MOBILUNITY

Ukrainian Development
Western Management
Global Delivery

The Ukrainian Data Scientist:

Insights from Mobilunity's experts
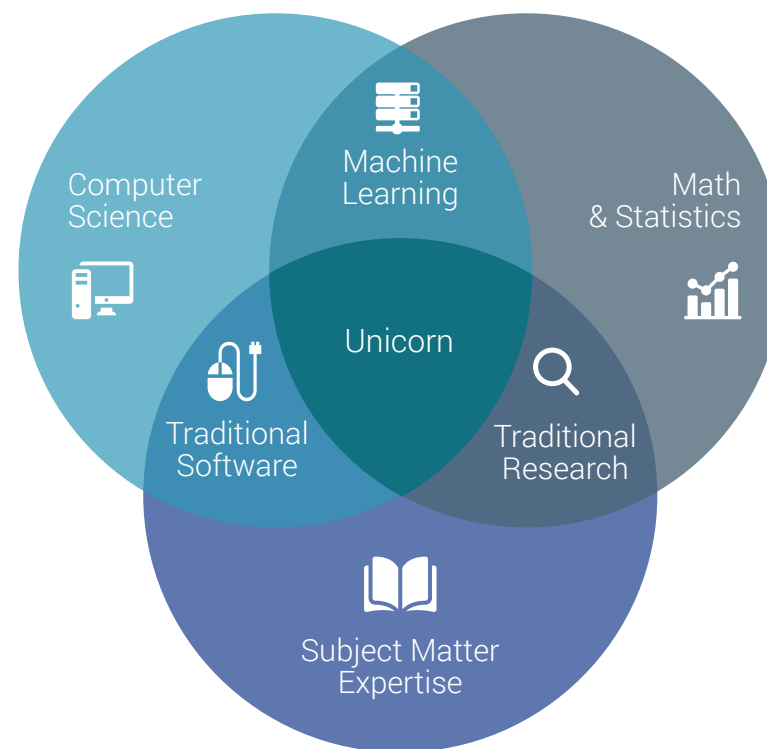
Data Scientists in Ukraine

Data Scientists are professionals responsible for processing and analyzing large amounts of data. Data Science is the umbrella term that includes different fields, such as big data analysis, machine/deep learning, neural networking, artificial intelligence as well as simple procession of diverse data sets.

20k

In January 2019 the total number of Data Scientists in Ukraine reached up to 20,000 specialists, coming from different regions of the country, all with varying levels of experience, and diverse skill sets.

Data Scientists required skills

Computer Science

Machine Learning

Math & Statistics

Unicorn

Traditional Software

Traditional Research

Subject Matter Expertise

Data Scientists in Ukraine:
Level of experience and Skill

Compared to other IT specialities in Ukraine, Data Scientists have not been around as long, however the profession has been consistently growing. In 2014 the role of "Data Scientist" was considered a rare and uncommon specialization in Ukraine, but by the beginning of 2019, that role has grown in popularity. The current state of the job market shows that 32% of all candidates are beginners with less than 1 year of commercial experience, with 25% of those candidates being considered senior Data Scientists as in having at least 5 years of commercial experience in the field. The remaining 43% consists of Mid level specialists that tend to hover around having 2-4 years of experience.

Data Scientists in active search, by level of experience, January 2019

32.1%	18.4%	13.2%	11.6%	24.7%
less than 1 year	1-2 years	2-3 years	3-5 years	more than 5 years

>> Mobilunity Insight <<

Data Science in Ukraine has become a more attractive field over the past couple of years. Some Ukrainian universities have even recently launched AI Development departments. Within 5 years Ukraine will have plenty of young graduates ready to work as Data Engineers or invest their time, and efforts into the development of the AI field. At Mobilunity we are receiving more and more requests for big data engineers. Since we have access to a large pool of talent, it takes approximately 3 to 5 weeks for our specialists to find the right fit, assess both the hard and soft skills of all candidates and bring the best value to our clients.

