

# Krakow IT Market Report 2022

---

**MOTIFE**

IN PARTNERSHIP WITH











# Content

<b>Introduction</b>	<b>5</b>
<b>Krakow - growing through technology</b>	<b>6</b>
<b>About Krakow</b>	<b>7</b>
<b>Krakow - a beacon in an uncertain world</b>	<b>8</b>
<b>Stand with Ukraine</b>	<b>10</b>
<b>Key findings</b>	<b>14</b>
<b>Tech ecosystem</b>	<b>16</b>
<hr/>	
Large companies	18
Start-ups landscape	26
Fintech companies	38
Most common technologies	50
Education	54
Communities	60
<b>Hiring</b>	<b>64</b>
<hr/>	
Talent pool	65
Salaries	67
Employment and benefits	74
IT recruitment	84
Employer of Record (EOR)	88
<b>Cost of doing business</b>	<b>92</b>
<hr/>	
Key figures	93
Office space in Krakow	94
Professional services	100
Taxation in Poland	102
Staying in Krakow	104
<b>2021 in review</b>	<b>108</b>
<hr/>	
New IT players in Krakow in 2021	109
Hiring trends	114
Working trends	120
Office market trends	128
Start-ups ecosystem	134
<b>About MOTIFE</b>	<b>141</b>







# Introduction



**Michał Piątkowski**

Co-founder & CEO at MOTIFE

## MOTIFE

### **It is with great pride that we present the 2022 edition of the Krakow IT Market report.**

Last year was marked by the continued investment in Krakow from technology companies of all shapes and sizes. We saw hundreds of already-present companies growing their footprint here, and the city welcomed about 20 new players to its tech scene. Krakow is proving to be a strategic location for technology companies and a key hub within the global IT market.

The global tectonic changes in the IT labor market are one of the key trends influencing our local ecosystem. As an example, with the transition to remote- and hybrid-working models, the accessible tech talent pool has grown from 50 000 in Krakow and the surrounding region, to more than 300 000 IT professionals nationwide.

Since the publication of the 2021 edition, we've received words of appreciation from numerous companies already in Krakow that are seeking to stay on top of market trends, as well as from potential new entrants to the market. Our aim with the Krakow IT Market report is to combine our market research with input from local experts and industry sources to create a single, comprehensive, and up-to-date source of information about Krakow's IT market.

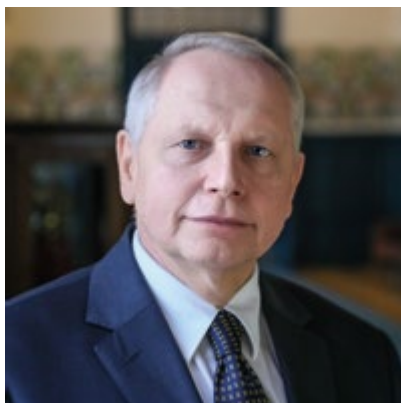
The report wouldn't be possible without the involvement of community leaders, local and international companies, and our friends from across the ecosystem. We thank them sincerely for their contributions.

There is a great deal to be proud of and yet, at the time of publication, our thoughts are dominated by the plight of Ukraine and its people. Everyone we know stands united with Ukraine. With its established position as a global strategic IT hub, and Poland's status as a member of NATO and the EU, Krakow acts as a safe harbor for both the people of Ukraine and tech organizations in the region.

Wherever you are in the world, I wish you peace and enjoyable reading.



# Krakow - growing through technology



**Jerzy Muzyk**

Deputy Mayor of Krakow  
for Sustainable Development



**A city is nothing but the sum of its people – this is why all scenarios for Krakow's development are based on its most valuable assets – the activity, knowledge, and creativity of its residents.**

With this in mind, the local government should do everything within its power to channel this positive energy and promote collaboration between all relevant partners to ensure the sustainable development of the city. The economy remains one of the key areas where this is possible, with IT sector making up an essential part of it. This is due to the extensive research and development facilities of our universities and our highly-renowned academic staff, well-educated people, and

Krakow's genius loci – combined, these create an attractive proposition for investors and companies active in the IT market, as well as with all of the digital dimensions of modern life.

In line with the strategic goal of developing a knowledge-based economy, our city implements and supports a number of initiatives, following the strategic "smart city" paradigm – we understand this as the skillful use of the city's resources to optimally meet the needs of the residents and respond to emerging challenges. Digital transformation, based on a strong foundation – the presence and operations of IT companies in and around the city is a prerequisite for creating a dynamic space and a modern city. Moreover, it enables positive change and makes Krakow an even better place to live and work.

In a highly competitive global market, Krakow continues to attract young people who want to develop their talents here. This is made possible thanks to start-ups, which can grow dynamically and effectively attract investors by way of local incubators, venture capital, and access to funding, as well as by the reputations gained by the many highly specialized IT companies that operate here, in the City of Kings. In order to complement the attractive job market and the competency and talent development in the digital technology industry, we make sure that the city offers a high quality of life, work, and leisure. We are doing this by facilitating cooperation between all partners across a wide range of domains, including business, academia, local government, and residents.

We do this to provide opportunities for growth for businesses operating in our friendly, open and safe city, and to enable them to bring their modern technologies to all.



# About Krakow

1.5<sub>M</sub>

**Population of Krakow  
metropolitan area**

2<sub>nd</sub>

**Largest city in Poland**

14<sub>M</sub>

**Tourists visiting Krakow  
annually (pre-COVID)**

3%

**Unemployment rate  
in Krakow**

Krakow, the medieval capital of Poland, is the country's second largest city with approximately 780 000 inhabitants. Krakow's metropolitan area has a population of approximately 1.5 million people.

Krakow is a visible sign of the success of a Polish transformation. Over the last 25 years the city has become the top outsourcing destination in the European Union. Global players such as ABB, Motorola, IBM, UBS, Shell, Cisco, Capgemini and Motorola have established their business service hubs here.

Krakow is also a vibrant city with over 140 000 students at local universities and over 14 million tourists visiting every year. The city has been named one of the top tourist destinations by many reviewers including CNN or The Telegraph.

Krakow is located in the southern part of the country. The city is well connected with Europe with its airport featuring direct flights to major European cities and 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. Krakow, as a university town, not only turns out over 2 300 new ICT graduates every year, but, as a business hub, attracts talent from other cities and countries.

Sources: [krakow.stat.gov.pl](http://krakow.stat.gov.pl), [krakow.pl](http://krakow.pl), [krakowairport.pl](http://krakowairport.pl). December 2021



# Krakow - a beacon in an uncertain world



## Andrew Hallam

General Secretary  
at ASPIRE



**Krakow's evolution challenges the very notion of offshore; more than a source of attractively priced, skilled labour, Krakow is a compelling strategic choice, a safe haven, a first port of call, a trusted partner, and a source of expertise.**

This report is being published at a time when war is raging in Ukraine. Just 150 miles from Ukraine's western border, Krakow has demonstrated great solidarity with its neighbour, welcoming as many as 150 000 Ukrainians displaced by the war, alongside the nearly 60 000 already settled in the city.

Krakow's admirable and lightning response to the plight of its neighbours demonstrates the same characteristics that have helped the city emerge – and thrive – as a major global hub for the tech industry.

The same qualities of resilience, energy, enthusiasm, creative thinking, resourcefulness, and strong sense of community that have enabled the city to respond so quickly to the current crisis are also the very qualities that equip Krakow companies to compete so successfully on the global stage – hardly missing a beat during the pandemic and responding to the ebb and flow of economic events.

As this report demonstrates, companies large and small, established and new, continue to set up or expand their scope in Krakow, with the tech and business services population now exceeding 100 000, and many of the world's leading corporations playing active roles in a rich, diverse, and robust ecosystem.

With every new arrival and with every extension of scope, the city gains something new, its talent pool swells, and its networks and connections become stronger. All of this makes the city more diverse, more mature, and better equipped to help companies to navigate and thrive in uncertainty.

At ASPIRE, we look forward to helping shape the next chapter of Krakow's evolution, confident in the city's capacity to sustain its remarkable growth trajectory, eager to consolidate and build on the city's status as Europe's No.1 location for tech and business services.







# Stand with Ukraine

At the time this report was being finalized (March 2022), Europe was facing arguably the most-concerning security crisis since World War II, with the invasion of the Republic of Ukraine by Russian Federation troops. The events in Ukraine and neighboring countries are already having an influence on the the Krakow tech scene and it is highly likely that they will continue to do so for the foreseeable future.

## Krakow as a Safe Harbor

MOTIFE, ASPIRE and our partners stand with Ukraine, and are committed to promoting Krakow as a safe harbor for Ukraine-based tech companies, and Ukrainian IT professionals and their families.

As the situation evolves, it is possible that some of the analysis and predictions in this section become obsolete. Here we seek to report on early effects and the possible implications for the Krakow tech scene in the near future. Future editions of this report may provide more-detailed information and insight on how the events in impact the Krakow IT landscape.

## Impact of war on the region's and Krakow IT Market

The outbreak of war in Ukraine has had a real and significant impact on the tech talent in the region.

- There are approximately 200 000 Ukrainian software engineers and IT professionals. Some of them left their professions to bear arms. The most visible impact is business continuity driven attempt of international companies to find alternative to their locations in Ukraine.
- Approximately 400 000 Russia-based IT professionals are no longer available or eligible to be considered by non-Russian companies due to sanctions or moral stances (i.e. to avoid investing in Russia) prompted by Russia's invasion of Ukraine. Even in those instances where companies feel comfortable continuing to work with Russia-based service providers or contractors, sanctions placed on Russian financial institutions and decisions by financial services providers to prevent the influx of funds into Russia could make payment for services impossible.

- A further 50 000 engineers from Belarus can also be discounted due to the country's association with Russia and the decision by many institutions to extend their boycott of Russia to its ally.



With global demand for software and IT professionals already high, a decreased availability of couple hundred thousand engineers will naturally have ramifications for availability and cost.

Poland has a major role to play in this scenario:

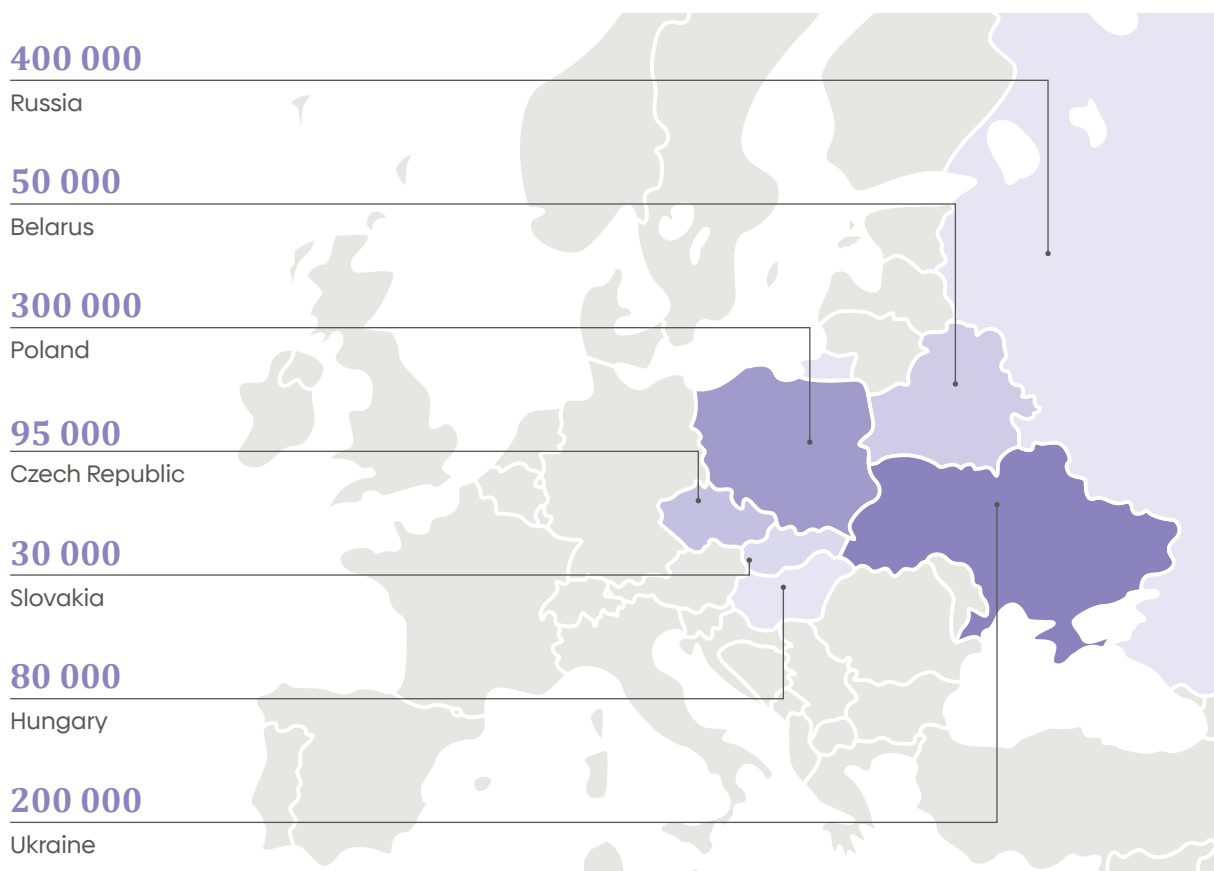
- Many companies that had been considering Ukraine, Russia or Belarus either as locations to hire or to set up operations will likely now look at Poland.
- Many projects, teams, and companies previously located in Ukraine will now be looking for alternative locations.

Poland, and Krakow in particular, will be among the preferred alternatives for both of the aforementioned scenarios.

# 650<sub>K</sub>

**Estimated total number of engineers and IT professionals in Ukraine, Russia and Belarus**

## Map of talent pool in Central and Eastern Europe, as of 2021



Sources: Nofluffjob's Specialists in Central-Eastern Europe, 2021, Atomico's State of European Tech 2019



## Impact of war on talent relocation to Krakow

The effects of Russia's invasion of Ukraine were felt within one week of the first military strikes. Since the end of February 2022, we have observed the following:

- Strong interest in relocating teams previously based in Ukraine to Krakow and to diversify regional footprints by adding a Krakow location.
- IT companies located in Krakow, if previously opened to hiring Ukrainians, now made it a priority and an explicit goal to increase the number of people from Ukraine among their staff.
- Legal, HR, IT companies of the city run initiatives to help people of Ukraine settle here and find a job. This include advisory, guidance or even CV writing workshops.
- Krakow-based companies, such as Brainly, are offering assistance and relocation packages to new employees originating from Ukraine. Wherever possible, the intention is for such packages to cover transport, shipping of possessions, accommodation and official permits for the employee and their family.
- Increase in demand for serviced offices, co-working spaces and subleases as a result of companies relocating Ukrainian staff to Krakow, or Ukrainian professionals that have been forced to leave their home country and now require suitable facilities in order to continue their professional duties.
- People of Krakow help Ukrainians find jobs by reaching out to their networks in channels like LinkedIn.
- On countless occasions, IT companies showed their support by offering donations, encouraging volunteering activities among their staff or even converting sections of their offices to temporary refuges for people from Ukraine.

In general, we expect an increase in the number of companies seeking to set up operations and hire in Krakow. However, it is currently too early to see how significant this effect will be

### Focus



### Wix.com quickly relocates and expands in Krakow

At the start of February 2022, just weeks before the invasion of Ukraine by Russia, Wix.com, the world-renowned cloud-based drag-and-drop website builder, arranged for the relocation of 45 members of staff and their families from Ukraine to Krakow, as reported in an article published in the Washington Post. The Israeli-founded company, which has been present in Krakow since its acquisition of Modalyst in 2021, quickly found and rented additional office space and arranged accommodation for its

relocated staff and their families. It has also been supporting the rest of its Ukraine-based staff with their evacuation efforts. Whether it proves to be a long-term solution or temporary, the decision by such a renowned organization to move a large part of its operations to Krakow, is a major vote of confidence in the city but also highlights the possibility of increased pressure on the supply of high-quality office space

CHWAŁA UKRAINIE





# Key findings

## Growth of the talent pool

---

**50K in Krakow  
300K in Poland**

The IT Talent pool in Krakow grows by around 10% each year, driven by new graduates and candidates from other cities and neighboring countries attracted by career opportunities. Two years of pandemic conditions have decoupled the idea of place of living and place of work, increasing flexibility and enabling companies to access a national talent pool of 300 000 engineers and IT professionals.

## Largest IT employers

---

**As per IT headcount:  
#1 Comarch, #2 HSBC,  
#3 Aptiv, #4 Motorola,  
#5 EPAM**

The largest 5 employers of IT talent in Krakow account for close to 10 000 engineers and IT specialists. The top 20 large corporations account for 20 000 engineers and IT professionals.

## Almost 20 new IT players

---

**New companies continue to set up in Krakow, adding to the booming tech scene**

Among the new arrivals, there were 3 recognized unicorns (Project44, Bitpanda and BlockFi), demonstrating that Krakow appeals to companies of all shapes and sizes, and from a variety of sectors. By the end of 2022, these companies are expected to employ more than 1 000 IT professionals in Krakow.

## Fintech momentum

---

**5 unicorns and over 1.5K engineers and IT professionals employed in Krakow Fintech scene**

The Fintech scene is booming, enhanced by the arrival of 2 unicorns (Bitpanda and BlockFi) and a growing representation from the world of cryptocurrency and blockchain, financial and commodity trading, digital banking, and more.



## Increased demand for tech talent

---

**Employers working harder to appeal to candidates**

Continued digitalization of the global economy means that demand for tech talent continues to rise. Candidates can afford to wait for approaches and are likely to wait for the right opportunity (company fit, tech stack, mission) before changing jobs. Employers are having to work harder to differentiate and appeal to discerning tech talent.

## Quality, not cost

---

**Ongoing IT market globalization means that Krakow stands out for quality more than cost.**

With the ongoing globalization of the IT market, costs and salaries are aligning around the world. Despite rising costs, Krakow remains an affordable destination, but cost is no longer the main factor. Availability, quality, time-to-hire, low attrition, and culture matter more to companies considering Krakow.



chapter 1

# Technecosystem





20<sub>K</sub>

**Estimated number of engineers employed by large IT companies in 300+ FTEs development centers in Krakow**



50<sub>K</sub>

**Estimated number of engineers and IT professionals working in Krakow region**



2.35<sub>K</sub>

**Number of Computer Science students graduating yearly from Krakow universities**

Sources: stats.gov.pl, MOTIFE Insights

**In this chapter, you will find information about which companies are present in Krakow, and about the academic and business ecosystem that contributes so strongly to Krakow's appeal. You will also learn from leaders of Krakow-based companies about their reasons for establishing operations in Krakow, their experiences, and their plans for the future.**

Firmly established as one of Central and Eastern Europe's most important technology centers, Krakow's technology and business scene continues to go from strength to strength, demonstrating its resilience and appeal despite the global economic and societal disruption caused by the pandemic.

Early arrivals to Krakow continue to grow and many are expanding their scope of services, new companies of all shapes and sizes continue to come, and more and more Polish companies are establishing themselves as major players on the market. The city is also growing in importance in the dynamic startup scene, with a growing number of unicorns and VC-backed players now calling Krakow their home.

Despite the disruption to education caused by the pandemic, the city's strong academic and business ecosystem continues to develop large numbers of candidates with strong technical skills, while fostering relationships between talent, investment, and business.

Whether companies are looking to strengthen their existing teams, expand their scope or create game-changing new products, platforms or services, Krakow is better prepared than ever to satisfy the need.



# Large companies

## The largest IT companies in Krakow

### List of the largest IT companies in Krakow (300+ engineers/IT professionals)

The Krakow IT market has a fair portion of big players. At least 80% of these large companies are software engineering centers focusing on software development and service delivery.

Company Name	Number of employees in Krakow	Number of engineers/IT professionals in Krakow	Country of origin	Krakow office setup year	Key competencies
Comarch	3 480	2 430	Poland	1993	Java, .NET, Scala, JavaScript
Aptiv	3 000	2 000	United States	2000	System Engineers, C, C++
Motorola Solutions	2 500	1 700	United States	1998	Java, JavaScript, Python, C#, C++, C
EPAM Systems	1 770	1 540	United States	2011	Java, JavaScript, .NET, Python, DevOps/Cloud
Sabre Corporation	1 400	1 240	United States	2000	Java, .NET
HCL Technologies	1 400	1 200	India	2007	Systems engineers
Cisco	2 200	1 000	United States	2012	Python, Go, Node.js, JavaScript, Angular
ABB	2 100	800	Switzerland	1997	.NET, Java, Cloud

<b>IBM</b>	3 000	710	United States	2005	Java, C++, Virtualization and Cloud technologies
<b>SII Group</b>	800	700	France	2011	Java, .NET, Embedded, C++, Cloud
<b>Capgemini*</b>	2 640	640	France	2003	Systems engineers
<b>Nokia Networks*</b>	670	600	Finland	2010	C, Linux, Networking
<b>Luxoft*</b>	650	500	Russia	2010	Java, .NET
<b>Ericsson*</b>	580	480	Sweden	2003	Java, C++
<b>Akamai Technologies*</b>	680	440	United States	2011	Java, Python, Scala, React
<b>Grand Parade</b>	470	410	United Kingdom	2011	Java, Scala, React, node.js, Angular
<b>Pegasystems</b>	450	320	United States	2005	Java, Kotlin, React, JavaScript, Go, Pega
<b>Ocado</b>	350	300	United Kingdom	2010	Java, Linux, Networking

Sources: based on data provided by companies mentioned

\*LinkedIn insights (January 2022), headcount likely understated by 20-40%





## Przemysław Zakrzewski

Head of Corporate Technology Center  
at ABB

**In 2022, we celebrate the 25th anniversary of our ABB R&D operations in Krakow, which is one of only seven such ABB centers worldwide.**

We will also celebrate the sixth birthday of our Global Business Services (GBS) Center – the most prominent in the ABB Group. Across R&D and GBS, ABB employs more than 2,200 people in Krakow and our teams here support some of the key functions in the ABB business – from research, to purchasing and finance, and front-line customer support.

