



Committed to connecting the world

Changing Mindsets and Upskilling of Civil Servants

Symposium on “Effective Governance and Digital Transformation for Building Back Better and Accelerating the Implementation of the 2030 Agenda for Sustainable Development”

18 November 2021

ITU Regional Office for Asia and the Pacific

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@ITUAsiaPacific



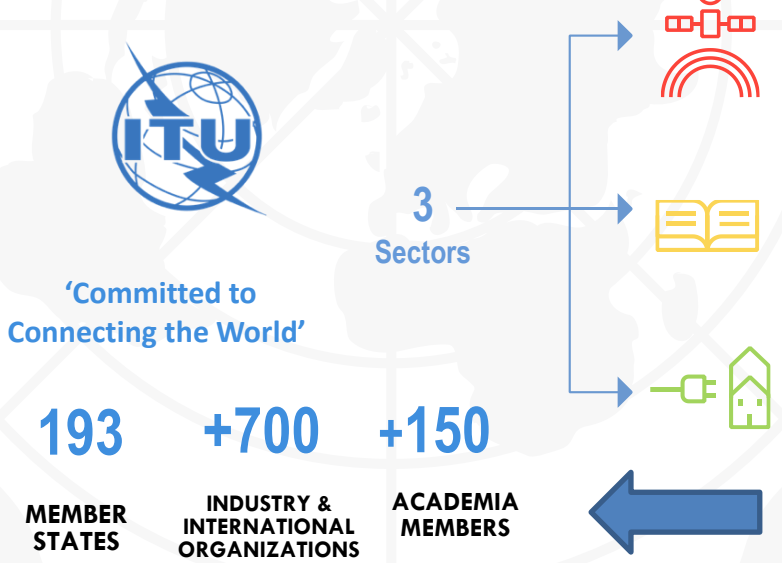
ITU Regional Office for Asia and the Pacific



ITU is the United Nations specialized agency for information and communication technologies (ICTs)



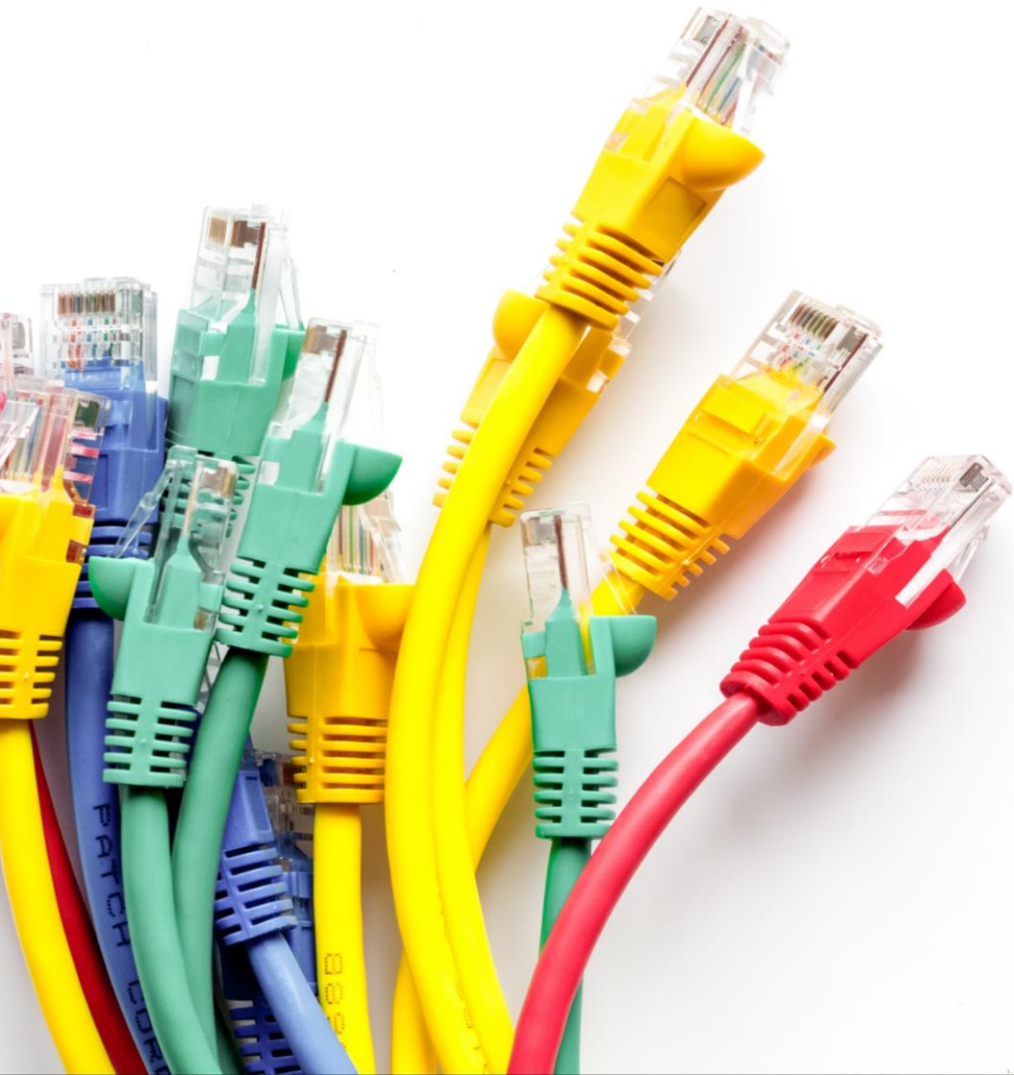
What we do



- ITU Radiocommunication**
Coordinating radio-frequency spectrum and **assigning** orbital slots for satellites
 - ITU Standardization**
Establishing global standards
 - ITU Development**
Bridging the digital divide
- MEMBERSHIP**



