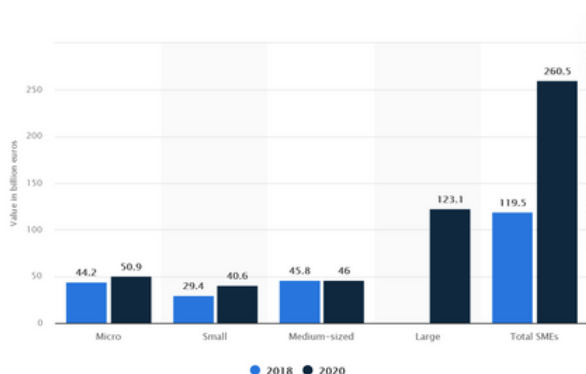
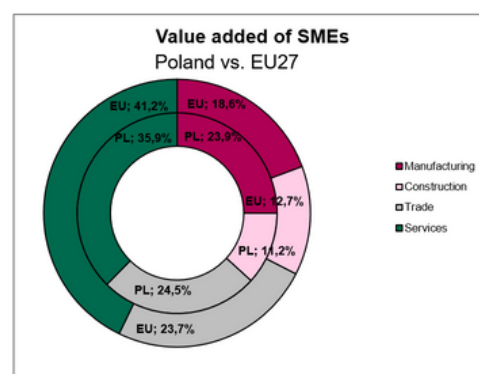


COUNTRY FINDINGS: POLAND

The whole society is currently facing the negative impacts resulting from the Covid-19 pandemic, the war in Ukraine, or the rising inflation. The upcoming period is a huge challenge, especially for SMEs. SMEs play an indispensable role in the Polish economy. According to the data from Statista, which we can see in Graph 1, the added value of Polish SMEs in 2020 has reached more than 260 billion euros. When we look at the sectoral distribution in Graph 2, we see that the biggest value is brought by SMEs coming from the service sector (35,9%), followed by the trade sector (24,5%), manufacturing (23,9%) and construction sector (11,2%). Moreover, according to the research,¹ as businesses are digitizing, they invest in research and development more than others. This also results in the fact that the contribution of Polish SMEs to innovation is higher than their contribution to added value.



GRAPH 1. VALUE ADDED BY SMES IN POLAND BETWEEN 2018 AND 2020, BY SIZE
SOURCE: [HTTPS://WWW.STATISTA.COM/STATISTICS/937779/VALUE-ADDED-BY-SMES-IN-POLAND/](https://www.statista.com/statistics/937779/value-added-by-smes-in-poland/)

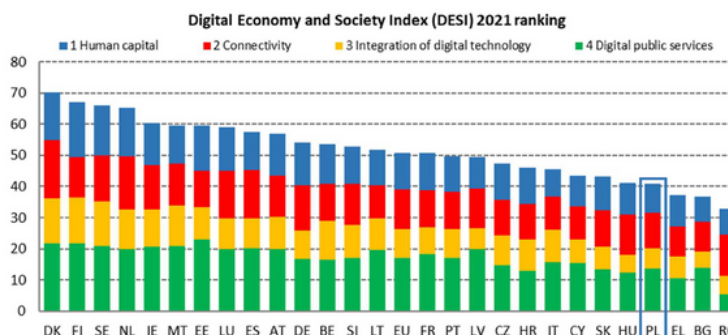


GRAPH 2. VALUE ADDED OF SMES BY SECTORS
SOURCE: [HTTPS://WWW.STATISTA.COM/STATISTICS/937779/VALUE-ADDED-BY-SMES-IN-POLAND/](https://www.statista.com/statistics/937779/value-added-by-smes-in-poland/)

The adoption of digital technologies brings new opportunities and many benefits for the whole society, and SMEs in particular. Digitalization is closely linked to a company's growth and productivity, impacting its sustainability or profitability. As digital transformation is one of the key drivers of productivity growth, the common goal should be to enable SMEs a fast, efficient and transparent process of digitalization. The government, SMEs and big companies, academia or NGOs each have a role to play in this process.

This paper maps the SMEs in Poland with a focus on the level of implementation of digital technologies in their businesses and connected areas. With reference to the discussions and working groups organized under the umbrella of the League for Digital Boost, we bring a summary of the main challenges of the Polish SMEs and the ecosystem and we also introduce key policy recommendations and success stories as an inspiration.

