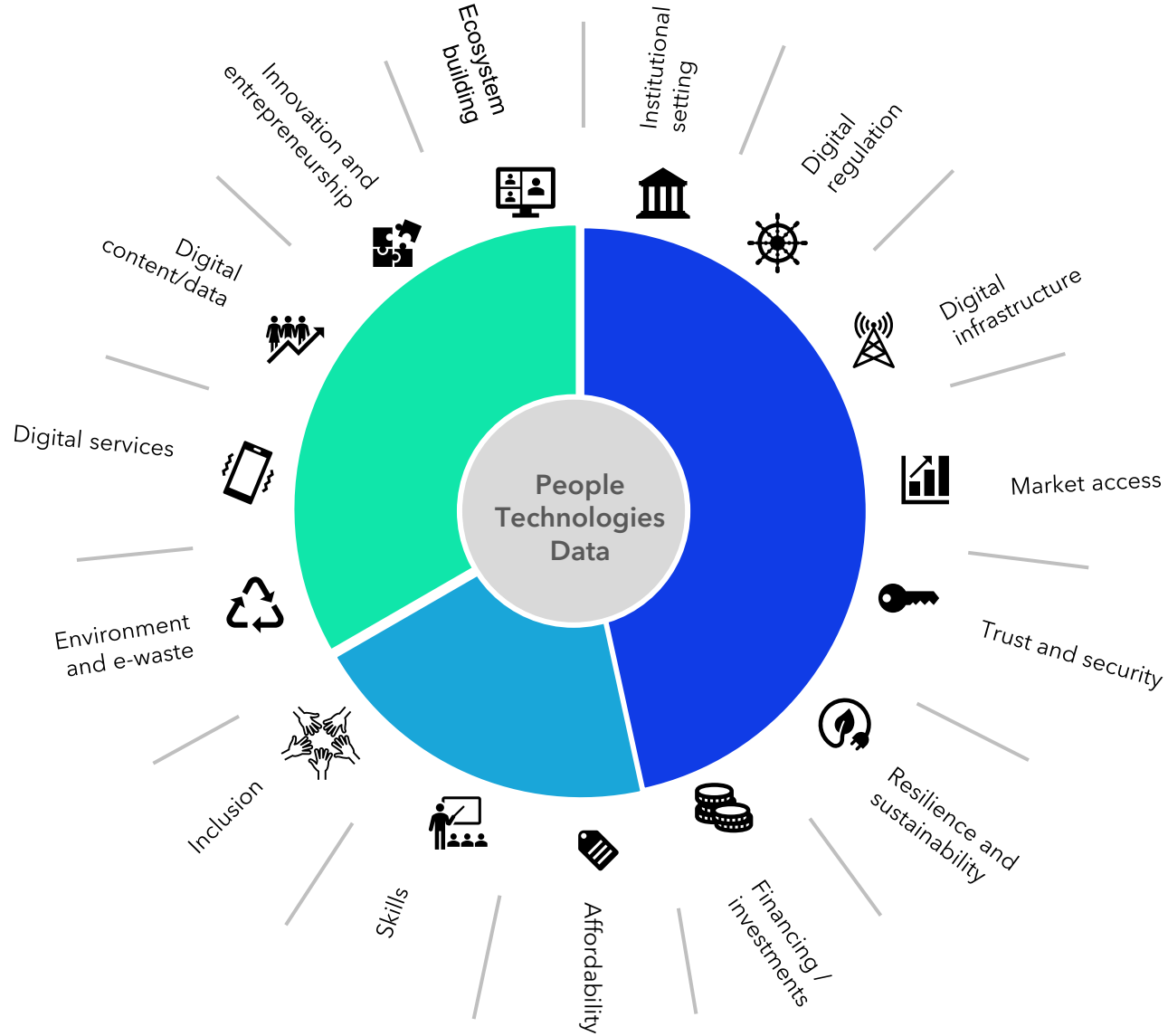
03

The evolution of regulation

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

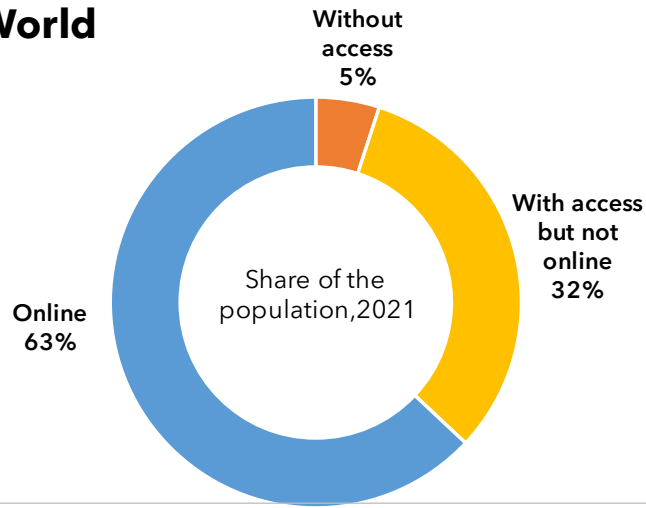


...as digital impacts all sectors and aspects of people's life



Connectivity in the Decade of Action

