Polska

ICT in Poland

2017-04-24 10:29:52

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The ICT sector in Poland employs 430 000 people. The share of ICT industry in GDP amounts to around 8%. The number of ICT companies increased by 24.5% in 2011-2014. The number of persons working in the sector increases at the rate of around 6% annually. More than three quarters of persons employed in the sector work in ICT services, of which most are persons employed in IT services. The largest revenues in the sector are generated by services, telecommunications in particular. IT companies are responsible for two thirds of the revenues in the sector.

In the past 5 years in Poland digitally advanced sectors were growing almost 3 times faster than less advanced ones. Service companies with operations based on the work of Polish programmers have the largest share in IT exports. ITO (Information Technology Outsourcing) centres have been opened in Poland by companies such as Luxoft, Tieto, BLStream, Sii, and C&F. According to forecasts, up to 240 thousand persons could work in Polish BPO, ITO, R&D and call centres in 2018.

Every year ICT sectors companies spend more and more money on research and development. Companies providing ICT services are responsible for 90% of the increase. At the same time the ICT sector demonstrates more innovativeness than other sectors of the economy.

Alongside the development of software on request and outsourcing services, development of computer games is a Polish speciality. Popularity of titles released by studios such as CD Projekt Red („The Witcher” series), CI Games („Sniper” series), Techland („Dead Island”, „Dying Light”) or 11bit Studios („This war of mine”) significantly influenced popularity of this sector in Poland. The market for computer games is strongly globalised and the origin of the publisher is less significant than in other ICT branches. At the same time the revenues of Polish game developers are relatively small in comparison to other ICT branches. The revenues of CD Projekt RED, Techland and CI Games, definitely the largest game developers in Poland, amounted to less than PLN 1.5 billion in 2015.

Talent pool in Poland

2.2% of all graduates are of scientific faculties. Poland ranks 4th in the EU in this respect. The cost of labour in ICT in Poland is 45-70% lower than in the Western Europe countries. One of the primary factors hindering the development of the ICT sector, and IT in particular, is the shortage of qualified employees. At the same time, as statistics indicate, there is a shortage of several dozens of thousands of programmers in the territory of the European Union, and these values continue to grow every year. Also in Poland CEOs of companies point to this factor as one of the most significant problems. Programmers experienced in Java, .NET, C++, Objective C, HTML, CSS, Javascript, Python are most sought after. Re-qualification of a programmer from one programming language to another is definitely simpler and cheaper that training a new one. It does not alter the fact that in the next few years the situation in the IT labour market will continue to deteriorate from the point of view of employers.

Demographic trends have a negative impact on the number of students and graduates of universities. Employers are looking for new, flexible forms of employment, which will facilitate better use of freelancers. The hope lies also in popularisation of robotisation and machine learning, which in some areas will take the burden off human resources and will make it possible for programmers to get involved in other tasks.

What is the Polish ICT specialisation?

- Software development on request – 34,7%

- Development of games – 22,3%
- BPO/ITO services – 19,8%
- Internet technologies – 14%
- Research and development in the area of software – 5%
- Research and development in the area of hardware – 0,8%

Digitalisation of economy

Polish e-economy represents 4.1% of GDP. According to Deloitte's forecast this value will increase to 5% in 2016 and as much as 9.5% in 2020. Thanks to progressing digitalisation, the cost of running companies shall be decreasing over the next few years. Also, exchange of information within companies shall improve and customer service shall become easier.

In 2008-2016 GDP per capita increased by 31%, and the Economy Digitalisation Indicator by 70%. Poland ranks 4th in the EU in terms of the increase of the digitalisation indicator. At the same time Poland ranks 6th in Europe in terms of improvement of digital competences and 10th in terms of improvement of business environment. At the same time it should be noted that Poland is relatively poorly developed in terms of digitalisation in comparison to the most developed economies in Europe. Digitalisation should improve effectiveness also in sectors, which are least connected with digitalisation, such as mining or industrial production. Meanwhile, the only sector with digitalisation better than EU average is the financial sector. Inclinable approach of the Financial Supervision Authority to technological novelties, openness of customers and high competitiveness of the sector, resulted in a situation, in which Poland possesses a user friendly banking system. Remaining sectors are weaker than EU average in terms of digitalisation. It may result from the fact that small and medium-sizes enterprises in Poland are usually smaller than their counterparts in Western Europe. In 2008-2014 huge effort was made improving the quality of e-administration.

This work shall continue under the new EU perspective. The use of ICT technologies in the public sector continues to call for improvements. The Ministry of Economic Development has made it its objective for 50% of the society to handle 80% of official matters electronically within 2-3 years. Furthermore, one of the priorities is to increase non-cash turnover. The Digital Poland programme envisages introduction of widespread ICT services, broadening of online administrative procedures and other actions supporting digitalisation of Poland.