Krakow is a strategic location for ABB. We have built and expanded our presence on the strength of the city's academic excellence and the presence of leading research and scientific institutions, as well as our collaboration with leading universities and the support of EU funding. The modern laboratory facilities at our campus and at the Krakow University of Technology are testament to the strength of the local ecosystem and collaboration.

Krakow is one of our most important locations – it is home to core functions and teams, and the source of great pride and globally recognized achievements, such as:

- Location for ABB's only center of excellence for the digitalization of ABB products.
- The origin of future digital solutions powered by the ABB Ability cloud platform, based on Microsoft Azure.
- The location where ABB designs and develops production management systems for the manufacturing, food and petrochemical industries, used in 150 of the largest factories and manufacturing plants in the world.
- Home to the ABB Marine Software Development Center, which develops software and integrated systems for the marine industry.
- Source of pioneering new solutions for use in electro-mobility and Formula E.

Some of ABB's major differentiating capabilities are based in Krakow and our presence in the city is an integral part of our global footprint. We are proud of our growth in the city and proud of our contribution to the city's development as a major tech hub in the world. It's safe to say that for the last 25 years Krakow and ABB have been living in true symbiosis. We look forward to the next 25 years.







**Kamil Dowlaszewicz**

Country Head, EPAM Poland

**EPAM has been present in the Krakow market since 2011 and currently employs almost 2 000 people in this branch.**

We have five established locations in Poland with more than 4 000 EPAMers delivering digital transformation solutions to our clients, helping them to reimagine their business through a digital lens.

In 2021, almost 800 talented professionals joined our Krakow team and together, the teams launched many successful projects.. Last year we also significantly expanded our healthcare and life science projects portfolio and developed our delivery capabilities for gaming and entertainment.

What our employees value most are clearly defined career paths and the possibility of continuous professional, multi-dimensional development, no matter if they are junior or experienced engineers, Project or Delivery Managers, or if they want to grow as Technology Consultants. Focus on this aspect, combined with multiple company and people-driven initiatives and programs enabled through our cherished startup mindset, make us recognized as a Great Place To Work®.



**Jacek Przybylski**

Krakow Site Lead at Cisco

**2022 marks a very important milestone for Cisco Krakow. We will be celebrating the 10th anniversary of our site. We started back in 2012 with 80 people on board, and now, 10 years later, we are the biggest Cisco site in EMEAR, with 2 200+ working in Krakow.**

My priorities for Cisco Krakow are threefold: to continue the development of the site, not only in terms of headcount but mainly in terms of our teams' seniority and site maturity; to move Cisco Krakow even higher up the value chain by adding new competencies and specialized functions strategic to Cisco, also in advanced areas of engineering; and to nurture the unique Cisco Krakow culture of inclusion, diversity and giving back to the community.

In terms of our business focus, Security, Software, and Innovation are top priority areas for us in Krakow. We have Cisco's only Security Operations Center in EMEAR located on our campus, and a team of 300 specialists in various security roles. We have also recently become a hub for Cisco acquisitions like AppDynamics and ThousandEyes, delivering Software Engineering support to our customers across EMEAR. And we have 20 patents developed by our engineers in Krakow that either already are or will soon be implemented in our products and services. Our goal as a site is not only to evolve in alignment with the transformation of the company but to be at its forefront.

# Non-IT companies hiring engineers in Krakow

Approximately 100 000 people work for corporate business centers in Krakow and 40% of them are IT specialists. Other functions located here include various financial roles, customer service, procurement, HR, or marketing. Many companies started by employing non-IT personnel and then expanded to hire technology specialists. With that, there are also non-IT companies in Krakow that employ significant numbers of engineers. These are primarily financial institutions, such as UBS (Switzerland) or HSBC (United Kingdom).

## List of the largest non-IT companies hiring engineers in Krakow (300+ engineers/IT professionals)

Name and sector	Number of employees in Krakow	Number of engineers/IT professionals in Krakow	Country of origin	Krakow office setup year	Key competencies
HSBC (Financial Services)	5 200	2 200	United Kingdom	2010	Java, JavaScript, Python, Data integration
UBS* (Financial Services)	3 600	1 060	Switzerland	2008	Java, JavaScript, Python, Data integration
Philip Morris International (Tobacco)	2 150	520	United States	2006	C#, Java, Python, SAP
Shell* (Oil & Gas)	4 400	400	Netherlands / United Kingdom	2005	SAP, Data integration
Brown Brothers Harriman (Financial Services)	1 560	370	United States	2012	Java, Angular, C++
State Street* (Financial Services)	3 200	330	United States	2007	Data integration
IG (Financial Services)	550	300	United Kingdom	2015	Java, C++, Android dev, Python

Sources: based on data provided by companies mentioned

\*LinkedIn insights (January 2022), headcount likely understated by 20-40%





## Focus



### **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.

The association takes a city-centric approach to the development of the industry, through the organization of conferences or events, the publication of reports and surveys such as the ASPIRE Headcount Tracker, and the facilitation of networking and information sharing between members.

**[aspire.org.pl](https://aspire.org.pl)**

# Start-ups landscape

## Krakov, dynamic start-up city

It would be a platitude to say that everything has changed in the start-up scene in Krakow over the last 20 years. From being a deserted land with only a handful of businesses that could be called start-ups, Krakow now has a growing ecosystem of new ventures that operate internationally. There are incubators, business angels, advisers, and access to funding at both private and public levels.

Start-ups in Krakow attract investors and receive the highest funding in Poland. According to the report "Polish start-ups" from the Start-up Poland Foundation, as many as 40% of companies that have acquired over 10M PLN (\$2.6M) from investors, come from Krakow, Krakow being number one before Wroclaw, Warsaw, Tricity region and the rest of Poland.

Krakov's leading position in investments comes from the existence of a truly connected start-up ecosystem, including incubators, mentors, investors and organizations collaborating with start-ups, such as the Foundation Supporting #OMGKRK or the Krakow Technology Park.

Start-up associations, accelerators and incubators for young entrepreneurs have helped start-ups to flourish in Krakow. Below you will find the five most active organizations that help develop start-up businesses in Krakow:

- Krakow Technology Park and its Technology Incubator
- Foundation Supporting #OMGKRK - Krakow Start-up Community
- hubraum, Deutsche Telekom's tech incubator
- #Start-up Małopolska, the regional accelerator of the Lesser Poland Voivodeship
- Foundation "Krakov City of Start-ups"

There are at least 150 companies in Krakow that meet the criteria of a start-up.

# \$148.5<sub>M</sub>

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

There are three very specific areas where Krakow start-ups specialize.

- The first group of start-ups are **IoT** ventures which includes Silvair, EMBETECH, Airlly, 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, FreshMail, Edward 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).



## Katarzyna Wysocka

Director of Department  
for Entrepreneurship & Innovation  
at Municipality of Krakow

**In recent years, video games have become the fastest-growing creative industry worldwide. Due to the fact that gamers have been growing up with the industry, today both adults and children enjoy this kind of entertainment.**

All signs point to continued growth for this market, based on the fact that we spend more and more time in the virtual worlds. Access to games is also getting better – distribution networks make it easier to buy, sell, and enjoy digital content, which increases the visibility of games released by smaller studios.

These days, games are created not only by large corporations, but also by start-ups and individual developers. The growth of this sector goes hand in hand with the development of the services market – the video game sector has a positive impact on the entire economy, brings in new jobs, and helps companies that are not directly involved in developing games to grow as well. Thanks to e-sports and pop culture events, the market for event services and – indirectly – tourism is also growing. The gaming industry today encompasses not only the production and distribution of games and hardware, but also a growing galaxy of related businesses.

Krakow is home to an annual international gaming industry event – Digital Dragons – a highly renowned conference and trade show, ranked as one of the key meetings of its kind in Europe. The DD Awards, Poland's most important annual awards in the games industry, are also presented here. Set to celebrate its tenth edition in 2022, the Digital Dragons events regularly attracts more than 1 400 attendees.

Importantly for the city of Krakow, the gaming industry is attractive to investors. Last year alone, global giant Tencent invested in two Krakow studios – The Parasight and Bloober Team. Game developers, service companies, and manufacturers of gaming hardware are becoming increasingly important creators of the vision of modern Krakow, as well as sources of the revenue that enables us to deliver on this vision.



# Start-ups born in Krakow

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

The following list includes 15 of the most successful start-ups born in Krakow, selected according to their respective Crunchbase Ranking. Together, these 15 companies have raised over \$400M in total funding since their creation. Although originally from Krakow, some start-ups such as Estimote, Kontakt.io or Silvr now have their headquarters located in the United States while continuing to run and grow their R&D centers in Krakow.

Name and sector	Year founded and total funding	Description and Crunchbase ranking
<b>#1 Brainly</b> (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: 1 088 <b>brainly.com</b>
<b>#2 SALESmanago</b> (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: 6 830 <b>salesmanago.com</b>
<b>#3 Synerise</b> (Software, Sales, Marketing)	2013 \$19.2M	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: 12 160 <b>synerise.com</b>
<b>#4 Kontakt.io</b> (IoT)	2013 \$8.3M	Kontakt.io builds secure and configurable beacon hardware and software to power competitive proximity-based solutions. CB ranking: 14 953 <b>kontakt.io</b>
<b>#5 Estimote</b> (IoT)	2012 \$29.6M	Estimote is a technology start-up, building a sensor-based context and micro-location platform for mobile developers. CB ranking: 16 501 <b>estimote.com</b>
<b>#6 edrone</b> (CRM, Marketing & Sales automation)	2014 \$5.9M	Edrone is an autonomous e-commerce CRM platform that provides advanced marketing automation solutions. CB ranking: 17 044 <b>edrone.me</b>

<b>#7 Airly</b> (IoT)	2016 \$6.4M	Airly specializes in providing hyper-local data about air pollution. It empowers individuals and communities with knowledge about the air they breathe. CB ranking: 17 527 <b>airly.eu</b>
<b>#8 Talent Alpha</b> (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: 19788 <b>talent-alpha.com</b>
<b>#9 Onteon</b> (Software)	2015 \$0.7M	Onteon is a software stack to orchestrate, scale, communicate and manage modern applications and legacy ones in an efficient and effortless way. CB ranking: 28 397 <b>onteon.com</b>
<b>#10 CallPage</b> (Software, Sales)	2011 \$6.7M	CallPage is an ICT SaaS company that converts website visitors into sales calls. CB ranking: 30 473 <b>callpage.io</b>
<b>#11 LiveKid</b> (EdTech)	2017 \$2.4M	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: 31 331 <b>livekid.com</b>
<b>#12 HCM Deck</b> (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: 42 427 <b>hcmdeck.com</b>
<b>#13 Mobiltek</b> (Software)	2002 \$29.7M	Mobiltek is a software house specialized in online and mobile payments. CB ranking: 45 389 <b>mobiltek.pl</b>
<b>#14 Sinterit</b> (3D Printing)	2014 \$3.7M	Sinterit specializes in development of SLS 3D printers. CB ranking: 46 250 <b>sinterit.com</b>
<b>#15 Silvair</b> (IoT)	2013 \$23.3M	Silvair is a turnkey smart lighting platform enabling manufacturers to provide an enhanced lighting experience. CB ranking: 48 287 <b>silvair.com</b>
<b>#unlisted Zendesk Sell</b> (formerly BASE) (Software, Sales)	2009 \$85.5M	Zendesk Sell (formerly BASE) is a service-first CRM company that builds software designed to improve customer relationships. CB ranking: 1 106 <b>zendesk.com/sell</b>

Sources: crunchbase.com, January 2022

## Expert view



### Rajesh Bysani

Chief Product Officer at Brainly

**Brainly is the leading global, online learning platform that provides over 350 million students, parents, and educators from over 35 countries with the collaborative tool they need to succeed in any educational environment.**

2021 was a huge year for Brainly as we continued to introduce new products and tech-driven solutions to help students thrive in this challenging learning environment. We even grew our team to over 400 employees globally, which makes us one of the biggest Polish startups in operation.

In March we launched Math Solver. With our Snap to Solve feature, Math Solver provides simple step-by-step solutions by just taking a photo of the problem or writing it into a mobile device's touchscreen. Powered by AI, this product gives users another always available tool for tackling the most challenging subject for middle and high school aged students.

In May we rolled out another first of its kind product in the U.S., Brainly Tutor which is an affordable subscription service connecting students with real-time access to live chat support for subjects such as Math and Physics. Resulting in very impressive user stats, we expect to roll this out globally in 2022. Brainly Tutor has become a go-to resource for many students who would have otherwise been unable to afford or access traditional in-person tutoring.

Additionally, throughout 2021, Brainly users and staff experts continued to add even more solutions to our ever-growing Knowledge Base, which now holds over 200 million answers to the most frequently asked questions in middle and high school coursework. This database is the heart of the Brainly platform and is drawn upon by our AI-powered products such as Math Solver to make thousands of homework help recommendations a day.

Finally, one of the newest additions to Brainly is the Dextbook Detective, a product feature which allows users to uncover more from their textbooks by browsing expert explanations and practice on questions straight from the books.

We're going to continue the momentum in 2022 by constantly improving and expanding product offering to more users. With over 350 million users in 35 countries - we have many students, parents, and teachers relying on us for homework help than ever before. We consider this a huge privilege, and responsibility. That said, the demand for innovative edtech products has never been higher which really gives the whole team a sense of purpose and pride when we continue to deliver the solutions users are looking for.





# Foreign start-ups with offices in Krakow

## Selected foreign start-ups with offices/hiring 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 offices 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
<b>bidroom</b> (Hospitality)	The Netherlands 2014	bidroom is a membership-based travel club and online booking platform that offers hotels and apartments at discounted room rates across the globe. <b>bidroom.com</b>
<b>Karhoo</b> (Mobility)	UK 2016	Karhoo is one of the Mobility-as-a-Service (MaaS) leaders, operating a B2B platform model for people transportation and building a digital marketplace that connects fleets with travel & hospitality brands. <b>karhoo.com</b>

## Expert view



**Bill Wilkins**

Group CTO / CPO at Karhoo

**Karhoo is a UK-based mobility start-up, we build mobility solutions for the world's largest brands. We opened our Krakow office in March 2019 and it now counts around 50 team members, working across various areas such as Software, IT Infrastructure, Finance and Support.**

To enter new markets, we needed to scale up our engineering capabilities quickly. What we found in Krakow was a great talent pool and the possibility of building a larger team thanks to reduced operational and labor costs. With the opening of our primary development center in Krakow, we exceeded our objectives of transformation and the Krakow team has proven to be a key contributor to the rapid development of Karhoo's platform.



<b>Esatto</b> (Digital agency)	Sweden 2013	Esatto is a digital agency offering an extensive expertise in digital communication, from strategic consulting, concept development, design, system development and management of the solutions tailor-made for their customers. <b>esatto.se</b>
<b>Revolut</b> (Fintech)	UK 2015	Revolut is a world-renowned Fintech company offering digital banking services to its users via online and mobile applications, offering customers a digital alternative to traditional banks. <b>revolut.com</b>
<b>MojoRank</b> (AI/Recruitment)	USA 2017	MojoRank is a Silicon Valley start-up focusing on building the next generation of AI technology for the talent acquisition industry, allowing recruitment teams to increase their productivity by speeding up the decision and hiring process. <b>mojorank.com</b>
<b>DataFeedWatch</b> (Marketing/Sales)	USA 2012	DataFeedWatch offers data feed optimization and management software that integrates with the most popular eCommerce platforms, providing marketers with detailed cost and revenue data on product level. <b>datafeedwatch.com</b>
<b>NEXTA</b> (AI/Media)	Denmark 2017	NEXTA created the first AI-driven Sales and Media Activation Platform tailor-made for digital media and commerce companies, enabling them to increase value for their customers by unlocking new advertising demand with intelligent automation. <b>nexta.io</b>
<b>FLYR Labs</b> (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. <b>flyrlabs.com</b>
<b>project44</b> (Supply chain)	USA 2014	project44 is a provider of an advanced supply chain visibility platform for shippers and third-party logistics firms. <b>project44.com</b>
<b>W1TTY</b> (Fintech)	UK 2020	W1TTY is a financial app that renders scholarship programs, financial products and services for people and businesses. <b>www.w1tty.com</b>
<b>Stonly</b> (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. <b>stonly.com</b>
<b>Kitopi</b> (Food Tech)	United Arab Emirates 2018	Kitopi is a Kitchen as a Service (KaaS) platform that enables restaurants to open delivery-only locations by providing the necessary managed infrastructure and software with minimal capital expenditure and time. <b>kitopi.com</b>





### Marcin Welner

VP of Engineering at Kitopi

#### What is Kitopi?

Kitopi is a tech-powered food company founded in 2018, in Dubai. Today, we operate a network of over 100 kitchens in the United Arab Emirates, Saudi Arabia, Kuwait, Bahrain and Qatar.

As a managed cloud kitchen platform, Kitopi became known for the ability to help restaurants and F&B brands scale and expand their reach in as little as 14 days. One of the fastest growing startup companies in the MENA region operating a portfolio of both invested and franchised F&B brands, we serve as enablers in the food market by helping brands to grow and scale while providing services around (but not limited to) sourcing, preparing, producing, cooking and packaging- both in the delivery and dine-in space.

In 2019, we opened our main engineering hub in Krakow. Our engineering hub is focused on accelerating the evolution of our tech platform, so that Kitopi can offer more services and solutions to clients, enable them to enhance the experience for diners, and to facilitate global expansion for Kitopi and our clients.

#### What have you been able to achieve with Kitopi in the last 2 years?

We have achieved a lot of success in the last two years. At the global company level, we closed two financing rounds, which resulted in the value of the company surpassing the \$1B mark. We also expanded to several new markets. Globally, the demand for 'contactless' ways to enjoy 'eat out' experiences has intensified as a result of the pandemic. This is an acceleration of an existing trend that is expected to continue into the future.

In Krakow, we've successfully created a state-of-the-art engineering hub that – thanks to an intensive recruitment effort in the second half of 2021 – now employs more than 70 engineers. Our team boasts a variety of specializations, from Java and Front-end Developers, through to DevOps and Data Science. Today, the Krakow center is Kitopi's primary global R&D center.

#### To what do you attribute your success?

As a company, Kitopi has been steadfast in delivering its mission and to always listen to our customers. This has enabled the company to succeed and grow at an impressive rate. We must also acknowledge the hard work, commitment and technical expertise of our global team, without which this level of success would be impossible.

#### How do you facilitate collaboration between the Krakow and Dubai teams?

We invest a lot of time and effort into making sure that the core Kitopi values are embraced globally. To achieve success, we first had to acknowledge and truly understand the cultural differences between our regional teams. Equipped with a stronger understanding of this, we were then able to build a culture that is inclusive, celebrates diversity, and empowers both people and the company to thrive.

Of course, the pandemic made life a little more challenging. However, as a tech company, we pride ourselves in finding tech solutions to overcome challenges. When conditions permitted, we've been able to send 30 members of our Poland team to Dubai and have also been able to bring some of our Dubai-based colleagues to Poland. These trips range in duration from a couple of days to 1-2 months, and they enable people to meet their teams, be fully onboarded, and kick off new projects. As a product company, we consider these opportunities for colleagues to meet in person essential. Our teams work closely together for extended periods of time, so it's vital that they have the opportunity to get to know each other, understand different work

styles, and enjoy each others' company in person. Such interactions have helped us build a solid foundation for the ongoing success and growth of Kitopi.

### **What are your plans in Krakow for 2022?**

We want to continue to build our capabilities in Krakow. Our goal is to attract the best candidates from Krakow's rich talent pool, double our headcount in Poland, and cement the Krakow center's status as Kitopi's primary engineering hub. To help us achieve this, we will be predominantly focused on hiring the best Java developers and Data engineers.



# Unicorns in Krakow

**As of February 2022, there are 1 000 unicorns (VC-funded private companies valued at USD 1 billion) in the world, according to CB Insights.**


While a Polish-born company hasn't yet made the unicorn list, the dynamic growth of companies like eObuwie (an online footwear retailer) and Docplanner (MedTech) suggests that we won't have to wait too much longer.


