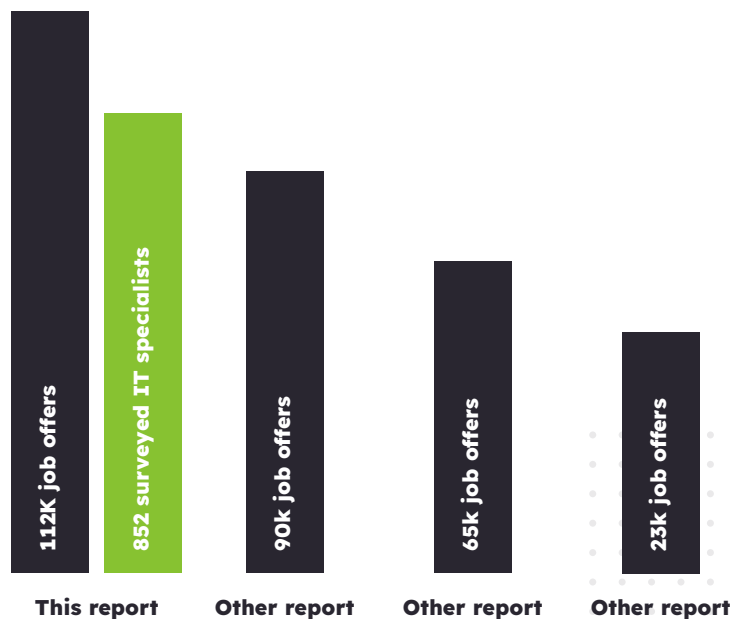


REPORT
**PREPARE FOR
THE IT RECRUITMENT
PROCESS IN 2022**

IT JOB MARKET IN POLAND

The only IT industry study in Poland based on 2 data sources

- > 112 000 job offers
- > 852 surveyed IT specialists



Unique Information

- The expected wage increase when changing jobs is on average 20%.
- Every second respondent working on a B2B contract indicated that the employer offers paid days without the need to provide services ("paid leave").
- Every third IT specialist receives a bonus once a year.
- 71% of IT specialists are open to changing jobs.
- 44% of IT specialists communicate at work mainly in English.

Introduction

The global demand for people with technical skills is growing day by day. Hence, there are also more and more challenges in hiring them.

For this reason, we decided to analyze 112 000 job offers and 852 responses left in our survey. **We believe that we have obtained interesting and often non-obvious conclusions** that may turn out to be very useful for both employers and IT specialists.

Is the data regarding the number of 100% remote job offers surprising? What specialists are the most sought-after and what is the relation of salaries presented in job offers to the ones actually received? What are the candidates' opinions on the length of recruitment processes and how to best verify their competencies?

This report contains data answering these and other questions that bring valuable knowledge about the current situation in the Polish IT market.

Read the report, draw the right conclusions, apply them and **achieve recruiting successes in 2022! :)**



Dominik Jurek

CEO Next Technology Professionals



Piotr Jurek

COO Next Technology Professionals

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Methodology

The report is based on **112 000 job offers**, which in 2021 could be found on itradar.io - an aggregator of job ads from 4 of the most popular portals: Pracuj.pl, No Fluff Jobs, Bulldogjob and Just Join IT. Thanks to the data unified by the website, we were able to make our comparisons and look at the offered salaries, as well as the required skills, depending on the job title. Additionally, in the period between 9th September 2021 and 2nd December 2021, we conducted an anonymous survey in which we collected **852 responses** from active IT employees at all seniority levels from all over Poland.

In the report, we present the offered salaries, which were included in the job advertisements. For the purposes of aggregation, we do not divide the salaries from offers according to the type of contract and we present the arithmetic mean of the extreme values of the ranges (the lowest and the highest).

Both in offers and surveys, the amounts for the B2B contract are expressed in PLN net on the invoice without VAT, while for the employment contract as gross amounts.

Report's partner:



Key insights

1

In 44% of job offers there was a possibility of 100% remote work.

2

50% of respondents want to work in a hybrid model, 48% fully remotely, and only 2% fully from an office.

3

Most job offers in 2021 were addressed to Mids, i.e. people with 2-4 years of professional experience.

4

Regardless of the type of contract, Seniors and Experts receive higher salaries than those presented in job advertisements.

5

According to the data collected from job advertisements, people who work with: Google Cloud Platform, Kubernetes and microservices, could count on receiving the highest earnings.

6

Programming languages such as Java, JavaScript and Python appeared most frequently in job offers.

7

Experts (people with over 10 years of experience) expect the highest salary increase when changing jobs - 28% on B2B, 27% on employment contract.

8

The most sought-after specialists are: Quality Assurance (QA) Engineer, Frontend Developer, Fullstack Developer, DevOps Engineer, Mobile Developer and Data Scientist.

9

IT specialists want to participate in recruitment processes consisting of a maximum of 2 stages.

10

The most preferred form of competency verification among IT specialists is a technical interview.

11

63% of IT specialists indicated the possibility of remote work as the most important employee benefit.

1.1. The most popular voivodeships and cities

The largest number of offers in 2021 were with locations assigned to the following voivodeships: Mazowieckie (35%), Małopolskie (16%) and Dolnośląskie (13%). Accordingly, among the cities with the highest number of job offers on the podium were: Warszawa (34%), Kraków (16%) and Wrocław (13%). The demand for IT specialists is in alignment with their place of residence, as the respondents most often indicated these areas.

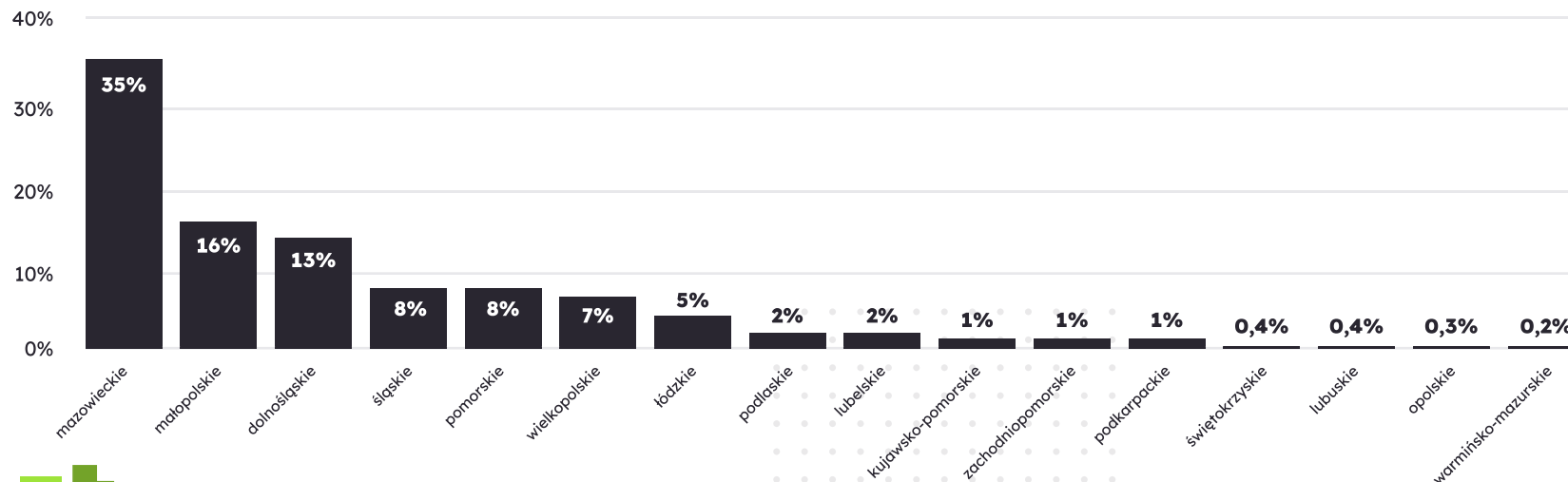


INTERESTING FACT:

In 2021, every third offer addressed to people working in IT was from a company based in Warsaw.

Number of job offers divided by voivodeships

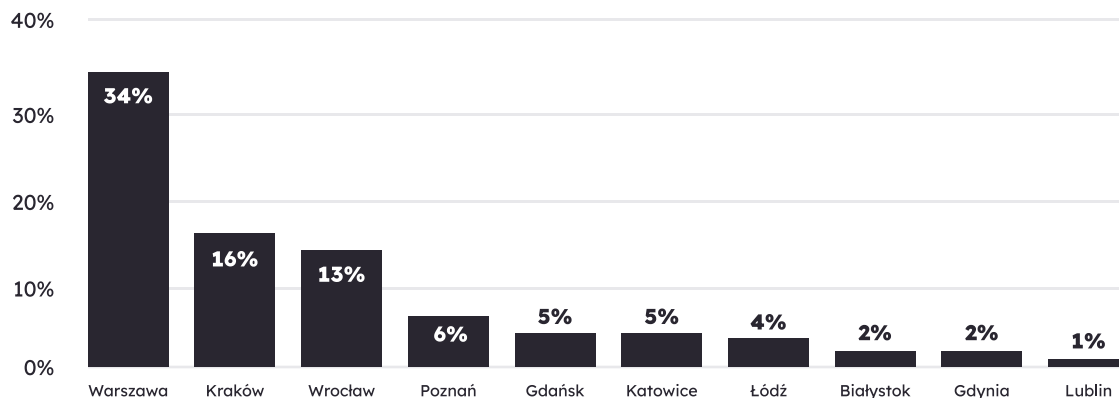
Source: Own elaboration based on data from itradar.io for 2021



1.1. The most popular voivodeships and cities

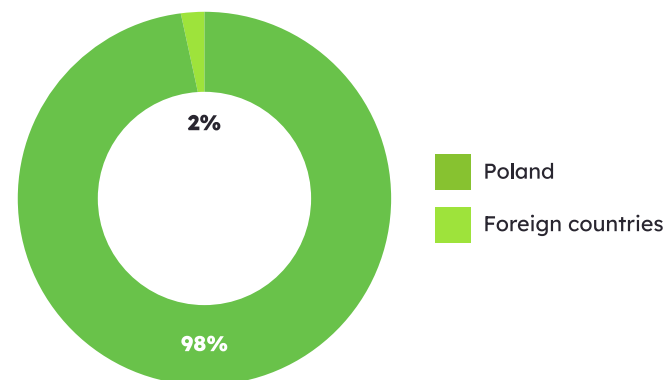
10 cities with the biggest number of job offers

Source: Own elaboration based on data from itradar.io for 2021



Permanent place of residence of the respondents

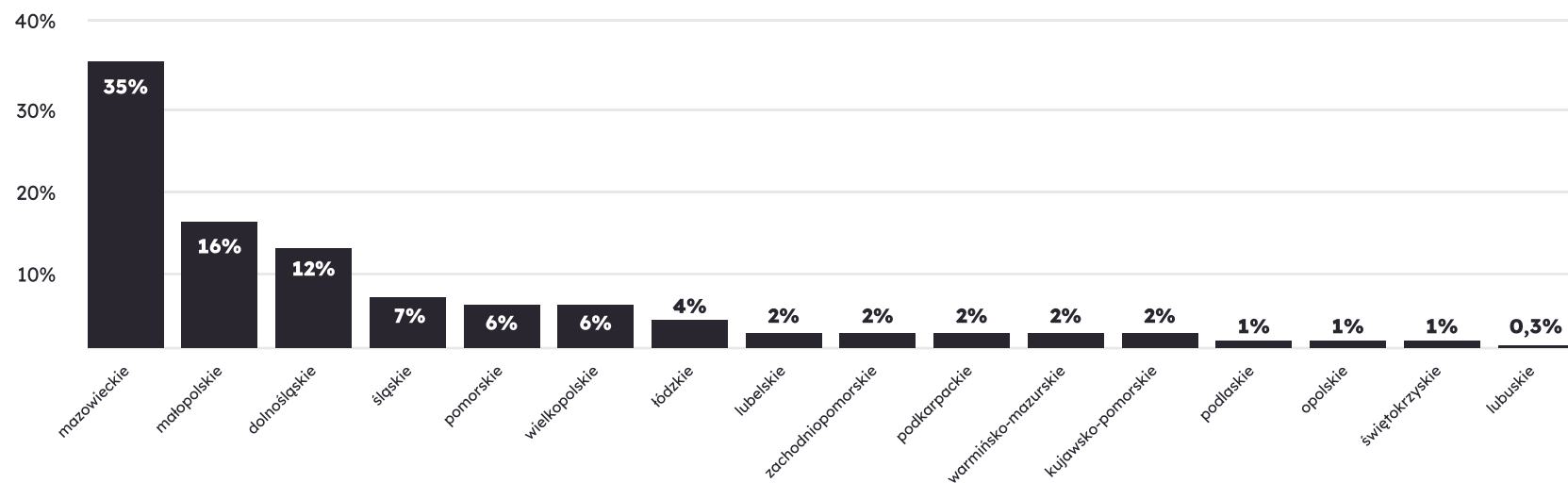
Source: Own elaboration based on data from an online survey conducted between September and December 2021



1.1. The most popular voivodeships and cities

Location of respondents (voivodeships)

Source: Own elaboration based on data from an online survey conducted between September and December 2021

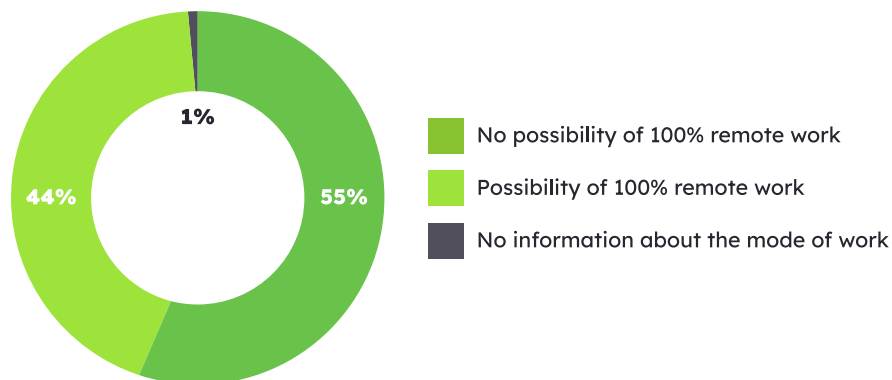


1.2. Remote work

Despite the pandemic and the resignation from coming to the office every day in many companies, 55% of offers still did not include the possibility of working 100% remotely. As the results of our research show, 50% of specialists prefer to work in a hybrid model, while a little less, 48% chose 100% remote work as the optimal model. Only 2% of the respondents prefer working 100% from an office.

