



DIGITALISATION FOR DEVELOPMENT. A TOOLKIT FOR  
DEVELOPMENT COOPERATION PRACTITIONERS  
INTERNATIONAL PARTNERSHIPS (INTPA)

# Introduction

InfoSheet n°1

*This InfoSheet is part of a series on digitalisation and relevance to EU International Partnerships and development cooperation programmes. The Toolkit is designed to provide key definitions, main opportunities and challenges for global development presented by digital transformation, case studies and suggested further reading. Learn more on [Cap4Dev](#)*

## Background

In our globalised, fast-evolving and inter-connected world, it is imperative to understand the impact on our society and on people's lives – both in terms of risks and opportunities – of digital technologies. The Internet has no borders and digital transformation is a global economic, social and geopolitical process, which brings opportunities but also challenges. International partnerships are indispensable to fulfil EU ambitions in the domain of Digitalisation and new technologies.

Digitalisation is an essential tool in combatting inequalities and achieving sustainable development. It is directly named in four Sustainable Development Goals (SDG)<sup>1</sup>, but digital transformation could impact the entire 2030 Agenda<sup>2</sup>. Digital technologies can be leading contributors to positive societal value, but this will only become a reality if the focus of technological development and deployment is framed by a clear commitment to sustainable development.

Digital transformation is rapidly reshaping the global economy and the labour market; despite the intensity of this structural revolution, the impact of the digital economy still struggles to reach its full potential in certain regions of the world. The digital divide is at the same time a challenge and an opportunity, as technological developments and digital entrepreneurship can bring productivity gains in crucial economic and social sectors (e.g. financial technology, smart cities and mobility, education, health, e-commerce, e-Government, etc.) and extending Internet access in the developing world could enhance productivity by as much as 25% with tremendous benefits on jobs and growth<sup>3</sup>.

The new EU digital strategy<sup>4</sup>, presented in the communication on Shaping Europe's digital future, presents ideas and actions for a fair,

diverse, democratic, and confident digital transformation. Digital is a key enabler to fighting climate change and achieving the green transition. The three key objectives are: a technology that works for people; a fair and competitive digital economy; and an open, democratic, and sustainable society.

In line with this new strategy, the EU is shaping its external action through a joint effort to prioritise and to mainstream digital technologies and services into cooperation policy, targeting millions of people across the globe and encouraging digital transformation in partner countries.

This Toolkit for Development Cooperation Practitioners presents a diverse set of topics related to Digitalisation for Development, including key technologies and the building blocks for digital transformation, EU policies and standards, and challenges and opportunities for the EU in developing countries.

## Opportunities

Digital innovation is transforming almost every sector of the economy by introducing new business models, new products and services. Robotics, 3D printing, big data, blockchain technologies, cloud computing, the Internet of Things, and the rise of the platform economy are transforming production and distribution processes in many industries. The results of this transition are already visible: the global digital economy in 2019 was worth 15.5% of the world's GDP. This figure is expected to reach 25% in less than a decade<sup>5</sup>.

Digital transformation has rapidly reshaped the global economy and the labour market; seven out of the 10 most valuable companies are American and Chinese digital companies (e.g. Amazon, Google, Facebook, Alibaba, Tencent, etc.), while in 2010 they were mostly oil and financial companies.

