FLANDERS INVESTMENT & TRADE MARKET SURVEY



Market study

FLANDERS INVESTMENT & TRADE

IT & DIGITAL MARKET IN UKRAINE

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1. INTRODUCTION

Ukraine's IT market has been gaining a lot of attention for the last few years due to its rapid development and constant growth. Ukraine is now considered one of the best tech places in Europe, providing endless possibilities for foreign IT businesses.

In recent years, the IT market of Ukraine has been expanding drastically, growing at a 26% rate. That's why a lot of experts call it a driving mechanism of the Ukrainian economy. According to the <u>Ukrainian</u> <u>IT market report</u>¹, since 2012 the IT contribution to the Ukrainian's GDP has risen from 0.8% to 4% due to the growing export of tech services.

Nowadays, there are about 4,000 Ukrainian tech companies on the market that mostly specialize in software engineering, QA testing, application support, research & development. In terms of types of IT companies, there are <u>1,142 product companies and 858 service vendors in Ukraine²</u>. The latter ones are mostly specialized in IT outsourcing. Besides that, Ukraine is also recognized for its booming IT start-ups (around 2,000), among the widely known ones being Grammarly, People.ai, Readdle, Attendify, MacPaw, and others. In 2021, Ukrainian start-ups have attracted a record-high number of investments, namely <u>\$571 million³</u>, providing good opportunities for Ukrainian IT business development.

According to <u>Outsourcing Journal</u>⁴, Ukraine is now the number 1 IT outsourcing destination in Central & Eastern Europe. In addition, it was listed in the top 20 offshoring destinations in the EMEA region. therefore, Ukraine is viewed as a potent tech hub where the IT industry is gaining momentum. This upward trend has attracted the attention of the world IT society, inducing more and more foreign companies to hire developers in Ukraine⁵.

There are a lot of countries that are interested in Ukrainian BPO services, but its permanent clients remain in the United States and Western Europe. The main factors which attract foreign companies to the Ukrainian IT market are the following:

- a huge pool of gifted IT specialists;
- convenient location;
- low taxes (5%) and wages;
- high-quality work;
- cultural similarity.

² https://www.irex.org/sites/default/files/UNITY%20LMA%20Report%20Final%20June%202021%20Final_0.pdf

³ https://www.bbc.com/storyworks/future/ukraine-innovating-for-the-future/ukraine-the-home-of-start-ups-and-entrepreneurs

⁴ https://outsourcing-journal.org/ukraine-4-O-afternoon-meeting-at-the-embassy-of-ukraine-in-germany-july-4th/ ⁵ https://alcor-bpo.com/recruitment-news/what-you-should-know-before-hiring-software-developers-in-ukraine/

2. UKRAINIAN IT TALENTS POOL OVERVIEW: SKILLS & SALARIES

It's impossible to talk about the IT market of Ukraine without mentioning its driving force – tech talents. While there is a deficit in IT specialists throughout the world, Ukraine is flourishing with its growing number of tech graduates – bringing up more than 16,000 new coders each year. According to BRDO⁶, these figures are expected to increase to 37,400 IT specialists each year by 2030. The largest community of developers in Ukraine, DOU, states that there are about 200,000 Ukrainian tech phttps://dou.ua/lenta/articles/jobs-and-trends-2019/rofessionals⁷, and 67,000 of them work in the Top 50 largest Ukrainian companies. In terms of talent dislocation, there are three Ukrainian cities with the largest number of software developers – Kyiv (42%), Lviv (15%), and Kharkiv (12%), making up 69% of all IT professionals of the country.

3. UKRAINIAN DEVELOPERS' HARD AND SOFT SKILLS

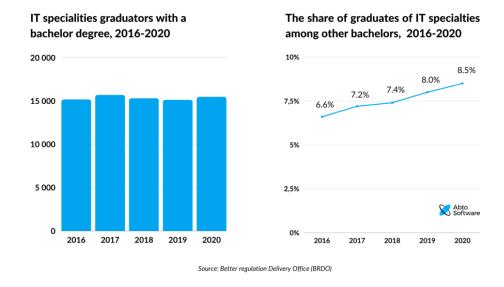
What really makes the Ukrainian IT developers exceptional is their high level of tech education. It provides students with deep knowledge and integral skills, which allows graduates to be flexible enough to adjust to fast-pacing tech trends. In terms of programming languages, JavaScript⁸ is considered number one in the Ukrainian IT community. Recently, Java (14.7%), C# (14.3), Python (12.1%), and TypeScript (6.9%) have been gaining significant popularity among tech specialists as well. Living in an environment where IT is constantly developing provides Ukrainian software developers with lots of opportunities for gaining multilateral expertise.

⁶ <u>https://brdo.com.ua/top/do-2024-roku-kilkist-it-fahivtsiv-v-ukrayini-zroste-na-23-doslidzhennya-brdo/</u>

⁷ https://dou.ua/lenta/articles/jobs-and-trends-2019/

^{*} https://dou.ua/lenta/articles/language-rating-jan-2021/

Education level



First, let's take a look at higher IT education tendencies inside the country.