Possibility of 100% remote work in job offers

Source: Own elaboration based on data from itradar.io for 2021



EXPERT'S COMMENT:

"For remote work to be effective and asynchronous, trust is essential. This is why it cannot be done overnight. If the team feels that their supervisors or project managers are organizing meetings just to engage in micromanagement, they will not be held responsible for their work. But these meetings won't end unless the tech team has earned their trust."



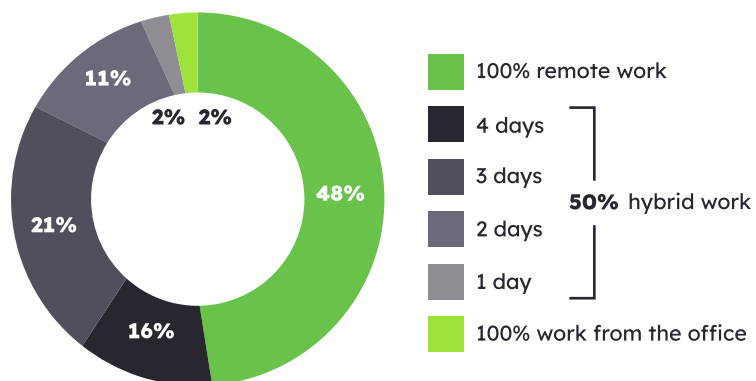
Ola Kunysz

Software Development Engineer, author of the book „Kierunek jakość. Jak unikać błędów w projekcie” /
"Direction: quality. How to avoid errors in the project"

1.2. Remote work

Optimal number of remote work days per week

Source: Own elaboration based on data from an online survey conducted between September and December 2021



According to the data we have collected from the survey, it appears that in the hybrid model the most preferred option is working remotely for 3 days and for 2 days from the office.

EXPERT'S COMMENT:

"At CouponFollow, remote work is natural from the very beginning. Despite this, for the first years, the dominant form of work in the IT team was working from our office in Toruń. On the other hand, from the beginning of 2019, we employ new members all over Poland, as well as abroad. Each form of work has its advantages, but the challenge is to combine them within one project team. The implementation of the remote first approach, focusing on asynchronous communication and over-communicating, as well as mindfulness and intentionality in social issues and building relationships in the team are, in our opinion, the key elements of a successful employment strategy."



Marcin Daczowski

Principal Engineer, [CouponFollow.com](https://couponfollow.com)



INTERESTING FACT:

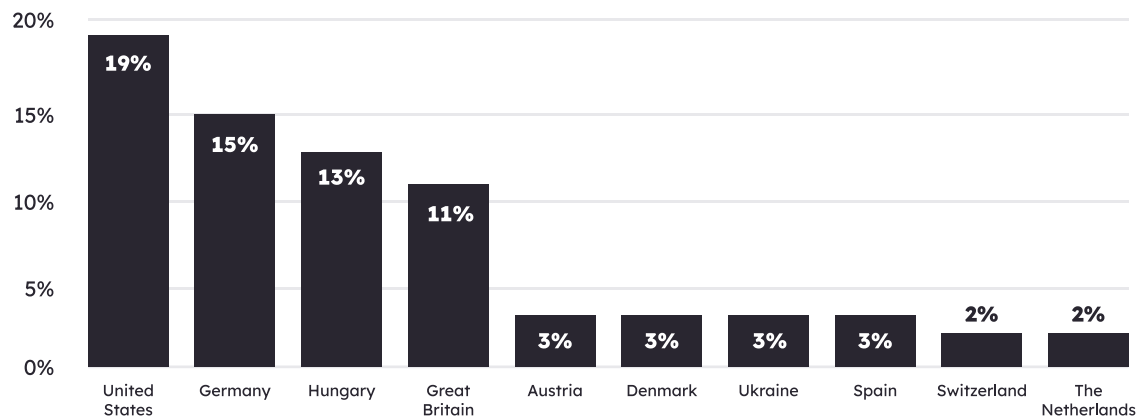
By offering 1 day of remote work a week, employers meet the expectations of only 2% of candidates.

1.2. Remote work

We also had access to 6 500 offers from abroad that appeared on job portals in 2021. Polish IT specialists who can work 100% remotely were most often sought by companies from the United States, Germany, Hungary and Great Britain.

Share of countries in the total number of foreign job offers published on Polish portals in 2021

Source: Own elaboration based on data from itradar.io for 2021



INTERESTING FACT:

The possibility of remote work was most often indicated as the most important benefit offered by the employer - this option was chosen by 63% of the respondents.

1.3. Seniority level

In the IT industry, the use of the words "Junior/Mid/Senior" to describe the level of seniority is the subject of many heated discussions, as it can be very subjective. However, in order to systematize the data, we decided to use the division presented below, both in the survey and in the report itself.



Trainee - currently on internship



Junior - up to 2 years of professional experience



Mid - 2 - 4 years of professional experience



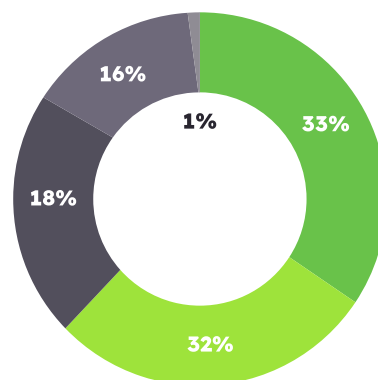
Senior - 4 - 10 years of professional experience



Expert - over 10 years of professional experience

Seniority level of the respondents

Source: Own elaboration based on data from an online survey conducted between September and December 2021



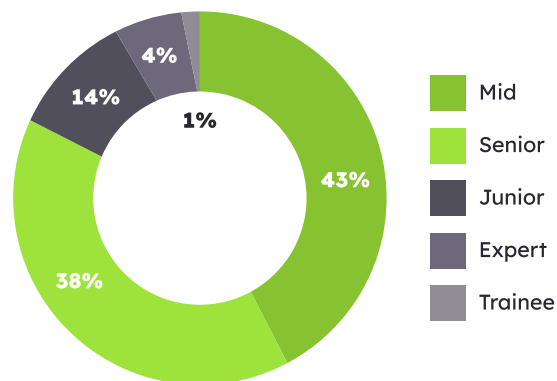
- Mid - 2 - 4 years of professional experience
- Senior - 4 - 10 years of professional experience
- Junior - up to 2 years of professional experience
- Expert - over 10 years of professional experience
- Trainee - currently on internship

1.3. Seniority level

Many job offers included two, sometimes even three levels of seniority level; however, in 2021 in Poland, the greatest number of job offers were addressed to people referred to in the industry as Mids (43%). The second most sought-after group were Seniors (38%), and the third - Juniors (14%).

Seniority level in job offers

Source: Own elaboration based on data from itradar.io for 2021



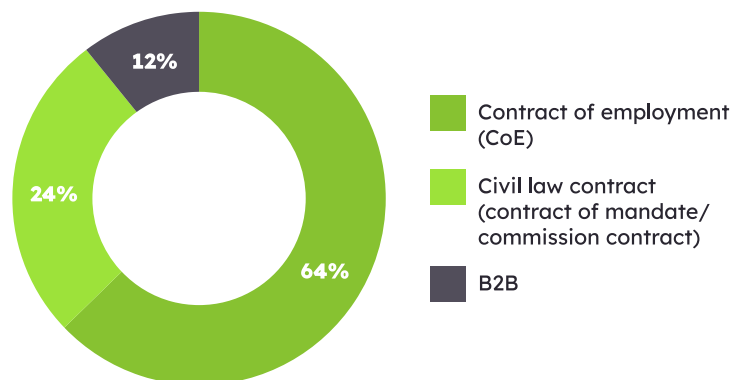
1.4. Relationship between seniority level and type of contract

In the IT industry, the type of contract is largely related to the level of professional experience. 64% of Juniors and 63% of Mids indicated that they were employed under a contract of employment. In turn, 55% of Seniors and 54% of Experts, whose earnings are higher, most often cooperate on the basis of a B2B contract.

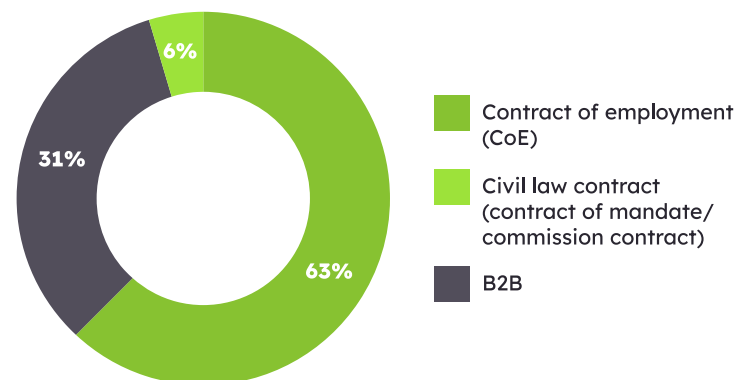
Seniority level and the type of contract

Source: Own elaboration based on data from an online survey conducted between September and December 2021

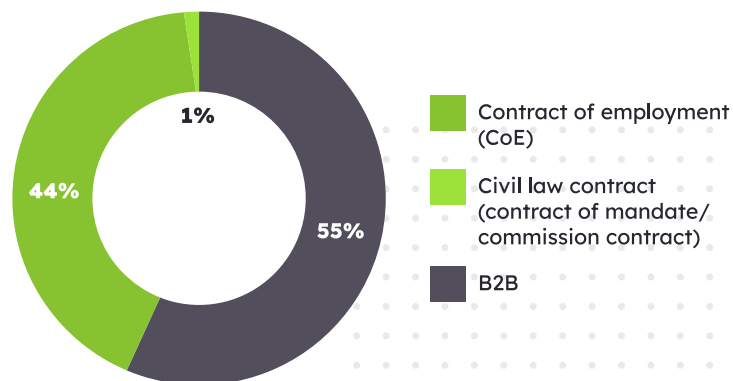
Junior



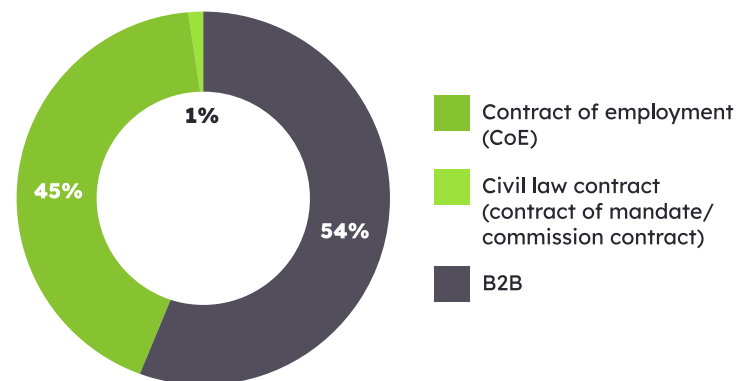
Mid



Senior



Expert

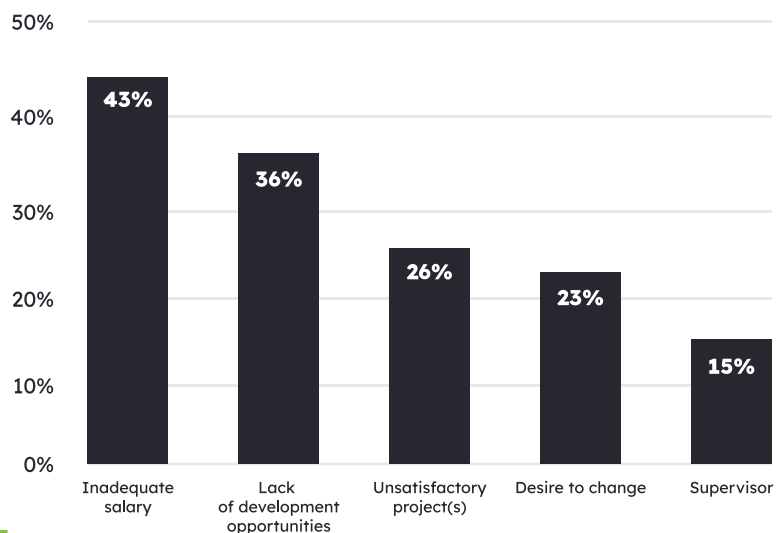


2.1. Current salary

According to 43% of respondents, the main reason for the last change of job was “inadequate salary”. In second place is the lack of development opportunities, while 23% of IT specialists want to change jobs for... the change itself.