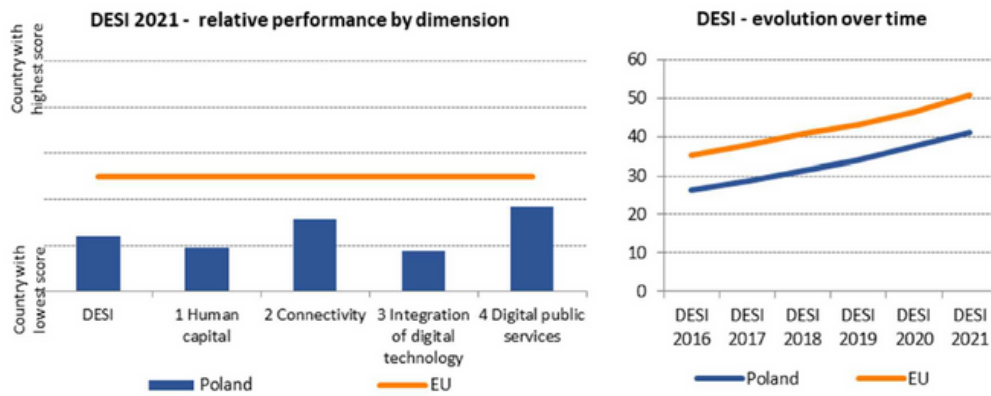
As displayed in Graph 3, Poland ranks 24th out of 27 EU Member States in the Digital Economy and Society Index 2021 or DESI with a score of 41. In comparison, the score of the EU is 50,7.² When we look at the relative performance by dimensions and the evolution over time in Graph 4, Poland doesn't reach the EU average in any DESI dimension.



GRAPH 3. DESI - EVOLUTION OVER TIME
SOURCE: [HTTPS://DIGITAL-STRATEGY.EC.EUROPA.EU/EN/POLICIES/DESI](https://digital-strategy.ec.europa.eu/en/policies/desi)

¹ https://www.politykainsight.pl/multimedia/_resource/res/20105186

² <https://digital-strategy.ec.europa.eu/en/policies/desi-poland>



GRAPH 4. DESI - EVOLUTION OVER TIME
SOURCE: [HTTPS://DIGITAL-STRATEGY.EC.EUROPA.EU/EN/POLICIES/DESI-POLAND](https://digital-strategy.ec.europa.eu/en/policies/desi-poland)

Strengths:

Poland has been often perceived as a leader in the support for the development of the digital economy. The country has been successful in its focus on the start-up scene, and has seen the growth of dozens of incubators and accelerators for start-ups. It has strong pillars in quality education, broadband connection, and digital participation of citizens. According to the Emerging Europe ranking, Poland is considered the best place in the region to start a business and enjoys the largest existing tech talent pool in CEE. The country is also known for its high human resources potential, stable financial sector, considerable improvements of the quality and density of domestic infrastructure, or for being a considerable base of the ICT skills and know-how in ICT clusters that can easily spread these competencies to SMEs. In addition to this, Poland also leads the region in terms of the share of R&D expenditure provided to the academia and public sector.

Threats:

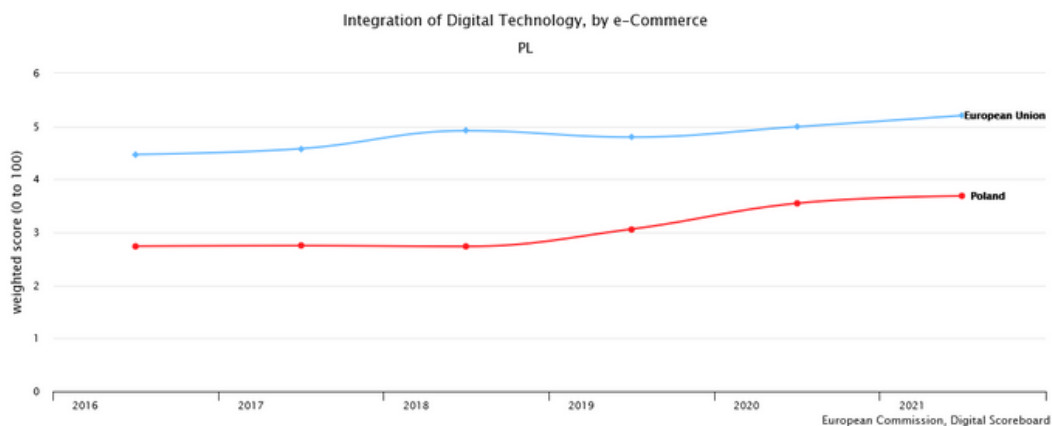
Among things the country could think about from the long-term perspective, we could mention the dependence of Poland on the capacity to attract sufficient numbers of ICT skilled employees from Eastern Europe or the need to make SMEs more concerned about the adoption of digital tools, return on investment, data protection and the cost of tools.

