

Digitalisation in the public sector










Republic of Cyprus

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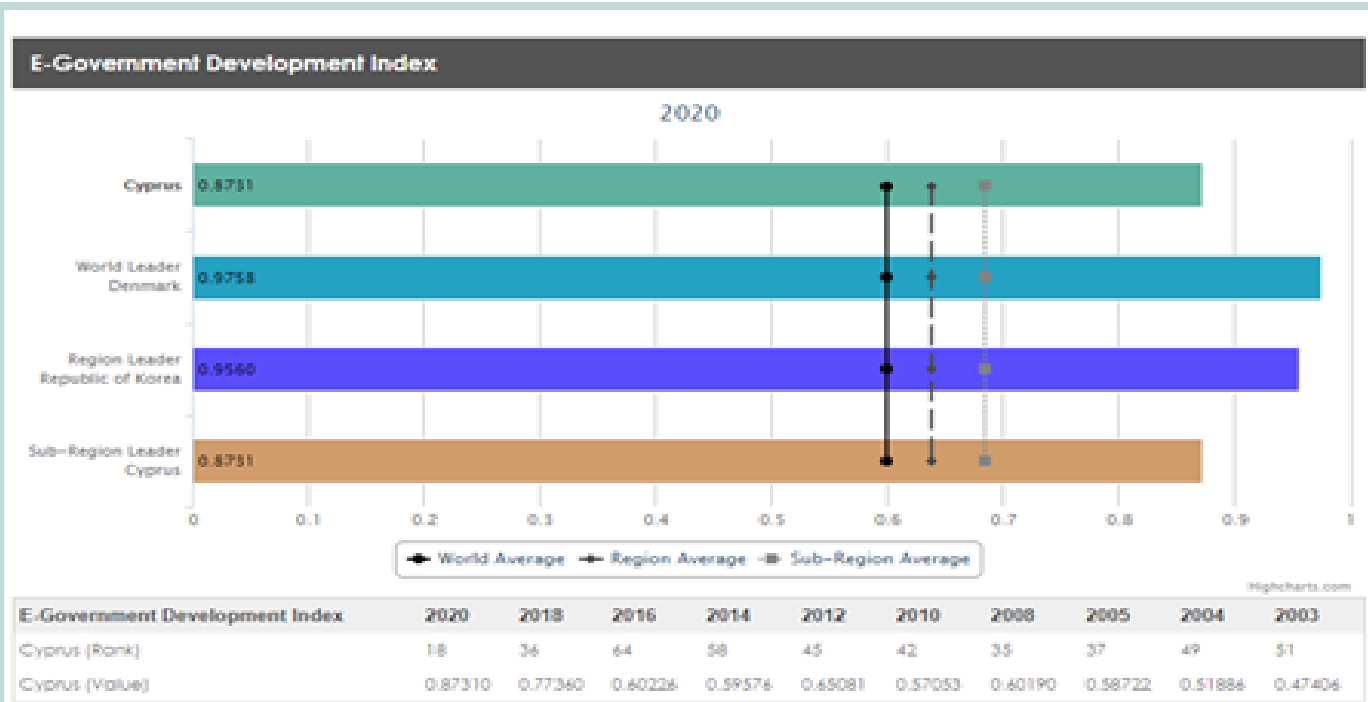
Digitalization trends

- Is your country represented in the international rankings on e-government/public sector digitalization? How does it fare? For example,
- <https://publicadministration.un.org/egovkb/en-us/Data-Center> (UN e-government survey, all C2ESS countries are represented).
- <https://www.oecd.org/gov/digital-government-index-4de9f5bb-en.htm>
- <https://ec.europa.eu/digital-single-market/en/digital-economy-and-society-index-desi>
- When did systemic public sector digitalisation initiatives begin?
- What are the general trends and characteristics of public sector digitalization in your country?
- Is it possible to talk about a digital ecosystem in your country comprising public, private and third sectors? What are the characteristics of this ecosystem?

