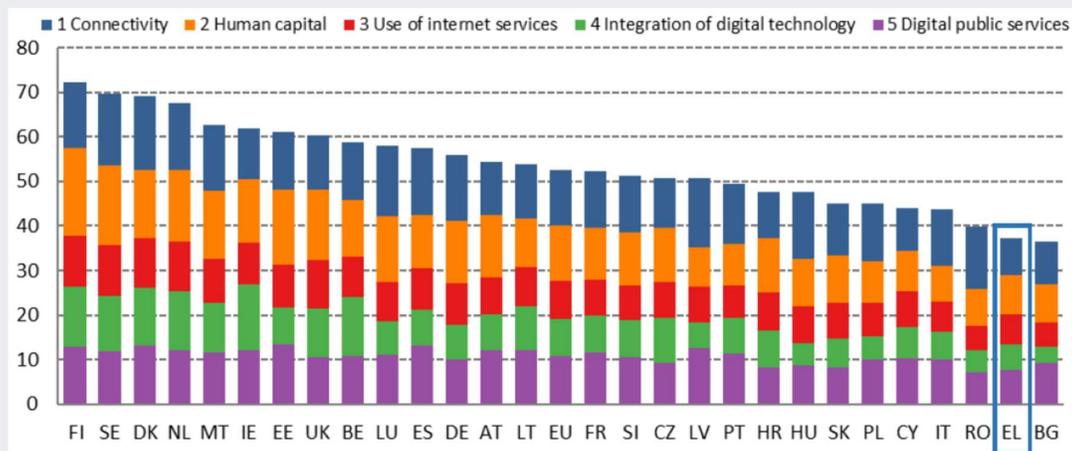


Greece 2020 – Factsheet on Digital Transformation

Key points

- Greece's digital transformation performance has been improving, but remains well below EU average.
- Both the public and private sector have key roles in upgrading and exploiting further digital infrastructure and technology.
- The pandemic crisis caused significant economic challenges but also highlighted the importance of digital infrastructure for a resilient recovery.
- There is potential for significant steps towards advancing digital transformation in Greece.
 - The country's **connectivity infrastructure** and level of **digital skills** lag those of its EU peers.
 - The degree of **digitisation of businesses** is far below the EU average.
 - **Digital public services** indicators have started to close the gap with EU peers but remain among the weakest in the EU.
- According to the latest overall Digital Economy and Society Index (DESI), Greece ranked second last in the EU.

Figure 1: Digital Economy and Society Index (DESI) ranking of EU member states in 2020



Source: DESI 2020 (data refer to 2019)

1. FACTS & FIGURES

Digital transformation in the public sector

- Within the Digital Economy Society Index 2020 (referring to 2019 data), the country made the most progress in the Digital Public

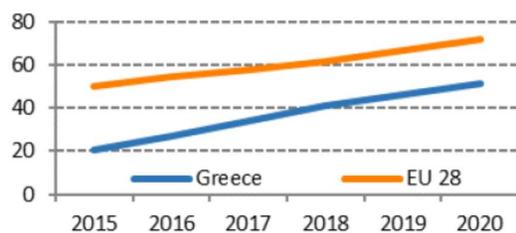
Services sub-index, but still scores well below the EU average, ranking second last.

- Regarding the provision of online public services, Greece made progress in 2019, with 25/100 pre-filled forms, though this remains well below the EU average of 59/100.
- The number of internet users that are active users of e-government services also

improved at 39% but remains below the EU average of 67%.

- The availability of digital public services for businesses increased (to 63) but significantly lag the EU average (88).

Figure 2: Digital public services (DESI Score)



Source: DESI 2020

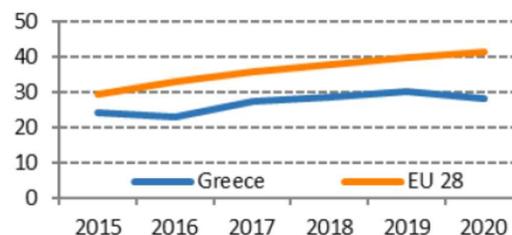
- The digitization of the public services has been accelerated with the launch of the governmental portal “gov.gr” by the Ministry of Digital Governance providing more than 500 e-services.
- In response to the pandemic crisis containment measures, the Ministry of Digital Governance ensured a secured access to Virtual Private Network for teleworking of critical public services to 10,000 employees and provided a platform for all public bodies to conduct secure and high-quality teleconferences.