ITU-D's Role in Supporting Digital Transformation



- Spreading **equitable and affordable access** to telecommunications to help stimulate social, economic and human development.
- Strengthening **capacities** in developing and least developed countries in the field of digital technologies.
- Contributing to **digitally empowering** everyone to reap the benefits that connectivity delivers
- Advancing digital transformation through meaningful connectivity to accelerate the **achievement of the SDGs**

Digital Transformation - Global ICT indicators 2019 & 2020 where available



15.2
(+5.7%)

Fixed Broadband
Subscriptions



75
(+9.3%)

Mobile Broadband
Subscriptions



51.4%*
(+3.5%)

Individuals using the
Internet



48.3 %f /
55.2% m

Women and Men using the
Internet



96.7%*
(+0.2%)

Mobile Network Coverage



72%

Urban Household Internet
Access



37%

Rural Household Internet
Access



57.4 %
(+3.7%)

Household Internet Access



93.1%*
(+1.9%)

Percentage of
Population within
reach of a 3G signal



84.7%
*
(+4%)

Percentage of
Population within
reach of a 4G signal



717.9
tbit/s*
(+35.7%)

Total International
Bandwidth



131.3
(+26.4%)

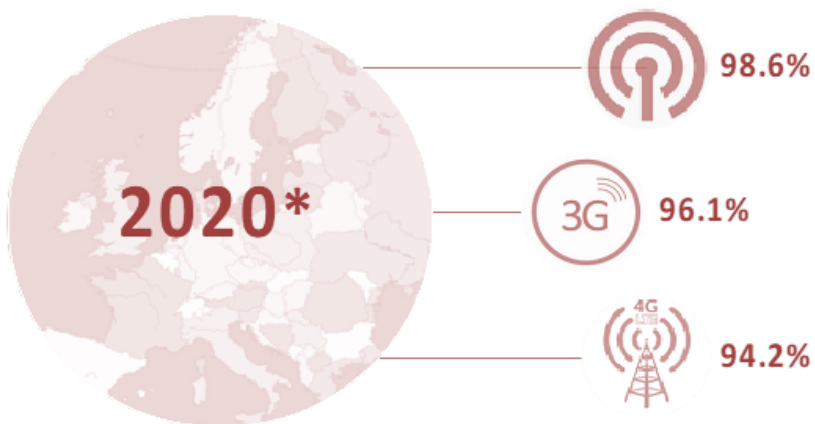
International
Bandwidth per
Internet user

Source: Based on ITU WTI Database from 2017, 2019, and 2020 where available

Digital Transformation- Digital trends in Asia and the Pacific

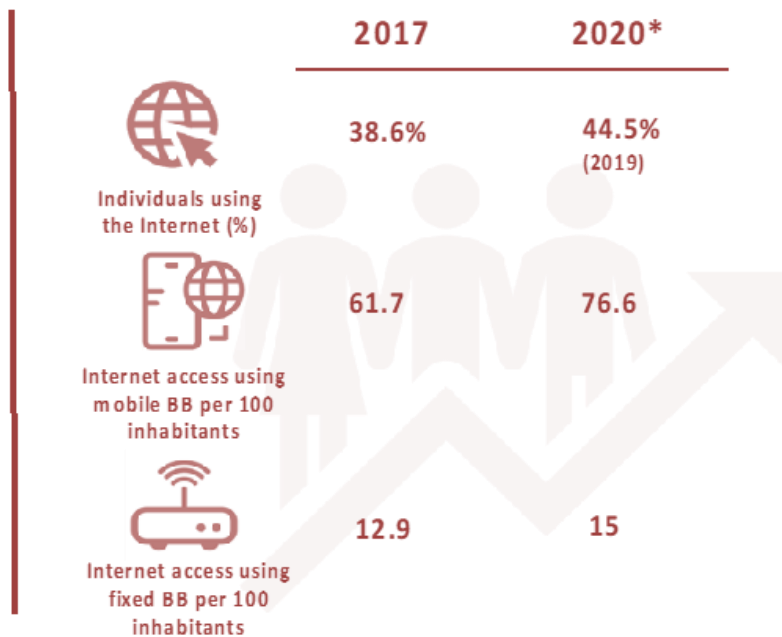
Key ICT statistics, ITU Asia and the Pacific region 2017-2019

Mobile network coverage

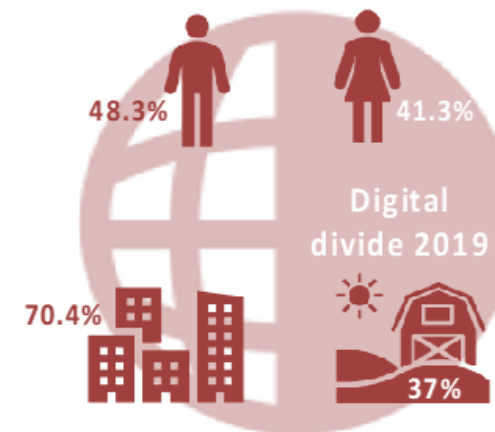


*Estimate

Internet access and use



Digital divide



Household internet and computer access at home, internet use by youth (15-24 years old), 2019



✓ 53.4 per cent of households in Asia and the Pacific region had Internet Access at home in 2019



✓ 41.1 per cent of households in Asia and the Pacific had access to a computer at home in 2019