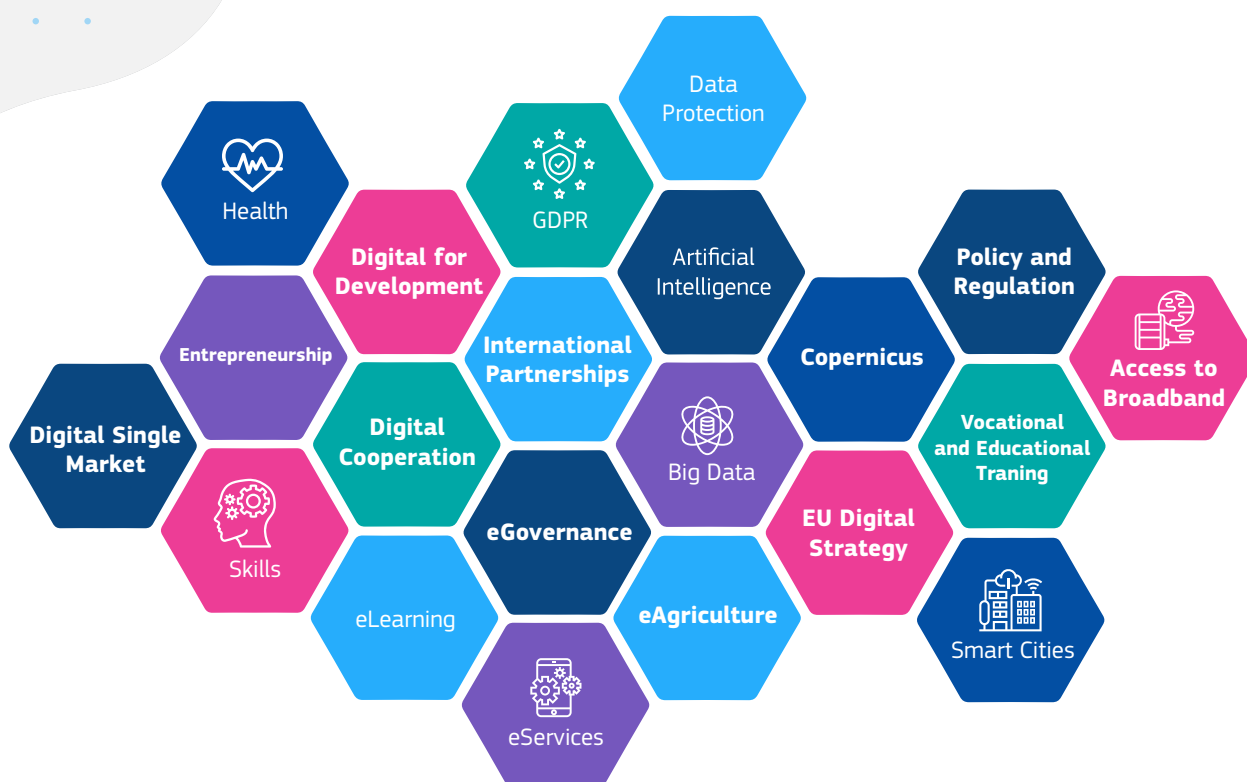
<sup>1</sup> SDGs: 4.Education, 5.Gender equality, 8.Decent Work and Economic growth, 9.Industry innovation and infrastructures.

<sup>2</sup> Deloitte report: DIGITAL WITH A PURPOSE – DELIVERING A SMARTER 2030

<sup>3</sup> Deloitte report: Digital Connectivity report

<sup>4</sup> European Commission communication – Shaping Europe's digital future | Digital Economy & Society COM (2020) 67 19/02/2020.

<sup>5</sup> UNCTAD (2019). Digital Economy Report.



According to the recent publication on Mobile Economy Sub-Saharan Africa<sup>6</sup>, the mobile industry contribution to GDP in 2018 was 8.6%, equivalent to \$144bn, generating 500,000 direct jobs and 1.2 million indirect jobs. By 2023, mobile's contribution will reach almost \$185 billion (9.1% of GDP) as countries increasingly benefit from the improvements in productivity and efficiency brought about by the increased take-up of mobile services. Furthermore, technological hubs are emerging and flourishing across the developing world, spurring digital innovation and providing essential content, covering a wide range of sectors such as health, trade, culture, and agriculture.

A conducive innovation environment, combined with digital and entrepreneurial capacities, is crucial for a deeply rooted digital transformation. Increased access to mobile networks and the Internet can represent a disruptive occasion for developing countries to stimulate productivity growth and create numerous new jobs.

In developing countries, digital technologies like mobile phones are increasingly accessible and used by large numbers of people. This could be the perfect window to increase access to basic services, often too difficult to reach by the most excluded and marginalised groups in society.

Digital literacy and digital skills are key enablers to mitigate inequalities and build strong digital economies. If applied together with the right skills, digital tools can improve access to information and leverage greatly the impact produced by innovative services.