Top 5 reasons for the last job change

Source: Own elaboration based on data from an online survey conducted between September and December 2021



INTERESTING FACT:

In 2021, visible salary ranges were included in 44% of job offers.

EXPERT'S COMMENT:

”Polish IT specialists were - long before the pandemic - and are still appreciated internationally. Therefore, it is not a big surprise of such a dynamic development in direct contract cooperation with companies from Western Europe, the UK or the Silicon Valley. The location from which the work is performed does not matter anymore. From the company’s perspective, it is important to have a good Internet connection, presence at key meetings and reliable performance of the assigned duties. On the other hand, specialists themselves, already used to working remotely, began to notice additional advantages of such cooperation, such as, for example, much greater opportunities for development/promotion, constant improvement of the English language or much higher salary compensating for the shortcomings of standard employee benefits.

For this reason, among others, competition between Polish IT companies flooding candidates with job offers has increased. It should be taken into account that not every programmer feels comfortable on the contract, which, however, does not mean consent to paying non-market salaries or implementing uninteresting projects.”



Paulina Gawlicka

Founder of the consulting company [Gawlicka Consulting](#), certified MindSonar consultant, YouTuber and creator of the RNFL GROUP community (formerly Rekrutacja na FreeLansie). She has been active in the IT industry for 10 years, and in 2021 she was distinguished in the Strong Women in IT, Global Edition report.

2.1.1. Division into seniority level

In our study, we checked whether the rates in the offers match the actual earnings of IT specialists. Juniors' offered salary is in line with what they receive, regardless of the type of contract. The same situation applies to people employed on the basis of an employment contract, who are Mids. On the other hand, people working as Mids on B2B and Seniors and Experts (both on B2B and employment contract) can count on higher wages than those presented in the advertisements. It is also worth mentioning that IT specialists expect an average wage increase of **20%** with the change of job.

Average salary offered and received depending on seniority level

Source: Own elaboration based on data from an online survey conducted between September and December 2021 and itradario for 2021

Seniority level	Average min and max salary ranges in job advertisements*	Type of contract	Average received salary of respondents*	Received salary in relation to the ranges in the job advertisements
Trainee	3,048 zł - 4,251 zł	B2B	ND	ND
		CoE	ND	ND
Junior	5,227 zł - 8,165 zł	B2B	7,117 zł	✓
		CoE	6,671 zł	✓
Mid	10,200 zł - 15,605 zł	B2B	15,782 zł	↑
		CoE	14,486 zł	✓
Senior	13,705 zł - 20,123 zł	B2B	23,376 zł	↑
		CoE	21,063 zł	↑
Expert	17,351 zł - 24,611 zł	B2B	27,751 zł	↑
		CoE	24,996 zł	↑

*B2B: net on the invoice, excluding VAT

*CoE: gross

ND no data

✓ the received salary is within the specified range

↑ the received salary is higher than the maximum range

2.1.1. Division into seniority level

EXPERT'S COMMENT:

”The fact that more experienced people receive higher wages than those offered in job advertisements is the effect of supply and demand. In order to cope with the current demand, employers must hire people who will be quickly useful. At the same time, there are less and less of them on the market. So we have a strong demand and the need to compete for talent that is aware of the situation. This prompts experienced people to apply for higher rates and employers to go beyond the original budget assumptions.

It should be added, however, that for employers it is still a profitable activity.”



Krzysztof Kempinski

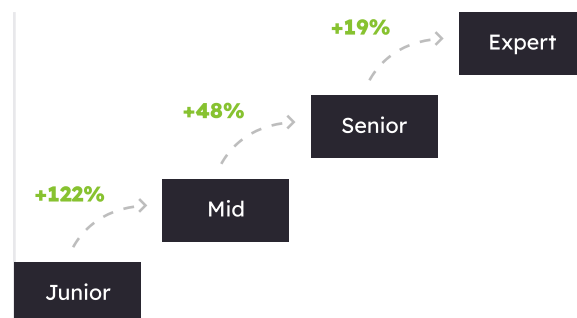
Developer. Podcaster.

2.1.1. Division into seniority level

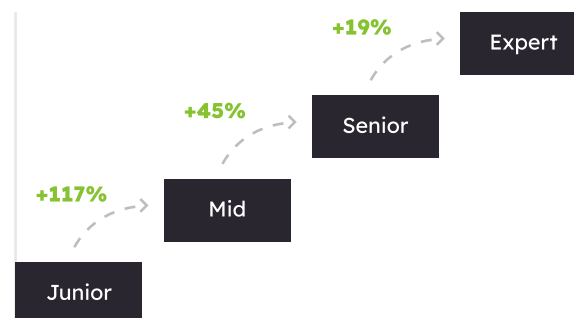
Growth dynamics of the received salary

Source: Own elaboration based on data from an online survey conducted between September and December 2021

B2B



CoE



*B2B: net on the invoice, excluding VAT

*CoE: gross

EXPERT'S COMMENT:

"Programming is a field that allows for continuous development and selection of many areas of interest. As can be seen from the research, development is also followed by an increase in salary. The perfect combination: development of skills and increasing earnings, therefore it is undeniable that more and more people are applying for Junior positions. Backend, frontend, testing and other IT directions can boast a high demand for specialists and this does not seem to end anytime soon."



Bartłomiej Kalka

Founder of javaready.pl and Software Engineer at Allegro.

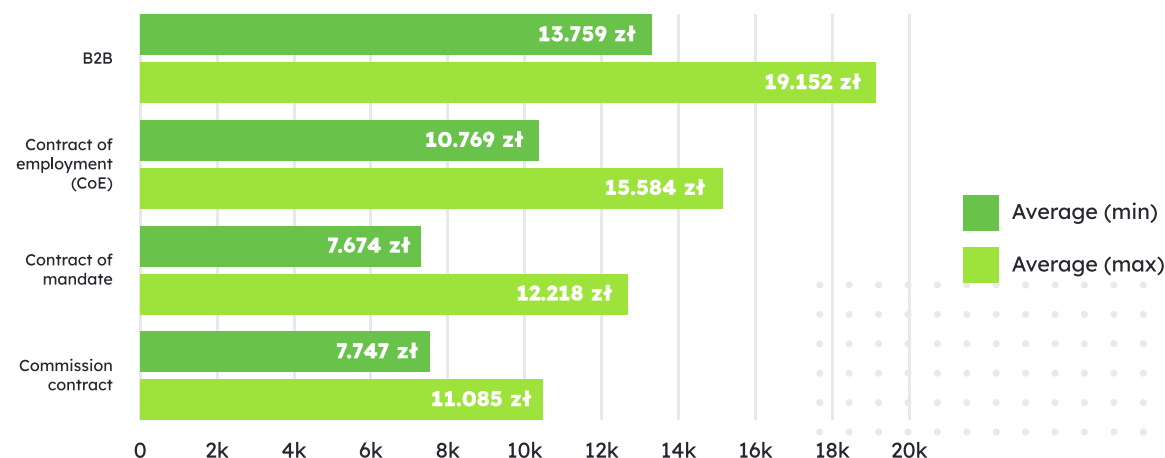
2.1.2. Division into the type of contract (B2B vs employment contract)

When analyzing the salaries appearing in the advertisements in terms of the type of contract offered, we can see that the highest salary ranges appeared in the advertisements where cooperation was on the basis of a B2B contract. In the case of salary based on an employment contract and a civil law contract, gross amounts are presented.

Every second respondent working on a B2B contract indicated that the employer offers paid days without the need to provide services ("paid leave").

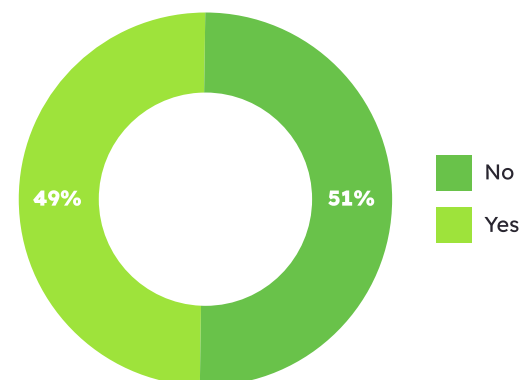
Average salaries offered depending on the type of contract

Source: Own elaboration based on data from itradar.io for 2021



Having paid days without the need to provide services ("paid leave") on a B2B contract

Source: Own elaboration based on data from an online survey conducted between September and December 2021



2.1.2. Division into the type of contract (B2B vs employment contract)

EXPERT'S COMMENT:

"Programmers' earnings are still a topic that raises a lot of excitement, especially among people outside the industry. Despite the awareness of the overall salaries, we do not quite know what it is. Programmers become entrepreneurs with the increase in salaries, and thus the amounts presented require the deduction of health insurance, tax, business costs and more.

This year's tax changes in Poland will certainly have a significant impact on the profits of a programmer running their own business, and perhaps many of them will change their form of employment to a traditional employment contract."



Dominika Czarniewska

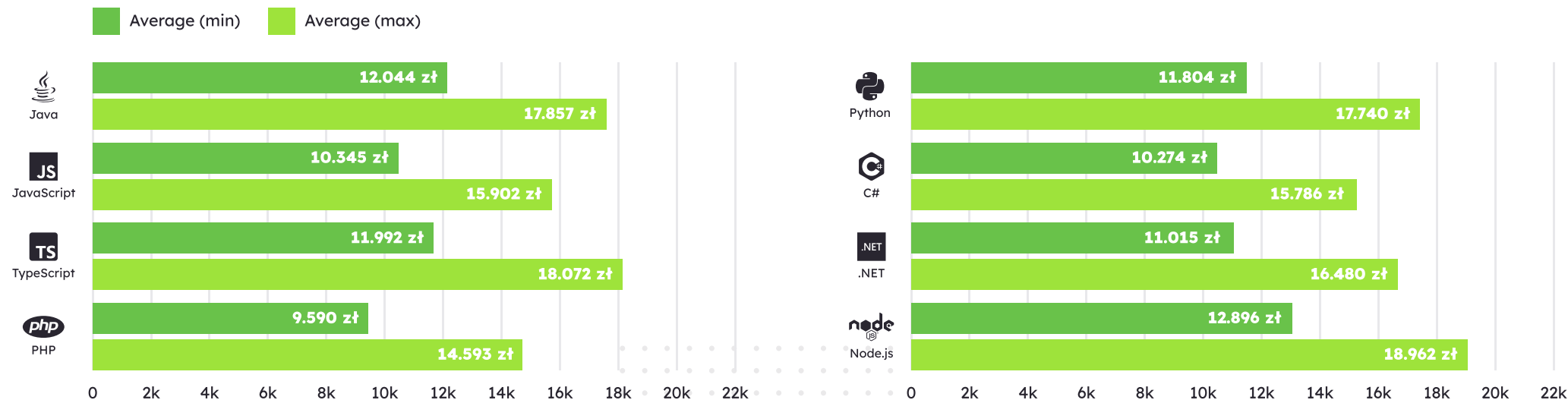
Front-end Developer on B2B

2.1.3. Division into technologies

According to the data collected from job advertisements, people who work with: Google Cloud Platform, Kubernetes and microservices, could count on receiving the highest earnings. GIT and SQL were mentioned in most of the advertisements, which means that they are the most basic skills required by employers regardless of the job title.

