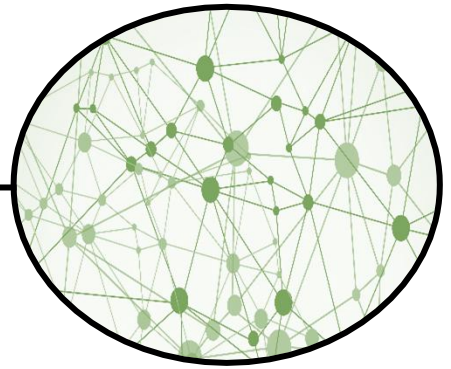
Theories of Information Society

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

INFORMATION SOCIETY

A group of verbal (spoken and written) and non-verbal symbols that the transmitter wishes to convey to the receiver.

(Jelovac, Rek, 2010)



Information is meaningful; it has a subject; it is intelligence or instruction about something or someone.

(F. Webster, 2006)

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

INFORMATION SOCIETY



Source: Generated by vivago.ai

Role of information in shaping social structures, power dynamics, cultural norms.

A resource that influences social processes, including decision-making, social change, and the formation of identities within society.

The ability to access, analyze, and utilize information <u>effectively</u>.

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

INFORMATION **SOCIETY**

SOCIOLOGY Social science, that studies human society and social behavior.

Fakulteta za informacijske študije
Faculty of information studies

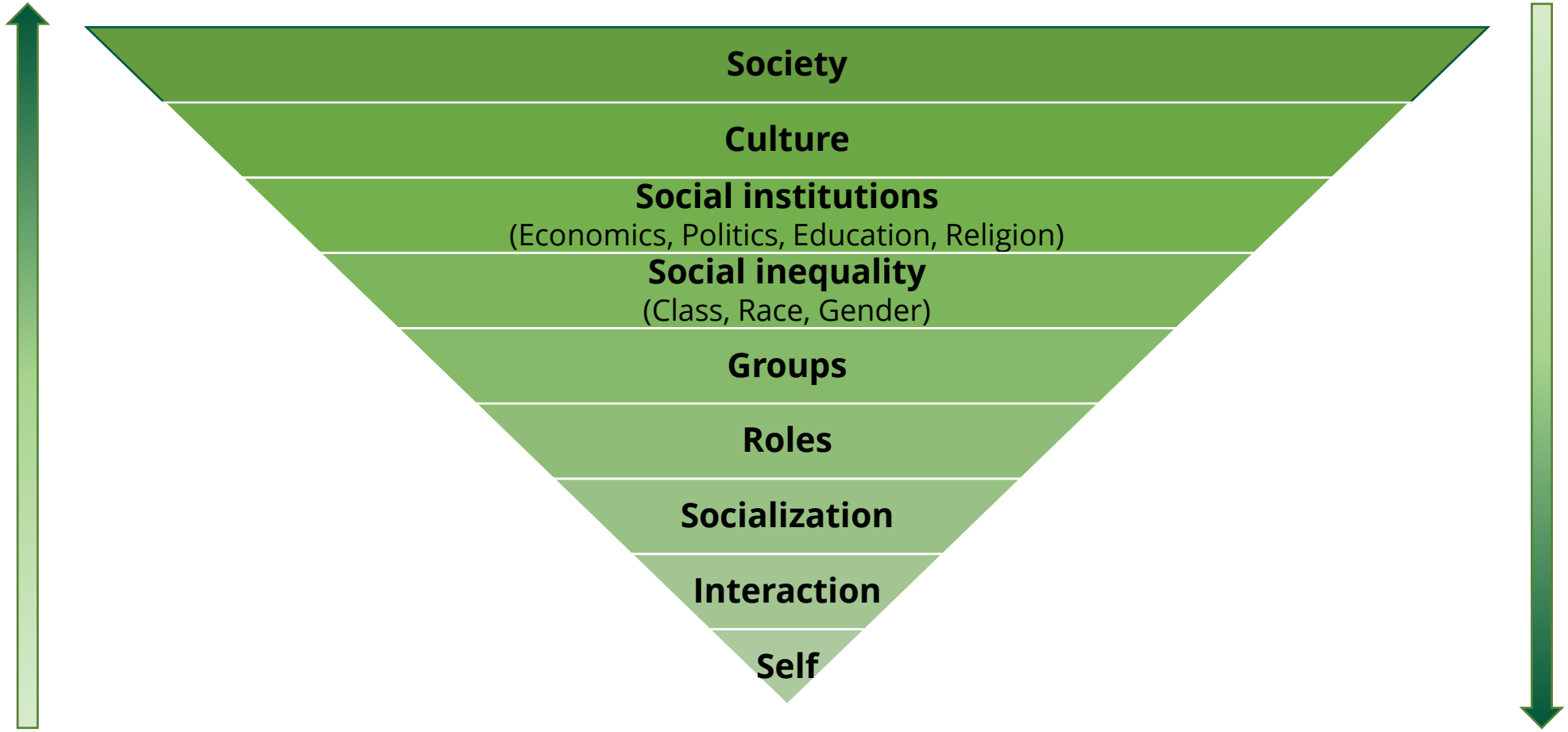
TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

INFORMATION SOCIETY

Studying the society according to levels of analysis (macro-micro)



Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

A concept used to describe the structured social relations and institutions among a large community of people which cannot be reduced to a simple collection or aggregation of individuals.

A. Giddens and P. Sutton (2017)

Society as a 'sui generis' (a matter of its kind) which has a strong influence on individuals; the concept of a society based on a nation-state based principle.

David É. Durkheim

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

CRITICISMS OF THE "CONCEPT OF SOCIETY" AS A NATION-BASED SOCIETY:

01

- the relative staticity of the concept (creating the impression that society and the individual are completely separate "things" - the presence of a kind of dualism);

02

- the phenomenon of **globalization**: the concept of society did not seem to be able to cope with the dynamics of global social change.

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

ARGUMENTS "FOR" THE CONCEPT OF SOCIETY AS A NATION-BASED SOCIETY:

01

- nation-states remain key players, as state-based societies are the largest survival units capable of mobilizing a large population to defend their territory;

02

- nation states retain most of their power in uniting countries in supranational organizations (e.g. the EU) and transferring.



Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

GLOBALISATION

D. Held and A. McGrew (“The Global Transformations Reader” (2003):

A historical process, which embodies the spatial organization of social relationships and creation of transnational and interregional interactions.

A.G. Hopkins (“Globalization in World History” (2002)):

Growing influence of non-state actors (e.g. multinational corporations).

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

SOCIOCULTURAL EVOLUTION

A process of changing societies characterized by dominant patterns.

Gerhard Lenski - "sociocultural evolution theory“:



The society will "develop, change and survive" with the help of **technology** as “**information** about how to use the material resources of a given society or culture to meet human needs and satisfy human desires”.

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Focus on **information**:

the more information (knowledge) a society has, the more advanced it will become.



Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Pre-Industrial societies:

Hunting and Gathering Society

Pastoral society

Horticultural society

Agricultural society

Industrial society

Post-Industrial society

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Pre-Industrial Societies

Pre-Industrial societies:

Hunting and Gathering Society

Pastoral society

Horticultural society

Agricultural society

Hunting and gathering societies

- the strongest dependence on the environment;
- hunting animals and harvesting plants, fruits, crops;
- nomadic and small;
- the central institution is the family.

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Pre-Industrial Societies

Pre-Industrial societies:

Hunting and Gathering Society

Pastoral society

Horticultural society

Agricultural society

Horticultural and pastoral societies

- domestication and breeding of animals (pastoral society);
- horticulture (horticultural society);
- nomadic (pastoral society)/permanent settlements (horticultural society);
- greater specialization of work (also crafts, pottery, construction tents, making tools, clothes);
- social inequality is increasing.

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Pre-Industrial Societies

Pre-Industrial societies:

Hunting and Gathering Society

Pastoral society

Horticultural society

Agricultural society

Agricultural society

- “consumption” of technology;
- construction of cities;
- strong specialization of work;
- the family as an institution loses its central role;
- appear religious, political and economic system;
- great social inequality.

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Industrial Societies

- the economy is based on money;
- mass production;
- complex division of labor;
- noticeable social inequality;
- developed economic, political, religious, educational and family system.

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Post-Industrial Societies

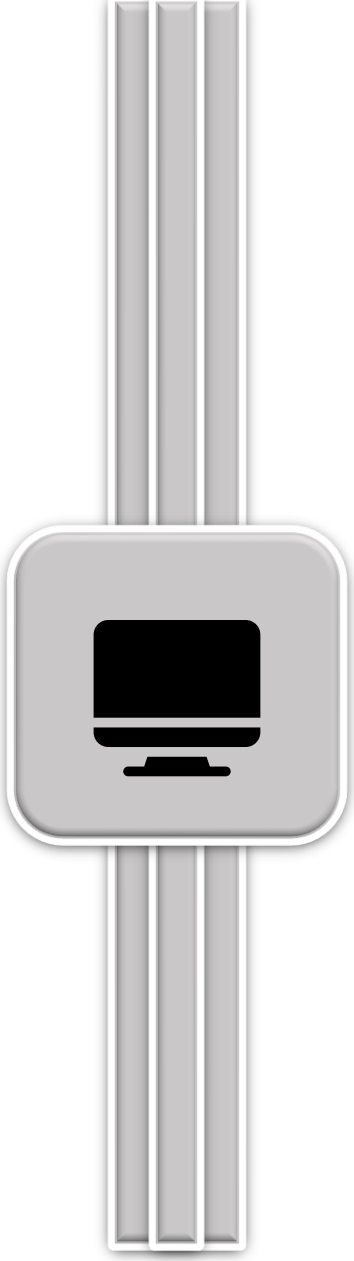
- the bulk of income is generated by IT service activities;
- technology becomes vital;
- collection, processing and control of information;
- information society/knowledge society;
- the heart of globalization;
- the important role of educational institutions and science.

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Discontinuity of the Information Society

Information society represents a completely new type of society *(theories of post-industrialism, theories of the information mode of development, theories of postmodernism).*



Continuity of the Information Society

Information society as a 'computerisation' of existing social relations and structures *(theories of the nation-state, the theory of the public sphere).*

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

INFORMATION SOCIETY

Society in which the generation, dissemination, utilization, and control of information serve as central pillars of economic, political, and cultural activities, often making it the primary driver of economic and cultural development.

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

INFORMATION SOCIETY

F. Webster – theoretical definition of the Information Society.

„Theoretical knowledge/information is at the core of how we conduct ourselves these days.“

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

INFORMATION SOCIETY

F. Webster – theoretical definition of the Information Society.

- Technological
- Economic
- Occupational
- Spatial
- Cultural

- Political

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

INFORMATION SOCIETY

F. Webster – theoretical definition of the Information Society.

- Technological
  - ✓ Development of new technologies, which are one of the most visible indicators of new times – new type of society;
  - ✓ Technological determinism;

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

INFORMATION SOCIETY

F. Webster – theoretical definition of the Information Society.

- Technological
- Economic
  - ✓ Growth of GDP and growth in economic worth of informational activities;
  - ✓ The greater part of economic activity is taken up by information activity;

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

INFORMATION SOCIETY

F. Webster – theoretical definition of the Information Society.

- Technological
- Economic
- Occupational
  - ✓ Most of occupations is found in information work;
  - ✓ Production of products comes from knowledge, skills, talent and creativity.

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

INFORMATION SOCIETY

F. Webster – theoretical definition of the Information Society.

- Technological
- Economic
- Occupational
- Spatial
  - ✓ Information networks, information flows which connect locations and can have profound effects on the organisation of time and space.