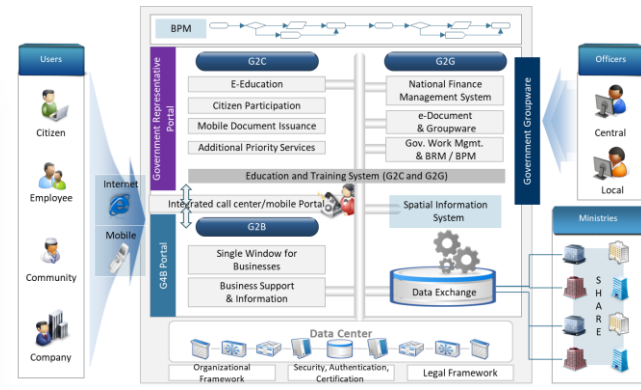
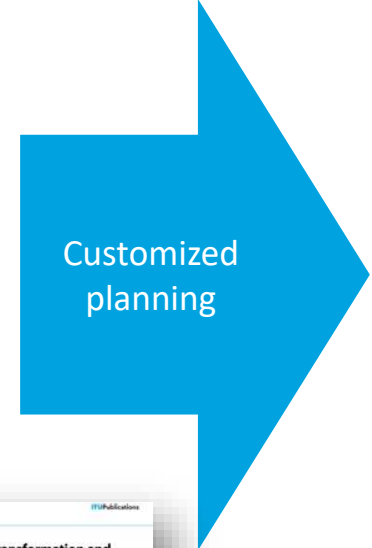
✓ 70.3 per cent of 15-24-year-olds were using the Internet in 2019

Whole-of-government approach for digital development

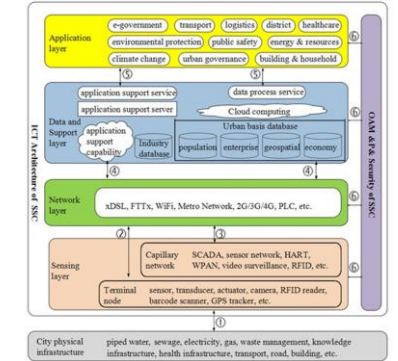
National Vision and SDG implementation plan



Legislations
Regulations



Smart city



Smart village



Smart Islands



International level

National level

Local level





GovStack

Accelerating the digital transformation of government services



REPUBLIC OF ESTONIA
MINISTRY OF FOREIGN AFFAIRS



Bundesministerium für
wirtschaftliche Zusammenarbeit
und Entwicklung

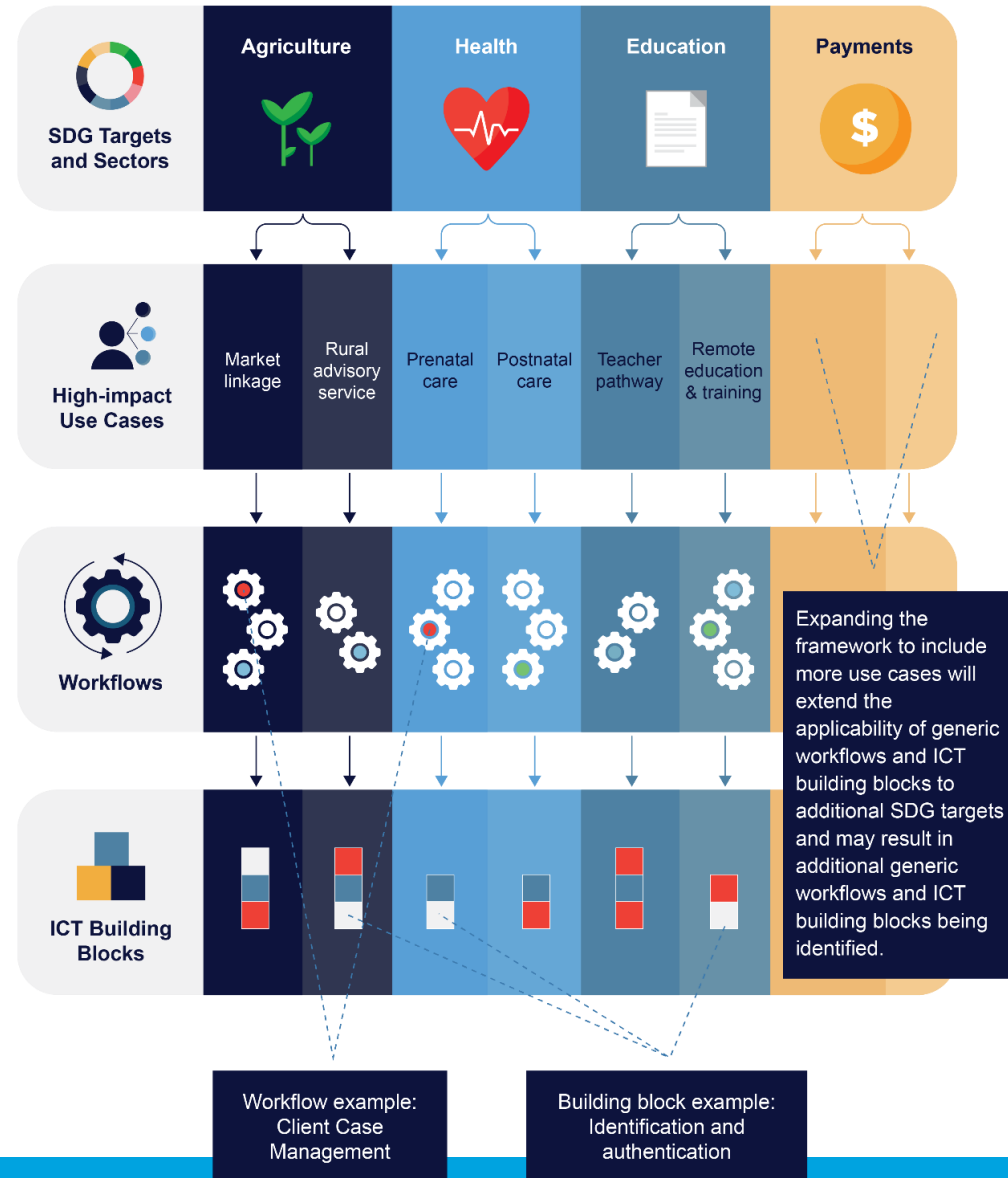


dial Digital
Impact
Alliance

Through coordinated (re)use of these common digital components...