Average salaries offered depending on the skills

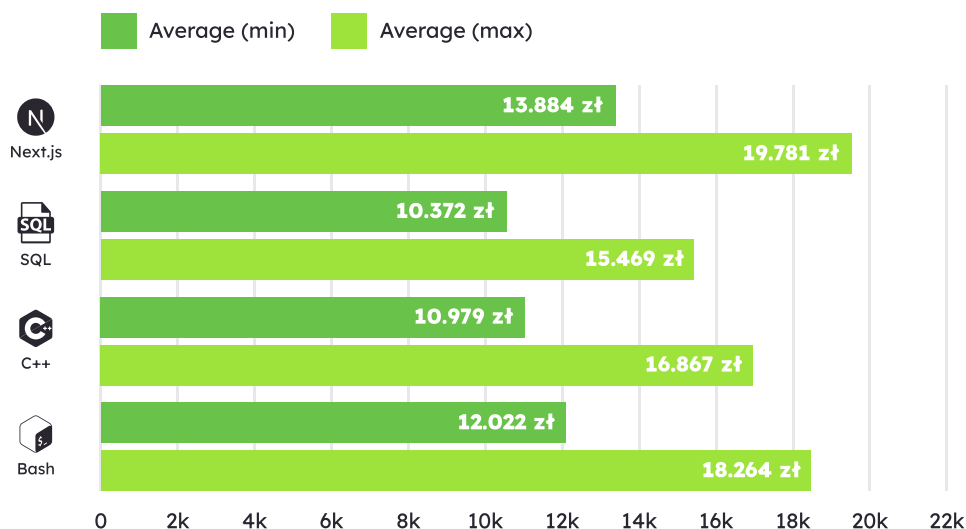
Source: Own elaboration based on data from itradar.io for 2021



2.1.3. Division into technologies

Average salaries offered depending on the skills

Source: Own elaboration based on data from itradar.io for 2021



EXPERT'S COMMENT:

”Working as a .NET Programmer and Programming Mentor, in recent years I have been observing a very large split in salaries among .NET programmers. To a large extent, this is due to the growing interest in the IT industry among juniors and people changing their profession. The beginnings are not as easy as it was a few years ago. Today, to start working as a .NET Developer you need to show solid knowledge, but it is still within reach of most ambitious people. The start is difficult, but with experience, earnings increase and reach very high amounts. Today it is especially worth learning C#, .NET and new technologies.”



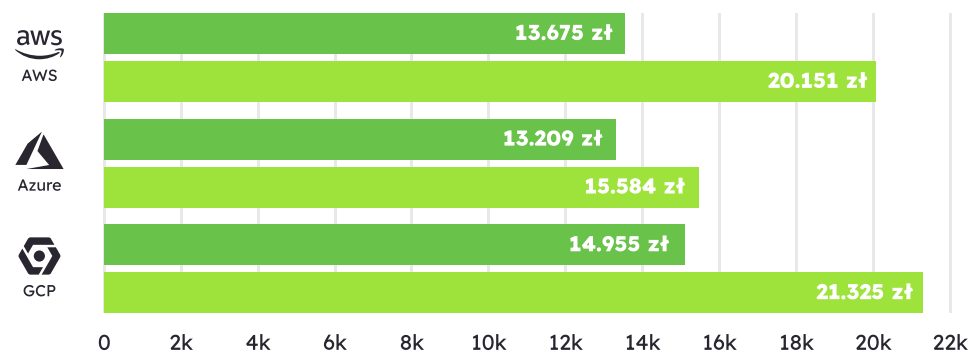
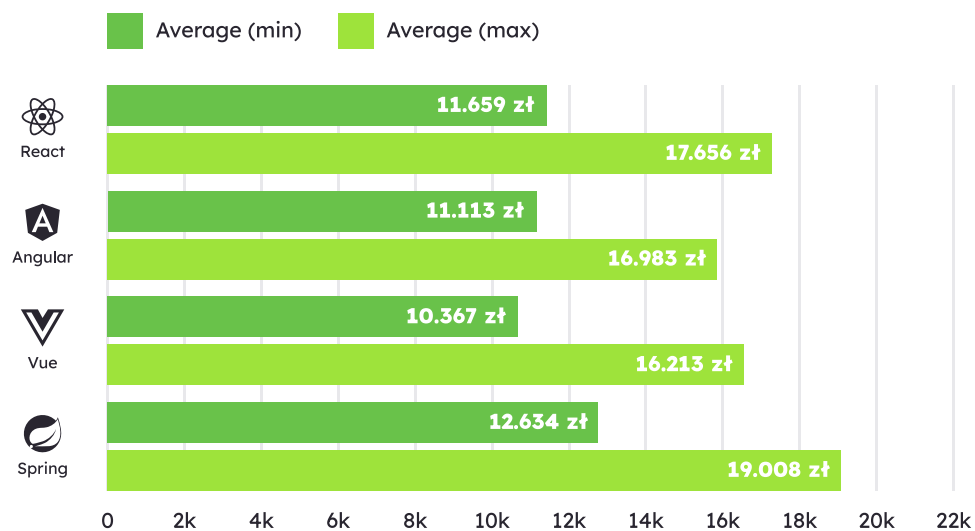
Adam Kamizelich

.NET Developer and Programming Mentor at gotoit.pl

2.1.3. Division into technologies

Average salaries offered depending on the skills

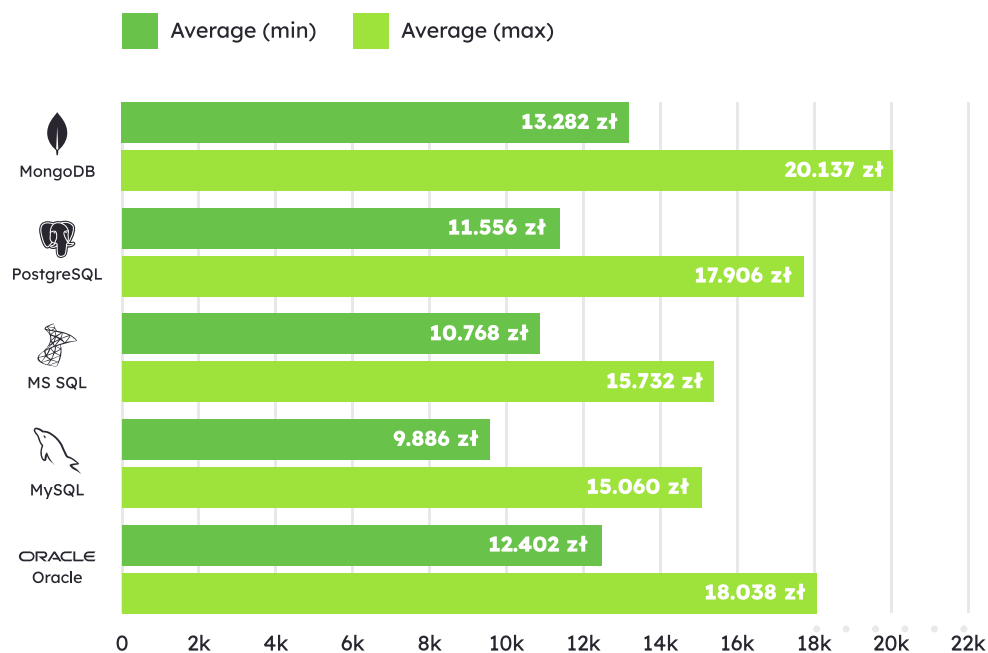
Source: Own elaboration based on data from itradingio for 2021



2.1.3. Division into technologies

Average salaries offered depending on the skills

Source: Own elaboration based on data from itradar.io for 2021

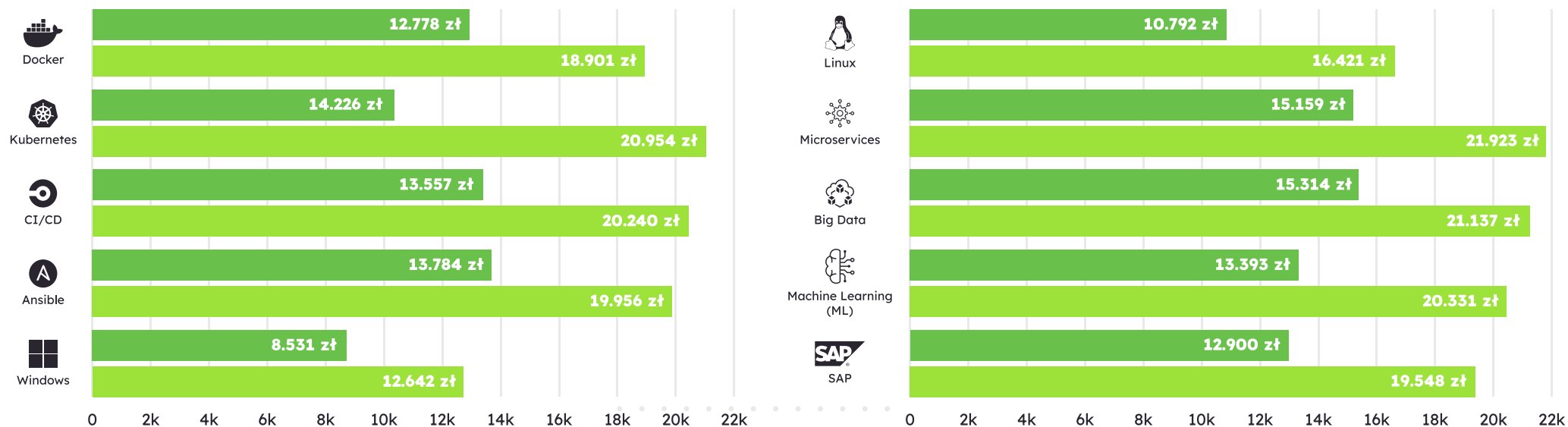


2.1.3. Division into technologies

Average salaries offered depending on the skills

Source: Own elaboration based on data from itradar.io for 2021

Average (min) Average (max)

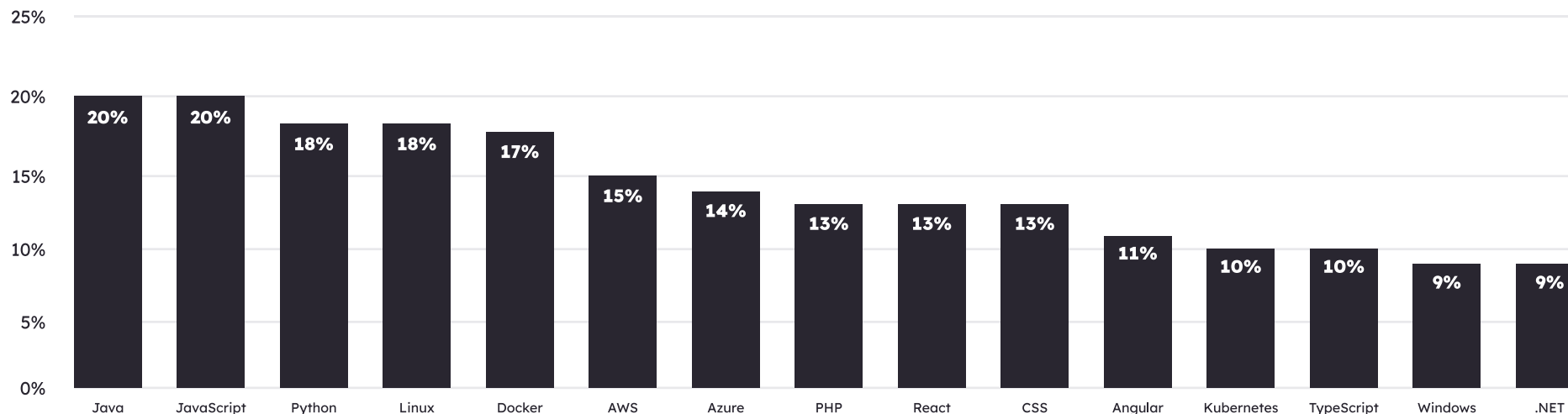


2.1.3. Division into technologies

What technologies did employers most often look for in potential employees? The top three included: Java, JavaScript and Python.

Number of offers divided by technology

Source: Own elaboration based on data from itradar.io for 2021

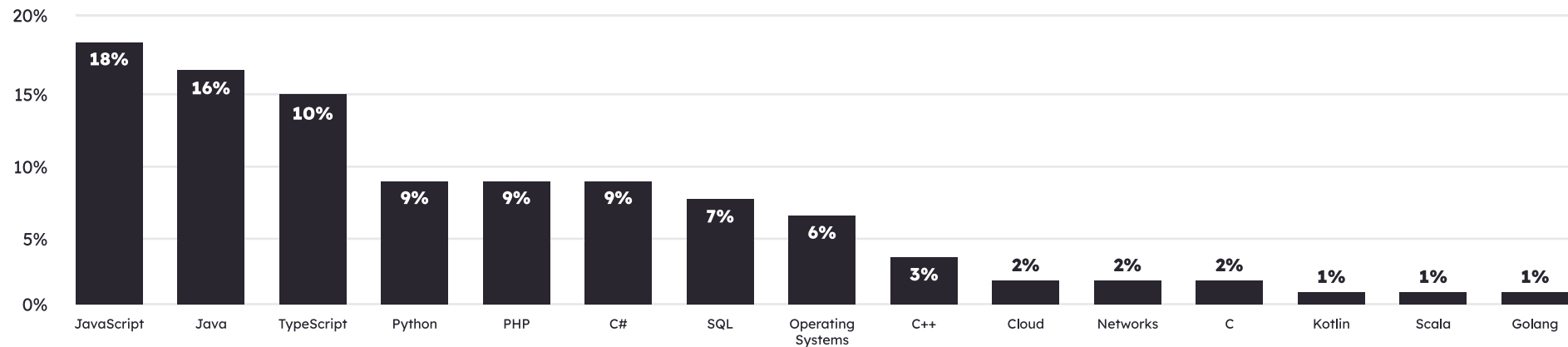


2.1.3. Division into technologies

It turns out that the demand for selected technologies largely matches with those in which the **respondents** specialize. Among the top 5 technologies they use most often are JavaScript, Java, TypeScript, Python and PHP.

