

Introduction to the dimensions of digitalisation

Module 1.1: Introduction to Digitalisation

Agenda

Module 1.1: Introduction to Digitalisation

- Terms and Definitions
- Opportunities and Challenges
- Digitalisation affects all parts of our lives

Warm-Up A short quiz!

<http://etc.ch/NBND/>



15 min





Terms and Definitions

- **ICT:** "Information and Communication Technologies" covers any product that will store, retrieve, manipulate, transmit, or receive information electronically in a digital form (e.g., personal computers, digital television, email, or robots).
- **Digitisation:** Digitisation is the process of changing from analogue to digital form” Therefore we are talking about **turning photos, movies or documents from analogue (paper based) forms into digital formats**, which is easier to replicate, share etc. It is important to distinguish digitization from digitalization.
- **Digitalisation:** One step up from digitisation and describes processes being conducted now digitally. May it be business processes or the way we interact personally and further. Example: Send emails or instant messages instead of letters.
- **Digital-Transformation:** Describing the transformative changes we see happening due to digitalization and digitization. Both lead to a complete transformation of Business Modells and the way we live and work.
- **Big Data:** Big data is high-volume, high-velocity and/or high-variety information assets that demand cost-effective, innovative forms of information processing that enable enhanced insight, decision making, and process automation.

Digitalisation & Development Coop. Opportunities



Provide access to
information and
health services via
e-Health



boost education
via e-Learning



Create jobs and
boost economies



Promote participation and
inclusion with
e-Participation, e-Governance
and access to finance

Digitalisation & DevCo

Opportunities - Facts and Figures



50 % of people in Africa will own a smartphone by 2020.

Productivity in developing countries could increase by up to **25 %** in the long term if access to the Internet would be at the level of industrialized countries. This would create **140 million** jobs.



264 million people worldwide do not go to school.

1.4 billion textbooks and learning materials and many training courses are freely available on the Internet and offer educational opportunities.

Digitalisation & Development Coop. Challenges

the digital divide
between those
who have access
and those who
don't



electrical waste is a
catastrophe for
nature and humanity



misuse
compromises
people's privacy
(data security)



Work is reshaped
by digitalisation
also threatening jobs



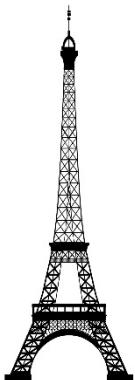
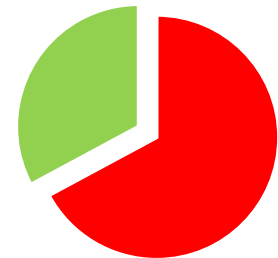
Digitalisation & Development Coop.

Challenges - Facts and Figures



80 % of the people in the least-developed countries are not using the Internet. Worldwide **12 %** fewer women than men use the Internet – in Africa this is even **25 %** less.

Up to **2 / 3** of all current jobs in developing countries could disappear through digitally driven automation.



In 2016, **44.7 million** tons of e-waste were generated. This corresponds to about **4.500 Eiffel Towers**. Only **20 %** of these devices contaminated with toxic substances are properly disposed of and recycled.

Digital Transformation affects all parts of our lives

Question: How does it affects these parts of our lives?



CONSUMPTION

LIFE



WORK

PRODUCTION