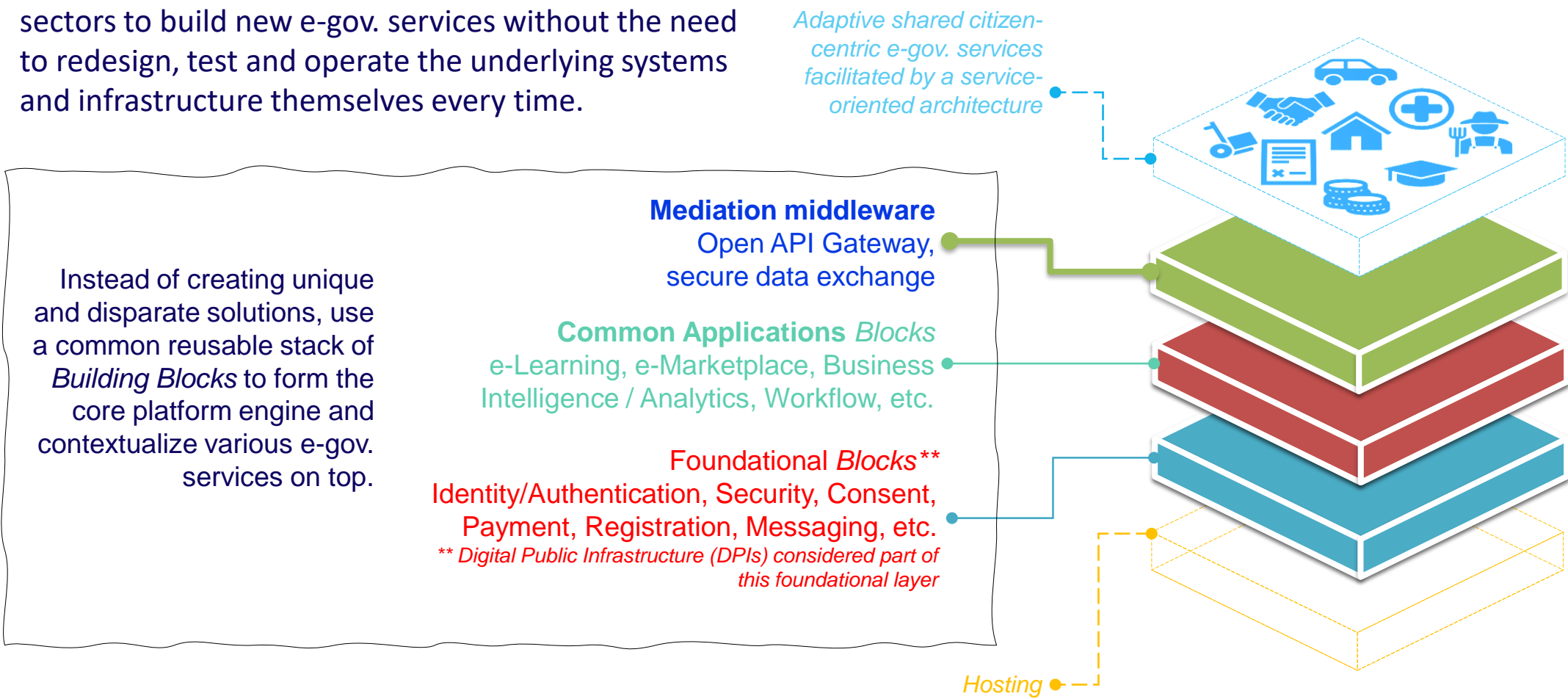
Ideal: Across sectors and government agencies, subset of same ICT building blocks can be put in place and leveraged. Whereas they are used to deliver one use case, such as agriculture market linkage service, their foundational design can be reapplied to deliver others additional use cases across multiple sectors.

Same components can be reused



... these *Building Blocks* can be used to create one common platform to deliver various government services digitally.

- A **holistic** (*Whole-of-Government*) digital platform that can be used by any government agency across sectors to build new e-gov. services without the need to redesign, test and operate the underlying systems and infrastructure themselves every time.