Areas in which the respondents specialize


Source: Own elaboration based on data from an online survey conducted between September and December 2021



2.1.3. Division into technologies

Top 5 technologies and the average salary received

Source: Own elaboration based on data from an online survey conducted between September and December 2021

Technology	Seniority level	Type of contract	Average received salary of respondents*
 JavaScript	Junior	B2B	6,300 zł
		CoE	5,580 zł
	Mid	B2B	15,780 zł
		CoE	14,760 zł
	Senior	B2B	22,619 zł
		CoE	19,100 zł
	Expert	B2B	28,500 zł
		CoE	ND

*B2B: net on the invoice, excluding VAT

*CoE: gross

ND no data

EXPERT'S COMMENT:

"JavaScript has been on top in all research on the most popular programming languages. We also see it in Coders Lab.

Our front-end course enjoys the greatest interest almost from the very beginning. This is due to two things. Firstly, JS is not as difficult to learn as it may seem. Secondly, many companies regularly add JavaScript Developers to their programming teams. We know from experience that thanks to this, our graduates quickly find a well-paid job."




Marcin Tchorzewski

Founder and CEO at Coders Lab – the first IT school in Poland


Coders Lab
SZKOŁA IT

2.1.3. Division into technologies

Technology	Seniority level	Type of contract	Average received salary of respondents*
 Java	Junior	B2B	8,051 zł
		CoE	7,374 zł
	Mid	B2B	16,247 zł
		CoE	15,423 zł
	Senior	B2B	23,346 zł
		CoE	21,663 zł
	Expert	B2B	29,033 zł
		CoE	29,786 zł

*B2B: net on the invoice, excluding VAT
*CoE: gross


ND no data

Technology	Seniority level	Type of contract	Average received salary of respondents*
 TypeScript	Junior	B2B	7,128 zł
		CoE	6,505 zł
	Mid	B2B	16,037 zł
		CoE	15,125 zł
	Senior	B2B	23,165 zł
		CoE	20,809 zł
	Expert	B2B	27,500 zł
		CoE	ND

*B2B: net on the invoice, excluding VAT
*CoE: gross

ND no data

2.1.3. Division into technologies

Technology	Seniority level	Type of contract	Average received salary of respondents*
 Python	Junior	B2B	ND
		CoE	6,848 zł
	Mid	B2B	15,825 zł
		CoE	14,691 zł
	Senior	B2B	25,087 zł
		CoE	22,820 zł
	Expert	B2B	29,600 zł
		CoE	28,250 zł

*B2B: net on the invoice, excluding VAT
*CoE: gross

ND no data

Technology	Seniority level	Type of contract	Average received salary of respondents*
 PHP	Junior	B2B	ND
		CoE	5,520 zł
	Mid	B2B	12,979 zł
		CoE	11,578 zł
	Senior	B2B	18,500 zł
		CoE	16,962 zł
	Expert	B2B	22,750 zł
		CoE	19,343 zł


*B2B: net on the invoice, excluding VAT
*CoE: gross

ND no data

2.1.3. Division into technologies

Technologies and the average salary received

Source: Own elaboration based on data from an online survey conducted between September and December 2021

Technology	Seniority level	Type of contract	Average received salary of respondents*
 .NET	Junior	B2B	8,061 zł
		CoE	6,966 zł
	Mid	B2B	15,100 zł
		CoE	14,053 zł
	Senior	B2B	23,526 zł
		CoE	21,295 zł
	Expert	B2B	27,853 zł
		CoE	25,844 zł

*B2B: net on the invoice, excluding VAT

*CoE: gross

ND no data


Technology	Seniority level	Type of contract	Average received salary of respondents*
 Node.js	Junior	B2B	ND
		CoE	8,383 zł
	Mid	B2B	17,780 zł
		CoE	15,445 zł
	Senior	B2B	26,440 zł
		CoE	25,379 zł
	Expert	B2B	29,375 zł
		CoE	ND

*B2B: net on the invoice, excluding VAT

*CoE: gross

ND no data


2.1.3. Division into technologies

Technology	Seniority level	Type of contract	Average received salary of respondents*
 React	Junior	B2B	7,250 zł
		CoE	6,173 zł
	Mid	B2B	17,378 zł
		CoE	14,983 zł
	Senior	B2B	26,286 zł
		CoE	24,750 zł
	Expert	B2B	29,833 zł
		CoE	ND

*B2B: net on the invoice, excluding VAT

*CoE: gross

ND brak danych

Technology	Seniority level	Type of contract	Average received salary of respondents*
 Symfony	Junior	B2B	ND
		CoE	5,729 zł
	Mid	B2B	13,558 zł
		CoE	12,415 zł
	Senior	B2B	18,738 zł
		CoE	15,758 zł
	Expert	B2B	21,996 zł
		CoE	19,684 zł

*B2B: net on the invoice, excluding VAT

*CoE: gross

ND no data

EXPERT'S COMMENT:

”Comparing the results of surveys and data from the labor market, one can see a correlation showing the balance between the percentage of job offers and the number of specialists in most technologies. Python and PHP are an exception to this rule, where the number of offers significantly exceeds the number of available specialists. In the case of Python, this also translates into higher earnings. PHP programmers will not benefit from the shortage of specialists so much, they will earn 22% to 35% less than Python programmers with the same seniority. The knowledge of PHP programmers of even very complex and demanding Symfony class frameworks does not guarantee them higher earnings, as a result of which there is an outflow of experienced specialists and less interest in juniors.”



Grzegorz Marchwiński

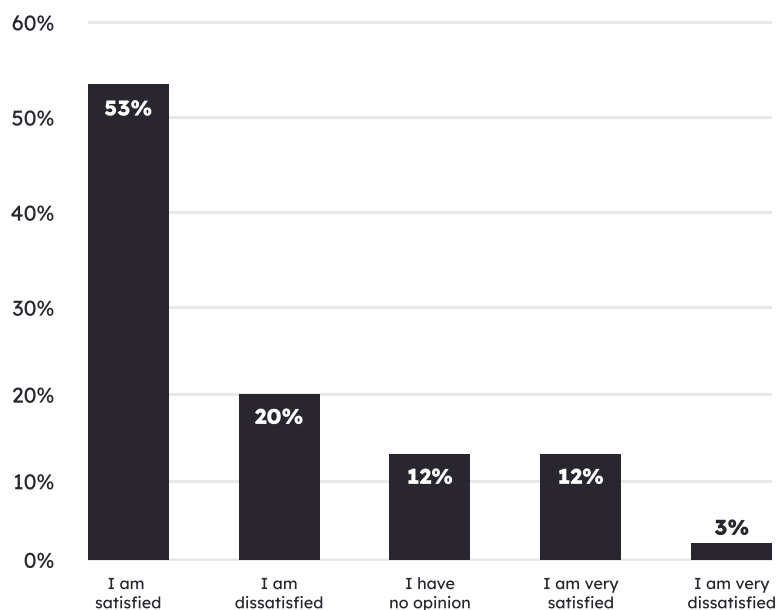
Co-owner and developer itradar.io

2.2.1. Satisfaction with the salary received

Almost 65% of the respondents indicated that they are satisfied or very satisfied with their current salary.

Satisfaction with the salary received

Source: Own elaboration based on data from an online survey conducted between September and December 2021



INTERESTING FACT:

79% of Experts expressed their satisfaction with the received salary.
52% of Juniors share the same opinion.

Satisfaction with the salary received and seniority level

Source: Own elaboration based on data from an online survey conducted between September and December 2021

Junior



Mid



Senior



Expert

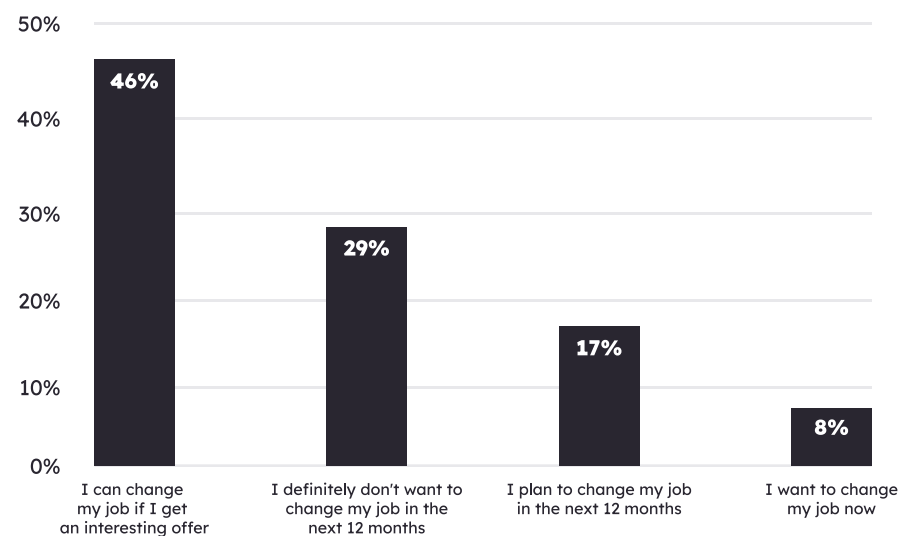


2.2.2. The expected value of the raise when changing jobs

Despite overall satisfaction with their salaries, 71% of specialists are open to changing jobs soon, and almost half of them are ready to do it if they receive an interesting offer. Every fifth respondent plans to make such a change within a year. It is worth mentioning that "inadequate salary" was the most frequently indicated reason for the most recent job change (20%).

Reasons for a recent job change

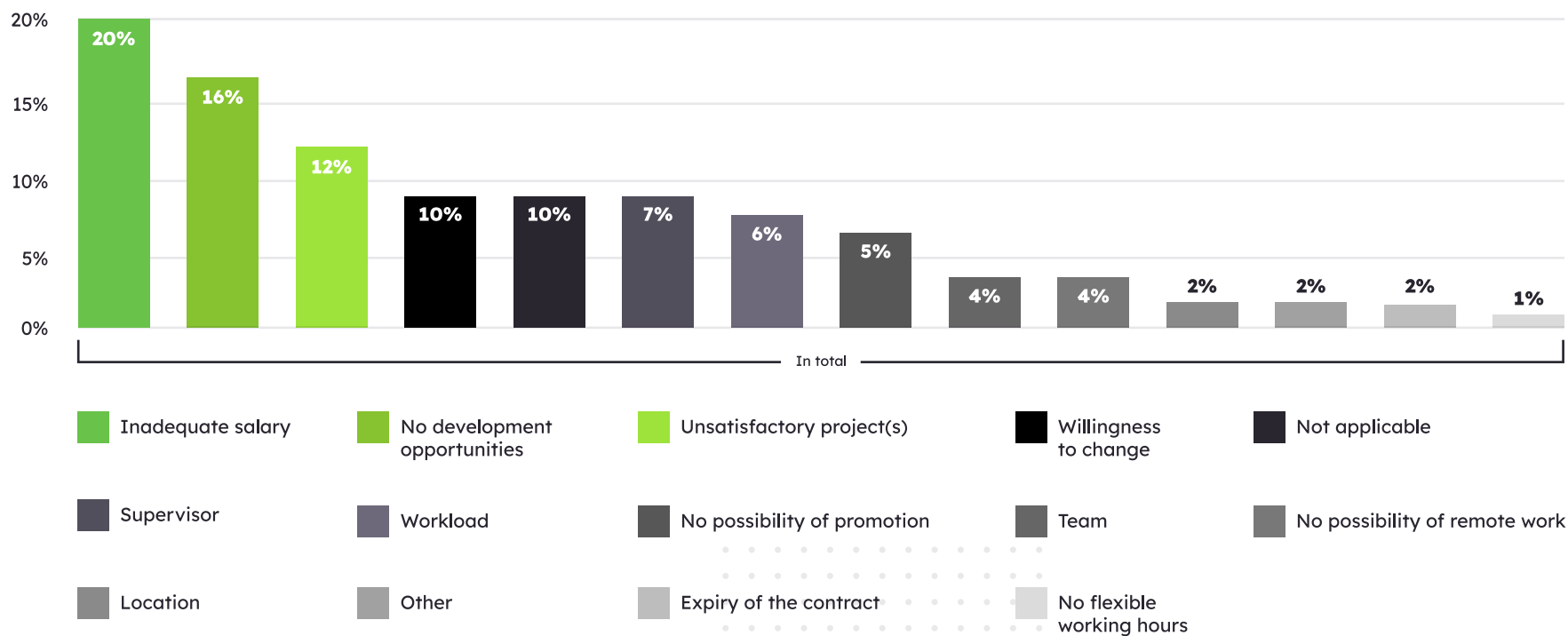
Source: Own elaboration based on data from an online survey conducted between September and December 2021



2.2.2. The expected value of the raise when changing jobs

Reasons for a recent job change

Source: Own elaboration based on data from an online survey conducted between September and December 2021



2.2.2. The expected value of the raise when changing jobs

Experts have the highest expectations (28%) for an increase in their current salary, while Juniors working on B2B have the lowest expectations (9%).