Digital transformation in the private sector

- Despite progress, the pace of businesses’ digital transformation in Greece lagged the respective EU average in 2020 (referring to 2019 data).
- Greek businesses ranked 24th in the EU regarding the integration of digital technology, compared to 22nd a year ago.
- Electronic information sharing and use of big data are the strongest digital dimensions of Greek businesses.
- In contrast, the use of cloud services (by only 7% of firms versus 18% in the EU) and SMEs selling online (only 9% of total SMEs versus 18% in the EU) are Greek businesses’ weakest digital dimensions.

- Greece scores lower than EU average also in the use of social media.

Figure 3: Integration of digital technology by businesses (DESI Score)



Source: DESI 2020

- At the beginning of 2020, Greece had 9 fully operational Digital Innovation Hubs covering various sectors such as agriculture, fishing, construction, manufacturing, transport and electricity through a wide spectrum of advanced technologies such as additive manufacturing, AI and cognitive systems, cybersecurity and blockchain, big data and photonics (Source: DESI 2020).

Industry 4.0

Industry 4.0, is an ongoing transformation of manufacturing from traditional practices to the latest smart technology. Industry 4.0 introduces innovative and high technology practices to manufacturing sector by focusing mainly on the use of large-scale machine to machine communication (M2M). It provides increased automation, improved communication and self-monitoring, as well as smart machines that can analyse and diagnose issues without the need for human intervention. Industry 4.0 or, also called, “Smart factory” is defined by major technology components, i.e., Cyber-physical systems and Internet of Things. The cyber-physical systems, via IoT communication and cooperation, create a virtual copy of the physical world and monitor manufacturing processes, while they have the ability of making decentralized decisions on their own and reach a high degree of autonomy. As a result, Smart factory uses a wide range of new technologies to create value.

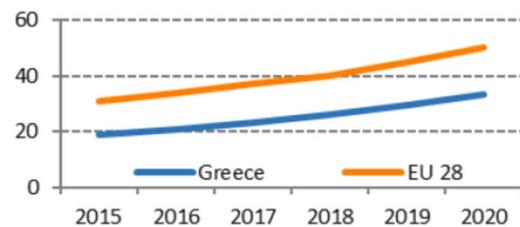
The 4th Industrial Revolution brings great challenges, but also great opportunities for

businesses and the economy as a whole. Digital transformation requires strategic actions not only from the state, but also from the industry. Cooperation between stakeholders of the industry and the state, as well as new investments from the industries are needed.

Digital infrastructure and skills

- With respect to overall connectivity metrics, Greece ranks last among EU countries.
- Indicatively, the country has not yet assigned radio spectrum for 5G services, while it lags behind in the deployment of Very High Capacity Networks (VHCN).

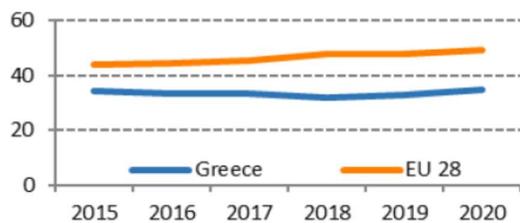
Figure 4: Connectivity (DESI Score)



Source: DESI 2020

- Greece converged to the EU average on the human capital dimension of digital skills measured by DESI, though it continues to rank only 25th in the EU.
- In 2020 (referring to 2019 data), 51% of individuals between 16 and 74 had at least basic digital skills, narrowing the gap with the EU average from 11 ppts down to 7 ppts.

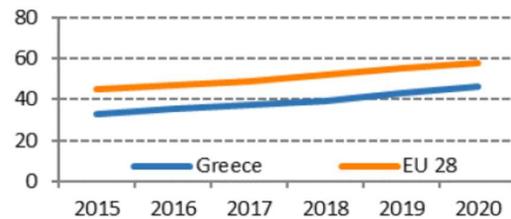
Figure 5: Human capital (DESI Score)



Source: DESI 2020

- The overall use of internet services in Greece remains well below the EU average, while the country continues to rank 25th in the EU.

Figure 6: Use of internet services (DESI Score)



Source: DESI 2020

2. Open Discussion Questions

- What are the key policies needed for accelerating digital transformation in Greece's public and private sector, in line with international good practice?
- Is the pandemic a threat or rather an opportunity for digital transformation? Can improved digital governance in Greece be seen as one of the principal lasting consequences of the Covid-19 crisis? How can the Next Generation EU recovery package contribute to this strategic objective?
- How can the digital governance project create new opportunities for Greek businesses?
- How can local government leverage smart city technologies to stimulate new investments and economic development? What could central government be doing to assist local efforts?
- What are the opportunities of Industry 4.0? How does the current innovation model of manufacturing in Greece need to change to take the opportunities?

3. Sources

Digital Economy and Society Index, 2020

European Commission, (26.02.2020), 'Country Report Greece 2020'

IOBE, 2019, Strategic Interventions for Industry Growth: Impact and Policy Analysis