For now, Brainly (EdTech) is arguably the best bet for the title of 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 the EdTech sector is forecast to grow by an average of 15% per year over the next five years.

Despite the current lack of a Polish-born unicorn, the unicorn scene is well represented in Krakow, with eight such organizations currently operating in the city and tapping into the city's pool of IT talent and expertise.

## 8 unicorns with R&D centers in Krakow

  
**KITOPI**  
Foodtech  
Dubai, UAE

 **SpotOn**  
Fintech  
San Francisco, USA

 **bitpanda**  
Fintech  
Vienna, Austria

 **BlockFi**  
Fintech  
Jersey City, USA

**Revolut**  
Fintech  
London, UK

 **project44**  
Supply chain  
Chicago, USA

 **Relativity**  
Software  
Chicago, USA

 **ZEPZ**  
Fintech  
London, UK

Source: cbinsights.com, The Complete List Of Unicorn Companies, February 2022, Global EdTech Market Outlook & Forecast Report 2022.



## Focus



### InPost, the EUR 2.6 billion Krakow giant

InPost has been a major disruptor in the logistics and e-commerce sectors – first in Poland and then internationally – thanks to its introduction of self-serve InPost parcel lockers and courier services. The growth of the InPost locker network has facilitated the rise of e-commerce in Poland and elsewhere, and the contactless nature of delivery means that InPost (and companies that use its services) was optimally positioned to thrive during the pandemic.

In the twelve months to 30 June 2021, InPost handled 381 million parcel deliveries through its networks in Poland, France, the UK, Italy, Benelux, and Iberia.

Established in Krakow in 2006, InPost introduced its first lockers in Poland in 2009,

before expanding into courier services in 2015. The company has successfully expanded into markets like Italy, France, the UK, and many others. It has achieved this via acquisitions (e.g. Mondial Relay in France) and partnerships with local players (e.g. TotalErg and Repsol in Italy, and supermarket chains Tesco and Lidl in the UK). Indeed, the acquisition of Mondial Relay in July 2021 resulted in InPost becoming Europe's leading out-of-home automated solution for e-commerce.

As of April 2022, InPost's market capitalization is EUR 2.6 billion. Based on its market capitalization, the parent company, Integer.pl, could easily qualify as a unicorn but chose different routes to raise capital.



# Fintech companies

## Fintech in Poland

The number of companies operating in the Fintech industry in Poland has increased by more than one-third (35%) since the onset of the pandemic (Q1 2020), according to The Map of Polish Fintech 2021, a report by cashless.pl that surveyed 273 Fintech companies in Poland. Companies focused on payment solutions account for the largest category of Fintech companies in Poland, and Warsaw is the most popular location for the headquarters of Polish Fintech companies or Poland offices of international Fintech companies.

## Krakow Fintech scene driven by international companies

Krakow welcomed the arrival of some major Fintech players in 2021. The decisions by Bitpanda and BlockFi – both major global players in cryptocurrency trading and recognized unicorns – to open offices in Krakow were strong votes of confidence in the city's talent pool and solid evidence of its appeal to foreign Fintechs. It also demonstrates the strong position that Krakow has attained within the cryptocurrency domain. Bitpanda and BlockFi joined Revolut and SpotOn as Krakow-

based Fintech unicorns that are advancing the adoption and trading of digital assets.

Although Krakow trails slightly behind Warsaw and Poznan (which has developed a reputation as a hotbed for digital payment services and innovation for the Polish market) in terms of the number of Fintech companies present, the city is perhaps strongest in attracting foreign Fintech companies and Polish Fintech companies that are operating globally.

# 30+

**Fintech players with R&D centers in Krakow**

# 5

**Fintech unicorns with R&D centers in Krakow**



## Krzysztof Ras

VP of Engineering and Head  
of Bitpanda Technology Poland

**Krakow, with its globally-renowned developers, an exciting local tech scene, and geographical proximity to Vienna, made it a pretty clear choice for Bitpanda.**

Bitpanda is a Fintech company based in Vienna, Austria founded in 2014 by Eric Demuth, Paul Klanschek and Christian Trummer. For the last seven years, Bitpanda has been working on making investments accessible for all.

Initially offering cryptocurrencies, the company developed its offering by adding tokenized digital assets such as precious metals and fractional stocks to the platform, allowing anyone to start investing with a minimum of just one euro. With a straightforward signing up process from your phone or laptop, the company allows you to create an account you can access and control from your phone to buy/trade/sell digital assets. Bitpanda's overall vision is to accelerate the transition to a tokenized world and bring traditional financial products to the 21st century. Bitpanda has over 3 million users and over 600+ staff members from more than 50 nations.

In 2022 Bitpanda aims to double up the current employee size in its world-class Technology & Innovation Hub in Krakow, Poland that saw 50 people join at the end of 2021. Bitpanda is looking to hire skilled and top-notch qualified tech talent, but also to build a local marketing team, starting with a Country Manager.

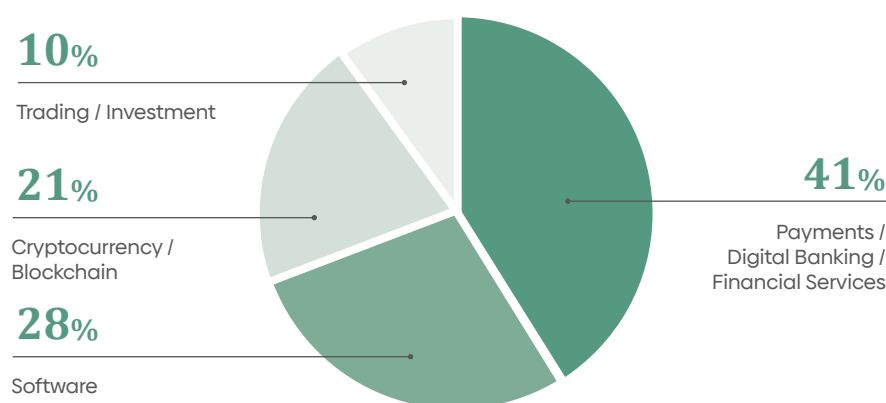
Our unique culture based on trust, openness and collaboration puts us in a strong position for IT candidates to choose Bitpanda.



# Types of Fintech companies in Krakow

The Fintech scene in Krakow is as diverse and exciting as almost anywhere else in the world. Although the range of Fintech companies is broad and diverse, we have identified several categories that are particularly well represented in the city.

## Share (in %) of Fintech companies in Krakow as per category



Source: MOTIFE insights, 2022

### Cryptocurrency / Blockchain

These are companies that are either active in facilitating the trading of cryptocurrencies and other digital assets, or organizations involved in developing their own blockchain solutions (also represented by tradeable tokens or currencies). This category includes the unicorns Bitpanda and BlockFi, as well as players like Metahero and Aleph Zero.

### Payments / Digital Banking / Financial Services

Organizations in this category are advancing the state of digital payments and pioneering digital-first alternatives to traditional banking and financial services to facilitate commerce and quick and easy transfers of funds between consumers, merchants, and businesses alike. This category includes unicorns like Revolut, SpotOn and Zepz, as well as the P24 DotCard group, PragmaGo, and WITTY.

### Software

These are tech companies and software houses that are developing and maintaining solutions specifically for Finance organizations or other organizations that offer Fintech or Fintech-like services to businesses and consumers. This category includes companies like Backbase, Metrosoft, InFakt, and Softnet.

### Trading / Investment

These organizations are bringing the possibility to trade (currencies, shares, CFDs, etc.) to consumers and businesses alike with sophisticated trading platforms and slick, consumer-like user experiences. This category includes the big three of OANDA, StoneX, and IG.



## Robert Liziniewicz

Delivery Director & Development  
Center Leader at Backbase

**Backbase continues to expand its Development Center which started in Krakow in 2020. After a successful 2021 which saw us concentrate on building our engineering capacity, we plan to continue the momentum.**

This means more roles around managing the development and delivery cycle will be opened, creating more space for people with domain knowledge. Due to further expansion of the BaaS (Backbase as a Service) offering – we'll continue to grow our production operations teams, serving customers from all continents.

So far we have been mostly concentrated on engineering roles, and now our core competencies are around software development – starting from backend engineers writing applications in Java, through to Web frontend based on Angular, and ending on native mobile applications written in Kotlin and Swift. In addition to this, we have managed to build a strong QA automation group helping projects across the globe. We have also started to fill the domain roles such as Product Owners and Business Analysts where deep knowledge of the banking industry is crucial.

Krakow is a very competitive market for IT companies – and for us it is not only a challenge but also an opportunity. Competition attracts talent and a good offer allows us to hire.

# A growing talent pool with Fintech competencies

One of the main reasons that Krakow appeals to foreign Fintech companies is the city's rich pool of talent and expertise within the Banking, Financial Services and Insurance (BFSI) sector. The city is home to large centers operated by international companies like UBS, HSBC, State Street, and Brown Brothers Harriman, who employ both IT and non-IT roles (including trading, marketing, and customer-facing positions).

We estimate that there are approximately 15 000 people employed in the BFSI sector in Krakow, which is equivalent to around 15% of the total number of people employed in the city's Business Services centers. This depth of Finance expertise and talent, combined with the city's strong reputation as a hotbed for tech / software development talent, creates a unique and compelling value proposition for Fintech companies seeking the ideal location to begin or expand their operations.

The IT talent pool in Krakow Fintech is estimated to over 1 500 engineers and IT specialists.

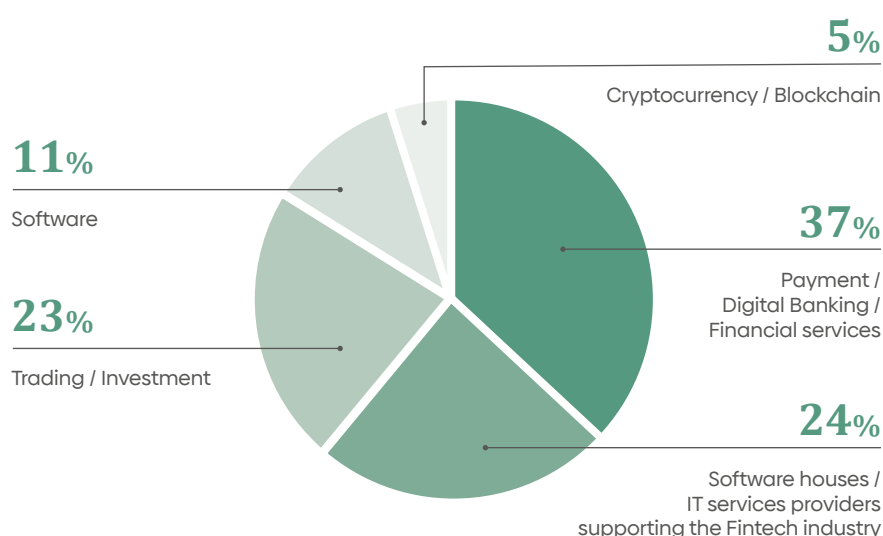
# 15<sub>K</sub>

**employees in the Finance sector in Krakow**

# 1.5<sub>K</sub>

**engineers / IT specialists in Fintech in Krakow**

## Share (in %) of Fintech companies in Krakow as per number of engineers/IT specialists



Source: LinkedIn insights, MOTIFE insights, 2022





# Selected Fintech companies with R&D centers / remote base in Krakow

## Cryptocurrency / Blockchain

Name and specialty	Country and year founded	Description
<b>Aleph Zero</b> (Blockchain)	Switzerland 2018	Aleph Zero is a peer-reviewed DAG platform that is scalable, fast, and developer-friendly. <b>alephzero.org</b>
<b>Bitpanda</b> (Cryptocurrency)	Austria 2014	Bitpanda is a digital assets platform used to facilitate the buying and selling of cryptocurrencies, fractional stocks and metals. Bitpanda opened its Krakow office in 2021. <b>bitpanda.com</b>
<b>BlockFi</b> (Cryptocurrency)	USA 2017	BlockFi is a secured non-bank lender that offers USD loans to crypto-asset owners who collateralize the loan with their crypto-assets. BlockFi opened its Krakow office in 2021. <b>blockfi.com</b>
<b>Cardinal Cryptography</b> (Blockchain)	Poland 2018	Cardinal Cryptography is a consultancy, providing cryptography, blockchain, data science, web applications, and machine learning solutions. <b>cardinals.cc</b>
<b>Metahero</b> (Cryptocurrency)	United Arab Emirates 2021	Metahero offers a next-generation deflationary utility token coupled with Ultra-HD metascanning technology. Metahero boasts a Krakow-based senior team and private funding from the original co-founder of Codewise. <b>metahero.io</b>
<b>Star Beta</b> (Cryptocurrency)	Australia 2002	Star Beta is a trading company that offers investment strategies and cryptocurrency services for various organizations. <b>starbeta.com.au</b>

## Payments / Digital Banking / Financial Services

<b>Atom Bank</b> (Digital banking)	UK 2014	Atom Bank is a mobile banking application that offers a range of personal and business banking products to UK consumers. Atom Bank arrived in Krakow in 2021 and operates from Pragmatic Coders office. <b>atombank.co.uk</b>
<b>Equiniti</b> (Financial services)	UK 2007	Equiniti offers financial and administration services, including payments. Equiniti's Krakow-based technology hub operates under the name of EQTek. <b>equiniti.com</b>

<b>Mobiltek</b> (Payments)	Poland 2002	Mobiltek specializes in online and mobile payment, and also offers software development services. Mobiltek is based in Krakow since its creation. <b>mobiltek.pl</b>
<b>OTI Group</b> (Payments)	Israel 1997	OTI Group offers cashless payment solutions for public commuting, parking systems and contactless prepaid card systems based on GSM communication. <b>otiglobal.com</b>
<b>P24 Dotcard</b> (Payments)	Poland 2019	P24 DotCard group resulted from the merger of Przelewy24, Dotpay and e-Card in 2019. Those three operators create the most comprehensive online payments solution dedicated for Polish ecommerce. The operator Dotpay is based in Krakow since its creation. <b>przelewy24.pl, dotpay.pl, ecard.pl</b>
<b>PeP</b> (Payments)	Poland 2010	PeP (Polskie ePlatnosci) is a payment processor delivering innovative business services, providing support for payment transactions using payment cards and terminals in retail outlets. <b>pep.pl</b>
<b>PragmaGO</b> (Financial services)	Poland 1996	PragmaGO is a non-bank financial institution providing factoring, leasing, and loans to micro, small and medium-sized enterprises. <b>pragmago.pl</b>
<b>Revolut</b> (Digital banking)	UK 2015	Revolut is a world-renowned Fintech company offering digital banking services to its users via online and mobile applications, offering customers a digital alternative to traditional banks. Revolut opened its Krakow office in 2019. <b>revolut.com</b>
<b>Smart</b> (Financial services)	UK 2014	Smart is a pensions and retirement technology business, delivering pensions technology platforms in partnership with other financial institutions, and running a defined contribution master trust pension scheme setup for employers. <b>smart.co</b>
<b>SpotOn</b> (Payments)	USA 2017	SpotOn provides mobile payment technology and management system for restaurants and small businesses. SpotOn opened its Krakow office in 2019. <b>spoton.com</b>
<b>W1TTY</b> (Digital banking)	UK 2020	W1TTY is building a new digital finance platform and a fully mobile-based finance app, offering multicurrency accounts, domestic and international transfers, debit cards, and instant payments. W1TTY is currently operating fully remote, with a strong R&D base in Krakow. <b>w1tty.com</b>
<b>Zepz</b> (Payments)	UK 2010	Zepz (formerly known as WorldRemit) is an online service that lets people send money to friends and family living abroad, using a computer, smartphone, or tablet. <b>zepzpay.com</b>



## Software

<b>Backbase</b> (Software)	The Netherlands 2003	Backbase is a Fintech software provider offering digital banking solutions to financial institutions all over the world. Backbase opened its Krakow office in 2020. <b>backbase.com</b>
<b>Chargify</b> (Software)	USA 2009	Chargify is a billing and subscription management platform built specifically for modern B2B SaaS business. <b>chargify.com</b>
<b>InFakt</b> (Software)	Poland 2008	InFakt is a provider of an online invoice and billing software designed for entrepreneurs. The company's software offers an application using artificial intelligence that automatically recognizes and documents the bills using. InFakt is based in Krakow since its creation. <b>infakt.pl</b>
<b>Medius</b> (Software)	Sweden 2001	Medius is a leading global provider of accounts payable (AP) invoice automation solutions in the cloud. <b>medius.com</b>
<b>Metrosoft</b> (Software)	Poland 1991	Metrosoft develops multi-tier, service-oriented asset management software using the latest programming technologies. Metrosoft is based in Krakow since its creation. <b>metrosoft.com</b>
<b>Open GI</b> (Software)	UK 1979	Open GI is a specialized provider of software for the insurance industry. Their solutions provide multi-line, multi-channel, multi-brand trading capability complemented by innovative eCommerce and mobile technologies. <b>opengi.co.uk</b>
<b>Pico</b> (Software)	USA 2009	Pico provides solutions to the Financial Markets community including infrastructure hosting, network connectivity, live and historical market data, normalized market data, Corvil analytics, and cloud services. <b>pico.net</b>
<b>Softnet</b> (Software)	Poland 1991	SoftNet provides software, technologies and banking products connected with credit services, deposits, settlements, IT services and digital banking. Softnet is based in Krakow since its creation. <b>softnet.com.pl</b>

## Trading / Investment

<b>IG</b> (Trading / Investment)	United Kingdom 1974	IG is a global trading company, providing access to financial markets, including shares, indices, commodities and binaries to a retail and institutional client base. <b>ig.com</b>
<b>OANDA</b> (Trading / Investment)	Canada 1995	OANDA is a foreign exchange company that provides internet-based forex trading and currency information services. OANDA opened its Krakow office in 2020. <b>oanda.com</b>
<b>StoneX</b> (Trading / Investment)	USA 1981	StoneX is a Fortune 500 company, providing customers across the globe with customized financial services and tools. In 2020, StoneX has acquired GAIN Capital, which opened its Krakow office in November 2018. <b>stonex.com</b>

docker-compose.yml

app.js

last commit 7 months ago | 1 author (You)  
version: '3'

services:

app:

container\_name: app

build:

context: .

dockerfile: Dockerfile

volumes:

- ./var/www

- ./development/php/local.js/php/local.js

networks:

- application-network

composer:

container\_name: composer

image: composer

command: /bin/bash -c "/app/composer install --no-dev --no-progress --quiet"

volumes:

- ./app

networks:

- application-network

npm:

container\_name: npm

image: node:12.13.0-alpine

command: /bin/bash -c "npm install --no-dev --no-progress --quiet"

volumes:

- ./app

networks:

- application-network

production.yml  
docker-compose.yml

# Software houses and IT providers supporting the Fintech industry

Although not all exclusively focused on supporting the Fintech industry, these software houses and tech companies are developing and maintaining solutions specifically for Finance organizations, or augmenting the teams of these organizations, whether they are located in Krakow or elsewhere. These providers constitute a non-negligible part of the talent pool with Fintech experience (close to 25%).