EXPERT'S COMMENT:

”The visible, highest tendency to change jobs related to a significant increase in salaries among seniors and experts is not surprising. Other examined motivations are not a sufficient reason for them to change their job. This group is usually firmly rooted in the realities of running a business by the current employer. It is the most emotionally and business-related with them. At the same time, it is a group with the greatest market needs, so finding an employee with these qualifications is extremely difficult and is associated with a significant pressure on the amount of remuneration. We are dealing here clearly, either with a significant pressure on high salary, or on the creation by the current employer of other mechanisms discouraging from changing jobs, and binding the employee with the company.”



Wiesław Paluszyński

President of the Polish Information Technology Society

Expected value of the raise for a job change

Source: Own elaboration based on data from an online survey conducted between September and December 2021

Seniority level	Type of contract	Average salary*	Expected salary after the job change*	% of the expected salary increase when changing job
Trainee	B2B	ND	ND	ND
	CoE	ND	ND	ND
Junior	B2B	7,17 zł	7,778 zł	9%
	CoE	6,671 zł	7,401 zł	11%
Mid	B2B	15,782 zł	19,387 zł	23%
	CoE	14,486 zł	18,043 zł	25%
Senior	B2B	23,376 zł	27,261 zł	17%
	CoE	21,063 zł	25,298 zł	20%
Expert	B2B	27,751 zł	35,409 zł	28%
	CoE	24,996 zł	31,775 zł	27%

*B2B: net on the invoice, excluding VAT

*CoE: gross

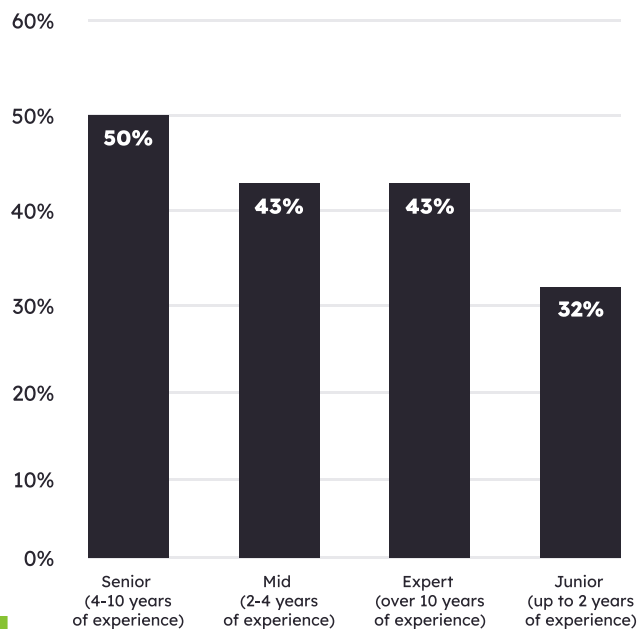
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2.2.3. Pay rises and bonuses

Almost half of the surveyed IT workers with more than 2 years of experience received a pay rise in 2021. Juniors were the least affected by the pay rise, with only one in three declaring that they had received a pay rise. For respondents who are interns, this may be their first job, hence the lack of declarations about a pay rise.

Percentage of respondents who received a raise in 2021

Source: Own elaboration based on data from an online survey conducted between September and December 2021

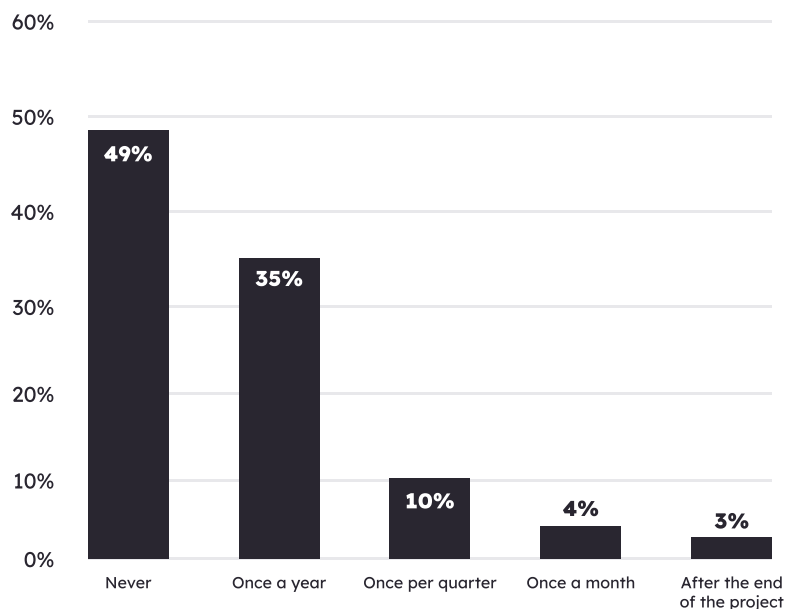


Almost every second employee in the IT industry does not receive a bonus, which was also confirmed by [our short survey on LinkedIn](#), which was completed by 1,054 people. On the other hand, those who receive it, mostly get it in the form of a discretionary bonus (53%), the value of which does not result from the achievement of specific targets or a fixed bonus (40%), the value of which results directly from the achievement of specific targets. 7% of the respondents indicated that they can count on a "different" type of bonus.

2.2.3. Pay rises and bonuses

Frequency of receiving bonuses (survey)

Source: Own elaboration based on data from an online survey conducted between September and December 2021



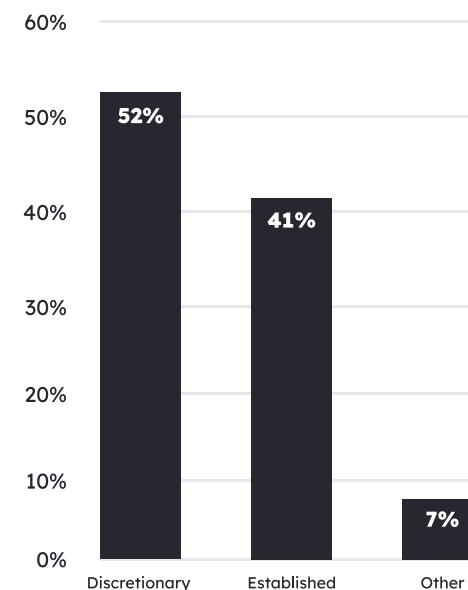
Frequency of receiving bonuses (LinkedIn)

Source: Own elaboration based on data from the LinkedIn survey conducted in November 2021



Types of bonuses received

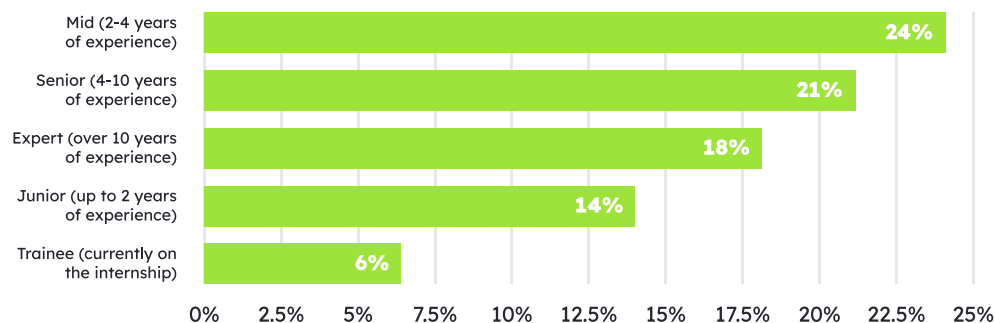
Source: Own elaboration based on data from an online survey conducted between September and December 2021



2.2.3. Pay rises and bonuses

Value of the expected bonus on the scale of annual salary based on experience level

Source: Own elaboration based on data from itradar.io for 2021



EXPERT'S COMMENT:

"Programmers are slowly getting used to periodic salary increases. The year 2022 does not project a change in this trend.

However, one should be aware that the glass ceiling does exist and sooner or later it will also catch up with our profession.

Nevertheless, 2022 will be another year of growth in the IT industry."



Mateusz Rus

.NET & Python Developer. Author of the book „Programistą być” / "To Be a Programmer"



INTERESTING FACT:

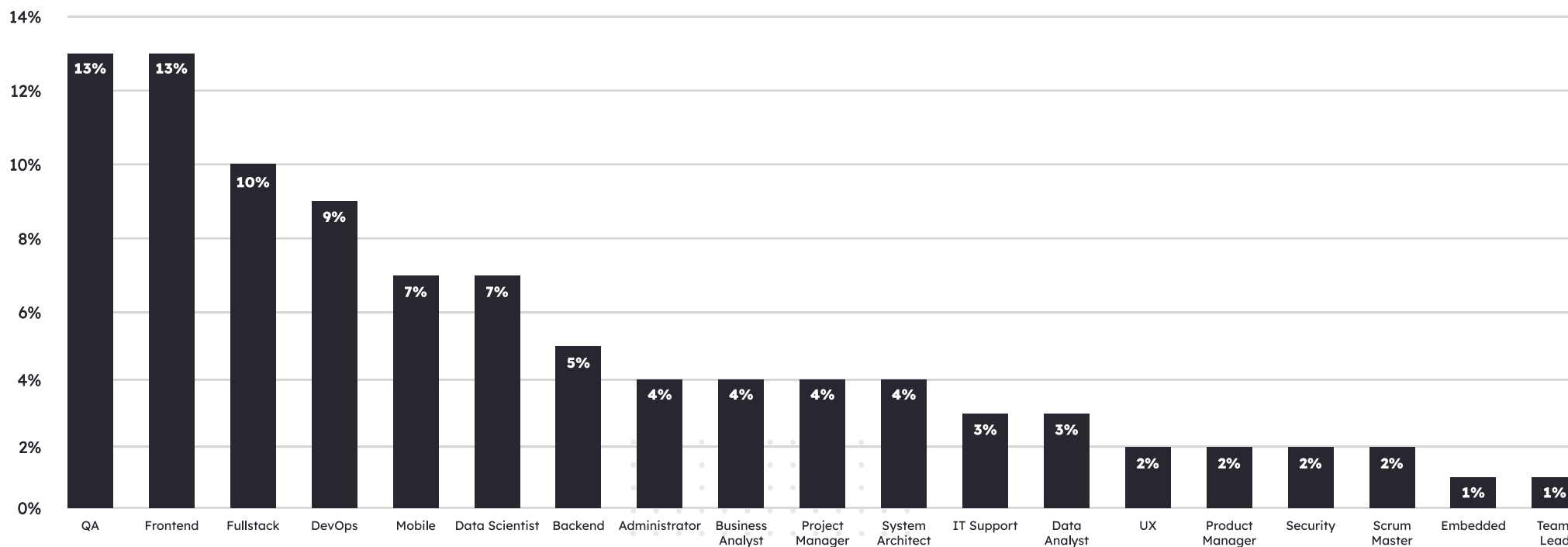
According to the respondents, the annual bonus should amount to 16,6% of the annual salary.

3. The most sought-after specialists

In 2021, the most sought-after specialists were Quality Assurance (QA) Engineer, Frontend Developer, Fullstack Developer, DevOps Engineer, Mobile Developer, and Data Scientist. In each of these groups, the most offers were addressed to Mids and the least to Experts.

Share of offers by role/area

Source: Own elaboration based on data from itradar.io for 2021



3. The most sought-after specialists

Share of offers based on experience level

Source: Own elaboration based on data from itradar.io for 2021

Area	Seniority level	Share of offers
Quality Assurance (QA) Engineer	Junior	15%
	Mid	51%
	Senior	32%
	Expert	2%
Frontend Developer	Junior	9%
	Mid	50%
	Senior	39%
	Expert	2%
Fullstack Developer	Junior	6%
	Mid	47%
	Senior	44%
	Expert	3%

Area	Seniority level	Share of offers
DevOps Engineer	Junior	9%
	Mid	45%
	Senior	40%
	Expert	6%
Mobile Developer	Junior	7%
	Mid	46%
	Senior	44%
	Expert	3%
Data Scientist	Junior	9%
	Mid	43%
	Senior	42%
	Expert	6%

3.1. Quality Assurance (QA) Engineer

Testers are the guardians of quality and are an integral part of the entire software development cycle. Many employers in 2021 have recognized the important role played by a team that cares about the quality of the prepared IT solutions.

