Women in IT {2021}

NOFLUFF JOBS

Salaries, working conditions and expectations towards employers



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Last year's No Fluff Jobs report on the situation of women in the IT industry **aroused great interest in the IT community and the media** and thus became a guide for women who were planning to start a career in IT or were just taking their first steps in this industry. Data presented in the report also constituted a signpost for many organizations undertaking initiatives focused on supporting women in their professional activation and retraining processes. That is why we decided to launch another survey to find out how the declarations of women working in IT have changed in terms of earnings, contract terms and expectations towards employers at the beginning of 2021.

We conducted the survey in **February 2021** and addressed it **both to women working in IT, as well as to women who are considering changing their industry to IT.** We asked about specializations, salaries, level of experience, sources of knowledge and the greatest ills and challenges in women's professional lives. Overall, 2,650 women participated in the study. Data presented in the report are **declarative.** We collected votes by promoting the online survey on internal and external channels – in social media, using a paid display campaign and email marketing campaigns. A statistical error in this research amounts to 2%.



Women from all over Poland participated in the study. They were both women working in the IT industry, as well as women declaring a willingness to start a career in this market sector.

Among the respondents who already work in IT, **the largest group were programmers** (34%) specializing in Backend, Frontend, Fullstack and DevOps. **Testers (16%)** belonged to the second-largest group when it comes to quantity, followed by Women working as **Project** Managers (8.4%) and UX/UI specialists (8%).

In the group of women who declared their willingness to start working in the IT sector, the most numerous respondents were women currently working in the following industries: **banking and finance, sales**, **marketing, HR, engineering and trade.** A slightly smaller group consisted of women presently employed in **journalism and education.**

I. Women in Tech

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Women aged 25–34 were the most numerous group of respondents (61%). The second-largest group were women aged 35–44 (20%). The youngest respondents aged 18–24 (16%), were ranked third.

In terms of declared professional experience – among the most numerous group of respondents were **juniors (23%)** and women with **mid/regular experience (31%). Seniors** constituted **14%** of the respondents, and experts – 5%. **Internship positions** were taken by **9%** of the survey participants, and **18%** did not specify their experience level.

In regard to acquired education - **most women graduated with a master's degress (61%)**, while **29%** of women received a **bachelor's or an engineer's degree**. Respondents who declared education at the high school level accounted for 9% of all study participants.

Introduction

Due to the growing demand for IT services and high customer requirements, IT companies have been actively seeking new talents for many years. What's more, employees from various industries are looking for new development paths that will guarantee higher earnings as well as opportunities to participate in exciting projects. Is there enough place in the IT sector for male and female specialists with competences and experience unrelated to the world of technology?

Definitely yes! The IT industry is a complex ecosystem created by people with different skills and levels of work experience. Men and women. It is a world where previously acquired education does not determine a better or a worse start in a company, and success often depends on the continuous process of training and working on your own effectiveness. The study "Women in IT 2021" confirms this thesis. Women who have found their dream job in IT are well suited for their positions in programming, testing as well as to project management and service design positions. What is significant – 22% of the survey participants declared that before they started their first IT job, they had acquired specialist knowledge on their own. I hope that the data presented in the report will inspire many women to take action. Enjoy reading!



Magdalena Gawłowska – Bujok COO NO FLUFF JOBS^{**}



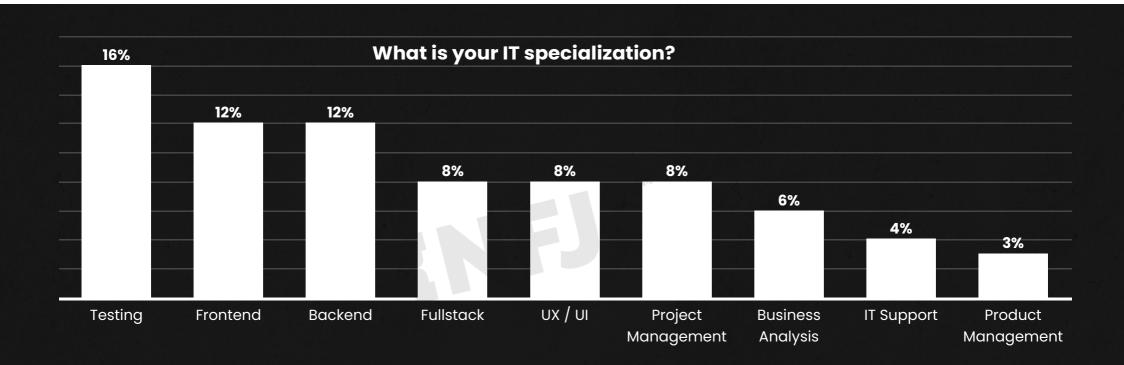
I. Women in Tech

Specializations, salaries, working conditions and expectations toward employers

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The most popular specializations among women in Tech