## Selection of software houses and IT providers in Krakow supporting the Fintech industry

Name and specialty	Country and year founded	Description
<b>Ailleron</b> (Software house)	Poland 1999	Ailleron is a provider of software development services, offering products such as Fintech and leasing platforms, smart telecommunication solutions and hotel technologies Ailleron is based in Krakow since its creation. <b>aileron.com</b>
<b>Code &amp; Pepper</b> (Software house)	Poland 2014	Code & Pepper provides a development framework and a team that includes all the roles required to build FinTech products from start to finish. <b>codeandpepper.com</b>
<b>Grape Up</b> (Software house)	Poland 2006	Grape Up is a technology consulting company that helps companies deliver their most impactful software by bringing together AI, Machine Learning, Cloud-Native Technologies, and a unique approach to software delivery. <b>grapeup.com</b>
<b>Rumble Fish</b> (Software house)	Poland 2017	Rumble Fish is a software development house specializing in Blockchain, Fintech, e-commerce and Cloud Computing. Rumble Fish is based in Krakow since its creation. <b>rumblefish.dev</b>
<b>Visiona</b> (IT services)	Poland 2003	Visiona supplies the financial sector with IT solutions, with a focus on supporting and optimizing processes in two business areas – electronic fund transfers and cash management. <b>visiona.pl</b>
<b>Xceedance</b> (IT services)	USA 2013	Xceedance is a global provider of strategic operations support (SOS), which includes consulting, managed services, data sciences, and technology across the entire insurance lifecycle. <b>xceedance.com</b>

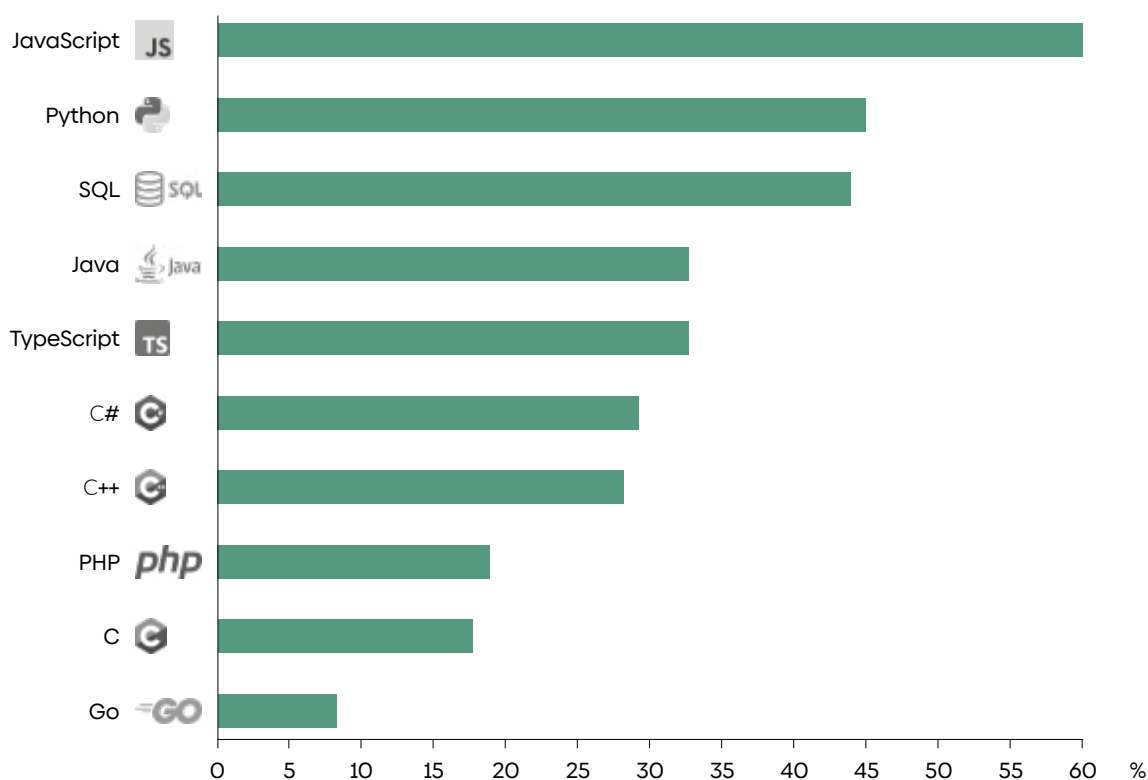


```
1 // Summary:
2 // - param returns the closest point of the value to param.
3 // - Summary:
4 // - param returns the value to param.
5 // - Summary:
6 // - param returns the value to param.
7 // - Summary:
8 // - param returns the value to param.
9 // - Summary:
10 // - param returns the value to param.
11 // - Summary:
12 // - param returns the value to param.
13 // - Summary:
14 // - param returns the value to param.
15 // - Summary:
16 // - param returns the value to param.
17 // - Summary:
18 // - param returns the value to param.
19 // - Summary:
20 // - param returns the value to param.
21 // - Summary:
22 // - param returns the value to param.
23 // - Summary:
24 // - param returns the value to param.
25 // - Summary:
26 // - param returns the value to param.
27 // - Summary:
28 // - param returns the value to param.
29 // - Summary:
30 // - param returns the value to param.
31 // - Summary:
32 // - param returns the value to param.
33 // - Summary:
34 // - param returns the value to param.
35 // - Summary:
36 // - param returns the value to param.
37 // - Summary:
38 // - param returns the value to param.
39 // - Summary:
40 // - param returns the value to param.
41 // - Summary:
42 // - param returns the value to param.
43 // - Summary:
44 // - param returns the value to param.
45 // - Summary:
46 // - param returns the value to param.
47 // - Summary:
48 // - param returns the value to param.
49 // - Summary:
50 // - param returns the value to param.
51 // - Summary:
52 // - param returns the value to param.
53 // - Summary:
54 // - param returns the value to param.
55 // - Summary:
56 // - param returns the value to param.
57 // - Summary:
58 // - param returns the value to param.
59 // - Summary:
60 // - param returns the value to param.
61 // - Summary:
62 // - param returns the value to param.
63 // - Summary:
64 // - param returns the value to param.
65 // - Summary:
66 // - param returns the value to param.
67 // - Summary:
68 // - param returns the value to param.
69 // - Summary:
70 // - param returns the value to param.
71 // - Summary:
72 // - param returns the value to param.
73 // - Summary:
74 // - param returns the value to param.
75 // - Summary:
76 // - param returns the value to param.
77 // - Summary:
78 // - param returns the value to param.
79 // - Summary:
80 // - param returns the value to param.
81 // - Summary:
82 // - param returns the value to param.
83 // - Summary:
84 // - param returns the value to param.
85 // - Summary:
86 // - param returns the value to param.
87 // - Summary:
88 // - param returns the value to param.
89 // - Summary:
90 // - param returns the value to param.
91 // - Summary:
92 // - param returns the value to param.
93 // - Summary:
94 // - param returns the value to param.
95 // - Summary:
96 // - param returns the value to param.
97 // - Summary:
98 // - param returns the value to param.
99 // - Summary:
100 // - param returns the value to param.
```

# Most common technologies

## Share of developers in Poland having experience with a specific programming language

The ever-changing technology landscape of Krakow is quite diverse. It is hard to find a technology or a programming language that would not be used here. Most of the trends seen here reflect trends around the globe. When analyzing surveys of engineers' familiarity with different languages we can identify some leading ones.



Source: Stack Overflow's 2021 Developer Survey of 1282 Polish professional developers.

3<sup>rd</sup>

**Global rank of Polish programmers according to HackerRank**

1<sup>st</sup>

**Rank of Polish Java programmers according to HackerRank**



```
export default function Dashboard() {  
  const classes = useStyles();  
  return (  
    <div>  
      <GridContainer>  
        <GridItem xs={12} sm={6} md={3}>  
          <Card>  
            <CardHeader color="warning" stats icon>  
              <CardIcon color="warning">  
                <Icon>content_copy</Icon>  
              </CardIcon>  
            </CardHeader>  
            <p className={classes.cardCategory}>Used Space</p>  
            <h3 className={classes.cardTitle}>  
              49/50 <small>GB</small>  
            </h3>  
            </CardHeader>  
            <CardFooter stats>  
              <div className={classes.stats}>  
                <Danger>  
                  <warning />  
                </Danger>  
              </div>  
            </CardFooter>  
          </GridItem>  
        </GridContainer>  
      </div>  
    );  
  }  
}
```





### Maciej Grzyb

Partner & Software Architect  
at Forte Digital

**Forte Digital is a consultancy company that builds solutions for web, mobile e-commerce, and service platforms. The company has built teams in Poland and Norway.**

### JavaScript is eating the world

JavaScript and TypeScript account for 35% of IT job ads published in 2021\*.

Without doubt, JavaScript continues to be the most popular coding language. For years, it was primarily used for front-end/client-side applications. However, in recent years, it has become increasingly popular to use JavaScript as a backend language. The use of JavaScript in larger projects was made possible by the introduction of TypeScript, which makes the long-term maintenance of inherently dynamically typed code much easier. Although it shares many of its goals with previous failed attempts to create “better JavaScript” (e.g. CoffeeScript), the main difference with TypeScript is that it is designed as a superset of JavaScript, which makes it

a safe and almost obvious choice for new projects. The fact that the entire JavaScript ecosystem is adopting TypeScript is the strongest indication of its success.

The position of JavaScript as the only client-side language is being challenged by many languages that support WebAssembly as a compilation target. Rust and Go is a leading example of this, while C#/.NET with Blazor is an interesting attempt to enable C# usage on both client and server side. The potential benefits of such a project is compelling, namely that it enables code reuse and means that there is no need for different skills on a team based on whether people work on the frontend or backend. However, it should be approached with caution – Microsoft has previously attempted something similar with Silverlight – a project that was killed after just a few years.

### .NET ecosystem

C# accounts for 7% of IT job ads published in 2021\*.

Thanks to big investments in cross-platform capabilities and a move to open source, C#/.NET and the .NET ecosystem in general is starting to become a viable choice outside of its traditional domain of enterprise solutions.

### Other languages

Python accounts for 15% of IT job ads published in 2021\*, C/C++ 5%, Kotlin 3%, and Scala 2%.

Surprisingly, Python is becoming an increasingly popular language, although use cases still remain largely limited to the domains of Machine Learning and Data Science.

There continues to be increased demand for C/C++. This could be attributed to either embedded or game development. However, for system programming Rust is becoming an interesting memory-safe alternative.

While new programming languages are being created all the time (research, niche applications, etc.), very few of them enter mainstream use. Our experience in recent years shows that if a new language solves an important problem and does not compromise ease of use, then it has a good chance of achieving widespread adoption and creating a community around it. TypeScript (mentioned above) is one example of such a language. Others include GoLang, which makes concurrency easier; Rust, which enables memory-safe system coding; Scala and F#, which are adopting a functional paradigm without abandoning the rich OO ecosystem of Java or .NET; and Kotlin, which serves as a modern version of Java.

## Cloud vs. on-premise hosting

The use of virtual machines and traditional, on-premise, hosting continues to decline. Containerization and serverless options are becoming increasingly popular due to the versatility and speed-to-market benefits of this technology, as well as the vendor-agnostic nature of these options. At the same time, identifying a chosen Platform-as-a-Service (PaaS) provider can decrease development and maintenance costs, although this does come at the expense of cross-cloud portability.

\* Source: inhire.io, IT Market Snapshot 2021, based on 75 496 job ads published in Poland in 2021 on 4 reference IT job boards



# Education

## Higher education schools

23

Higher education schools  
in Krakow

One of the key strengths of Krakow is its continuous stream of new graduates. In fact, the city is dominated by students: more than one in ten people who live in Krakow are students.

10

Higher education schools  
with IT courses

There are over 15 computer science courses at B. Sc. level run by various universities. They turn out over 2 350 graduates every year. The majority of CS students usually start working in their third year of school, and by the time they graduate already have professional experience.

143<sub>K</sub>

Students in Krakow

2.35<sub>K</sub>

Computer Science  
students graduating  
yearly

11.5<sub>K</sub>

Computer Science  
students

free

Higher education  
in Poland

Source: [krakow.stat.gov.pl](http://krakow.stat.gov.pl), [agh.edu.pl](http://agh.edu.pl)



# Main universities



UNIwersYTET  
JAGIELLOŃSKI  
W KRAKOWIE

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

[www.uj.edu.pl](http://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** is the largest Polish technical university with 15 different faculties offering **10 computer science courses**. 20 000 students attend this university.

[www.agh.edu.pl](http://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 so-called New Europe, countries that joined the European Union on or after 2004
- The Faculty of Computer Science also conducts certified courses for everyone who wants to expand their IT knowledge in areas such as UX web application design, VPN networks, BGP Routing, C++ and Scala programming, cryptography and safety, or introduction to Agile / Scrum
- 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



Politechnika Krakowska  
im. Tadeusza Kościuszki

**Krakov University of Technology (Politechnika)** is the second largest technical university in Krakow offering **3 computer science courses**.  
13 000 students attend this university.

[www.pk.edu.pl](http://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

## **Focus**

### **Supporting the generation of engineers to come**

Krakov technical universities support and educate the future generations of engineers via fun and interactive extracurricular programs from 8 years old, such as AGH Junior Academy or at Jagiellonian University science workshops for children.

It is not uncommon to meet there both the children and parents who attend the University of Children, where they learn subjects such as robotics and computer science through play.



# 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.

## 630+

**IT postgraduate students in the Krakow region yearly (nearly 4000 students yearly in Poland)**

## 42%

**IT postgraduate students in the Krakow region are female (vs. ca 18% for ICT bachelor/master students)**

## 6

**universities/schools in Krakow offering IT postgraduate studies**

## 28

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

## MBA IT

**2 year program in Krakow launched for the 2021/2022 academic year with 25 participants**

Source: [krakow.stat.gov.pl](http://krakow.stat.gov.pl), MOTIFE insights, 2022



### Justyna Pawlak-Mihułka

Program Director at MBA IT,  
Cracow University of Economics

**To attract talent and retain employees, IT companies should build their business strategy around four key axes. The first element is project management based on agile methodologies. This allows work to be done efficiently, gives transparency and increases employee engagement.**

The second, non-obvious element is product thinking, which allows us to clearly define the goal and vision that our employees are working towards.

Third, an organizational culture based on trust, transparency, respect, and autonomy is significant. Building a culture and defining values important for the company is a process in which employees should participate.

Finally, the essence of this puzzle is modern leadership, combining a charismatic definition of vision, purpose, and strategy which supports people every day.

The Krakow School of Business at the University of Economics meets the needs of the IT sector and offers an MBA IT program that holistically addresses the challenges faced by today's leaders. The program is characterized by an innovative approach to issues specific to technology organizations and the knowledge and experience shared by practitioners and experts from top high-tech companies, as well as the high level knowledge of participants. It is a space where IT leaders can improve their vision and skills to create and manage organizations ready for an uncertain future.

The program is built on 5 pillars – which we believe are crucial for IT top managers education: Tech Organization Management, New Technology & Digital Transformation, Project, Program Management & Product Development, Business Models & Scaling Up, Leadership & Tribe building.

The main goal of the program is to provide participants with knowledge, skills, and competences useful in developing a managerial career in the IT and technology industries. The second aim of the program is to educate directors, managers, and leaders in the fields of modern leadership, technological trends, organization management strategies and building a culture of innovation based on autonomy, trust, and transparency.

# Communities

**Krakow, as a university city, is home to many young people interested in different facets of technology.**

These are students and young graduates who want to explore domains they are passionate about. Several years ago, they started creating community groups around specific technologies.

Enthusiasts, technology geeks and programmers initiated regular meet-ups to exchange information and educate others. Examples here include frameworks and programming languages such as Angular or Java. Although the ecosystem originally started with technology groups, later, new communities appeared, some

of which focused more on business and entrepreneurship. During these meet-ups they would talk about start-up pitching, financing, validating product ideas, legal aspects and more, with a heavy focus on networking. There are also communities that explore the software engineering methodologies, including lean, agile, scrum, or Kanban.

Some of the communities in Krakow were formed more than 15 years ago, while others, such as French Tech Cracovie, are relatively new. Most of the communities are very active. They organize regular meetings, presentations, and workshops. They use social sites such as meetup.com to organize the events. Communities may also be helpful in recruiting new employees.





## 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
French Tech Cracovie	lafrenchtech.com/en/community/cracovie	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	womenintechology.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
ITCQF	itcqf.org	Technical Communication
TechWriter.pl	techwriter.pl	Technical Communication



**Dominika Walec**

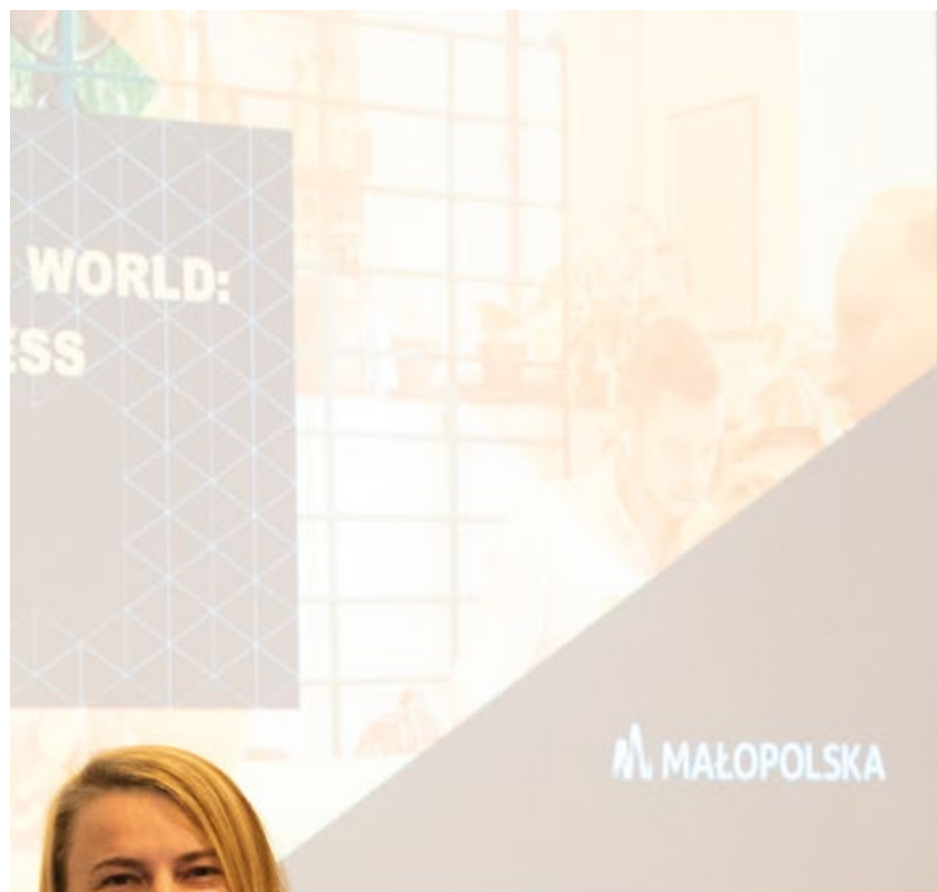
President of OMGKRK

**Krakow is one of the top European innovation hubs, attracting both early-stage start-ups and more mature entities willing to establish their business operations here.**

What makes Krakow unique is its innovation ecosystem, which consists of high-quality educational institutions, local communities, supporting organizations, and funding entities, as well as a vast pool of talent and enterprise expertise offered by international business centers.

OMGKRK has been a leading facilitator of the start-up community for the last 6 years, focusing on creating a world-class business ecosystem and catalyzing innovation in Krakow and the Małopolska region.

Our main activities are concentrated on building 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. Since its founding, OMGKRK has organized more than 50 events, 4 acceleration programs for 30 teams, involved 110 speakers, mentors, experts, and collaborated with over 100 members and partners. Learn more about OMGKRK and browse our Krakow Startups Report on [omgkrk.com](https://omgkrk.com).





## Chapter 2

# Hiring





In this chapter, you will find key information about the size and makeup of the Krakow talent pool, as well as insight about average salaries, in-demand skills, candidate expectations, the different ways to contract tech talent, and some vital information about Polish labor law.

# Talent pool

# 300<sub>K</sub>

**professional developers  
in Poland**

## IT Talent pool in Krakow and Poland



Krakow attracts a considerable number of domestic and foreign technology companies. They come to the city attracted by the large IT talent pool. With more than 50 000 IT professionals, Krakow is the second largest pool in Poland, after Warsaw and before Wroclaw.

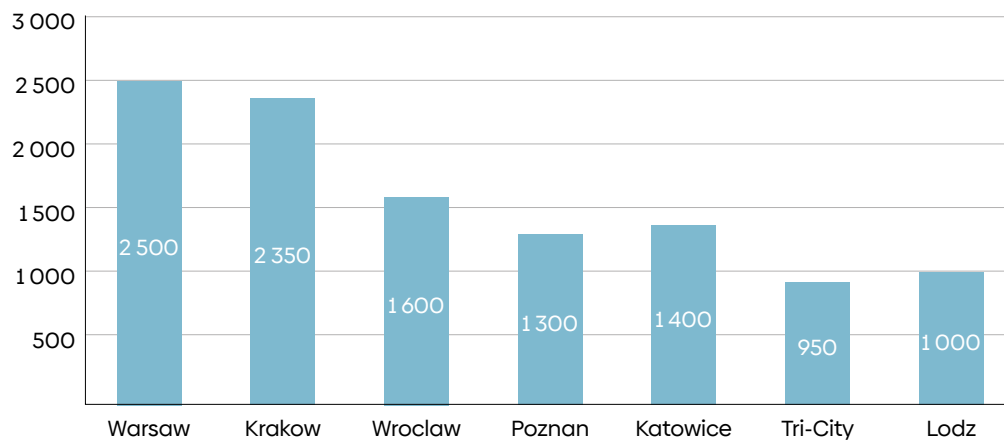
The key characteristics of the Krakow talent pool are:

- Big share of engineers with strong international experience, as foreign companies employ more than 80% of the engineers in Krakow
- A rapid growth supported by the local universities as well as migrations from other Polish cities and from Ukraine
- Software development is the primary area of the expertise before IT infrastructure or applications support

Sources: stats.gov.pl, 2021, nofluffjobs.com's  
Specjaliści IT w Europie Środkowo-Wschodniej, MOTIFE Insights

In 2020, 2 350 Information and Communication Technologies (ICT) students graduated from Krakow universities. Many of these graduates will find work in Krakow, contributing to the growing local talent pool. Krakow also attracts a number of computer science graduates from other regions in Poland. An average of 14 000 ICT students in Poland graduate each year.