Experience level vs. offered salaries

Source: Own elaboration based on data from itradar.io for 2021

Role/area	Seniority level	Salary ranges (min - max)*
Quality Assurance (QA)	Junior	5,593 zł - 8,248 zł
	Mid	10,311 zł - 15,958 zł
	Senior	12,525 zł - 18,508 zł
	Expert	14,683 zł - 21,628 zł

*B2B: net on the invoice, excluding VAT

*CoE: gross

*For the purposes of aggregation, we do not divide the salaries from offers according to the type of contract and we present the arithmetic mean of the extreme values of the ranges (the lowest and the highest).

Top 10 skills appearing in offers (QA Engineer)

Source: Own elaboration based on data from itradar.io for 2021

Selenium	Python	Postman	C#	Docker
Java		JavaScript		Cypress
		Linux		.NET

The most common skills required are knowledge of Selenium, Java, and Python.

3.2. Frontend Developer

Frontend Developer is a person who is responsible for the appearance of a product, e.g. an application or a website. Such a specialist introduces graphics, creates an interface, adds animations, etc. It can be said that it has a finishing and visually most important job for the end-user.

Experience level vs. offered salaries

Source: Own elaboration based on data from itradar.io for 2021

Role/area	Seniority level	Salary ranges (min - max)*
Frontend Developer	Junior	4,850 zł - 8,215 zł
	Mid	11,875 zł - 17,842 zł
	Senior	16,766 zł - 25,122 zł
	Expert	17,665 zł - 26,080 zł

*B2B: net on the invoice, excluding VAT
*CoE: gross

*For the purposes of aggregation, we do not divide the salaries from offers according to the type of contract and we present the arithmetic mean of the extreme values of the ranges (the lowest and the highest).

Top 10 skills appearing in offers (Frontend Developer)

Source: Own elaboration based on data from itradar.io for 2021

JavaScript	HTML	TypeScript	Vue	Redux	
CSS	React.js	Angular		Docker	
				REST API	

The following technologies are the most common in offers targeting Frontend Developers: HTML, CSS, JavaScript, TypeScript, and React.js.

3.3. Fullstack Developer

Fullstack Developer is a specialist with a wide range of skills. It can be said that such a programmer is self-sufficient because he can create an entire product/application from A to Z.

Experience level vs. offered salaries

Source: Own elaboration based on data from itradar.io for 2021

Role/area	Seniority level	Salary ranges (min - max)*
Fullstack Developer	Junior	5,716 zł - 9,255 zł
	Mid	13,978 zł - 20,635 zł
	Senior	17,179 zł - 25,267 zł
	Expert	19,066 zł - 25,351 zł

*B2B: net on the invoice, excluding VAT

*CoE: gross

*For the purposes of aggregation, we do not divide the salaries from offers according to the type of contract and we present the arithmetic mean of the extreme values of the ranges (the lowest and the highest).

Top 10 skills appearing in offers (Fullstack Developer)

Source: Own elaboration based on data from itradar.io for 2021

JavaScript	React.js	Java	.NET	Node.js
	Angular	Docker		C#
				Spring

According to the collected data, Fullstack Developers are among the most sought-after specialists in the IT industry. Based on the analyzed offers, we indicate the 10 skills that appeared most often in them.

3.3. Fullstack Developer

EXPERT'S COMMENT:

"Fullstack developer is a role that requires extensive experience and a broad view of technologies. Excellent knowledge of JavaScript is an indispensable skill for this position. The big advantage of such programmers is responsibility and readiness to make key technological decisions, which is also reflected in the salary range given in the report. Companies appreciate such a profile of engineers due to their versatility - it is much easier to manage and organize a project with such rangers."

**Rafał Piekara**

Software Engineer/Blogger

3.4. DevOps Engineer

We analyzed 112,000 IT job offers in Poland, of which every tenth of them was addressed to DevOps Engineers.

Experience level vs. offered salaries

Source: Own elaboration based on data from itradar.io for 2021

Role/area	Seniority level	Salary ranges (min - max)*
DevOps Engineer	Junior	7,017 zł - 10,430 zł
	Mid	14,608 zł - 21,828 zł
	Senior	18,868 zł - 26,442 zł
	Expert	19,918 zł - 29,297 zł

*B2B: net on the invoice, excluding VAT
*CoE: gross

*For the purposes of aggregation, we do not divide the salaries from offers according to the type of contract and we present the arithmetic mean of the extreme values of the ranges (the lowest and the highest).

Top 10 skills appearing in offers (DevOps Engineer)

Source: Own elaboration based on data from itradar.io for 2021

Linux	Python	AWS	CI/CD	Bash
Docker		MS Azure	Terraform	
Kubernetes			Ansible	

The top 3 skills that most often appeared in job offers for the DevOps Engineer are Linux, Docker, and Kubernetes. Python and cloud solutions, such as AWS or MS Azure, were in the next positions.

3.4. DevOps Engineer

EXPERT'S COMMENT:

”DevOps Engineer is undoubtedly one of the most sought-after specializations. At the same time, it is a very cross-sectional profession, and the offers of employers may differ significantly from each other in terms of the required competencies and expectations towards the candidate. DevOps should have infrastructure building, automation, programming, and system administration skills. The ideal candidate is a combination of the competencies of a programmer, network operator and administrator. DevOps is often put in the position of a technical leader in the transformation process, which consists in implementing the so-called ”DevOps culture”, based on automation, CI/CD processes and migration to the cloud.”



Piotr Korlaga

Senior DevOps Engineer and Founder of „Zakoduj Pomoc” Foundation

3.5. Mobile Developer

Mobile Developers create software for mobile devices (e.g. smartphones on iOS or Android).

Experience level vs. offered salaries

Source: Own elaboration based on data from itradar.io for 2021

Role/area	Seniority level	Salary ranges (min - max)*
Mobile Developer	Junior	5,907 zł - 9,958 zł
	Mid	13,318 zł - 20,580 zł
	Senior	16,450 zł - 24,790 zł
	Expert	18,646 zł - 25,995 zł

*B2B: net on the invoice, excluding VAT

*CoE: gross

*For the purposes of aggregation, we do not divide the salaries from offers according to the type of contract and we present the arithmetic mean of the extreme values of the ranges (the lowest and the highest).

Top 10 skills appearing in offers (Mobile Developer)

Source: Own elaboration based on data from itradar.io for 2021

Kotlin	Java	React Native	TypeScript
		JavaScript	
Objective-C		Flutter	
CI/CD			
React.js			
Swift			

Based on the data collected from the job offers, a Mobile Developer should know Kotlin, Swift and Java well.

3.5. Mobile Developer

EXPERT'S COMMENT:

"The boom for mobile applications is in full swing. The pandemic period for a moment dimmed the recruitment processes and programmers' expectations, it also suspended many projects, but only for them to begin with multiplied force in the near future.

The salaries in this field have caught up with other technologies such as FrontEnd and DevOps. The number of offers is very large, many of them concern Architect or Lead positions. The perspective and division in projects is changing, applications stopped being single or multi-person projects. From the perspective of the technical verifier, it can be seen that many people try their hand at mobile technologies, but only those with high skills and extensive experience can count on the best offers."

**Jakub Szostakowski**

Freelance Mobile Architect

3.6. Data Scientist

Data Scientist is a person who deals, among other things, with the analysis and visualization of data and the creation of predictive models using statistical methods and machine learning.

Experience level vs. offered salaries

Source: Own elaboration based on data from itradar.io for 2021

Role/area	Seniority level	Salary ranges (min - max)*
Data Scientist	Junior	6,713 - 10,828 zł
	Mid	13,205 - 20,336 zł
	Senior	18,787 - 27,090 zł
	Expert	18,834 - 28,006 zł

*B2B: net on the invoice, excluding VAT

*CoE: gross

*For the purposes of aggregation, we do not divide the salaries from offers according to the type of contract and we present the arithmetic mean of the extreme values of the ranges (the lowest and the highest).

Top 10 skills appearing in offers (Data Scientist)

Source: Own elaboration based on data from itradar.io for 2021

Big Data	Apache Spark	AWS	GCP
Machine Learning			Apache Hadoop
Python	MS Azure	Java	Scala

Data Scientists must have skills and competencies in many areas. According to the data collected from job offers, Data Scientists are required to know Big Data, Machine Learning (ML) and Python.



3.6. Data Scientist

EXPERT'S COMMENT:

"Data analysis is developing very fast. But at Coders Lab, we know that you don't need any previous data experience to get into the profession of the future. Sufficient willingness to work intensively is enough to take the first steps in data analysis after just 7 months. This is a chance for a quick return on investment. And also a great basis for further development and regular increase not only in competencies, but also in earnings."



Marcin Tchórzewski

Founder and CEO at Coders Lab – the first IT school in Poland



3.6. Data Scientist

EXPERT'S COMMENT:

"Data Science is a field that is dynamically developing under the influence of the growing amount of data and the decrease in the costs of their aggregation and processing.

Here an undoubted role is played by cloud solutions such as AWS, Azure or GCP, which allow to quickly perform analyzes that previously required costly and complex IT architectures.

Thus, people who are familiar with these technologies, additionally having an understanding of mathematical issues and programming skills, for example in Python, are increasingly sought-after by companies. Combined with knowledge and industry experience, such as telecommunications or banking, they can significantly improve the operation of many business areas."

**Emil Kamiński**

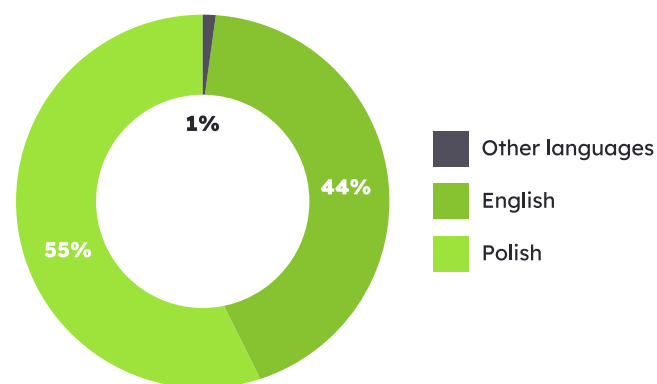
Head of Data Office

4. Knowledge of foreign languages

In the Polish IT industry, communication between employees is not always in Polish. Over 43% of respondents indicated that they speak mainly English at work. The declared level of English proficiency is also at a high level - over 70% of respondents claim that they speak English at the B2/C1 level.

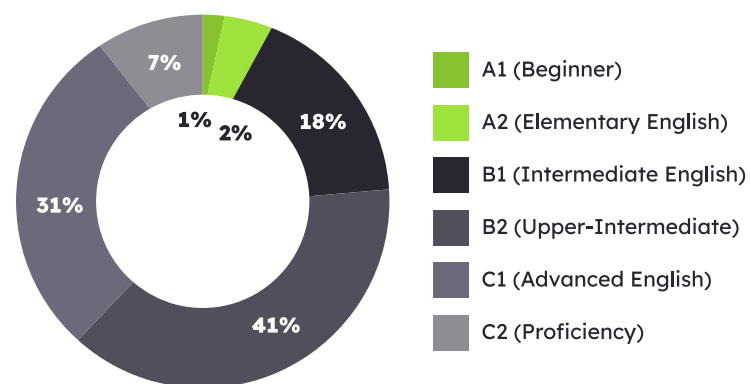
The main language of communication at work declared by the respondents

Source: Own elaboration based on data from an online survey conducted between September and December 2021



English proficiency level of the respondents

Source: Own elaboration based on data from an online survey conducted between September and December 2021



4. Knowledge of foreign languages

EXPERT'S COMMENT:

”Along with the increase in the presence of foreign investors in Poland, as well as the opening of global markets to remote work, the need for knowledge of foreign languages increases among programmers. Thanks to working from home, developers can basically work for any company located anywhere in the world. Nevertheless, it requires at least communicative knowledge of languages, the top of the rankings is, of course, knowledge of English. However, looking through the prism of projects supported by The Polish Investment and Trade Agency and the specificity of some investments, we notice that knowledge of other languages, such as German or Scandinavian languages, can give a decisive advantage and constitute an excellent basis for negotiating even higher salaries.”



Radek Pituch

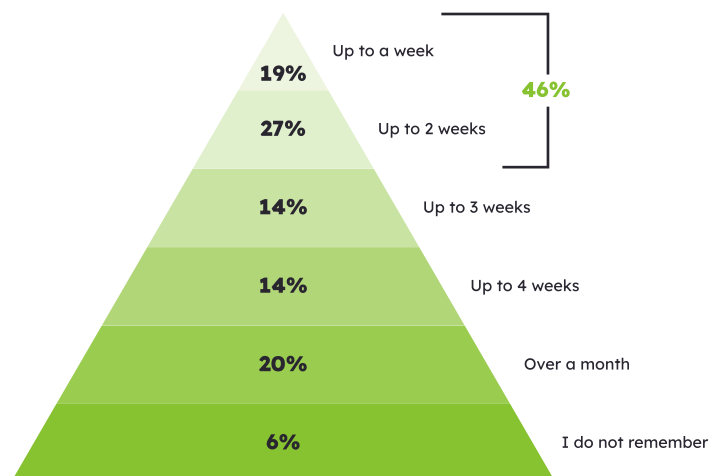
Expert at the Polish Investment and Trade Agency

5.1. Length of a recruitment process

We checked how long the recruitment process takes from receiving the CV by the employer to signing the contract. In a [short survey on LinkedIn](#) filled by 548 users, the most popular response was "over 3 weeks." However, the respondents of our main survey most often chose the option "up to 2 weeks". This may be a harbinger of the direction of change for the future. Furthermore, this shows that many employers already see the importance of time in the recruitment process.