Digitalization trends

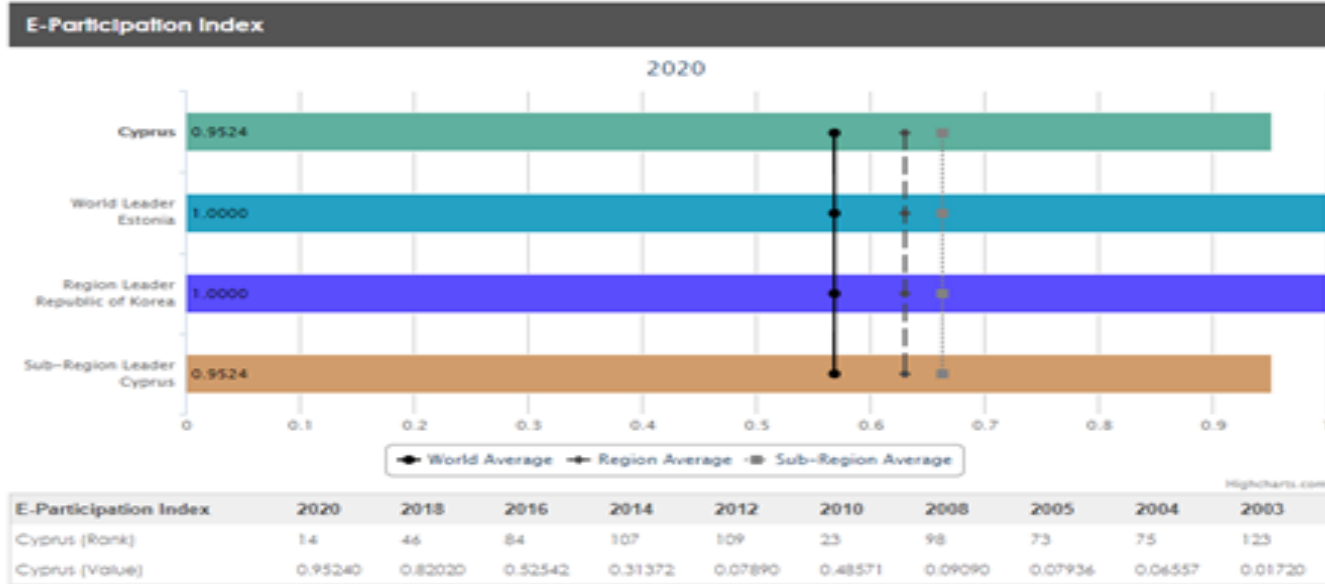
Country	Group	Quartile	Rank 2010	Rank 2020	EGDI 2020	Rank Change
 Estonia	VHEGDI	VH	20	3	0.9473	+17
 Iceland	VHEGDI	VH	22	12	0.9101	+10
 Cyprus	VHEGDI	V3	42	18	0.8731	+24
 Malta	VHEGDI	V3	30	22	0.8547	+8
 Liechtenstein	VHEGDI	V2	23	31	0.8359	-8
 Luxembourg	VHEGDI	V2	25	33	0.8272	-8
 Montenegro	HEGDI	H3	60	75	0.7006	-15
 Andorra	HEGDI	H3	57	80	0.6881	-23
 San Marino	HEGDI	H2	184	96	0.6175	+88

Digitalization trends: E-Government in Cyprus



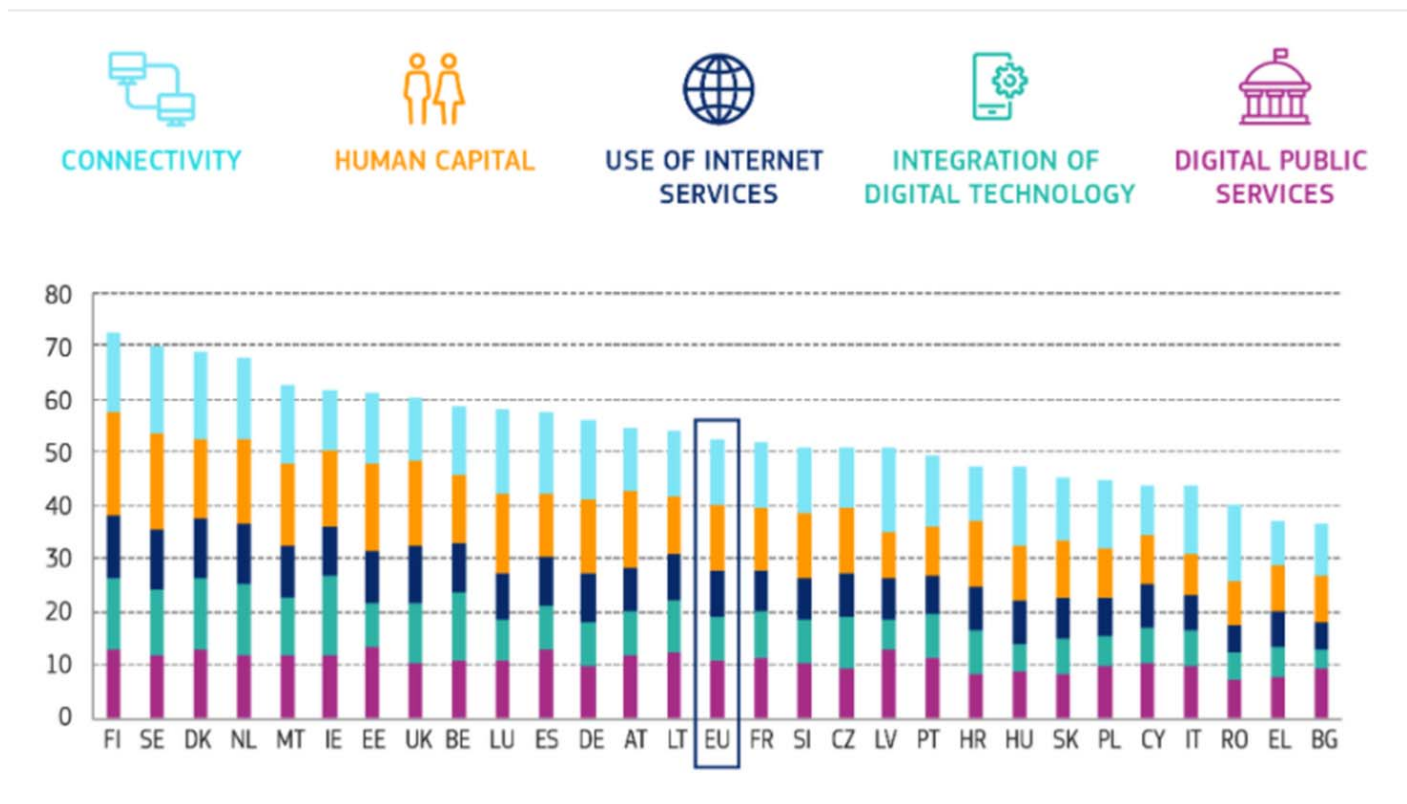
<https://publicadministration.un.org/egovkb/en-us/Data/Country-Information/id/44-Cyprus>