World



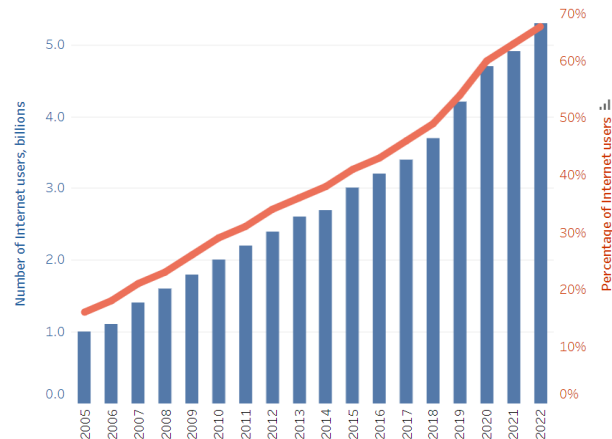
The three challenges of the 2020-2030 decade:

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.

Individuals using the Internet

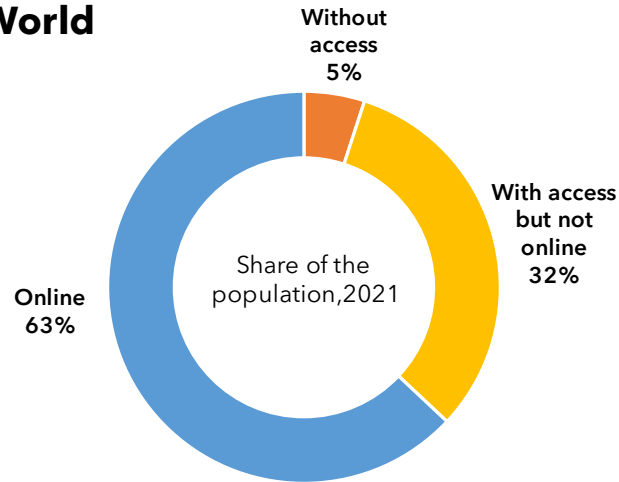


Source: ITU

[Global Connectivity Report 2022](#)