- **What are *Building Blocks*?**

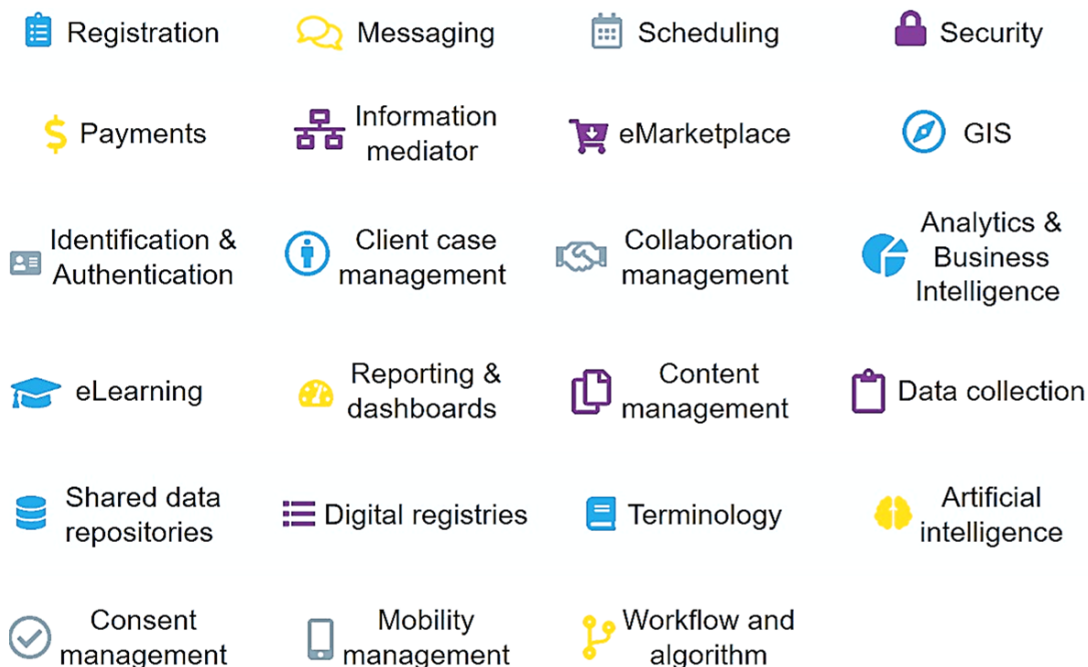
Generically-defined **software components** that in combination provide key functionalities to facilitate generic workflows common across multiple sectors.

- **What are their characteristics?**

- Reusable software components
- Open-source, commercial off-the-shelf (COTS), or freely available with open access to data
- Facilitate one or more generic op. workflows
- Applicable to use cases across multiple sectors
- Interoperable with other *Building Blocks*

Building Blocks set

Identified **components** so far



[refer to: *Building Blocks* section of [Govstack.global](https://govstack.global)]

Digital Transformation at community level - The concept of Smart Island/Village



Competencies to support the implementation based on Smart Island/Village concept

- Established access to broadband networks needed for delivery of digital services for all
- Improved resilience of networks and connectivity
- Shared broadband connectivity and devices
- Shared /common digital infrastructure
- Government support for universal service obligations (USO)
- Use of public-private partnership model
- Establishment of public WiFi in schools, hospitals, public offices and libraries
- Trainings and digital literacy programmes conducted and awareness raised in the target communities
- Collaboration with partners for cross-sectoral initiatives
- Creating community experts ownership
- Youth, women and persons with disabilities empowered through targeted activities
- Service delivery platform established for the development and delivery of digital applications and services
- Various digital applications and services developed and made available for socio-economic development, including e-learning, e-agriculture, e-health, e-commerce and e-tourism

Broadband connectivity accessible to remote islands

Enhanced affordability

Digital skills enhanced

Wide range of digital service delivered

Evidence-based, human-rights based, future-proof (integrated emerging technology), partnership-driven, whole-of-government approach

Limited access to broadband and digital services in remote islands / villages

Limited access to broadband connectivity

- Limited access to broadband networks needed for delivery of digital services
- Limited resilience in broadband connectivity
- Sustainability of broadband connectivity not established

Insufficient affordability

- Insufficient
- affordable devices
 - affordable Internet services
 - Wi-Fi in schools, hospitals, public offices, libraries...

Insufficient digital skills

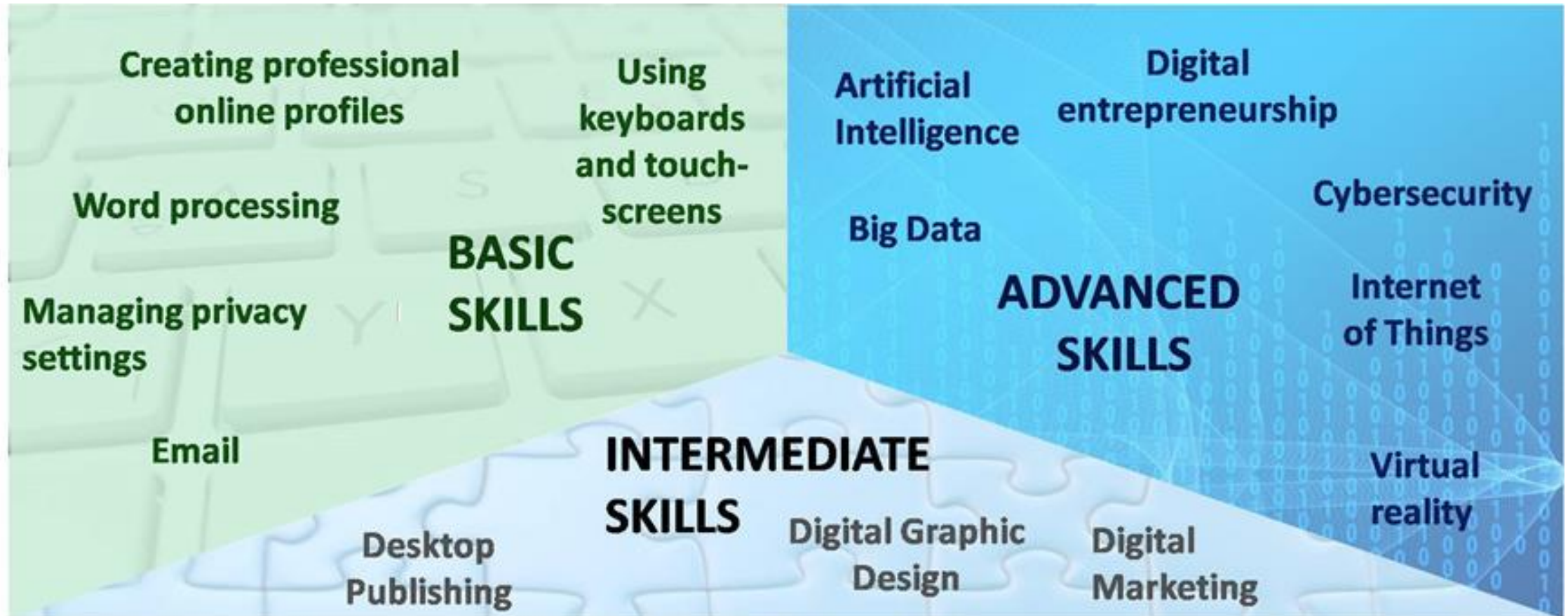
- Insufficient
- training programmes
 - education opportunities
 - digital literacy and skills
 - awareness
 - community engagement
 - youth and women participation