The number of bachelor's graduates has been stable over the last five years with an <u>average of 16.2</u> <u>thousand per year</u>⁹. Despite the growing popularity of the profession, we can't see a steep increase in the amount of new IT professionals. The reason is quite simple. The General number of all graduates in the country in 2020 was only 191 thousand, which is 21% less than in 2016.

Nonetheless, the share of bachelors in IT specialities in the overall structure of graduation tends to increase. In 2020, it was over 8.5% with an average growth rate of 1.9%. It affects overlap, which ensures a stable number of graduates.

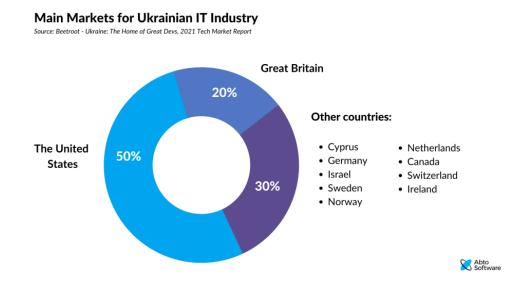
On the other hand, students can now gain practical skills while studying. It is closely related to internship opportunities which the IT industry is providing now. Even more, in 2020, the IT department of the Kyiv-Mohyla Academy merged with the EASE association¹⁰. It proves that Ukrainian specialists get strong tech practice. As for now, more students choose not to study for two more years to get a master's degree and prefer to seek practice inside IT companies, so 54%¹¹ of graduates with bachelor's degrees continue studying.

⁹ https://en.brdo.com.ua/news/the-number-of-it-specialists-in-ukraine-will-increase-by-23-by-2024-brdo-analysis/

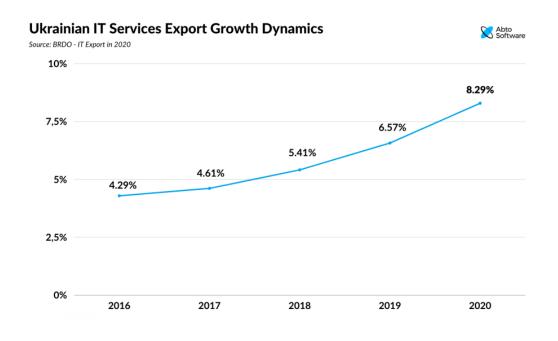
¹⁰ <u>https://it-ease.com/en/partners/6</u>
¹¹ <u>https://brdo.com.ua/wp-content/uploads/2021/02/Analiz_IT_osvity_u_vyshah_Ukrai-ny_Print.pdf</u>

5. THE MAIN MARKETS OF IT EXPORT

The main clients of the Ukrainian IT industry are the United States and Western Europe with Great Britain and European Union countries. However, it is obvious that the <u>USA remains Ukraine's largest</u> <u>R&D partner¹²</u> (45% of research companies), even if the statistics differ in other researches. Although, the geography of Ukraine's main markets is about to expand and become more diverse.



The growth of the Ukrainian IT market correlates with the growing number of IT services export growth dynamics.



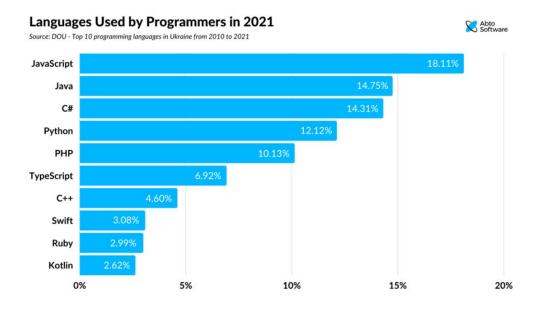
¹² https://ain.capital/2021/04/07/ukrainian-tech-market-overview-2021/

6. TECHNICAL SKILLS

Data provided by Coursera <u>Global Skills report for 2021</u>¹³ shows that Ukraine took 7th place in the level of Technology knowledge in the world. Moreover, Ukrainian developers are among the leaders of European countries by two parameters – Technology and Data Science.

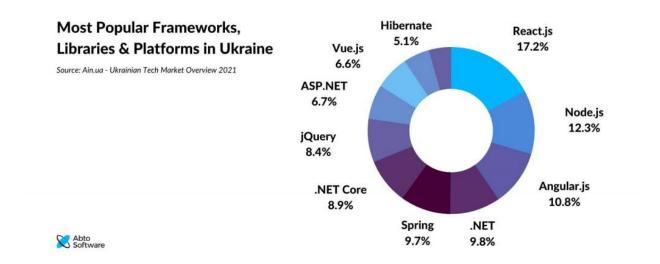
As for Data Science expertise, the IT industry in Ukraine closes the top 20 countries.

And what about the programming languages software developers are using the most? Well, in 2021 JavaScript is leading, Java is in second place, and C# took the third one, <u>according to DOU¹⁴</u>.