World



Connectivity in the Decade of Action

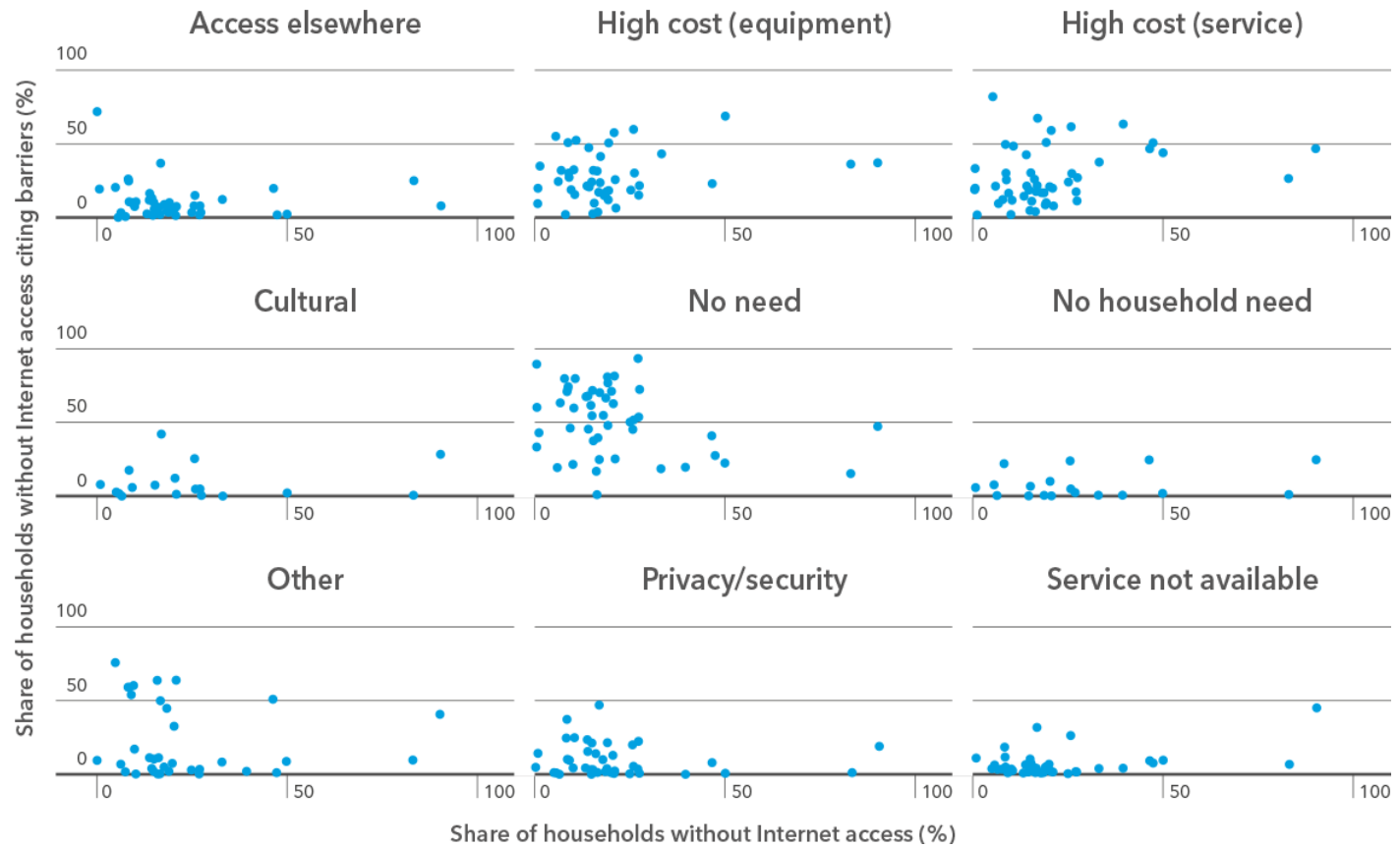
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Connectivity barriers



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
- 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
- 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.



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.

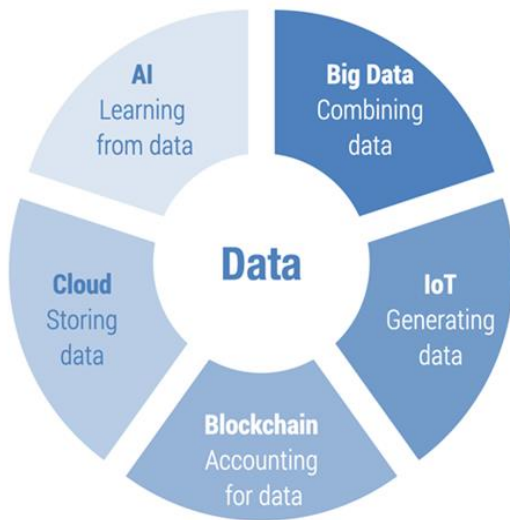
By improving a country's performance on the three dimensions of sustainable development: human well-being, economic prosperity and environmental sustainability.

Efforts to achieve UMC directly help sustain digital transformation.