Public procurement supported by EU funds represents around one quarter of the demand for ICT services in recent years. The Digital Poland Operational Programme shall be the primary programme continuing this trend in 2014-2020. The total amount of funds allocated to the programme shall excess PLN 10 billion, of which 80% are EU funds. The programme has been divided into the following priority axes:

- Common access to high-speed Internet,

It focuses on provision of broadband Internet, with a minimum capacity of 30 Mbit/s, in areas where necessary infrastructure could not be provided without support from the state. The objective is to provide the access to broadband Internet in the entire territory of Poland by 2020. In 2015 slightly more than 70% of households had a broadband access to the Internet. At the same time almost one quarter of households still do not have Internet, of which households without children are a decisive majority. The reason given for the absence of Internet in these household is the lack of need to use the network.

13.7% of Internet users aged 16-74 used disk space in a cloud. This is a 5.7 percentage points increase in compari-son to 2014. Most of these persons are young people, with higher education and self-employed persons.

- E-government and open government,

Under that axis public institutions shall be granted aid to broaden the scope of e-services, integration of services at the ePUAP platform (Electronic Platform for Public Administration Services), streamlining of services within administration, digitalisation of processes and procedures and provision of more data within the public sector.

- Digital competences of the society,

It shall support persons willing to improve their digital competences and people at risk of digital exclusion. Moreover, support shall be offered to programmers, which will facilitate better use of the potential of this resource.

- Technical assistance.

It focuses on provision of tools and human capital necessary for implementation and day to day management of the Digital Poland programme.

„Polityka Insight" centre issued a number of recommendations, which are to accelerate the digitalisation process in Poland:

- To guarantee shaping of digital competences at each stage of education.
- To encourage public institutions to make data and services available online.
- To create a single government service to handle official matters.
- To support and develop educational programmes on personal data.
- To regulate access to personal data taking into account all groups.
- To invest public funds only in selected, prospective sectors.
- To design a system of tax allowances for purchases of innovative technological solutions.
- To support investment in broadband infrastructure to ensure universal, high-quality access to the Internet.
- To facilitate business activities.
- To coordinate the process of execution of IT procurement by administration.

E-commerce

The value of the e-commerce sector in 2015 amounted to PLN 32 billion and was higher by around 20% in comparison to 2014. The revenues of the sector are expected to double in the next 5 years. However, the sector continues to represent a small share of trade exchange.