Digitalization trends: E-Participation in Cyprus



<https://publicadministration.un.org/egovkb/en-us/Data/Country-Information/id/44-Cyprus>

Digitalization trends: E-Government in Cyprus



Governance of public sector digitalisation

- The digitalisation of the public sector governed by the Deputy Ministry Of Research, Innovation And Digital Strategy
- The use and adoption of digital technologies in the government centrally is coordinated by the Deputy Ministry Of Research, Innovation And Digital Strategy.
- Role and competencies does the central coordinator:
 - To develop and implement a national digital policy and strategy and to participate in forming a suitable regulatory framework, at European and international level, for the development of digital policy
 - To develop, coordinate and implement the national strategy for research and innovation and to supervise the operation of the National Governance System for Research and Innovation
 - To specialise and implement policies in Information and Communication Technologies and e-government in the public service
 - To design and coordinate the implementation of a national broadband plan
 - Political guidance and supervision of the Research and Innovation Foundation

Governance of public sector digitalisation

- There is a national strategy for digitalisation- key aims with regard to the public sector
 - via e-Government Projects 2020-2025 to modernise and digitalise state machine which still operates using paper files, e.g. 'The Government Information Warehouse' to record data from the various information systems of the State which are utilized in decision making, draw in conclusions and shaping policy; the . In the expansion the CAP will be upgraded and enriched with new possibilities
 - Two key chapters: (a) 'CYPRUS research & innovation strategy Framework and (b) Blockchain Strategy
- Digitalisation is in part conceptualised as part of public administration reform/development
- Benefits of public sector digitalisation is depicted, conceptualised and essentialised in terms of efficiency, cutting costs, and how 'good' it is for the public.

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Governance of public sector digitalisation

1. **Department of Information Technology Services (DITS)**: The Department of Information Technology Services (DITS) is the department of the Deputy Ministry responsible for matters concerning the promotion and application of Information Technology and e-Government in the Public Sector, as well as Cyprus' representation in European and other international conferences on IT-related issues. The mission of the department is to plan, develop, implement, manage and maintain the Information and Communication Technology (ICT) systems which modernize the functioning of the Public Sector, aiming to improve the services offered to the public, increase the productivity and efficiency, decrease the functioning costs, save time and resources.
2. **Department of Electronic Communications (DEC)** : The mission of the Department of Electronic Communications (DEC) is the digital transformation of Cyprus with the support and promotion of the ICT (Information and Communications Technologies) and Space Technologies for the provision of high quality and secure electronic services, within affordable prices, resulting in the increase of social and economic welfare and in general the exploitation of the benefits of the new digital age. The Department has responsibilities in Radiocommunications, Electronic Signatures, Information Society and Space issues.
3. **Directorate for Research and Innovation (R&I)**: The Directorate for Research & Innovation focuses on the support and operation of the National Research and Innovation system and on the design, coordination and monitoring of implementation of the National Strategy for Research and Innovation, aiming to promote scientific excellence and innovative entrepreneurship. It is responsible for R&I-related strategy issues at national, European and international level, representing the Republic of Cyprus at relevant bodies and promoting interstate cooperation at bilateral and multilateral level.
4. **Directorate of Digital Policy and Technology@** The Directorate of Digital Policy and Technology is mandated to design and implement strategies and policies aiming at the digital transformation of the state, society and the economy of Cyprus. Through the promotion of the development and use of innovative technologies, the promotion of digital skills, and the optimization of services and internal modus operandi of the government, we aim to build a modern, efficient and transparent country, offering an end-to-end digital experience in interactions between citizens/ businesses and the State.