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

INFORMATION SOCIETY

F. Webster – theoretical definition of the Information Society.

- Technological
- Economic
- Occupational
- Spatial
- Cultural
  - ✓ Increase in the information in social circulation within the everyday life;

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

INFORMATION SOCIETY

F. Webster – theoretical definition of the Information Society.

- Technological
- Economic
- Occupational
- Spatial
- Cultural

- Political
  - ✓ Changes in the global politics;

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

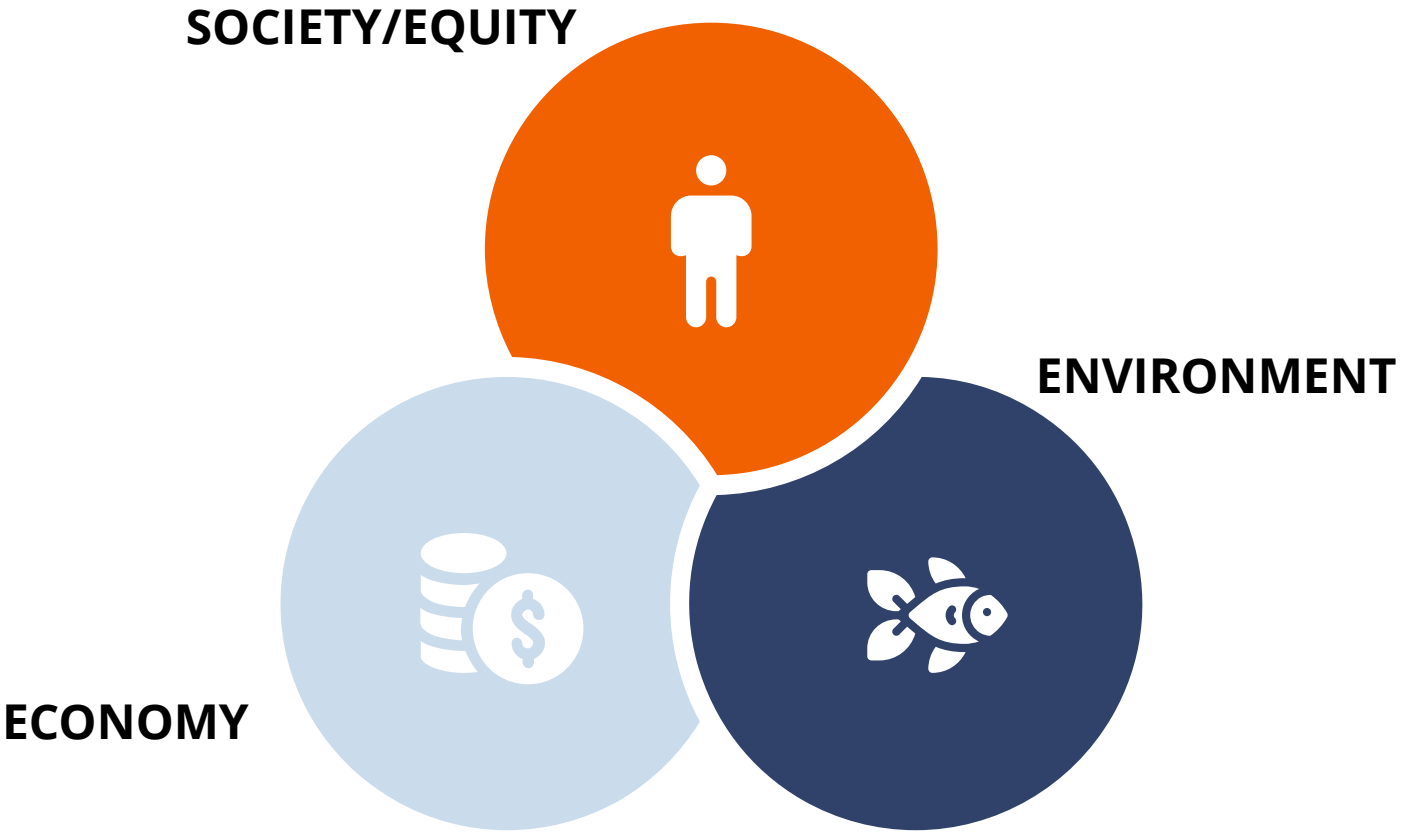
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

SUSTAINABILITY

Meeting our own needs without compromising the ability of future generations to meet their own needs. In addition to natural resources, we also need social and economic resources.

THE 3 E'S



Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

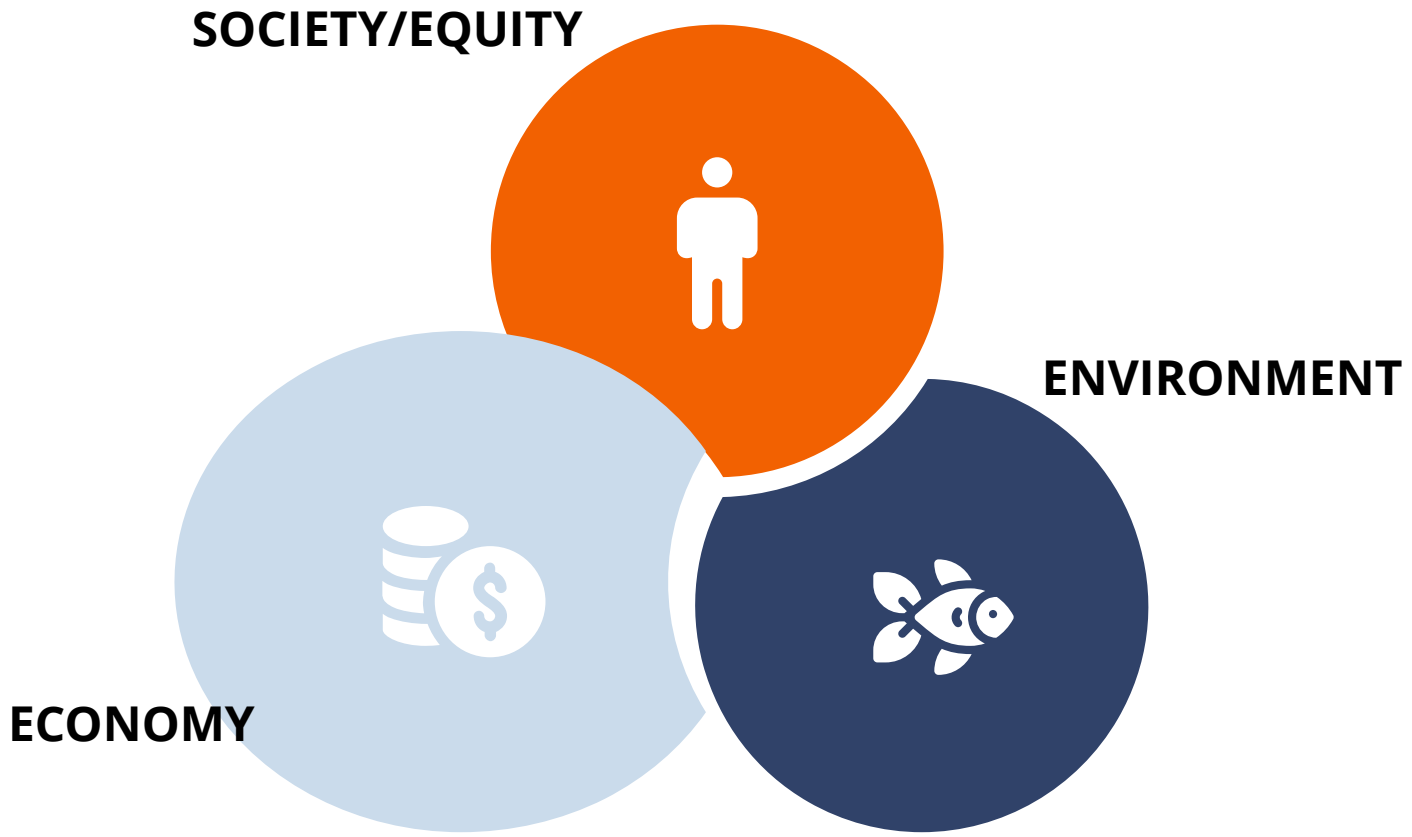
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

SUSTAINABILITY

ECONOMY

Economic sustainability is the responsibility of businesses and communities. They are encouraged to use their resources responsibly and efficiently.

Economic sustainability is designed to support long-term economic growth without harming environmental, social and cultural aspects of global community.



Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

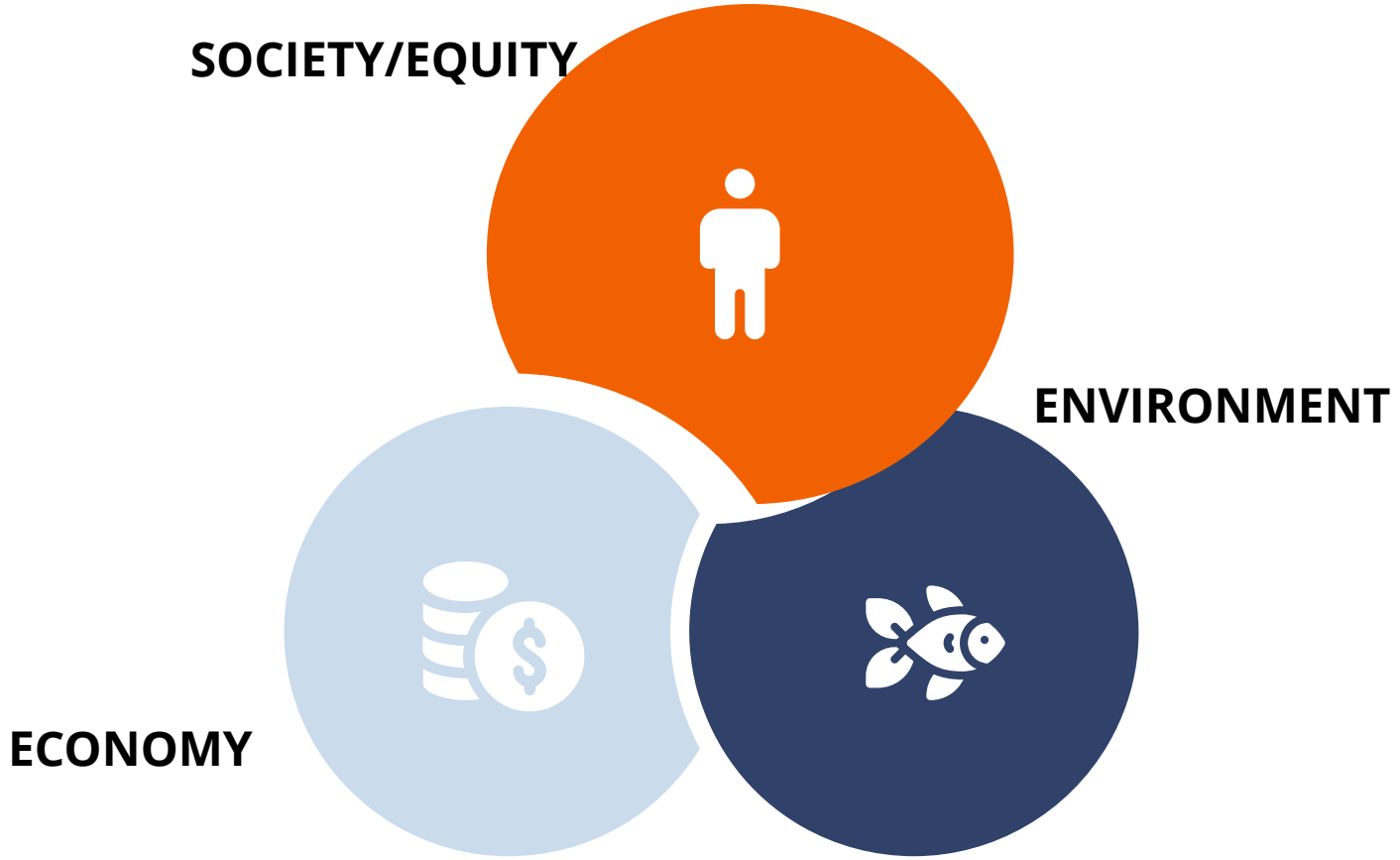
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

SUSTAINABILITY

SOCIETY

Living sustainably as individuals, families, communities and countries (e.g. healthier air and less money needlessly spent on healthcare, using renewable energy sources to reduce droughts as they require less water and energy to maintain).

The eventual goal is that sustainable development will also reduce hunger, poverty and generally provide a better global quality of life, promoting fairly distributed education and healthcare.



Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

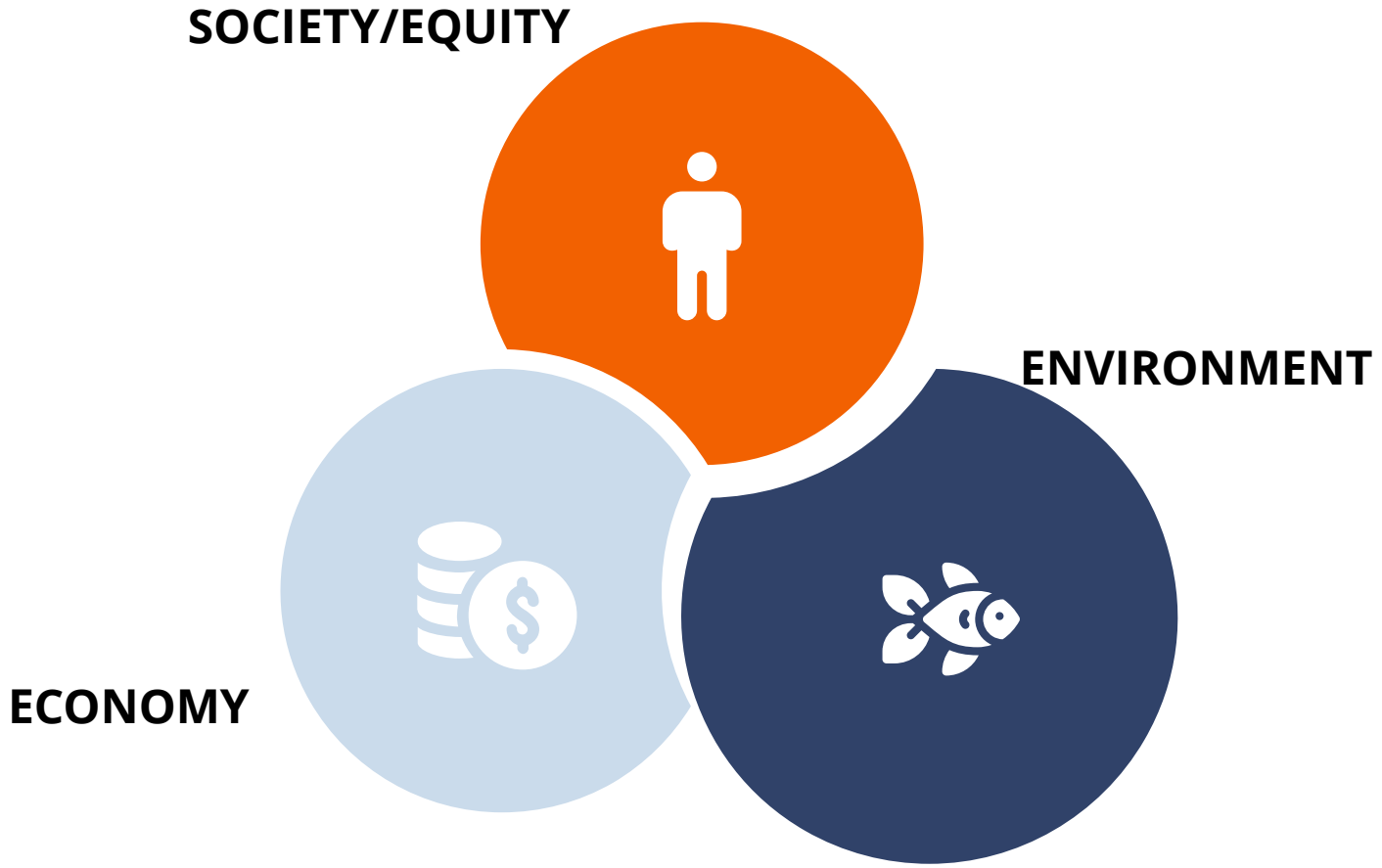
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

SUSTAINABILITY

ENVIRONMENT

Focus on the state of the planet we leave it in.

It encourages individuals to live in a way that creates minimal waste and even regenerates some of the resources we use every day.



Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Agenda 2030



Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



https://www.stat.si/Pages/cilji

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Millennium Development Goals (MDGs)



Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

MAIN ELEMENTS OF INFORMATION SOCIETY

INTEGRATION

Connection and smooth interaction of devices and platforms, computers, communication, audiovisual and publishing technologies, broadcasting technologies.



COMMUNITY

Online platforms, social networks and digital spaces bring together like-minded individuals and foster communities based on shared interests, goals or identities. These virtual communities transcend physical limitations and enable global connections.

NETWORKS

A set of interconnected nodes or entities, common, connecting element between community and technological integration.

Fakulteta za informacijske študije
Faculty of information studies

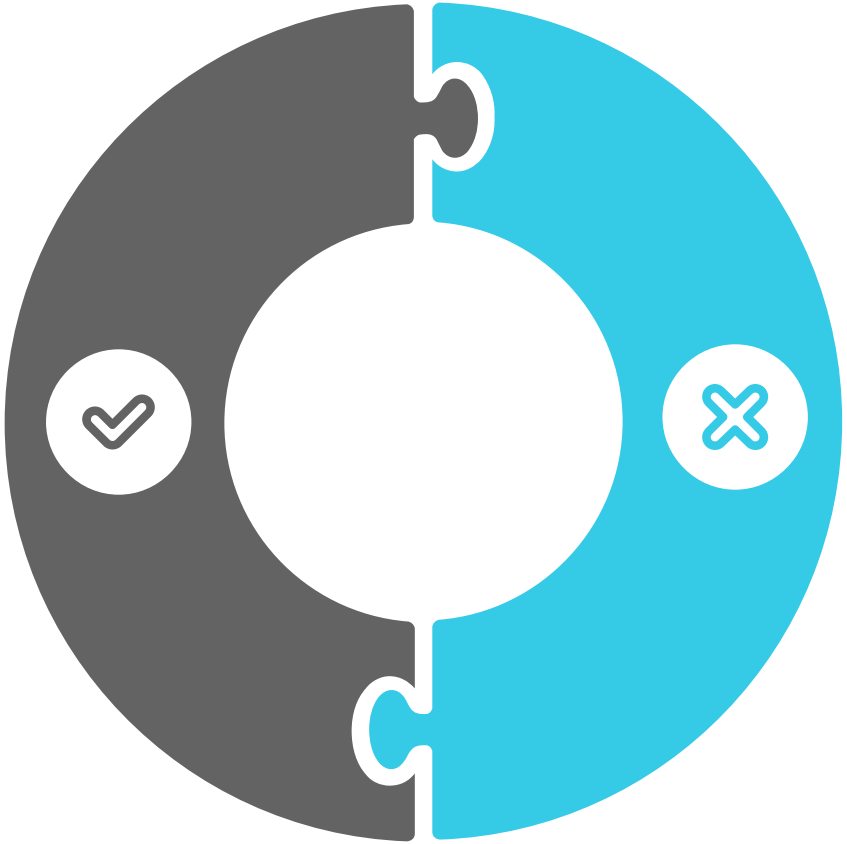
TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Equal and meaningful access to digital resources, technologies and opportunities for all individuals, regardless of their socio-economic status, geographic location or origin.

INCLUSION



EXCLUSION

Systemic barriers that prevent certain individuals or groups from fully participating in the information society.

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

INFORMATION SOCIETY

https://www.globalgoals.org/goals/9-industry-innovation-and-infrastructure/



BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION



UNIVERSAL ACCESS TO INFORMATION AND COMMUNICATIONS TECHNOLOGY

Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020.

Fakulteta za informacijske študije
Faculty of information studies

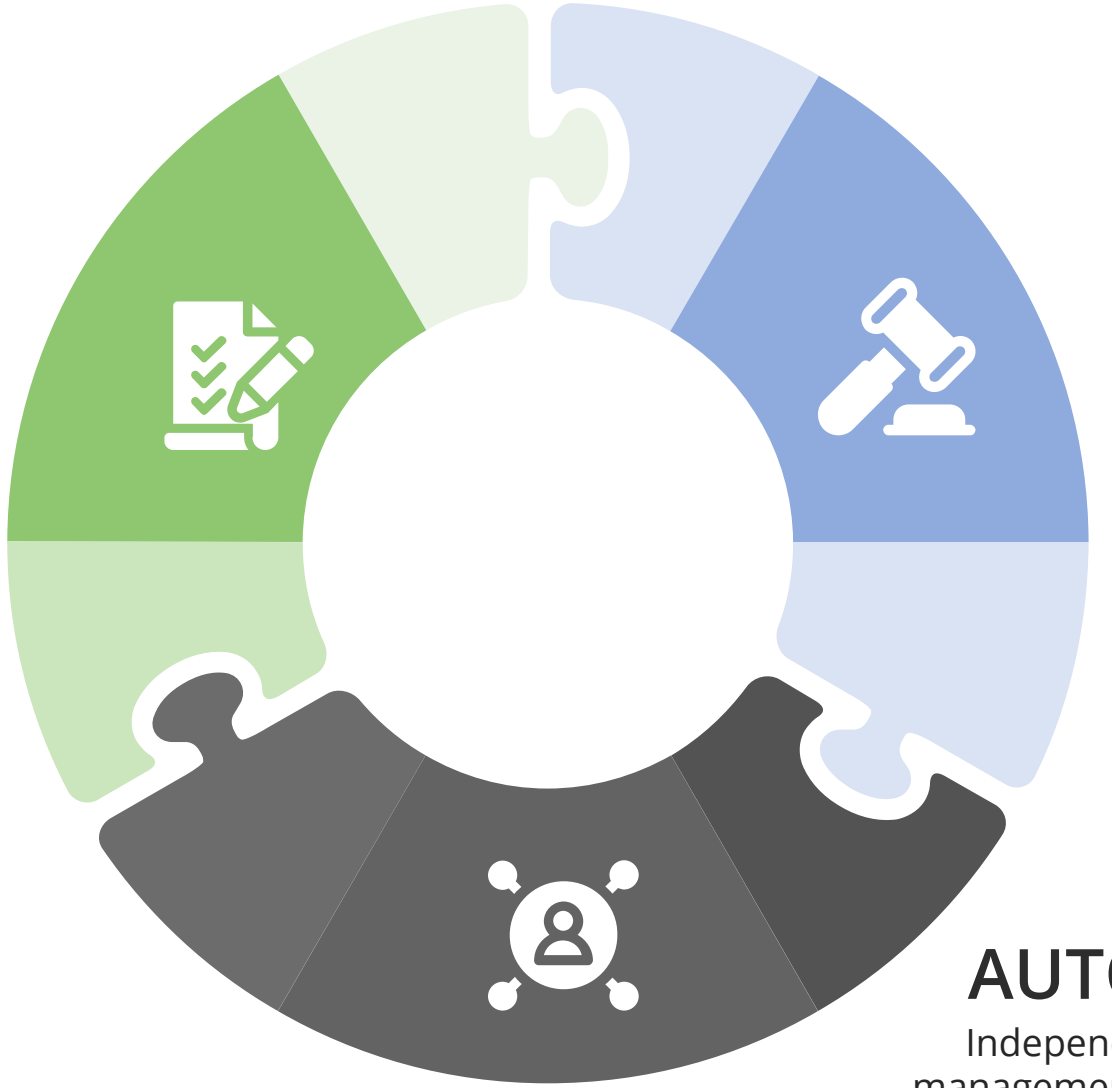
TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

CHOICE

Ability of individuals to choose between different options, especially in the digital domain.



CONTROL

Ability of individuals to manage and direct their interactions in the information society, regulate the use of technology in their lives.

AUTONOMY

Independence and self-management of individuals in their digital interactions.

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

A systematic process of setting goals, defining strategies and describing steps to achieve the desired results in the digital sphere.

PLANNING



GUIDANCE

Providing guidance, advice and support to individuals and subsystems in the information society.

power

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

EU principle of solidarity

The Union is founded on the values of respect for human dignity, freedom, democracy, equality, the rule of law and respect for human rights, including the rights of persons belonging to minorities. These values are common to the Member States in a society in which pluralism, non-discrimination, tolerance, justice, solidarity and equality between women and men prevail

(Article 2, Treaty on European Union)

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

EU principle of solidarity

Concept of a joint "task" with equal partners pooling common risks, or diverse support from stronger member states to weaker member states to create and maintain European stability.

Joint decision-making and joint actions by EU member states to solve common challenges and promote common goals.



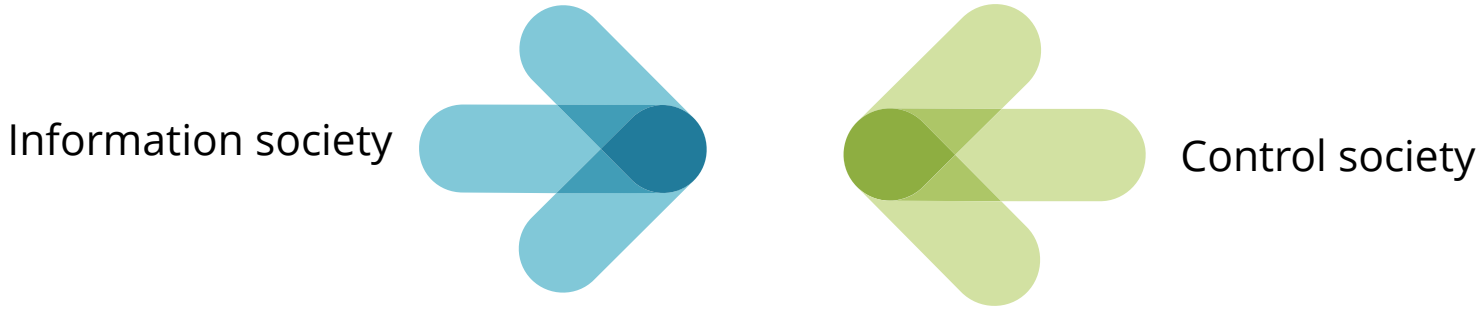
Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

De-centred control centers in the information society



Information and communication technology is thus established as a central **control** technology. It not only enables it, but also facilitates it, as it is already fundamentally designed to collect and store data.