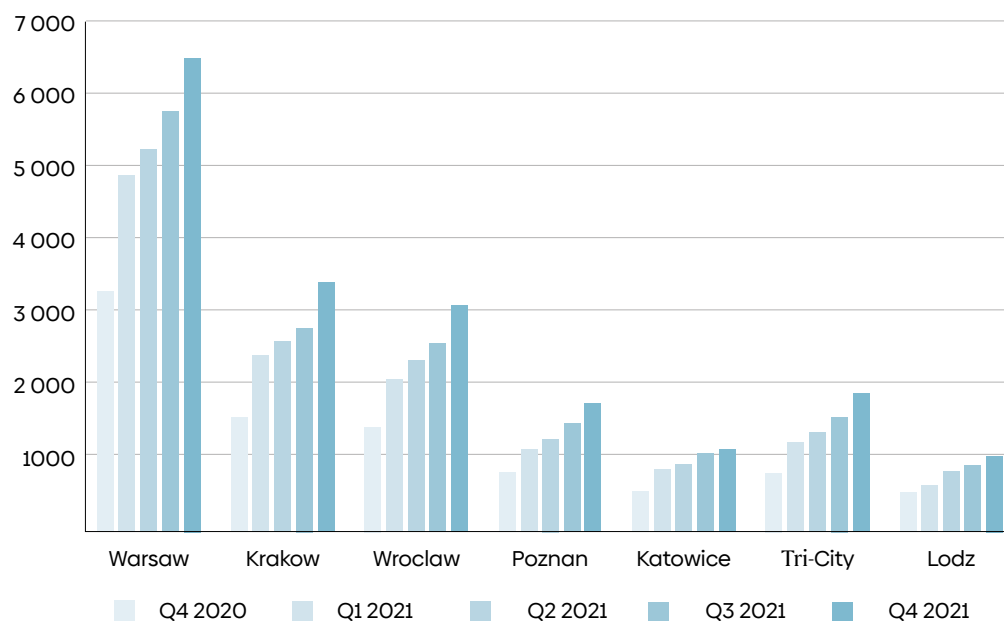
## Number of ICT graduates per main city in Poland, 2020



Source: stats.gov.pl

The IT job market in Krakow 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 2020 - Q4 2021



Source: inhire.io, IT Market Snapshot 2020, 2021

# Salaries

**The IT job market in Krakow grows every year as the city continues to be an attractive location for IT and software businesses.**



There are numerous compensation reports available that display salaries in Poland and in Krakow. Also, websites like Glassdoor or Payscale feature information about typical pay in the city. The majority of IT job ads feature salary brackets, which also makes fairly transparent the access to compensation data. However, the information available in these sources can be misleading as it represents current average salaries of the employees, or median salaries advertised on job portals, but to some extent does not reflect the expectations of the potential new hires. The differences between the two can be significant.

This trend is also amplified by companies who offer salaries above the market when hiring new employees, usually for one or more of the following reasons:

- Companies want to attract senior engineers by offering a higher compensation than their current one
- Foreign companies entering the market want to hire a significant number of engineers quickly. According to Sedlak & Sedlak's Salary Report these firms can propose salaries 10 to 15% above market
- Start-ups can offer higher salaries to cover the "risk-factor" for joining a potentially less stable organization
- Hiring in Q4 is usually more difficult, which may influence salary level. Candidates are least likely to change jobs before year end partially due to an expected bonus payout.

The above practices impact the salary ranges, for all roles and seniority levels.



# New hires salaries

In this section, we offer an overview of the gross monthly salary ranges for software developers and IT professionals in Krakow on employment contracts, taking into consideration the most popular programming languages and profiles as well as seniority. This is how much a new hire will expect to be paid.

**16 000** PLN  
**~3 600** EUR

**Median salary for hiring  
a Regular engineer  
(3-5 years experience)  
in Krakow (gross, monthly)**

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



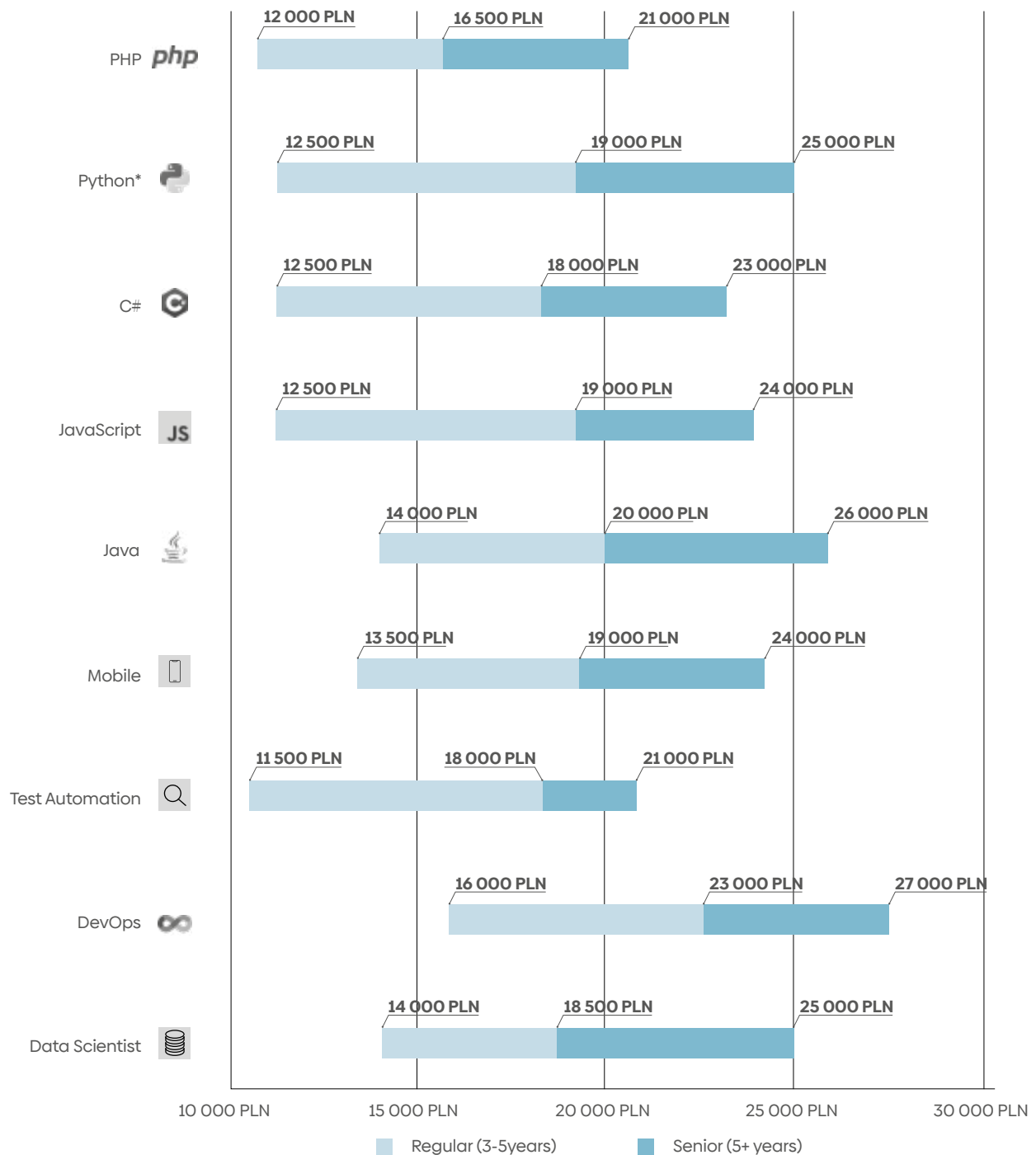
Sources: MOTIFE Recruitment insights, inhire.io IT Market Snapshot 2021, nofluffjobs.com.  
1 EUR = 4.5 PLN

## Methodology

The research was conducted by MOTIFE Insights team between December 2021 and February 2022. Our aim was to produce a set of salary ranges data that would be representative of new hires current salary expectations (vs. salaries earned or salaries advertised in job offers). We chose a methodological approach of mixing quantitative and qualitative methods. The quantitative research consisted of data collection of salary brackets from industry reports and portals (qualified sources: inhire.io, nofluffjobs.com), salary brackets of jobs advertised on motife.com, salaries offered to candidates by IT companies via MOTIFE, and acceptance rates for said offers. The quantitative analysis started 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), before merging data from the different sources with respective weights. The result was a calibrated salary range for each selected technology composed of 3 salary data points (minimum regular, maximum regular/minimum senior, maximum senior). Qualitative analysis consisted of a series of interviews and dataset reviews with IT recruiters and hiring managers, allowing to finetune the dataset with a margin of correction equivalent to +/- 10% of quantitative analysis results. Assumption: 1 EUR = 4.5 PLN. Values in EUR rounded.

## New hires salary expectations in Krakow, per most popular technologies (monthly, gross in PLN)



Sources: MOTIFE Recruitment insights, inhire.io IT Market Snapshot 2021, nofluffjobs.com.  
 \*For regular Python development, not Data Science

## New hires salary expectations in Krakow, per most popular technologies (monthly, gross in EUR)



Sources: MOTIFE Recruitment insights, inhire.io IT Market Snapshot 2021, nofluffjobs.com.

\*For regular Python development, not Data Science

1 EUR = 4.5 PLN

# Join us in creating software for the future world energy industry!



TechnipFMC is a company that provides technology related to energy harvesting in the seas and oceans of the world. It has just started developing its Digital Factory, which is a kind of IT start-up inside the organization. Digital Factory develops software for internal use and for its external customers. It is connected with the designing field extraction, engineering calculations, production, purchases, logistics or monitoring. The Krakow branch of the company cooperates with offices in Oslo, Houston and Paris.

## Benefits offered at TechnipFMC:

- B2B or employment contracts
- 13th salary for employment contracts
- 100% remote work, hybrid work or work from the office of your choice
- Krakow office right by the AWF Park, chosen as one of the best in Europe in the Office Interior Category (INTERNATIONAL PROPERTY AWARDS 2021)
- A MacBook Pro or PC, two monitors and necessary peripherals
- MyBenefit, LuxMed, integration meetings and others
- Co-financing of trainings, certificates and studies.



## We are looking for:

- Full Stack Developers (Java/Kotlin, React or Angular 2+)
- DevOps Engineers (AWS)
- TestOps Engineers (Cypress)
- Product Owners
- UX/UI Designers

Learn more and apply on our [career portal](#)



wielka orkiestra  
świątecznej  
pomocy

The proceeds from this unique paid placement were fully donated to Wielka Orkiestra Świątecznej Pomocy.



# It's not about salary alone

The observed inflation of salaries in Poland is driven by macroeconomic factors such as an increased global demand for IT professionals, worldwide inflation trends or overall the state of the IT job market today. Globally, the pressure converts into increased IT costs and often leads to companies turning to Eastern Europe to support their staffing needs. While the cost to run a software team in Poland continues to be very attractive, it is worth knowing that the gap has shrunk significantly in the last 15 years. The savings are there, but are not as substantial as they used to be (two- three- folds in the past). With that, while planning to build a team in Krakow, one should assure the cost related expectations are realistic.

While global trends are not something most of companies can influence, there are factors that companies have control over, and which can drive up (or down) the new hires salaries expectations. Companies looking for solutions to increase their attractiveness and to assure their offer doesn't come down to just financial dimension consider the following levers:



## **Brand**

Companies with a well established brand can expect to pay the lower side of the range. New companies or companies with no visible brand on the market can expect to pay the highest side of the range.



## **Benefits**

A rich offer of benefits can take away the focus on salaries during the recruitment processes. Benefits that are worth looking into to maintain salary expectations steady are stock options/ESOP, paid holidays and paid sick leave for B2B contractors, and travels abroad to HQ.



## **Work model flexibility**

Offering a large array of work models will allow every single candidate to find a model that fits them, whether it is full remote, occasional hybrid, work anywhere, full flexible schedule... The more flexibility, the better.



## **Contracts flexibility**

The choice between permanent contracts and B2B contracts, but also choosing the currency you want to be paid in.



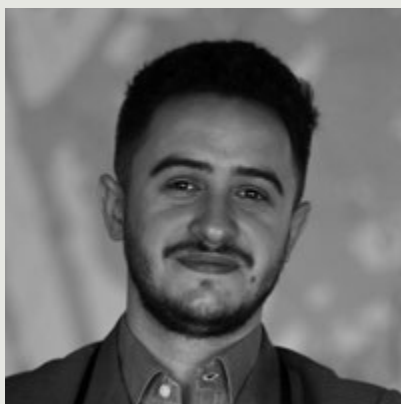
## **Technology**

It's a broad aspect of what technology is used and how it is used. It mostly means using the latest and greatest, but also means keeping codebase tidy, avoiding technology debt and employing right quality assurance practices.



## **Culture**

Understood as a set of behaviors that are promoted and encouraged in the organization. Are people treated equally? Is the organization hierarchical? Do team members have autonomy to make decisions? Does the company practice true transparency?



## Szymon Adamczyk

Senior Compensation and Benefits  
Analyst at Sedlak & Sedlak

**There is no indication that salary increases will slow down in the upcoming months. Well-paid specialists will need to compensate for both inflation and tax changes under the Polski Lad (New Deal) tax reform.**

With this in mind, it is unlikely that those in the industry will be willing to lower their standard of living and any additional costs will need to be offset against a higher salary.

According to the Sedlak & Sedlak 2021 Salary Report – in 2022, companies plan to increase the salary budget for IT specialists by an average of 9%. It is worth adding that this value does not include salary raises due to e.g. promotions/changes in positions.

When it comes to benefits, we can observe that a high emphasis is placed on these by specialists employed in the IT industry. A basic must-have currently is private medical care, life insurance, gym/sports passes, and financing/co-financing of studies/professional trainings.

## Focus

### IT market average salaries vs new hires expectations from a candidate point of view

The IT job market in Krakow is no different from other industries and changing jobs is commonly regarded by candidates as the right moment to reach for higher levels of compensation. New hires salary expectations will likely be 10-15% higher compared to their current level of pay. Sometimes the expectations can also be higher compared with the current salaries of employees in similar roles in prospective companies, thus creating salary gaps.

This is even more true for candidates with newest and rarest technologies such as Go, React.js or Kotlin, for which the demand is driving salaries upwards.

This trend causes significant differences between compensation of junior specialists and regular/senior specialists. The most talented individuals can double their compensation in 5 years by continuously working on their skills and... changing jobs.

In a dynamic job market with the salary gaps mentioned above, replacing departing employees with candidates from the talent pool can sometimes result in an increase in costs of salaries. The impact can be even more hard felt for smaller organizations and start-ups.

# Employment and benefits

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 from law, but became a norm and need to be observed.

## 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 on 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.

# B2B contracts

40%

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

20%

**Extra income an employee can get after taxes on B2B contract vs. permanent contract**

There are two main reasons to explain the popularity of B2B contracts in the IT industry. The first reason is that B2B contracts usually allow the contractor to be independent and allow them to deliver services to more than one company. Secondly, the contractor is able to increase his net income without increasing the total cost for an employer due to taxation and social insurance regulations. B2B contracts allow an employee to take home approximately 20% extra income. Also, during the first two years of self-employment a B2B contractor pays a preferred social insurance rate.

From the hiring company perspective, the following tables illustrate the main differences between hiring an employee on a permanent contract and hiring services from a B2B contractor.

TAX	Permanent		B2B (Contracting)	
Personal Income Tax	1 model – Progressive tax: 17%* income tax rate under 120K PLN annually, and 32% income tax rate over that threshold <small>*likely to be changed to 12% as of July 2022</small>		3 models: Flat tax: 19% flat rate, Progressive tax: 17%-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-Deduction Costs scheme for creative work		Flat tax/Progressive tax: The contractor can deduct the costs incurred to the one-person company (hardware, leasing etc.) Lump-sum tax: No cost deduction allowed	





## CONTRACT

### Permanent

### B2B (Contracting)

Rate	Monthly	Daily or hourly
Duration	Usually starts with 3-month probation period, followed by indefinite contract	Custom
Notice	Depending on employment length, notice period can either be 2 weeks, 1 month or 3 months, or custom by mutual agreement	1 month



## BENEFITS

### Permanent

### B2B (Contracting)

Annual leave	20-26 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 any significant differences between regular employees and contractors. For instance, contractors are invited to company events, and benefit from all office perks on offer.

# Market customs around B2B contracts

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



## **Probation period**

None. 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 package 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 an employment contract.

# Tax-Deductible Costs (TDC) for IT professionals, aka "Creative Tax"

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.

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 require the support of a local partner and legal verification. The cost of necessary legal services has to be taken into account when planning.

## Non-statutory benefits

Employers attract developers with rich benefits packages. The most popular ones are paid gym/fitness cards, professional trainings, and private healthcare. These are often considered as three at minima components of a benefits package.

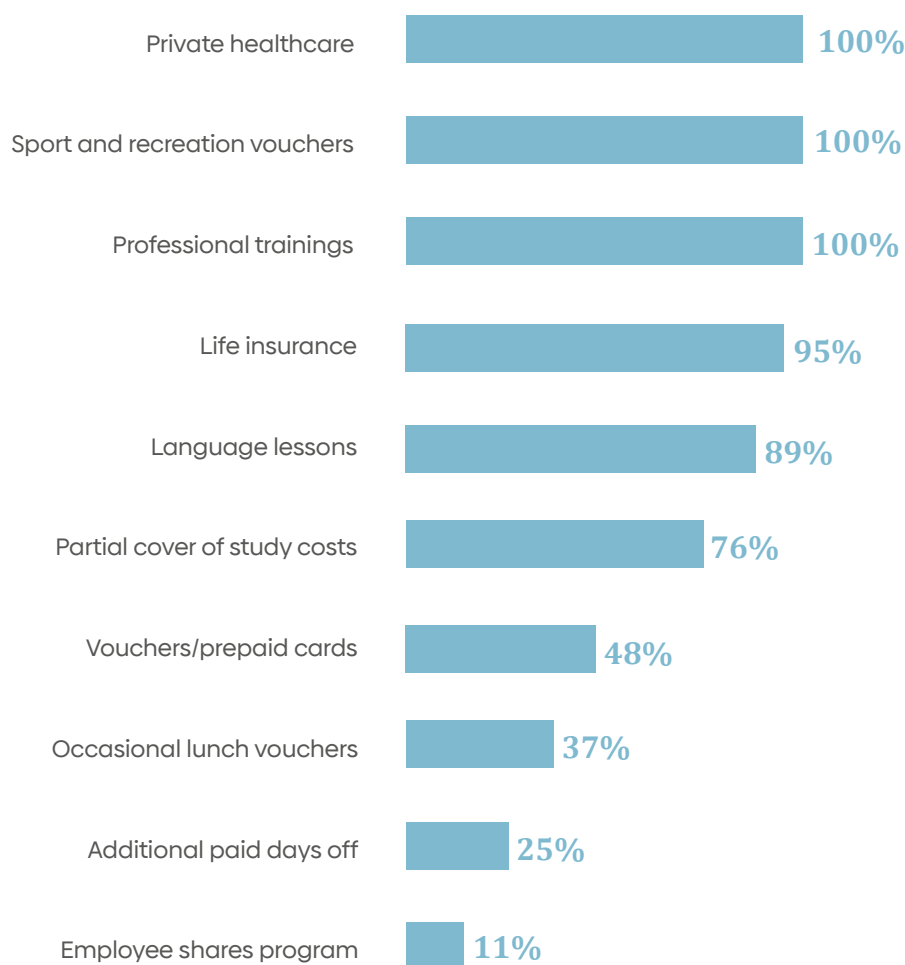
# 100

EUR

**Estimated monthly cost of benefits package per employee**



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



Source: Sedlak & Sedlak Salary Report for the IT Industry – 2021 (Fall)

Benefits popularity can differ per seniority. Employees in leadership positions might be expecting a company car and fuel costs reimbursement (respectively 61% popularity for department director role and 40% for a senior manager role) or employee shares program (32% for department director). Apart from these 3 benefits, the popularity of benefits is comparable across the career levels.

Other types of benefits, more seldomly encountered in Krakow companies 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



# Practices from abroad not 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 large-size corporations)
- Public transport abonnement paid/co-sponsored 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.

## Home office and flexible working time

Similarly to other European cities, Krakow struggles with heavy traffic during rush hour. Despite continuous investments, the road infrastructure is not able to handle the ever-growing number of cars. Students, tourists and visitors alike all contribute to the issue of congestion seen in the city.

Although Krakow is well-known for its well-organized public transport links and cycling routes, the time spent commuting is increasing year by year.

Due to this, flexible working hours and home office opportunities have become important and attractive benefits offered by IT industry employers in Krakow. Nearly all employees (96%) are offered an opportunity to work from home on a part time. Before COVID-19 crisis, job descriptions would often mention "1 or 2 days of home office per week".

Regarding flexible working hours, 81% of IT industry employees are offered this work arrangement no matter their seniority.



# 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, hybrid and fully remote models have 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
<b>Office</b>	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.
<b>Attrition</b>	Long-term impact, with potentially weaker ties in the team; More effort is required by employers to promote unity and team spirit	Potential impact of attrition of those who want to – now or in the future – work fully remotely; Regularity of in-office interaction and presence can positively contribute to team spirit and culture	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
<b>Productivity</b>	Difficult collaboration; Too many meetings	Days can be designated as collaboration or individual contribution, according to location	Easy collaboration; Easy ad-hoc interactions
<b>Cost</b>	Savings on office space; Potential need to subsidize home office costs	Potential for savings to be made by provisioning fewer workstations (e.g. hot desking or partial hot desking)	High office cost and potential lack of flexibility in case of future turbulence
<b>Culture &amp; Employer Branding</b>	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)
<b>Onboarding</b>	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

Source: MOTIFE Insights, 2022



# IT recruitment

## 4-8 WEEKS

### **Time to recruit an experienced IT specialist**

Recruitment projects for IT specialists in Krakow 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 Krakow: 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 Krakow. The scope of involvement of the agencies differs from one project 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.

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.



## Agnieszka Widacka

Recruitment Manager at MOTIFE  
Podcaster at HR-UP!

**2021 was a year of major change for Krakow's IT recruitment scene. Although increased competition has made the market more challenging, it has also resulted in several new opportunities.**

### Key developments in IT recruiting in 2021

**Fewer organic applications.** Recruiters need to spend a lot more time and effort finding and engaging the right candidates. Furthermore, recruiters need to be able to talk confidently about the role, organization, and requirements in order to attract candidates and achieve a fit that works for all parties.

**Increased demand is driving up salaries,** and while this is not the only factor that influences a candidate's decision to participate in a recruitment process, it is a quite important one.

**Inflow of candidates from Eastern European countries** is diversifying the workplace and is also opening new sources of talent for recruiters and growing the pool of talent available to companies in Krakow.

**Growing number of ways to recruit, hire, and contract.** Companies based in Krakow already or in the process of setting up operations can now choose from a variety of different ways to build their teams. At one end of the spectrum, some companies are hiring numerous recruitment agencies and receive hundreds of CVs. At the other, there is the option of collaborating closely with a specialized local partner that operates as if it were an extension of the client's own team (i.e. RPO model). In between, there are multiple different hybrid options to consider.

When considering your recruitment strategy, it's important to choose carefully and to consider the entire recruitment experience and the impact it can have on your employer branding efforts and how you are perceived by candidates and the entire Krakow tech community.

# Recruitment Process Outsourcing (RPO)

In addition to 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 usually comes with a management fee which is in addition to the recruitment fee.

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 practice of outsourcing a whole project 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:

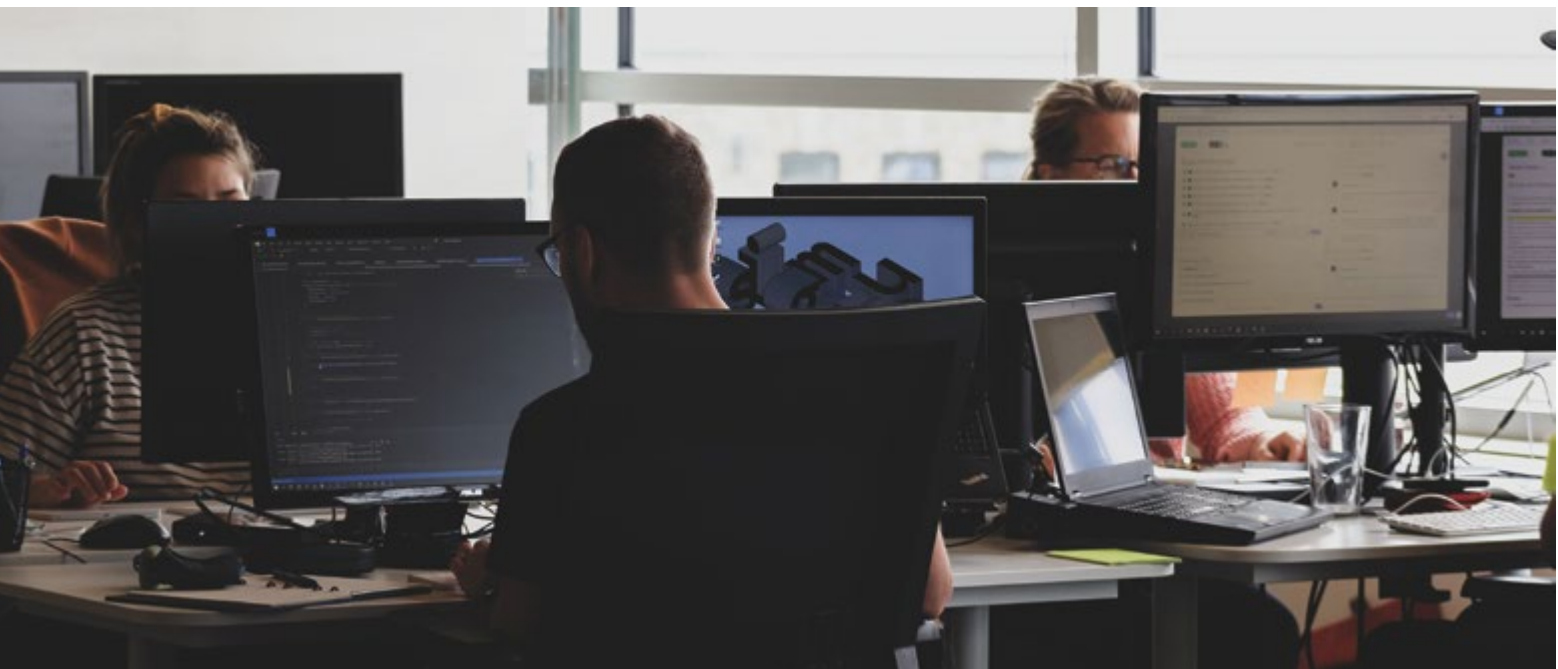
- company is unable to hire sufficient number of people in a short period of time;
- a project has a budget for limited time
- company doesn't accept B2B agreements with candidates

- 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.





## John Nash

Chairman & Founder at Nicholson Search and Selection

Nicholson Search and Selection is a London-based recruitment firm, specialized in the exec and tech talent acquisition.

**Last year proved to be a bumper year for European start-ups and scaleups that set records in the amount of money raised: \$116B has been invested in these companies (+159% compared to the \$45B invested in 2020). These companies are now looking to dramatically scale up recruitments in all departments, especially in their R&D, engineering, and tech areas. The same goes for US companies wanting to expand in Europe.**

Thanks to their openness, these companies are more and more willing to work with remote teams so it therefore makes sense for them to concentrate their recruitment efforts on a European-wide scale including Poland and Central Europe at large. Talents scouted from these countries are skilled, up to date with the newest technologies, and consequently extremely attractive profiles for these types of companies with substantial recruitment needs.

For expert UK-based search companies like Nicholson Search & Selection, it was crucial to look towards the East and partner with local recruitment firms, such as MOTIFE, to include candidates from Central Europe to our portfolio.

Central Europe boasts some very impressive talent that many Western Europe-based & US-based companies are not aware of. Our aim is to connect them.



# Employer of Record (EOR)

Restrictions on travel and the subsequent difficulty in visiting and scouting locations, a greater acceptance of remote work and reduced reliance on physical meetings, and the accelerated digitalization of work and administrative processes all made EOR providers and platforms more popular. Organizations realized they don't always need a local entity and a fully-fledged, on-site HR department.

Engagements with EOR providers are typically fee based, 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.

## The emergence of Global EOR providers

In recent years, thanks in no small part to the pandemic, we saw an advent and growth of global EOR providers. Global EOR providers have entities in hundreds of locations worldwide and provide a unified experience for hiring parties and for staff across the world.

Their automated platforms typically include onboarding, billing, attendance tracking

and reimbursement support. 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.

	Global EOR service providers	Local EOR partners
<b>Their offer</b>	Provide the same range of EOR services in multiple countries	Provide tailored EOR services with local expertise / sector expertise
<b>Their clients</b>	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
<b>What they do</b>	Payroll processing, compliance, billing, attendance tracking, reimbursement	Same as Global EOR providers plus tailored services beyond administration (custom benefits, local advisory, procurement of equipment)
<b>Example</b>	Omnipresent.com, Remote.com or Letsdeel.com	MOTIFE

# Advantages of EOR services

EOR providers combine software platforms with lean presences (typically HR and Compensation & Benefits specialists) in local markets to help companies accelerate the process of setting up and running a team in a new country and by enabling the following benefits:

- No need to invest in establishing a local entity.
- No need to establish a local HR function or become intimately familiar with all aspects of local labor laws.
- Guarantee of compliance with local regulations (subject to provider and agreement).
- Access to HR tools, workflows, and best practices that have been honed across multiple locations and client organizations.
- Favorable access to employee benefit packages such as healthcare packages and benefit cards, due to economies of scale.
- Reduced administrative burden – EORs typically offer simple billing solutions, including across multiple geographies.

# Potential disadvantages of EOR services

Although EOR providers are a great fit for some companies, there are potential drawbacks, such as:

- They rarely extend their support to recruitment, which means hiring in a new country still requires significant effort and an understanding of the local market.
- Sometimes employees need support from a HR or HR-like function within the organization they're working for. This is especially true in Poland, where it is common for employees to expect HR support or representation. Not all EOR providers offer it.
- Limited or strictly defined scope of most of EOR providers.
- Limited ability to deal with the cultural nuances and sensitivities of specific markets.



# Labor law

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/week

---

8 hours per day, 40 hours  
per week working time

**50-100%**  
Overtime pay

---

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

**251**  
Working days on average

---

13 days of public holidays annually

**80%**  
Paid sick leave

---

From first day of sick leave  
with medical certificate

**20 OR 26**  
Days of vacation

---

Vacation entitlement depending  
on experience

**100%**  
Paid maternity leave (up to 6 month)

---

That can be extended by a 6-month parental  
leave (60% paid).  
Paternity leave lasts 2 weeks (100% paid).  
Maternity and parental leave can be split  
between mother and father.

**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.





## Chapter 3

# Cost of doing business



**In this chapter, you will find essential information that will help you understand the cost of running a business in Krakow, including office space, professional services, cost of living, and the taxation that will apply to your business.**

Despite being a top tourist destination, Krakow continues to be an affordable location. Unlike many large European cities, Krakow manages to keep the cost of doing business here competitive. Office space leasing, professional business services, accommodation and dining provide amazing value with a great price-to-quality ratio.

Krakow offers excellent offices, hotels and restaurants, all whilst managing not to become as crowded, rushed and pricey as the capital, Warsaw.

The last 15 years has seen a significant growth in office building construction, new modern hotels and restaurants. More recently there has been an incredible effort to develop city infrastructure, with event venues such as the ICE Congress Center or large Tauron Krakow Arena. Krakow Airport has also undergone a complete make-over, and the ongoing development of a Regional Fast Railway network brings office centers closer to peripheral areas.

## Key figures

**19 000** EUR

Average gross annual salary  
in the business sector in Krakow

**6<sup>TH</sup>**

Largest economy  
in the European Union

**PLN**

Polish zloty  
Currency of Poland

**5.7** %

GDP growth in 2021. EU countries  
average: 5.3%. Eurostat

**2.9** %

Unemployment rate in Poland  
in December 2021

**39.7** %

Combined GDP growth rate  
between 2010 and 2021.  
EU countries average: 15.3%. Eurostat

**NATO**

member since 1999

**EU**

member since 2004 and Schengen  
Area member since 2007

# Office space in Krakow

## Office market

**1.6** MLN m<sup>2</sup>

### Office space surface in Krakow

**60.7** K m<sup>2</sup>

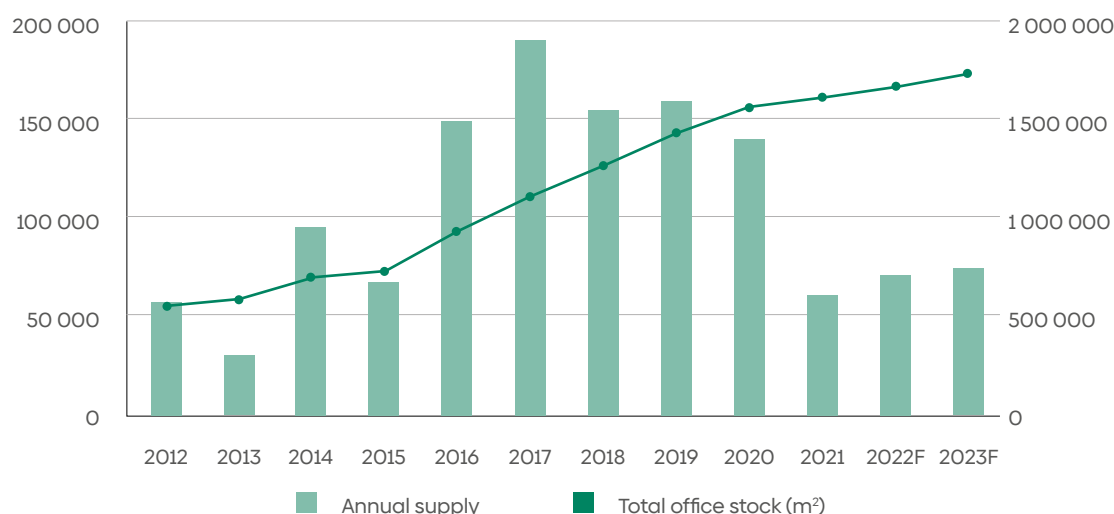
### Office space completed in 2021

Krakow offers a variety of office options. Some of them are large buildings with a capacity of 2 000+ people such as Kapelanka 42, Fabryczna Office Park, HighFive 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 4 years, this number has increased to 1.6 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 m<sup>2</sup>)



Source: Cushman & Wakefield, 2022



## Lease costs

**13.5-15** EUR

Lease per 1 m<sup>2</sup> of office space/month  
in an A-class building

**10-13** EUR

Lease per 1 m<sup>2</sup> of office space/month  
in a B-class building

Lease costs for A-class and B-class spaces have remained stable over the last 3 years. The usual lease period for an A-class office space is 5 years, and 3-5 years for a B-class office space.





# Sublease

The standard rental period for A-class spaces is 5 years and 3-5 years for B-class spaces, but it is possible to find shorter offers, e.g. office sublease. The office space available for sublease in Krakow is now estimated at approximately 28 000 m<sup>2</sup>.

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, which may come potentially cheaper than under a traditional lease agreement with the building owner. Based on our observations, it can be concluded that a sublease rent in Krakow can be cheaper than the standard rent by as much as 8-18%. However, 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.

# 28

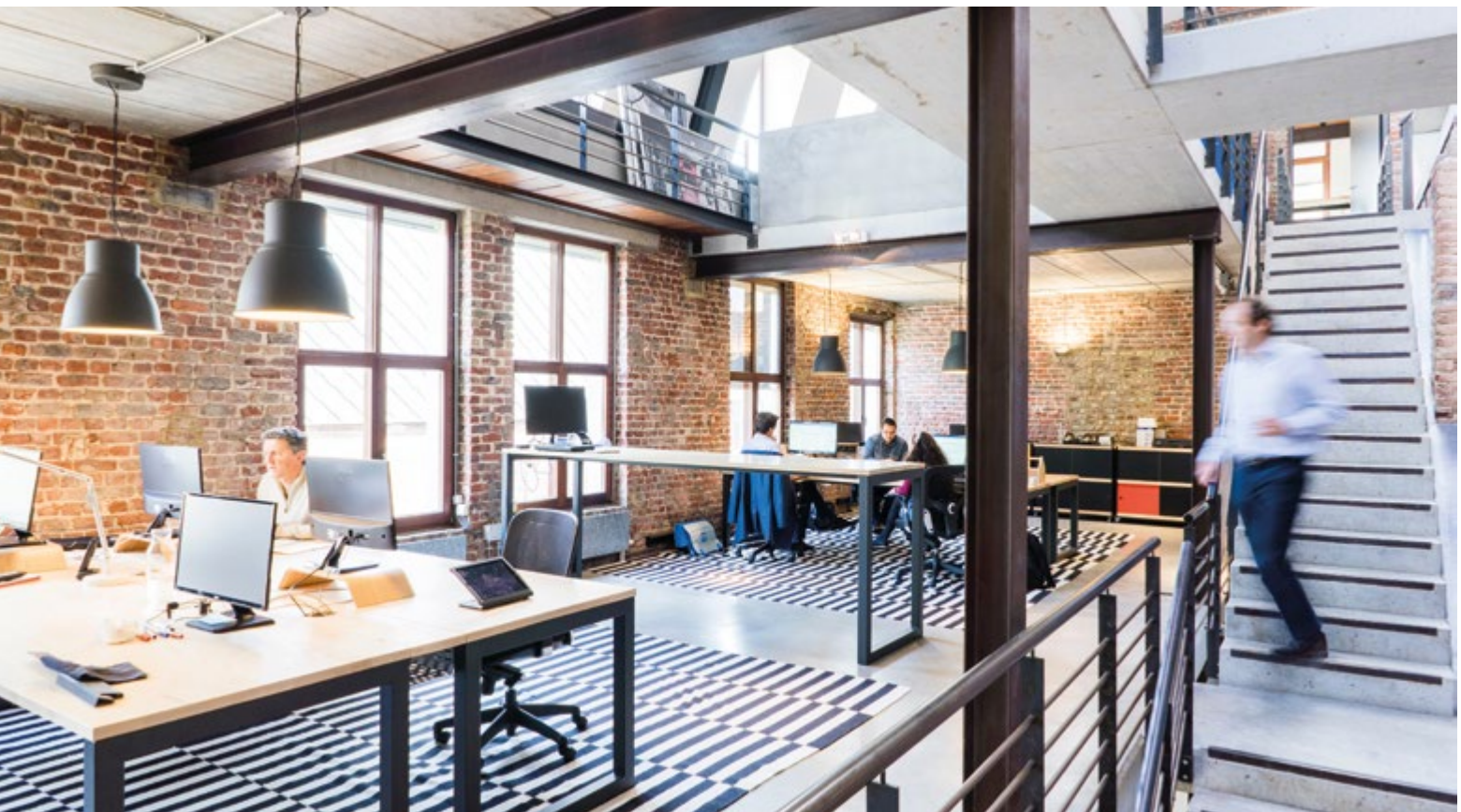
K m<sup>2</sup>

**Office space sublet  
in Krakow**

# 8-18

%

**Sublease cost saving  
vs. standard lease**





## Dariusz Madej

Senior Negotiator  
at Cushman & Wakefield – Krakow

**For years, the sublease market has accounted for a portion of leases offered in the marketplace and has grown linearly along with an increasing volume of office space. In 2020-2021, considerable variability in this type of space availability was observed.**

With a significant increase in the number of sublease offers for office space in 2020, the office space stock began to decrease gradually in the spring of 2021. Many companies have opted for ready-made solutions, choosing offices available offhand on a sublease and flex basis.

As a result, the total supply of offices for sublease decreased from approx. 53 000 m<sup>2</sup> to 28 000 m<sup>2</sup> (as at the end of December 2021). Nevertheless, such a space stock is still considered higher than in recent years. For flex offices, the demand side was also very active here. Currently, a significant part of serviced offices are leased; some hubs are 100% leased, while the other operators offer only single modules.

When it comes to demand for modules providing a larger number of workstations (e.g. 100+), the availability of such offices is very limited. In 2021, many new investors entered the market and, instead of choosing traditional lease, they opted for ready-made and flexible solutions, which was dictated by the uncertain economic situation.

Therefore, the office space absorption recorded a significant decrease compared to 2020 despite the higher volume of transactions completed in 2021.

# Flexible office space

**43** K m<sup>2</sup>

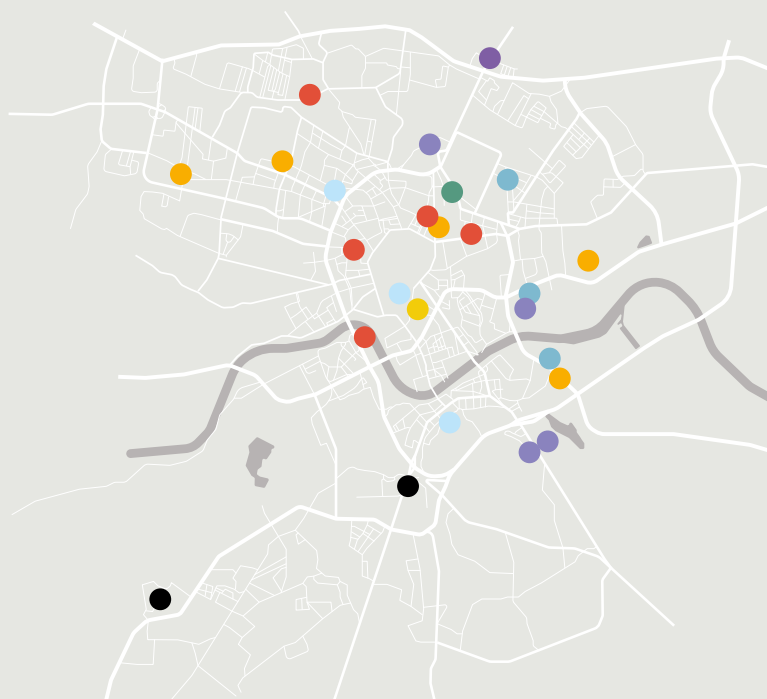
**Flexible office space in Krakow**

**300** EUR

**Monthly rental cost per desk  
in a serviced office in Krakow**

A growing number of start-ups and high-tech 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 & Cowork Centre (5 offices) | ● Biznes Lab (3 offices)     | ● Business Link (1 office) |
| ● Regus (4 offices)                  | ● Cluster Cowork (3 offices) | ● City Space (1 office)    |
| ● Rise (5 offices)                   | ● At Office (2 offices)      | ● Volk (1 office)          |

Source: OMGK RK Krakow Startups Report, 2022



## Max Burgess

Co-Founder  
at Yolk Community & Workspace

**Krakow's co-working scene, which is roughly split into large corporate and smaller boutique outfits, has been 'shaken out' in the past two years of the pandemic. The corporates have scaled up - building more floor space regardless of demand, while the boutique outfits have focused on niches of the market with more personalized service and have seen more organic growth.**

Yolk is a community-focused workspace and social hub in the center of Krakow. Since the start of the pandemic, we have expanded our membership base and rentable area by about 300% as we see a steady rise in people opting to work around people they know, but not necessarily who they work with. We attribute this to our work on creating a strong social network centered around an international, English-speaking core and helping them to integrate and collaborate by holding small events and community-building exercises.