Strategy for digital transformation

- Ensure that necessary strategies, technologies, infrastructures and skills for digital transformation of the economy are interlocked with R&I ecosystem, as facilitating and enabling factors for knowledge sharing and innovation.
- Digital transformation marks a radical rethinking of how a company, an organization, the public sector and the society uses technology, people and processes to radically change performance. It is, essentially, not just moving all processes into a digital format, but fundamentally shifting thinking to accommodate the digital environment into all products and processes (online and offline). In this way, digital transformation is a fundamental enabler, facilitator and in some cases prerequisite for innovation (particularly in technology-enabled innovations), whereas in some cases can even coincide with innovation.
- The role of digital transformation is, moreover, instrumental in enhancing communication and knowledge sharing among stakeholders within ecosystems of research and innovation. 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 benefit including:
 - reduced bureaucracy and enhanced transparency, - improved quality and efficiency of service to citizens and businesses - improved citizens' satisfaction and enhanced credibility for the public service,
 - reduced operational cost through increasing productivity and saving resources and time,.

Governance of public sector digitalisation

- Strategies, Technologies, Infrastructures, Skills and Competencies for digital transformation of the economy are considered to be interlocked with the national R&I strategy and ecosystem, as facilitating and enabling factors for knowledge sharing and innovation.
- Current initiatives undertaken under separate frameworks, associated and interlocked with the national R&I strategy and ecosystem include the following:
 - Adoption of strategies such as the National Digital Strategy and E-Government Strategy;
 - Focus on leading technologies, such as Artificial Intelligence (AI), Distributed Ledger Technologies (DLT), Big Data and Internet of Things (IoT);
 - Support of infrastructures related to Electronic Communications and Information Technology;
 - 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.

Provision of public services

- Before the pandemic most public services it was not possible to access online. In general, the digitalisation of services is NOT user-driven/user-oriented
- Few public services can be said to lead the way such as Deputy Ministry Of Research, Innovation And Digital Strategy; Cyprus Statistical Service
- Most public services that lag behind
- There a uniform government platform for providing public services: [Web Portal of Republic of Cyprus](#)
- To some extent artificial intelligence, machine learning and automated decision-making is not used in the digital service-provision process To what extent have proactive public services been introduced?
- Is there a difference between central and local levels with regard to the digitalisation of public services?