Elena Rubezhova, Recruiting Team Lead at Mobilunity

Data Scientists in Ukraine:
Geographical distribution and Readiness to relocate

To start the new year, over 60% of Data Scientists, who were actively searching for career opportunities, were from Ukraine's Capital city of Kyiv. An additional 17.4% of those Data Scientists were located in Lviv.

Additionally, 17% of Data Scientists are ready to relocate from other parts of Ukraine to its Capital city of Kyiv which has consistently been the most attractive destination for their relocation. Even though the majority of Data Scientists want to stay in Ukraine at least for some time, 30.5% of them are ready to move abroad, if needed.

Data Scientists divided by cities

17.4%
62.6%
4.7%
4.7%
2.1%

■ Lviv   ■ Kyiv   ■ Kharkiv   ■ Dnipro   ■ Odessa

Data Scientists readiness to relocate, January 2019

69.5%
Not ready to relocate

30.5%
Ready to relocate
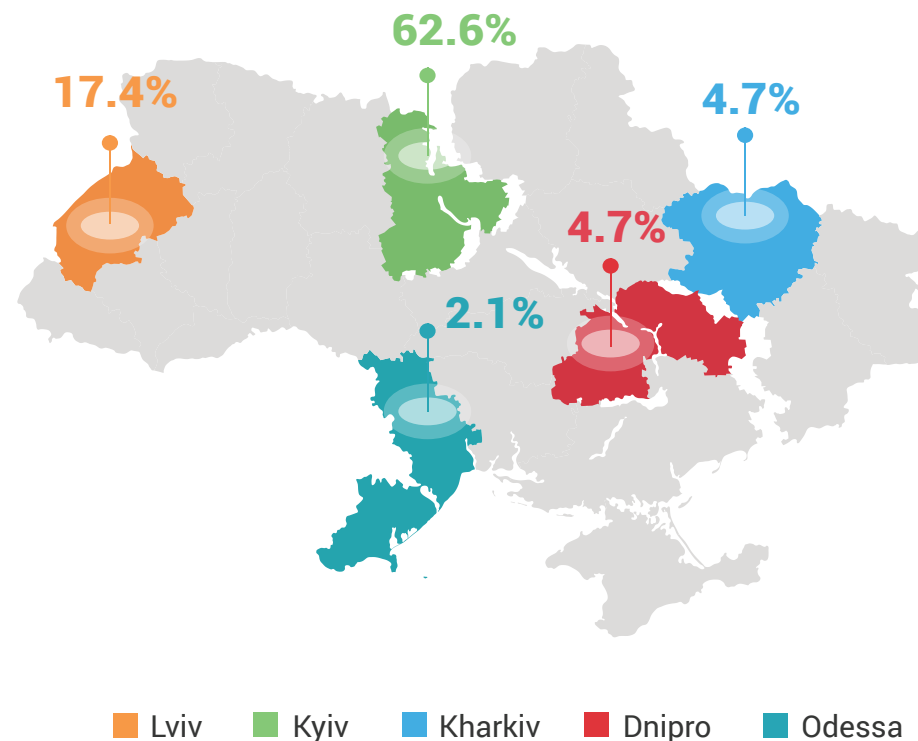
Data Scientists in Ukraine: **Market need**

Data Scientists market need based on location, January 2019

The market need for Data Scientists has risen dramatically over the last year, which is evident by the amount of demand for these specialists in Kyiv. Kyiv has by far the highest demand for Data Scientists, accounting for nearly 70% of vacancies in January, 2019. Most of the demand come from Western Europe or North America, and it is primarily met by various outsourcing companies or dedicated teams providers. It is noteworthy that although most specialist are located in Kyiv, with a few other cities having less than 10 percent of the market share, that some companies also offer relocation to Data Scientists in order to have them join their head office. The most popular destinations for relocation tend to be Latvia, Estonia, the Netherlands and Cyprus.

