

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 <u>Cap4Dev</u>

#### Introduction

Across the world, digitalisation is playing an integral role in a wide range of areas. In the 21st century, it forms the foundation for recognising human rights, creating job opportunities, increasing access to high-quality basic services, accelerating transparency and accountability in governments, and enhancing all aspects of public and basic service delivery.

This self-learning guide provides access to numerous free online resources, such as e-learning courses, webinars, conferences, toolkits, toolboxes, and other digital self-learning opportunities. These resources are valuable for individuals seeking a deeper understanding of the roles and realities of digitalisation in modern societies, particularly in the developing world. They are offered directly by European Union institutions or indirectly through the promotion of various programs and digital platforms, in collaboration with educational institutions (e.g., the H2020 program, Digital Skills and Job Platform, European Universities). Some of the materials have been provided also by renowned global organisations like the United Nations and the World Bank, who share the commitment to digital inclusion.

The resources cover a wide range of important contemporary topics that have been addressed in the info-sheets series "Digitalisation for Development", related to digitalisation and its role in:

- Facilitating effective policy-making and governance.
- Developing Smart Cities to enhance the daily lives of citizens, such as health and financial management.
- Improving global internet security, connectivity, and infrastructure.
- Advancing Artificial Intelligence and providing professional training for business development.
- Bridging the knowledge gap in digital technology to address gender inequalities and the urban-rural divide in developing regions.





#### Toolkit Infosheet 1 - Introduction to Digitalisation



#### **Digitalisation & Cybersecurity**

EDigitalisation for Development.

course

The course explores the main concepts of digital dynamics, presents milestone documents on the wider policy framework of digitalisation, introduces EU objectives and strategies for the digital age and analyses how digital solutions can help with other challenges such as climate change.

#### Toolkit Infosheet 2 - Policy and Regulation



#### **Courses on EU policy**

EU Academy.

course

The EU Academy is an EU-owned online hub containing first-hand knowledge, high quality educational resources and valuable insights, directly produced by the EU institutions, for individuals whose work is related to its sphere of action. The aim is to facilitate their easy and smooth understanding and successful implementation of EU policies in a wide array of fields. The mission of the EU Academy is to provide a modern and engaging learning environment that can foster and improve the quality of the application of knowledge on EU-matters in a simple, smart and inspirational way.

#### **BLSI (Better Legislation for Smoother Implementation) Learning Hub**

Joinup, European Commission.

#### learning platform

It is a continuously evolving space gathering learning material on different topics linked to BLSI. It is for all types of profiles involved into policymaking (e.g. policymakers, legal drafters, IT and business profiles). Like a tree, it will keep growing and evolving over time and will be co-created with our community. The Hub is based on a number of "learning needs" related to BLSI. These needs were identified via research and different activities carried-out as part of the BLSI community (including the virtual breakfasts). Technology evolves very quickly, therefore these needs also evolve over time. BLSI Learning Hub is gathering the feedback of its community members on these needs as well as on the learning material gathered in the webpage.

#### Policy tools and training

International Telecommunication Union (ITU). The International Telecommunication Union (ITU) is the United Nations specialized agency for information and communication technologies – ICTs.

#### training materials

ITU has been producing leading research and analysis on ICT policy and regulation for over 25 years. Policy advice and regulatory best practice guidelines published by ITU have accompanied ICT regulators from their creation through their journey towards digital transformation of economies and societies. The main purpose of the work is to provide the tools for an effective policy, legal and regulatory environment for the ICT sector.

#### **Toolkit Infosheet 3 - Copernicus**



#### Science, Technology and Innovation

European Space Programme.

course

The course explores the main concepts of digital dynamics, presents milestone documents on the wider policy framework of digitalisation, introduces EU objectives and strategies for the digital age and analyses how digital solutions can help with other challenges such as climate change.



#### **Copernicus Information Material**

Copernicus.

brochure

With this brochure, you will learn about the many facets of the Copernicus Programme: its actors and their roles, as well as its mechanisms, its success stories, and its benefits and applications for Europe and its citizens, with a special focus on six cross-cutting topics dealing with major societal goals.

#### **Understanding Copernicus data and services**

Copernicus.

course

The course addresses three key topics: Chapter 1 - Understanding Copernicus data and services – what they are, and how they can be accessed and used; Chapter 2 - Learning from success stories – understanding how existing Copernicus-enabled services and applications have been developed and deployed; Chapter 3 - Doing it yourself – acquiring the key skills and knowledge to develop and deploy Copernicus-enabled products and services and to navigate the Copernicus ecosystem. The course modules is taught in English by internationally-recognised experts and successful practitioners. Different engaging and interactive formats are used during the lessons, from webinars and videos to use cases and projects. The course is built on a user-driven approach aimed at enabling participants to work on their own projects, learn from others, understand the latest trends in situational awareness technologies, and become active members of the Copernicus community.