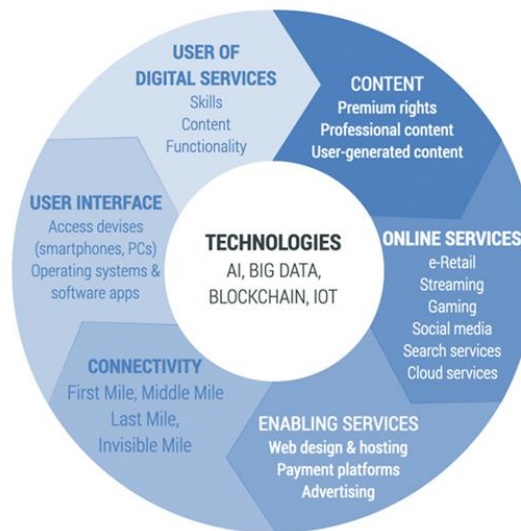
As more people go online and users enjoy better connectivity, the ability of a country to sustain digital transformation inevitably increases, leading to the realisation of a digital economy, digital society and ultimately, a digital nation.

Evolving technologies and regulation

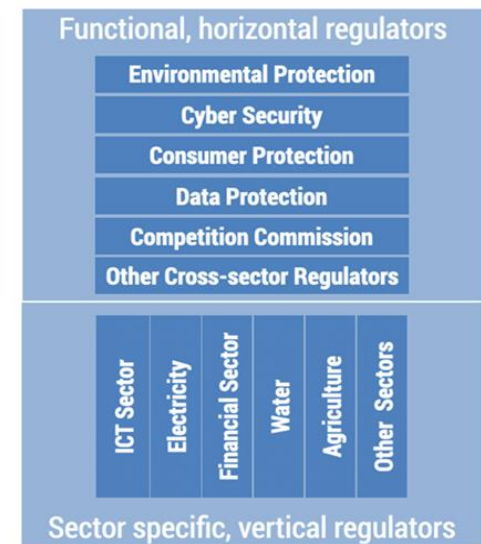
Data technologies



Internet value circle



The digital regulatory ecosystem



Regulation in the digital ecosystem

REGULATORS



- Security
- Rules
- Law
- Risk management
- Cyber-war
- Cyber-crime
- Protection of assets
- Protection of society
- Protection of privacy
- Protection of traditional market players
- Labor protection
- Syndicates
- Control
- Enablement of international digital spaces
- Enablement of cross national technologies
- Norms
- Consumer protection
- Enablement of a digital single market



DIGITAL



- Free economy
- Boundless communication
- Full transparency
- Business opportunities
- High rewards
- Freedom of ideas
- Money
- Open society
- Open economy
- Open government
- New ideas
- New ways of working
- Flexibility
- Connectivity
- Global village
- Innovation
- Entrepreneurship

What regulatory tools and approaches are at hand for enabling a sustainable digital transformation

ITU GSR
PORT VILA 2019

Global Symposium for Regulators (GSR) 2019

Best Practice Guidelines

fast forward digital connectivity for all



Looking back over nearly 20 years of GSR, the role of the ITU regulator has never been more important. ICTs are at the heart of efforts to attain the 17 UN Sustainable Development Goals, and accessible, affordable ICT infrastructure is the pre-condition of every nation's ongoing socio-economic development. Based on the contributions of regulators from all regions and edited by consensus, the new guidelines will fit the way towards achieving inclusive digital connectivity globally.

Mrs. Doreen Bogdan-Martin,
Director, Telecommunication Development Bureau (ITU-T),
International Telecommunication Union



The regulatory landscape of digital markets is fast-moving and extremely complex. There is still much work to be done and regulators across all sectors must rise to the challenge of connecting the other half of world's population. The GSR 19 Best Practice Guidelines we adopted are an invaluable tool that enables regulators to address the challenges ahead and navigate through rapidly evolving technologies, business models, and market structures that are affecting economies, society and people around the world.

Mr. Brian White,
Regulator, Office of the Telecommunications, Radiocommunications
and Broadcasting Regulator (ORRB) of New Zealand and GSR 19 Chair

Pro-competition frameworks for the digital transformation

should consider longer value chains, more diverse market players, services and devices, stakeholder partnerships and digital infrastructure layers, and ultimately, their impact on markets and consumers

Regulatory incentives and Stakeholder engagement

Incentives can create a positive market dynamic and improve market outcomes with less regulatory effort. Stakeholders engagement such as public hearings and expert workshops and roundtables can allow pooling resources and expertise to inform major regulatory decisions

Robust and enforceable mechanisms for consumer protection

including a set of rules on data protection, privacy and data portability

Market-based and dynamic mechanisms for spectrum management

can allow for flexible, simplified and transparent use of scarce radio frequencies, also promoting technology neutrality