In our survey of women's situation in the IT industry in 2020, the respondents most often indicated **Backend and Frontend** as their main IT specializations. **Testing** was third in the ranking. At the beginning of 2021, Testing became the most popular specialization in which women work in IT, while Frontend and Backend fell respectively to the second and third position in the ranking. Right after the "big three" were **Fullstack and UX/UI**, followed by Project Management, Business Analysis, IT Support and Product Management. The least popular specializations turned out to be DevOps, IT Administration, Security and Embedded (1-2%).

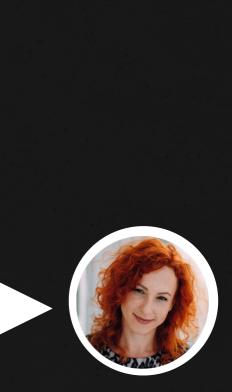


Magic of testing

Testing is one of the most essential areas of IT. Efficient product testing at the appropriate production stage can significantly impact quality by allowing the design team to notice and remove systemic and functional problems and ultimately guarantee that the product will be appreciated by users and will bring the expected revenue once it gets to the market.

A tester is a person who should have high communication skills. Their daily work affects the process of product improvement and optimization, especially if they know the fundamental issues in the field of Business Analysis. Constant cooperation with UX / UI specialists is helpful as well. Many testers do not have an IT education and learn the profession through courses and daily work in the development team and cooperation with field experts as part of the company's projects. At the end of the day, since testers have a holistic view of the product, its quality and functionality, it is worth being in touch with them.

The average salary of a tester reaches gross PLN 8,000–12,000 on the employment contract and net PLN 11,000–16,000 (+ VAT) on the B2B contract.



Marta Steiner Head of Product&Marketing

The most popular technologies and frameworks

Java and JavaScript are invariably leading technologies among women in Tech.

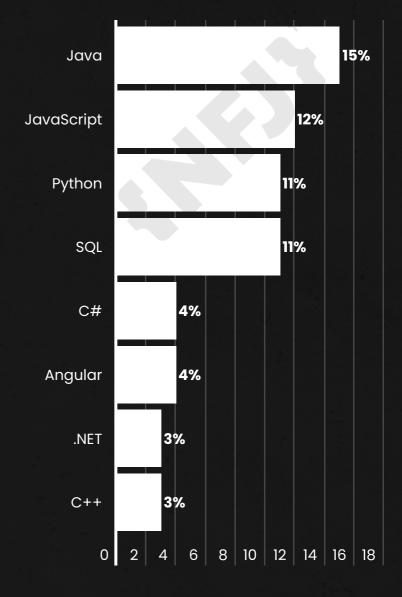
Knowledge of Java in 2021 was declared by 15% of the surveyed women employed in IT. JavaScript came second (12%), followed by **Python** and **SQL** (11% each).

Among the least frequently mentioned frameworks and technologies are, for example, PHP, Ruby, Node.js, Kotlin, Unity, Spark, Selenium, Scala, and Swift.

Interestingly, the contenders who plan to start a career in the IT world most often indicated that they learn Python and SQL, Java and JavaScript are far less prevalent.

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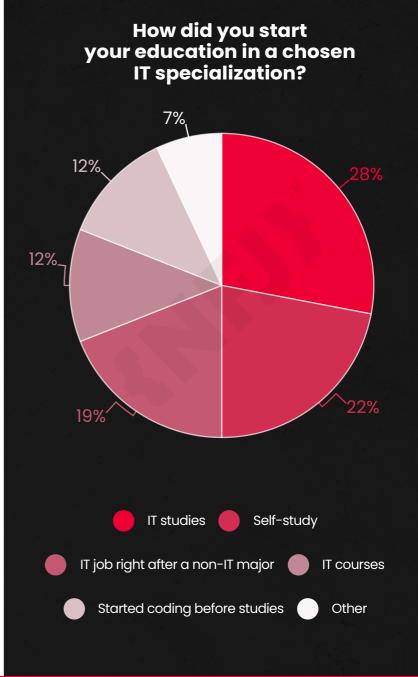
What technology do you specialize in?



Getting ready for the first job in IT

It turns out that a career in IT is possible not only for graduates of IT and related studies. Only 28% of the respondents finished Tech majors. Every fifth participant of the study declared that she had a technological and engineering education or had studied science and nature studies. Among women in IT, we can also find former students of humanities and social sciences.