We offer thoughtful flexibility for different workflows; from a cafe-style workspace called the ClubHouse to more traditional office environments. Whether this is catering for solopreneurs or remote workers that have a dedicated desk in one of the co-working spaces or early-stage startups and small companies renting a private office by the day or by the month.

The concept that binds all the different members at Yolk is our commitment to the larger community and creating social spaces like the ClubHouse to give them a platform to connect.



# Professional services

## 250<sub>EUR</sub>

**Monthly cost of accounting services  
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. Krakow 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.

## 100<sub>EUR</sub>

**Monthly cost of payroll services  
for up to 10 employees**

## 50-100<sub>EUR</sub>

**Hourly fee for legal services**



Accounting  
and bookkeeping



Payroll  
calculation



Legal



Health  
& Safety



IT  
Equipment



# Taxation in Poland

## PIT

### Personal Income Tax

---

**17%\* under 120K PLN  
(26K EUR) annually,  
and 32% over that threshold**

\*likely to be changed to 12% as of July 2022

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.

## VAT

### Value-Added Tax

---

**23% standard VAT rate**

## CIT

### Corporate Income Tax

---

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

## 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% 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

JACOBS  
ch2m

Akamai

UBS

TYRÉNS

Relativity

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.

## Expert view



### Justyna Czystek

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 150 companies.**

Among service sector companies, we welcomed well-established brands such as UBS or new-technology-driven entities such as Relativity. 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](http://kpt.krakow.pl)







# Staying in Krakow

## Travel

As one of the top tourist destinations in Central Europe, Krakow attracts approximately 14 million domestic and foreign tourists each year. Thanks to its cultural wealth, Krakow's Historic Center has been listed as one of 12 first sites to be entered on the UNESCO World Heritage List in 1978. Krakow is also a thriving business center, playing a leading role based on the total number of meetings and events held here. It is one of the most important economic hubs in the country, focusing on professional services for business, new technologies, finance, IT and telecommunications.

Being the most visited Polish city, Krakow offers connections and facilities that make travel easy and enjoyable. There are direct flights to over 50 cities across Europe as well as direct connections to the USA, Israel and the United Arab Emirates. Krakow is also conveniently connected with major European air hubs, including multiple daily flights to Munich, Frankfurt, Vienna, Zurich, Oslo, and London.

Krakow hotels offer amazing value for the money. With locations both in the old town and near business centers, there is always a nearby facility ready to accommodate business needs. The majority of hotels are brand new or were built within the last 10 years. They are clean and modern, offering a high-quality environment for doing business.

# 161

HOTELS

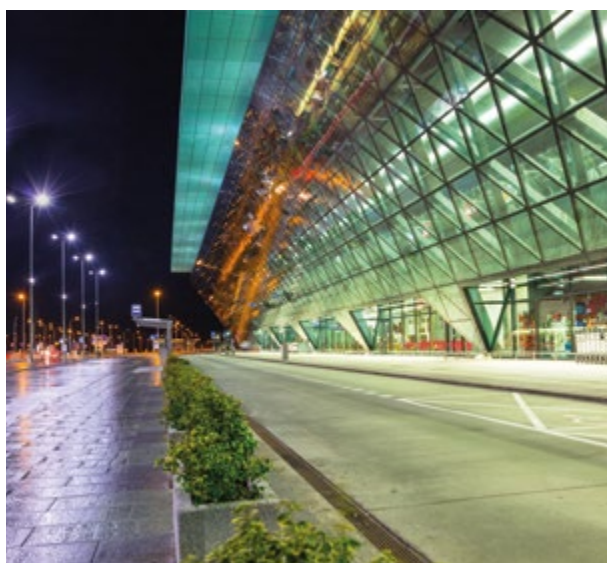
**with 3\* or higher rating**

Long forgotten are times when Krakow's cuisine was limited to traditional Polish food. With 500+ restaurants, Krakow has much to offer, and dining can be part of a great experience during a stay in the city. From Michelin or Gault&Millau recommended restaurants to new affordable eateries offering international and fusion tastes from Japanese ramen and Middle East specials to vegan burgers and Argentinian steaks, there's something to suit everyone's taste.

# Cost of travel

Airfares from European capitals start at 100 EUR and from the US start at 500 EUR. A 4-star hotel starts at 200 EUR for a four-day stay.

You will not need to spend more than 30 EUR per day on food (this amount will get you an excellent lunch and dinner) and 50 EUR for a 5-day stay for local transport by taxi.



## 700 EUR

**Estimated total cost of a 5-day trip to Krakow from a European capital including airfare, a stay in a 4\* hotel, food and local transport**

## 1.1 K EUR

**Estimated total cost of a 5-day trip to Krakow from a European capital with coach class airfare, a stay in a 5\* hotel and fine dining and drinks every evening**

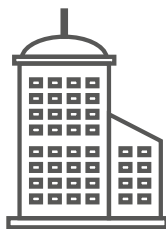
Origin	Flight time	Airfare range*
Northern, Southern, Western Europe	1.5–2.5 hours	100–200 EUR
Middle East	3.5 hours	200–400 EUR
United States – East Coast	11 hours	From 500 EUR
United States - West Coast	14 hours	From 650 EUR

\*For tickets purchased at least 2 weeks before the planned travel date

## Cost of 4 nights in a hotel (in EUR)



**450-1 000**  
5\* rate for 4 nights



**200-450**  
4\* rate for 4 nights



**150-250**  
3\* rate for 4 nights

**50+**

Direct connections to  
European cities from Krakow

**18%**

Average passenger annual  
growth at Krakow Airport  
between 2015 and 2019

**150** EUR

Average airfare for a return  
flight from a European city to  
Krakow

**20** MIN.

Taxi ride from the city center  
to the airport



# Local expenses

**4** EUR

---

Cappuccino in the Old Town

**7** EUR

---

Basic lunchtime menu

**5** EUR

---

Taxi ride on a business day,  
5 km

**6** EUR

---

A cocktail in an Old  
Town club

**18** EUR

---

Dinner with drinks at a good  
restaurant in the center

**80** EUR

---

Dinner for two in a city  
center restaurant, including  
appetizers, main course,  
wine and dessert





## Chapter 4

# 2021 in review



In this chapter, we provide an overview of the key highlights of 2021, including information about new arrivals to the Krakow tech scene, and a look at the key trends that are shaping the market.

## New IT players in Krakow in 2021

Every year we see more and more new companies who decide to establish their subsidiaries in Poland and build IT teams in Krakow. Also, every year at least 1 000 new IT jobs are added in Krakow as a result of arrival of new companies.

In 2021, at least 17 companies decided to set up their software development teams in Krakow (vs. 10 companies in 2020), joining a list of firms that had already have offices in the city.

Number of these new organizations were from the Software and Fintech sectors. The list of new IT comers to Krakow in 2021 also included 3 non-Polish unicorns - Bitpanda, BlockFi and Project44.

A trend worth mentioning, is that a share of the 2021 new IT players decided to hire engineers in Krakow without setting up an office, preferring to build 100% remote engineering teams in the region and meet in person occasionally.



**Retail / Germany**  
[aldi-nord.de](https://aldi-nord.de)

Aldi Nord is a supermarket business that sells a wide range of products, including groceries, home furnishings, and kitchenware.

Number of engineering / IT roles in Krakow by end of 2022: 250+



**Software / USA**  
[apptio.com](https://apptio.com)

Apptio is a US-based software company that builds a platform which helps enterprises to optimize the cost of cloud.

Number of engineering / IT roles in Krakow by end of 2022: 80+

**AstraZeneca**  
**Biopharma / UK**  
[astrazeneca.com](https://astrazeneca.com)

AstraZeneca is a global, science-led biopharmaceutical company that focuses on the discovery, development and commercialization of prescription medicines.

Number of engineering / IT roles in Krakow by end of 2022: details not announced





## Michał Porzożyński

Director of Engineering and Site Lead  
at Apptio Poland

### **There are two main reasons why Apptio has chosen Krakow as its first EMEA Product Innovation Center.**

First is the number and reputation of universities present in our city. AGH University of Science and Technology and Jagiellonian University, to name the top two, constantly enrich our local talent pool with amazing people that are ready to pick up difficult software engineering tasks. The second reason is the high diversification of software companies that are already on our market. From smaller start-ups to bigger corporations that employ thousands of people in areas such as fintech and security, the range is impressive. Such diversity guarantees that Apptio can find in Krakow people with the knowledge and experience necessary to build independent teams that can immediately start delivering real business value.

2021 was an amazing time for Apptio Poland. We have closed the year with more than 40 employees that today build, maintain and support key Apptio's products: ApptioOne, Targetprocess, Cloudability, and our underlying platform. We were able to create end-to-end

teams that have taken both engineering and business ownership for specific corporate goals. With recruitment as our number one priority, behind the scenes we were concentrated on setting up the Polish entity: we opened our office on Al. Pokoju, set up all the necessary HR, payroll, and accounting processes, chose the benefits, etc. We were also concentrated on employer branding activities like sponsorship and participation in Devovx and preparation in cooperation with Women in Technology Poland, a webinar about product management. I am proud and happy that our presence has been noticed by the local media - especially articles published in Wyborcza. With the number of new companies emerging in Krakow every single year, it is very hard to be visible.

For 2022 I have two goals for Apptio Poland. We need to grow our existing teams as well as build a couple of new ones to continue the transition of products to Poland. It is not only about bringing new engineers in, but also about opening customer success and sales roles in our Center. I expect that at the end of the year we will be around 80 people strong. The second goal is to mature our organization. Today we have all the basics in place, and we are ready to take the next steps to become a great place to work in the long term. For us, this means keeping the engagement high, building internal mobility processes, making recruitment even smoother, ensuring knowledge flows between teams, looking at our benefits package and making the Apptio brand recognizable among our target talent pool. I like Krakow's ecosystem and all the competitors that we have in our local market. They constantly challenge us and force us to think about what to improve, what can be done differently. This mindset is crucial if you want to build a top-tier company, and this is exactly Apptio's goal for the Product Innovation Center in Poland.



**Fintech / UK**  
**atombank.co.uk**

Atom Bank is a mobile banking application that offers a range of personal and business banking products.

Number of engineering / IT roles in Krakow by end of 2022: 30+

---



**Fintech / Austria**  
**bitpanda.com**

Bitpanda is a digital assets platform used to facilitate the buying and selling of cryptocurrencies, fractional stocks and metals. Bitpanda is a unicorn company (private company with a valuation over USD 1 billion).

Number of engineering / IT roles in Krakow by end of 2022: 100+

---



**Fintech / USA**  
**blockfi.com**

BlockFi is a secured non-bank lender that offers USD loans to crypto-asset owners who collateralize the loan with their crypto-assets. BlockFi is a unicorn company (private company with a valuation over USD 1 billion).

Number of engineering / IT roles in Krakow by end of 2022: details not announced

---



**SaaS / UK**  
**cogniflare.io**

Cogniflare helps organizations to assess their business requirements, plan, create, secure migrations of applications and data to the cloud.

Number of engineering / IT roles in Krakow by end of 2022: details not announced

---



**Consumer Electronics**  
**/ UK**  
**dyson.com**

Dyson is a global technology and engineering company that designs iconic products across four main areas: floorcare, environmental control, personal care and professional care.

Number of engineering / IT roles in Krakow by end of 2022: 70+

---



**Fintech /**  
**Dubai, UAE**  
**metahero.io**

Metahero offers a next-generation deflationary utility token coupled with Ultra-HD metascanning technology. Metahero boasts a Krakow-based senior team and private funding from the original co-founder of Codewise.

Number of engineering / IT roles in Krakow by end of 2022: details not announced

---



**Digital Consultancy /**  
**Japan**  
**monstar-lab.com**

Monstarlab is a global digital consultancy offering products and services ranging from co-working spaces, robotic process automation, game development, streaming services, HR tech and education programs.

Number of engineering / IT roles in Krakow by end of 2022: 100+

---





Software / Lithuania  
nfq.lt

NFQ is a software development company that provides solutions in software engineering, product development, process digitalization and business analytics.

Number of engineering / IT roles in Krakow by end of 2022: 100+

---



Software / Poland  
orbify.com

Orbify offers professional Earth observation solutions allowing users to create own applications and digital solutions without codes.

Number of engineering / IT roles in Krakow by end of 2022: details not announced

---



Supply chain / USA  
project44.com

Project44 is a logistics technology company that provides a visibility solution to span the entire shipment workflow. Project44 is a unicorn company (private company with a valuation over USD 1 billion).

Number of engineering / IT roles in Krakow by end of 2022: details not announced

---



Software / Finland  
tietoevry.com

TietoEVRY is an IT software and service company providing IT and product engineering services globally to the energy, forestry, banking, and healthcare sectors.

Number of engineering / IT roles in Krakow by end of 2022: 200+

---



Software / Poland  
veloxalpha.com

VeloxAlpha is a robotics and software technology company focused on delivering functional solutions to retail and quick service restaurants (QSR).

Number of engineering / IT roles in Krakow by end of 2022: 30

---



Fintech / UK  
w1tty.com

W1TTY is a financial app that renders scholarship programs, financial products and services for people and businesses.

Number of engineering / IT roles in Krakow by end of 2022: details not announced

---



Utilities / USA  
westinghouse.com

Westinghouse Electric Company LLC provides nuclear power plant products and services to utilities worldwide.

Number of engineering / IT roles in Krakow by end of 2022: details not announced



## Łukasz Drewnowski

CEO & Co-Founder  
at VeloxAlpha

**VeloxAlpha is a robotics and software technology company focused on delivering functional solutions to retail and quick service restaurants (QSR). Our unique combination of advanced robotics solutions and software technology, creates one of a kind highly flexible retail ecosystem that is managed remotely from the cloud.**

These solutions bring enormous value and growth possibilities in the sectors we cover, not only for our company and our corporate partners that will join us on the long-term business journey but most importantly, for consumers.

We chose Krakow to start our business because it is a great place for the initial stage of development of a technology company, where people, talent, their approach to work, and commitment to building the best product really count. The pool of programmers, mathematicians, robotics, and engineers is large enough to build multidisciplinary engineering teams in a short time.

In 2021, we set ourselves the goal of building prototypes for the retail industry and receiving the first orders – all of which we managed to achieve. In 2022, our aim is to verify our products with the market by launching several POC installations.

# Hiring trends

The IT job market in Poland has experienced significant changes in 2021, driven mostly by global trends. In this section, we focus on three key angles: the increased demand for software developers, the place of Polish engineers in the global IT market and how renowned large companies are becoming a new source of IT jobs in Krakow.

## IT job market key findings



### **Job ads doubled**

The number of advertisements for IT positions in Krakow doubled between Q4 2020 and Q4 2021.



### **Salaries of new hires grew by min. 10%**

Of new hires for IT and software engineering positions in Krakow increased by 10-18% between the start of 2021 and the end of the year.



### **60% of jobs are remote**

At least 60% of jobs posted in 2021 offered the option of working remotely (source: inhire.io). With more than a year of pandemic-conditions experience, working remotely had become the norm for most, and this was reflected in position profiles.



### **73% of IT specialists are passive candidates**

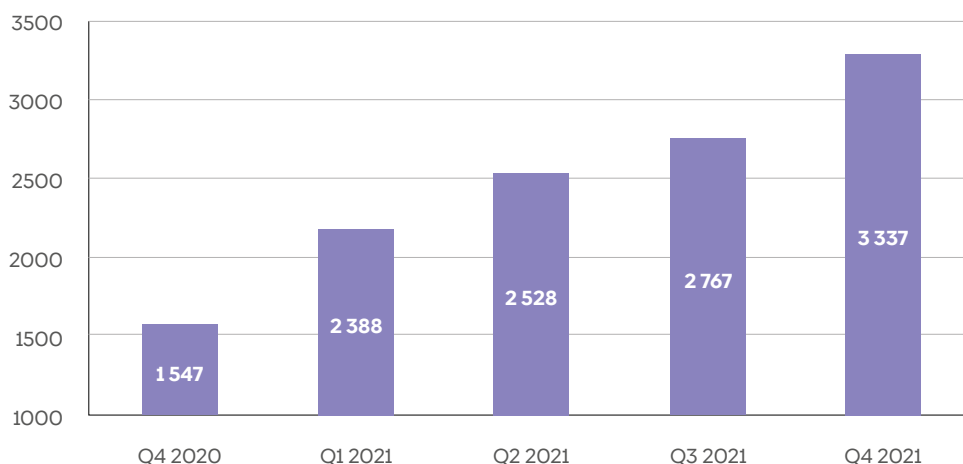
The majority of IT specialists and software engineers were not actively looking to change jobs (according to a Devire survey from September 2021, only 27% were). This means that hiring organizations need to proactively find and approach candidates, especially for mid-level and senior roles.



### **Java is the most sought after skill**

Most in-demand role by volume: Java Developer, which correlates with this skill being one of the most prevalent. Most available candidates: Juniors! With the IT and software industry holding more and more appeal, the constant output of graduates of technical disciplines and a continued influx of tech talent from nearby countries, there is currently an abundance of junior candidates on the market.

## IT job ads in Krakow Q4 2020-Q4 2021



Source: inhire.io, IT Market Snapshot 2020, 2021

## Polish engineers as part of the global IT workforce

Even before the pandemic, international businesses of all shapes and sizes were waking up to the benefits of hiring remotely and integrating Polish engineers into their global workforce. Today, with digitalized ways of working accepted as the norm and increasing competition for tech talent, companies everywhere are introducing 'hire anywhere' policies. 'Hire anywhere' essentially means that a company opens a vacancy without stating a preference or requirement for the candidate's location. This trend, combined with the growing receptiveness in Poland to different forms of employment (e.g. B2B or contractor status), has made it easy and convenient for international companies to hire in Poland, without being physically present in the country.

These international companies typically employ or contract Polish tech talent through local partners, like MOTIFE; through a global EOR provider or directly, with last option having number of limitations.



# Increased demand for software developers

All around the world, the demand for software developers and engineers is growing. There are many reasons for this, among them the pace of digitalization globally. Already an imperative for businesses everywhere, the onset of the global COVID-19 pandemic increased the urgency and pace of digitalization – for businesses and their customers.

Furthermore, we saw a global trend of more cash being channeled towards new business ideas and start-ups. In North America alone, Crunchbase reported that a total of \$329B was raised by start-ups in 2021 – an increase of 90% over the previous year.

These trends are global in nature but, due to Krakow being in the global tech industry, the effects are felt here.

What do these trends mean for hiring tech talent in Krakow? We've observed the following:

## **More offers are being rejected**

The proportion of offers rejected by candidates has risen from around 15% to over 20%. This is due to candidates receiving more offers than before, including counter offers from current employers. Hiring companies need to keep multiple candidates in the hiring process and be prepared to pivot to second- or third-choice candidates should their first-choice candidate reject their offer.

## **Candidates in Krakow tend to keep their word**

Despite the rapid growth in salaries and competition for their skills, candidates in Krakow do tend to fulfill their commitment to start work once they have accepted an offer and signed a contract.

## **Time to hire increased**

Time to hire, understood as the time between a recruitment process commencing and the moment an offer is accepted, has increased from around 4-6 weeks to 4-8 weeks. Due to increased competition for their services, candidates are typically approached by many recruiters at the same time and are participating in more recruitment processes than before. The desire to find the best position, combined with the time taken to negotiate and consider all options, results in the process lasting longer. Companies need to factor longer recruitment lead times into their planning and also be able to move decisively in order to secure preferred candidates.

## **Adjustment of recruitment practices**

Due to the increased demand and competition for developer talent, hiring companies with rigid recruitment processes and non-negotiable salary bands are at risk of being uncompetitive to candidates. Hiring companies need to be able to move quickly and nimbly with their recruitment efforts to secure the right talent – this might require accelerating or adjusting existing processes and salary bands.