The possible applications of digital services are countless and the potential they can achieve is infinite. For example, digital technologies can provide market price information to rural farmers, establish digital financial services as an easy, secure and flexible alternative to the traditional banking system, or provide life-saving maternal health messaging for pregnant women in rural areas.

Innovative digital services can support disaster preparedness by providing early warning of natural hazards and risks to the threatened population, or they can deliver better information about government policies to citizens, leading to improved transparency and institutional accountability. Education professionals can use digital learning platforms to get access to quality material and best practices, improving enormously education quality and range, reaching also students based in remote areas.

### Challenges in the digital era

Africa has the lowest Internet usage rate in the world – it is less than 30%<sup>7</sup>; but the Digital Divide is a significant gap and has the potential to exacerbate inequalities also in other regions like Latin America and Asia. The technology gap varies and depends on several factors: gender, rural/urban contexts, socio-economic conditions, and other geographical and economic variables. It is a phenomenon observable all over the world, which affects each region, country, and area in different ways.

Having a conducive digital environment can allow countries to reap large benefits from innovative technologies. When it comes to societal penetration, affordability, and performance of digital services, there is a huge disparity between developed and developing countries, between and within countries, between rural and urban areas, and across genders, age, and income levels<sup>8</sup>. It is a huge challenge to ensure global, functioning, and affordable access to technological devices and Internet coverage for the majority of the world's population, in particular in remote areas of developing countries. There are several structural constraints to be addressed in order to achieve an inclusive and growing number of Internet users and to establish a price range at which the Internet becomes widely affordable.

<sup>6</sup> GSMA. (2019). The Mobile Economy Sub-Saharan Africa 2020.

<sup>7</sup> World Bank (2019) Report: Connecting Africa to Broadband: A Roadmap for Inclusive Growth.

<sup>8</sup> World Bank. (2019). Information & Communication Technologies Overview.

Indeed, although more than half of the world's population is now using the Internet<sup>9</sup>, the penetration rate in the least developed countries is only 15%<sup>10</sup>. One of the reasons is the onerous price of broadband and mobile Internet, determined by infrastructural deficiencies and inefficient markets.

Furthermore, even within the population of the same region or city inequalities exist. In Africa, urban areas have more than twice the number of digital users compared to rural areas, and these figures reveal that within this population women are 25% less likely to use the Internet than men<sup>11</sup>. The Digital Gender Divide reduces the chances for girls and women to equally participate in our ever more digital societies. If appropriately addressed, the promotion of inclusive accessibility to digital means could enhance the potential for economic growth. The investment in women's empowerment has been defined as the most direct and effective way to promote economic growth, peace, and prosperity. The GSMA estimates that closing the gender gap in mobile Internet use across low- and middle-income countries could add up to 1% of GDP growth in these countries over the next five years.

Additionally, the lack of technical literacy, digital skills and locally relevant content presents a further challenge to Internet access. Extensive educational training is needed to reach a reasonable level of digital capability in developing countries. An improvement in digital knowledge would also support the creation of content in local languages, which is currently lacking on the Internet. Around 55% of the online content is in English<sup>12</sup>; this greatly limits the opportunities of less formally educated people, who are unable to comprehend web materials and benefit from Internet usage.

While the potential is clear, the practitioner community has identified several issues in the implementation of digital development projects<sup>13</sup>, for example:

- the projects have failed to move into scalable and sustainable programmes;
- the solutions used too often reinvent the wheel rather than build on robust infrastructure;
- the applications and services designed thousands of miles from their use environment failed to meet user needs;
- The creation of duplicated tools and systems has made data difficult to access and use for decision-making.

Moreover, the misuse of digital technologies in areas such as cybercrime, mass surveillance, manipulative interference in elections, disinformation campaigns, hate speech, unlawful data mining, use of biased data sets for artificial intelligence, etc. can be harmful to human rights and democracy. The increased use of digital technologies by citizens can help undemocratic governments and regimes to control people limiting even more freedom of expression or movement. The tracking apps used during the COVID-19 crisis by some governments are a striking example of the risks that digital technologies can represent to privacy and human rights.