Individual privacy issue - responding to developments in information technology.

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

EU principle of solidarity

Decentralised control – a strategic approach to governance that emphasises cooperation, shared responsibility and mutual support between EU Member States.

Instead of a centralised authority, control and decision-making is divided between several centres.

- regional autonomy and the possibility to address specific challenges or opportunities;
- information systems and control mechanisms are networked;
- local authorities and communities can play an active role in shaping policies and strategies related to the information society.

Contribution to a more flexible, resilient and inclusive European digital environment.



Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Innovation

It is a broad term, which describes both the process and outcome of developing and adopting technologies and techniques that are put to use in the world, first implementation of an idea in practice.

The term itself contains concepts such as social change, development, modernization, growth, creation, evolution etc.

Not all innovations are radically new technologies based on scientific R&D.



Innovation is closely linked to progress of science and technology within a society.

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Innovation

Not all innovations are radically new technologies based on scientific R&D.

BIOMIMICRY / BIOINSPIRATION

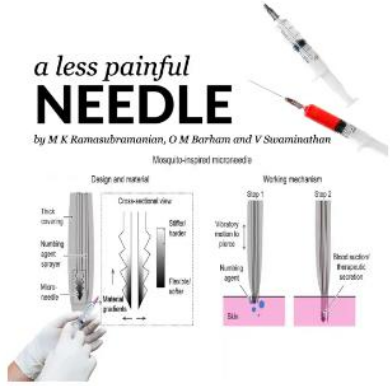












The Top 50 Biomimicry Examples and Inventions of All Time. (n.d.). https://www.learnbiomimicry.com/blog/best-biomimicry-examples

Fakulteta za informacijske študije
Faculty of information studies

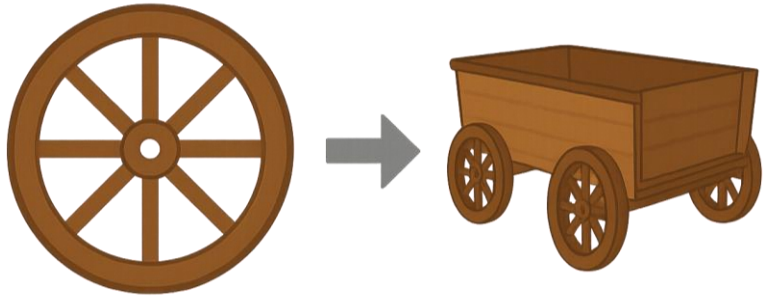
TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

INNOVATION
the first implementation of an idea in practice.

INVENTION
the first appearance of an idea



Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Registration of innovations



A process where innovators, companies or organisations document innovative ideas, products, services or processes in order to protect their intellectual property and obtain rights to their innovations.

Registration allows innovators to enjoy the rights to use, market and protect their innovations and to commercialise them.

Slovenia - Urad za intelektualno lastnino

https://www.gov.si/drzavni-organi/organi-v-sestavi/urad-za-intelektualno-lastnino/storitve/

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Development of innovations, business innovations



Innovation encompasses both the process and the outcome of the development and adoption of new technologies and techniques in the world.

Innovation is not a linear process, but rather an interactive process, because of the interaction between customers, suppliers and knowledge institutions that is crucial for the outcome.

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Disruptive innovations

Potentially disruptive innovations - like most - are all too often not profitable enough at the outset and their development can require huge resources to be devoted to other innovations.

They could change the whole market.



Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

FACTORS CONTRIBUTE TO EXPLAINING INNOVATION

1 Cognitive mobilization

2 Quality of governance

3 Entrepreneurial spirit



4 Firm characteristics (firm size or firm age)

5 History

6 Social capital

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

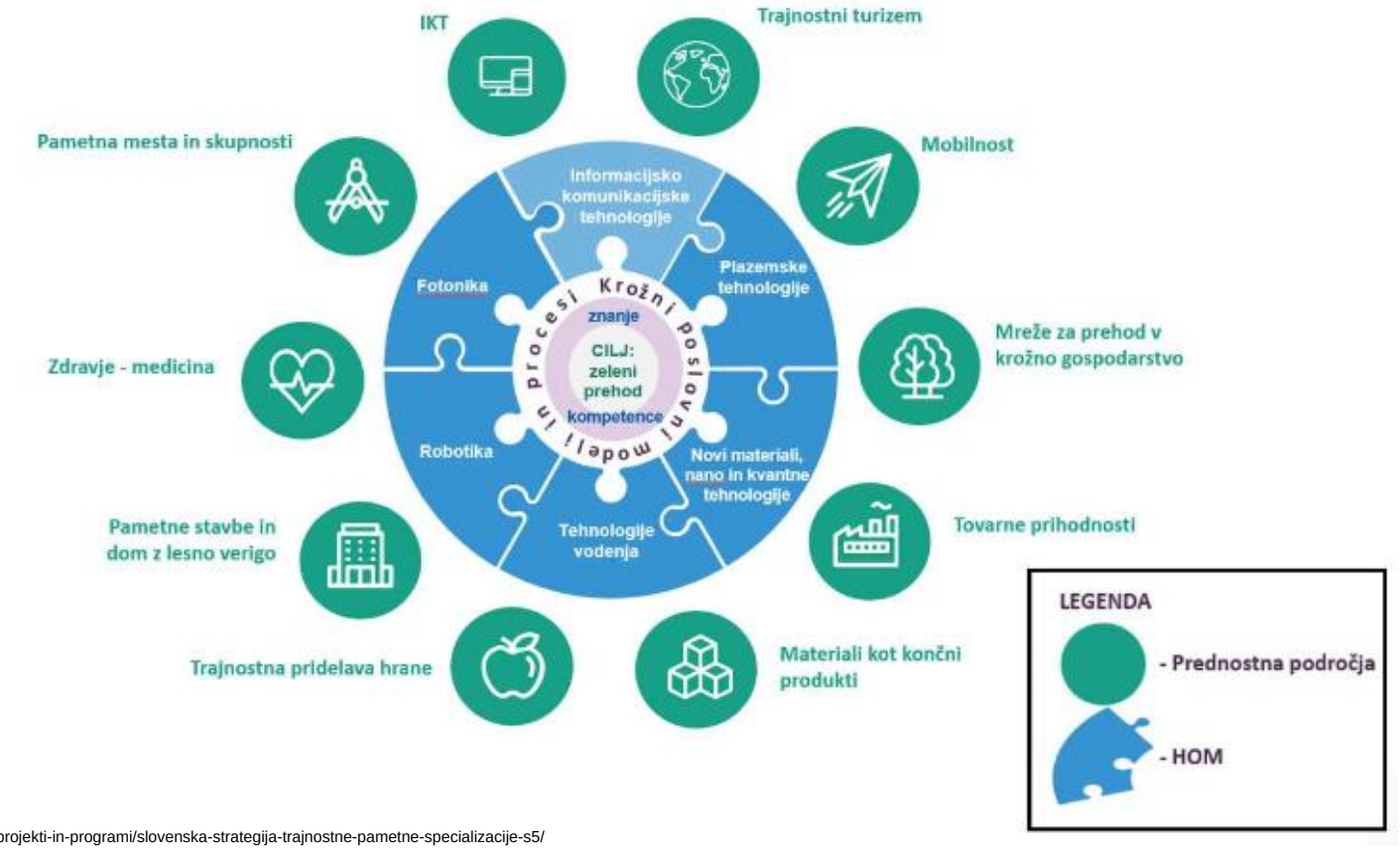
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Slovenska strategija trajnostne pametne specializacije - S5

Smart specialisation is a platform for focusing development investments on areas where Slovenia has a critical mass of knowledge, capacity and competences and where it has the innovation potential to position itself in global markets.

https://www.gov.si/zbirke/projekti-in-programi/slovenska-strategija-trajnostne-pametne-specializacije-s5/



Slovenska strategija trajnostne pametne specializacije—S5 | GOV.SI. (n.d.). Portal GOV.SI. Retrieved 25 October 2026, from https://www.gov.si/zbirke/projekti-in-programi/slovenska-strategija-trajnostne-pametne-specializacije-s5/

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Innovation systems

Made up of components (private enterprises, universities, research centres and government, among others), the relationships among them and institutions.

National Innovation Systems - systems that encompass the relationships both within and between organisations, institutions and socio-economic structures, which determine the rate and direction of innovation and technological capability building.



Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

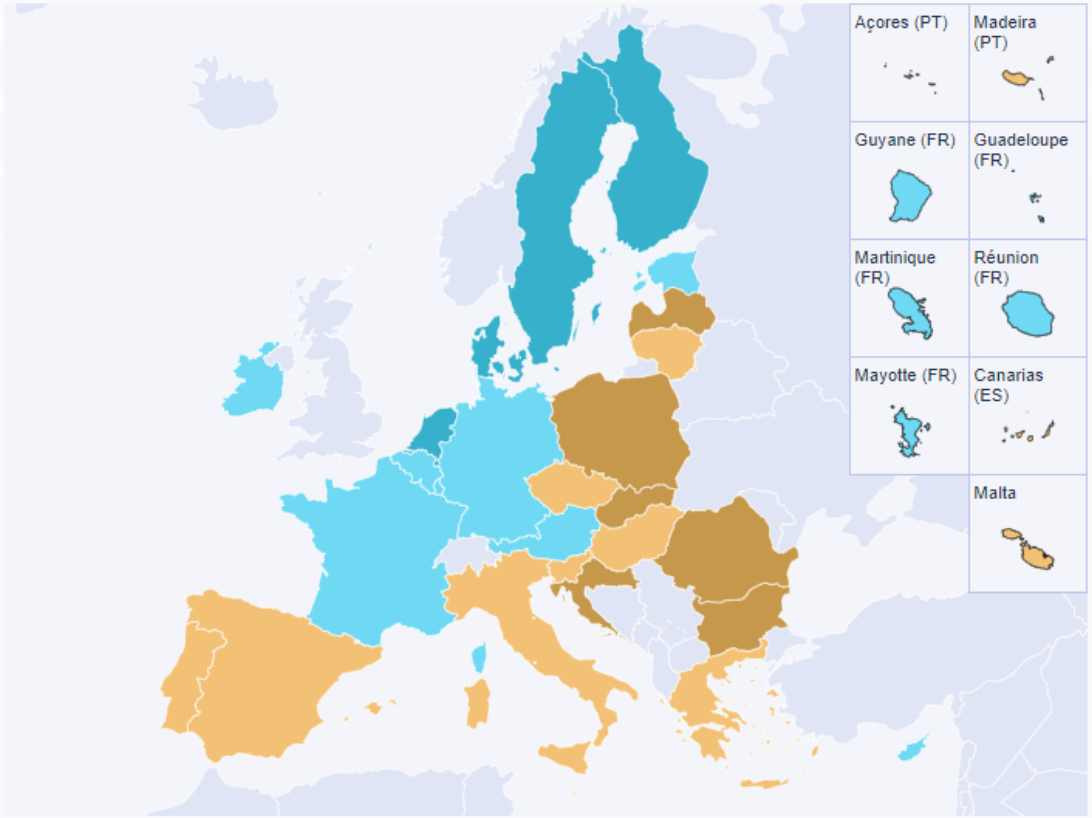
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

EU member states' innovation performance, 2024

https://projects.research-and-innovation.ec.europa.eu/en/statistics/performance-indicators/european-innovation-scoreboard/eis-2024#/eis?compare_year=2023&country_scope=eu

Year: 2024 | Comparison year: Change vs 2023 | Country scope: EU countries

Zoom using the mouse wheel and pan by dragging.



Administrative boundaries: © EuroGeographics © UN–FAO © Turkstat
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the European Union.