E-participation

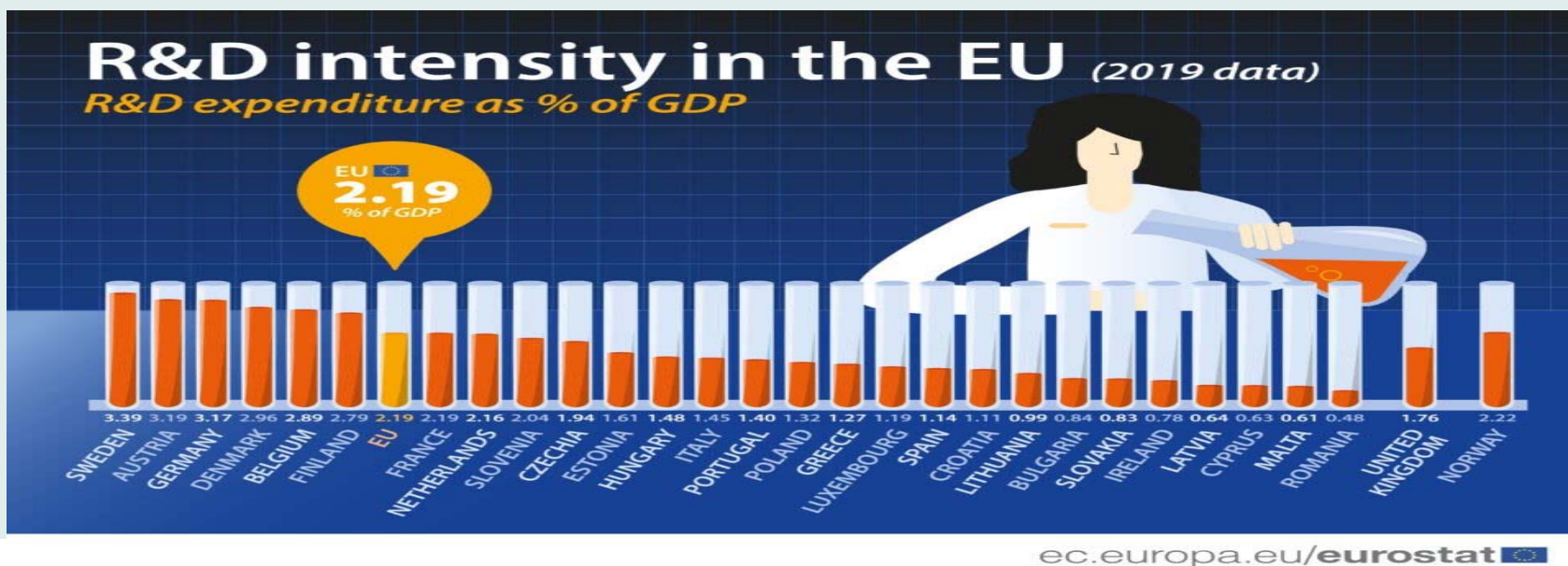
- Not possible to participate in public sector decision-making by digital means, other than leave a comment on Government websites
- Few possibilities to have a say in public administration policy making.
- Some opportunist during the consultation process of bills before parliament to comment to participate in the legislative process.
- No special environments for e-participation.
- Small but growing e-participation in Cyprus particularly with the pandemic.
- Digital divide between old and young on the subject. Younger generations are very interested in issues of e-participation and are pushing for further development of this.

Flashpoint: COVID-19

- Digitalisation issues interacted with the COVID-19 pandemic
- New digital initiatives were launched to manage the pandemic: in May 2020 COVTRACER and it was developed in partnership with a government-funded research centre, Cyprus' Deputy Ministry of Research, Innovation and Digital Policy. The app allows people who test positive to coronavirus to share this information with public health authorities, who are then able to trace anyone who may have been in close proximity to them.
- COVID-19 pandemic influenced the public debate on digitalisation and especially public sector digitalisation primarily on services to public (permits, payments etc), health issues (general appointments and for immunisation) and transitioning to on-line education provision

Flashpoint – R&D: 1

In 2019, Cyprus' spending on R&D stood at 0.63% of GDP – well below the EU27 average of 2.19% and one of eight countries with spending below 1% ([Cyprus Mail](#), 27/11/2020)



Flashpoint: 1

- “Cyprus seems to have technology at the bottom of its priority list after ranking 54 from 63 economies for digital competitiveness just one spot above the Philippines, while behind India, Turkey and Romania.” [“TECHNOLOGY: Cyprus is lagging in digital transformation”, [*Financial Mirror*](#), 5/10/2019]
- [Coronavirus exposes Cyprus digital divide](#) – calls for ‘digital leap’
- Cyprus seems to have technology at the bottom of its priority list after ranking 54 from 63 economies for digital competitiveness just one spot above the Philippines, but behind India, Turkey and Romania, according to the latest IMD World Digital Competitiveness ranking (WDCR) in 2019.

Flashpoint: 2

- **New Strategy:** There are two categories of projects: one category is the major large scale-initiatives, a set of projects totalling roughly €350 million – ranging from five to 50 million euros each and expected to be implemented within the next two to five years. And then the other packet of projects consists of smaller projects of low to medium complexity yet high impact on society and or the business community. [[Cyprus Mail](#) 15/8/2020]
- The government has pledged to assign 400 euro marched a corresponding injection of private funds to raise it to 1.5% to bring to closer to the EU average

Conclusion

- Cyprus a very large tertiary education sector but falls behind R&D. Also, Cyprus is leading in blockchain expertise in the private university sector and has good technological innovation on AI and IT in the public university sector.
- Covid19 Pandemic has exposed digital divide and need for 'digital leap forward'.
- The Cyprus public sector digitalisation has been falling behind. Recently The Cypriot Government has been investing in the digitalization of its public service, as well as the economy and society, including education.
- The core challenges with regard to public sector digitalisation is the slow process of transition from old paper system to digital governance.
- Small size can be a source of strength, but this requires investment and strategy to make the digital leap happen.