### EU commitment to promoting digitalisation in partner countries

The European Commission has identified digitalisation and the Green Deal as their main priorities ; the EC will implement its strategy towards digital transformation both within its borders and on an international scale. The European approach to digital transformation means empowering and including every citizen, strengthening the potential of every business, and meeting global challenges with its core values.

The EU pillars for digital transformation with partner countries are the following:



<sup>9</sup> ITU. (n.d.). Press Release – ITU releases 2018 global and regional ICT estimates.

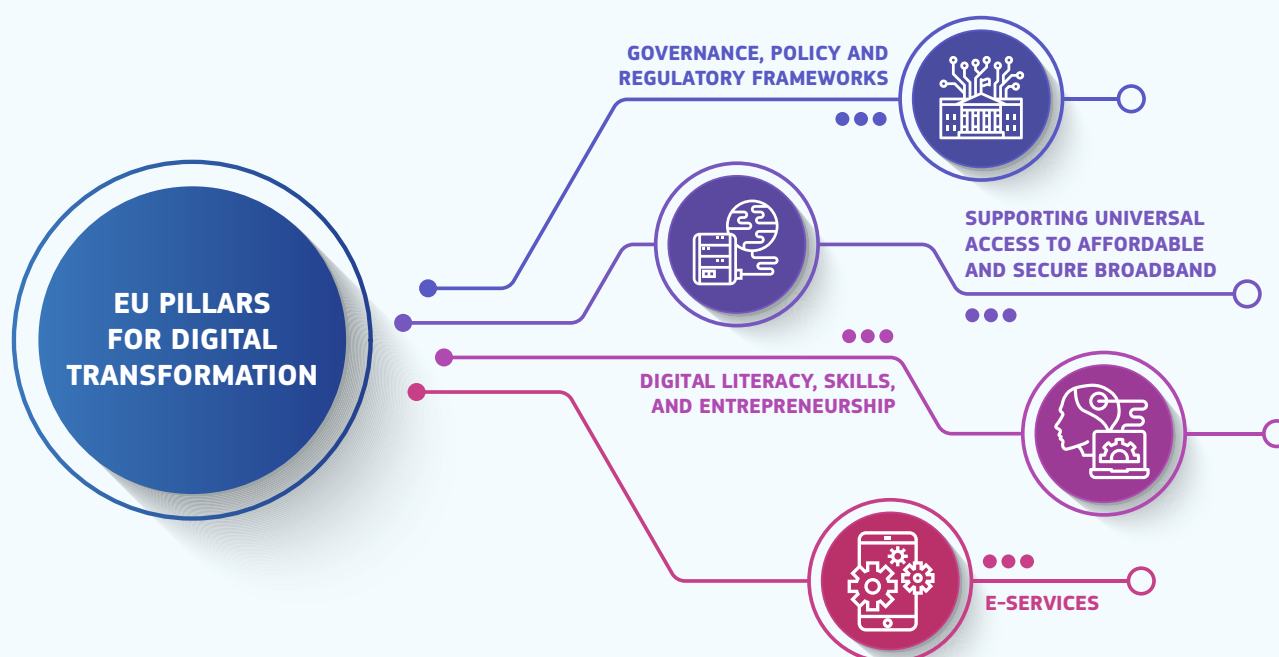
<sup>10</sup> World Bank. (2019). Information & Communication Technologies Overview

<sup>11</sup> ITU (2017) [ICT Facts and Figures](#).

<sup>12</sup> GSMA. (2014). Digital Inclusion.

<sup>13</sup> Waugaman, A. (2016). From Principles to Practice: Implementing the Principles for Digital Development – Perspectives and Recommendations from the Practitioner Community | Principles for Digital Development.





### (i) Governance, policy and regulatory frameworks

The EU intends to promote its values through the human-centric approach, leading to an inclusive and fair digital transformation reducing the impact of the inherent challenges and threats of digital transformation. The EU ambition is to focus on equality and inclusion through the key principles, experience and founding values of our Digital Single Market (DSM). The EU is a global model fostering the balance between the promotion of investments, competition and the protection of consumers' rights. In this context, the EU's internal policies, such as the General Data Protection Regulation (GDPR), the Directive on security of network and information systems (NIS Directive), the EU 5G Toolbox or international legal instruments such as the Budapest Convention on Cybercrime and the ethical approach to Artificial Intelligence and use of Big Data remain a key part of the EU policy reference framework.