Limited digital services (access, scale and scope)

- Limited
- service delivery platforms
 - range of digital applications and services (e-commerce, education, health, finance, agriculture, tourism etc.)

Digital skills gaps exist at all levels

Building innovation capacity, in terms of skills, infrastructure and support, is essential to accelerating digital transformation

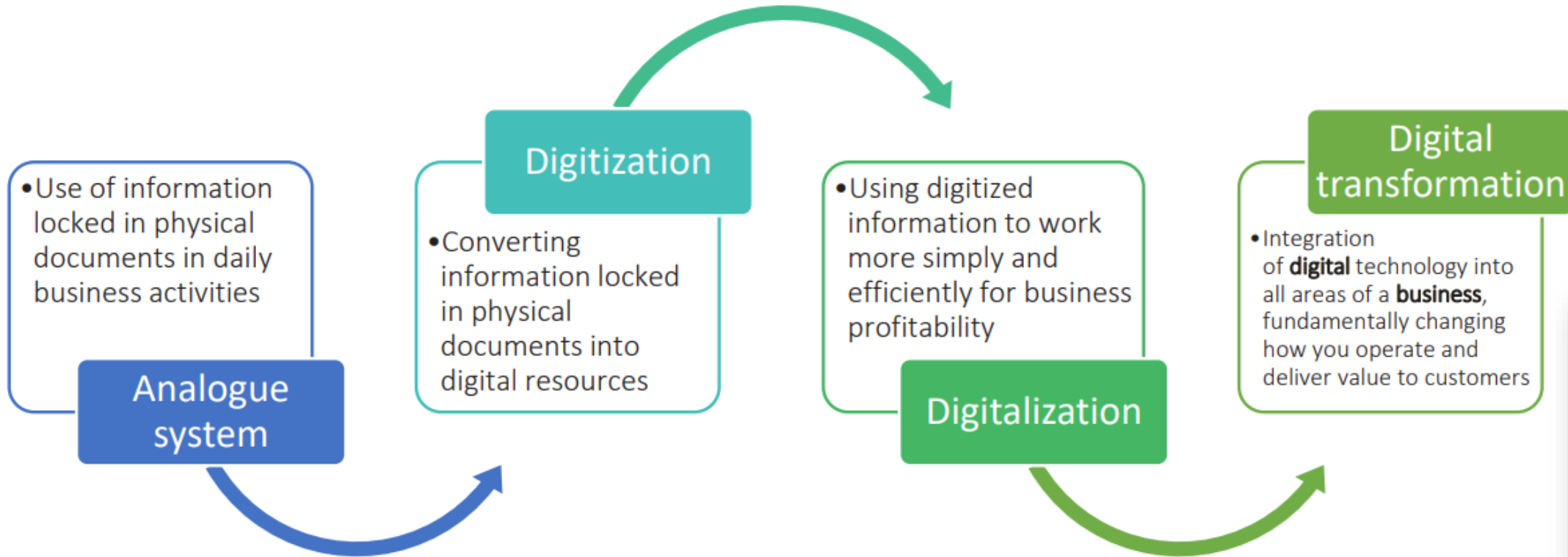


... and the growing digital skills gap

- Lack of digital skills one of the main barriers to Internet usage
- 65% of people in developing countries lack skills to use the Internet
- Strong growth of employment in ICT-related industries (even during Covid)
- Adult reskilling
 - BCG global survey of 366,000 found that when people need to learn new job skills, most choose active and adaptable learning approaches such as **studying on one's own** and **on-the-job training** versus more structured and traditional learning, including educational institutions and government sponsored programme
- Skills gap in Asia-Pacific:
 - APEC 2020 report finds that **demand for digitally skilled workers is growing much faster than supply**; and 7 out of 10 job postings are in digital occupations
 - AWS 2021 report finds that number of **workers applying digital skills in ASP countries will increase by over five-fold** in 2025, including skills related to cloud computing and data analytics
 - Cisco/IDB 2021 report: **lack of digital skills and technologies are top 2 challenges** SMEs in ASP are facing

Enhancing capacity on digital skill needs of the future

Digital Transformation Technical Process



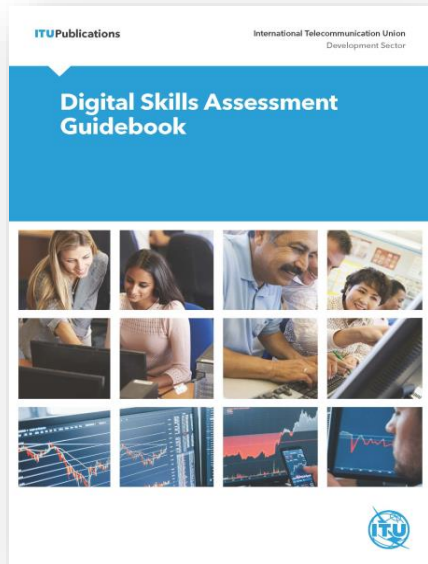
Enhancing capacity on digital skill needs of the future