Weaknesses:

The successes of the ICT economy in Poland, however, have not yet translated into a successful ecosystem for the SMEs, which is mainly caused by considerable regional differences. The list of major weaknesses and challenges to deal with includes a weak entrepreneurial culture with low readiness for the digital economy due to a weak rate of technological adoption, weak and insufficient regulatory framework, and big regional differences (including low capacities in digital and technological skills or cybersecurity skills outside big cities). Polish businesses, especially in the rural areas, face difficulties to get connected and become a full and active part of the country's digital economy.

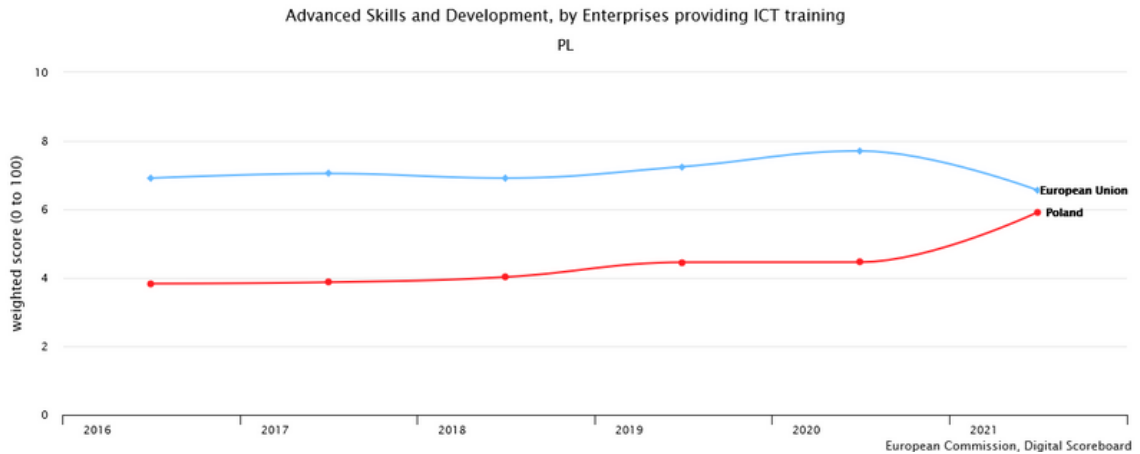
Opportunities:

The Polish Recovery and Resilience plan (RRP) is structured around five pillars of resilience of the economy, including business environment, innovation, and labor market policy (EUR 4.7 billion, or 13.1%); green energy (EUR 14.313 billion, or 39.8%); digital transformation (EUR 4.897 billion, or 13.6%); sustainable transport (EUR 7.518 billion, or 20.9%); and the health system (EUR 4.542 billion, or 12.6%). The plan includes measures for improving air quality, energy-efficiency in buildings, the development of renewable energy sources, zero-emission transport, and access to broadband internet. The Polish RRP contains several provisions, which have potential to help boost the digitalisation of the country's SMEs.



GRAPH 5. DESI 2021 COMPARE COUNTRIES PROGRESS: INTEGRATION OF DIGITAL TECHNOLOGY BY E-COMMERCE
SOURCE: [HTTPS://DIGITAL-AGENDA-DATA.EU/DATASETS/DESI/VISUALIZATIONS](https://digital-agenda-data.eu/datasets/desi/visualizations)

During the last two pandemic years, we have witnessed that SMEs which used advanced mechanisms have been able to adjust their business models and therefore survive. To the contrary, companies which were not digitalized and demonstrated no willingness to adapt and enter the online world, were severely affected or closed. When we compare DESI characteristics for the country in Graphs 5 and 6 and put them into the context, they confirm several from our previous findings during the discussions. We see an increase in implementing new technologies among Polish SMEs. It is important to continue with this trend and capacity building and to support SMEs to navigate through digitalization.