As many as 22% of the No Fluff Jobs survey respondents gained knowledge on their own. Whereas, 12% participated in the IT courses, and 19% started working in IT after graduating from unrelated studies. The collected data indicate that **53% of women in IT begun working in the industry even though they did not complete IT studies.**



Many paths lead to the IT industry

Based on our own experience and our Dare IT community's history, you can get to the IT industry from many paths. Among successful women in this sector, we can find those who graduated from IT studies and those who studied archaeology, Iberian studies, oriental studies, architecture, medicine, law, social rehabilitation – the range of study courses is extensive! The IT industry has so many specializations that it is possible to constantly expand the scope of competences by entering new IT fields or increasing the range of competences in our core area of operation.

And although it is difficult to change the industry or specialization, the belief that we can "make it" can be empowering. It is worth remembering that our experiences and actual achievements are the strongest pillars that build our confidence and effectiveness. Because once we've achieved success in one area, why should it be any different now?



"

Salaries of women in Tech in relation to their experience

How much do IT specialists earn? Juniors declared their earnings in the amount of net PLN 3-4k and indicated net PLN 5-6k as their dream salary. On the other hand, women at the mid/regular level declared that they earn net PLN 5-6k, and their expectations are twice as high (net PLN 10-15k).

Seniors are the most fulfilled group of specialists

because their actual and expected earnings are the same – net PLN 10–15k. Interestingly, the declared salary of experts received does not differ from the stated desired salary of seniors. However, experts' expectations differ in terms of salaries, which they currently currently on their bank accounts – most of them would be satisfied with an amount of over net PLN 20,000.

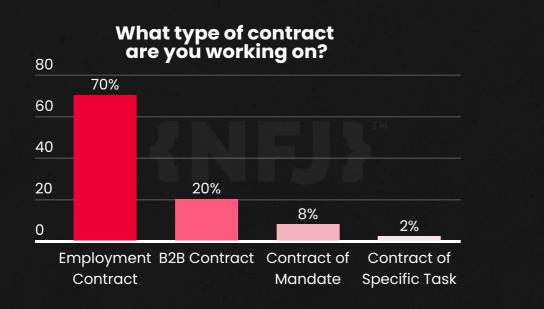
Salaries of women in Tech in relation to their experience (net)

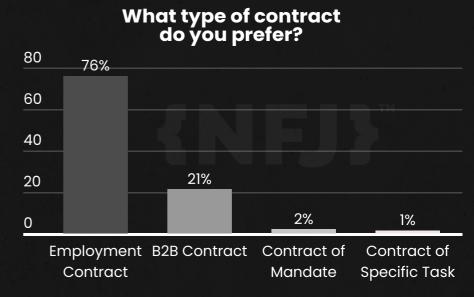
	Declared salaries	Desired salaries
INTERN	PLN 2,000-3,000	PLN 4,001-5,000
JUNIOR	PLN 3,001-4,000	PLN 5,001-6,000
MID	PLN 5,001-6,000	PLN 10,001–15,000
SENIOR	PLN 10,001–15,000	PLN 10,001–15,000
EXPERT	PLN 10,001–15,000	> PLN 20,000

Contracts Declared and desired types of contracts

The employment contract is invariably **the queen of contracts among women in IT.** As many as 70% of the surveyed specialists are employed based on this type of contract and even more (76%) indicated it as the most desirable contract type. 20% of women are employed on B2B contracts, which almost entirely corresponds to their demand for this type of contract (21%).

When at the beginning of 2020, we asked IT specialists what type of contract they prefer, 66% indicated the employment contract, whereas 29% – a B2B contract. By comparing this data with the information collected in 2021, we noticed that women's **preferences have changed throughout the year and shifted from B2B towards an employment contract.**





Do preferences of women in IT regarding types of contracts match the current market situation?

Currently, ¾ of women prefer employment contracts - **regardless of their level of experience.** How do these preferences relate to the current situation in the IT market? According to our <u>annual report</u>, juniors were most often offered an employment contract as it was mentioned in 73% of job offers. However, in 17% of cases, it was a mandate or a specific-task contract. This is four times more than in the case of mid contracts and as much as 11 times more in case of seniors. When entering the IT world, inexperienced candidates must take into account that they will not sign the desired type of contract right away, because...

The B2B contract reigns supreme in the IT industry - in 2020 it appeared in ¾ of job offers posted on nofluffjobs.com and was a standard type of contract in 87% of offers for seniors. For comparison: at the beginning of 2021, as many as 20% of surveyed women from the IT world declared that they work on B2B contracts, and outside the IT industry, this type of employment turned out to be even less popular - only 1 in 10 respondents outside the IT sector indicated that they work on a B2B contract.

What guarantees a secure professional future nowadays?

It comes as no surprise that the number of women who prefer employment under an employment contract has increased during the pandemic. In fact, on every continent, the sense of security has always been crucial for women, and the employment contract is considered the most stable form of employment. However, it is worth remembering that it does not give any guarantees, and employers more and more often opt for new employment models that we all should not be afraid of.

What currently provides us with a secure professional future is not the type of contract we sign, but the readiness to constantly learn and commit, awareness of changes taking place on the job market, and ability to treat them as opportunities for a better and more stable professional future. According to the report *The Future of Jobs 2020* created by The World Economic Forum, by 2025, as many as 85 million jobs will be automated. People, algorithms and robots will serve 97 million new jobs in total. Moreover, as shown in our last year's report *The Digital Key to the Professional Future* carried out as part of the Woman Update campaign, mostly women work in professions threatened by automation and robotization, e.g. in trade, finance and the industries most severely affected by the pandemic. **This means that it is not a form of employment but learning digital skills and starting a career in IT that guarantee a safe, secure and satisfying professional future for women.**



Joanna Pruszyńska-Witkowska Co-founder of



Aspects valued by women in IT

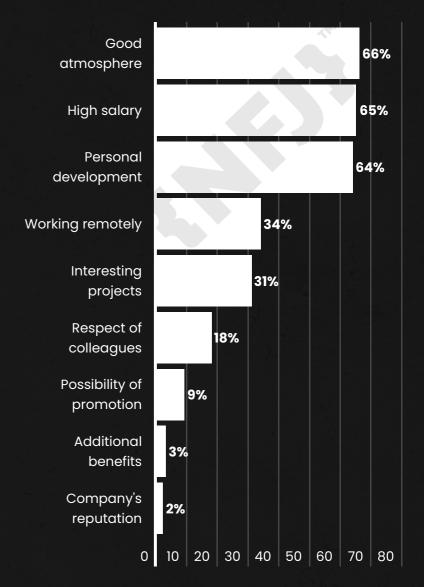
When asked about the most important aspect of work, most IT specialists answer: "earnings".

Meanwhile, female survey respondents chose a different winner - a good atmosphere won by a hair with high salary (66% vs. 65%).

In addition to a high salary and satisfaction from the company's positive atmosphere, the possibility of **personal development** and **participation in interesting projects** were equally important to women.

Remote work turned out to be another essential aspect. Due to the pandemic, this convenience turned into a standard. In 2020, remote job offers on nofluffjobs.com accounted for 31% of all job offers. For comparison: in 2019, this rate was 9%.

What do you value the most at work?

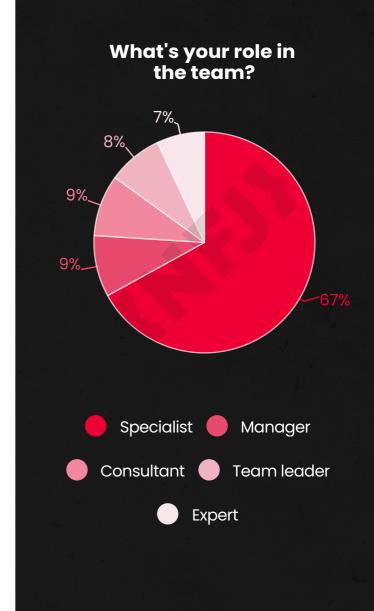


Roles in IT teams

81% of women declared that they have the possibility to be promoted in their current workplace. Moreover, **37% of them actually were promoted**. According to our report from 2020, "The Most Desired IT Specialists", experienced tech-world specialists are torn over promotion to leadership positions. 40% of respondents expressed a desire to develop in the managerial direction, but almost the same number preferred to pursue a career on the specialist path.

Such a division of votes may result from the fact that in the case of a group of programmers, taking a leader's position means abandoning coding altogether and "falling out of circulation", making it difficult to change jobs in the future.

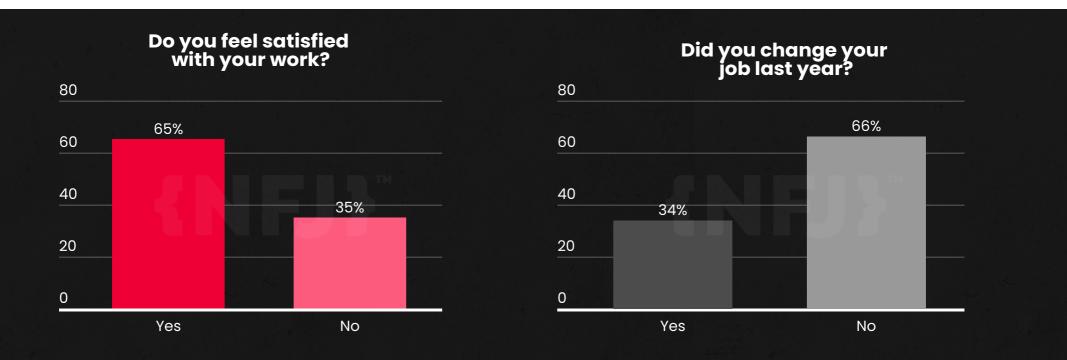
Among the surveyed women, as many as **17% indicated that they hold managerial or leadership positions.** We also know from our last year's research that 56% of current managers and team leaders were promoted as a result of internal recruitment. What conclusions can we draw from the presented data? From the very beginning of your professional career, you should **develop soft skills**, which are crucial at every career level.



Comparison of the set of the s

When asked if you feel satisfied in your current workplace, **65% of the respondents answered in the affirmative.** The percentage of women who declared that they did not feel satisfied at work was almost the same as the percentage of women who eventually changed the job.

The data mentioned above coincide with the research results on management culture in the IT industry, which we conducted in December 2020. According to this research, 2 out of 5 people in IT **do not feel appreciated** in the workplace, and only half felt a strong connection with their company.



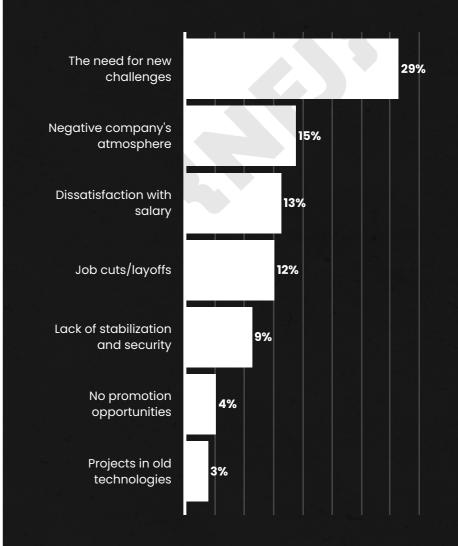
Reasons and circumstances of changing jobs

We already know that in 2020 every third female respondent changed her workplace.

In the survey, we also asked participants about the primary motivations for their decision.

The main reason was **the need for new challenges**. It was declared by 29% of women. The second most common stimulus was **the atmosphere in the company**, followed closely by **unsatisfactory earnings.** Among the selected answers were also: loss of the current job and lack of stabilization and security in the company.

What was the reason for your job change?



It's not all about money

Earnings are important for women employed in IT, but not necessarily the most important. Respondents already working in IT indicated the following aspects as the most significant: a good atmosphere (66%), followed by high salaries (65%), the possibility of personal development and participation in interesting projects. It is worth mentioning that the respondents who are just planning to enter the industry considered high salary first and the possibility of development second. **40% of them emphasized that the IT industry is simply fascinating for them.**

What demotivates women while working? Almost every third woman in IT declared that she quit her job due to the lack of new challenges (29%). Significantly, the respondents who want to find employment in the industry hope that new challenges await them in IT, ensuring personal development. New challenges and personal growth for both groups of surveyed women seem to guarantee an excellent professional future.



Marta Steiner Head of Product&Marketing





II. Women entering Tech career

Salaries, work conditions, chances and difficulties during job searching in the IT sector

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Who are the women who plan to start a career in IT?

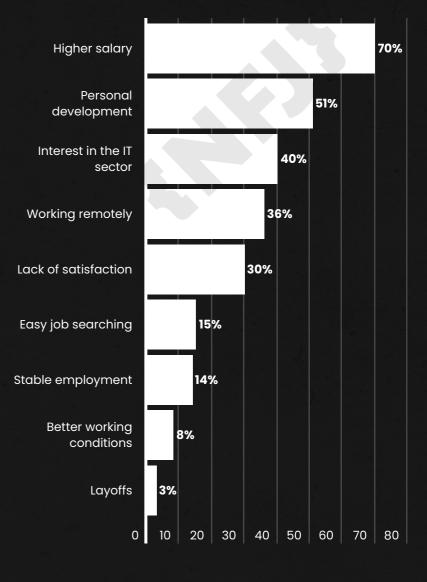
Our study participants who have declared their willingness to work in IT have various professional backgrounds – they work, among others, in banking and finance, marketing, sales, industry and engineering, or HR.

18% of the interviewed candidates described their level of experience as mid/regular, 10% - senior, and 7% - expert. This means that a total of **35% of the respondents have professional** experience and first promotions behind them.

The greatest motivation to work in the IT sector are **higher salaries** and the possibility of **personal development**. Moreover, 40% of respondents find the tech-world exciting.

What collective image of a candidate emerges after analyzing this data? At the beginning of their IT careers, women are often professionally active and have had their first successes in other areas. Their decision to change their branches is, therefore, conscious and supported by prior market research.

What motivates you to start a career in IT?

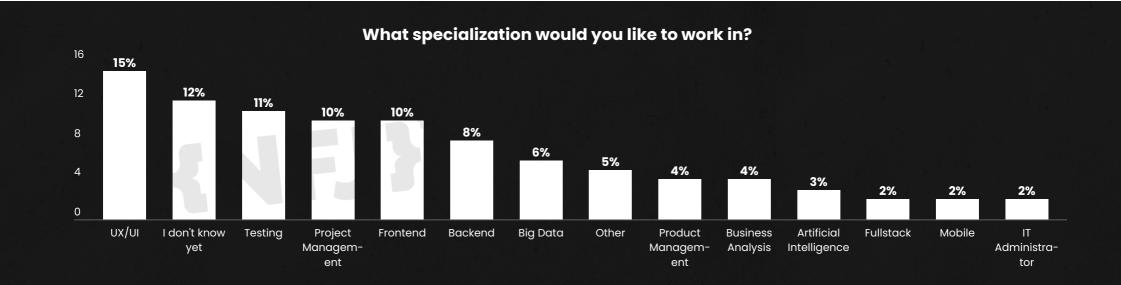


Most desired IT specializations among women entering IT

What are dream specializations of women whose preparatory process to enter the IT industry is still in progress? Here, the data was slightly **different from the declared specializations of women already employed in IT.**

The field of UX/UI turned out to be the most desirable specialization, followed closely by Frontend, Project Management and Testing. Interestingly, Fullstack, highly ranked among female IT specialists, was at the bottom of the list among aspiring IT candidates.

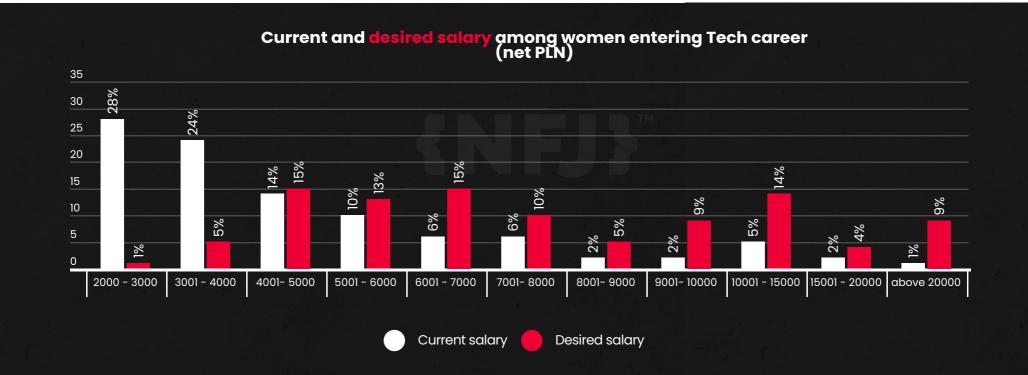
It is worth noting that the field of User Experience is broad, as are the competencies possessed by UX/UI specialists - this sector is especially popular among candidates after language studies, psychology, social sciences and graduates of the faculties of Architecture and the Academy of Fine Arts.



Current and desired salaries among women outside IT

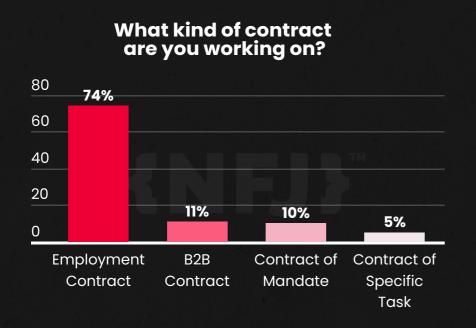
More than half of the surveyed women from outside IT **declared earnings in the range of net PLN 2,000–4,000.** Salary between net PLN 4,000-5,000 was indicated by 14% of respondents, and net PLN 5,000-6,000 – 10% of women. A five-digit salary was declared by 8% of the survey participants. For comparison – among women in IT, this high salary appeared in responses of 16% of women.

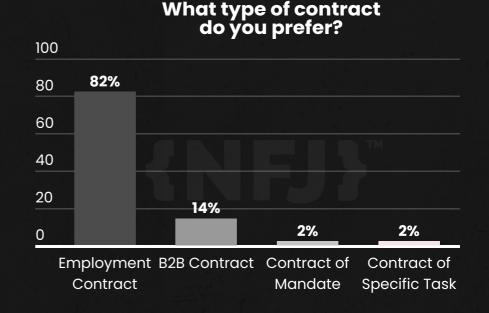
The biggest group of respondents indicated the range of net PLN 4,000–7,000 as their dream salary, and for 27% the desired earnings started from net PLN +10k.



Declared and desired types of contracts

Among the surveyed candidates from outside the IT industry, **74% declared that they work under an employment contract,** and 11% - on a B2B contract. The indicated preferences of women not working in IT are similar to the expectations of female IT specialists. Here, too, the employment contract gained an overwhelming advantage over other types. It was indicated by 82% of the respondents, which is 6 percentage points higher than the result obtained for women working in IT.

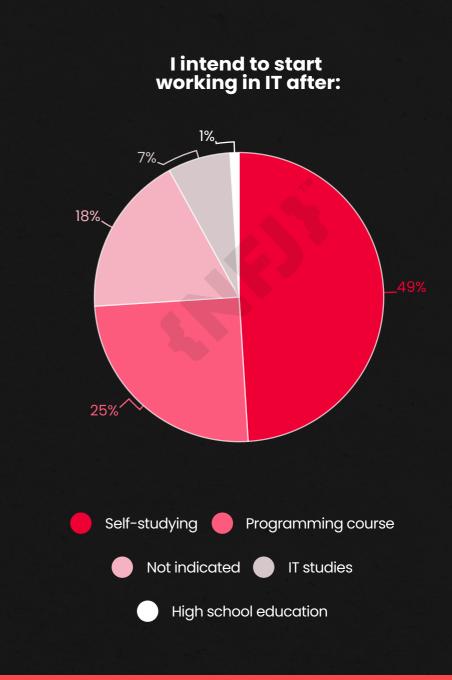




How do women prepare to enter Tech industry?

Almost half of our respondents undertook independent education in the field of IT. 25% of the survey participants took up specialist courses and only 7% decided to sign for IT studies.

Women planning a change of industry have different academic backgrounds. They graduated from, among others: humanities, technology and engineering, social and natural sciences.

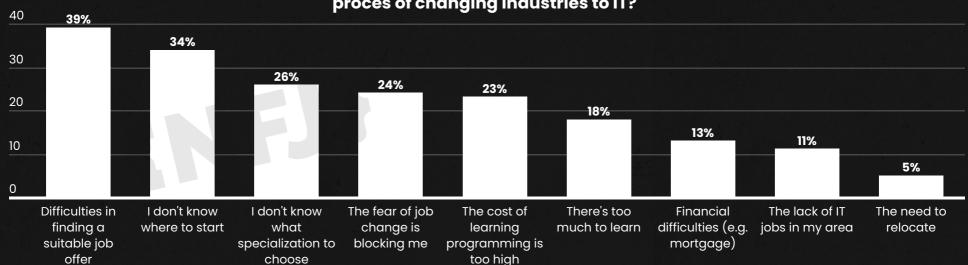


Difficulties on the path to IT

We set out to explore the challenges and obstacles that women face in the process of changing industries.

We found out that **39% of respondents have difficulties in finding a suitable job offer.** Every third woman does not know where to start the whole process and which specialization to choose. 24% of the respondents struggle with a mental barrier, i.e. the fear of change.

Also, the high cost of IT courses and the overwhelming scope of material to master are discouraging as well.



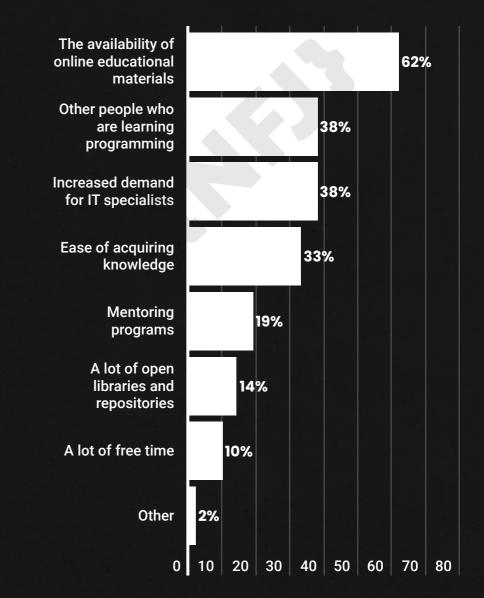
What do you consider as a difficulty in the proces of changing industries to IT?



Every third respondent from outside the IT industry declared that the difficulty on the way to a career in IT is the lack of knowledge - "where to start". At the same time, **62% of the respondents** from this group indicated numerous educational materials available on the Internet as significant facilitation in the process of learning and looking for a job.

The growing demand for IT specialists also turned out to be a big motivator. For many women, the inspiration to take up the challenge of changing the industry are other people who have already started learning in the IT sector.

What motivates you and makes it easier to start a career in IT?

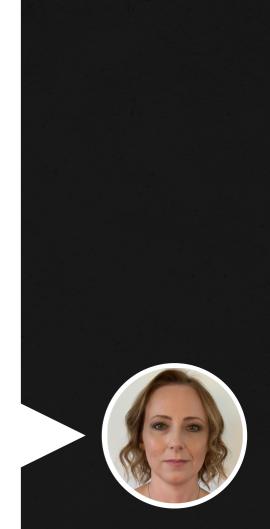


What guarantees a secure professional future nowadays?

Mentoring programs are a valuable support for professional development, and it is worth looking for mentors actively. If you know what direction you want to develop in, the help of a kind, experienced partner is not to be overestimated. This relationship works not only in the area of hard competences.

One of the most common barriers for women who do not have a technological background is overestimating the impact of formal education for a career opportunity in IT. Working with a mentor opens up new perspectives in your head, enables the clash of ideas with reality and gives a chance to see the variety of roles that can be performed in IT.

A mentor (either a man or a woman) participating in a mentoring program enjoys sharing accumulated knowledge because they wish that "I had been told that by somebody when I first started". What gives me the greatest satisfaction is watching how, thanks to a better understanding of the IT mechanisms, mentees make the best possible professional decisions regarding their own development and career.



Joanna Grzywna Head of Project Management Department

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What non-technical skills are valuable in IT?

According to a Deloitte report, by **2030**, ²/₃ **jobs will require highly developed soft skills.** Therefore, we asked non-IT women about their non-technical skills acquired while working in their current industries. Half of our respondents can boast of:

- Teamwork skills
- Problem-solving attitude
- Analytical skills

These are only the most popular among the indicated soft skills. The list of women's competencies from outside the IT industry is much longer, which means that **many candidates meet some of the necessary requirements to work in IT**. When completing your CV, you should take into account not only strictly technical knowledge but also soft skills acquired while working in other positions. More and more often, they are the deciding factor while hiring junior candidates. The recruiters examine the fit to a given organization's culture and estimate how efficiently the implementation process will run, and thus, how quickly a new employee will become independent. **Junior, you may be closer to your goal than you think!**

Women's challenges in IT in 2021

The year 2021 is the time when IT companies are even more actively looking for employees, especially the experienced ones. **In 2020, employers on nofluffjobs.com published a record number of job offers** – over 26,000! Half of them were targeted at seniors and experts with extensive knowledge and experience in various IT fields.

This year, **the quality, efficiency, ergonomics and safety of services** offered to users online will be of particular importance. Among the candidates and employees, regardless of gender, the most appreciated will be those who easily adapt to changes, act agile, quickly acquire new skills, as well as understand and follow the organization's business goals. There is still a shortage of around 50k IT specialists in Poland, and in Europe this number reaches 600k. This means that the IT market is not slowing down but accelerating. In order to meet the expectations of consumers and keep up with the implementation of contracted projects, **IT companies will open up to juniors, but only to those who know what they want, consistently acquire new skills and can efficiently cooperate with other people in the team.**

Regardless of the employee's seniority, the ability to communicate effectively will be a particularly valuable skill, not only at the level of specifying the needs, goals and business requirements in projects but also for sharing their own needs and requirements. The individual success of the candidate and employee in the industry will largely depend on the ability to cooperate with people and work on oneself. Soft skills will become an important indicator for seniority as well as technical skills will. It is especially these competences that the IT world will devote more attention to in 2021.

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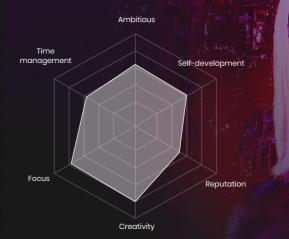
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