Latest trending technologies to lead the future of the digital economy

Artificial intelligence	Machine learning	Internet of Things	Bing Data Analytics
FinTech	Blockchain	Robotic process automation	Virtual and augmented reality
Edge computing	Quantum computing	3D printing	Cloud computing
Cybersecurity	Mobile applications	Intelligent apps	Practical delivery drones



Supporting Digital Skills Assessment at the National, Organisation and Community level



Main objectives of Guidebook

- Focus is on **national** level skills assessment
- Helps governments assess skills **supply** and **demand** and determine existing and future skills **gaps**
- Practical tool to **guide policy makers in their digital skills strategies** and education policies

What does the Guidebook covers?

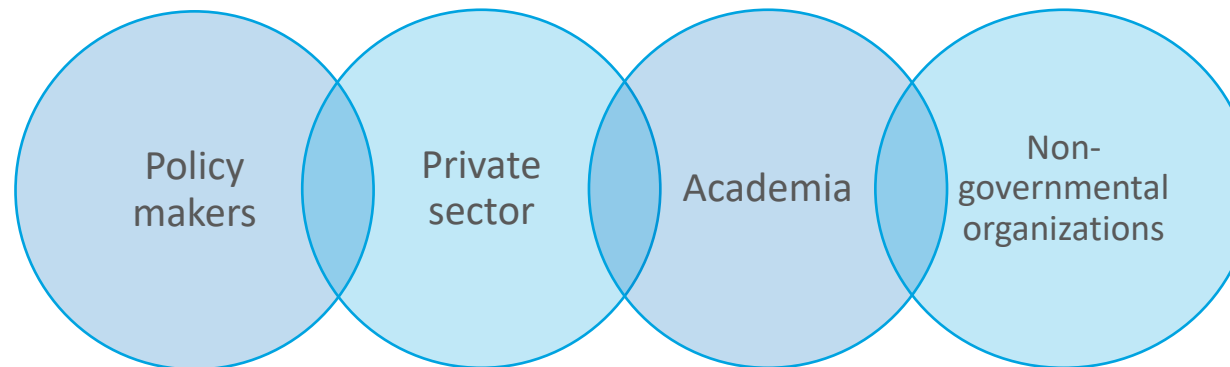
Review of existing skills assessment frameworks and approaches

Assessment of current national skills levels (supply)

Assessment of skills needs and gaps (demands)

Forecasting future skills requirements

Target audience



ICT policy makers
working in close
collaboration with other
stakeholders

Digital Skills Assessment Approaches- Frameworks, Skills Supply and Demand

Digital skills frameworks

DigComp

- Digital Competence Framework for Citizens
- EU JRC
- Updated 2017
- Includes 5 competence areas

DLGF

- Digital Literacy Global Framework
- UNESCO
- Developed in 2018 to serve SDG 4
- Adds 2 competence areas to DigComp

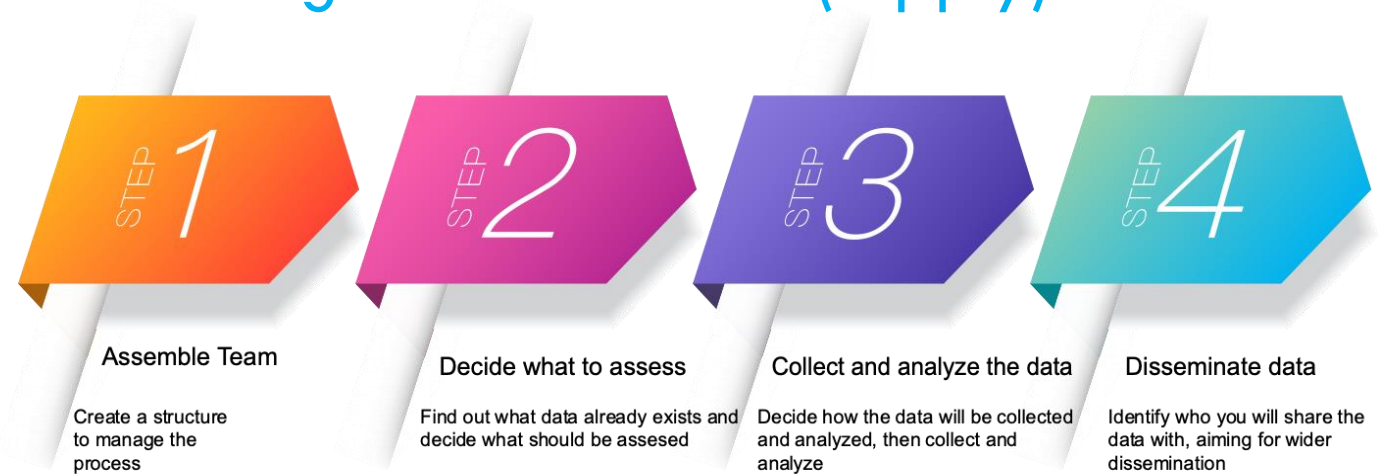
DiSTO

- Digital Skills to Tangible Outcomes
- LSE
- Organizes digital media skills around 4 domains
- Updated 2012

NEDSF

- New Essential Digital Skills Framework
- UK Government
- 5 skills categories
- Updated 2018

Assessing available skills (supply)



Assessing skills needs (demand)

