## Bobnis U., Kovalikhin A., Bazyleva I. IT Industry of the Republic of Belarus

Belarusian National Technical University Minsk, Belarus

Digital transformation of all aspects of business is on the agenda in the companies all over the world. Today, three key factors influencing the company's success and prospects for the future are the ability to create and manage digital technologies, access to technological talents, and the speed and cost of transformation [1].

In the Republic of Belarus the IT industry is quite well developed, but in order to understand it we need to start with the concepts, consider the current state and development of the Belarusian IT industry.

Industry is a set of enterprises engaged in the production of tools, extraction of raw materials, fuel, energy production and subsequent processing of products.

Information technology (IT industry) is processes, methods of searching, collecting, storing, processing, providing, delivering information and ways of implementing such processes and methods; ways and methods of application of computer facilities in the performance of functions for the collection, storage, processing, transmission and the use of data; resources necessary for collecting, processing, storing and delivering information.

In the past few years, Belarus has gained a reputation of the leading *IT-country* in Eastern European region and in the world. According to the Global Services 100 rating, Belarus ranked 13th among the 20 leading IT outsourcing and high-tech services. In addition, six HTP resident companies have

been included in the list of the best providers of outsourcing services, having been included in the 2017 Global Outsourcing 100 rating. These are Bell Integrator, Ciklum, EPAM, IBA Group, Intetics and Itransition. In the UN IT ranking Belarus takes 48th place. Ten companies from the world's largest software companies rankings Software 500 have development offices in Belarus. These are EPAM (107), Bell Integrator (281), IBA (281), Itransition (368), Coherent Solution (393), SoftClub (409), Artezio (416), Intetics (419), Oxagile (456), IHS (482) [2].

The IT industry plays a key role in the Belarusian economy. It has grown and developed significantly in the last decade. From 2005 to 2016, the export of IT services and products increased by 30%, while the share of IT exports in the total volume of exports of goods and services in Belarus increased from 0.16% to 3.25%. Experts are convinced that the industry has great prospects, and they are increasingly showing interest in our IT companies. Over the past 10 years, the IT industry in Belarus, unlike other sectors of the economy, has shown a steady growth in income, exports, labor and other indicators.

The sphere of Information technologies and communications employs more than 85,000 people as a workforce, which includes about 34,000 professionals in the field of IT products and services. Other 30,000 IT professionals work in various economic sectors. There has also been a significant increase in the demand for products and services of Belarusian IT in recent years: more than 90% of sales of Belarusian IT companies are sales to external IT market. The state has a strong influence on industry through local laws that regulate the business environment [1].

The most popular in the IT field are such companies as EPAM, Itransition and Wargaming. In 1993 two classmates Arkady Dobkin and Leonid Lozner created one of the world's

largest software developers and distributors – EPAM Systems. In 1996 a graduate of the Faculty of Applied Mathematics and Informatics of the BSU, a lecturer and HR IBA Group, Sergey Gvardeitsev created the company Itransition. In 1998 a student of the Physics Department of the BSU Viktor Kisly, who was studying lasers and spectroscopy, created the company Wargaming and started developing the first commercial product – game DBA Online. On August 12, 2010 Wargaming.net released a Russian version of the multiplayer online game World of Tanks. The game enjoyed a phenomenal success. In January 2011 the number of World of Tanks' users was over 1 million people. In February 2011, World of Tanks entered the Guinness Book of Records for the simultaneous presence of users on the game server (91,311 people). In January 2013 World of Tanks set a new world record among all MMO games for the Guinness Book of Records: 190,541 players were fighting simultaneously in tank online battles on one of the five servers of the Russian cluster. Two Israeli businessmen, Talmon Marco and Igor Magazinik, launched the first version of Viber's pilot application, a competitor to Skype, which allows free communication over the Internet [3].

Today the average salary in the ICT sector is higher than in other sectors of the economy. In 2016 the average salary for Belarus was about \$ 400, whereas in the ICT sector an average of \$ 1.8 thousand was earned. The average earnings in HTP are expected to be \$ 2.4 thousand in 2020 [4]. IT products and services are the fastest growing segment of the economy in terms of revenues and exports. The export of computer services has grown 36 times in 12 years and amounted to 956.8 million in 2016. In Belarus 75,000 students (24% of the total number of university students) study in STEM-specialties, including about 70 IT-specializations. The share of the graduates of the Belarusian State University of Management and Information Systems is 35.4% of employees of HTP resident companies.

About 12% of those employed in the IT industry are students. A large number of employees in the IT industry of Belarus have higher education (about 76%). Another characteristic of the sector is the youth: 57% of the staff of HTP resident companies are under 30 years. The career path in the industry usually begins before the age of 25. The share of girls in the IT industry slightly decreased compared to the previous year, nevertheless it accounts for almost a fifth of the total number of employees. Compared to 2010 the number of business people has 2.5 times. The most popular Belarus grown programming languages are Javascript (57%), SQL (52%), Java (48%), C++ (38%) and Python (18%).

Taking into account all these factors, it is certain that the Belarusian IT industry will have a high chance to continue developing and generating revenue.

## References:

- 1. The IT industry in Belarus 2017: and Beyond [Electronic resource]. 2017. Mode of access: http://www.ey.com/Publication/vwLUAssets/ey-it-industry-in-belarus-2017-and-beyond/\$FILE/ey-it-industry-in-belarus-2017-and-beyond.pdf. Date of access: 10.04.2018.
- 2. IT-industry [Electronic resource]. Mode of access: http://belarusfacts.by/en/belarus/economy\_business/key\_economic/it/ Date of access: 10.04.2018.
- 3. История развития ИТ отрасли в Беларуси [Электроннный ресурс]. Режим доступа: http://itmentor.by/articles/istoriya-razvitiya-it-otrasli-v-belarusi. Дата доступа: 25.03.2018.
- 4. ИТ в Беларуси-2016: в индустрии еще никогда не было столько новичков [Электроннный ресурс]. Режим доступа: https://dev.by/lenta/main/it-v-belarusi-2016. Дата доступа: 24.03.2018.