Time spent on participation in the recruitment process (survey)

Source: Own elaboration based on data from an online survey conducted between September and December 2021



Time spent on participation in the recruitment process (LinkedIn)

Source: Own elaboration based on data from the LinkedIn survey conducted in November 2021



548 votes • Poll closed



6 comments

5.1. Length of a recruitment process

EXPERT'S COMMENT:

"As indicated by the data collected in the report, many employers are now putting emphasis on shortening the recruitment process. This is a response to the candidates' needs, but only to a certain extent. Although everyone involved wants to minimize the time spent on formalities, the process of getting to know the employer should not be shorter. It is thanks to them that candidates make the right decisions choosing from among numerous job offers. Therefore, companies must invest in building a realistic image of the job offered among potential candidates before they even engage in the recruitment process. They can do this, for example, by promoting content related to their projects and giving space for employees to talk about their work."

**Kasia Tang**

Co-founder of Super Source Me



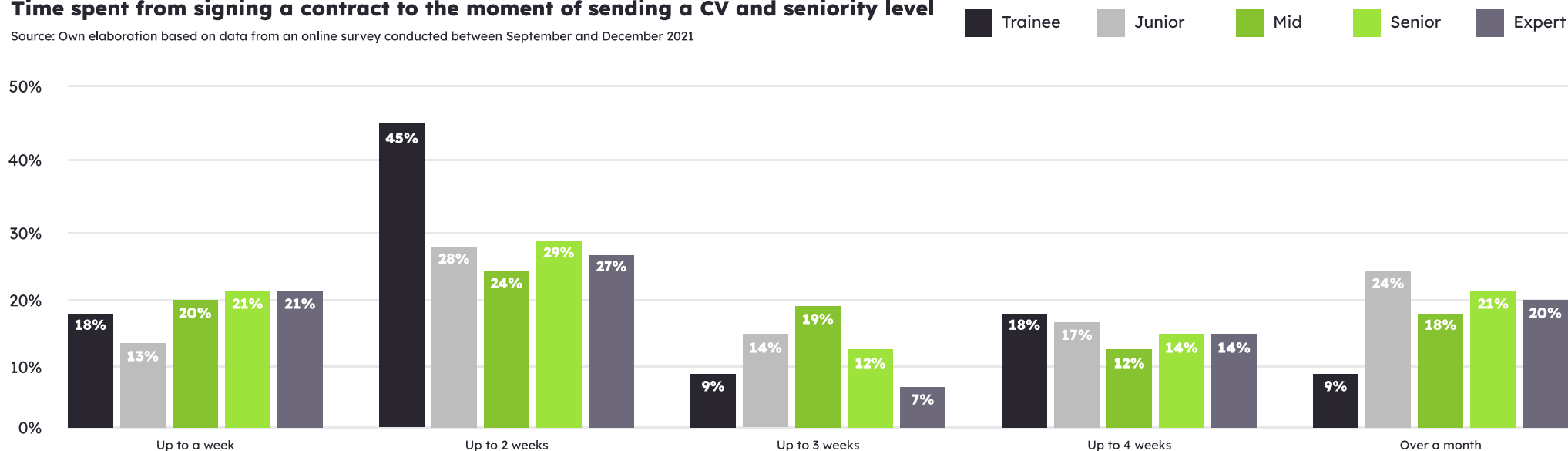
INTERESTING FACT:

46% of the recruitment processes in which the respondents participated were finalized within 2 weeks.

5.1. Length of a recruitment process

Time spent from signing a contract to the moment of sending a CV and seniority level

Source: Own elaboration based on data from an online survey conducted between September and December 2021



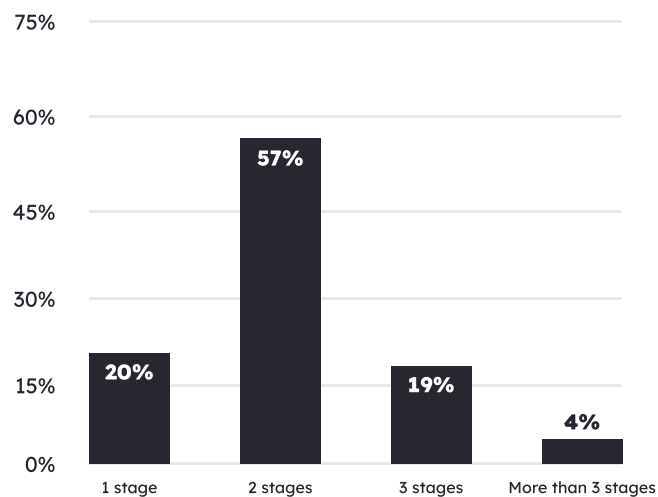
5.1. Number of recruitment stages

”Time is money” - this principle is also followed by Polish IT specialists. The recruitment process consisting of many stages is a frequent reason for candidates’ resignation. In our survey, we asked specialists: ”How many stages (not including sending and verification of a CV and / or contact from a recruitment agency) do you think an optimal recruitment process should consist of?”. 77% of them indicated that recruitment should consist of a maximum of 2 stages.

[Our short survey on LinkedIn](#), in which 2,313 people replied, confirmed these expectations - as many as 82% of respondents chose **1 or 2 stages**.

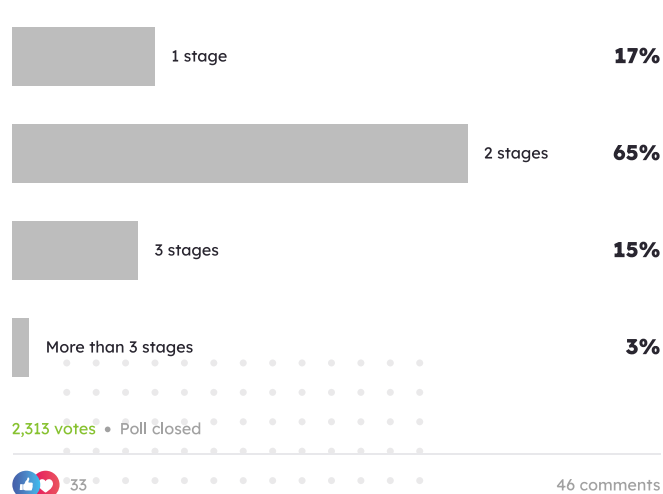
Preferred number of stages in the recruitment process (Survey)

Source: Own elaboration based on data from an online survey conducted between September and December 2021



Preferred number of stages in the recruitment process (LinkedIn)

Source: Own elaboration based on data from the LinkedIn survey conducted in November 2021



EXPERT’S COMMENT:

”I agree with these expectations. 2 stages of a recruitment process should be enough to make a decision. The number of stages combined with the short duration of the process can be a strong advantage in competition for the same employee. The efficiency of the recruitment process is the first opportunity to prove to the candidate our values and culture, which we so often boast about.”



Damian Murawski
BitBag Founder & CTO.

5.2. Verification of competencies

Almost every third respondent indicated that the most preferred form of skills verification is a technical interview. IT professionals also don't mind having tasks done at home or an HR/business interview to test their skills. However, they are definitely not fans of the personality tests that came in last place.

The preferred method of verifying competencies

Source: Own elaboration based on data from an online survey conducted between September and December 2021



To sum up, the most desirable course of the recruitment process consists of 3 key elements:

1. The recruitment process has a maximum of **2 stages**.
2. Competencies are verified during a **technical interview**.
3. The contract is signed a maximum of **2 weeks** from the moment the employer receives the candidate's CV.



5.2. Verification of competencies

EXPERT'S COMMENT:

"People actively looking for a job, most often take part in several recruitment processes at the same time. I have heard from candidates many times that they simply do not have time to complete the next task, let alone on the scheduled date. Which may result, for example, from an excess of tasks in the current project or additional family responsibilities.

Solid technical talks, even lasting an hour and a half or live coding, were preferred.

On the other hand, Professionals who are not actively looking for a job may not have the appropriate motivation to devote, for example, 6-8 hours to perform a technical task, in line with: 'you are offering me a job'.

I've also come across an approach where companies pay for the time spent on a technical task, but is this the right direction? That is for you to decide.

In summary, the shorter and more efficient the process, the better. Thanks to this, the recruitment costs are reduced, but the company also shows the candidates that it knows who it is looking for."

**Paulina Gawlicka**

Founder of the consulting company [Gawlicka Consulting](#), certified MindSonar consultant, YouTuber and creator of the RNFL GROUP community (formerly Rekrutacja na FreeLansie). She has been active in the IT industry for 10 years, and in 2021 she was distinguished in the Strong Women in IT, Global Edition report.





5.2. Verification of competencies

EXPERT'S COMMENT:

"For our company, a short and fast recruitment process and a trial period are a great way to verify the competencies of an IT specialist and to match both parties in terms of being and working culture.

It is worth remembering that in the first months of cooperation, the employer also goes through a trial period, especially in relation to experienced specialists.

It is important that in the event of a mismatch, after this mutual trial period, both sides are ready to part ways quickly and culturally."

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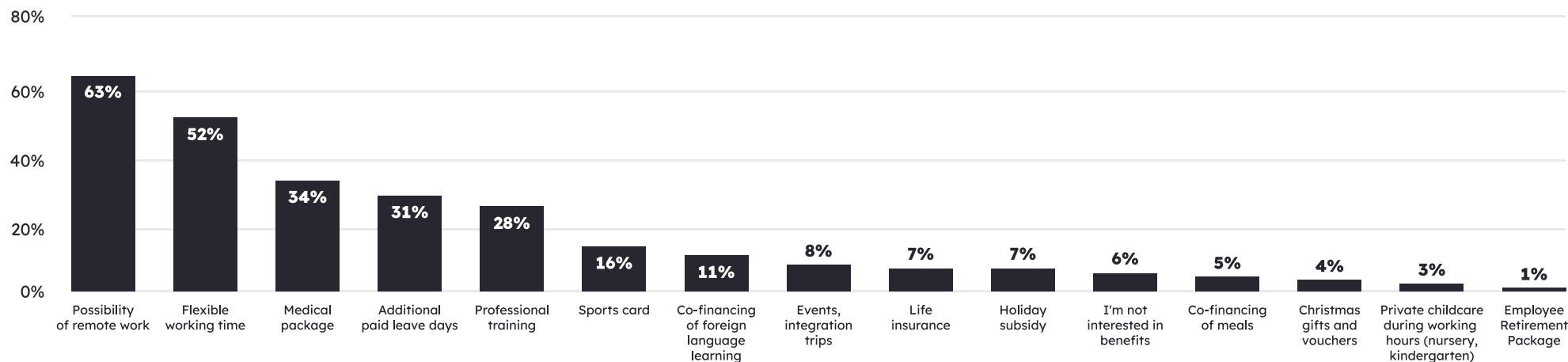


6. Employee benefits

"Possibility of remote work", "flexible working hours" and "medical package" - these three non-wage benefits were the most frequently chosen among the surveyed IT specialists. This shows that for IT employees, in addition to finances, comfort, convenience and a sense of security are important. Flexible working time or remote work make it easier to combine work and private life and ensure a balance between work, family and for example one's own hobby.

Preferred employee benefits

Source: Own elaboration based on data from an online survey conducted between September and December 2021



INTERESTING FACT:

Employee benefits are not that important to Experts - they mostly indicated that in their opinion they are irrelevant.

6. Employee benefits

EXPERT'S COMMENT:

"There is no doubt that nowadays the possibility of remote work is one of the key issues that the employer must remember. However, the fundamental question arises whether the possibility of remote work should be still perceived as a benefit?

In my opinion, we should look at it rather as a standard and foundation of the entire organizational culture. Companies should take into account the fact that people are no longer willing to spend 40 hours a week in the office and offering them freedom as to where they can work from may even positively affect their efficiency and job satisfaction.

Among the preferred benefits, flexible working hours also clearly play a role. Currently, this issue needs to be looked at a bit wider than just from the perspective of the possibility of flexible shaping of the hours of starting or finishing work on a given day. The report clearly shows that apart from flexible working hours for people, additional vacation days are also extremely important and this fits very well with the current trends. There is more and more talk about the 4-day working week and it is a trend that will gain in importance over time, and the company that offers it now can gain a really valuable argument in the fight for employees.

Of course, when we are talking about benefits, we must not forget about health - understood comprehensively. In the past, health benefits were associated primarily with a private medical care package. However, as important as our physical health is mental health, and in this area there are more and more interesting solutions, and employers already have a lot of opportunities to effectively support employees in terms of their mental health."



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