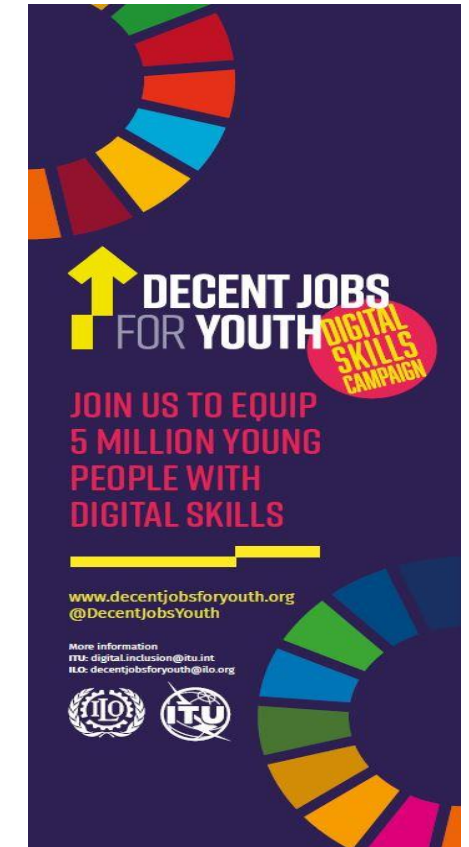
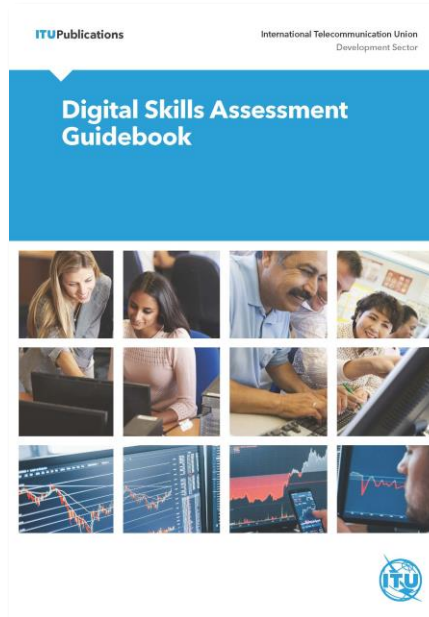
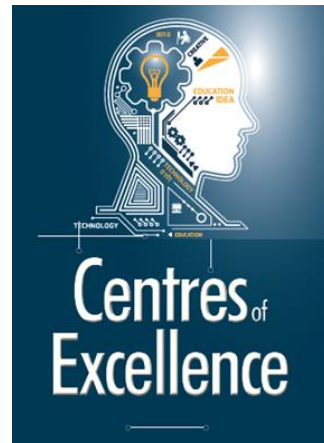
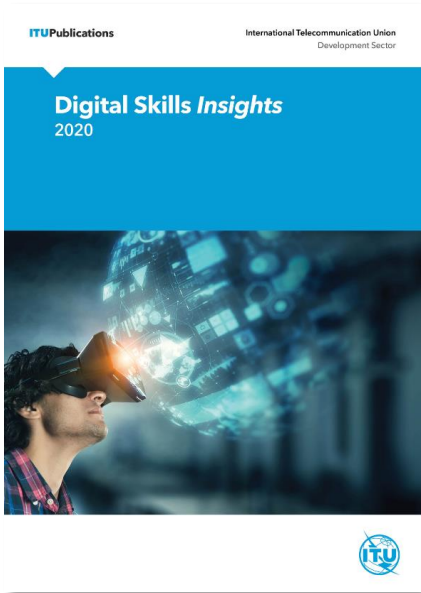


Challenges and successful approaches in enhancing digital skills

	Common Challenges	Successful Approaches
Basic and intermediate skills	<ul style="list-style-type: none">• Scaling and sustainability• Affordability of training• Qualified instructors• Infrastructure• Relevant curriculum• Adapting and innovating• Gender divides and inequalities in skills development	<ul style="list-style-type: none">• Integrating soft skills and entrepreneurial/business skills development into digital skills• Extending basic, intermediate and advanced digital skills beyond schools• Forming cross-sector partnerships• Upskilling instructors• Adapting programmes to meet changing needs• Obtain input from industry and employer
Advanced Skills	<ul style="list-style-type: none">• Affordability of training• Relevant curriculum• Sustainability• Adapting and innovating	<ul style="list-style-type: none">• Introduce sustainability models that lower upfront costs for learners• Incentivize participation from the private sector• Ensure pathways from training and education programs to the workforce• Review accreditation requirements

Supporting Capacity Development of ICT Professionals in Asia and the Pacific

ITU's products and services on digital skills



**Digital
Transformation
Centres**

ITU Academy
Empowering minds

World Telecommunication Development Conference

6-15 June 2022

- Leading quadrennial policy conference to shape the future of digital development.
- Setting strategies & objectives.
- Developing innovative models of collaboration.



Partner2Connect Digital Coalition

Objective

To serve as a leadership level platform that mobilizes new resources, partnerships, and commitments to drive the implementation of meaningful connectivity and digital transformation projects, with a particular focus in LDCs, LLDCs, and SIDS.

Focus areas

1. *Connecting People Everywhere*
2. *Empowering Communities*
3. *Building Digital Ecosystems*
4. *Incentivizing Investments*



itu.int/roadtoaddis
#ITUWTDC#RoadToAddis
#Partner2Connect



Network of Women for ITU WTDC

Build a community of female delegates in the activities leading up to ITU World Telecommunication Development Conference and beyond.

Platform for female delegates to support each other, expand their network, share experiences and knowledge.

Empower women to take up leadership roles in ITU-D activities.

Mentorship programme.

Fireside discussions



Visit the website at <https://www.itu.int/en/ITU-D/Conferences/WTDC/WTDC21/NoW/Pages/default.aspx>

Thank You



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