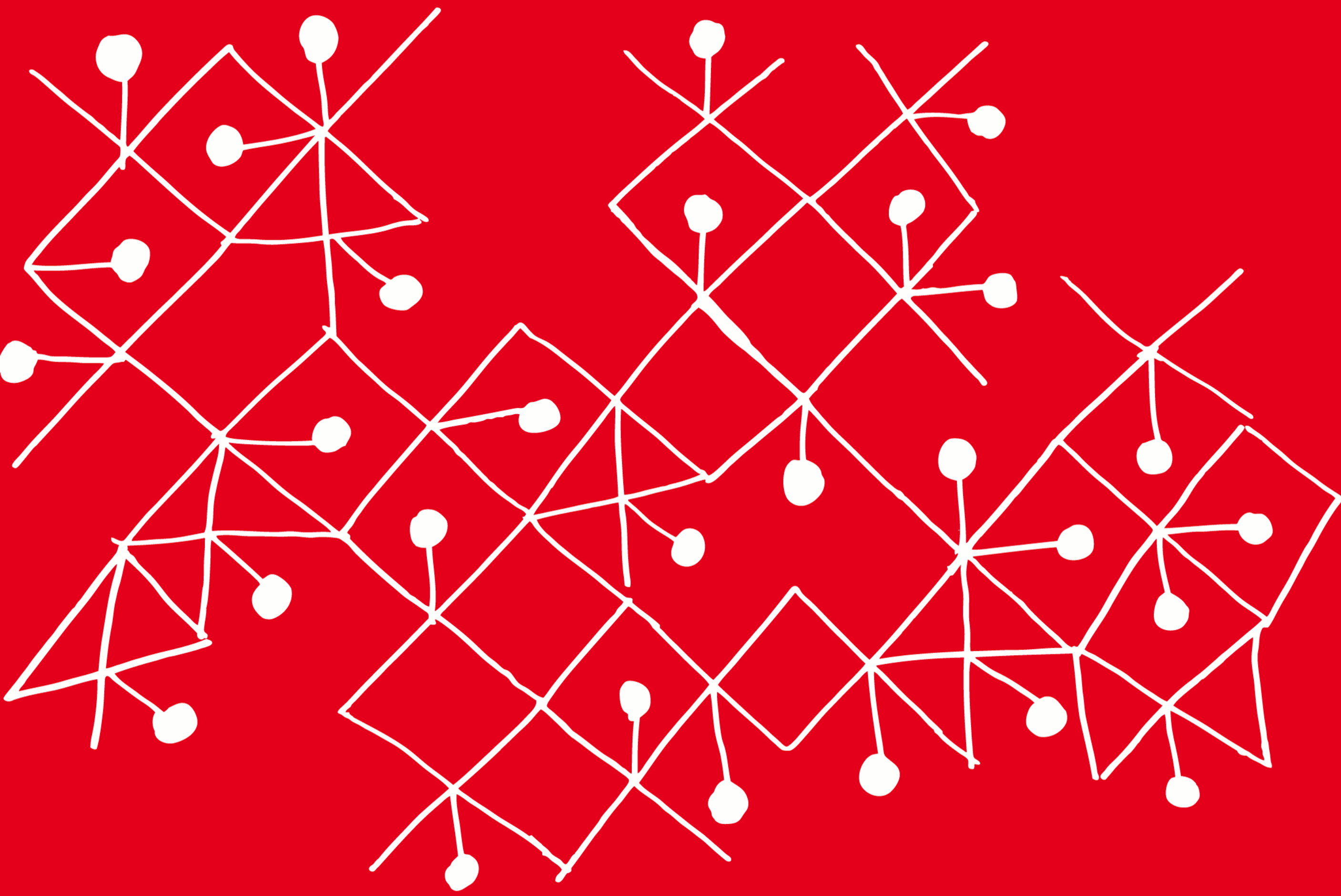
In 2015 11 million persons aged 16-74 made at least one purchase via the Internet. Two thirds of these persons have a degree. Men buy online more often than women. Nowadays consumers are very well informed. Thanks to the Internet they can quickly find products they want, at the best possible price. They are used to have their need fulfilled immediately, on good conditions. Therefore competitiveness in this sector is governed by different rules than those of the traditional trade. E-commerce is characterised by rapid changes in consumers' habits. Companies, which shall quickly and effectively adapt new technologies and react to changes in customer preferences stand the biggest chance of remaining in the market. One of the key factors will be effective use of big data.

Polish Start-ups

As the study of Deloitte shows, half of start-ups in Poland carry out activities related to the ICT sector. The most frequently mentioned areas of start-ups' activities include mobile technologies, e-commerce, business software, education, Internet of Things and Big Data. The structure of financing of young companies is changing. Most companies start their activities using own funds, avoiding costly investments until they generate enough revenue. In substantial majority from the start of operations start-ups intend to sell their services and products outside of Poland. At the same time, as in the entire sector, shortage of qualified employees is a problem. Already one in every four start-ups employs foreigners as ICT specialists.

The progressing computerisation of the society is an opportunity for startups from the ICT sector and companies already established in the industry. With every year more and more households are connected to the Internet (75.8%) including broadband. This trend leads to the increase of the target group for many ICT solutions, endogenously stimulating the demand for products of Polish companies from the sector. The change of consumer behaviours, including transferring of a large part of day to day activities to the Internet, is a significant stimulant of the sector. Computerisation continues to affect more and more aspects of lives of citizens and companies. One of the strongest trends is the increased use of mobile devices. This is very well exemplified by more customers logging in from mobile devices than from traditional ones to one of the leading banks in Poland in November 2014. These data clearly justify the statistics indicating that more than 50% of start-ups are established in the ICT sector. A very dynamic development of the sector can be expected in the coming years, as well as its continuously growing significance to the economy. At the same time one should remember that in order to keep the sector in a good condition substantial efforts are required, especially in the form of investment and allowances from the government. The needs include provision of financing for high risk projects, introduction of allowances (e.g. tax allowances) for enterprises investing in R&D and computerisation and retaining of the level of public expenditure supported by EU funds. Without an active approach of companies and the state, the retention of positive results of the sector may prove very difficult at the time of growing competition and decreasing cost advantage of Poland.

For more information on ICT sector in Poland please download the file below "Growth Perspectives for Polish ICT Sector by 2025".



INNOWACYJNA GOSPODARKA
NARODOWA STRATEGIA SPÓJNOŚCI

MINISTERSTWO
ROZWOJU

UNIA EUROPEJSKA
EUROPEJSKI FUNDUSZ
ROZWOJU REGIONALNEGO

Projekt jest współfinansowany przez Unię Europejską ze środków Europejskiego Funduszu Rozwoju Regionalnego