GRAPH 6. DESI 2021 COMPARE COUNTRIES PROGRESS: ADVANCED SKILLS AND DEVELOPMENT BY ENTERPRISES PROVIDING ICT TRAINING
SOURCE [HTTPS://DIGITAL-AGENDA-DATA.EU/DATASETS/DESI/VISUALIZATIONS](https://digital-agenda-data.eu/datasets/desi/visualizations)



The mindset of the CEOs is not enough, though. Bearing in mind the existence of some funding possibilities, structures and schemes, the lack of digitally skilled employers and employees becomes one of the key challenges for SMEs. A world-known online platform for online learning, courses and certificates, Coursera, publishes a Global Skills Index and the Global Skills Report³ each year, based on the platform data and research. When we look into Graph 7, we see that Poland operates with competitive Business skills in total, ranked as 53rd in this category. When looking at the details, Sales and Communication skills are ranked on the level of cutting-edge, there are several skills on the competitive level such as Finance, HR and Marketing. On the other side of the spectrum, Strategy & Operations, Leadership & Management, Entrepreneurship are among emerging skills and Accounting is being categorized as a lacking skillset.

| Global Rank | | Accounting | Communications | Entrepreneurship | Finance | Human Resources | Leadership & Management | Marketing | Sales | Strategy & Operations |
|-------------|----------------|------------|----------------|------------------|---------|-----------------|-------------------------|-----------|-------|-----------------------|
| 37 | Estonia | 47% | 31% | 29% | 94% | 94% | 41% | 54% | 46% | 31% |
| 39 | Turkey | 18% | 63% | 45% | 67% | 87% | 58% | 81% | 63% | 46% |
| 42 | Finland | 31% | 29% | 22% | 81% | 46% | 39% | 82% | 94% | 83% |
| 43 | Czech Republic | 24% | 48% | 34% | 89% | 73% | 44% | 70% | 55% | 41% |
| 44 | France | 33% | 33% | 88% | 87% | 3% | 82% | 46% | 40% | 74% |
| 49 | Hungary | 13% | 75% | 31% | 91% | 53% | 43% | 79% | 58% | 34% |
| 50 | Belarus | 8% | 96% | 25% | 50% | 99% | 22% | 31% | 23% | 52% |
| 51 | Portugal | 27% | 47% | 41% | 98% | 25% | 49% | 59% | 36% | 37% |
| 53 | Poland | 20% | 80% | 26% | 64% | 59% | 45% | 71% | 77% | 33% |
| 59 | Slovakia | 4% | 34% | 14% | 86% | 41% | 29% | 39% | 38% | 19% |
| 61 | Lithuania | 15% | 52% | 16% | 75% | 79% | 42% | 62% | 51% | 36% |
| 62 | Spain | 74% | 36% | 71% | 71% | 58% | 28% | 37% | 29% | 27% |
| 63 | Serbia | 19% | 66% | 19% | 55% | 62% | 37% | 55% | 33% | 26% |
| 69 | Ireland | 26% | 26% | 24% | 83% | 20% | 36% | 57% | 49% | 48% |
| 70 | Ukraine | 4% | 86% | 21% | 32% | 97% | 25% | 28% | 15% | 24% |
| 76 | Romania | 16% | 39% | 20% | 54% | 28% | 32% | 47% | 48% | 23% |
| 77 | United Kingdom | 23% | 21% | 13% | 85% | 13% | 33% | 58% | 50% | 21% |

coursera

Global Skills Report 2021: Regional Results

GRAPH 7. GLOBAL SKILLS REPORT 2021:EUROPE BUSINESS SKILLS

³ To develop the Report, Coursera uses the data collected on their platform, including more than 77 million learners, 4000 campuses, 2000 businesses, more than 100 governments, workers, graduates and individuals. https://pages.coursera-for-business.org/rs/748-MIV-116/images/coursera-global-skills-report-2021.pdf?mkt_tok=NzQ4LU1JVioxMTYAAAGDB-NfKn_gxICDnsuCef2zv5cIN-FlnXEqCH-KicjlvONw3Ob7gMzO-7tqXiwU-uvPYOj9I5wQx7gb3NMFGR17WB27CtMtYZh_lskJgsrUmlhQ

Among our key recommendations, we bring the following:

The starting point for SMEs is to know what digitalization is, how it could help them and why they should pursue it. Based on the inspiration from Finland and Estonia, we recommend creating an online platform that would help SMEs with all aspects of the digital transformation, including a single system listing all opportunities of financing, including national, regional or European, which would ease the processes and also the willingness to apply for financing. In this regard, the League for Digital Boost aims to become an active player and in cooperation with Polish stakeholders, ministries, businesses, academia and the third sector prepare a structure for such a portal and help to navigate it further.



The government should focus on advising SMEs about potential cyber risks and attacks and guide them on how to build cybersecurity and cyber resilience. This should be easily achieved by European Digital Innovation Hubs (EDIH) or related institutions. The coordination from the level of EDIHs would also help to strengthen the regional aspect of digital transformation of businesses in their headquarters in regions.

According to the research and discussions, Polish SMEs should be able to speed up their digitalization processes through further incentives to invest in it, more support and educational programs from the government and platforms which already operate and provide reskilling over the country. The other aspect is to enhance and support female digital entrepreneurship. The platforms and initiatives or organizations which support education of entrepreneurs, employers, and mentoring should be actively supported.