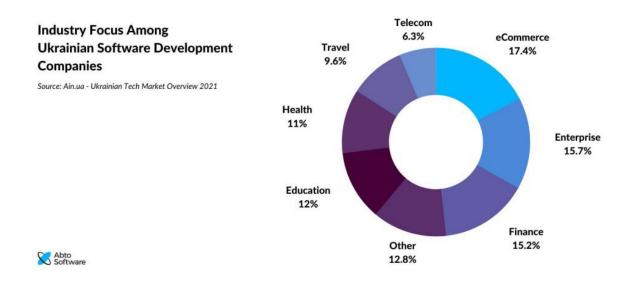


 ¹³ <u>https://www.coursera.org/skills-reports/global</u>
 ¹⁴ <u>https://dou.ua/lenta/articles/top-10-lang-in-ukraine/</u>

The top 5 frameworks¹⁵ in the Ukrainian IT market are React.js, Node.js, Angular.js, <u>.NET</u>¹⁶ and Spring.



The IT industry¹⁷ in Ukraine focuses mostly on <u>eCommerce¹⁸</u>, <u>Enterprise¹⁹</u>, and <u>Finance²⁰</u> software products development. Still, the Education and <u>Healthcare²¹</u> industries are also among the most popular.



IT & DIGITAL MARKET IN UKRAINE

¹⁵ https://ain.capital/2021/04/07/ukrainian-tech-market-overview-2021/

¹⁶ https://www.abtosoftware.com/net-development-company

¹⁷ https://ain.capital/2021/04/07/ukrainian-tech-market-overview-2021/

¹⁸ https://www.abtosoftware.com/portfolio/web-applications/ecommerce-platform-adjustments-for-an-international-company

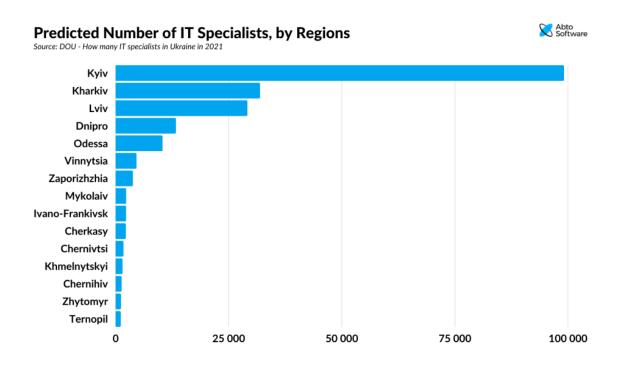
¹⁹ https://www.abtosoftware.com/blog/dot-net-modern-enterprise-architecture

²⁰ https://www.abtosoftware.com/portfolio/industries/banking-finance

²¹ https://www.abtosoftware.com/blog/where-to-find-hire-the-best-healthcare-software-developers

7. NUMBER OF UKRAINIAN IT INDUSTRY SPECIALISTS

The numbers of working specialists differ in different researches and vary from 200 000²² to 220 000 experts. The majority of them is concentrated in cities with the biggest IT schools: Kyiv, Kharkiv, Lviv, Dnipro and Odesa.



In the Global Skill Report 2022, Ukraine ranked eighth in terms of technological skills.

Ukrainians were recognized as one of the best in the world in working with computer networks, databases, operating systems, security engineering, software engineering, computer programming, web development, mobile device development.

8. DIGITAL COUNTRY

Digitalization has become Ukraine's flagship topic and the state priority during the last two years. Taking the lead internally, the Ministry of Digital Transformation has the ambition to make Ukraine a world champion in being digital, and we are already the first ones who can use digital IDs with absolutely no internal restrictions. Here is how Ukraine moves forward with the concept of building a digital state and becoming the world's leading country in terms of providing services for citizens and businesses.

Diia is a new level of interaction between the state and citizens: convenient, invisible, humane. It is the only brand that combines a mobile application with access to citizens' digital documents, and a

²² <u>https://www.atlanticcouncil.org/blogs/ukrainealert/ukraines-booming-it-sector-defies-the-coronavirus-crisis/</u>

single portal of public services for the population and business. The main goal is to make 100% public services available online.

As of the 1 of April 2021, almost 4.5 million Ukrainians have updated the Diia 2.0 application. There are more than 3.6 million users of the Diia portal by now – over 50 government services are available online. Mobile application Diia 2.0 allows Ukrainians to access 9 digital documents (ID card, foreign biometric passport, student card, driver's license, vehicle registration certificate, vehicle insurance policy, tax number, birth certificate, IDP certificate) and 12 services in total. Just recently, Ukraine has become the first country with a digital ID that is valid and can be used everywhere within the country and the fourth in Europe to launch a digital driving licence. All digital documents in Diia now have the same legal force as their plastic or paper counterparts. Using the Diia app Ukrainians can also share digital copies of the documents, and pay debts or fines.

9. USED MATERIALS AND USEFUL LINKS:

https://www.abtosoftware.com/blog/ukrainian-it-industry-key-facts: https://alcor-bpo.com/your-own-rd-office-news/ukrainian-it-industry-market-overview-for-2022/ https://ukraine.ua/invest-trade/digitalization/

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