Relocate	Odesa	Lviv	Kyiv	Kharkiv	Vinnytsia
4.8%	3.2%	6.3%	68.3%	11.1%	3.2%
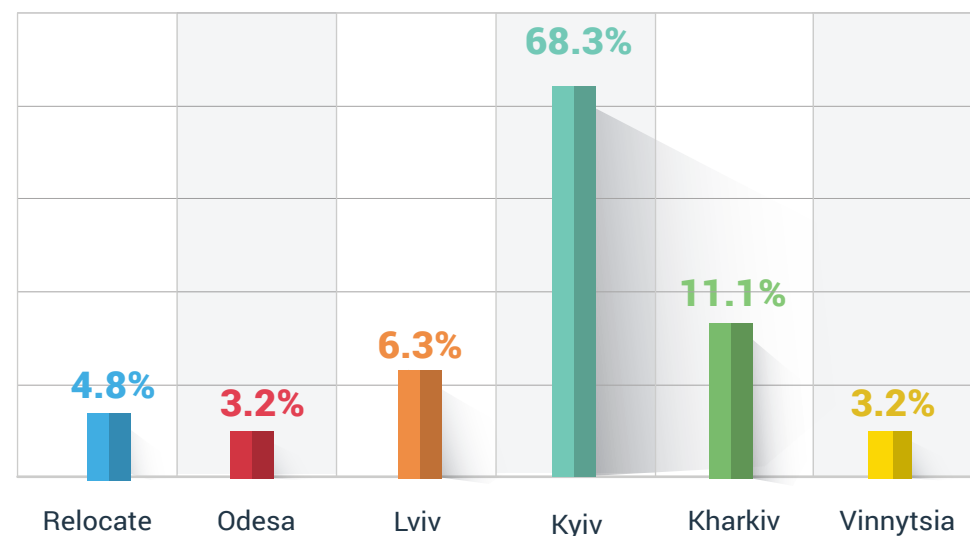
>> Mobilunity Insight <<

It seems clear that Kyiv will continue to be a destination for companies to augment there Data Science teams. As these projects are normally very large and complex, Kyiv, being the largest IT hub in Ukraine has the best ability to fulfill the needs of clients. Being based in Kyiv, Mobilunity benefits from the large talent pool and market share of Data Scientist that the city maintains.

Cyril Samovskyi, CEO at Mobilunity

Data Scientists in Ukraine:
Technical and Soft skills

Data Scientists need to have a plethora of talents as they are tasked with the responsibility of spearheading large technical initiatives. Therefore they should be proficient in Applied Mathematics, Physics or Cybernetics.

In terms of technology stack, a good Data Scientist should be experienced in:

- Big Data analysis
- Artificial Intelligence and neural networking
- Machine Learning and Deep Learning
- Natural Language Processing (NLP)

Data Science programming languages in Ukraine, January 2019

25.3%	45.3%	6.8%	22.6%
Python and R	Python only	R only	Other

Additionally, Data Scientists should be able to use R as it is considered to be the best technology for operating with data and mathematical functions.

Although only 6.8% of Data Scientists in Ukraine use R as a programming language, Python has recently become a suitable alternative with 45% of candidates actively using it. An additional 25.3% of all candidates are well versed with both R and Python and the remaining 22% use less common languages, such as Java, C++, rarely JavaScript, Scala or Go.

Quite frequently, specialists turn to Data Science after studying and working as Software Engineers (Python, Java developers and others). In some cases, Data Engineers start with studying economic analysis, consequently switching to data analysis and development. A degree in Economic Science and/or Economic Cybernetics is a solid background for learning data science and working in this field.

As most projects where Data Scientists are needed originate from Europe or North America, it definitely requires both Soft skills, as in Cultural understanding and English proficiency as well as the technical expertise to meet the high standards set for Western based corporations. Over 85% of Data Scientists in Ukraine speak English at an Intermediate level or higher.

