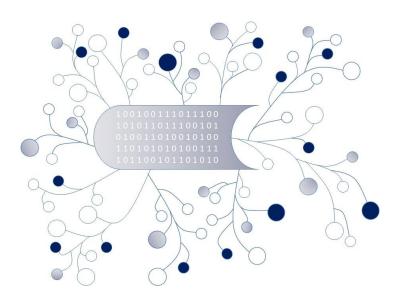






## Fostering Digitization and Industry 4.0 in vocational education and training



Intellectual Output 4 - Teaching Material and learning materials - Module C

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# Status of Digitisation in Cyprus

Introduction

During 2013, Cyprus was affected by the Eurozone financial and banking crisis.

However, after implementing the reform programme, Cyprus exited the EU/IMF bail-out programme in March 2016.

Cyprus is a moderate innovator characterised by a medium-low level of Digitisation.

This can be partly attributed to structural differences from most EU economies, particularly regarding the low contribution in terms of value added, of high and medium tech manufacturing, foreign controlled enterprises and large firms.

According to the European Commission's Digital Economy and Society Index (DESI) 2019 Country Report, Cyprus ranks 22nd out of the 28 EU Member States.

In comparison to the previous reports in 2017 & 2018 Cyprus has improved in the areas of Connectivity, Use of internet services, Integration of digital technology and Digital public services, although it still scores below the EU average. However, Cyprus performed less well in the Human capital during 2019.

In mobile broadband take-up, Cyprus is above the EU average. However, it is well below the EU average in the take-up of fast broadband. Almost a sixth of Cypriots have never used the Internet, and half lack basic digital skills. Despite growing demand in the labour market, the supply of ICT specialists is still below the EU average.

For more information on the current status for Cyprus, check out the links here:

- Monitoring progress in national initiatives on digitising industry for Cyprus, By VVA Economics and Policy & WIK Consult, July 2019 -<u>https://ec.europa.eu/information\_society/newsroom/image/document/2019-32/country\_report\_-</u> cyprus - final\_2019\_0D322D64-DDF7-AC6E-D1E61A12F0FD2A0D\_61231.pdf
- Shaping Europe's digital future, Cyprus <u>https://ec.europa.eu/digital-single-</u> <u>market/en/scoreboard/cyprus</u>
- Digital Economy and Society Index (DESI) 2019 Country Report Cyprus <u>https://ec.europa.eu/digital-</u> <u>single-market/en/news/digital-economy-and-society-index-desi-2019</u>

\*It is likely that this will change every year.





Tasks:

How would you characterise Cyprus' level of digitisation?





# Future Transformation/Developments

Innovation related to digital transformation, and particularly e-Government, is particularly important to support the currently slow pace of public sector reform in Cyprus, generating multiple benefits including:

- 1. Reduced bureaucracy and enhanced transparency,
- 2. Improved quality and efficiency of service to citizens and businesses
- 3. Improved citizens' satisfaction and enhanced credibility for the public service,
- 4. Reduced operational cost through increasing productivity and saving resources and time

Current initiatives undertaken under separate frameworks, associated and interlocked with the national R&I strategy and ecosystem include the following:

- 1. Adoption of strategies such as the National Digital Strategy and the E-Government Strategy.
- 2. Focus on leading technologies, such as Artificial Intelligence (AI), Distributed Ledger Technologies (DLT), Big Data and Internet of Things (IoT).
- 3. Support of infrastructures related to Electronic Communications and Information Technology.
- 4. Development of skills and competencies required to support the fast pace in which technology is adopted in everyday life and the widespread disruption expected to occur in business models and the labour market within the next decade.

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- Shaping Europe's digital future, Cyprus <u>https://ec.europa.eu/digital-single-</u> market/en/scoreboard/cyprus
- Digital Economy and Society Index (DESI) 2019 Country Report Cyprus <u>https://ec.europa.eu/digital-</u> <u>single-market/en/news/digital-economy-and-society-index-desi-2019</u>

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DiGI-VET Fostering Digitisation and Industry 4.0 in vocational education and training 2018-1-DE02-KA202-005145 IO 4 - Teaching and learning materials Germany, UPB



### Tasks:

There are 4 initiatives associated and Interlocked with the national R&I strategy and ecosystem. Please name 2 of them and explain in your own words.





# Artificial Intelligence & Blockchain Technology in Cyprus

### Artificial Intelligence

The "AI National Strategy" project proposes actions for the Utilization and Development of AI in Cyprus, and is based on Action 1.4: Initiative Action, in the four main pillars of the European Commission's (EU) coordinated plan, "A European approach to Artificial Intelligence".

Action 1.4: Initiative Action - This action has an important role in updating and implementing the "AI National Strategy", as it ensures the cooperation of the UN with a team of AI experts, which under the coordination of the UN, will be responsible for the implementation of the plan, while accounting and informing the Minister. The UN Group of Experts, will set targets, schedules, key performance indicators, stakeholders and manage the financial resources required while submitting communications recommendations policy. In addition, it is proposed to set up individual working groups, with representatives of companies, research institutes and others interested in AI issues.

Cyprus aims in the:

- Creation of programs for the promotion and development of AI technology in all organizations (academics, public, wider public, local governments, private and businesses)
- Enrichment and interoperability of available data in Cyprus
- Upgrading the education system
- Expanding the skills of AI experts and the human resources of organizations and companies
- Development of a moral and reliable AI
- Building international cooperation through Cyprus 'participation in EU and other countries' initiatives and programs

#### Blockchain Technology

Cyprus has earned a well-deserved reputation as a country for providing quality financial services. This sector is currently undergoing a rapid transformation with many long-term consequences from the new and emerging technologies and socio-economic trends. This transformation actually changes market structures and provides opportunities for both traditional and new companies to create innovative products and services that bring about change in the sector.

New technologies are a unique opportunity for transformation / reform of the national product, as Cyprus can be one of the leading innovation and development centres in the world with a strong technological infrastructure and an innovative regulatory framework.





For more information on the current status for Cyprus, check out the links here:

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#### Tasks:

Please provide a summary about AI and Blockchain Technologies in Cyprus and compare it with the current situation in your country.

(If you are from Cyprus, how would you compare the current status in comparison to the E.U?)

\*This exercise acquires additional online research

H5P for Artificial Intelligence: <u>https://h5p.org/node/879425</u>

H5P for Blockchain Technology: <u>https://h5p.org/node/879436</u>