Innovation Leaders

Denmark	149.3	▲ 0.5
Sweden	146.2	▲ 0.2
Finland	140.6	▼ 0.7
Netherlands	138.3	▼ 0.5

Strong Innovators

Belgium	136.0	▼ 0.2
Austria	127.9	▼ 1.2
Ireland	124.5	▲ 2.1
Luxembourg	123.3	▼ 2.5
Germany	122.8	▼ 3.4
Cyprus	116.9	▲ 3.3
Estonia	115.3	▼ 2.9
France	114.4	▲ 0.3

Indicators:
- attractive research systems
- business investment in R&D
- use of information technologies.

Moderate Innovators

Slovenia	100.1	▲ 1.5
Spain	98.9	▲ 2.0
Czechia	98.7	▲ 2.3
Italy	98.6	▲ 0.8
Malta	96.8	▼ 1.9
Lithuania	92.0	▲ 3.7
Portugal	91.8	▲ 0.5
Greece	85.3	▼ 1.0
Hungary	77.6	▲ 2.1

Emerging Innovators

Croatia	76.6	▼ 0.1
Poland	72.5	▲ 3.3
Slovakia	71.6	▲ 1.5
Latvia	59.0	▼ 0.2
Bulgaria	50.6	▲ 1.9
Romania	37.4	▼ 1.6

▲▼ Change vs 2023

European innovation scoreboard—Research and innovation. (n.d.).https://research-and-innovation.ec.europa.eu/statistics/performance-indicators/european-innovation-scoreboard_en

Fakulteta za informacijske študije
Faculty of information studies
TIA2030 Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Social structure

Organized system of social behavior, social relations and social institutions that constitute society. It ensures orderliness and predictability of social action.

It is not a 'thing', but it is present all the time and affects all dimensions of human experience in society, (informally) arranged, regulated.

It influences the creation of constant patterns of behavior and interactions.

It often changes imperceptibly.

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

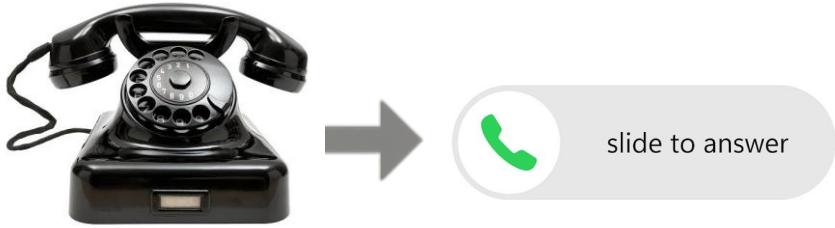
Social change

Transformations of culture, behavior, social institutions and social structure over time.

Any significant change in the pattern of social behavior or relationships between individuals, groups, and societies.

It also covers the transformation of values, norms and social symbols.

- Planned / unplanned and unforeseen.
- Fast / gradual.



Society as something non-fixed;
something that is otherwise relatively stable but is constantly changing.

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Causes of social change

1. NATURAL EVENTS

natural disasters, climate shifts, and environmental changes

3. DISCOVERY AND INNOVATION

scientific breakthroughs, technological advancements



2.DEMOGRAPHIC FACTORS

changes in population size, age distribution, migration patterns, and birth rates

4. INDIVIDUAL OR COLLECTIVE HUMAN ACTIONS

individuals or groups advocating for reform/challenge existing norms/mobilize around issues (civil rights, gender equality, environmental conservation)

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Technological change

It is the result of many innovation processes, based on processes of learning and knowledge accumulation that drive economic development processes.

Therefore, the accumulation, transfer, application and diffusion of knowledge and technology are key to sustainable economic prosperity in the emerging global economy of the 21st century.



TECHNOLOGY TRANSFER

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Technology transfer

The process allowing the transfer of a technology from the **'donor' organisation** to the ***'receiving' organisation*** that ends when the **technological innovation** is incorporated in a production process or product that is commercially available.



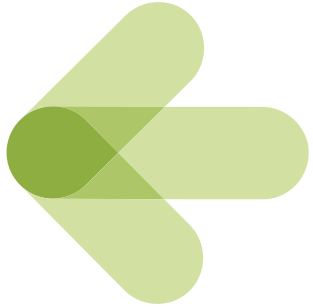
Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Technology transfer

transfer among countries





transfer from technology generation sectors (research institutions) to user departments

The knowledge and technology revolution is critically different from the past industrial revolution in that it is based upon a shift of wealth creating assets from physical things to intangible resources based on knowledge and technologies.

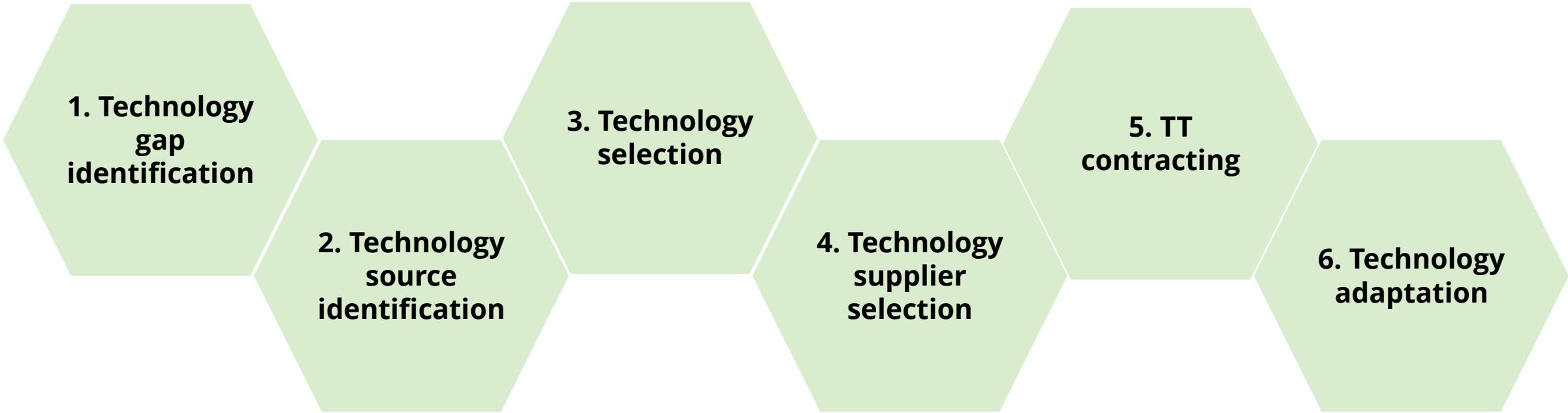
Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Phases of technology transfer



Technology transfer

It is the result of multiple processes of **innovation** (understood broadly). It relies on processes of learning and the accumulation of knowledge, which drive processes of economic development.

As a result, knowledge and technology accumulation, transfer, application, and diffusion are key to sustainable economic prosperity in the emerging global economy of the 21st century.

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Information, ICT, market mechanisms and regulatory strategies

Tremendous increase in information and ICTs, large range of new media technologies transmitting them.

Information networks now cover the globe, operating in real time and handling volumes of information.

The ‘information explosion’ is a striking feature of contemporary life, and any social analyst who ignores it risks not being taken seriously.

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Market mechanisms in information society

The information society is often characterised by a high degree of digitisation, where market mechanisms play a key role (e-commerce, digital platforms, innovation and other elements that are part of the economic system).

Market mechanisms play a key role in fostering innovation.

A circular flow of innovation benefits both businesses and consumers, while contributing to the development of the information society as a whole.

Digital economy: an important segment of the modern economy.

Businesses invest in technology that can improve their efficiency and competitiveness in the market.



Stanley, J. (2023, March 20). What is the Internet of Things (IoT)? CloudBlue. https://www.cloudblue.com/blog/what-is-the-internet-of-things-iot/

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Regulatory strategies

DATA PROTECTION LEGISLATION



INTELLECTUAL PROPERTY LAWS

ANTITRUST MEASURES

OTHER REGULATIONS THAT SHAPE THE FUNCTIONING OF THE DIGITAL SPACE

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Regulatory strategies

Consumer protection: to protect consumers from potential risks such as misuse of personal data and online fraud and lay the foundations for trust in digital environments (e.g. GDPR).

Curbing abuse: to prevent abuse of market positions to ensure fair competition and maintain balance in the economic ecosystem; to establish fair rules of the game, prevent monopolistic practices and promote competition (e.g. Digital Markets Act, Digital Services Act).

Ethical considerations: to promote responsible business conduct and ensure that technological developments follow high standards of integrity, transparency and respect for the rights of individuals (e.g. EU Artificial Intelligence Act).

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

EU public diplomacy

Public diplomacy, the strategic communication process aimed at reaching out to foreign publics to create a positive image of a country. It is a way for governments to communicate with citizens of other countries in order to inform or influence their views.



European External Action Service (EEAS) - https://www.eeas.europa.eu/_en

Tackling global challenges such as climate change, global health, the eradication of poverty or achieving the SDGs, requires collective action.

The EU's Public diplomacy initiatives aim at engaging over the long term with citizens and potential partners around the world in order to build trust and mutual understanding and, by doing so, facilitate future cooperation to tackle our common challenges.

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

EU public diplomacy - online social networks and bottom-up politics

BOTTOM-UP POLICY

an approach to policy formulation and implementation that starts at the local or sub-national level and then moves upwards to higher levels of government/society.

European Committee of the regions, which represents local and regional authorities across the European Union and advises on new laws that have an impact on regions and cities (70% of all EU legislation) - https://ec.europa.eu/regional_policy/policy/communication/campaigns/euinmyregion_en/

Online social networks:

https://www.europarl.europa.eu/portal/en
https://www.consilium.europa.eu/en/european-council/

EUandMe: https://op.europa.eu/webpub/com/eu-and-me/sl/index.html

Two-way communication and collective actions:

- dialogues with citizens through various agencies, inviting their views and addressing their concerns, **empowering them for public diplomacy -** https://citizens-initiative.europa.eu/_sl
- digital literacy – platform **„Digital future for Europe“ -** https://www.consilium.europa.eu/sl/policies/a-digital-future-for-europe/

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

DIGITAL DIPLOMACY

- International negotiations have entered the digital age.
- Public now takes place simultaneously as politics negotiate.
- Usage of social media in foreign policy – Twitter diplomacija ("Twiplomacy")
- Traditionally, diplomacy rests on time, space and tact – they are being affected and shaped by the digital revolution.
- The revolution of digital diplomacy has opened foreign policy to the whole world and made it possible for everyone to follow events. It can create more transparency in foreign policy, but can be also a force of conflicts and misunderstandings and embarrassment.



Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

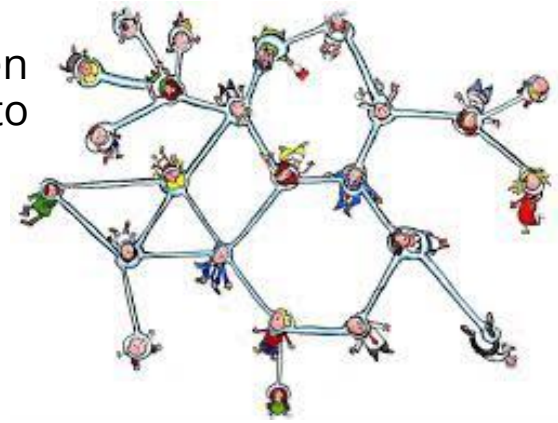
NETWORK SOCIETY

Manuel Castells's commitment to a holistic* account of the world today:

to explain adequately the workings of the world, the most consequential social, economic and political features should be examined as interrelated elements that connect.

Castells's approach is one which emphasises the connectedness of parts, though often these are in contradictory relationships, and their very frictional character is an important contributor to change.

Castells's core argument is that the 'information age' announces 'a new society', which has been brought into being by the development of networks (enabled by ICTs) and which gives priority to information flows.



It is characterised by the globalisation of strategically decisive economic activities:

- the networked form of organisation;
- the flexibility and instability of work and the individualisation of work;
- the culture of real virtuality built by a ubiquitous, interconnected and diversified media system;
- the transformation of the material foundations of life, space and time.

All societies have used information, and hence the term 'information society' is of little analytical value with regard to the distinctiveness of the present era.

**Holism is the idea that various systems should be viewed as wholes, not merely as a collection of parts*

Castells, M. (2010). The rise of the network society (2nd ed., with a new pref). Wiley-Blackwell.

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

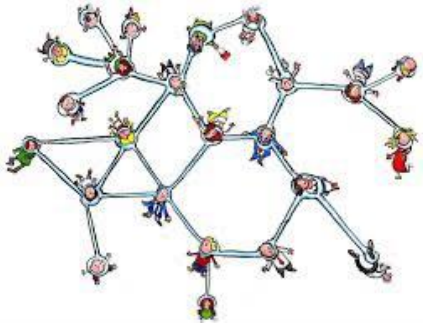
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

NETWORK SOCIETY

Castells rejects as ‘a bit pretentious’ those who ‘label our society an information or knowledge society’ because:

> ***„I know no society in which information and knowledge have not been absolutely decisive in every aspect of society“.***



He has distanced himself from the prioritization of information.

INFORMATIONAL CAPITALISM

Castells, M. (2010). The rise of the network society (2nd ed., with a new pref). Wiley-Blackwell.

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

NETWORK SOCIETY

INFORMATIONAL CAPITALISM

It draws attention to developments of such import that they mark the arrival of entirely new relationships.

Informationalism, a key term to Castells, identifies ‘the action of knowledge upon knowledge itself as the main source of productivity’, and it heralds a ‘new economy’ as well as a ‘new society’.

‘Capitalism’ lets Castells observe that familiar forms of economic relationships (profit-seeking, private ownership, market principles and the rest) prevail.

Castells is recognising that capitalism plays a lead role in the present period (and this necessarily means that former relationships are perpetuated and even extended), and at the same time he is forwarding the view that fundamental changes have come about because of the establishment of a ‘network society’ and that these networks are requisites of any future social organisation.

Castells argues that we are undergoing a transformation towards an ‘information age’, the chief characteristic of which is the spread of networks linking people, institutions and countries. Moreover, this is closely involved with the process of globalisation, so that the ‘**network society**’ is one in which capitalist activity is conducted in real time around the world, something that is unthinkable without sophisticated ICTs.

Castells, M. (2010). The rise of the network society (2nd ed., with a new pref). Wiley-Blackwell.

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

DIGITAL DIVIDE

Ability to access and use ICT and to participate as a digital citizen.

If we follow M. Castells, there are the basic social divisions in the information age:

- internal division of labour between information producers and substitutable general routine work;
- social exclusion;
- division between the market logic of global networks of capital flows and the humane notion of workers' lives.

Digital Natives vs Digital Immigrants

Castells, M. (2010). The rise of the network society (2nd ed., with a new pref). Wiley-Blackwell.

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

DIGITAL DIVIDE

WHY?

- Lack of motivation to learn how to use technologies;
- Lack of physical access to technologies and digital literacy;
- Low literacy level;
- Low income level, affordability;
- Geographical restrictions;
- Limitations by governments or culture, social inequality;

IS THERE „DIGITAL DIVIDE“ IN THE EU?

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

DIGITAL DIVIDE IN THE EU

Digital Economy and Society Index (DESI)

It is a composite index that summarises relevant indicators on Europe's digital performance and tracks the evolution of EU Member States in digital competitiveness.

4 key areas:

- Human capital
- Connectivity
- Integration of digital technology
- Digital public services

The European Commission has monitored Member States' progress on digital and published annual Digital Economy and Society Index (DESI) reports since 2014.

DESI Dimension	Indicators related to the Path to the Digital Decade proposal
1 Human capital	At least basic digital skills
	ICT specialists
	Female ICT specialists
2 Connectivity	Gigabit for everyone (Fixed very high capacity network coverage)
	5G coverage
3 Integration of digital technology	SMEs with a basic level of digital intensity
	AI
	Cloud
	Big data
4 Digital public services	Digital public services for citizens
	Digital public services for businesses

Source: European Commission

Fakulteta za informacijske študije
Faculty of information studies
TIA2030 Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

START-UP

It is a new and fast-growing company. It seeks to meet a market need and offers an innovative product, process or service.

A start-up is usually a small business, partnership or organisation. Their aim is to grow rapidly, they are based on new ideas, technologies, or business models that differentiate them from traditional companies.

Start-ups often use the internet, e-commerce, computers and telecommunications.

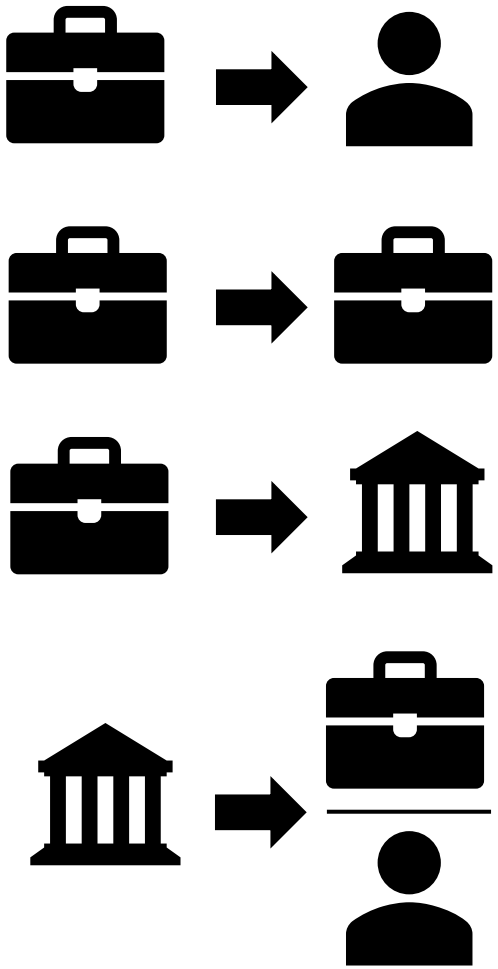


Hearn, K. (2024, September 15). Essential Startup Success Strategies for Long-Term Growth. Finepoint Design. https://finepoint-design.com/7-steps-success-startups/

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

BUSINESS MODELS



Main types:

B2C (Business-to-Customer): businesses selling products or services directly to consumers. *Examples*: *grocery stores, convenience shops, restaurants, beauty salons, gyms, online clothing stores, food delivery apps, streaming platforms…*

B2B (Business-to-Business): businesses selling products or services to other businesses. *Examples*: *wholesalers selling to retailers, manufacturers selling to distributors, accounting services for businesses…*

B2G (Business-to-Government): businesses selling products or services to government agencies. *Examples*: *companies selling equipment to government agencies, contractors providing services to the government (e.g. construction and infrastructure projects, IT and digital services for the public sector, trainings and education in public sector – funded by public budgets/EU programs), defence industry, space industry …*

Additional types, proposed by some literature:

G2C (Government-to-Customer) and **G2B (Government-to-Business):** government agencies providing products or services directly to customers. *Examples*: *government agencies providing services such as healthcare or education, platforms/applications/digital public services for business…..*

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

START-UP

It is a new and fast-growing company. It seeks to meet a market need and offers an innovative product, process or service.

A start-up is usually a small business, partnership or organisation. Their aim is to grow rapidly, they are based on new ideas, technologies, or business models that differentiate them from traditional companies.

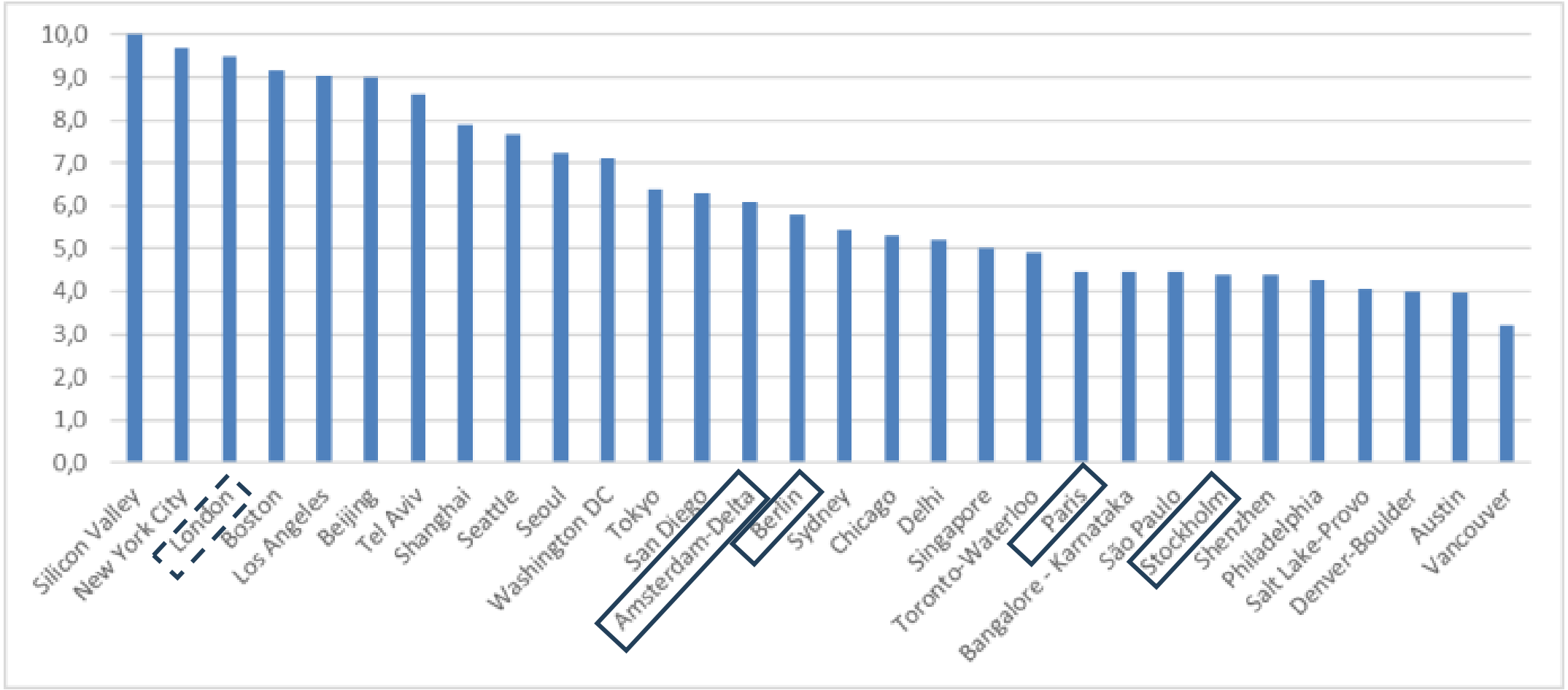
Start-ups often use the internet, e-commerce, computers and telecommunications.

„Unicorns“ - a privately held start-up company valued at over USD 1 billion with novel offering, disruptive innovation approach, consumer-focused, witth high growth potential and strong market position.
„Decacorn“ – over $10 billion or **„Hectocorn“** – over $100 billion

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Figure 58 Global start-up ecosystem ranking 2021



Source: Startup Genome, The Global Startup Ecosystem Report 2022

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Startup register. (n.d.). http://www.startup.si/sl-si/za-startupe/register

Slovenski startup ekosistem na enem mestu

Da bomo vedeli, kdo je kdo, koliko nas je in kako dobri smo

PRIJAVA V REGISTER



START:UP SLOVENIA

Akcijski načrt »Slovenija – dežela zagonskih podjetij (startupov)«

Start-up culture in SLOVENIA

What do you need to do to register a company in Slovenia?

REPUBLIC OF SLOVENIA SPOT

SPOT portal (formerly e-VEM) - central state portal for potential entrepreneurs, companies and other business entities

https://spot.gov.si/sl/teme/pred-postopkom-ustanovitve-podjetja/

Economic activity may be performed by an individual or business in different legal and organisational forms:

- individual entrepreneur (samostojni podjetnik - s.p.),
- a private limited company (družba z omejeno odgovornostjo - d.o.o),
- a society with unlimited liability company (družba z neomejeno odgovrnostjo - d.n.o),
- joint-stock company (delniška družba - d.d.),
- limited partnership (komanditna družba - k.d.),
- joint-stock partnership Limited Liability Company (komandidtna delniška družba – k.d.d.),
- commercial interest organization (gospodarsko interesno združenje – g.i.z.).
- social business (socialno podjetje).

Prior to the registration procedure, you need the following data:

- Company name
- Company's representatives
- Head office of the company
- Activities of the company

Fakulteta za informacijske študije Faculty of information studies

TIA2030 Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Networked businesses, industries and economies in Europe

- Many European countries have witnessed the emergence of vibrant entrepreneurial ecosystems, fostering the growth of startups.
- Startups often leverage digital platforms to create and expand their networks.
- Networked economies facilitate global connectivity for startups and provide them with access to diverse funding sources.
- European countries often adopt digital agendas and strategies to bridge the digital divide and promote innovation.
- The challenge lies in ensuring that the benefits of networked economies and startups are inclusive, reaching all segments of society.



Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Internet in the adoption of Agenda 2030 and its SDGs

Internet and ICT as a connective tool, a unique platform for innovation, creativity, economic opportunity and social inclusion.