Knowledge of English among Data Scientists in Ukraine, January 2019

4.7% Elementary

8.4% Pre-Intermediate

34.2% Intermediate

30.5% Upper-Intermediate

22.1% Advanced
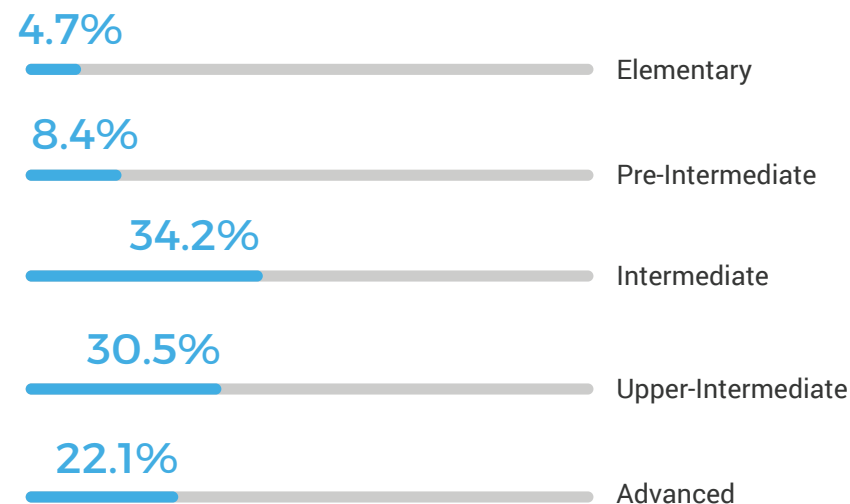
>> Mobilunity Insight <<

Here, at Mobilunity, we test the level of English during the first interview with Data Science candidates. Our clients rarely request English language certificates, but the ability to speak and write in English, at a high level is a must. Additionally, we provide in-house English language courses for those who are in need of improving their level of English. We make sure that no language barriers interrupt effective work and communication.

Eliza Kravchenko, Resource Manager at Mobilunity

Data Scientists in Ukraine: **Hiring process**

As Data Scientists are unique, so is the hiring process for them in comparison to other developers that are more commonly found on the market. Although the questions asked during technical interviews, and test assignments tend to be a bit different, overall the process of sourcing the right candidate still remains familiar to general considerations. In order to hire a data professional no matter the seniority, a client should always have a thorough HR vetting process with a candidate that includes:

01 Conducting a motivational interview (discuss previous job experience, ability to develop professionally and personally, new job expectations)

02 Commiting to a Technical interview (check their knowledge of statistics, mathematics and applied skills of data gathering and operating)

03 Having the candidate perform a Test assignment

Test assignments for Data Scientists are usually quite extensive, taking up to 6-8 hours to complete. Most of these tasks require creating a tool for gathering certain amounts of data (parser), analyzing the data array, and operating it in a certain way accordingly to the task requirements.

If a project requires Junior or Middle specialist, the companies usually hire relatively less experienced specialist who agree to join the project even without trendy technology stack in order to gain more skills.

Sources used: LinkedIN.com   Djinni.co   Dou.ua

>> Mobilunity Insight <<

Our company does not guarantee to find the top Data Science specialists on the market, but we make sure that they are the right fit for our clients. We conduct in-depth interviews, check their skills set, we give them complex testing assignments. Sometimes it takes up to 8 hours (a whole business day) to complete that, and we are willing to compensate the time spent. All is done to bring the best value to our clients.

Elena Rubezhova, Recruiting Team Lead at Mobilunity

Ukrainian Development
Western Management
Global Delivery

MOBILUNITY

WE ARE MOBILUNITY

Ukrainian Developers, with western Management, that guarantee global Delivery

sales@mobilunity.com
www.mobilunity.com

Mobilunity is a global provider of Ukrainian based, dedicated development teams. We believe that the key to any successful endeavour lies in the people that commit themselves to it. Therefore we leverage the relationships that we have locally, to unite companies from around the world, with the very best in Ukrainian development. All done by investing in people, ensuring employee retention, effective teamwork and advanced performance.

At the core of our business lies what we call the
3Rs of Nearshoring

2R
Recruitment

1R
Relationships

DEDICATED DEVELOPMENT TEAM

3R
Retention

Contact us to learn more how to build a successful dedicated development team!

Get in touch

© Mobilunity, 2010-2019