### (ii) Supporting universal access to affordable and secure broadband

Even though the digital revolution is a global phenomenon, due to the digital divide, there are still huge disparities between and within countries when it comes to the societal penetration, affordability, and performance of digital services. Lack of infrastructures, limited affordability, poor digital skills, unreliable sources of electricity, and regulatory bottlenecks are some of the key barriers to the uptake of the Internet. The digital gender divide is an important element to be also considered.

Proposals for addressing the digital divide include : promoting the improvement of the regulatory environment; boosting investment in digital infrastructures; supporting measures to increase affordability of broadband for citizens and protect them from cyber threats; and addressing the socio-economic and cultural causes of the digital gender divide.

### (iii) Digital literacy, skills, and entrepreneurship

The advent of digitalisation has transformed the definition of literacy. Along with skills allowing individuals to both use digital devices and create digital solutions to local development challenges, a whole set of transversal skills are necessary, especially for women and young

people entering the labour market. Much can be done by providing foundational skills including literacy, second language learning and basic digital skills to enable citizens to actively participate and succeed in the digital society. Skills for ICT professionals, digital entrepreneurs and public institutions are necessary to build a skilled workforce through the provision of digital and entrepreneurial skills for current and future professionals across all sectors that use technology, including Technical and Vocational Education and Training (TVET) programmes.

Digital entrepreneurship can be the engine of economic development in the 21st century. At the same time, the development of successful companies is intertwined with digital skills. Digital entrepreneurship also plays a vital role in bridging the digital divide and improving the inclusion of women for economic and social growth. Capacity building support for the digital start-up eco-system is fundamental in topics such as marketing, regulations, and legal requirements. Limited access to finance and lack of financial services are amongst the major issues for start-up and digital companies and need to be addressed. The Green Digital Economy is particularly relevant to the new EU international partnership strategy. Supporting science, technology and innovation is instrumental to Digital Transformation in order to help the public and the private sector to take full advantage of new technologies and innovative business. Existing European scientific and industrial excellence plays a fundamental role for partner countries to take advantage of European assets such as Copernicus, Galileo and EGNOS.

### (iv) e-Services

Digital technology has a 'transformational' effect on achieving the UN Sustainable Development Goals. Digitalisation and ICT have brought the world closer together through a wide range of changes in how people, government and businesses interact. Both public and private services are rapidly migrating from traditional operation models to digitally enabled services, tagged as eServices. A digital infrastructure should include those services that are a prerequisite for a digital economy (e.g. financial-technology and digital financial services, eGovernance services such as digital identity, marketplaces, open data platforms, eCommerce) and those that enhance governmental service delivery (e.g. healthcare, education).

## Toolkit for Digitalisation in Development and Cooperation

The toolkit explores Digitalisation for Development as it provides a set of resources, references, and information to leverage the potential of digitalization in the context of Development and Cooperation.

More specifically, this toolkit provides operational references and concrete examples to improve development actions, with a focus on best practices related to Digitalisation. It addresses the design and the management of projects, policy dialogue with partner countries, and leverages the digitalization potential in other areas such as agriculture, infrastructure, health, and education.

The toolkit is composed of a series of individual, independent info-sheets, covering a diverse range of subjects such as:

- Key technologies relevant to digital transformation in partner countries,
- Key elements and building blocks for digital transformation,

- EU policies and standards,
- Inspiring case studies to illustrate the diverse ways in which digital solutions can be applied,
- Recommendations on the implementation of projects, methods, tools and approaches,
- Digital solutions in specific contexts and various scenarios,
- Key terms related to the digital transformation defined and explained in relation to the development sector.

The world of digitalisation is rapidly evolving, as are the concepts, topics, and approaches it is generating. Therefore, this toolkit is to be considered as a dynamic and flexible document to be constantly updated and expanded where needed, as new information arises.



The info-sheets will be posted on:  
<https://europa.eu/capacity4dev/>

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