Contribution to achieving both local and global goals (Sustainable Development Goals – Agenda 2030)



Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

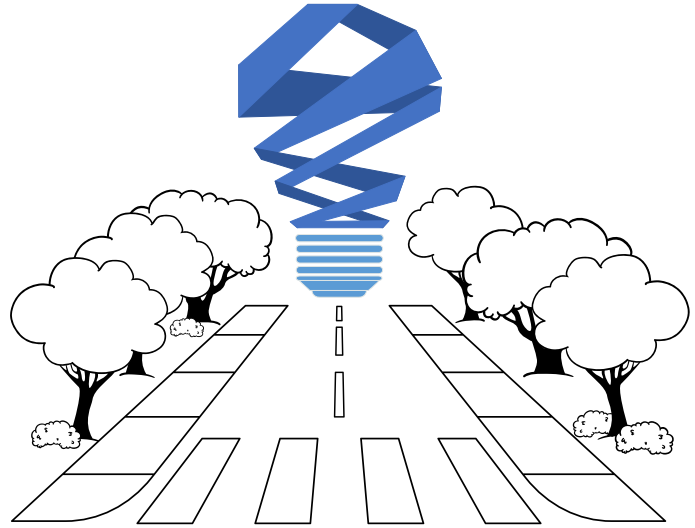
NEXT-GENERATION CONTENT FOR NEXT-GENERATION NETWORKS

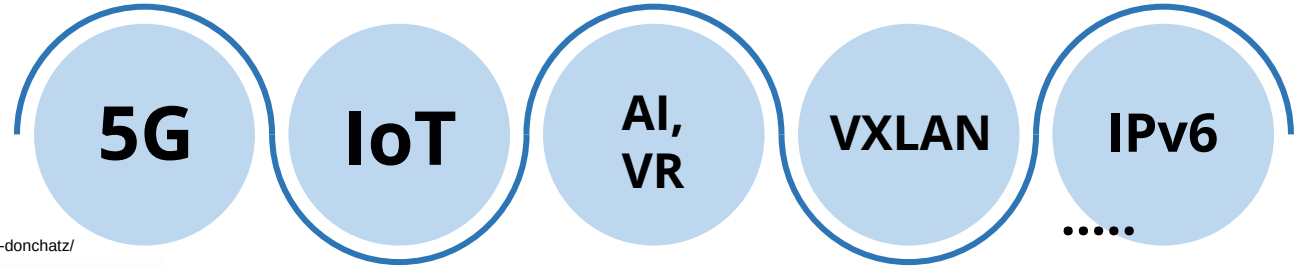
Next-generation networks refers to the process of designing network infrastructure with new, advanced technologies.

Next-generation networks are flexible, secure architectures that are easier to manage and help enterprises meet modern business demands.

Demand for faster, more efficient networks that can handle the growing amounts of data and traffic generated by these technologies.

More advanced and capable than traditional networks, offering improved performance, reliability.





(24) 10 Key Components of a Next Generation Network. | LinkedIn. (n.d.). https://www.linkedin.com/pulse/10-key-components-next-generation-network-michael-donchatz/

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

NEXT-GENERATION NETWORKS

1) Centralized Control.
One main control center for the entire network, allowing network administrators to easily manage and monitor the network from one central location, making sure the network is safe and follows the rules. It helps prevent security issues and makes the network run more smoothly.

2) Automation.
Network administrators can streamline network provisioning and configuration, enabling them to deploy new applications and services more quickly and efficiently. It helps to improve network consistency and reliability by reducing the risk of human errors and misconfigurations.

3) VXLAN (Virtual Extensible Local Area Network).
Technology that provides overlay networks on top of physical networks, enabling the creation of logical networks that are independent of the physical network topology. The benefits of VXLAN include improved scalability, security, and flexibility.

(24) 10 Key Components of a Next Generation Network. | LinkedIn. (n.d.). https://www.linkedin.com/pulse/10-key-components-next-generation-network-michael-donchatz/

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

NEXT-GENERATION NETWORKS

4) Quality of Service (QoS): Intelligent Traffic Control

It helps manage the internet efficiently; by giving different priorities to different types of internet activities, network managers can make sure the internet is used to its maximum capacity.

5) Convergence

This approach eliminates the need for separate networks for each traffic type, reducing complexity and making more efficient use of network resources. It enables new services such as unified communications, which combine multiple communication channels into a single interface.

6) IPv6

The next generation of the Internet Protocol (IP), which identifies devices on a network. It offers the larger address space, which can accommodate the expected deployment of billions of Internet of Things (IoT) devices. It also includes built-in features such as security and Quality of Service (QoS).

(24) 10 Key Components of a Next Generation Network. | LinkedIn. (n.d.). https://www.linkedin.com/pulse/10-key-components-next-generation-network-michael-donchatz/

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

NEXT-GENERATION NETWORKS

7) Network Function Virtualization (NFV)

It transforms traditional network infrastructure by virtualizing network functions, replacing physical devices with software-based virtual instances that can be deployed on demand. It virtualizes network functions, offering benefits such as cost reduction, flexibility, scalability, and simplified maintenance.

8) Software-Defined Networking (SDN)

It separates the control plane from the data plane, and provides greater flexibility and control over network traffic, allowing organizations to quickly and easily adapt to changing business needs. With SDN, network administrators can use a centralized controller to configure and manage network devices and traffic flows, simplifying network management and improving network agility.

9) Visibility

It helps organizations to ensure the security and performance of their networks, incorporating advanced visibility tools and techniques, such as network analytics, machine learning, and artificial intelligence.

(24) 10 Key Components of a Next Generation Network. | LinkedIn. (n.d.).https://www.linkedin.com/pulse/10-key-components-next-generation-network-michael-donchatz/

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

https://www.linkedin.com/pulse/10-key-components-next-generation-network-michael-donchatz/

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

NEXT-GENERATION NETWORKS

10) Security: Baked-in vs Bolted on

This approach is about shifting from relying on external security solutions to baked-in security is a significant advancement in network security. Baked-in security refers to the integration of security measures as fundamental elements of the network infrastructure. By having security features baked into the network architecture, organizations can establish a strong foundation for their network security. It eliminates the need for additional bolt-on security solutions, simplifying the overall security infrastructure and reducing potential vulnerabilities.

(24) 10 Key Components of a Next Generation Network. | LinkedIn. (n.d.). https://www.linkedin.com/pulse/10-key-components-next-generation-network-michael-donchatz/

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

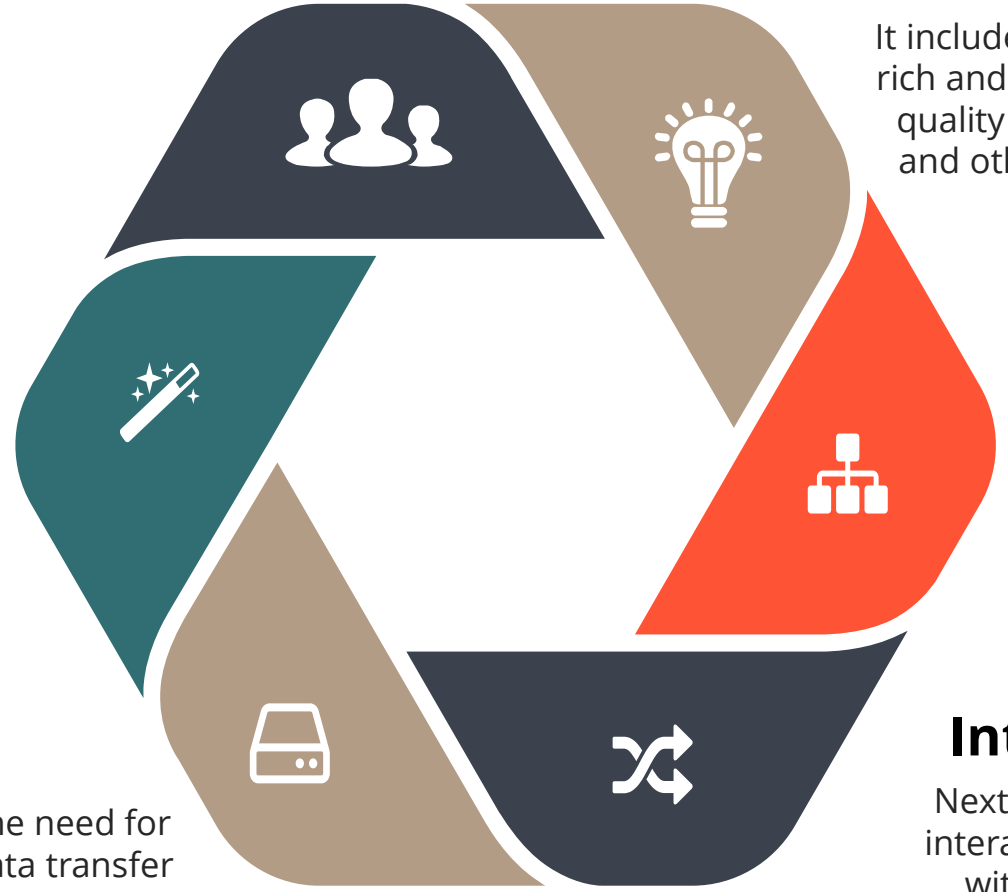
NEXT-GENERATION CONTENT

Augmented Reality (AR)

It allows the integration of digital elements with the real world. AR applications deliver enriched experiences that complement reality and provide a new way of interacting with the world.

Virtual Reality (VR)

VR creates a completely virtual environment that immerses the user in the digital world.



Streaming Services

They enable access to content without the need for downloading or installation. With high data transfer speeds provided by advanced networks, streaming content becomes fast, stable, and high-quality.

Immersive Content

It includes content focused on creating emotionally rich and engaging experiences. It may involve high-quality production of films, music, sports events, and other content that appeals to the emotions.

AI-powered Content

Artificial intelligence is used to tailor content to individual preferences and behavior: recommender algorithms, personalized experiences, automated production.

Interactive Platforms

Next-generation networks enable better interactivity of content. Users can engage with content, shape it, and influence events, providing a more dynamic and adaptable experience

(24) 10 Key Components of a Next Generation Network. | LinkedIn. (n.d.). https://www.linkedin.com/pulse/10-key-components-next-generation-network-michael-donchatz/

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

NEXT-GENERATION CONTENT

- More specialized and “long tail” programs
- More user-generated content
- More individualized content
- More independent and foreign content
- Anytime, anywhere video entertainment
- More interactivity and games

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Artificial Intelligence (AI)

- *AI and Intellectual Property*
- *Ethical use of AI*
- *Future of AI*

Generative AI – a new wave of opportunities and challenges has emerged.

In order to train systems like Chat GPT, vast amounts of data including texts, images, and parameters, are required. During the training process, AI platforms identify patterns to create rules, make judgments, and predictions which then allow them to respond to user prompts. However, this training process may involve IP infringement as it often uses data scraped from the web, including potentially copyrighted content.

Does copyright, patent, trademark infringement apply to AI creations?
Is it clear who owns the content that generative AI platforms create?

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Artificial Intelligence (AI)

- *AI and Intellectual Property*
- *Ethical use of AI*
- *Future of AI*

Generative AI – a new wave of opportunities and challenges has emerged.

Does copyright, patent, trademark infringement apply to AI creations?
Is it clear who owns the content that generative AI platforms create?

The key issue with copyright is that it requires originality, which is often attributed to human authors. Without human involvement in the creative process of AI-generated works, copyright protection may not be possible.

As AI does not have legal personhood, it is currently not recognized as a holder of any IPR.

The future of intellectual property in the era of AI – Network Readiness Index. (n.d.). https://networkreadinessindex.org/the-future-of-intellectual-property-in-the-era-of-ai/

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Artificial Intelligence (AI)

Copyright Act (Zakon o avtorski in sorodnih pravicah, ZASP) :

2. ODDELEK
AVTOR

Fizična oseba
10. člen

Avtor je fizična oseba, ki je ustvarila avtorsko delo.

Hafner, A. (2025, November). *Can artificial intelligence invent in Slovenia?* [Conference presentation]. 16th International Conference on Information Technologies and Information Society (ITIS 2025), Slovenia.

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Artificial Intelligence (AI)

Industrial Property Act (Zakon o industrijski lastnini – ZIL – 1):

106. člen
(vsebina registrov)

(1) V register patentov se vpišejo predvsem naslednji podatki: /.../ podatki o imetniku (priimek, ime in naslov oziroma firma in sedež)....

115. člen
(izpodbijanje pravice do patenta oziroma modela)

(1) Izumitelj, njegov dedič ali drug pravni naslednik lahko s tožbo pri pristojnem....