Regulatory Impact Assessment (RIA) and dynamic collaboration among regulatory authorities

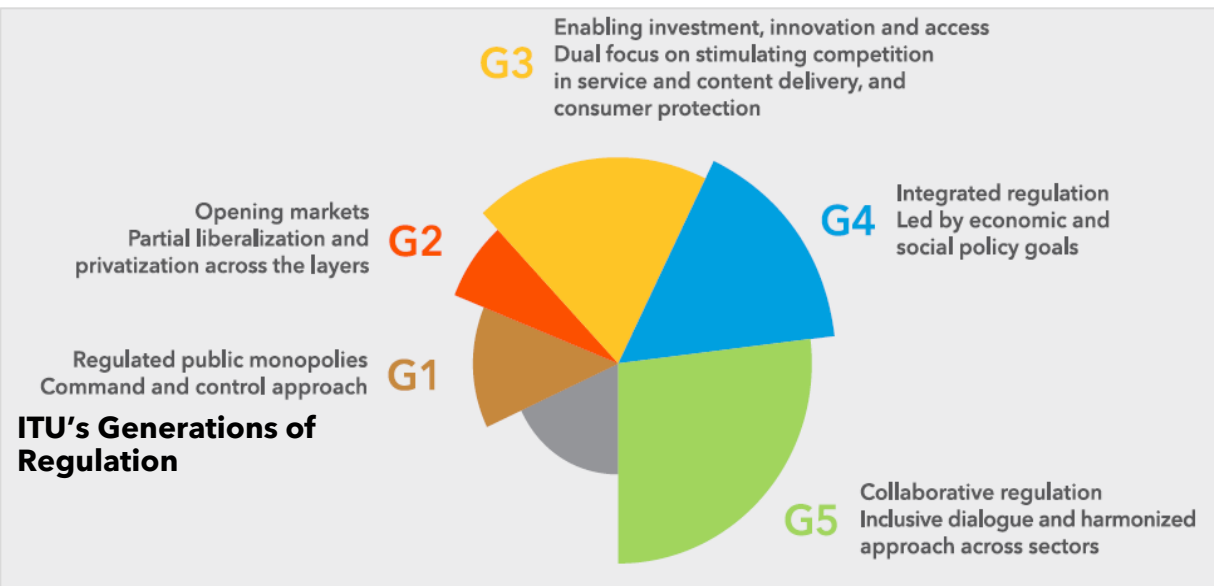
RIA should be introduced as a regular practice before major regulatory decisions are made as well as throughout the lifecycle of regulation. Effective collaboration channels with other regulatory authorities are necessary to ensure coherent and reasonable regulations across economic sectors

Regional and international cooperation in defining regulatory rules on cross-border issues

can ensure consistency, predictability and fluidity of digital markets

Regulatory expertise needs to be developed continuously

to integrate new technologies, competencies and skills and allow for data and evidence-based decision-making.



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**



04

Digital Economy and
Regulation Policy
Tools

BDT's digital transformation approach

Based on implementable and sustainable tried and tested guiding principles:

Evidence-based (data)

Governance (policy, regulation and strategy)

Capacity (people as well as institutional)

Partnerships (public, PP, private)

Sustainability (towards realizing a digital nation)