#### **Toolkit Infosheet 4 - eGovernance**



### Massive Open Online Course on the Basics of Digital Government Transformation Gov 3.0 consortium (Joinup, European Commission).

course

The MOOC will cover all three generations of digital government evolution from the basics of information systems (IS), through Government 1.0 (digital transformation foundations and interoperability) and Government 2.0 (collaborative government) to Government 3.0 (disruptive technologies in data-driven policy making and public service). The Massive Open Online Course (MOOC) incorporates open lessons both on pre- and post- graduate level that offer to participants the opportunity to study high quality courses online. Furthermore, there is concern on education for company staff and entrepreneurship so that enterprises will train their employees in such a way that they can transform knowledge into practical applications. Consequently, the particular way of transmission of knowledge will lead to training provision of participants, by creation of high level of expertise on the area of Electronic Government and appliance of their principles in everyday life of citizens. The MOOC was created by the Gov3.0 ERASMUS+ Knowledge Alliance project.

#### E-Strategies, ITU

International Telecommunication Union (ITU). The International Telecommunication Union (ITU) is the United Nations specialized agency for information and communication technologies – ICTs.

guidelines, toolkit

This Series includes key publications providing guidelines and toolkits on eGovernance.

#### **UN E-Government Knowldegebase**

United Nations.

publication

The resource includes selected key publications on digital government and allows browsing and comparison of data at a regional, national and city level.

#### OECD Digital Government Studies; OECD e-Government Studies

OECD.

seminars, reports

This series analyses trends in digital government policies and practices across OECD and partner countries. The reports provide advice on the use of digital technologies to make governments more agile, innovative, transparent and inclusive. In addition, a series of reports on e-government in OECD countries.

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#### Toolkit Infosheet 5 - Big Data & Artificial Intelligence



#### **Al&Law series**

Co-organised by the Council of Europe and the University of Strasbourg (UMR DRES).

webinars

A series of webinars on the impact of digital on human rights, democracy and the rule of law, in support of initiatives by Council of Europe sectors. These webinars are an opportunity for experts from different backgrounds to meet and discuss issues related to the digital transformation of society.

#### **Elements of AI**

University of Helsinki and Reaktor.

course

To learn what AI is, what can (and can't) be done with AI, and how to start creating AI methods. The courses combine theory with practical exercises and can be completed at your own pace.





#### Data-driven Digital Agriculture: Knowledge and Learning Platform

World Bank.

learning platform

A One-Stop-Shop to share knowledge, analytics, innovations, tools, and best practices among practitioners, policymakers, innovators, researchers, and experts in the area of Data-driven Digital Agriculture. The platform is available to the World Bank staff to support policy advice, analytical reports, diagnostics, project and program design and investments in the area. It also includes opportunities for developing partnerships with key stakeholders in this area.

#### FaST platform

European Commission's DG Agriculture and Rural Development, by the EU Space Programme (DG DEFIS) and by the EU ISA2 Programme (DG DIGIT).

online platform

FaST digital service platform will make available capabilities for agriculture, environment and sustainability to EU farmers, Member State Paying Agencies, farm advisors and developers of digital solutions. The vision is for the FaST to become a world-leading platform for the generation and re-use of solutions for sustainable and competitive agriculture based on space data (Copernicus and Galileo) and other data public and private datasets. The modular platform will support EU agriculture and the Common Agricultural policy by also enabling the use of solutions based on machine learning applied to image recognition, as well as the use and reuse of IoT data, various public sector data, and user generated data.'

#### mAgri Design Toolkit. User-centered design for mobile agriculture

Global System for Mobile communications Association (GSMA).

toolkit

A collection of instructions, tools, and stories to help develop and scale mobile agriculture products by applying a user-centered design approach.



#### **Toolkit Infosheet 7 - Smart Cities**



#### **European Green Capital - Toolkits**

European Green Capital Network, European Commission.

webinars

The European Green Capital Network has a new series of webinars to join up all cities and relevant stakeholders with EGCN experts to discuss sustainable urban development and the findings of their related toolkits of policy recommendations and strategies. The toolkits will provide you with you with various examples and ideas about how your city can manage waste, reduce energy demand, become more resilient and more.

#### **Smart City Roadmap Masterclass**

Smart Cities Marketplace, European Commission.

masterclass

As part of its project shaping activities, the Marketplace is offering a masterclass in developing a good smart city strategy which will sustain your work beyond the first experiments and pilots and form the resilient backbone of future projects. Special focus will be on integrated planning and implementation, the aspects of cross-domain collaboration with and buy in of a multitude of actors, the deployment of a long-term perspective on the built environment, and the early inclusion of financial aspects in your development of plans.

### ITS Toolkit for Intelligent Transport Systems (ITS) for urban passenger transport World Bank.

toolkit

This is a self-learning tool for city transport leaders and their advisers, but also a public resource that provides guidance in the planning, design, implementation, and evaluation of an ITS program. The toolkit comprises this dedicated website, but is supported by a Companion Guide and Handbook that can be downloaded for printing as reference documents.