(2) Oblikovalec videza izdelka, njegov dedič ali drug pravni naslednik lahko s tožbo pri pristojnem sodišču....

(3) Tožbo iz prvega ali drugega odstavka tega člena lahko vloži tudi oseba, ki ji pripadajo pravice iz patenta oziroma modela, če je patent podeljen ali model registriran na ime izumitelja oziroma oblikovalca ali druge osebe.....

Hafner, A. (2025, November). *Can artificial intelligence invent in Slovenia?* [Conference presentation]. 16th International Conference on Information Technologies and Information Society (ITIS 2025), Slovenia.

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Artificial Intelligence (AI)

Although neither Slovenian law nor the EPC explicitly states that an inventor must be a natural person, in practice, inventors are consistently treated as human, reflecting a legal tradition built around human-based rights.

“AI CAN INVENT, BUT CANNOT BE AN INVENTOR.”

The issue of whether AI can own inventions under patent law remains open, as **no definitive legal agreement has been reached.** This makes it essential to modernise the legal framework so that AI-generated innovations are properly protected and regulated.

Hafner, A. (2025, November). *Can artificial intelligence invent in Slovenia?* [Conference presentation]. 16th International Conference on Information Technologies and Information Society (ITIS 2025), Slovenia.

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Artificial Intelligence (AI)

- *AI and Intellectual Property*
- *Ethical use of AI*
- *Future of AI*
- ***Trust in a Network Society***

  - ❑ Increased skepticism towards the internet and digital technologies like artificial intelligence (AI).
  - ❑ Concerns over how and by whom data is being collected, stored, shared, and processed for.
  - ❑ Ability to generate fake news, images, and voices, while undermining people's privacy.
  - ❑ Growing fears over new technologies, questions over appropriate forms of digital governance and regulation, etc.

The future of intellectual property in the era of AI – Network Readiness Index. (n.d.) https://networkreadinessindex.org/the-future-of-intellectual-property-in-the-era-of-ai/

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Artificial Intelligence (AI)

- *AI and Intellectual Property*
- *Ethical use of AI*
- *Future of AI*
- ***Trust in a Network Society***

EU Intellectual Property Office (EUIPO)

"Study on the Impact of Artificial Intelligence on the Infringement and Enforcement of Copyright and Designs" (2022).

The future of intellectual property in the era of AI – Network Readiness Index. (n.d.). https://networkreadinessindex.org/the-future-of-intellectual-property-in-the-era-of-ai/
European Union Intellectual Property Office. (2022). Study on the impact of artificial intelligence on the infringement and enforcement of copyright and designs. Publications Office. https://doi.org/10.2814/062663

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Artificial Intelligence (AI)

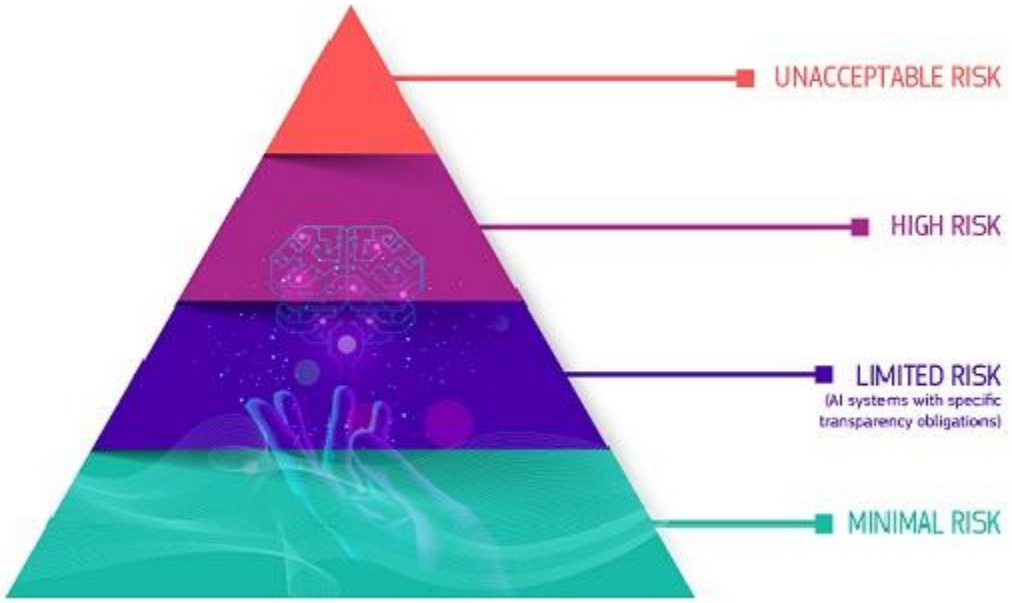
EU AI Act

To synchronize the rules for regulating AI technology across EU member states and to provide a clearer definition of what AI actually is.

The framework categorizes a wide range of applications by different levels of risk:

https://www.youtube.com/watch?v=s_rxOnCt3HQ





Akt o umetni inteligenci | Shaping Europe's digital future. https://digital-strategy.ec.europa.eu/sl/policies/regulatory-framework-ai

The EU hasn't got its AI Act together yet | The Verge. (n.d.). https://www.theverge.com/2023/6/29/23777239/eu-ai-act-artificial-intelligence-regulations-europe

The future of intellectual property in the era of AI – Network Readiness Index. (n.d.)., https://networkreadinessindex.org/the-future-of-intellectual-property-in-the-era-of-ai/

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Artificial Intelligence (AI)

"The relationship between artificial intelligence (AI) and intellectual property (IP) can be complex, but there are a few ways to balance the two:

1. *Protecting AI with IP: Just like any other invention, AI can be protected by intellectual property rights such as patents, copyrights, and trade secrets. This can encourage innovation and investment in AI research and development.*
2. *Addressing ownership and licensing: When AI is developed by a team or in collaboration with others, ownership and licensing agreements need to be established. This can ensure that the creators and contributors receive appropriate credit and compensation for their work.*
3. *Managing data and privacy: AI often relies on large amounts of data, which can include sensitive personal information. It's important to manage this data responsibly and protect privacy, while also allowing for innovation and development of AI.*
4. *Considering ethical implications: AI can have significant social and ethical implications, such as bias, discrimination, and automation of jobs. It's important to consider these implications and ensure that AI is developed and used in an ethical and responsible manner.*

Overall, balancing AI and intellectual property requires careful consideration of legal, ethical, and practical issues. By addressing these issues and promoting ***responsible innovation****, we can create a balanced and sustainable approach to AI development and intellectual property protection.*

The future of intellectual property in the era of AI – Network Readiness Index. (n.d.). https://networkreadinessindex.org/the-future-of-intellectual-property-in-the-era-of-ai/

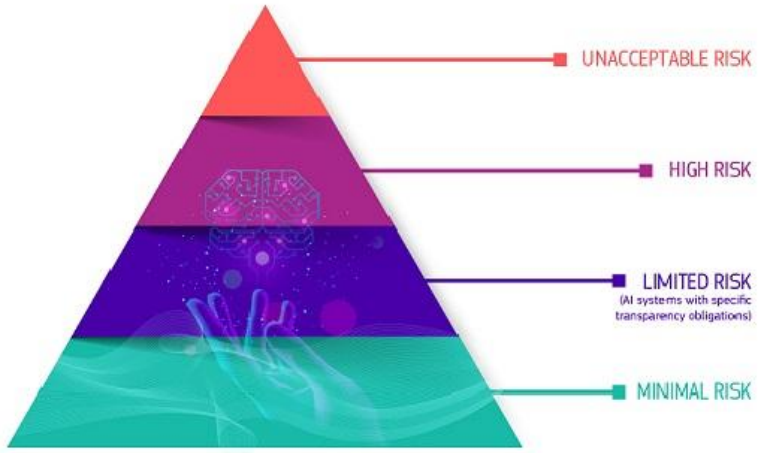
Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Artificial Intelligence (AI)

- ***AI and Intellectual Property***
- ***Ethical use of AI***
- ***Future of AI***
- ***Trust in a Network Society***

- ❑ Increased skepticism towards the internet and digital technologies like artificial intelligence (AI).
- ❑ Concerns over how and by whom data is being collected, stored, shared, and processed for.
- ❑ Ability to generate fake news, images, and voices, while undermining people's privacy.
- ❑ Growing fears over new technologies, questions over appropriate forms of digital governance and regulation, etc.



EU AI Act

To synchronize the rules for regulating AI technology across EU member states and to provide a clearer definition of what AI actually is.

The framework categorizes a wide range of applications by different levels of risk.

The future of intellectual property in the era of AI – Network Readiness Index. (n.d.). https://networkreadinessindex.org/the-future-of-intellectual-property-in-the
Akt o umetni inteligenci | Shaping Europe's digital future. https://digital-strategy.ec.europa.eu/sl/policies/regulatory-framework-a
era-of-ai/#:~:text=As%20AI%20does%20not%20have,any%20(intellectual%20property)%20rights.Accessed 22 November 202
Weatherbed, J. (2023, June 29). The EU still needs to get its AI act together. The Verge. https://www.theverge.com/2023/6/29/23777239/eu-ai-act-artificial-intelligence-regulations-Europe. Accessed 22 Novem 2024

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Data privacy and the cloud in view of GDPR

GDPR (General Data Protection Regulation) is a European Union law that regulates the collection, processing and storage of EU citizens' personal data – since 2016.

The main aim of the GDPR is to protect individuals' rights to privacy and data protection and to ensure that organisations take care of the personal data they collect.

- Online Services and Websites;
- E-commerce and Marketing;
- Employment and Human Resources;
- Healthcare and Medical Data;
- Education Sector;
- Government and Public Sector;
- Third-Party Processors;
- Non-Profit Organizations;
- Cross-Border Data Transfers…

DATA CONTROLLERS VS DATA PROCESSORS

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Data privacy and the cloud in view of GDPR



CLOUD SERVICE

- advantages for enterprise;
- better optimization of IT resources;
- unlimited scalability;
- great flexibility.

Challenges of using cloud services (regarding GDPR):

General challenges

- sensitivity of the entrusted information
- determination of the applicable law
- externalization of privacy

GDPR specific challenges

- implementing retention effectively in the cloud
- transparency and accountability

GDPR and the impact on cloud computing | Deloitte Netherlands. (n.d.). https://www.deloitte.com/nl/en/services/consulting-risk/perspectives/cyber-security-privacy-gdpr-update-the-impact-on-cloud-computing.html
(24) GDPR: CLOUD-SPECIFIC SECURITY AND PRIVACY CONCERNS | LinkedIn. (n.d.). https://www.linkedin.com/pulse/gdpr-cloud-specific-security-privacy-concerns-dr-eve-sariyiannidou/

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Data privacy and the cloud in view of GDPR



https://sdgs.un.org/goals

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

EU frameworks and regulations of internet and information society

Internet governance is „the development and application by Governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programmes that shape the evolution and use of the Internet.“

It requires more than some traditional regulation.

CAN THE INTERNET BE GOVERNED?

New governance
alternative legal paradigms for regulating issues

Multi-stakeholder governance
different stakeholders, including non-government and commercial entities, are all involved

Savin, A. (2017). Internet regulation in the European Union. In EU Internet Law (pp. 1–37). Edward Elgar Publishing. https://www.elgaronline.com/monochap/9781784717957/10_chapter1.xhtml

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Social media challenge to internet governance

Dissemination of misinformation/Fake news

Privacy

Transparency, risk of manipulation

Mental health

Freedom of speech and moderation

Fakulteta za informacijske študije
Faculty of information studies

TIA2030
Jean Monnet Centre of Excellence

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Social media challenge to internet governance

Potential governance models:

1. Extension of territorial sovereignty - the state can simply adapt its current laws to apply to the Internet.

2. International agreements and international regulatory efforts.

3. New international organisations (Internet Corporation for Assigned Names and Numbers (ICANN), the World Wide Web Consortium (W3C), the Internet Society (ISOC)).

4. Internet architecture and its regulatory potential - the architecture or 'code' of the Internet produces regulatory effects.

There are a lot of complex and technical legal matters.
For instance – **advertisement in social media + data ownership and data protection + cyber attacks….**

Savin, A. (2017). Internet regulation in the European Union. In EU Internet Law (pp. 1–37). Edward Elgar Publishing. https://www.elgaronline.com/monochap/9781784717957/10_chapter1.xhtml

Fakulteta za informacijske študije
Faculty of information studies
TIA2030
Jean Monnet Centre of Excellence
Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.