6-step approach

Diagnostic assessment

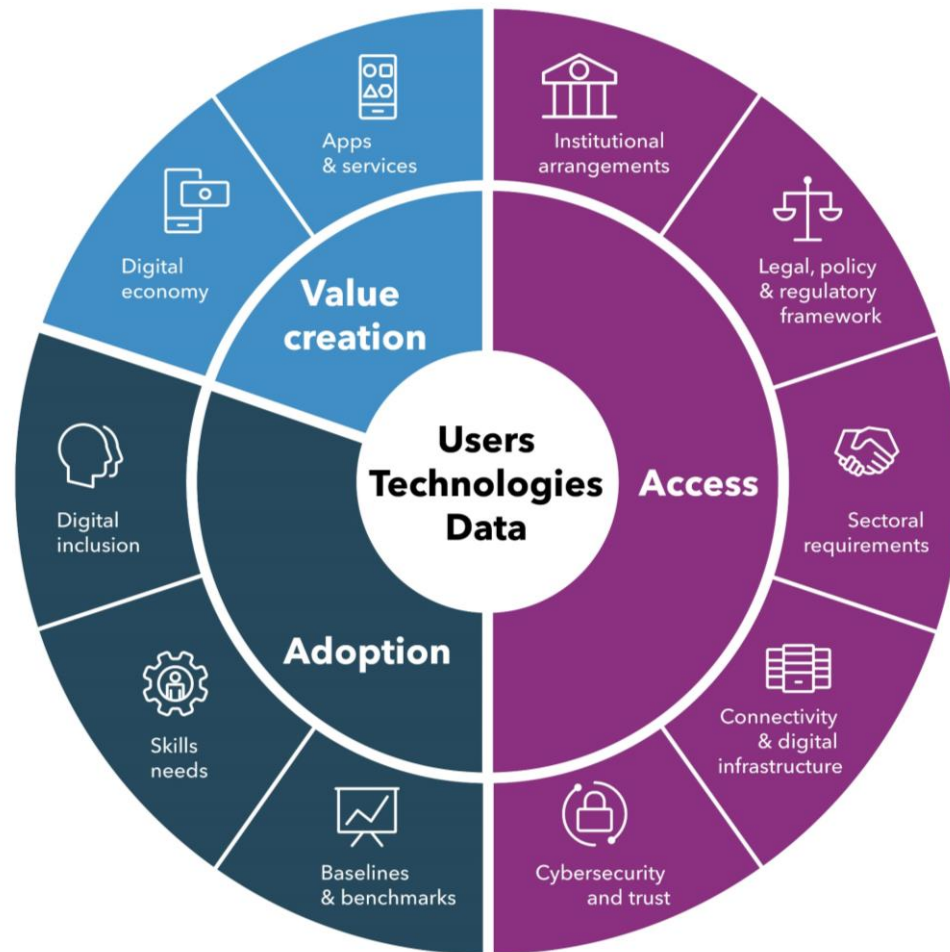
Validation and prioritisation

Deep dive

Identifying interventions

Implementation

Monitoring and evaluation



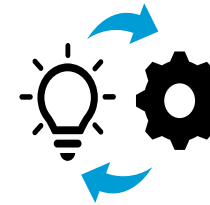
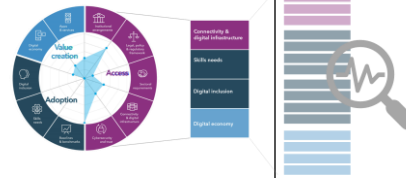
[BDT Transformation Wheel](#)

A 6-step approach to digital transformation



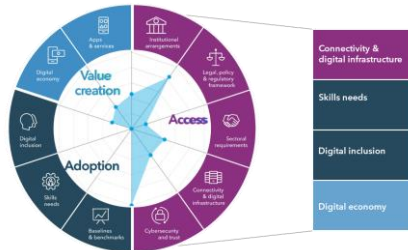
1 Diagnostic Assessment
360 Country Digital Landscape assessment based on Access, Adoption, Value Creation streams (HQ and Regional Office)

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



Data sources

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)



 **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.**

Use our data to inform your decisions & track your growth

Share your experiences and see what works and where

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...



An overview of digital regulation

ITU Publications

International Telecommunication Union
Development Sector

Digital Regulation Handbook 20th Anniversary Edition



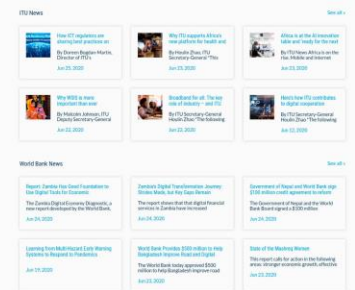
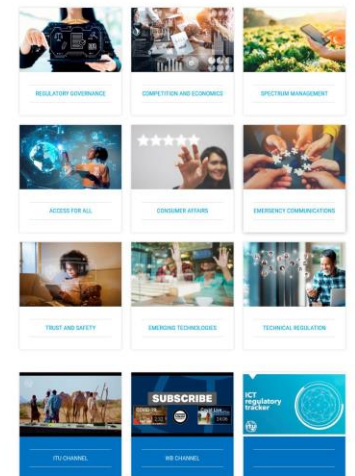
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