#### **Green City Development Toolkit**

Asian Development Bank (ADB).

toolkit

This tool kit is a reference for ADB staff, consultants, and city leaders that introduces key concepts of Green City development and identifies crosscutting issues that help in designing urban programs to support city development in a green and sustainable manner. It outlines a three-step city assessment framework and provides a summary of existing tools and resources for green and sustainable development.

#### **CITYkeys**

H2020 project.

indicators

Development and validation of a performance measurement framework to promote a common, transparent and comparable monitoring system for smart city solutions across European cities. The framework includes two levels of indicators: at city or neighbourhood level, and at project level.



#### Toolkit Infosheet 8 - Digitalisation and Democracy



#### EAEA Annual Conference: Learning to exercise democracy in a digital world 2021

EAEA - European Association for the Education of Adults.

conference

Digital transformation is a reality and adults across Europe see an urgent need to adapt to new expectations. Spaces for learning and for exercising democracy have shifted to new environments. How does the rapid digital transformation affect our daily life as adult learning professionals and as citizens? Has it democratized access to knowledge, or has it left some of our learners behind? During the EAEA Annual Conference we will have a conversation about building democracy in a digital world, and the role of adult learning in creating a human-first digital society.

#### **E-Democracy**

Congress of Local and Regional Authorities, Council of Europe.

congress

The relationship between elected representatives, citizens, civil society and political authorities is evolving. While traditional linkages between citizens and politicians are weakening, e-tools, including Internet, social media sites and open data, can help mobilise voters, increase citizen participation in new and different ways to improve public service delivery, foster innovation and economic growth, and strengthen democracy. In particular it considers questions related to the impact of the increasing use of e-media on the work of political representatives at local and regional levels, the use and re-use of open data and the development of smart cities.

# Vocational Education In the Digital Age The Digital Age

#### Toolkit Infosheet 9 - VET for professionals



#### **Digital Skills and Jobs Platform**

European Union.

training opportunities

Training opportunities on digital skills and emerging technologies from all around Europe. Find a range of online courses, professional trainings, and wider education programmes in various fields to build your skills further and thrive in an increasingly digital world.

#### Europe's online platform for school education; Course catalogue

SchoolEducationGateway.

course

The Course Catalogue contains professional development courses designed for school teachers and staff.

#### SALTO, Online courses for youth workers.

SALTO-YOUTH is a network of 7 Resource Centres working on European priority areas within the youth field.

course

As part of the European Commission's Training Strategy, SALTO-YOUTH provides non-formal learning resources for youth workers and youth leaders and organises training and contact-making activities to support organisations and National Agencies (NAs) within the frame of the European Commission's Erasmus+ Youth programme, the European Solidarity Corps, and beyond. It works within the Erasmus+ Youth and the European Solidarity Corps programmes.



#### Toolkit Infosheet 10 - Digital & Gender



## Gender Equality Academy project. Webinar's series on gender equality in research, innovation and higher education

H2020 project, European Commission.

webinar

The Playlist includes twenty videos of approximately 10 minutes duration. The Gender Equality Academy project built a high-quality capacity-building programme on gender equality in research, innovation and higher education. The programme is based on state-of-the-art knowledge and composed of different training formats.

#### **Engendering ICT Toolkit**

World Bank.

toolkit

This Toolkit highlights the likely barriers that women face in owning, accessing, and benefiting from digital sector interventions implemented by the World Bank. It also identifies opportunities for using ICT to empower women. It then goes on to suggest a set of actions, drawing from existing examples and good practices, that have the potential to address these barriers. The Toolkit can assist task teams at different stages of the project cycle. The design seeks to ensure that Task Team Leaders (TTLs) do not have to go through the entire document to mainstream gender into their daily operations. Instead there are embedded hyperlinks that allow jumping to the relevant section.



#### Toolkit Infosheet 11 - Connectivity & Digital Infrastructure



#### **Connectivity and infrastructure**

Digital Europe.

resources

DIGITALEUROPE aims to contribute to the creation of the right framework for Europe's evolution to a gigabit society, from very high-capacity networks to SG.



#### Toolkit Infosheet 12 - Digital Entrepreneurship and Startups



#### A guide for fostering entrepreneurship education

EU publications.

guide

Entrepreneurship education (EE) can unleash the potential of Europeans to master climate change and digitisation and to build a more resilient society. In order to enhance European cooperation and strategy building in EE, the European Commission implemented the project "Peer-Learning Activities in Entrepreneurship Education and in Women's Entrepreneurship" (2018–2021). This Guide is a final output of the project. The target group is decision makers in governments, schools and higher education, civil society, and business – on local, regional, national, and European level. The project identified five main areas where decision makers could become active: training educators, ensuring stakeholders' cooperation, sharing knowledge, raising awareness of EE benefits as well as conducting research and analysis about EE.

#### **BLUES.** European entrepreneurship experience

BLUES project, with the support of the ERASMUS+ Programme.

toolbox

The 10 European institutions members of the BLUES project team have developed a new blended-learning methodology and toolboxes, available to every person or institution interested. Using them will help you to have a multilateral approach to entrepreneurship, or to promote management and entrepreneurial skills amongst university students if you are a teacher.