We also see the education of the state apparatus in digital topics for a better understanding of the context and the problems of the market, as well as the transfer of experience and best practices from abroad, as big opportunities that could help to speed up the processes. It goes hand in hand with improving the communication between the government, businesses and the third sector.



The country should strengthen the awareness and share information about initiatives which provide digital solutions and further development of applications like the m-Obywatel digital wallet for documents and services as a part of national case studies and best practices. According to the European Commission, this case is considered to be one of the most developed case studies among European digital identity wallet solutions and it is expected that the country could play a huge role in developing and implementing the European Digital Identity Framework.⁴ In order to be able to come up with new digital solutions and technologies, the digital infrastructure needs to be built up properly and throughout the whole country, including regions in the countryside.

The most significant barriers to growth for SMEs are the high tax burden and bureaucracy. The implementation of new technologies is closely connected to the easing of the regulations and having a legislation which is in favor of digitalization of SMEs, removing heavy bureaucratic burdens and implementing administrative tax benefits for digitalization of SMEs and simplifying the processes of coordination with the state and respective state authorities.

SMEs should continue with the investments into reskilling which is a trend that leverages existing industry strengths to enter into more sophisticated, high value-added products or services for the digital economy. When speaking about education, there is a huge need for the support of innovative thinking and for a change of mindset starting at schools, through the support of reskilling, or opportunities of lifelong learning, to the implementation of visa for digital nomads and removing barriers for employing qualified digitally skilled workforce outside of EU/EEA.

We believe that all actors of the ecosystem have their key role to play in order to boost the level of digital transformation of SMEs and that we will succeed only when we work together. The government provides education and regulation; big companies, start ups and scale ups bring new solutions to the market; NGOs connect various stakeholders and create knowledge sharing platforms; universities contribute to generating innovative mindsets. After all, that is what the success stories of countries with a highly digitalized economy teach us. We have to realize that by helping SMEs to digitalize, we will help not only to businesses, but to society, organizations, or individuals. All the investments into digitalization will produce returns across the economy.

⁴ <https://digital-strategy.ec.europa.eu/en/policies/desi-poland>



Poland already has a number of case studies and best practices, we will share some of them:

- epodreczniki.pl which is a learning portal offered by the Ministry of Education, providing online learning.
- The Girls Code Fun Foundation which aims to encourage school-aged girls in Poland to find an interest in programming and technology.
- biznes.gov.pl is an example of how government actions help businesses go digital. It allows micro companies to be established in a single day through their online platform and therefore, it allows access to e-government services.
- Skriware offers educational solutions for STEAM education in schools and at home through connecting experts and users and providing new technologies and solutions.
- DocPlanner is a solution from an e-health cluster. It is a platform matching physicians with patients and it enables patients to search for an appropriate physician and saves time and cuts of no-shows, offers online chats and consultations.

Other Sources:

- Daxx (2021) “Eastern Europe: IT Talent Tech Hubs to Look For in 2022”, Daxx.com, 23rd August 2021, at <https://www.daxx.com/blog/development-trends/it-hubs-in-europe>
- Digitally Driven Poland (2020) European Small and Medium-Sized Enterprises (SMEs), Connected Commerce Council, at <https://digitallydriven.connectedcouncil.org/wp-content/uploads/2021/03/Digitally-Driven-Poland.pdf>
- Emerging Europe (2021) IT Landscape Report, London: Emerging Europe Limited, at <https://emerging-europe.com/it-landscape-report/>
- European Commission (2021) Digital Economy and Society Index (DESI) 2021: Poland, European Commission, 28th October 2021, at <https://ec.europa.eu/newsroom/dae/redirection/document/80495>
- Green Recovery Tracker (2021) Poland, Green Recovery Tracker, at <https://www.greenrecoverytracker.org/country-reports/poland>
- TMF Group (2021) Top 10 challenges of doing business in Poland, at <https://www.tmf-group.com/en/news-insights/business-culture/top-challenges-poland/>

Next steps:



Addressing specific policy recommendations to governments



Preparation of a digital handbook for SMEs



Connecting key stakeholders



Raising awareness through different set of activities

Contact us:



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The vision of the League is to create a broad coalition of the key actors in the field of digital economy and to launch and drive a sustainable format of a long-term cooperation in the implementation of digital transformation in SMEs.



Lucia Colníková
The League for Digital Boost Lead

Under the Auspices of: Founded & Led by: Partners:

