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Michał Piątkowski

CEO at MOTIFE

MOTIFE

Welcome to the 5th edition of the Krakow IT Market Report.

This publication has dual objectives: firstly, it aims to keep those involved in the Krakow IT industry informed of current market state, and secondly, it's a comprehensive guide for anyone considering breaking into the Polish tech sector to set up and run a thriving tech hub.

Looking back over the last year, a few patterns in the Krakow IT Market are noticeable. The IT talent pool grew by 10%. We've seen new faces like Volvo, First Advantage, and Kaseya entering the scene. The growing importance of fintech and financial services companies has become increasingly apparent too, with HSBC becoming a number one employer of IT specialists in Krakow. The scope of traditional Global Business Services (GBS) sites has expanded to include software R&D – just take a look at companies like Heineken, Euroclear, and TechnipFMC. Another noteworthy trend is that a rising number of unicorns or pre-IPO companies with over \$1B valuation are choosing to establish their technology centers in Krakow.

An important development we've observed is the influx of Ukrainian companies making a significant impact on the Polish market. Examples of these companies include Infopulse, ELEKS and Sigma Software.

It's essential to acknowledge that the Poland IT market, as a part of the global IT landscape, follows global trends e.g. embracing hybrid and remote work, but also a "return to the office" trend. While Krakow remains a leading hub, the real IT talent pool is now Poland-wide, with companies tapping into remote talent through satellite offices or fully remote hiring. Still, as Andrew Hallam of ASPIRE says in his intro words, the world isn't flat and location matters.

Other important global trends that start to be visible in Poland are related to companies reevaluating hiring strategies in response to the evolving needs, and preparing for the widespread integration of AI technologies across the entire technology space.

We would like to extend our gratitude to our partners ASPIRE, OMGKRK, and Cushman & Wakefield, as well as all the guest contributors for their invaluable support in creating this 2023 edition – without their input, this report would not be possible.

We hope you find this report insightful and informative, and we look forward jointly contributing to the continued growth and evolution of the IT market in Krakow and beyond.



Jacek Majchrowski

Mayor of Krakow



Krakow has been the European leader of attractiveness for the sector of advanced technologies, modern business services as well as research and development centres for a few years now.

Numerous companies, technology hubs, start-ups, research centres and universities are based in our city. The local government constantly tries to support the inter-sector cooperation of business and academia.

By promoting innovations and development of knowledge-based economy, Krakow, which is also an excellent place to live, attracts businesses, investors and new residents. And Krakow's residents are the city's greatest asset. Their energy, creativity and talents form the foundation of our joint success. It is especially valuable as the contemporary dynamically changing reality poses various challenges and requires that we constantly seek new solutions both in reality and in the digital sphere. But it is with immense pride that we can say that the city we are creating is well prepared to offer new opportunities for development.

About Krakow

1.5_M

Population of Krakow metropolitan area

 2_{nd}

Largest city in Poland

130_к

Students in Krakow

2.3%

Unemployment rate in Krakow

Krakow, the medieval capital of Poland, is the country's second largest city with 0.8 million registered inhabitants, although the actual number, accounting for students and non-registered persons, is more likely 1.1 million people.

Over the past 25 years, Krakow has emerged as the premier destination for business services delivery centers within the European Union. Global companies such as ABB, Motorola Solutions, IBM, UBS, Shell, Cisco, and Cappemini have established their business service hubs in the city. Krakow also boasts a vibrant atmosphere, with over 130 000 students attending local universities. More than 16 million tourists visited the Krakow region in 2022, and the city has earned recognition as a top tourist destination with the 10th place in TripAdvisor's , "Travellers' Choice Best of the Best Destination Awards 2023".

Situated in the southern part of Poland, Krakow enjoys excellent connectivity with Europe. Its airport offers direct flights to over 100 European cities and to international business hubs such as New York, Chicago, and Dubai.

Since 2012, computer science has been the most popular field of study among Polish students.
As a university town, Krakow not only produces over 2 500 new ICT graduates each year but also attracts talent from other cities and countries, thanks to its thriving business environment.

Sources: krakow.stat.gov.pl, krakow.pl, 2023

Partners of the report

For this year's edition of the Krakow IT Market Report, we are delighted to partner with three well-respected local stakeholders: ASPIRE, OMGKRK, and Cushman & Wakefield. Their contributions in terms of content and promotion have helped us create a comprehensive document that offers insights into the IT industry in Krakow.



ASPIRE - Association of IT and Business Services Companies

Established in 2008, ASPIRE brings together key players in developing the Krakow tech and business services sector under one umbrella. ASPIRE is acknowledged as being a key player in Krakow's rise to the position of the top ranked location for global services in Europe. ASPIRE currently has 160 members, comprising leading multinational companies operating delivery and development centers in Krakow and companies providing support services to the industry.

aspire.org.pl



OMGKRK has been a leading animator of the startup community for the last 7 years. It focuses on creating a world-class business ecosystem and catalyzing innovation in Krakow and the Malopolska region. The main areas of the foundation's activities are creating a positive brand of the city and province, supporting digital transformation, technology entrepreneurs, building a network of connections between people, companies and organizations, and accelerating, inspiring, and educating technology companies.

omgkrk.com



Cushman & Wakefield (NYSE: CWK) is a leading global real estate services firm that delivers exceptional value for real estate occupiers and owners. Cushman & Wakefield is among the largest real estate services firms with approximately 52,000 employees in over 400 offices and approximately 60 countries. In 2022, the firm had revenue of \$10.1 billion across core services of property, facilities and project management, leasing, capital markets, and valuation and other services.

cushmanwakefield.com



Andrew Hallam

General Secretary at ASPIRE



The world still isn't flat.

Krakow is a global IT hot spot. 12 months ago maybe the jury was out. Today, no longer.

12 months ago there was some thinking our ties to location had been permanently loosened. The response to COVID-19 had shown our capability to work remotely and geopolitical tensions in the region were high. There was some unease that our IT talent would be attracted elsewhere. 12 months forward these fears have been allayed. In fact, more than ever the role of location as a defining factor in strategic growth is clear.

For sure, our understanding of location has evolved. Whereas previously when we discussed talent pool it was a question of the attractiveness of Krakow as a location for talent, now when we say Krakow, we think Poland - meaning that IT talent from across the country is available to us.

If this is true of Krakow then surely it is also true for other locations. Not so, it would seem as Krakow continues to outperform the market. Which means we must look deeper. The reason, I would venture, for Krakow's continuing success is the role played by maturity, scale and culture. These in turn support resilience and the ability to capture opportunity; also the ability to not only attract but to develop talent — not just resisting the tide but riding the wave.

Underlying this scale, maturity and evolved "Can do" culture is Krakow's global business services sector - 20 years in the making, now employing c. 120 000 in 200 centres across Krakow and along the A4 highway corridor.

As Europe's leading services hub, the business services sector in Krakow provides the ballast that shape the Krakow ecosystem. More than that, however, it is the evolution of the sector itself which is driving Krakow's IT success. As Business Services centres in Krakow have become increasingly important partners to the businesses they serve, so too technology has become increasingly important in business transformation, such that what is now done in our centres is less IT enabled delivery of services than it is development of core IT.

This is evidenced in the fact that IT jobs now account for c. 25% of total headcount in business services in Krakow and some of the largest IT employers in Krakow are multinational operating in the business services sector (rather than pure technology companies).

This should provide us with significant optimism for the next 12 months and beyond. As was always the case, the world is not flat, and some places are and always will be spiky. As first discovered by Copernicus - in Krakow.

Key findings

Growth of the talent pool

55K in Krakow 360K in Poland

The IT talent pool in Krakow grows by around 10% each year, driven by new graduates and professionals from other cities and neighboring countries attracted by career opportunities.

40 new IT players

Doubled vs. 2021

The number of international companies building IT teams in Krakow continues to grow, reaching all-time high of 40 last vear.

HSBC

No. 1 IT specialists' employer in Krakow

The presence of large financial services companies and the arrival of new fintech players confirm growing role of the financial sector in Krakow.

Largest IT employers

As per IT headcount:

- 1. HSBC
- 2. Comarch
- 3. Aptiv
- 4. EPAM Systems
- 5. Motorola Solutions

5 companies account for over 10 000 IT professionals (based on the data provided by the companies).

is a hub...

Krakow ...but the talent pool is the entire Poland

Companies tap into the remote talent either by opening satellite offices or hiring fully remotely.

Up to 15%

2022 was a year of salary expectations increase

Accelerated by high inflation rate in Poland and globally. In 2023, we have already observed a slowdown in this trend.

Ukraine war impact

Numerous companies relocating their teams and operations from Ukraine to Poland

Over 40 new companies registered in 2022 in Krakow with beneficial owners from Ukraine and PKD related to IT. showing a growing importance of Ukrainian IT companies in Poland.

Unicorns

19 international unicorns

with R&D teams in Krakow confirming the attractiveness of Krakow as a tech hub, and brings entrepreneurship exposure to the tech ecosystem.

Google

back in Krakow

The team, located in the Main Market Square, is building the Google Cloud Platform.



Tomasz Siwiec

Senior Leader Software Engineering at Google

Google

Google has been present in Poland since 2006 and operates offices in Warsaw, Wrocław and Krakow. Poland has become one of the fastest growing locations, with engineering teams focusing mainly on the development of Cloud technologies.

The teams in Krakow are responsible for supporting key elements of Google's Cloud computing services and the global Internet infrastructure. This includes the Content Delivery Network platform, responsible for delivering data and video streaming to users globally; the Borg system, which manages the computational tasks in Google data centers; and services such as BigQuery, used by many of the world's largest companies to analyze data.

The office space is located at the city's historic Market Square in a listed townhouse dating back to the 14th century.

Krakow boasts renowned academic institutions and is an attractive, modern city. It also has a number of international IT companies and a large pool of experienced engineers working in multicultural environments. We are looking to hire both fresh graduates eager to learn and engineers experienced in building distributed systems at global scale.



Focus

The impact of the war in Ukraine on Poland's IT market

The war in Ukraine has affected the IT market in Poland. Since 2014, we have observed a growing trend of IT specialists moving from Ukraine to Poland, and since the outbreak of full-scale war, there has been an increase in Ukrainian IT companies opening operations in Poland. It is estimated that since the beginning of 2022, over 500 IT companies with Ukrainian capital have been registered in Poland.

Many Ukrainian companies began relocating their operations soon after the invasion and employees outside of Ukraine, and Poland became the destination of first choice. Over 70% of Ukrainian IT companies are currently partially or completely relocated to western Ukraine or abroad. Four out of ten have completely moved outside of Ukraine. These partial or complete relocations apply to both small and larger companies such as SoftServe or Infopulse. As a result, the Polish and Ukrainian IT markets, which previously functioned rather independently, are increasingly integrated. We can expect a deepening

integration in the coming years. At the same time, the conflict has not substantially affected the number of Ukrainian IT specialists in the Polish market who could join local companies. When the war broke out, most of them could not leave the country.

A year ago, we expected many Western clients who previously used services from Ukrainian IT companies, as well as Russian or Belarusian companies, to try to replace them with suppliers from Poland. This happened to a limited extent.

The outbreak of war has also affected the perception of Poland, especially in the United States. Immediately after the invasion, some international IT companies canceled plans to open operations in Poland, while others that already had operations in Poland suspended travel of employees from other branches to Poland. Now that 12 months have passed, we no longer observe such concerns.

40

New companies registered in 2022 in Krakow with beneficial owners from Ukraine and industry code related to IT 20%

of Krakow registered inhabitants are Ukrainian (+10 points since the start of the war)



Sebastian Drzewiecki

Country Manager Poland at SoftServe

soft**serve**

SoftServe, a leading global digital consulting company, is known for its cutting-edge solutions in technology strategy, software engineering, and cybersecurity.

The company has been continuously growing its presence in Poland where it currently employs more than 1 600 employees, thus contributing to SoftServe's geographical reach and expertise. Since its fast-paced start in 2021, SoftServe has rapidly grown to almost 200 employees in Krakow, reflecting the company's commitment to the region.

Due to the onset of the 2022 Russian invasion, SoftServe's Ukraine-based workforce has faced immense challenges. The company has been actively supporting its employees through humanitarian efforts, remote work opportunities, and relocation assistance to ensure their safety and well-being.

SoftServe's entry to Poland was a strategic move that had predated the conflict. Driven by such factors as a highly skilled talent pool, a thriving tech ecosystem, and an advantageous business climate, the company expanded its presence across Poland over time. This growth has been facilitated by partnerships with local universities, talent acquisition initiatives, and the launch of innovative projects.

SoftServe's short-term goal is to solidify its position in the Polish market by fostering collaboration, attracting top talent, and delivering exceptional services to clients. The company also plans to continue assisting its employees impacted by the war, while maintaining business continuity.

Looking towards the long term, SoftServe aspires to become a significant player in Poland's technology sector. Through consistent innovation, thought leadership, and high-quality service delivery, the company envisions a future where it leads the charge in transforming industries and empowering organizations to thrive in the digital age.



Within this chapter, we delve into Krakow's role as a thriving technological center, highlighting its abundance of skilled IT professionals, recent corporate establishments, prominent IT industry leaders, and burgeoning startup ecosystem. Furthermore, valuable information is provided regarding the city's academic institutions, vibrant communities, and the dynamic landscape of its office market.

Why Krakow?

55_K

Estimated number of engineers and IT professionals working in Krakow region

500+

IT companies operating in Krakow

30+

Large companies hiring each 300+ IT specialists in Krakow

Firmly established as one of the most significant technology hubs in Central and Eastern Europe, Krakow's IT and business sectors continue to flourish, showcasing their resilience and allure even amidst the global economic and social upheaval brought on by the pandemic.

Early entrants to Krakow such as Motorola Solutions or UBS continue growing, with many broadening their range of services. A steady stream of new companies, both large and small, continues to join the growing business environment, while the share of Polish firms is increasing. Additionally, the city is growing in importance in the start-up scene, with a rising number of unicorns and venture capital-backed entities now calling Krakow home.

Factors attracting IT companies to Krakow

Krakow has become a magnet for IT companies due to a multitude of factors. Firstly, the city boasts an exceptional talent pool known for its high-quality skills. Cultural similarities as well as English proficiency facilitate seamless collaboration. Additionally, compared to the United States and Western Europe, Krakow offers a compelling cost advantage.

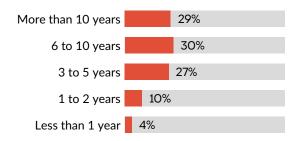
Furthermore, 63% of employees stay in their job for three years or more, while 36% choose to stay for an extended period of six years or longer.

IT talent in Krakow

Seniority

The IT sector in Krakow is quite diverse. It includes professionals at all levels, from junior roles to highly experienced senior and management roles. The city's growth as a tech hub has attracted experienced professionals, but there's also a steady supply of junior talent from local universities.

Estimated distribution of developers in Krakow by years of experience (according to Stack Overflow)



Education

Polish IT professionals are highly educated. 77% of IT specialists in Krakow have a degree in computer science or a related field. Poland has a strong educational system, especially in STEM (Science, Technology, Engineering, Mathematics) fields, and its universities are recognized for producing high-quality graduates.

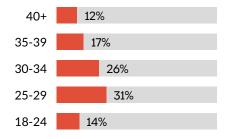
Gender

Like many places around the world, the IT field in Krakow and Poland has traditionally been maledominated (84.5%), but the gender balance has been gradually improving. There has been an increase in initiatives aimed at encouraging more women to enter the IT field.

Age

The age range in the IT sector is broad, but many professionals are in their mid-20s to mid-40s. This is a sector that's popular with younger people due to the strong demand and high earning potential.

Distribution of developers in Krakow by age range



English skills

English proficiency is generally high among IT professionals in Krakow. English is commonly taught in schools, and since it's the lingua franca of the tech world, professionals often have a good command of the language. Overall, Poland ranked #13 in the 2023 EF English Proficiency Index with a Very High proficiency mark – Krakow region ranked highest amongst all Polish regions.

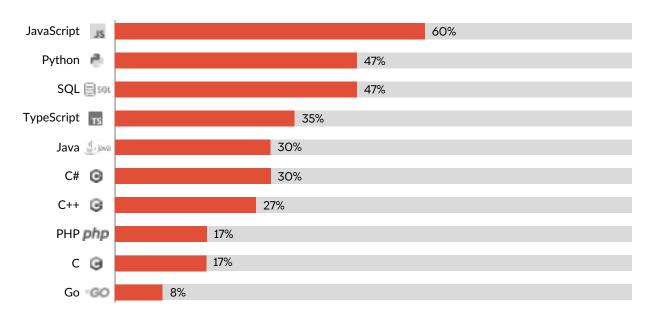
#13

Rank of Poland in the 2023 EF English Proficiency Index, out of 111 countries

Tech skills

The skill set of IT professionals in Krakow is diverse, with expertise in various programming languages (like Java, Python, JavaScript, C#, and more), as well as in areas such as machine learning, data analysis, cloud computing, cybersecurity, and more.

Share of developers in Krakow having experience with a specific programming language



Employee retention

Polish IT professionals are generally seen as loyal to their employers. The probability of a person changing a job is in the range between 11% and 15% in each year the first 3 years of work. After this period, the probability of someone changing a job in a given year falls to less than 10% and continues to fall with each year of employment. In 2022, around 11% of developers in Krakow transitioned to a new job, which accounts for approximately 6 000 people. Another 5 000, approximately, entered the job market.

of IT professionals in Krakow stay at their job for 3 or more years

Approximate number of IT specialists in Krakow who found a new job in 2022

Sources: Stack Overflow's 2022 Developer Survey of 1 480 Polish professional developers, MOTIFE Insights, LinkedIn, Eurostat, EF Education First, Bulldogjobs's IT Community Survey, 2023

Focus

Women in the Poland IT Market

In Poland, women represent a mere 15.5% of the IT workforce, according to Eurostat.
Concurrently, numerous companies face challenges in recruiting suitable candidates to fill IT positions, with an estimated 150 000 IT specialists roles remaining vacant (as per a study conducted by the Polish Economic Institute).

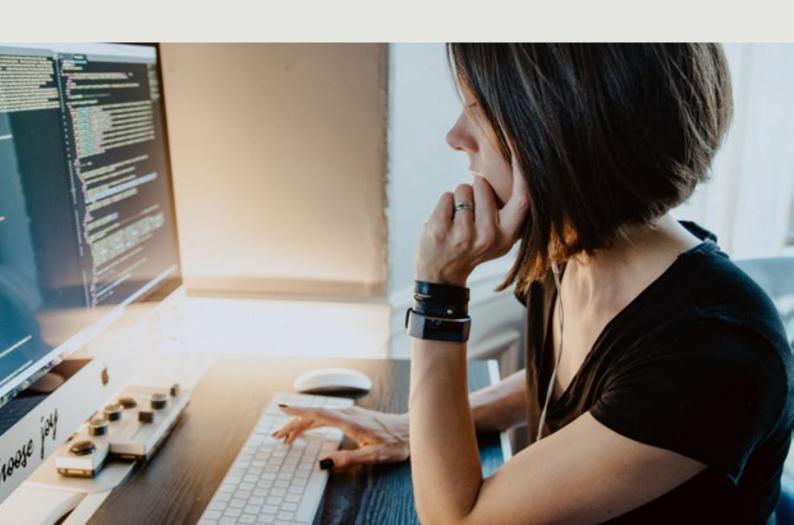
This underscores the significant untapped skills and intellectual potential in the workforce that could be utilized by attracting more women to the industry. We sought the perspective of an experienced IT manager on the issue of gender diversity in Poland's IT market, Dominika Pacyna.

15.5%

Share of women in the IT talent pool in Poland

150_к

Estimated number of IT specialists positions not filled in Poland





Dominika Pacyna

Director IT Service Management at KION Group



In the early days of my career, gender diversity was often overlooked in IT. Jokes about women in engineering were common and diversity initiatives faced criticism. Since those days, we have made significant progresses in both the social and organizational aspects of the IT industry. It is now rare to find a company that does not prioritize gender diversity, as it is widely recognized as crucial for achieving business goals.

This shift has been brought about by a combination of factors, including the realization that diverse companies perform better and achieve superior results, a scarcity of skilled candidates within the existing talent pool, social changes, and legal requirements in some countries that have made these efforts increasingly mainstream.

At the same time, there is untapped potential in Poland's female workforce that the IT industry can benefit from. A 2022 Eurostat report revealed that 42.5% of employed women in Poland held managerial positions across various industries, the second-best result in the European Union. Considering this, we must question why women represent only 15.5% of the IT sector in Poland.

Diversity as an economic growth lever for the Krakow IT Market

The increasing number of companies attracted to Krakow, in part due to its rich IT talent pool, highlights

the importance of enabling these businesses to grow and recruit the specialists they need. However, tapping into the full potential of the city's workforce requires broadening the pool of candidates by promoting gender diversity in the IT sector.

This is not only crucial for IT companies but also serves as a critical driver of economic growth and employment stability for the city. To maintain Krakow's appeal to existing and future IT players, it is essential for the city council to invest in initiatives that attract more women to the field. By providing girls and young women with appropriate education and opportunities, we can empower them to join the IT sector early in their careers and help companies find the workforce they need to achieve their business goals.

What can companies do?

- A recent "No Fluff Jobs" report revealed that fewer than 30% of women in the IT sector hold a technology-related university degree, with many acquiring their expertise through courses and self-learning. This highlights the importance of supporting such training initiatives to increase accessibility for those seeking to learn new skills or enter the IT industry.
- Gartner indicates that despite efforts to attract more women to the IT sector, results remain unsatisfactory. Companies often target the same pool of candidates on social networks. To improve outcomes, more emphasis should be placed on recruiting managers with a track record of attracting female candidates and fostering diversity and inclusion in their teams.
- To counter the claim that "no female candidates applied for the role," hiring managers should actively engage in initiatives that attract more women to the IT sector. They need to ask themselves how they have approached the pool of potential candidates and how they can create a more inclusive environment. By building social connections, becoming a mentor, and

- supporting gender diversity movements, managers can more easily create diverse and successful teams. It is important for managers to understand that they themselves will benefit from these efforts, as the IT industry thrives with a wide range of skills and abilities contributed by diverse teams
- Lastly, fostering an inclusive workplace
 where employees can grow professionally
 while achieving personal goals and
 maintaining work-life balance is crucial.
 Recommendations from existing employees
 are invaluable for attracting candidates.
 By making concerted efforts to attract and
 retain female employees and ensuring an
 inclusive atmosphere in the workplace,
 companies may benefit from these
 employees bringing in their female peers.

What each of us can do at our own personal level?

While there is a positive trend in the number of women in IT and an increase in inclusion initiatives, it's up to us in the industry to ensure the change is rapid enough to meet the sector's needs and guarantee stable growth in Krakow. The growing popularity of these initiatives and small steps, such as requiring gender diversity among speakers at IT conferences, indicate that the situation will improve in the coming years. By actively engaging in these initiatives, we can accelerate the change and contribute to the stable growth of Krakow's IT sector.

As parents, aunts, uncles, or siblings, we can make a significant impact by ensuring children do not grow up with biases about who can work in the IT sector. As a mother of a 10-year-old girl, I have had many occasions to explain that she can play with cars and that girls are just as good at math as boys. These social biases are unfounded, and we can teach all children, regardless of their gender, that they can succeed in any industry they are passionate about. By taking small steps individually, we can collectively make significant progress towards a more diverse future.



New international IT players in Krakow

Each year, an increasing number of companies are choosing to build IT teams in Krakow. In the last 12 months (April 2022 - April 2023), at least 40 international companies have set up software development teams in the city (compared to 17 companies last year).

Once again, the software and IT services categories are the most represented sectors among new entrants. The list of newcomers to Krakow's IT scene also includes non-Polish unicorns such as Zilch and Kaseya. Some companies, like Papaya Global or LegalZoom, have entered the Krakow IT market through acquisitions. Finally, nearly a third of the new IT players have relocated their staff or operations to Krakow due to the war in Ukraine.

 ~ 40

New IT players in Krakow in the last 12 months

10+

At least 10 new IT players arrived in Krakow due to the war in Ukraine



Finance / HR / Legal



Financial services / Belgium

euroclear.com

Euroclear is one of the world's largest providers of domestic and crossborder settlement and related services for bond, equity, ETF and mutual fund transactions. Already present in Krakow with 800 employees in supporting functions, Euroclear plans to have over 300 engineering and IT roles in Krakow by the end of 2025.



First Advantage

HR Tech / USA

fadv.com

First Advantage is a provider of technology solutions for employment background screening, verifications, safety and compliance related to human capital. First Advantage plans to have 100 engineering and IT roles in Krakow by the end of 2023.

LEGALZOOM

Legal Tech / USA

legalzoom.com

LegalZoom is a technology platform that gives access to professional legal advice. They offer online legal document services and legal plans. LegalZoom acquired the virtual mailbox solution Earth Class Mail which was already present in Krakow.



Financial services / USA

papayaglobal.com

Papaya Global is a SaaS fintech company enabling enterprises to master the complexities of workforce management. Papaya's comprehensive technology, known as Papaya OS, is the only global platform that offers payroll and payments as a unified process. Papaya Global acquired Azimo, a Krakow-based payment startup.



Financial services / France-UK

shares.io

Shares is a social investment platform that gives everyone access to the stock market and improves the investment experience.

zılch

Financial services / UK

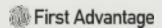
zilch.com

Zilch is a buy now, pay later app that allows its customers to shop wherever Mastercard is accepted with no hidden costs.



Raymond Van der Wal

Chief Product Officer, International at First Advantage



What is First Advantage?

First Advantage is a leading global provider of employment background screening and verification solutions supported by award-winning customer care. Operating across almost all industries and serving small, medium-size, and large businesses, First Advantage performed over 100 million screens on behalf of approximately 33 000 customers spanning the globe during 2022. We chose Krakow as the location to build a new team in Europe and started onboarding our initial set of employees in the first half of 2022. By the end of 2022, our presence in Krakow has grown to more than 60 people, including product and technology, operations, customer care, and HR shared service roles.

Why did First Advantage choose Krakow?

With a reputation as an emerging tech hub in Europe, the expansion into Krakow furthers First Advantage's commitment to developing and delivering innovative solutions and insights that help customers manage risk and hire the best talent across the globe.

We chose Krakow as the location for our new team as we felt that the city and its talent could play an important role in our global strategy to help our clients hire smarter and onboard faster. Our ambition to build product platforms at scale required us to rethink our talent needs and to prioritize cloud and full-stack engineering. We knew that we could find this talent in Central Europe, and Krakow and Poland stood out as prime locations.

We were drawn to Poland due to the quality of the talent pool and several appealing cultural aspects, such as open mindedness, curiosity, a desire to add value, as well as a naturally collaborative mindset and strong communications skills.

We also needed to consider the niche market segment that First Advantage operates in, the legal framework that guides us, and our global strategic goals. This meant that we had to find a location where we could find stability and continuity, build trust, and proceed at a speed that made sense for our business.

Due to its attractiveness as a city, the modern infrastructure, outstanding academic ecosystem, and thriving international business scene, Krakow has become an exceptionally appealing place for businesses and expats to move to. The steady growth and diversity of the talent pool means that we're able to fulfill a variety of hiring needs here, not just tech roles.

Setting up in a new location, however appealing, is a major undertaking – you can't overstretch your existing resources by trying to do everything yourself, and you need to be able to tap into local knowledge and experience in order to make the right choices and get set up quickly and efficiently. The role of our softlanding and recruitment partner in Poland and the relationship we developed definitely played a big part in our decision to choose Krakow and the smooth operations we've enjoyed since arriving.

What roles has First Advantage hired in Krakow?

When it comes to tech roles, we have 3 Agile product development pods, comprising tech leads, product owners, UX designers, QA experts and a mix of senior-, mid-level, and junior developers. Beyond tech, we've also built a team of multilingual customer-care specialists. The combination of an outstanding academic ecosystem here and the appeal of Krakow to expats means we've been able to enhance the local-language services we provide to some of our biggest clients as well as our ability to verify

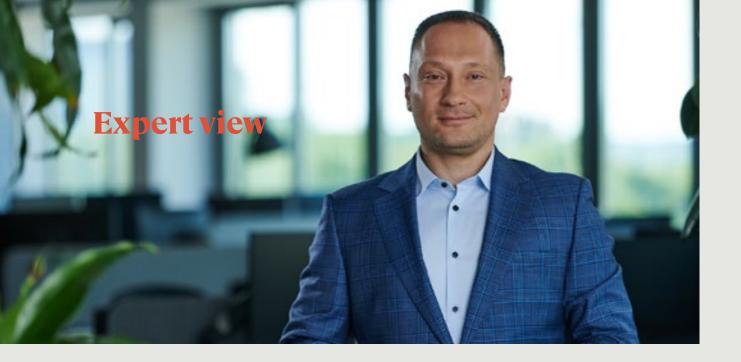
the backgrounds of international candidates. That's been a real benefit to First Advantage.

What projects do First Advantage colleagues in Krakow work on?

The tech teams mainly work in three key areas – building a cloud-native platform for capturing and managing orders from clients, re-designing and re-building our candidate-experience app, and working on how to integrate our services with API-based data providers such as tax offices, courts, payroll companies, and more. Our Krakow teams are at the heart of First Advantage's strategy and the disruption of the industry. That says a lot about the quality of people we've hired and the trust we're able to place in them.

What are First Advantage's plans for Krakow in the near future?

We grew very quickly in 2022 and so our first goal is to get everybody up to full productivity. Although we officially only opened our office here in October 2022, it feels like we've always been here, which is an indication of how smooth the ramp up has been and how seamlessly the Krakow teams have integrated into our global workforce. I look forward to building on strong foundations in Krakow and to First Advantage contributing to the thriving tech and business community here.



Andrzej Mikolajczak

Chief Technology Officer at Euroclear Euroclear SA Krakow branch manager



Euroclear is the world's leading settlement system for domestic and cross-border securities transactions, covering bonds, equities, investment funds and derivatives. Headquartered in Brussels, Belgium, we employ over 4 000 people worldwide.

Krakow was selected for Euroclear's Tech hub expansion to gain access to the city's rich talent pool, thriving tech ecosystem with numerous Tech and Finance players, and to build on the impressive growth of the local office since its opening in 2013. With close to 800 existing employees in Krakow, Euroclear aims to hire an additional 400 in the next 3 years, making it the company's second-largest office after Brussels.

Euroclear seeks diverse talent for its Krakow Tech hub expansion, including software engineers, frontend developers, infrastructure engineers, testers, IT business analysts, cloud architects, data engineers, and RPA developers. The company is also recruiting for cybersecurity professionals, compliance & ethics, risk specialists, and experts in finance, HR, and business consultancy domains.

The Krakow facility's expansion is due in part to Euroclear establishing a new legal structure in Krakow, setting up a Euroclear SA branch as of June 1, 2023. Euroclear SA Krakow branch will support Euroclear SA by providing various services to group entities. These services can relate to technology, client-facing, support or control areas. This new branch underscores the strategic importance of Krakow to the group and demonstrates a deep commitment to the corporate strategy, which is built on two crucial pillars: people and technology. The opening of this new branch will enable Euroclear to grow as a company and expand its talented workforce over the years.



Software



Gaming / Cyprus

belka-games.com

Belka Games is a game developer, one of the fastest growing companies in the industry. Over 1 million users play daily their top games Clockmaker, Bermuda Adventured and Solitaire Cruise.



Software / Canada

cae.com

CAE is a world leader in providing simulation and modelling technologies and integrated training solutions for the civil aviation industry.



Metaverse / United Arab Emirates

everdome.io

Everdome builds a Mars and space exploration themed metaverse experience, uniting individuals, creators, brands and businesses to collaborate on the shared virtual reality adventures.



Software / USA

kaseya.com

Kaseya is an automation software provider that offers remote management software for the information technology industry. Kaseya plans to have 150+ engineering / IT roles in Krakow by the end of 2023.



Software / Sweden

lime-technologies.com

Lime Technologies is a leading provider of CRM solutions in the Nordic region.



Software / UK

sensestreet.com

Sense Street innovates capital market communications, provides unstructured market conversations to a fine-grained understanding of liquidity in OTC capital markets.



Software / USA

tealium.com

Tealium is a provider of customer data orchestration tools aimed to address challenges in online search, marketing, and segment targeting.

unatri%

Software / Germany

unarix.com

Unatrix offers a user-friendly SaaS solution that combines HR know-how with modern technologies.



Software / USA

verkada.com

Verkada is the world's largest cloud-based physical security platform provider helping enterprises operate safer, smarter buildings.



Data / USA

voltactivedata.com

Volt Active Data is a data platform for generating 5G-based applications.



Software / Israel

wix.com

Wix specializes in web development and management that provides a cloud-based platform of products through a freemium model.





Software / Sweden

younium.com

Younium is the subscription management hub for B2B companies to streamline subscription management, invoicing/billing, financial reporting, and data insights.

Manufacturing / IoT

Amway

Manufacturing / USA

amway.com

Amway is the world's largest direct selling company, manufacturing and distributing nutrition, beauty and home products via independent entrepreneurs. Already present in Krakow with 600+ employees in supporting functions, Amway launched in 2022 a new IT hub.

BASLER?

Manufacturing / Germany

baslerweb.com

Basler AG is a Germany-based manufacturer of industrial cameras for a wide range of applications in industrial image processing, imaging and inspection. Basler AG plans to have 20 engineering and IT roles in Krakow by the end of 2023.

☐ futurehome

IoT / Norway

futurehome.io

Futurehome is a smart home and security solutions company helping apartment buildings and private homes digitalize and smarten up their homes to be safer, and more energy efficient.



Manufacturing / USA

genpt.com

Genuine Parts Company is a service organization engaged in the distribution of automotive replacement parts and industrial replacement parts.

VOLVO

Manufacturing / Sweden

volvocars.com

Volvo Cars Group specializes in the fields of automotive manufacturing and sales. Volvo Cars plans to have 120 engineering and IT roles in Krakow by the end of 2023.



Przemek Berendt

Head of the Poland Tech Hub at Volvo Cars

VOLVO

In 2023, Volvo Cars opened its Tech Hub in Krakow - one of four tech hubs globally. It will develop software for advanced car technologies, including autonomous driving.

Modern cars are true computers on wheels with software becoming a key differentiator. Volvo's ambition is to be a fully electric brand and a leader in new technology by 2030. The opening of another Tech Hub is part of the strategy.

After analyzing the best locations, the choice fell on Krakow. This city is an established tech center with a wide network of tech companies in the region. We will be the first car manufacturer to establish such center in Krakow.

We are actively recruiting skilled engineers so that our new office can start developing features to be used in our cars as soon as possible. We want to employ over 100 people by the end of the year, and more than 500 by mid-decade.

We are looking for engineers in the following areas:

- Embedded Software
- · System Architecture
- · Cyber Security
- DevOps

Volvo Cars is known not only for our safe cars. We are also famous for our Scandinavian work culture and our respect for both people and planet. Come and shape the future of mobility.

IT services and consulting



IT services and consulting / USA

agiliway.com

Agiliway is a custom software development company founded by a group of IT experts to provide partners with flexible yet high-quality software development service.

Cloudinary

IT services and consulting / USA

cloudinary.com

Cloudinary empowers companies to deliver visual experiences that inspire and connect by unleashing the full potential of their media.

CONCENTRIX

IT services and consulting /

concentrix.com

Concentrix offers digital engineering, customer experience (CX) management, data and analytics.

■ DataArt

IT services and consulting / USA

dataart.com

DataArt is a global software engineering firm that provides software development and consulting services. DataArt plans to have 100 engineering and IT roles in Krakow by the end of 2023.



eleks°

IT services and consulting / Ukraine

eleks.com

ELEKS offers custom software development, product design, QA and consultancy services.



infopulse

IT services and consulting / Ukraine

infopulse.com

Infopulse offers a full scope of IT lifecycle services. The company develops custom IT products and maintains complex IT infrastructures, serving customers from a variety of industries.





IT services and consulting / USA

helping them build great products by providing highly skilled engineers.

INSART is a software development partner for Fintech companies,

insart.com

:iTechArt

IT services and consulting / USA

itechart.com

iTechArt offers custom software and application development, modernization, migration, QA and testing services.

keapit[®]

IT services and consulting / Denmark

keepit.com

KeepIt specializes in cloud-to-cloud backup services for enterprises. It provides cloud backup and SaaS workload protection services.

() L&T Technology Services

IT services and consulting / India

ltts.com

L&T Technology Services Limited is an India-based engineering research and development services company. LTTS plans to have 100 engineering and IT roles in Krakow by the end of 2023.



Advertising / UK

loopme.com

LoopMe is focused on brand advertising, using AI, attribution, and analytics to deliver measurable outcomes.

N-iX

IT services and consulting / Malta

n-ix.com

N-iX is a European software development service company that helps businesses across the globe expand their engineering capabilities and develop successful software products.



Nortal

IT services and consulting / Estonia

nortal.com

Nortal is a multinational strategic change and technology company. Nortal plans to have 50 engineering and IT roles in Krakow by the end of 2023.

Proffiz

IT services and consulting / Ukraine

proffiz.com

Proffiz is a reliable software vendor that provides high-quality solutions for Fortune 500 companies and startups.





IT services and consulting / Ukraine

sigma.software

Sigma Software provides top-quality software development, graphic design, testing, and support services. Sigma Software plans to have 100 engineering and IT roles in Krakow by the end of 2023.





IT services and consulting / Ukraine

techmagic.co

TechMagic is a full-cycle development company that provides end-toend software development services to businesses of different sizes.





Focus

Opening satellite offices beyond Krakow

Numerous companies establish their presence in Krakow as a gateway to the country's IT market. As these companies mature, many begin expanding their operations to other cities in Poland by establishing satellite offices, despite the substantial costs involved in opening and running additional offices.

One of the primary reasons for opening new offices in other cities is to gain access to a larger talent pool. While Krakow boasts a significant pool of skilled IT professionals, other cities in Poland also have considerable numbers of IT specialists, and unique set of skills that IT companies can leverage.

In addition to tapping into specific skills, some companies may also want to assure their teams in other locations are not forced to work from home. Despite the prevalence of remote work, most of companies prefer the traditional or hybrid office environment. For these companies, opening new offices in other cities can help them maintain their culture of office-based work.

Another reason for opening new offices in other cities is to encourage the return to the office for employees hired remotely during the pandemic. While this can be a challenging and delicate process, having a physical office can facilitate the transition back to the office environment.

Opening new offices in other cities is not the only approach that companies are taking. Some companies are making flexible office spaces available to employees in major cities across Poland. This enables employees to work in a physical office when necessary, while still maintaining the flexibility of remote work.

It is also worth noting that some companies are adopting a multiple cities entry strategy when establishing their presence in Poland. For example, they may open offices in both Krakow and Warsaw.





Boris Lentini

Director, Country Lead at Grid Dynamics



Founded in 2006 and headquartered in Silicon Valley, Grid Dynamics is a provider of IT professional services and digital transformation services to Fortune 1000 companies.

We opened our first office in Poland in 2014, in Krakow. Today, we have around 700 people working in and around four major cities:

Krakow (est. 2014) is home to the biggest Grid Dynamics presence in Poland and one of our biggest globally.

Wroclaw (est. 2018) enabled us to have a second lever in Poland; one that has a similar talent profile to Krakow and is close to Germany.

Gdansk (est. 2020) provides access to niche skills and helps us appeal to those who enjoy life by the sea.

Warsaw (est. 2022) holds all the appeal of a capital city, with a large talent pool and opportunities to connect with our clients' local subsidiaries.

Being in these four cities is beneficial to our business and - because we have critical mass in each - it remains relatively cost-efficient.

However, expansion can bring new challenges. Spreading our culture – with the right quality and attention it deserves – becomes a demanding task as the number of locations rises. For Grid Dynamics, being in four cities is practical – we arrange visits, host virtual events, and more to ensure that employees everywhere feel informed and involved.

We also promote multiplexity. People belong to many circles, such as practice, project or client, and location. This enables us to create a common culture and for individuals to feel like they are part of multiple communities.

Large companies

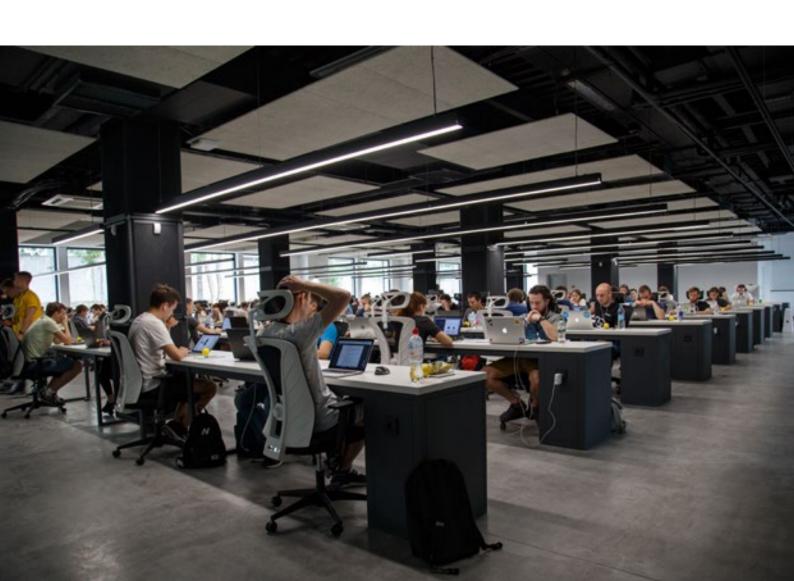
The largest IT employers in Krakow

The Krakow IT market has experienced significant growth over the years, driven by the presence of numerous large players in the industry. Approximately 125 000 people work for corporate business centers in Krakow, and an estimated 30 000 engineers are employed in these companies' development centers

The influence of these major corporations on the job market cannot be overstated. In fact, they played a pivotal role in the establishment of the IT job market in Krakow. In the early 2000s, only a few large firms such as Comarch and a handful of foreign companies operated in the city.

As the demand for engineers increased, the landscape began to change. This prompted universities to introduce more computer science courses, encouraged engineers from other disciplines to transition into programming, and attracted talent from other Polish cities to Krakow. Furthermore, it spurred additional IT companies to establish offices in the city.

Currently, at least 80% of large Krakow-based companies are software engineering centers, focusing on software development and service delivery, solidifying the city's status as a major IT hub in Europe.



List of the largest IT employers in Krakow (1000+ engineers/IT professionals)

Company Name	Number of engineers/IT professionals in Krakow	Number of employees in Krakow	Country	Krakow office setup year	Key competencies
HSBC	2 500	6 500	United Kingdom	2010	Java, JavaScript, Python, Data integration
Comarch	2 400	3 300	Poland	1993	Java, .NET, Scala, JavaScript
Aptiv	2 200	3 800	United States	2000	System Engineers, C, C++
EPAM Systems	1800	2 000	United States	2011	Java, JavaScript, .NET, Python, DevOps/Cloud
Motorola Solutions	1700	2 500	United States	1998	Java, JavaScript, Python, C#, C++, C
HCL Technologies	1600	1900	India	2007	Systems engineers
Capgemini	1300*	5 000	France	2003	Systems engineers
Cisco	1 200	2 300	United States	2012	Python, Go, Node.js, JavaScript, Angular
Sabre Corporation	1 100	1300	United States	2000	Java, .NET
ABB	1000	2 200	Switzerland	1997	.NET, Java, Cloud

Sources: based on data provided by companies mentioned. * Estimation based on online sources.



Grzegorz Góralczyk

Deputy Centre Director at HSBC



HSBC is one of the world's largest banking and financial services organisations. HSBC Service Delivery Poland, located in Krakow, is HSBC's global operations, technology, finance, and risk & compliance centre.

It employs 4 500 employees (and cooperates with an additional 2 000 B2B-contract staff) who provide specialised services – from transforming the banking systems and technologies to managing 2 trillion payments annually.

We deliver innovative products and solutions to HSBC customers worldwide. 2022 was another year of further growth, development, and specialisation of the centre in terms of the services and support provided to HSBC global businesses and functions, highlighting the Krakow centre's pivotal role in delivering great experiences for customers and colleagues. This year we will continue implementing strategic transformation programmes, delivering cutting-edge solutions, and providing support across technology and operations, enabling the bank's strategy.

Our people are our most valuable asset. We celebrate their diversity and support their well-being by offering flexibility, collaboration, learning and an inclusive work environment to encourage curiosity and creativity. At HSBC, we seek ambitious people who want to learn, grow and innovate to create a better future. We find such candidates in Krakow and, as we have embraced hybrid working, across Poland.

List of the largest IT employers in Krakow (from 500 to under 1000 engineers/IT professionals)

Company Name	Number of engineers/IT professionals in Krakow	Number of employees in Krakow	Country	Krakow office setup year	Key competencies
UBS	850	4 900	Switzerland	2008	Java, JavaScript, Python, Data integration
Ericsson	850*	1100*	Sweden	2003	Java, C++
Luxoft	850*	1100*	Switzerland	2010	Java, .NET
Nokia Networks	700*	900*	Finland	2010	C, Linux, Networking
Hitachi Energy	650	1300	Japan	2019	.NET, Java/JavaScript, Python, Embedded, C, C++, React, DevOps
SII Group	650*	800*	France	2011	Java, .NET, Embedded, C++, Cloud
Akamai Technologies	550*	850*	United States	2011	Java, Python, Scala, React
Alior Bank	500	1700	Poland	2008	Java, JavaScript, Angular, Python
Accenture	500	1300	Ireland	2013	SAP, Python, Java, JavaScript

Sources: based on data provided by companies mentioned. * Estimation based on online sources.



Krystyna Pietrzykowska

Head of Technology Center at Hitachi Energy

HITACHI Inspire the Next

Hitachi Energy is a global technology leader that is advancing a sustainable energy future for all. We serve customers in the utility, industry, and infrastructure sectors with innovative solutions and services across the value chain.

We employ around 40 000 people in 90 countries. 3 000 employees are based in Poland, of which 1 300 are in Krakow.

Our teams code the future of the energy market by developing pioneering solutions for industrial electronics, energy management software, and hardware systems with battery energy storage. 2022 was a very successful year for both Hitachi Energy globally and our Krakow site. We extended our commitment to new strategic initiatives like the Power Electronics platform, strongly contributing to the HVDC business.

The top priorities for Technology Center Krakow are set by our mission to build sustainable energy solutions that span cities, countries, and continents:

- Leading development of the next generation solutions and breakthrough technologies,
- Connecting businesses and incubation of new business opportunities,
- Expanding strategic corporate functions, like Security Operations Center.

What distinguishes us from other local IT companies is the wide range of our competencies and technologies for creating products, software, and cybersecurity solutions. Combining broad expertise of Technology and Research Centers and Common Shared Services, which are based in Krakow, makes us uniquely equipped to deliver great innovation. We transfer the power of the world's largest wind farms, bring energy to mass transportation systems, and protect our biggest cities from blackouts.



Jaromir Pelczarski

CIO, Managing Director at Alior Bank



Alior Bank is a financial institution in Poland that offers retail banking, savings accounts, financial transactions, and credit management services.

There is an interesting fact about the IT and financial sectors. On one hand, banking institutions are completely dependent on the adoption of modern IT solutions, while at the same time, banking can be a great source of inspiration in terms of innovative ways of IT usage. Both dimensions require the engagement of well-educated, passionate, and involved people who link the practical adoption of technology with business acumen. This is the essence of modern services in the financial sector: a pragmatic usage of mathematics, science, and economics, mixed with the adoption of cutting-edge technologies like AI, blockchain, cloud, and modern ways of working.

Krakow is one of the few cities that provide solid support in all of these domains. The presence of top Polish universities, acknowledged in the international community, efficient communication with other European cities, and established partnerships with many global players - all of these contribute to a stable foundation for further development of the IT-education-business ecosystem. This was one of the key factors that led Alior Bank to set up the Financial Technology Center of Excellence in Krakow, with more than 900 top-class specialists in different areas of IT and universal banking services. We are proud of our presence in this city and look forward to future development.

List of the largest IT employers in Krakow (from 300 to under 500 engineers/IT professionals)

Company Name	Number of engineers/IT professionals in Krakow	Number of employees in Krakow	Country	Krakow office setup year	Key competencies
State Street	450*	3 400*	United States	2007	Data integration
IBM	450	2 500	United States	2005	Java, C++, Virtualization and Cloud technologies
Pegasystems	410	480	United States	2005	Java, Kotlin, React, JavaScript, Go, Pega
Shell	400*	5 000*	Netherlands / United Kingdom	2005	SAP, Data integration
IG	380*	700*	United Kingdom	2015	Java, C++, Android dev, Python
Brown Brothers Harriman	370	1600	United States	2012	Java, Angular, C++
Ocado	360*	420*	United Kingdom	2010	Java, Linux, Networking
Grand Parade	360	370	United Kingdom	2011	Java, Scala, React, node.js, Angular
InPost	350	700	Poland	2006	Java, JavaScript, Python
StoneX	320	350	United States	2018	.NET, Angular, Kubernetes, low, latency systems

Sources: based on data provided by companies mentioned * Estimation based on online sources.



Tomasz Manugiewicz

General Manager Poland at Grand Parade



Grand Parade is a technology hub located in Krakow offering strong engineering and architecture capabilities for William Hill, a trusted brand with global recognition in the sports betting industry.

My goal for this Site is not only to boost programming capabilities for our shareholders, but also focus on Site Reliability Engineering and provide Cloud based solutions. We have strong technical leaders in the Krakow organization who are key in fostering DevOps mindset across the teams and build strong Agile culture.

2022 and the shocking news about the war in Ukraine it brought was significant in elevating our culture, which we have always been very proud of, to the next level. It is unbelievable how much good energy it released and how much Grand Paraders have been involved in numerous pro bono initiatives. Over 50 of us volunteered in the company-driven initiatives, e.g. we organized a charity concert of traditional Ukrainian choir and jazz band created by our employees and alums.

However, the most impactful initiative we are especially proud of is Edu Hub, a safe space in our office for a group of Ukrainian teenagers we established together with ASPIRE and Ignatianum Foundation. For the last nine months, they have come every day to attend Ukrainian remote classes and various inspiring workshops.

Our ambition for 2023 is to become an organization that the competitors get inspired from regarding both our strong engineering practices as well as CSR initiatives we are proud of.



Tomasz Michalski

General Manager at StoneX Financial Ltd Poland Branch

StoneX^{*}

What is StoneX?

StoneX Group Inc. (NASDAQ: SNEX) is a Fortune-100 company with a nearly 100-year track record. It is an institutional-grade financial services network that connects companies, organizations, traders, and investors to the global markets ecosystem through a unique blend of digital platforms, end-to-end clearing and execution services, high-touch service and deep expertise.

We provide institutional access to 39 derivatives exchanges, 175 foreign exchange markets, nearly every global securities marketplace and a number of bilateral liquidity venues, as well as retail market access via FOREX.com and City Index, among other platforms. Our team of 3 900 employees serve clients from 80 offices located across six continents, including our Krakow location, which boasts over 300 dedicated team members.

What are the top skills / competencies you have in your organization?

Looking at Krakow in our organization, the top competencies we have built up are all connected with IT development. We employ a large number of dedicated project managers who oversee projects from the beginning, committed product managers, business analysts, and UX designers, who ensure the highest quality of users' experience with our platforms, and finally teams of outstanding developers, testers, and infrastructure and internal systems specialists, who provide 24/7 availability of our systems.

Our technology stack is extensive, although the main technologies we focus on are .NET for the backend, multiple messaging systems (ActiveMQ, TREP, Kafka, Redpanda, ZeroMQ), and Angular on the frontend. Our systems are hosted on Kubernetes, and managed by SUSE Rancher. This allows us to service upwards of 1.4 million requests per hour and send price updates more than 4 times per second.

From the infrastructure perspective, we hire topclass DBAs to manage our MSSQL databases. The systems are managed by highly-skilled system engineers, in close cooperation with network engineers and specialists maintaining and improving our DevOps capabilities.

We are exceptionally proud of our ServiceNow team, which has been built in just a little bit more than a year and managed to deploy a full solution that services our internal requests and system management.

Additionally, Krakow serves as a hub for customer-centric processes such as KYC, AML, and customer service, benefiting from a substantial pool of proficient multilingual speakers.

What have you been able to achieve in 2022?

One major achievement in 2022 is the modernization of client accounts management, which now features a totally new structure capable of handling multiple trading platforms and several countries around the world. Alongside this, StoneX has also focused on technology modernization by migrating to lightweight, scalable, and easy-to-maintain technologies, such as Kubernetes.

Additionally, StoneX successfully integrated Passfort, a third-party compliance solution for onboarding customers in regulated markets. Furthermore, StoneX completed the full migration to a new Xamarin Mobile App, making it accessible for both Android and iOS users. Lastly, StoneX has been actively involved in organizing events for the tech community in Krakow, fostering knowledge sharing around cutting-edge topics and technologies like Kubernetes and Redpanda. This engagement has helped to bolster StoneX's industry presence and establish the company as a thought leader in the financial services sector.

Why is Krakow particularly attractive for Financial Services companies?

Krakow's well-known brand garners positive recognition and evaluations from potential investors, tourists, and residents alike. As a leading academic and research hub in Poland, the city attracts talent both domestically and internationally. In recent years, Krakow has established a strong presence in sectors such as Business Services (including BPO and SSC), IT, and Research & Development. Consequently, the city has fostered a pool of skilled candidates with experience in international companies, particularly in the financial services and Fintech sectors.

What are your plans for 2023?

In 2023, StoneX aims to expand its offerings by launching a full investing service (including ISAs) for the UK market and introducing cryptocurrencies for the US market. The company is also committed to enhancing the client experience through a new Progressive Onboarding strategy, providing a faster, more efficient, and user-friendly journey. Additionally, StoneX will focus on improving the Web Trader platform's quality and performance and introducing a new charting solution for better customer experience and informed decision-making.

StoneX also places great emphasis on employee development and fostering leadership. That is why we will be running both graduate and internship programmes this summer.

Additionally, the company encourages senior employees and managers to take part in the TechLeaders Mentoring Program, external initiative that help women who want to start a career or develop their skills in IT and new technologies.

These ambitious plans for 2023 highlight StoneX's dedication to both market expansion and internal development by creating a culture of growth and continuous improvement throughout the organization.

Start-ups landscape

Krakow, a dynamic start-up city

Emerging from its humble beginnings as a sparse landscape with just a few startup businesses, Krakow has now flourished into a vibrant ecosystem abundant with innovative ventures that operate on a global scale. There are incubators, business angels, advisers, access to funding at both private and public levels, and more recently international unicorns.

One in ten Polish start-ups registered in Krakow region

Krakow comes in third place in Poland in terms of registered startups. While Wroclaw holds the largest share, and Warsaw takes second place, every tenth registered entity is based in Krakow, according to the report "Polish Start-ups 2022" from the Start-up Poland Foundation. Krakow's startup creation is driven by a well-connected ecosystem that includes incubators, mentors, investors, and organizations collaborating with startups. Examples of such organizations are OMGKRK and the Krakow Technology Park.

Krakow start-ups snapshot

According to the OMGKRK survey in the Krakow Startups Report, the city's startups are relatively young, with 60% established within the last five years. Most startups in Krakow are actively seeking funding, typically between 0.5 and 1.4 million euros, while 36% are not in fundraising mode. The majority (85%) have up to 50 employees, with 33% having a maximum of five team members. Approximately 21% of analyzed companies do not have paying customers yet, and 39% are already generating revenues higher than 50% year on year. About half of the startups cater primarily to Polish clients, while 42% operate predominantly in international markets.

Success story: BASE's acquisition by Zendesk

Founded in Krakow in 2009, BASE aimed to revolutionize sales software by offering user-friendly UI across web and mobile devices. Legacy salesforce automation solutions were clunky and impeded productivity, but BASE attracted over 5 000 customers and raised over \$50 million in VC funding by providing a tool sales reps wanted to use.

In 2018, Zendesk acquired BASE to transform sales just as it had done for customer service, rebranding it as Zendesk Sell.

The original vision of a sales tool built for salespeople persisted. Since the acquisition, the Krakow office has tripled in size, housing a research and innovation hub for Zendesk Sell. As the company continues to grow, it supports businesses across Europe and the world with cutting-edge sales tools for seamless customer engagement.

\$148.5_M

Total funding received by the most successful Krakow start-up Brainly since its creation in 2009

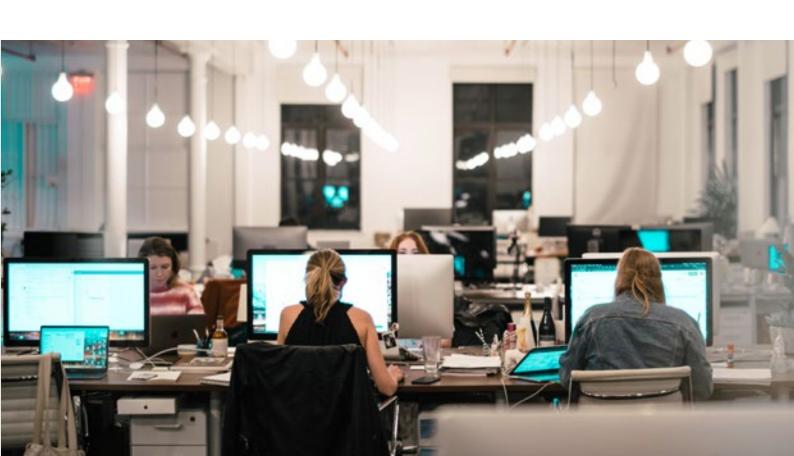
Rapid growth and international recognition

In recent years, the startup scene in Krakow has grown rapidly. Local startups employ hundreds of people and offer innovative solutions used worldwide. The city attracts young and creative individuals and promotes economic growth. The Krakow ecosystem is home to both locally-born companies and international branches of foreign startups, including 19 foreign unicorns. Early-stage teams have access to various support programs, such as incubators (KPT Incubator, Academic Incubation Programs (AIP)), pre-accelerators (OMGKRK, Dragons Cave Pre-Accelerator, KRK InnoTech Starter (KITS)), accelerators (#StartUP Małopolska), and acceleration programs of Krakow Technology Park (Poland Prize, KPT ScaleUp, EIT Digital),

Startup specializations

There are over 150 companies in Krakow that meet the criteria of a start-up. There are three very specific areas where Krakow start-ups specialize.

- The first group of start-ups are **IoT ventures** which includes Silvair, EMBETECH, Airly, SEEDia, Husarion, Findair, Estimote, Elmodis or Kontakt.io,
- The second group focuses on **Sales & Marketing tools/services**. The list here includes Zendesk Sell (formerly BASE), CallPage, Codewise, Synerise, SALESManago or edrone,
- And the third group, Game Studios. Over 20% of Polish game studios are based or have offices in Krakow, including Infinity Ward/Activision (Call of Duty), CD Projekt RED (The Witcher, Cyberpunk 2077) and Gamesture (Questland).



Start-ups born in Krakow

The following list includes 15 of the most successful start-ups born in Krakow, selected according to their respective Crunchbase Ranking. We are yet to find a better way to rank and evaluate these ventures as the current valuation data is in most cases not available. Together, these 15 companies have raised over \$300M in total fundings since their creation. Although originally from Krakow, some start-ups such as Estimote, Kontakt.io or Silvair now have their headquarters located in the United States while continuing to run and grow their R&D centers in Krakow.

The most successful start-ups from Krakow according to Crunchbase ranking

Name and sector	Year founded and total funding	Description and Crunchbase ranking		
#1 Brainly (EdTech)	2009 \$148,5M	Brainly is the place to learn, for students, by students. The world's largest social learning network with 350 million users monthly. CB ranking: 1179 brainly.com		
#2 Kontakt.io (IOT)	2013 \$21.3M	Kontakt.io builds secure and configurable beacon hardware and software to power competitive proximity-based solutions. CB ranking: 6 613 kontakt.io		
#3 HCM Deck (Software)	2017 \$4.2M	HCM Deck empowers enterprise business and HR management to deliver employee development experience at scale, thanks to enterprise-grade solutions embedded into user management, roles, and permissions. CB ranking: 6 900 hcmdeck.com		
#4 Airly (IoT)	2016 \$11.9M	Airly specializes in providing hyper-local data about air pollution. It empowers individuals and communities with knowledge about the air they breathe. CB ranking: 14 271 airly.eu		
#5 Estimote	2012 \$29.6M	Estimote is a technology start-up, building a sensor-based context and micro-location platform for mobile developers. CB ranking: 15 902 estimote.com		

#6 Synerise (Software, Sales, Marketing)	2013 \$42.2M	Synerise produces a Big Data and AI platform that allows users to process data in real time from various sources based on proprietary database systems and proprietary artificial intelligence algorithms. CB ranking: 16 161 synerise.com	
#7 SALESmanago (Marketing automation)	2011 \$7.7M	SALESmanago operates a cloud-based online marketing automation platform used by over 10 000 customers in over 40 countries. CB ranking: 16 580 salesmanago.com	
#8 edrone (CRM, Marketing & Sales automation)	2014 \$5.9M	Edrone is an autonomous e-commerce CRM platform that provides advanced marketing automation solutions. CB ranking: 18 801 edrone.me	
#9 LiveKid (EdTech)	2017 \$2M	LiveKid is the most popular system for kindergartens and nurseries in the EU and includes tools for communication with parents, settlements and documentation. CB ranking: 28 984 livekid.com	
#10 CallPage (Software, Sales)	2011 \$6.7M	CallPage is an ICT SaaS company that converts website visitors into sales calls. CB ranking: 30 276 callpage.io	
#11 Talent Alpha (Software, HR)	2018 \$5M	Talent Alpha is a human cloud platform that connects global enterprises with European software houses, offering tech talent as a service. CB ranking: 38 273 talent-alpha.com	
#12 Upacjenta (MedTech)	2017 \$4.9M	Upacjenta.pl is an online platform that enables patients to search, book medical appointments and receive healthcare-related services. CB ranking: 38 690 upacjenta.pl	
#13 Orbify (Software)	2021 \$1M	Orbify offers professional Earth observation solutions allowing users to create own applications and digital solutions without codes. CB ranking: 46 138 orbify.com	
#14 Silvair (IoT)	2013 \$23.3M	Silvair is a turnkey smart lighting platform enabling manufacturers to provide an enhanced lighting experience. CB ranking: 47 617 silvair.com	
#15 AILIS (MedTech)	2016 \$3.8M	AILIS is a pioneering technology that detects symptoms of breast cancer and estimate the risk of developing the illness. CB ranking: 49 080 ailiscare.com	

Source: crunchbase.com, April 2023



Michał Blak

CEO & Co-Founder at edrone



What is edrone?

Think of it as GPT Search - a human-like shopping experience. We are a VC-backed B2B SaaS with a \$6M ARR. We plan to seek new capital in early 2024.

How did it all start?

We were familiar with eCommerce pain points when we started in 2016, but we had no experience in building a product company. It quickly became clear that our metrics weren't attractive to VCs and the market was extremely crowded. Consequently, we bootstrapped for four years to validate our investment thesis. This led us to conduct numerous experiments before we opted for the VC route at the end of 2020, which was made possible by aggressively selling and securing non-dilutive capital from EU grants.

What are the top competencies in your organization?

In a nutshell, we excel at understanding the evolution of Generative AI. We boast an exceptional team of NLU (Natural Language Understanding) engineers. We are likely the first in the world to merge so-called instant search with NLU. But above all, our team is highly communicative. There are no isolated conversations about technology and business. A software engineer must think business. Businessmindedness empowers us to tackle challenging technological tasks.

What have you achieved with edrone?

No one expected access to capital to be so difficult. Nor does anyone with ambitious plans keep money in a sock. This year we secured funds until profitability. I'm excited to see solutions like Chat GPT reaching under thatched roofs. Our technology is related to Transformers and when we did it 3 years ago it seemed like a very distant future and a risky game. Suddenly this huge spaceship from OpenAI landed, and we already have our own that seems to solve some tasks better.



International unicorns in Krakow

As of April 2023, there are approximately 1 200 unicorns in the world (private companies valued at \$1 billion or more), according to data from CB Insights. Although no Polish-born company has yet made the list, the rapid growth of local businesses like Booksy (a beauty services marketplace) and Docplanner (a MedTech company) who raised over \$140M suggests that it won't be long before one does.

Currently, Brainly (an EdTech company) seems to be the most likely contender for the title of the first Krakow-born unicorn. The company behind the fast-growing peer-to-peer learning platform has raised the most funding among Krakow-born startups and boasts the best Crunchbase ranking of all Polish companies.

Despite the absence of a Polish-born unicorn, the unicorn scene is well represented in Krakow, with 19 such organizations operating in the city. These companies have established R&D teams and are tapping into the city's pool of IT talent and expertise. Their presence in Krakow highlights the attractiveness of the city as a tech hub and

provides valuable entrepreneurship exposure to the local startup ecosystem and talent pool.

The presence of these unicorns not only contributes to the market's diversity by encompassing businesses in the pre-exit stage, but it also offers employees invaluable opportunities to gain exposure to the intricacies of building, managing, and expanding such ventures. This exposure serves as a valuable learning experience for individuals, providing them with firsthand knowledge of the processes involved in creating and scaling successful enterprises.

19

International unicorns with R&D teams in Krakow

H2O.ai

Artificial intelligence Mountain View, United States

Backbase

Amsterdam, Netherlands



whatnot

E-commerce Marina del Rey, United States



Fintech Vienna, Austria



Fintech London, United Kingdom



Fintech Jersey City, United States



Fintech San Francisco, United States





Miami, United States



Software Chicago, United States



Software Chemnitz, Germany



Source: cbinsights.com, The Complete List Of Unicorn Companies, February 2023.



Foodtech Dubai, United Arab Emirates

Revolut

Fintech London, United Kingdom



Fintech London, United Kingdom



Fintech New York, United States



Software Santa Clara, United States



Software San Francisco, United States



Software San Diego, United States



Liran Lotker

Head of R&D at Papaya Global



Papaya Global is a market leader in global payroll technology, providing a hassle-free way for companies to employ globally in full compliance.

In 2022, we added global workforce payment capabilities – becoming the first global payroll platform with embedded payments. We raised \$440 million in four funding rounds for a market valuation of \$3.7 billion. Our 750 employees are spread across 20 locations.

The pivotal step in our payments journey was our acquisition of Krakow-based payment startup, Azimo. With the addition of Azimo's large team of backend, front-end, mobile, full stack, and quality control engineers, Krakow became Papaya's European engineering hub. We also have two teams managing finance and service operations in the city.

We plan to double the Krakow team by the end of 2024, drawing on Krakow's vibrant tech scene and large pool of highly skilled talent. We hope our central office, a short walk from the historical city center adds to the attraction for people.

Foreign start-ups with engineering teams in Krakow

Selected foreign start-ups with engineers in Krakow

The Krakow start-up ecosystem does not only consist of Polish start-ups, but also includes foreign businesses that have decided to set up teams in Krakow. Here are examples of foreign start-ups that opened a subsidiary in Poland and are well-established in the city.

Name and sector	Country and year founded	Description	
Beekeeper (Software)	Switzerland 2011	Beekeeper is a workplace app that connects the non-desk workforce to operational systems and communication channels. beekeeper.io	
Karhoo (Mobility)	UK 2016	Karhoo is a global transportation platform that connects the physical demand for mobility services with the best-fit local supply. Karhoo is part of Renault Group. karhoo.com	
Equativ (Advertising)	France 2001	Equativ is an advertising technology company that offers a digital marketplace to help advertisers. equativ.com	
Unit8 (AI/Data)	Switzerland 2017	Unit8 is a Swiss data services and consulting company, specializing in helping non-digital native companies in industries such as chemical, pharma, automotive, and finance turn data into value through data science, analytics, and Al. unit8.co	
FLYR Labs (Mobility)	USA 2012	FLYR Labs is a provider of commercial intelligence and automation across the travel and transportation industry. It has developed a deep learning platform to help airlines price and plan flights. flyrlabs.com	
Stonly (B2B SaaS)	France - Poland & USA 2018	Stonly is a platform to create and distribute interactive guides without code. From interactive knowledge bases to in-app product tours and contextual help, Stonly provides an all-in-one solution for onboarding, product adoption, support and internal training. stonly.com	

Education

One of Krakow's notable advantages lies in its consistent influx of fresh graduates. In fact, the city thrives with a significant student population, with more than ten percent of its residents being enrolled in educational institutions. This prevalence of students shapes the city's dynamic landscape and contributes to its vibrant atmosphere.

Within Krakow, there exists a robust selection of computer science programs offered at the B.Sc. level by various universities. These programs collectively produce more than 2 550 graduates annually. Remarkably, a significant portion of computer science students typically begin working in their respective fields during their third year of studies, thereby acquiring professional experience prior to graduation.

23

Higher education schools in Krakow

13_K

Computer Science students in Krakow

8

Higher education schools with IT courses in Krakow

2.55_K

Computer Science students graduating yearly in Krakow

130_к

Students in Krakow

Free

Higher education in Poland

Main universities

Jagiellonian University

Founded in 1364, it is the oldest university in Poland. It offers **3 different computer science courses.** 35 000 students attend this university.

www.uj.edu.pl



Courses offered at the Faculty of Mathematics and Computer Science:

- Computer Science (including software engineering, modeling, artificial intelligence and machine learning)
- Analytical Computer Science (including algorithms, software engineering, programming, operating systems and web)
- Computer Mathematics (including mathematics analysis, combinatorics and probability theory, programming languages, algorithms and software engineering)

Highlights:

- 100% of graduates from these computer science courses find a job right after graduation
- Video Games Development new specializations within Computer Science course: Video Games Production, 3D Modeling and Animation, and Video Games Design
- Jagiellonian University has developed cooperation with IT companies and gives opportunities to its students to participate in concrete IT projects



AGH University of Science and Technology

It is largest Polish technical university with 15 different faculties offering **10 computer science courses**. 20 000 students attend this university.

www.agh.edu.pl



Computer science courses offered at diverse faculties:

- Electronics and Telecommunications
- Software development methods
- · Data Science
- Modern Technologies in Forensics
- IT technologies and business processes
- ERP systems on the example of SAP ERP
- Database systems
- Cybersecurity in practice
- IT design, programming and operation of systems
- Automatics and Robotics

Highlights:

- AGH University of Science and Technology was ranked second of EngiRank Best universities of technology in the "New Europe" countries. EngiRank, short for European Ranking of Engineering Programs, covers higher education institutions and engineering programs in 13 countries of the socalled New Europe, countries that joined the European Union on or after 2004
- AGH recently launched MBA TECH, a program merging technology, engineering, computer science, and human sciences disciplines, in collaboration with experienced CEOs and managers from companies like HSBC, Google, and IKEA
- 100% of graduates from these computer science courses find a job within 3 months of graduation
- 65% of students find employment during their studies
- 55% of graduates receive more than 1 job offer when finishing studies
- Nearly 80% of AGH students decide to work in Krakow and its region





Krzysztof Boryczko

Professor, Head of Scientific Board for Computer and Information Sciences at AGH University



The AGH University is the largest technical university in Poland, and computer science is widely represented among its faculties – in particular, to the greatest extent, at the Institute of Computer Science. The number of graduates in this field of study annually has increased over the last 10 years by 40%, from less than 900 to over 1 200.

The Institute of Computer Science offers several programmes of study, mostly focused on Computer Science (1st and 2nd level). Answering to the situation in the job market, several years ago, the Institute created the Cybersecurity and Data Science fields of study, and it initiated the launch of another one: Modern Technologies in Forensic Science. Besides offering MSc and BSc diplomas, the Institute runs more than a dozen commercial courses and non-degree postgraduate programmes, which are very popular and usually bring in far too many eager recruits.

We constantly monitor the expectations of the market, staying ready to adapt our courses, offer new ones, and discontinue the outdated ones (although this is not the case of our education offer).

In the last year, the AGH University founded a novel mentoring programme, where any business company can participate in co-leading a diploma (Msc or BSc). Nokia, Motorola Solutions, Ericsson, and IBM, for example, have taken advantage of this opportunity. We actively participate in applied doctorate programmes funded by the Polish Ministry of Education and Science, and we are eager to extend our offer based on communication with the stakeholders.

Krakow University of Technology (Politechnika)

It is the second largest technical university in Krakow offering **3 computer science courses.** 13 000 students attend this university.

www.pk.edu.pl



Courses offered at the Faculty of Computer Science and Telecommunications:

- Computer Science
- Data Science
- Cybersecurity

Highlights:

- Krakow University of Technology has an extensive role in the cooperation between education and industry via the Technology Transfer Center within the campus
- The university also had a major role in the creation of the Krakow Technology Park in 1997



ICT post-graduate studies

Learning does not stop at bachelor's or master's degree. Krakow universities and schools offer a large array of academic postgraduate courses related to ICT topics, complemented by a multitude of professional courses offered by public institutions and private companies.

Each year, over 600 students in Krakow enroll for ICT postgraduate studies. The profiles of these students fall into two categories: students with an IT background, willing to expand their technical or business knowledge, and students with a non-IT background that see a value in learning new management skills or popular programming languages and seek a career in the IT industry. The share of women is also higher in ICT postgraduate studies in Krakow with 42% of female students vs. 18% for ICT bachelor/master studies.

6

Universities/schools in Krakow offering IT postgraduate studies

42%

IT postgraduate students in the Krakow region are female (compared to 18% for ICT bachelor and master students)

MBA

Both the University of Economics and AGH University offer tech-related MBAs **28**

IT postgraduate studies in Krakow (13 for graduates with IT background and 15 for graduates with non-IT background)

Communities

Krakow, renowned as a university city, boasts a vibrant community of young individuals drawn to various aspects of technology. This diverse group comprises students, recent graduates, and passionate individuals eager to invest themselves in their areas of interest.

Over the past few years, these individuals have formed specialized community groups centered around specific technologies. These communities, consisting of enthusiasts, tech aficionados, and programmers, host regular meet-ups to share knowledge and educate one another.

Although the ecosystem initially revolved around technology groups, it later expanded to accommodate communities with a focus on business and entrepreneurship. These meet-ups cover a wide range of topics, including start-up pitching, financing, product idea validation, legal considerations, and more, placing a strong emphasis on networking. Additionally, some communities are dedicated to exploring software engineering methodologies such as lean, agile, scrum, and Kanban.

These communities and their networks can serve as valuable resources for recruiting new employees. By leveraging the connections and expertise within these groups, companies can identify and attract skilled professionals who share a passion for their specific domain, and potentially enhance their visibility and strengthen their employer branding.





























Selected Krakow technology communities

Name	Website/social	Focus area	
#OMGKRK	omgkrk.com	Start-ups	
Krakow Technology Park	kpt.krakow.pl	Start-ups	
OpenCoffeeKRK	linkedin.com/company/ open-coffee-krakow	Start-ups	
La French Tech Krakow	krakow.lafrenchtech.community	Start-ups	
AleKrakow	alekrakow.com	Methodology	
KRAQA	kraqa.pl	Quality Assurance	
Angular Krakow	facebook.com/AngularKrakow	Technology / Software Development	
WTMKrakow	womentechmakers.com	Technology / Software Development	
Women in Technology	womenintechnology.pl	Technology / Software Development	
Hackerspace	hackerspace-krk.pl	Technology / Software Development	
Krakow Scala User Group	meetup.com/pl-PL/Krakow- Scala-User-Group	Technology / Software Development	
OWASP Poland	meetup.com/pl-PL/owasp-poland	Technology / Software Development	
Segfault	segfault.events	Technology / Software Development	
Polish Java Users Group	java.pl	Technology / Software Development	
KGD .NET	meetup.com/KGD-NET	Technology / Software Development	
ITCQF	itcqf.org	Technical Communication	
TechWriter.pl	techwriter.pl	Technical Communication	



Dominika Walec

CEO at OMGKRK



The Krakow innovation ecosystem is one of the key technology hubs in Europe and one of the top 100 emerging tech ecosystems in the world.

The hashtag OMGKRK, created by the community, has been uniting the Krakow city in the field of startup and technology for a decade, being a source of inspiration, education and news about the local ecosystem.

These days, OMGKRK is a dynamically developing institution with over 50 supporting members and hundreds of local, national and international partners participating in its activities and thousands of individuals involved in our initiatives and events.

If you want to feel the true ecosystem vibe, you cannot miss our recurring events. Summer Jam and X-mas Party are our top seasonal massive events, but you may also join smaller monthly gatherings like Hangouts or new Wake Up breakfasts, which create a space for dialogue, matchmaking, mutual learning and best practices sharing.

The local network of contacts is a key factor in the companies' development. In people lies the power of opportunities, establishing cooperation and forming new projects, as well as an invaluable source of practical knowledge and access to key resources and talent necessary for the development of the company and the region.

To learn more about our community, explore our Krakow Startups Report and startups' database: omgkrk.com



Focus

A beacon of hope for Ukrainian refugees in Krakow



The ongoing conflict in Ukraine has forced millions of people to flee their homes, with over 16 million refugees seeking safety in neighboring Poland. Among these are more than 400 000 displaced Ukrainian children of school age. To address their educational and integration needs, the ASPIRE Education Hub was established in Krakow, Poland, in May 2022. Since its launch, the Hub has welcomed over 200 individuals, with plans to double that number by summer 2023.

support in the form of Polish and English lessons, and short courses specifically designed for young adults.

To further cater to the individual needs of participants, the Hub offers a varied program that includes integration and relaxation activities, English and Polish classes, skills development workshops, and individualized support.

Transforming available office space into classrooms

The ASPIRE Education Hub is a joint initiative by ASPIRE members and the Ignatianum Jesuit University in Krakow. Utilizing available office space, the Hub creates a network of safe, welcoming, and well-equipped social spaces that provide a range of classroom and online activities aimed at helping displaced individuals normalize their lives and integrate into Polish society.

While initially focused on teenagers, the Hub now also supports young adults and mothers. Office spaces are offered by Krakow large companies such as AON, ABB, Grand Parade, Lufthansa Group Business Services, Zurich or Akamai.

An evolving model to meet changing needs

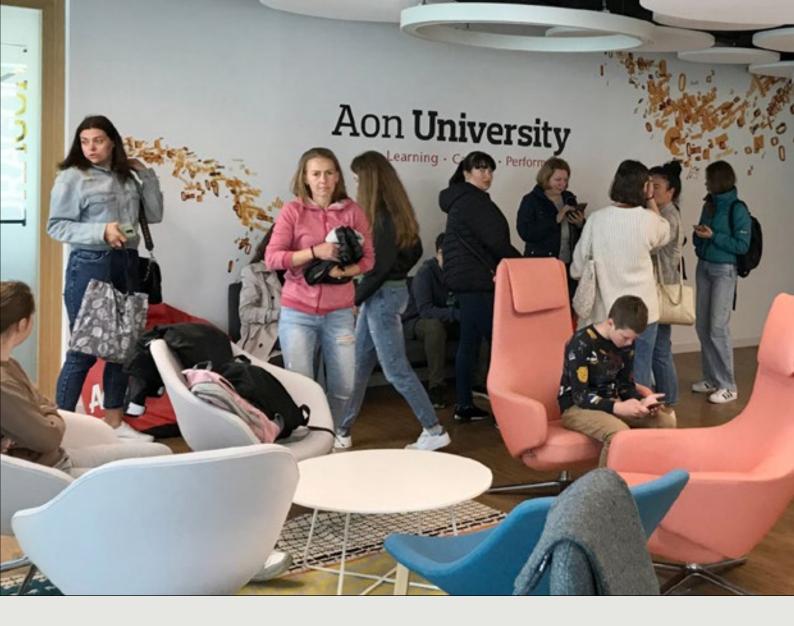
Recognizing the dynamic nature of the refugee crisis, the ASPIRE Education Hub has evolved its model since its inception to accommodate the diverse needs of its participants. The Hub now offers a variety of options, such as classrooms for teenagers to follow the Ukrainian education system online, after-school clubs for teenagers attending Polish schools with additional

400_K

Approximate number of school-age Ukrainian children in Poland

6

education hubs built in Krakow by international corporations AON, ABB, Grand Parade, Lufthansa Group Business Services, Zurich and Akamai



Each ASPIRE Education Hub is staffed with a minimum of one dedicated facilitator and receives educational support from Akademia Ignatianum and other sources. Different hubs operate at different hours, based on the hosting company's capacity to accommodate participants.

Making a difference

The ASPIRE Education Hub provides a safe and welcoming space that offers a sense of stability for refugees. It creates opportunities for integration and soft skills development through various activities, while also focusing on well-being through relaxation activities and support. The Hub extends educational assistance in language skills and citizen's advice, contributes to a balanced diet by providing snacks and lunches, and maintains a continually evolving model that adapts to the changing needs of its participants.

The ASPIRE Education Hub relies on the support and generosity of individuals and companies to continue providing its essential help to Ukrainian refugees.

Here are some ways you can help:

- Space: Offer unused office space or facilities to host Hub activities.
- Equipment: Provide desks, chairs, Wi-Fi, whiteboards, flip charts, screens, copying facilities, notepads, and other necessary items.
- **Food:** Donate snacks and lunches for students and volunteers.
- Tech: Contribute computers, tablets, and headphones for participants to use.
- Activities: Volunteer to lead workshops or activities in your area of expertise.
- Donations: Support the Hub through company or private financial contributions.

To support/donate to the ASPIRE Education Hub, visit educationhub,pl

Office space in Krakow

Office market

17 MLN m²

Office space surface in Krakow

 $100_{\text{K}\,\text{m}^2}$

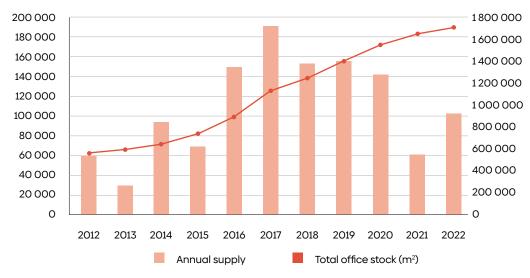
Office space completed in 2022

Krakow offers a variety of office options. Some of them are large building complexes with a capacity of 5 000+ people such as Fabryczna Office Park, High5ive or Quattro Business Park. There are also smaller buildings offering a unique vibe and a more private, low-key experience. In this section we present an overview of the office market in Krakow with different options for office space leasing and the associated costs.

In 2017, Krakow became the first regional market in Poland with modern office space exceeding 1 million square meters. In just 6 years, this number has increased to 1.7 million square meters.

In addition to the modern, A-class office space that is available, there is also a supply of office space in old, often historic, buildings. Some firms look for space with unique character and choose office space in the Old City or in the post-industrial areas of town.

Office stock evolution in Krakow (in m2)



Source: Cushman & Wakefield, 2023

Long-term lease

13.5-16.5_{EUR}

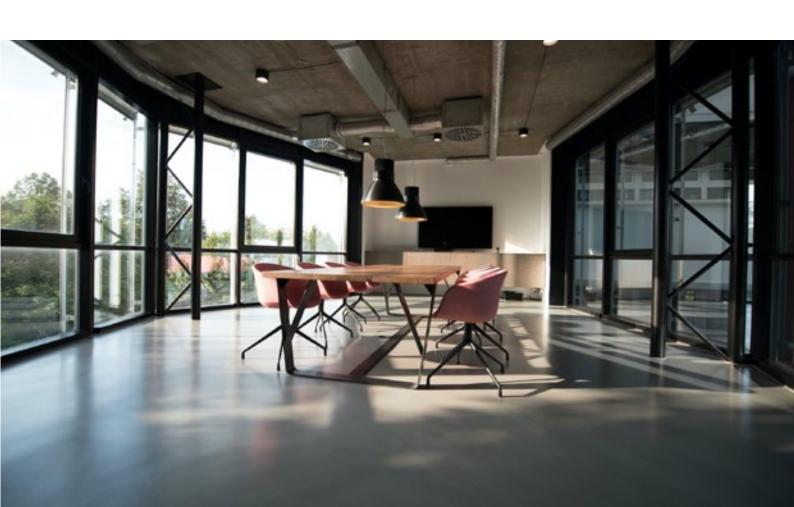
Lease per 1 m² of office space/ month in an A-class building

 $10-13_{\text{EUR}}$

Lease per 1 m² of office space/month in a B-class building

In 2023 tenants experienced a rent increase by 10-15% due to the inflation and contractual indexation of lease agreements. The usual lease period for an A-class office space is 5 years, and 3-5 years for a B-class office space.

Long-term lease arrangements are beneficial for established businesses that anticipate consistent growth and can accurately project their spatial and locational needs over the upcoming years.





Dariusz Madej

Associate at Cushman & Wakefield



The rental rates in the Krakow office market had been stable for many years and ranged from 13.50 to 15.00 EUR/sq. m./ month within A-class properties.

This trend was interrupted at the end of 2021, when a gradual increase in the cost of services and building materials, as well as energy prices, began to affect the pricing strategies of owners and developers.

Russia's aggression towards Ukraine intensified the effect of price pressure, which is visible in the record valuations of rental rates in the office market. As a result of changes in the work formula, we observe an increasing interest in offices located in central locations, and this is where we expect the highest pressure on rent rate growth. However, rent rate growth will depend on planned office space supply and land availability for future investments, as well as on the macroeconomic situation and the activity of both existing and new tenants in Krakow.

Sublease

The office space available for sublease in Krakow is now estimated at approximately 22 100 m².

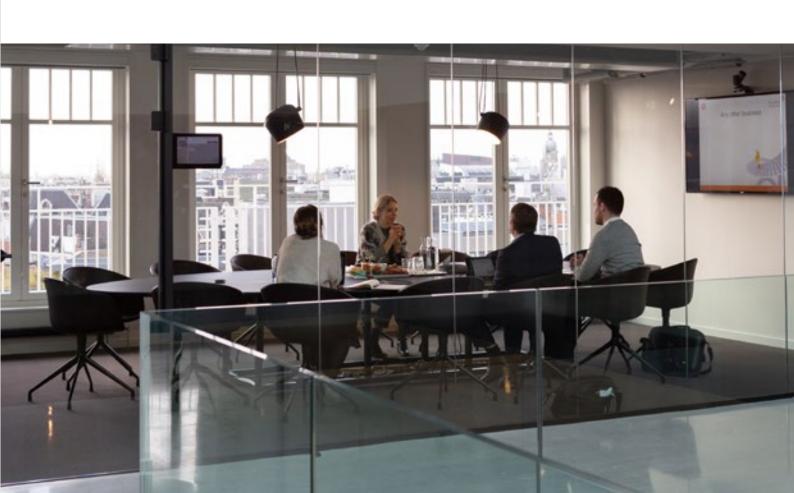
Subleasing is another flexible form of office space rental. It can be beneficial to both the original lessee and sublessee, because the lessee leases out part of the occupied office space, thus reducing fixed operating costs. On the other hand, the sublessee can rent space for a shorter lease period.

It is worth noting that a sublease is not always a good alternative to a standard lease. For example, a lease agreement may limit the office space customization and branding or may not be suitable for companies working with sensitive data 22.1_{K m²}

Office space sublet in Krakow

12-18 months

Typical duration of a sublease contract



Flexible office space

 56_{Km^2}

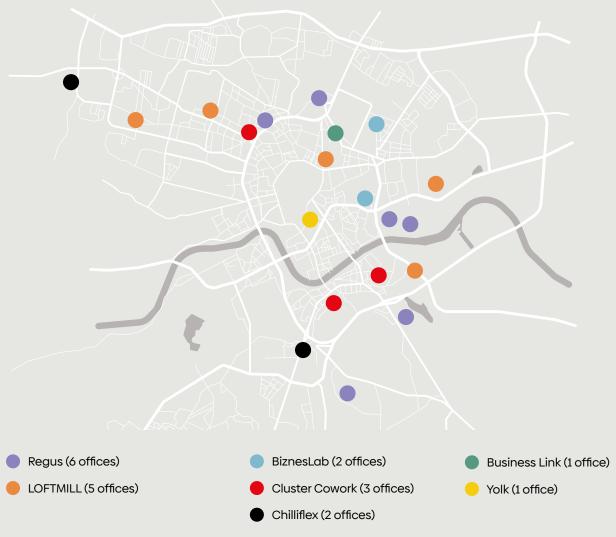
Flexible office space in Krakow

 350_{EUR}

Monthly rental cost per desk in a serviced office in Krakow

A growing number of start-ups and hightech companies in Krakow accelerated the development of co-working spaces, serviced offices and hybrid spaces. Flexible office spaces provide fully equipped office space shared among multiple companies, with administrative and maintenance services. The undisputed advantage of such an office solution is that it can provide a flexible rental period, while providing privacy and separation from other companies.

Selected coworking and serviced offices operators in Krakow



Office options comparison

	Long-term lease	Sublease	Serviced office
Best suited for	Best for established businesses with predictable needs over the next several years. Also for businesses needing a complete control over their space. Typically selected by the companies with hiring plans over 200 people within 24 months.	Best for businesses looking for short- to medium-term solutions. Could be a good option if a suitable space in a desired location becomes available.	Best for startups or those needing flexibility due to growth uncertainty. Also good for businesses needing location quickly and without setup hassle. Typically selected by the companies with hiring plans under 100 people within 12-18 months.
Flexibility	Low: Long-term contracts, typically 5 years, making it difficult to adjust size or location as needed.	Moderate: Depends on the terms of the original lease, usually 1-2 years commitment.	High: Short-term contracts typically 6-12 months, or month to month, allowing for easy expansion or downsizing as needed.
Cost	Low: Cheaper per square foot/meter or per desk, but costs for utilities, maintenance, and services are separate.	Moderate-Low: Typically cheaper than serviced offices as you're taking over part of someone else's lease. Utilities and services may or may not be included.	High: Services provided at a premium price, with printing and conference rooms often charged extra.
Setup	Time-consuming & Costly: Often provided as empty spaces. Requires time and money to set up utilities, services, and furnishings. A typical fit-out project lasts 3-6 months.	Moderate: Existing setup may be usable, but alterations might be needed. Time to enter the space from 1 to 3 months.	Quick & Easy: Offices are pre-furnished and equipped with necessary utilities and services. Typically a client can enter space within weeks.
Risk	High: Long-term financial commitment which is in most cases impossible to terminate early.	Moderate: Risks associated with the primary tenant (e.g., if they breach their lease, you could lose your sublease).	Low: Shorter terms mean less commitment, and providers take care of maintenance, security, etc.
Control	High: Complete control over customization of space, choice of service providers, etc.	Moderate: Depends on the terms of the sublease, but typically more control than a serviced office.	Low: Limited ability to customize the space or choose services providers.
Availability	Moderate: Contracts can be typically signed 6-12 months before the space is constructed.	Moderate: Depends on the market and existing leases.	High: Serviced offices are more readily available.
Contract Complexity	High: Contracts are complex and require lengthy negotiation on multiple points.	High: Need to understand both the primary lease and the sublease agreement. Usually consent from the primary landlord is required.	Low: Standardized contracts with few negotiation points.

Focus

Trends in the Krakow office market

Krakow is a leader among regional markets in terms of office resources and an important business center, especially attracting companies from the BSS/SSC sector. Krakow is the city with the most job opportunities in this sector, with an estimated 120 000 jobs in 2023 (ASPIRE).

Office space stock

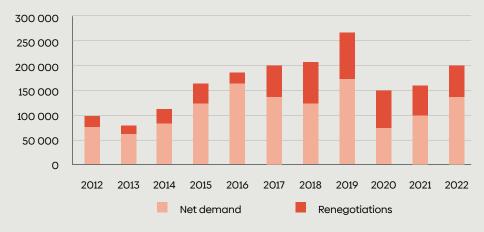
In 2022, Krakow maintained its position as the largest office market in regional cities. In the last 12 months, 9 buildings with a total area of 100 500 square meters were put into use, bringing the total office space resources in the city to 1.70 million square meters. Despite the outbreak of the pandemic, most of the projects planned for completion in 2020 in Krakow were completed according to schedule. However, since 2021, there has been a noticeable decrease in the number of new projects, and the total office space under construction at the end of 2022 was 110 000 m² in projects planned for completion in 2023-2024.

Demand for office space

During the pandemic period, tenant activity in the Krakow office market remained at an average level of 155 000 square meters of leased office space per year, which is nearly 40% lower than the record level in 2019. Nevertheless, after two years of limited tenant activity, we could observe a revival of transactional activity in the last 12 months, largely due to the return of tenants who had suspended their decisions regarding office space in 2020-2021. Throughout 2022, tenants leased nearly 200 000 square meters, which is 25% higher compared to 2021 and similar to the pre-COVID-19 pandemic level of activity. It is worth noting that over 70% of the leased space consisted of new contracts and expansions.

We expect that the demand for office space in Krakow in 2023 will maintain the upward trend observed since the beginning of 2021. At the same time, further market development will largely be driven by the modern business services sector. According to ABSL data, employment in this sector in Krakow will increase by nearly 8% in 2023 and excess 100,000 jobs, which will partially translate into demand for new office space.

Demand for office space by transaction type (in m²) in Krakow office market

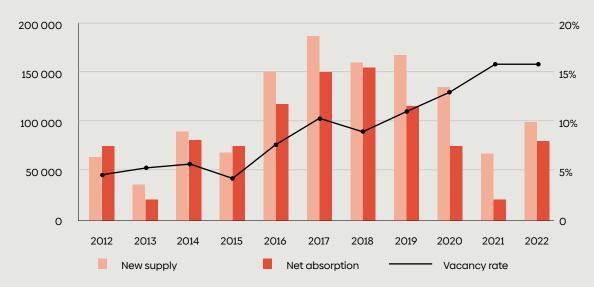


Source: Cushman & Wakefield, 2023

Availability of office space

The limited tenant activity due to the COVID-19 pandemic and a relatively high level of new office space supply have led to a significant increase in the availability of office space in the last 36 months. The vacancy rate at the end of 2022 was 16.0%, which increased by 2.0 percentage points compared to the same period in 2020. According to Cushman & Wakefield, the high availability of office space is a short-term phenomenon that will be affected by a reduction in the number of new projects planned for completion in 2024-2025 and a gradual revival of transactional activity. In the opinion of Cushman & Wakefield, in the next 12 months, the vacancy rate will return to the path of compression. The pace of office space absorption will affect developers' decisions to launch new projects planned for completion in 2025-2026.

Vacancy rate (in%), absorption, and annual supply (in m²) in Krakow office market



Source: Cushman & Wakefield, 2023



Lease costs

As of the end of 2022, the base rates for the best office spaces in Krakow ranged from 13.50 to 16.50 EUR/sq. m./month, depending on the location. However, at the beginning of 2023, tenants experienced a rent increase due to the indexing of lease agreements denominated in EUR by approximately 9% and 14.4% for agreements denominated in PLN. Despite the recovering demand, market participants are experiencing a deepening stratification of rent rates between buildings in the city center and other locations. Pressure on rents is also supported by still high costs of construction and finishing of office space. At the same time, to offset the higher costs of finishing the space, tenants are increasingly opting to extend their lease agreements or convert incentives offered by landlords in the form of periodic rent exemptions towards finishing the space.

In addition to the base rate, tenants in 2023 can expect an increase in operating costs of up to 15-25%, due to factors such as record growth in utility and waste management costs, minimum wage increases, property insurance and real estate and perpetual usufruct tax. The increase in costs also depends largely on at what level the office building owner purchased electricity for 2023 or whether they took advantage of frozen energy prices for micro, small, and medium-sized enterprises.

Sublease

After a significant increase in sublease offers in 2020 due to employees transitioning to remote work and increasing uncertainty about the future form of work, the sublease offer in Krakow amounted to 24,600 sq. m. and decreased by 53% and 12% respectively compared to 2020-2021.

Flexible office space

After a period of reduced activity in the flex market in 2020 caused by the pandemic, in 2021 we could already observe a return of interest in this form of office space rental among tenants. In the last 12 months, this trend has strengthened due to the growing need to optimize office maintenance costs and the increasing number of companies from Ukraine relocating their employees to Poland due to the Russian invasion. The increasing interest in the flex sector is also evident in the available office space offer, which has increased by 30% over the last 12 months in Krakow.





Catering specifically to HR teams and HR executives, this chapter offers essential information about the talent pool in Poland, encompassing its size, composition, in-demand skills, and salary insights. Additionally, it delves into crucial aspects of Polish labor law, local practices, candidates' expectations, diverse contracting options available for tech talent, and the latest trends in the job market.

360_к

engineers and IT professionals in Poland

10%

Approximate growth of the IT talent pool in Poland each year

16_K

Computer Science students graduating yearly in Poland

In addition to the domestic IT companies, Poland has become a magnet for numerous foreign technology firms. These organizations are drawn to the country by its impressive IT talent pool, which boasts 360 000 IT professionals.

The top three cities for IT talent in Poland are Warsaw, Krakow, and Wroclaw, each with unique features. Warsaw is favored by companies establishing their Polish headquarters to expand their operations within the country, while Krakow's talent pool benefits from extensive exposure to international firms and projects. Wroclaw, on the other hand, is a popular destination for IT companies from DACH region.

This talent pool continues to grow, supported by a strong educational foundation where nearly 16 000 computer science students graduate annually.

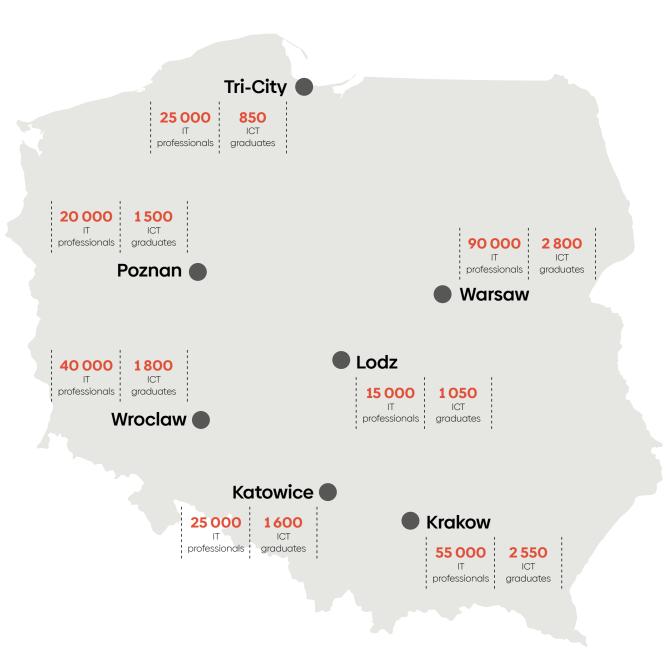
Additionally, immigration from Ukraine and other European countries contributes to this growth, as talented individuals are enticed by the appealing lifestyle and career opportunities at prestigious companies in Poland.

Source: MOTIFE Insights, stats.gov.pl 2023

IT talent pool in Poland

Poland is home to a growing IT talent pool that is gaining international recognition. The country's skilled professionals, strong educational programs, and a mix of large IT companies and start-ups contribute to its reputation as a reliable source of engineers and IT specialists. Many businesses are now considering Poland for outsourcing or expanding their technology operations, thanks to its quality, availability and adaptability.

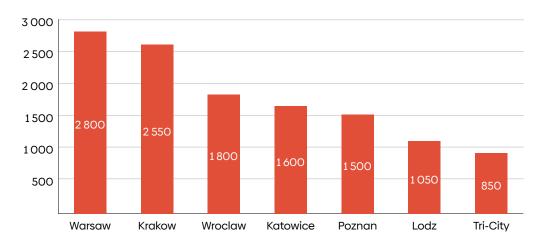
IT professionals and graduates per main city in Poland



Source: MOTIFE Insights, stats.gov.pl 2022, 2023

In 2021, nearly 16 000 Information and Communication Technologies (ICT) students earned their degrees from Polish universities. A significant portion of these graduates are expected to secure employment in major cities like Warsaw, Krakow, or Wroclaw, thereby bolstering the local talent pool. Additionally, these cities continue to draw computer science graduates from other parts of Poland and even from international locations, further strengthening the region's tech industry.

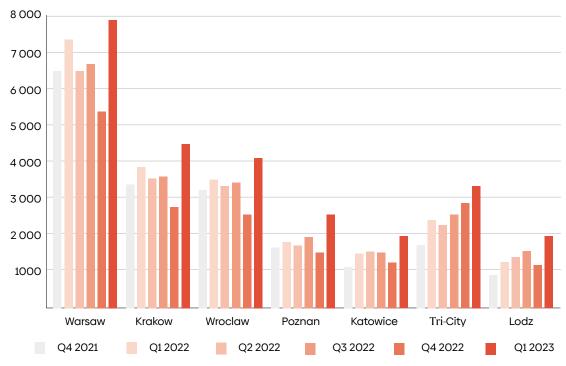
Number of ICT graduates per main city in Poland, 2021



Source: stats.gov.pl

The IT job market in Krakow and Wroclaw is dynamic and offers a number of job opportunities yet it is not as large as the capital city, Warsaw.

Number of IT job ads per main city in Poland, Q4 2021-Q1 2023



Source: inhire.io, IT Market Snapshot 2022, Q1 2023

Salaries

Salary reports and candidates' expectations

There are numerous compensation reports available that showcase salaries in the IT sector in Poland. Also, websites like Glassdoor and Payscale provide insights into typical pay across the country. The majority of IT job ads include salary brackets, offering relatively transparent access to compensation data.

The information found in these sources can be misleading, as it primarily represents current average salaries of employees or median salaries advertised on job portals. These figures may not accurately reflect the expectations of potential new hires, nor the salaries ultimately agreed upon in employment or B2B contracts. Consequently, there can be substantial discrepancies between the reports and the actual candidates' expectations.

In this report we focus on presenting the salary expectations of candidate's in the context of the actual compensation they are offered when they receive and accept a job offer.

Also, there are companies that offer above-market salaries when hiring new employees, typically for one or more of the following reasons:

- · Attracting senior engineers
- Facilitating the rapid hiring of engineers by foreign companies entering the market
- Providing higher salaries in start-ups to offset the "risk-factor" associated with joining a potentially less stable organization
- Navigating the challenges of hiring in Q4, which may influence salary levels; candidates are less likely to change jobs before year-end, partly due to anticipated bonus payouts

Methodology

The research was conducted by the MOTIFE Insights team between December 2022 and April 2023. Our aim was to produce a set of salary range data that would be representative of new hires' current salary expectations in Poland (vs. salaries earned in previous position or salaries advertised in job offers).

We chose a methodological approach that combined quantitative and qualitative methods. The quantitative research involved collecting salary bracket data from industry reports and portals (qualified sources: inhire.io, nofluffjobs. com, justjoin.it), salary brackets of jobs advertised on motife.com, salaries offered to candidates by IT companies via MOTIFE, and acceptance rates for those offers.

The quantitative analysis began by checking the datasets for outliers, normalizing the values (gross, monthly salary on employment contract; definition of regular and senior profiles; definition of popular technologies, popular programming and non-programming roles), and then merging data from the different sources with their respective weights.

The result was a calibrated salary range for each selected technology or roles, consisting of three salary data points (minimum regular, maximum regular/minimum senior, maximum senior). Qualitative analysis included a series of interviews and dataset reviews with IT recruiters and hiring managers, allowing us to fine-tune the dataset with a margin of correction equivalent to +/- 10% of the quantitative analysis results.

Assumption: 1 EUR = 4.6 PLN. Values in EUR are rounded.

New hires salaries

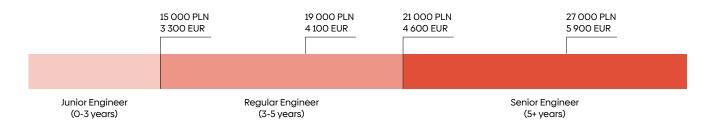
In this section, we provide a comprehensive overview of the gross monthly salary ranges for software developers, IT professionals, and selected non-programming roles in Poland under employment contracts. Our analysis takes into account the most popular programming languages, profiles, and varying levels of seniority.

This is how much a new hire will expect to be paid on a permanent employment contract.

19000_{PLN} Median salary for hiring a regular engineer
(3-5 years experience)
in Poland (gross, monthly)

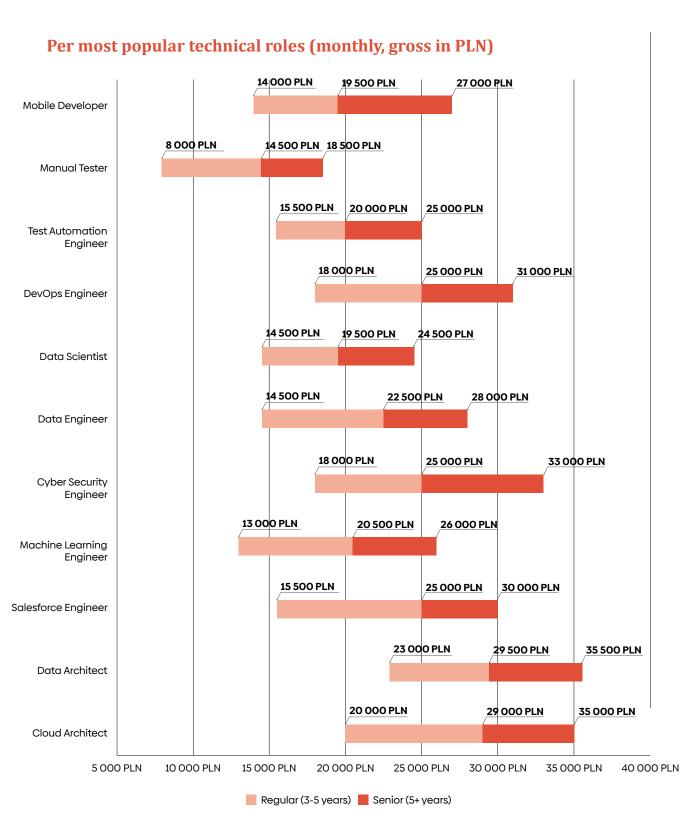
a regular engineer

Gross salary ranges for hiring an engineer in Poland (monthly, in PLN and EUR)



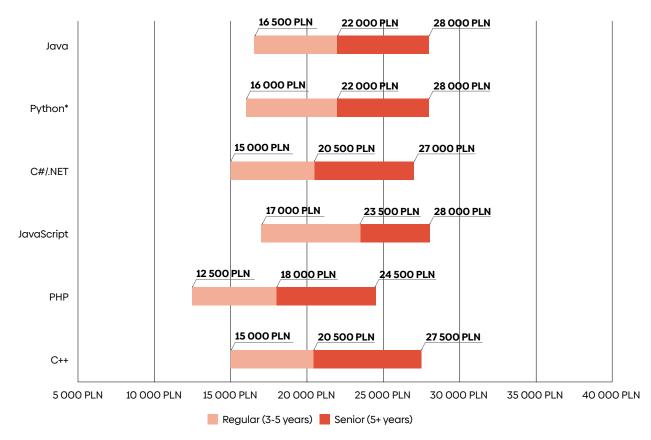
Sources: MOTIFE Recruitment insights, inhire.io IT Market Snapshot 2022, nofluffjobs.com, justjoin.it. 1 EUR = 4.6 PLN

New hires salary expectations in Poland in PLN



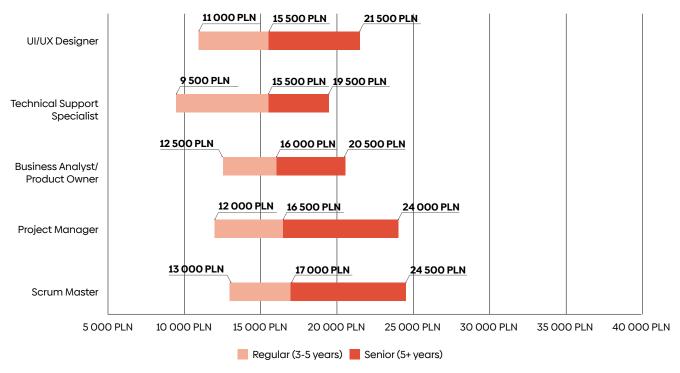
 $Sources: MOTIFE\ Recruitment\ in sights, in hire. io\ IT\ Market\ Snapshot\ 2022, nofluffjobs. com, justjoin. it.$

Per most popular languages (monthly, gross in PLN)



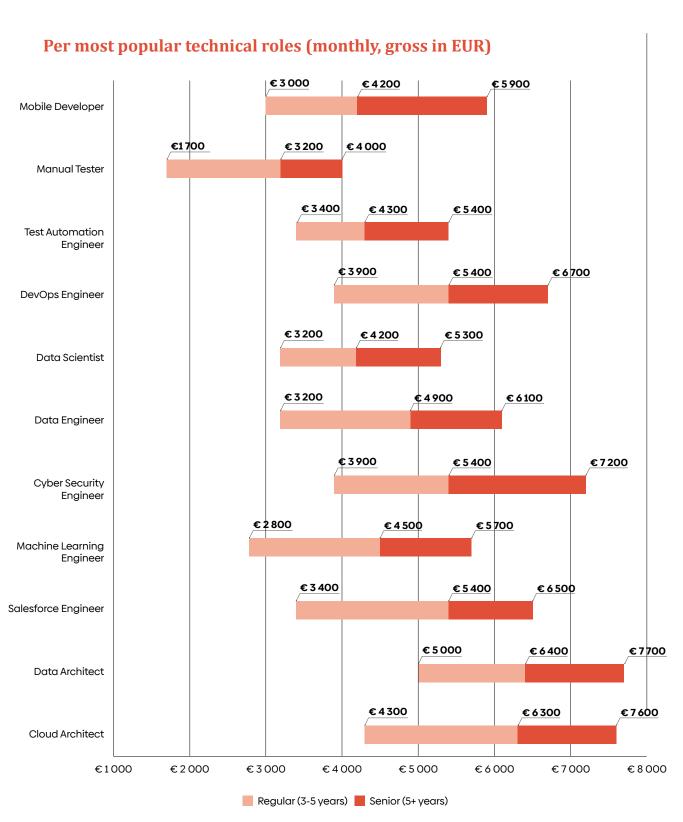
^{*}For regular Python development, not Data Science

Per most popular non-technical roles (monthly, gross in PLN)



Sources: MOTIFE Recruitment insights, inhire.io IT Market Snapshot 2022, nofluffjobs.com, justjoin.it.

New hires salary expectations in Poland in EUR



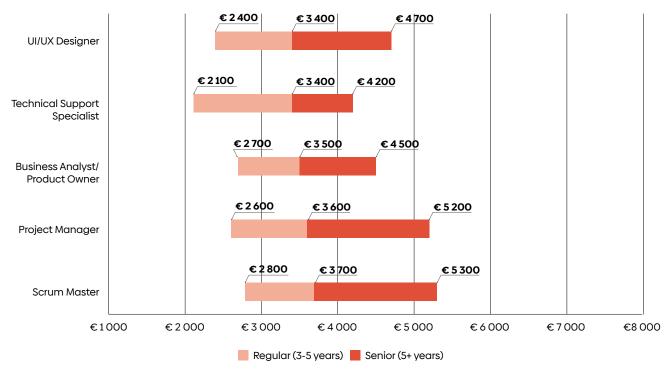
Sources: MOTIFE Recruitment insights, inhire.io IT Market Snapshot 2022, nofluffjobs.com, justjoin.it. 1 EUR = 4.6 PLN

Per most popular languages (monthly, gross in EUR)



^{*}For regular Python development, not Data Science

Per most popular non-technical roles (monthly, gross in EUR)



Sources: MOTIFE Recruitment insights, inhire.io IT Market Snapshot 2022, nofluffjobs.com, justjoin.it. 1 EUR = 4.6 PLN

It's not about salary alone

There are companies offering top-range salaries, while others focus on creating a comprehensive Employee Value Proposition (EVP). In fact, 90% of businesses aim to provide more than just appealing wages. Companies seeking to enhance their attractiveness should consider the following levers:

Brand

Well-established companies can expect to pay the lower end of the salary range, while new or less visible brands may need to pay the higher end.

Benefits

Offering a comprehensive benefits package can make an offer more attractive during recruitment. Consider providing stock options/ESOPs, paid holidays, paid sick leave for B2B contractors, and trips abroad to the headquarters.

Work model flexibility

Catering to various work preferences, such as fully remote, occasional hybrid, work-from-anywhere, and fully flexible schedules, can increase appeal to candidates.

Contracts flexibility

Offering choices between permanent and B2B contracts, as well as options for preferred payment currency, can make a difference.

Technology

Embracing cutting-edge technology and ensuring its proper use are crucial. This includes maintaining a tidy codebase, avoiding technical debt, and implementing effective quality assurance practices.

Culture

Fostering an organizational culture that promotes and encourages positive behaviors is vital. Consider aspects such as equal treatment, hierarchy levels, decision-making autonomy for team members, and practicing genuine transparency.



Piotr Sedlak, Ph.D.

Project Manager / Managing Partner at Sedlak & Sedlak

Sedlak & Sedlak

The IT sector in Poland has consistently ranked among the highest-paying industries for several years now.

This can be attributed to the comparatively high salaries offered, particularly for the engineering/ specialist roles. According to the Winter 2022 Sedlak & Sedlak salary survey (N=903), IT Directors earn an average of 4% more than their counterparts in other industries. However, the pay gap widens for experienced IT specialists, who earn 42% more than experienced specialists in non-IT roles. Senior IT specialists see an even greater difference, earning 50% more than senior professionals in other fields.

This higher wage also impacts non-statutory benefits, as the increased salary contributes to a relatively smaller proportion of benefits in the overall compensation package.

Focus

Salaries of new hires grew by up to 15%

In 2022, salary expectations for new hires increased, fueled by the post-pandemic surge in demand for IT specialists, as well as the impact of rising inflation rates and geopolitical uncertainties. However, a recruitment slowdown in 2023 is putting a halt to this trend, with salary expectations projected to remain relatively stagnant through the end of the year.

Employment and benefits

Labor law cheat sheet

Polish labor code is very detailed and outlines precisely the rules of employee - employer relation. In addition, there are number of practices and customs that are not implied by law, but became a norm and need to be observed.

In many aspects the Polish Labor law is aligned to the other European countries' Labor regulations with comparable working time, paid holidays allocations and contractual principles. Polish regulations are considered as business-friendly, while caring for employee status and ensuring a family-friendly environment boasting one of the most generous maternity leave schemes in Europe.

40
Hours per week

8 hours per day, 40 hours per week working time

251Working days on average

13 days of public holidays annually

20 or 26 Days of vacation

Vacation entitlement depending on experience

1 or 3
Months' notice

The termination period depends on the length of employment with a given employer:

- 2 weeks' notice for < 6 months
- 1 month notice for > 6 months
- 3 months' notice for > 3 years

50-100% Overtime pay

50% regular overtime pay, 100% overtime pay for working nights, Sundays and public holidays

80%
Paid sick leave

From first day of sick leave with medical certificate

55-65_{PLN}
Remote work subsidy monthly

Amount of subsidy an employee working in remote or hybrid setup will receive monthly from employer to cover the costs of home office

100% Paid maternity leave (up to 20 weeks)

That can be extended by a 41-week parental leave (70% paid). Paternity leave lasts 2 weeks (100% paid). Maternity and parental leave can be split between mother and father

Forms of employment

Contract for an indefinite period of time

The most popular form of employment in Poland is the permanent contract, referred to officially as contract for an indefinite period of time (in Polish *umowa o pracę na czas nieokreślony*). Hiring on a permanent employment basis usually starts with a 3 months' probation contract, followed by a contract for an indefinite period of time. For most employees, this type of contract is synonymous of stability and job security.

Fixed-term employment contract

The Polish Labor Law also offers employment contracts to respond to shorter or unique needs to hire. First of all, the fixed-term employment contract (*umowa o pracę na czas określony*) for a maximum period of 33 months and maximum 3 consecutive fixed-term contracts. This contract is common for temporary replacements such as maternity/parental leaves.

Contract of mandate & employment contract for specific task

There is also the contract of mandate (*umowa zlecenie*) for performance of a specified activity on a given period (for example SEO analyst support for a 3-month campaign), and employment contract for specific task (*umowa o dzieło*) for the achievement of a specific result (for example a freelance graphic designer creating a set of web banners).

B2B contract

In addition to the regular employment contracts, we observe a trend in the IT market of applying alternative forms of engagement, the most popular one being the B2B contract. Rather than an employment contract between an employer and an employee, the B2B contract is a service agreement between a company seeking services and a contracting party that can offer these services. Typically, this is a registered, one-person company. This type of engagement is attractive particularly for more experienced engineers for its financial benefits and self-entrepreneurial freedom.

Focus

B2B contracts perception in Poland and the United States

It is important to highlight that within the IT industry in Poland, B2B contracts and self-employed status are not seen as a freelancing or entrepreneurial model, as is often the case in the United States.

In Poland, these arrangements are predominantly viewed as a means to enhance net income rather than solely focusing on the entrepreneurial aspect. B2B contractors are subjected to a considerable degree of treatment similar to that of regular employees.

B2B contracts

30-40%

Estimated share of B2B contracts vs. permanent contracts for new hires in the Poland IT market

20%

Extra income an employee can get after taxes on B2B contract compared to permanent contract

The popularity of B2B contracts in the IT industry can be attributed to two primary factors. Firstly, these contracts afford contractors the freedom and independence to provide services to multiple companies, unless explicitly restricted by contractual agreements. This flexibility enables them to diversify their client base and expand their professional opportunities.

Secondly, B2B contracts offer contractors the opportunity to increase their net income without imposing additional costs on the employer. This is achieved through advantageous taxation and social insurance regulations. By operating under a B2B contract, an employee can take home up to 20% higher income compared to traditional employment arrangements. Moreover, during the initial two years of self-employment, B2B contractors benefit from a preferred social insurance rate, further enhancing their financial gains.

When considering the hiring process, it is essential to understand the key distinctions between employing an individual on a permanent contract and engaging the services of a B2B contractor. The following tables outline the primary differences from the perspective of the hiring company.

TAX

Permanent

B2B (Contracting)

Personal Income Tax 1 model – Progressive tax: 12% income tax rate under 120K PLN annually, and 32% income tax rate over that threshold 3 models -Flat tax: 19% flat rate, Progressive tax: 12%-32%, Lump Sum tax: 8.5% or 12% for IT, and up to 17% for other roles

Social Security Approx. 21% of gross salary at the charge of the employee and similarly approx. 21% at the charge of the employer (up to 23%), capped at 177K PLN of annual income Entirely at the charge of the contractor.
Total monthly cost is a mix of flat and variable contributions: flat from 300 PLN to 1200 PLN depending on duration of self-employment + variable 4.9% to 9% of income depending on personal income tax model

Cost Deduction It is possible for the employer to implement a tax-deductible costs scheme for creative work Flat tax/Progressive tax: The contractor can deduct the costs incurred to the oneperson company (hardware, leasing etc.) Lump-sum tax: No cost deduction allowed

CONTRACT	Permanent	B2B (Contracting)
Rate	Monthly	Typically daily or hourly
Duration	Usually starts with 3-month probation period, followed by indefinite contract	Typically indefinite or 1 year
Notice	Depending on employment length, notice period can either be 2 weeks, 1 month or 3 months, or custom by mutual agreement	Typically 1 month
BENEFITS	Permanent	B2B (Contracting)
Annual leave	20 or 26 days / year	None or custom
Sick leave	Unlimited	None or custom
Maternity/ paternity leave	Yes	None
Benefits package	Yes	None or custom

In terms of company and team integration, we observe that most companies do not create significant differences between regular employees and contractors. For instance, contractors are invited to company events, and benefit from office perks.

Focus

How to calculate a B2B contract compensation

A common practice is that the amount offered on the B2B contract may be up to 15% higher compared to a gross salary for permanent employees and this largely depends on the other terms of B2B contracts. Considering more working days of contractors who don't have a paid leave, the annual total can grow even higher. The custom is that the amount would be also different depending if a company is employing B2B contractors directly from abroad, or from its entity in Poland.

Market customs around B2B contracts

B2B contracts leave a level of flexibility in terms of contractual details and benefits. These are the trends observed for custom agreements in the Poland IT market.

Probation period

None. The first month is usually regarded as a trial period, but can be ended at any time as per notice period.

Notice period

1 month, however this can be 2 or 3 months for key individuals in senior positions.

Holidays

There are no paid annual leave and public holidays on B2B status. It is up to the contractor to take unpaid days off, in agreement with the company hiring his services. Companies can ask a B2B contractor to align his number of days off with the permanent employees' limit, i.e. 26 days of annual leave.

Sick leave

There is no paid sick leave on B2B status. The contractor needs to take unpaid absence if he is unable to perform his work duties. We observed that some companies allow flexibility in the form of remote and flexible work, or sickness days off fully or partially paid.

Benefits package

B2B contractors are not guaranteed to receive the same benefits package offered to regular employees such as medical coverage, a gym pass or life insurance. In order to keep attracting talent, we observed that some companies would offer access to these benefits packages to B2B contractors with costs recharged to contractor.

Non-exclusivity

Contractors are allowed to offer services to other companies unless this would violate competitive clauses of their contracts.

Opting for a B2B contract can be beneficial for both the employer and contractor. However, this requires legal advice and must be done with greatest care to comply with Polish law. Improperly written B2B contracts can be questioned and considered to be employment contracts.



Anna Rogowska

Legal Counsel, Partner at Kancelaria Prawna R. Jedynak, A. Rogowska

B2B contracts and risk of reclassification

With the B2B contract the self-employed individual, operating as a contractor with their own economic entity, provides specified services to the client company. This setup has gained traction in many European countries, much like Poland, where the employment regulations are less stringent compared to other places like the UK, where IR35 rules shift the burden of risk to the employer.

When self-employed, the contractor should be bearing the economic risk and act independently from other organizations. Contractors are expected to carry the costs of their operations, and their compensation should be tied directly to the economic risk they bear.

What to avoid?

The risk factor in B2B contracts hinges on the determination of whether there's a hidden employment relationship. Characteristics of this would include a situation where a B2B contract contractor performs tasks under supervision, during strictly defined hours, on specified days,

in a method imposed on them, using assets provided by the client, and at the client's place of work.

Similarly, if the agreement includes employee-like benefits, such as paid leave, work breaks, or sick leaves, this could indicate an employment relationship. The more these characteristics are fulfilled in a B2B contract, the greater the risk that, in case of an inspection or at the behest of one of the contractors, it could be determined that the agreement and its execution fulfil the conditions of an employment relationship.

If this were the case, a recalculation and possible payment of wages and other employee benefits would be necessary. This could also involve tax adjustments and calculating and making social insurance contributions. Additionally, there's a risk of misdemeanor liability.

Offsetting the risk

Although from a factual point of view, a significant part of sole-entrepreneurs could be classified as simulated (actually being in an employment relationship according to statutory criteria), the previous practice of using B2B cooperation has not raised major concerns from control authorities. However, it's currently impossible to determine whether the practices of these bodies will change in the future.

Number of companies decide to offset even the smallest risk and to the engage a local partner, like MOTIFE. In such scenario MOTIFE works as an umbrella company and hires the B2B contractors for the clients.

Non-statutory benefits

Commonly referred to as "benefits", non-statutory benefits enclose all perks offered by employers to attract and retain employees. These perks are distinct from statutory benefits like paid holidays, sick leave, and parental leave, which are mandated by labor law. It is important to note that statutory benefits do not apply to B2B contractors, but companies often extend similar benefits to them.

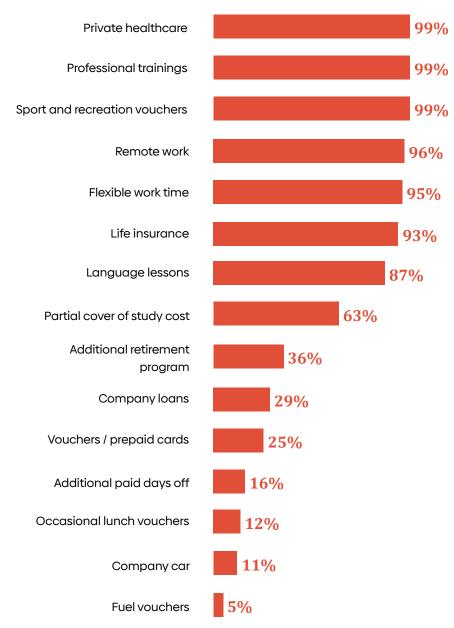
Popular non-statutory benefits within the IT sector include gym/fitness cards, professional training, and private healthcare. These offerings are often considered the baseline components of an attractive benefits package.

 150_{EUR}

Estimated monthly cost of benefits package per employee



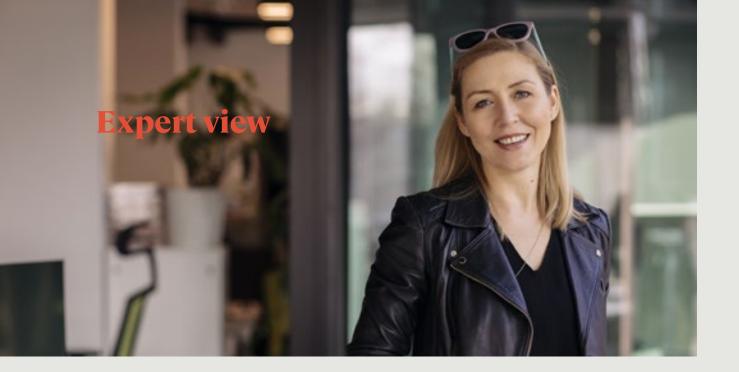
Most popular benefits offered by companies in the IT industry in Poland



Source: Sedlak & Sedlak IT salary survey, winter 2022, N=111 companies

Other types of benefits, more seldomly encountered in Poland include:

- Reserved parking space, especially when offices are in the hyper-center
- Mobility or car bonus integrated in compensation
- Premium office well-being, in-house gyms, massages, nutrition coach
- Permanent indefinite contract from Day 1, without trial period
- Company loans and additional retirement plan
- Workations and longer company retreats



Agnieszka Widacka

Recruitment Manager at MOTIFE

MOTIFE

When considering employee compensation, it's crucial to remember that salary is just one aspect. There are a multitude of benefits and perks that contribute to overall remuneration, such as health insurance, multisport cards, lunch vouchers, additional holidays, and flexible work arrangements. These elements can greatly influence an employee's satisfaction and overall compensation package.

The opportunity for remote work is another significant factor. With fully remote positions, candidates may be more willing to negotiate and adjust their salary expectations. This is because salaries can fluctuate greatly depending on the region or city, primarily due to variations in the cost of living and local job market competition.

It's also vital to acknowledge that specialized roles, such as Cloud or Data Architects, may have vastly different compensation structures between organizations. This is because the desired expert's scope of duties and background depends on various factors, including the industry, the product, and the team size of the hiring company.

Additionally, the number of similar job openings in a specific industry can influence the compensation offered for a particular role. When there is a high volume of vacancies for a certain job, it may indicate a strong demand for professionals in that field. Consequently, if the talent pool of experts is limited, the compensation packages may be higher due to the scarcity of candidates available to fill those positions quickly. This dynamic further underscores the importance of considering multiple factors when evaluating and determining employee compensation.

Practices from abroad less common in Poland

The idea of social welfare and benefits can differ from one country to another. Unlike some Western European countries with a richer heritage of social welfare and generous branch/company agreements (i.e. France, Germany), some benefits would not form part of the expectations from employees in Poland.

Here are some examples that are rarely found in Poland:

- Restaurant vouchers co-sponsored by employer for every working day
- Company cafeteria on-site (even for largesize corporations)
- Public transport abonnement paid/cosponsored by employer

- Company Committees offering employees the access to discounted/co-sponsored holidays, leisure activities, green camps for employees' children, etc.
- Allocation of free company products/services to employees or overly generous discounts to purchase these products/services
- · Company shares or incentive stock options

Companies setting up their teams in Poland are not expected to offer these benefits, unless an employer wants to attract specific talent with out-of-the-box benefits/perks, or import a strong company culture from the home country.



Tax-Deductible Costs (TDC) for IT professionals

The Polish Personal Income Tax Act allows for special tax-deductible rates for authors of copyrighted works. If they receive a remuneration for the transfer of the copyright, they may apply tax-deductible costs in the amount of 50% of a portion of earned income. This scheme is sometimes also informally referred to as "creative tax".

The scheme has gained popularity throughout the IT industry. Both smaller IT firms and large international software companies with 1 000+ employees utilize its benefits.

In terms of benefits, the TDC scheme allows employees to reduce their personal income tax and therefore increase their net income. Without increasing employer costs, the employee's net income can increase by as much as 13% per year. As an alternative, some employers use the TDC scheme to reduce the cost of salaries, by offering lower gross compensation but still an attractive net compensation.

Implementing the TDC scheme in an organization requires a thorough process that can take up to 6 months and the support of a local partner and legal verification. The cost of necessary legal services has to be taken into account when planning.

IP Box tax relief for IT businesses

Introduced in 2019, the IP Box tax relief encourages innovation by implementing a preferential 5% tax rate on income derived from eligible intellectual property (IP) rights. This incentive is accessible to entrepreneurs, partnerships, and corporations. Unlike Creative Tax mentioned earlier, IP Box specifically targets businesses, therefore applies to the sole entrepreneurs operating under B2B contracts and not the individual salaried employees.

The IP Box relief is particularly relevant for software developers. The basic requirement that a taxpayer must meet in order to take advantage of the IP Box is to conduct research and development activities that have led to the creation, development, or improvement of qualified intellectual property. Developers can benefit from the relief when they transfer intellectual property rights to developed applications or source code. To claim IP Box relief, taxpayers must separately identify each qualified IPR and maintain separate records for each type of right. The relief can only be claimed in the annual tax return, accompanied by a specific PIT/IP or CIT/IP attachment, which indicates the portion of income subject to the 5% tax rate.



How to recruit IT talent in Poland?

4-8_{weeks}

Time to recruit an experienced IT specialist

Recruitment projects for IT specialists in Poland usually take between 4 and 8 weeks. After accepting an offer, candidates have a 1-month, or in some cases 3-month, notice period.

Companies adopt four main approaches to sourcing talent in Poland: utilizing in-house recruitment function, hiring external recruitment services, RPO or staff augmentation services.

In-house recruitment function

When entering a new market, an obvious choice for many companies is to hire candidates using their own recruitment team. To be successful with this option, a company needs to build a recruitment function in the chosen location, as hiring with a remote recruitment team rarely works.

Building one's own team, however, is an investment which requires time and can slow down initial growth. Hiring with just an internal team is in most cases slower compared with hiring external agencies. Recruiting for senior IT roles can be particularly difficult with only

an internal team due to a limited database, relations with candidates, and a need for in-depth knowledge of the market.

An in-house recruitment scenario is often chosen when the demand for recruitment is high in the longer perspective, but a slow start is acceptable and when there is no budget for external recruitment agency fees.

To decrease the hiring cost, but to keep a fast pace, companies often choose a hybrid mode when they start with an agency and then continue with a mix of internal, agency and potentially RPO consultants.

External recruitment services

There are numerous local and global IT recruitment agencies operating in Poland. The scope of involvement of the agencies differs from one to another, but usually consists of advertising the roles and actively attracting candidates, screening interviews, coordination of the process with hiring managers and other interviewers, and finally issuing an offer.

With experienced technical recruiters, agencies use their in-depth knowledge of the local IT

job market and professional recruiting tools to accelerate the hiring process.

Some companies offer a success-fee based model, whereas some other agencies offer additional variants such as retained search.

The agency fee is anywhere between 15% and 25% of the new hire's yearly gross salary. The value can be different for the most senior roles.

Recruitment Process Outsourcing (RPO)

In addition to traditional external recruitment services, some agencies propose Recruitment Process Outsourcing (RPO). In RPO a team of recruitment professionals is plugged-in into the in-house function of the hiring company and often uses the company's branding for a seamless experience for the candidate.

RPO is increasingly popular among companies that have substantial hiring plans, but don't have know-how, or need to staff a large wave of hiring, which might be followed by a period of smaller demand.

The typical fee structure for RPO consists of several components including monthly cost and a reduced placement fee. The monthly cost may cover various additional scope elements such as recruitment administration or recruitment management.

RPO can take many shapes and does not only apply to candidates' acquisition roles such as sourcers or recruiters. An entire array of recruitment roles can be subject to the RPO model, including Recruitment Lead or Talent Acquisition Business Partner.

Staff augmentation services

Staff augmentation, also known as team augmentation, is a solution when an outsourcing partner provides engineers who are plugged-in into existing teams.

This option is different from a managed service practice where a whole project is outsourced to a third-party provider. With staff augmentation, the candidates are onboarded as members of the company's team and the project ownership remains in-house.

Staff augmentation is used when a company cannot or does not want to hire engineers on a traditional employment contract. Typical scenarios are:

- company is unable to hire sufficient number of people in a short period of time
- a project has a budget for limited time
- company doesn't accept B2B agreements with candidates
- company doesn't have a legal entity in Poland to hire permanent employees
- company has a limit on the headcount

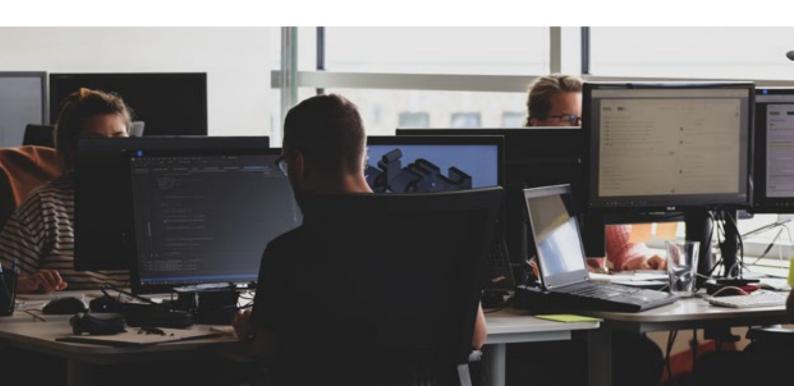
There are several models of staff augmentation: a rapid staff augmentation which involves the outsourcing of engineers already on the outsourcing partner's payroll or dedicated staff augmentation when candidates are hired from the market to match a precise set of skills.

The costs structure of staff augmentation can vary from one outsourcing partner to another.

Most common models include hourly and daily rate, or a mark-up on monthly gross salary, and is inclusive of social security, benefits, payroll and HR support.

Comparison of talent acquisition models

Talent acquisition model	When recommended?	What to be careful about?
In-house recruitment	 You expect constant staffing needs over time You are able to accept slow start Your budget is tight 	 Everything will depend on the team you build In-house hiring is a long-term commitment Performance management is more difficult
Agency offering success-fee / contingency recruitment	 Your recruitment needs fluctuate over time The roles are difficult and niche You are ready to pay premium for premium service 	 Pick a local company that has recognizable brand and knows your industry Bigger companies can perform not as good as the smaller ones Pick a provider that will care about your culture
RPO (Recruitment Process Outsourcing)	 You are planning a significant wave of recruitment You may need to scale it down after a certain period The price point for success-fee recruitment is too steep 	 Make sure the KPI/SLAs are clear Make sure the fees are competitive for large volumes Pick a provider that will care about your culture
Staff augmentation / Contract / Outsourcing	 You need staff quickly You want to test the idea of offshoring You are not certain about the length of the need 	 You will want to have an influence over the staff selection You will want to make the team feel as part of organization The investment you make in the training of staff might be lost





Marcelina Polak

IT Recruitment Partner at MOTIFE

MOTIFE

In my role as a recruiter, each client relationship is a unique journey. Our goal is to deliver an experience akin to having an in-house recruiter. We aim to build strong connections with hiring managers and maintain open lines of communication, ensuring our client is informed at every step. We want to build a relation with every client.

Understanding the company's culture is crucial to us, as we know it's the bedrock of the organization and it helps finding the candidates that fit.

As an external agency, we bring expertise, access to advanced tools, and a diverse recruitment team. However, we avoid a one-size-fits-all approach. Each company is unique, which is why we design a tailored sourcing strategy for every client. We commence work promptly, with the aim of delivering initial candidates as quickly as possible. Part of our strategy involves reaching out to passive candidates.

This endeavor goes beyond merely filling vacancies; it's about finding the right match for the client's company. We know that we can help our clients be successful.

How to employ IT talent in Poland?

Companies expanding their operations to Poland are faced with several choices on how to approach the process. The natural first option for many is to handle the expansion themselves. However, factors such as a lack of know-how, unfamiliarity with the Polish business environment, the need to onboard talent quickly, or previous experiences may prompt them to engage a local partner instead.

Do-it-yourself approach

When choosing do-it-yourself option, companies can choose to either directly engage Polish independent contractors or to choose an option to set up own subsidiary.

Setting up and running a subsidiary with in-house team

In this scenario the company establishes a separate legal entity in the foreign country. This option gives full control over the process and then operations, and prepares for a potential significant growth. In the same time, setting up and running a subsidiary in a new country relying mostly on own team can be expensive and time-consuming, requires understanding of local laws and regulations and may require significant ongoing management. This would be advised to companies who have internal teams with knowhow and capacity to do it.

600+

Software companies established in Poland in 2022 with foreign owners from EMEA or North America

Hiring independent contractors directly

As an alternative do-it-yourself option, companies can choose to hire Polish contractors directly. In this case a service contract is signed directly between a contractor and a foreign company. This is a very good option when a company is looking to hire only a handful of specialists and is able to coordinate the HR and payment process. In addition, this approach requires the contractors to be comfortable with such setup. It also usually excludes employment on employment contract and allows for B2B contractors only. Potential risks include limited control and compliance. This approach allows eliminating the cost of a local provider handling of HR and payments, but also typically won't allow for any local benefits like private health care or life ins urance.

In this option, companies can also use one of the global payroll providers to facilitate the process although it does come with in additional cost (see the focus about global payroll providers).

Hiring model When recommended? What to be careful about? Do-it-yourself You have a capacity and know-· It is always significantly more difficult - Setting up how in the organization to manage, and more complex compared to what it and running a coordinate, execute the process may seem at first glance The most time consuming are nonsubsidiary with vourself You have substantial hiring plans of at value added elements in-house team least 30 to 50 people You don't know what you don't know You have in-house experience doing Significant learning curve this, preferably in Poland Do-it-yourself When you are hiring a small number of • Effectively, you will not be building a - Hiring team members in Poland team in Poland, it will be a group of independent When you are hiring in multiple contractors contractors locations in parallel Loyalty and sense of belonging to directly When you already have contractors in an organization are more difficult to other locations achieve · This solution won't scale

Using a local partner

Most of the companies choose to use a local partner to support them in the execution of the "Poland strategy". Typically, they would choose one of the following options.

Umbrella Company, EOR, PEO

Using a local partner who acts as an umbrella company, Employer of Record (EOR) or Professional Employer Organization (PEO) allows hiring without establishing an entity. In this scenario an external organization employs staff on behalf of the company, but it also provides additional services like benefits administration and HR. No local subsidiary is established to avoid overhead. This approach helps reduce administrative burden, assures tax and payroll and compliance with local laws are handled, and is most of all quicker, easier and cheaper to set up than any other option. Local partners can also help understand local practices and regulations. Some of them can also offer additional benefits' packages to the team members.

Using an umbrella company can be also useful when a company has a subsidiary in Poland but would like to offset the risk of engaging individuals on the B2B contracts.

Softlanding: Setting up and running a subsidiary with a partner

In the softlanding model, a local partner provides an end-to-end support in establishing and running a legal entity in Poland. Local partner will provide staff e.g. HR, Finance, Legal, processes e.g. finance, HR, templates, tools, recommendations related to vendors, best practices etc. The staff engagement will scale depending on the needs of the organization. This allows to significantly reduce an overhead with setting up own subsidiary, particularly associated with learning, handling remotely supporting functions in a new market, and employing full-time supporting functions in Poland. There is still an overhead associated with global supporting functions involvement in the process. In this model, a company has full control over their operations in Poland.

Build, Operate, Transfer (BOT): Setting up and running a subsidiary by a partner

Build, Operate, Transfer is a model in which team and organization are incubated outside the company's organization and later transferred to the company. This option is an enhancement to the softlanding practice, where typically a substantial involvement from the global supporting functions will be needed. In the Build, Operate, Transfer model, the engagement of the in-house staff can be reduced even more. [More about Build, Operate, Transfer in the next page's focus]

Staff augmentation / Contract / Outsourcing

In this approach independent contractors provided by a partner are used. They are either recruited from the market or already available in the partner's team. They are usually fully dedicated to a client and can eventually be hired by a client. This approach provides greater flexibility, scalability and offsets all risks to a partner. It also may allow for a faster start. The downsides include the fact that the team doesn't have a sense of belonging to the client's organization and the setup may implicate compliance risks, or continuity and knowledge retention issues.

Hiring model	When recommended?	What to be careful about?	
Umbrella Company / EOR (Employer of Record) / PEO (Professional Employer Organization)	 You are not yet sure about building a full team in Poland and want to test the approach When you don't have an internal capacity to handle any complex setup and want to have the ease of outsourcing, but benefits of own, dedicated team 	 Make sure you clarify who owns what part between the partner and your own HR team Do treat every person as a member of your team You will need to learn bits and pieces of Polish labor code or market practices 	
Softlanding: Setting up and running a subsidiary with a partner	 You want to have your own entity, but you don't have a sufficient know-how and capacity in the organization You don't want invest in the supporting functions on the ground upfront You want the entity up and running quickly 	 Your global supporting functions will need to be involved The more you trust your local partner, the easier and faster the process will be Don't go this direction if you are uncertain about your plans for Poland or if you are not planning to have more than 10 people in the next 24 months 	
Build, Operate, Transfer: Setting up and running a subsidiary by a partner	 You need to have a team inside your organization and not through another organization You have no ability to handle the process of set up and running, even with support of a partner 	 You need to fully trust your partner to use this option Consider how to build your culture in the team outside your organization Consider the cost of transfer 	
Staff augmentation / Contract /	 You want to have a team as quickly as possible You are not certain if you will be able 	Make sure you have control over who is assigned to you, ideally do participate in the recruitment process	

to sustain the team beyond certain

period of time

Outsourcing

· Make sure you try as much as possible

vour team

to treat the contractors as members of

Focus

What is Build, Operate, Transfer?

The Build, Operate, Transfer model (BOT) is a concept in which a team and organization are incubated and temporarily operated as part of another organization, before being transferred to a company.

There are several ways of executing a BOT project.

- A local partner builds a team and organization in a new entity on behalf of and under the direction of a client company. This new entity is initially owned by the partner, before it is transferred to a company.
- A local partner builds and operates a team and organization inside their own organization under the direction of a client company. The team is then transferred to a new entity, when company is ready for a transfer.

Typically, the team or entity is transferred from the local partner to the parent company between 12 and 18 months after setup, although this can vary and is to be agreed between the parent company and local BOT partner.

The main advantages of the BOT model are associated with having own organization and own team operating under company's brand, but without the effort and time needed to set it up.

Typically, a local partner can have a setup running within weeks, whereas it typically would take months if executed without such support. This converts into being able to have a substantial team up and running within 3 or 4 months. Key disadvantages of BOT model include risks associated with giving the steering wheel to an external partner, which not all companies might be comfortable with and the cost associated with the transfer.

Typical phases of BOT

Build

- Define how the team, organization, processes, tools, governance, should look like for HR, Finance and other areas
- Build a timeline for the project
- Build the team and organization

Operate

- Operate in close coordination with the company
- Run all supporting functions spanning across HR, finance, legal, facilities, overall management of the site.

Transfer

- Revise the initial plans and assumptions related to the transfer
- Build an updated plan
- Prepare transition in terms of tools, templates and processes
- Inform the staff with 2-6-months notice
- Execute the transfer

"We had to rapidly scale our engineering capabilities and set up a development center in Krakow. At first, we thought about doing it ourselves, but it seemed it would take too long. That's when we found out about MOTIFE's Build Operate Transfer (BOT) solution, which could help us get established in Poland. 18 months later, we successfully transferred a 30-person R&D hub into our organization."

Bill Wilkins

Group CTO/CPO at Karhoo

Focus

Emergence of global payroll providers

In recent years, thanks in no small part to the pandemic, we saw an advent and growth of global payroll providers. These companies established legal entities in hundreds of locations worldwide and now provide a unified experience for companies who want to hire staff in other countries and for staff across the world.

Their automated platforms typically include onboarding, payroll processing, billing, attendance tracking and reimbursement functions. Providers often allow hiring both on employment and service contracts. The flexibility of terms is limited, but ease of use, standardization and automation make it a viable choice for many organizations.

The fees of global payroll providers are typically per employee, and are considered on top of salary and applicable taxes. Their rates typically cover payroll services, access to HR tools, assurance of compliance with local laws and regulations, and all required paperwork, such as contracts, work permits, etc.

	Global EOR service providers	Local EOR partners	
Their offer	Provide the same range of EOR services in multiple countries	Provide tailored EOR services with local expertise / sector expertise	
Their clients	Companies with very distributed fully- remote teams, companies that allow a certain portion (e.g. 20%) of their staff to be based anywhere	Companies with substantial number of people in one place, eager to offer extra benefits	
What they do	Payroll processing, compliance, billing, attendance tracking, reimbursement	Same as Global EOR providers plus tailored services beyond administration (custom benefits, local advisory, procurement of equipment)	
Example	Omnipresent.com, Remote.com, Letsdeel.com or Papayaglobal.com	MOTIFE	



Return to the office

Over the past 12 months, HR teams and managers have struggled to bring employees back into office spaces. Various strategies such as offering incentives like pizza, breakfast, parties, and workshops were employed as tools to entice employees back. In 2023, there was a noticeable increase in determination to bring teams back to the physical workplace.

Interestingly, some companies that initially embraced fully remote work now harbor regrets, realizing the difficulties in managing even a partial return to the office. On the other hand, those organizations that adopted a hybrid work model found it easier to navigate the transition back to the workplace.

While most companies still embrace the hybrid work approach and do not (yet) anticipate a full return to the office, they recognize that a minimum of 2-3 days in the office is a must. This balanced approach allows for collaboration, team cohesion, and in-person interactions while also accommodating the flexibility and autonomy of remote work.

The second edition of the "Return to Offices" report published in July 2022 by Cushman & Wakefield shows how companies develop work environment organization principles, which include elements such as flexibility in choosing remote workdays, the number of working days, and the way and place where employees can perform their work.

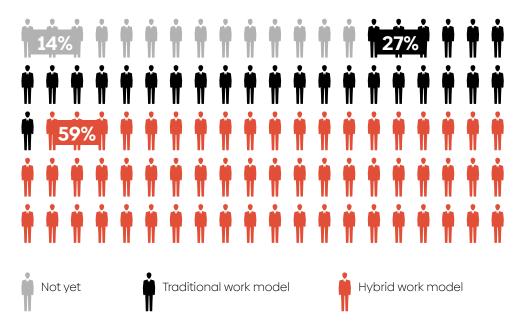
The study, conducted using the CAWI method in June 2022, involved 103 decision-makers in the field of office space management (CEO, Administrative Director, Operational Director, Office Manager).

Work model

Which form of work is most frequently chosen by respondents?

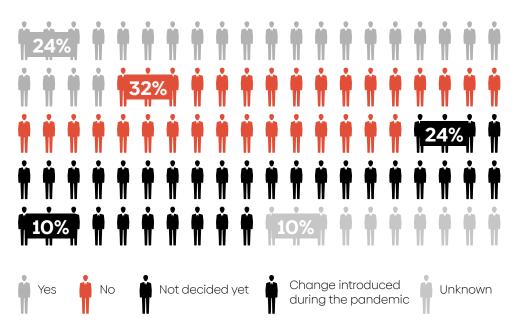
Total flexibility - decision on the employee's side	30 %
Maximum 4 days of remote work per week	10 %
Maximum 3 days of remote work per week	21 %
Maximum 2 days of remote work per week	28 %
Maximum 1 day of remote work per week	11 %

Has your company already determined how many days employees will return to the office after the pandemic subsides?



Changes in office space

Do you plan to introduce any changes in office space within the next 12 months?





Joanna Szczepańska

Associate Director
Total Workplace
at Cushmann & Wakefield



According to the study, the percentage of firms that have not yet introduced any rules is 14%, which is a minority compared to companies that have already regulated their work mode.

The most frequently chosen form by employers is hybrid work (59%). However, it is important to remember that when implementing any scenario, one should not apply a "copy-paste" principle but choose a model that meets the needs of employees and the nature of the company's activities. An interesting conclusion from the studies conducted by Cushman & Wakefield is that more than a third of companies that have implemented a hybrid work model allow employees full autonomy in choosing their workplace. These are self-organizing communities based on variability. The need for development, bonding, autonomy, physical comfort, job satisfaction, and effectiveness is the same in the office and at home, for high-level managers and those at the beginning of their professional career. While in the office, we focus on individual work, and when working from home, we still want to establish and maintain close relationships with colleagues, which is commonly understood as the domain of office work. The most important thing is the ability to choose, and motivation to work comes from a sense of purpose and positive experience.

It is also important who makes the decision about our workplace and what arguments speak for one decision or another. We noticed that, unfortunately, in the absence of an official hybrid work policy and so-called "sponsors" who promote a new approach in the organization, guidelines regarding how many days a week we work in the office are usually determined by middle-level managers. It should be emphasized that this is a group that simultaneously deals with managing hybrid teams and a multi-generational work environment, implementing new processes, automation, and – quite often lately – intensive recruitment.

In this context, prototyping and learning from experience, regular feedback, measurements of space utilization, employee satisfaction, observing team productivity, and involving managers to draw conclusions are important.



Remote, hybrid, and in-office working models

One of the enduring effects of the pandemic is the widespread acceptance of remote working. Within the Polish IT sector, the hybrid model has become the norm, with very few companies insisting on full-time presence at the office.

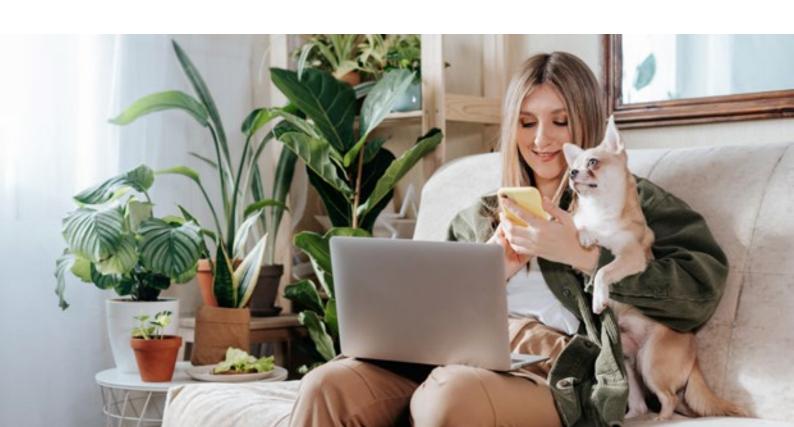
The three main working models used by Polish IT companies can be defined as follows:

100% remote. The employee never comes to an office and performs all of their work for the company from remote locations. This option can be considered suitable for roles that require little or no face-to-face interaction and for employees who live more than 1.5 hours' commute from the nearest company office (or who reside in another country). For such employees, switching to a hybrid model is unlikely to be feasible.

Hybrid. The employee comes to the office 2-3 times a week and spends the rest of the week working remotely (either from home or other, often unspecified, locations). This is suitable for roles that require low levels of supervision and face-to-face interaction with other team members, and for people who live within a 1.5-hour commute from the office.

100% from office. The employee travels to and works from a company office (or client location) every day (perhaps with occasional exceptions). This model is generally suited to roles that require high levels of supervision or for which there are client-specific requirements for work to be done at a designated location (e.g. contractual obligations around data security). It is suitable for people that live within an hour's commute of the office.

There can be variations to each of these models some companies operate a 100%-remote model, but maintain hub facilities that provide the option for employees to work from or to meet. Hybrid models can be tuned to include more or fewer days in the office than 2-3. Similarly, a company that operates a 100% 'in office' model can also offer policies such as provisions for employees to work from home one day per week. These variations can become key differentiators when seeking to attract talent and defining a company culture.



Working model options and their impacts on key organizational aspects in the Polish IT sector

	100% remote	Hybrid	100% from office
Office	Less/no need to provision office facilities	Lower need for office facilities, but solution required to accommodate varying in-office presence	Office facilities (e.g. designated workstations) required for all employees
Attrition	Long-term impact, with potentially weaker ties in the team; More effort is required by employers to promote unity and team spirit	es in the the future - work fully remotely required Regularity of in-office interactio omote and presence can positively	High probability of attrition caused by lack of flexibility; Potentially easier for an employer to gauge the mood of the team and to build company/team culture
Productivity	Difficult collaboration; Too many meetings	Days can be designated as collaboration or individual contribution, according to location	Easy collaboration; Easy ad-hoc interactions
Cost	Savings on office space; Potential need to subsidize home office costs	Potential for savings to be made by provisioning fewer work stations (e.g. hot desking or partial hot desking)	High office cost and potential lack of flexibility in case of future turbulence
Culture & Employer Branding	Potentially difficult to build teams with all members in different locations; Greater effort required to build and communicate culture (internally and externally)	Right balance between demonstrating an understanding of employee needs and maintaining company and team culture	Company can be perceived as overly rigid (even old fashioned)
Onboarding	Very difficult to onboard some roles (e.g. juniors) and team members remotely	Limited/no impact; Can be organized around in-office/remote schedule	Limited/no impact; Can be done easily, in office

Focus

Labor law changes for remote and hybrid work in Poland

In Poland, the benefits of a remote workforce have been recognized by companies, but the lack of regulatory clarity has posed challenges to this new way of working. Fortunately, recent updates to Polish labor laws have addressed some of these issues, providing more structure and clarity to remote work arrangements. In this article, we explore the key changes and their implications for employers and employees.

The introduction of remote and hybrid work terms in the labor law

A significant update in the revised labor laws is the formal recognition and definition of "remote work" and "occasional remote work." This legal framework provides more structure and clarity to remote work arrangements. According to the new regulations, remote work is defined as when an employee provides all or some services from their place of residence or another remote location agreed upon by the employer and employee.

Additionally, on-site employees can request up to 24 days of remote work per year (providing an 'occasional remote work,' which typically refers to working from home 'rarely' or 'sometimes').

Employer responsibility for costs and eligibility for remote work

Employers are now required to cover the expenses incurred by employees during remote work, including equipment, utilities, and internet access. This responsibility also includes providing necessary equipment, training, and support to prevent work-related injuries and illnesses.

To support remote and hybrid workers, employers will incur additional costs ranging from 55-65 PLN per month for full remote workers and 35-40 PLN for a hybrid work model where employees work two days in the office and three days from home.

Eligibility for remote work is now clearly defined under the new regulations, with established rules on who can apply for remote work and under what circumstances. The procedures for requesting and adjusting the working mode are also established, providing both employers and employees with a clear understanding of the requirements and processes to follow for remote work arrangements.

However, it's important to note that B2B contractors in Poland are exempt from these labor law changes as they are not considered employees under the labor law

Implications of Labor law changes

For employers:

- Employers have to equip employees for remote work and compensate them for their monthly costs incurred in relation to home office (lump sum)
- Cover remote work expenses
- Adapt the contract templates to cover the remote work regulations
- Implement safety protocols for remote work
- · Create internal remote work regulations

For employees:

- Clear rules of eligibility for remote work
- Employees can request up to 24 days of occasional remote work per year.
- Compensation of home office cost by employer



Marta Kania

HR Operations Manager at MOTIFE Attorney in law

MOTIFE

Regular remote work arrangements (full time and hybrid) have become increasingly popular, and it was about time that Polish authorities attempted to regulate this area impacting a significant number of employees in the country.

The Labor law changes introduced on 7 April 2023 require employers to provide employees with the necessary tools and resources, creating specific rules and guidelines, and implementing health and safety protocols for remote work.

It is now up for debates whether the legislator has created the most optimal amendments, or sought a compromise that would not bring too many implications on employers and employees.

At MOTIFE, we have seen that the majority of new businesses establishing their entities in Poland plan to build hybrid teams, where employees would be required to work on-site at least one or two days a week. This is especially true for the IT job market, resolutely an employee's market, where candidates are looking for work arrangements that offer greater flexibility.

In the context of regulating remote work in the European Union, member states can be categorized into two groups: those who regulate it by negotiating with labor organizations at national or branch level, and those who rely on specific legislation. Poland, along with a few other EU countries in Central Europe, falls into the latter group where regulations are defined by statutory definition and specific legislation, and collective bargaining has minimal to no involvement.



This chapter is designed for CFOs and other decision-makers responsible for evaluating costs and formulating a business model for market entry in Poland. Within the following pages, you will gain essential information to fully comprehend the expenses involved in running a business in Poland. This encompasses crucial factors such as office space, professional services, taxation, and notably, the cost of employment.

Key figures

19_{KEUR}

Average gross annual salary in the business sector in Poland

PLN

Polish zloty Currency of Poland

5.5%

Unemployment rate in Poland in February 2023 (Krakow: 2.3%, Warsaw: 1.5%)

NATO

member since 1999

Source: gov.pl, krakow.stats.gov.pl, Eurostat

23.7KEUR

Average gross annual salary in the business sector in Krakow

4.9%

GDP growth in 2022. EU countries average: 3.5%. Eurostat

13.2%

Inflation rate in 2022. EU countries average: 9.2%. Eurostat

EU

member since 2004 and Schengen Area member since 2007

Employment cost

When setting up a tech hub in Poland, the salaries of the team members hired will represent the major part of the budget. Understanding the salaries component is a key to build the right business case for "Poland project".

Total employment cost in Poland

To assess the total annual employment cost in Poland we are using as a reference a median monthly salary of a regular engineer on an employment contract, 19 000 PLN or 4 100 EUR gross, and top it with additional employer cost, the social security contribution, to obtain the total amount.

Since apart from regular employment contracts, approximately 30%-40% of engineers choose B2B contracts, we include also the expected cost for these types of agreements.

Permanent employment contract

58_{K EUR}

Annual total cost of employment on permanent employment contract for a regular engineer in Poland, inclusive of social security

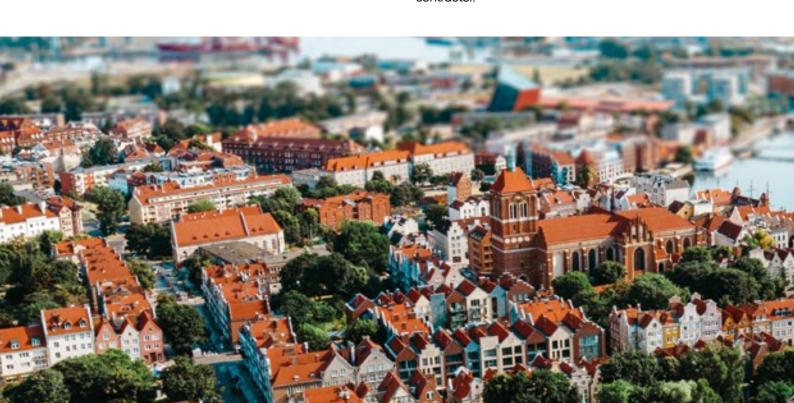
The total employment cost will consist of the annual gross salary, topped with social security contribution paid by the employer (on average 20%).

B2B contract

50-60_{KEUR}

Annual total cost of employment on B2B contract for a regular engineer in Poland

The total cost of employment on B2B doesn't include the social security contribution for B2B contractors as it is entirely at the charge of the contractor.



Beyond employment cost

The part of the budget beyond employment costs differs depending if you have your own subsidiary or employing through an umbrella company.

The umbrella company model simplifies the setup. The primary expenses include the cost of employment, the provider's mark-up, and recruitment cost. There might be additional expenditures if you opt for benefits, office space, or equipment.

Setting up your own subsidiary offers more control but also involves a broader range of costs. These include the cost of employment, benefits, supporting functions, recruitment, and equipment. Depending on your needs, you may also need to factor in office costs.

When operating your own entity, it's also essential to factor in the obligations associated with transfer pricing. Most companies use a cost-plus model to comply with tax regulations in Poland. This means that a minimal profit, referred to as a mark-up, is generated in the country. The good news is that this can be recovered in the form of dividends from your Polish entity.

70%

Approximate average portion of the cost of running an IT Hub Poland that goes to the employment cost and benefits

30%

This is an approximate average amount that goes to cover supporting functions cost, recruitment, office, equipment

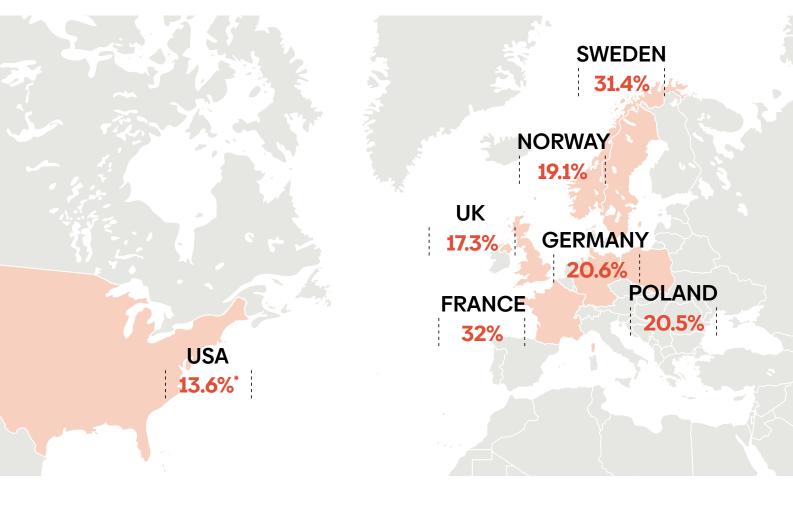
7%

A typical mark-up used in the cost-plus model added to the total cost of IT Hub Poland cost in order to conform with transfer pricing obligations



Comparison of total employment costs in different countries

Level of additional costs an employer has to incur on top of salary (in %) in selected countries



Sources: Eurostat, US Bureau of Labor Statistics, Papaya Global Payroll and Benefits Guide, 2023. * USA - mandatory contribution. Up to 30% with private healthcare and retirement in the private sector.

Find the detailed breakdown of salaries in Poland per roles in Chapter 2 – Hiring in Poland pages 86-93.

Professional services

500_{EUR}

Monthly cost of accounting services and payroll for a small limited liability company

When operating in Poland, companies need to comply with local regulations. Most of foreign firms choose to outsource most of the work associated with bookkeeping, payroll or legal. Poland offers competitive pricing for these types of services, which minimizes the overhead costs of running a business here. Business services providers are often familiar with elements of foreign legal and tax laws as well.

500_{EUR}

Yearly cost of insurance (hardware, liability) for a small limited liability company

50-100_{EUR}

Hourly fee for legal services

Taxation in Poland

There are 3 primary taxes that a company pays in Poland: the Personal Income Tax paid by companies for their employees by deducting it from their salaries, the Value-Added Tax and the Corporate Income Tax.

PIT

Personal Income Tax

12% under 120K PLN (26K EUR) annually, and 32% over that threshold



23% standard VAT rate



Corporate Income Tax

9% for companies with <2M EUR annual revenue and 19% over that threshold

Focus

Tax incentive for new investment in Poland

Polish Investment Zone program offers options of CIT tax break for companies who set up their operations in Poland. This income tax incentive is available for investments in the Krakow and Małopolska region, and is granted by a regional entity (Krakow Technology Park) on behalf of the Polish Minister of Economic Development.

The amount of tax break is calculated by multiplying investment costs by 40%, 50% or 60% depending on the size of the company (e.g. a "large" company that plans to hire 50 developers and incur 10M PLN as 2-year-employment cost will be granted 4M PLN income tax break)

Income tax break

From 40% to 60 % of 2-yearemployment cost depending on the size of the company

For service sector companies

and certain production companies

Investment allowed in the location of your choice

the Krakow Technology Park issues Decision of Support in Krakow and Małopolska Region

Companies that used this tax incentive in Krakow



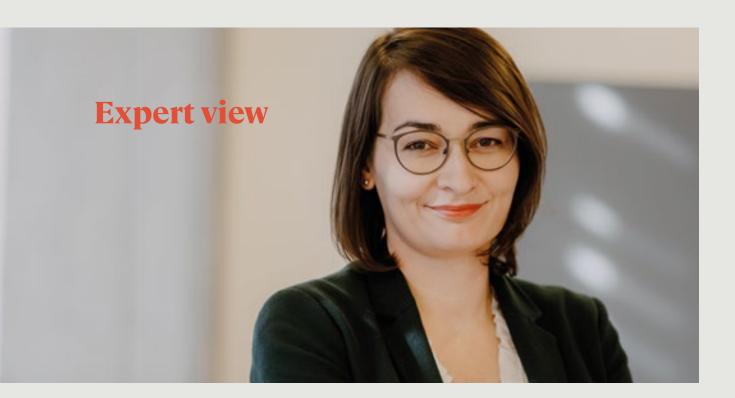








Companies of all sizes can apply and receive tax breaks if they incur minimum investment costs and declare to meet quality factors related to sustainable economic and social development. The tax break can be granted to services sector companies, including: IT services, research and development in natural and technical sciences, bookkeeping and book control, accounting services (with the exception of tax statements), research and technical analysis services, call center services, architectural and engineering services.



Justyna Czyszek

Deputy Director at Krakow Technology Park



Since 2018, when the Polish Investment Zone was introduced, Krakow Technology Park granted income tax breaks to more than 200 companies.

Among service sector companies, we welcomed well-established brands such as UBS or most recently a GameDev company - Globant Poland. We walk investors through the process of applying for this investment incentive and introduce them to the network of our clients. Every company that wants to join our growing business environment in Krakow should definitely consider this tax break and can learn more at kpt.krakow.pl

Office market in Poland

 $12.7_{MLN m^2}$

Total office space surface in 9 major cities in Poland

22-26_{EUR}

Lease per 1 m² of office space/month in an A-class building in Warsaw center The office market in Poland has experienced rapid growth in recent years, with new office buildings and business centers sprouting up in major cities across the country. This chapter provides an overview of the main features of the office market in nine key Polish cities: Warsaw, Krakow, Wroclaw, Tri-city (Gdansk/Gdynia/Sopot), Szczecin, Katowice, Lodz, and Lublin. Each city has its own unique characteristics, such as location, infrastructure, and local economic conditions, that have contributed to the development of its office market. By examining the office markets in these cities, our aim is to provide investors with a comprehensive understanding of the current state of the office market in Poland before they decide on the city (or cities) in which to set up their software hubs.

Office space resources

At the end of Q4 2022, the total office space resources in the largest markets in Poland (Warsaw, Krakow, Wroclaw, Tri-city, Katowice, Poznan, Lodz, Lublin, and Szczecin) exceeded 12.7 million square meters. Total office space resources in Warsaw account for 50% of the office space resources in the mentioned markets. The next largest markets in terms of size are Krakow (1.7 million sqm), Wroclaw (1.3 million sqm), and Tricity (1.0 million sqm).

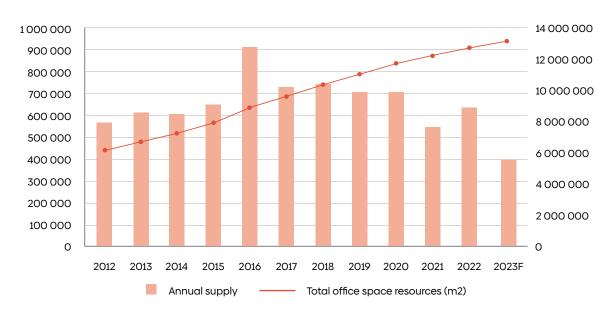
The total supply of office space in Warsaw in 2022 amounted to 236 800 sqm, which was 10% lower than the five-year average. In turn, the supply of office space in the eight largest regional markets from January to December 2022 amounted to 405 400 sqm, which is 5% lower than the five-year average.

Over the past three years, there has been a progressive decrease in the total area of implemented investments due to the completion of previously started projects. The limitation of the number of implemented investments is particularly visible in Warsaw, where currently approximately 161 500 sqm is under construction (for comparison, at the beginning of 2020, it was close to 750,000 sqm).

The decrease in new investments is due to the general increase in construction and finishing costs, uncertainty caused by the war in Ukraine, and the general deterioration of the economic situation in Poland and worldwide.

According to estimates by Cushman & Wakefield, the Warsaw office market will expand by approximately 66 000 sqm in 2023, entering a period of the so-called "supply gap," which may last until 2025. In regional cities, the total supply in 2023 may amount to 330 000 sqm, which is 20% lower than the average of the last five years, and the "gap" effect in the regions will be delayed compared to the Warsaw market by about a year and will begin to affect already in 2024.

Office stock evolution in Poland (in m²)



Source: Cushman & Wakefield, 2023

Lease costs

Observations by Cushman & Wakefield indicate that projects under construction are currently under the greatest pressure to increase rental rates, which is due to significant exposure to rising construction and finishing costs. In addition, the indexing of lease agreements denominated in EUR, which will be around 9%, will impact rental rate increases in the coming months. The increase in rates for the entire market will cause changes in the pricing strategy of renters depending on the location, quality, and occupancy level of their building portfolio. In the case of the capital city, the increase in rents is also a result of high demand for new space in the city center and its limited availability.

Rates for the best office spaces in the Central Business District in Warsaw averaged around 22.00 – 26.00 EUR/sqm/month, reaching as high as 28.00 EUR/sqm/month, while outside the Center, rates ranged from 13.50-16.50 EUR/sqm/month. In regional cities, the best offices in the city center were offered on average in the price range of 12.50-15.50 EUR/sqm/month.



Office space overview in the 7 largest cities in Poland



Demand for office space

The total tenant activity in Warsaw in 2022 amounted to 860 100 sqm, which was over 33% higher than in 2021 and only 2% lower than in the record year of 2019, just before the outbreak of the COVID-19 pandemic. The high demand in 2022 was a result of both the accumulation of transactions concluded by large-area tenants from the financial, business services, and IT sectors, as well as the general increase in tenant interest in the rental market.

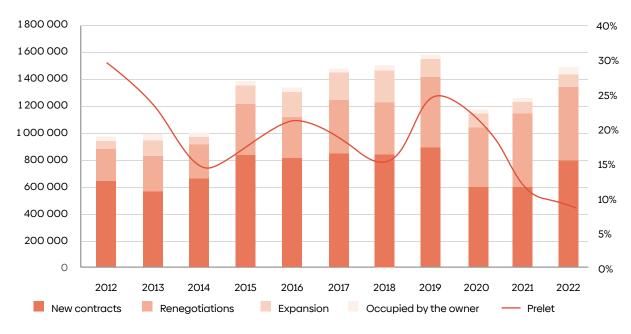
In regional markets, the total tenant activity during 2022 amounted to 623 200 sqm, which means an increase of 5% compared to 2021, but it is still 9% lower than in 2019. Favorable rental results are a consequence of the further development of the business services sector, from which a significant portion of tenants in regional cities come.

2023 will be a year of renewing contracts concluded in record years 2018-2019. The increased number of processes expected to start within the next 12 months may have a positive impact on the demand for office space in 2023. However, the specter of a recession and deteriorating tenant sentiment may have a negative impact on total tenant activity in 2023.

In addition, as a result of changes taking place in the market over the past three years regarding work mode or rising inflation, we will be able to observe a series of actions aimed at cost optimization, which will result in, among other things, extending contracts to amortize higher investment costs for office finishing. The structure of transactions concluded will also change, with an increasing share of renegotiations compared to relocations.



Demand for office space in Poland broken down by transaction type (in m²) and prelet (in %)



Source: Cushman & Wakefield, 2023

Availability of office space

The average vacancy rate in Poland in Q4 2022 was 13.5%, which is a decrease of 0.2 pp. compared to Q3 2022 and an increase of only 0.1 pp. compared to Q4 2021. This indicates stabilization of the rate in 2022 across all analyzed markets. Available office space amounted to 1.71 million sqm, an increase of 5% compared to the end of 2021. Limiting the developer's activity in the next 2-3 years will allow the markets to absorb the excess of available office space in the existing resources. However, the pace of space absorption will be strongly related to the dynamics of economic growth, which will affect organizational decisions on investments and employment growth.

Vacancy rate (in%), absorption and annual supply (in m²) in Poland office market



Source: Cushman & Wakefield, 2023



Michał Galimski

Head of Regional Markets in Poland at Cushman & Wakefield



After three years of turbulence, the Polish office real estate market is entering a period of stabilization.

In 2023, three years will have passed since the beginning of the COVID-19 pandemic, and since then, we have witnessed Russia's aggression in Ukraine. The modern office real estate industry feared that the accumulation of these events would destabilize the Polish market more than the financial crisis of 2008. However, at that time, the total supply of modern office space in Poland was three times smaller than it is currently.

In 2022, the strength of the Polish office market was driven by transactions of entities that have been present in the country for many years. Despite the lack of a common pattern in the decisions made by organizations, their actions allowed them to come out of the destabilization period unscathed. The market activity, measured by the total scale of lease transactions, including renegotiations, expansions, and relocations, exceeded 1.4 million sqm, a level comparable to the results of the last eight years. Contrary to appearances, absorption was also not low, and the total volume of new lease agreements and expansions was only 10% lower than before the pandemic, which allows us to look with optimism at the coming quarters.

The road to further market stabilization will lead through many interesting phenomena that we can expect in this and the following years. Differences in the condition of the office market between individual cities and the expected slowdown in supply in Warsaw in 2023 and in the perspective of regional markets in 2024 are becoming apparent. This year, we also expect further increases in office rents, which will be particularly visible in city centers and will affect the dynamics of the entire market.

About MOTIFE

We help set up, run, and grow tech teams in Poland

MOTIFE is a recruitment and consulting firm headquartered in Krakow, dedicated to facilitating the establishment, management, and expansion of tech teams in Poland for international tech businesses. With expertise in assembling and overseeing teams of software engineers and IT professionals, MOTIFE provides specialized support for tech businesses at various stages of growth.

Over the past five years, MOTIFE has assisted more than 30 companies in forming technical teams in Poland, working with businesses across EMEA and North America. Our portfolio includes collaborations with large-scale public companies aiming to create a footprint in Poland and smaller enterprises seeking to access Poland's thriving talent pool.

This report embodies MOTIFE's commitment to Krakow's IT ecosystem and aims to highlight the city's and the country's success.



Our services

MOTIFE provides a comprehensive range of tailored services, from the formulation of a "Poland strategy" to recruiting staff and managing operations of subsidiaries in Poland. We also offer employer of record/umbrella services, staff augmentation, and advisory. Our mission is to expedite the process of establishing an engineering presence in Poland while mitigating risk and minimizing overhead costs.

01

Recruitment and RPO

Our recruitment solutions are customdesigned for businesses entering the market with the intent to establish IT hubs in Poland. Our expertise spans across staffing cross-functional teams, catering to diverse technology stacks, and hiring professionals at various levels of seniority.

- | Contingency or success-fee recruitment
- Retained search
- **Recruitment Process Outsourcing (RPO)**

02

Setup and operations management

We assist in the establishment and operation of your entity in Poland by supplying a scalable support team. Our services are designed to minimize time-to-value and alleviate the challenges and risks of setting up a business in a new country.

- | Nearshoring advisory
- | Entity and operations setup
- Office setup
- **Operations management**

03

Employer of Record (EOR) or Umbrella Company

With MOTIFE's Employer of Record (EOR) services, it's possible to build a team in Poland without the need for opening a legal entity. This service ensures minimized overhead, maintained compliance, and professional HR support, all consolidated under a single monthly invoice.

04

Staff Augmentation

Our staff augmentation service allows for team expansion with skilled professionals when necessary. This low-risk, flexible approach can be employed alongside other services to bolster the team in accordance with project requirements.



Magdalena Fortuna -Sanocka

HR Manager at MOTIFE

MOTIFE

Having worked for MOTIFE for three years in the role of HR Manager, I can confidently say that our company stands out as a fantastic place to work.

MOTIFE's essence is its people. We hold a strong belief that our team is our greatest strength. Our group is made up of skilled crowd who have experience in areas like recruitment, HR & facilities, finance, and marketing. We are all dedicated to helping tech firms from other countries grow here in Poland. We deeply value teamwork. It is a part of our culture and drives us to do great things together.

At MOTIFE, we live by our values - Trust, Nurture Passion, Work Smart, and Focus on People. These principles shape how we do everything. Trust forms the foundation of our relationships, both within our company and with the outside world. Passion gives us the energy to aim for excellence and always do a little more. We believe in working smart, in a way that allows us to reach our goals without sacrificing our personal lives. And above everything, we give importance to people. We understand and acknowledge their value and well-being in our company.

Another thing about MOTIFE that I really like is the friendly feel we have created and our transparency. We place a lot of importance on speaking openly and honestly, which helps build trust between us employees. Be it updates about the company or clear and simple briefings about a project, we make sure everyone gets the information. This clear communication approach helps us all make decisions that are informed.

Trusted by great companies



Learn more at motife.com



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Share your thoughts, suggestions or questions by writing to hello@motife.com

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