## **Piotr Sedlak**

Project Manager / Managing Partner  
at Sedlak & Sedlak

**The economic situation in 2021 changed dynamically throughout the pandemic period. Industries that suffered the most over the last two years have slowly been returning to normal since the beginning of 2021. At the same time, an intensifying phenomenon of pay pressure was observed – caused by rising prices of products and services.**

The pandemic assured many companies about the pros of remote work which widened the Polish labor market even further for the recruitment activities of foreign companies. Specialists in Poland are still cheaper than, for example, new hires in Silicon Valley, so foreign players can successfully reduce their employment costs while paying significantly above the domestic market.

The phenomenon of salary inversion may turn out to be a threat for many companies. It occurs when newly hired employees earn more than those who have already worked for at least a year or more. It usually comes from the necessity to offer a higher salary to people we want to recruit for our organization, in particular for positions where several years of experience are required.

# Krakow BPO/SSC centers are expanding into software engineering and R&D

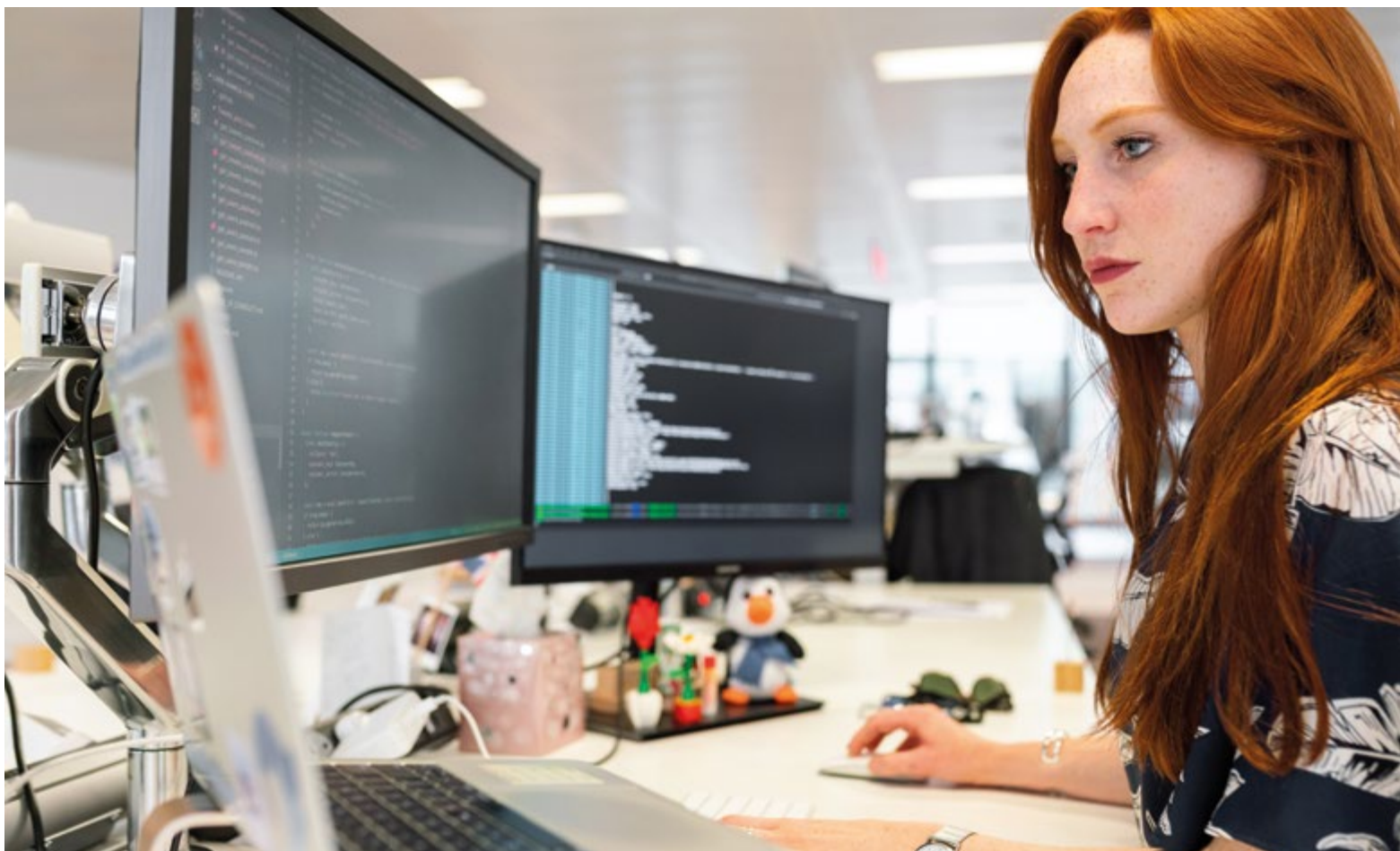
While Krakow appealed to companies seeking to set up shared service centers or BPO and IT outsourcing service delivery capabilities, the scope of services entrusted to Krakow centers has grown over time with functions like HR, Customer Care, and even Marketing, added to the traditional 'offshore' service portfolio.

More recently, many of the same companies that started out with Shared Service Centers in Krakow have broadened the scope of their operations to include R&D and software such as HEINEKEN, Herbalife or KION.

For companies already established in Krakow, this expansion of scope makes a great deal of sense. After all, they are already present in Krakow so it's easier and more cost effective to add

scope to an existing center than it is to identify and set up shop in a new location. In most cases, the company is already well known as an employer, infrastructure, management and organizational models are already in place.

This broadening of scope is also happening in reverse, with companies that started out in Krakow focused on building IT and technical teams now expanding their operations to include business services such as global HR, Finance and Accounting, Procurement and Customer Service. Examples of such companies include Motorola and ABB. There are also cases of companies arriving in Krakow and immediately setting up a full suite of technical and non-technical functions, such as StoneX and OANDA.





# Working trends

## Remote work & remote onboarding

More than two years after the onset of the pandemic in Europe, companies in Poland are accustomed to remote hiring, onboarding and working. What were previously considered temporary measures have gradually become the norm as organizations complete their transitions to 'hybrid work models' or 'new normals'.

### Gray areas relating to telework / remote work provisions

Officially, Poland continues to operate under the extraordinary measures introduced to minimize the disruption caused by the onset of the pandemic. The Polish government published a draft bill back in May 2021 that would seek to replace the current telework provision with a new remote work provision, which would be altogether more appropriate for the present reality and needs of employees and businesses. However, at the time of publication, this bill had not yet been implemented and employer-employee relationships continue to be governed by extraordinary measures. While this is the case, there are several gray areas that some employers have struggled to address.

Here are some examples of important areas relating to employment and provision of service that are not adequately addressed by the extraordinary provisions at the time of publication (April 2022):

#### Reimbursement of home-office costs

Many companies offer to contribute to the cost of equipping a home office, however, this is still done at the hiring company's discretion and is considered to be a perk. There are also costs such as internet connection and electricity – both vital to remote work – for which there is no mandate for employers to contribute to.

#### Security compliance

At offices, security is maintained with access cards, secure networks and much more. Beyond VPNs, authenticator tokens or apps, and passwords, most companies that we spoke to have not yet fully updated or articulated policies for security that are equal to what could be ensured at the office.





### GDPR compliance

With laptops and other work devices distributed and in use in multiple different locations, the risk of personal information being misplaced or exposed is naturally greater. In many cases, too little has been done to ensure employers and employees are aware of the requirements and how to fulfill them while working under these extraordinary measures.

### Health & Safety, and Insurance

When working from the office, employees receive Health & Safety training and companies and buildings are regularly audited to ensure compliance. Similarly, employees are insured when 'at work'. All of this changed when homes became the main place of work and work patterns became more fluid. Once the emergency pandemic measures pertaining to remote work are lifted, it is likely that employees will be responsible for ensuring and declaring the safety of their workplace.

### Workation

Many employers are now advertising their openness to workations – the practice of combining elements of leisure and recreation with work. Typically, an employee will travel to a vacation

location, continuing to work but also enjoying the benefits of their temporary location. While attractive as a perk, this raises questions about the length of stay away from the city specified in a contract as the place of work (for employment contracts), cybersecurity, definitions of work accidents and how the time away should be treated (e.g. is it business travel, remote work, annual leave, or something else?)

### Tax and legal implications of working in a different country

Many forward-thinking companies apply a 'hire anywhere' approach to recruitment. However, this can have implications for tax, compliance with local labor laws, and insurance. The situation for professionals on B2B contracts affords more flexibility but, for people on standard employment contracts, options to work from different countries – especially if considering a longer period – are more limited.

*Note: It is quite possible that the lifting of extraordinary measures and implementation of the new bill could happen soon, in which case, many of the concerns listed above could be resolved by the time of reading.*

## Positive side effects of remote working

When the pandemic first set in, there was a range of emotions and feelings about working from home. Many who had previously clamored for greater flexibility soon missed the structure of going to and being at work, as well as the buzz of a vibrant office. Some claimed they wanted to go back but, when given the option to do so, never did. However, it's clear that the shift to working from home has brought with it many positive developments. Here are some of the biggest:

### **Greater inclusion**

People with disabilities or who were deterred from applying for office jobs due to physical or mental conditions are now finding it easier to gain employment.

### **Geo-economic re-balancing**

People living in remote locations are no longer deterred from applying for jobs by impractical commutes. This is a positive development for employers and employees alike. For employers, it means that there are more candidates to consider. For employees, it means that they don't need to uproot to find work, or they can live in the location of their dreams, without sacrificing their career development. Similarly, smaller towns and cities don't suffer so much from the mass exodus of potentially high-earning residents to the big cities.

### **Larger talent pool**

With distance from home to work no longer being a prohibitive factor to applying for jobs, the number of candidates who could, realistically, apply for IT jobs in Krakow has swelled from approximately 50,000 to more than 300,000. This larger talent pool expands opportunities for companies already present in Krakow and those considering establishing operations there.

### **Part-time work becomes more viable**

Part-time work was often considered not worthwhile due to the fact that the time taken to prepare for and commute to work would be impractical to manage if working for only 4 hours a day. Now, without the need to commute, part-time work is much more viable, which creates more opportunities for employers and candidates.

### **Improved work-life balance (theoretically)**

Prior to the pandemic, many people complained about a lack of work-life balance. Now, with less pressure to commute, people have more time to spend with their families and to pursue personal interests. Of course, it's not so simple – many people find that worklife now encroaches on 'home' life much more often and that the lines between the two are blurred. Still, if 'return to office' rates are anything to go by, the pros of working from home must outweigh the cons.







## Dos and don'ts of remote working

### **Provide the option of meeting, without forcing it upon people**

Although remote or virtual meetings have become the norm, many people value the opportunity to meet 'face to face'. Employers and managers should proactively offer this option, without pushing it as compulsory.

### **Organize quarterly events and be prepared to foot the bill**

With remote working, there is a threat that relationships between employer and employees will weaken and become more distant, which can naturally increase the risk of attrition. Organizing away days or fun, non-work-related activities is a small price to pay to keep employees happy, rejuvenated and connected to their colleagues and the company.

### **Incentivize visits to the office**

Offering to cover the cost of transport and providing a catered breakfast or lunch is a great way to build positive sentiment towards being 'at work'. You should also consider initiating light-hearted fun rituals for those days when more people are at the office.

### **Reinvent the idea of being at the office**

Nobody wants to go to the office just for the sake of it or, worse still, just to appease a manager. Make your office or workspace experience different and beneficial compared to what employees have at home. If people struggle to focus at home due to distractions, invest in quiet zones. If people struggle with conference-call fatigue, make your meeting rooms places where people want to spend time. Alternatively, encourage people to make their office day a different type of work day, such as a workshop or brainstorming day, a day for Management meetings... something that makes the experience of coming to the office positively different to what they experience when working remotely.

### **Don't assume that everybody will enjoy casual coffees or after-work drinks over Zoom**

Or that everybody will appreciate the opportunity to engage in online fun activities or that such activities are the answer to all team-building needs. Offer up such activities, by all means, but don't forget to communicate the 'optional' nature and respect any decisions by employees not to attend.



## Expert view

## MOTIFE



**Michał Piątkowski**

Co-founder & CEO at MOTIFE

Many companies are concerned that remote work can impact their culture. Specifically for the new teams, they believe that coming to the office at least 3 days a week is necessary to build the right culture. However, building the right culture requires first and foremost hiring the right people, the people that fit. If the new hires represent the values aligned with the culture of the organization, it is less important how many days they spend together in the office.

At MOTIFE we offer flexible work terms with 20% of team working fully remote, and the rest of the team comes to the office once or twice a week. We believe that as long as the team shares the same values and has a well-defined purpose, the culture of the organization will thrive.





## Tips for succeeding in a remote-first world

### **Communicate progress and purpose**

Regularly. People naturally need to understand what they're contributing to and how it's going. Vibes and news might be easy to spread at the office, but less so when teams are distributed. Take the time to ensure that people know where the company is headed and how the journey is going. Try a mix of different communication channels and see which ones work best for you.

### **Give kudos**

Positive messages are a great way to keep employees and teams happy and motivated. Recognize achievements regularly to let people know that the team and company is on the right track, and that all efforts are appreciated.

### **Practice giving feedback**

As a skill, giving feedback has become one of the most important since the pandemic. Employees need to understand what they're doing well and less well, and they need for it to be communicated in a way that is considered, well structured and fair. This requires time and effort on the part of managers, but it's essential to the effective operations of a distributed team and so cannot be ignored.

### **Seek feedback regularly and encourage input and ideas**

Although it's been more than two years now, people's feelings and expectations toward remote work continue to evolve. It's important to seek feedback from your team to understand how people are feeling, if and where they might need more support, and what type of communication and forms of engagement they might need more or less of. It's shortsighted for managers to think they have all the answers and seeking feedback contributes to a happier, more inclusive workplace. Every organization is different and so frequency and format of feedback will vary, however, it's important to communicate that feedback is welcome and that employees know how to share it.



# Tax changes in Poland from 2022

A new system of income tax in Poland, known as the *Polski Ład* (loosely translated and referred to in English as the Polish Deal) was introduced in 2022. This new system represents a significant change to the way workers of all kinds and all levels of salary are taxed.

## Summary of key changes in Polish tax laws as of January 2022

- The 32% tax rate threshold is applicable to income over 120 000 PLN per year (previously: 85 528 PLN) for all progressive tax payers.
- The tax-free amount of 30 000 PLN was introduced for all progressive tax scale payers.
- The health insurance contributions are no longer deductible.
- The health insurance contribution changed for sole entrepreneurs from a flat contribution to a variable contribution based on income (4.9% for line tax payers, 9% for progressive tax payers).
- Corrections and new tax breaks will be implemented later in 2022, although details were not yet confirmed at the time of publication (April 2022).

## Key takeaways for IT specialists

- IT specialists on B2B contracts generally prefer the Lump Sum tax model (*Ryczałt*) due to its favorable 8.5% and 12% rates.
- IP Box can be attractive for IT specialists who are on B2B contracts and want to stay on the line tax model.
- Tax-Deductible Costs for IT professionals, aka "Creative Tax" continues to be attractive and can increase an employee's net income by as much as 13% (previously: 17%)
- Tax changes for IT specialists on B2B contracts are very favorable if they have little or no expenses to include in their costs. By moving to the Lump Sum model, IT specialists can increase their net income by 5-6%. Many employees on conventional employment contracts have seen their net incomes decrease by 5% as a result of the *Polski Ład*.
- These changes to taxation brought about by the *Polski Ład* push people to look for new employers that provide them with the freedom to choose the form of employment.





# Office market trends

## In cooperation with Cushman & Wakefield

The Covid-19 pandemic has placed the office market in the epicenter of changes caused by switching to the remote work mode. However, with the increasing vaccination rates, organizations implement plans for employees to return to their offices. The Return to Offices report published in September 2021 by Cushman & Wakefield analyzes how companies are preparing to return to their offices. The study carried out using the CAWI method in June 2021 saw the participation of 132 decision-makers responsible for office space management (CEOs, Administrative Directors, Operations Directors, Office Managers).

## Office space stock

In 2021, Krakow maintained its position as the largest office market in regional cities. Over the past 12 months, eight buildings with a total area of 60 700 m<sup>2</sup> were delivered for use, due to which the total office space stock in the city reached 1.6 million m<sup>2</sup>. Moreover, the response of new office space supply in Krakow to the pandemic outbreak was delayed, thanks to which the implementation of projects under construction was not suspended, and the

vast majority of projects planned for delivery in 2020-2021 were completed on schedule. Nevertheless, the slowdown in investment activity and the increasing office space availability resulted in a reduction in the number of new projects launched in Krakow in 2021. At present, the space of approximately 135 000 m<sup>2</sup> is under construction to be delivered in 2022-2023.

## Lease costs

Base rates for the best space remained stable and ranged from 13.50 to 15.00 EUR / m<sup>2</sup> / month, depending on the location. Despite the negative impact of the pandemic on tenants' activity and the increased availability of office space, rent rates did not change due to the limited supply in the central business area. Since the fourth quarter of 2021, less pressure from tenants to lower effective rents has been observed. It results from a disturbance in supply chains and the continued high activity in the construction sector, which have contributed to the increase in costs of

office adaptation. In comparison to previous years, the current prices of office adaptation work calculated with the building shell as the starting point increased by 25% on average. It directly translates into the level of incentives offered by the owners, affecting the achievable level of effective rent for office space. Nevertheless, projects located in areas with a higher level of vacant spaces may offer a higher level of incentives such as an extended period of rent exemption or increased office fit-out subsidies, which will result in a decrease in the effective office lease cost.

## Flexible office space

After a temporary decline in activity on the flex market in 2020 caused by the pandemic, a returning interest in this form of office space rental could be seen among tenants in 2021. Over the past 12 months, the supply of flexible space in Krakow increased by approx. 6% compared to 2020 since some tenants, as a result of the pandemic, began looking for

flexible solutions for renting office space, such as co-working spaces, serviced offices, or hybrid offices. Flexible office spaces in the „space as a service” formula provide a fully equipped shared office space and offer a range of administrative and maintenance services. Simultaneously, they offer flexible lease periods from days to months.

## Sublease

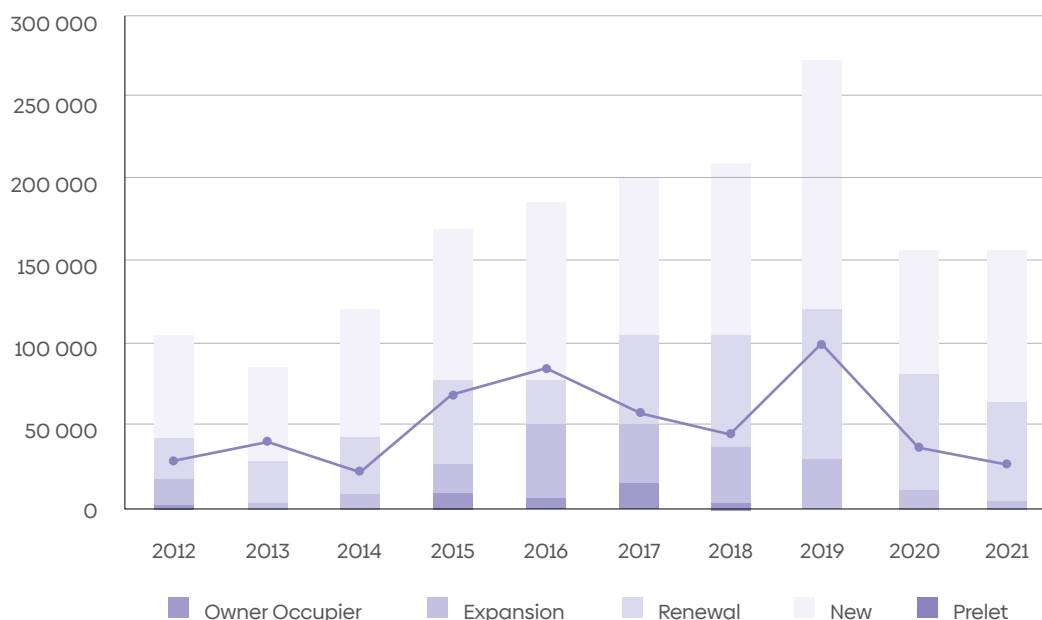
In 2020, a significant increase in sublease offers could be seen in Krakow. This is the result of the pandemic and the related uncertainty as to the future form of office space. In 2021 alone, sublease offers in Krakow amounted to 28 000 m<sup>2</sup> and declined by nearly 25 000 m<sup>2</sup> compared to 2020.

## Demand for office space

As a result of the Covid-19 pandemic, tenants' activity on the Krakow office market decreased by nearly 40% in 2020 compared to the record-breaking 2019. However, over the past 12 months, a gradual recovery in transaction activities could be seen despite the continuing economic uncertainty caused by the coronavirus pandemic. At the end of 2021, the total lease volume reached 156 000 m<sup>2</sup> and was higher by over 1% than in 2020. It is

expected that the upward trend in the demand for office space in Krakow observed since the beginning of 2021 will be maintained in 2022. Further market development will be driven, to a large extent, by the modern business service sector. According to the ABSL's data, employment in this sector increased in Poland by nearly 4% compared to the previous year, with approximately 82 100 employees located in Krakow, who account for 23% of total employment in this sector in Poland.

### Demand for office space in Krakow broken down by transaction type (in m<sup>2</sup>)



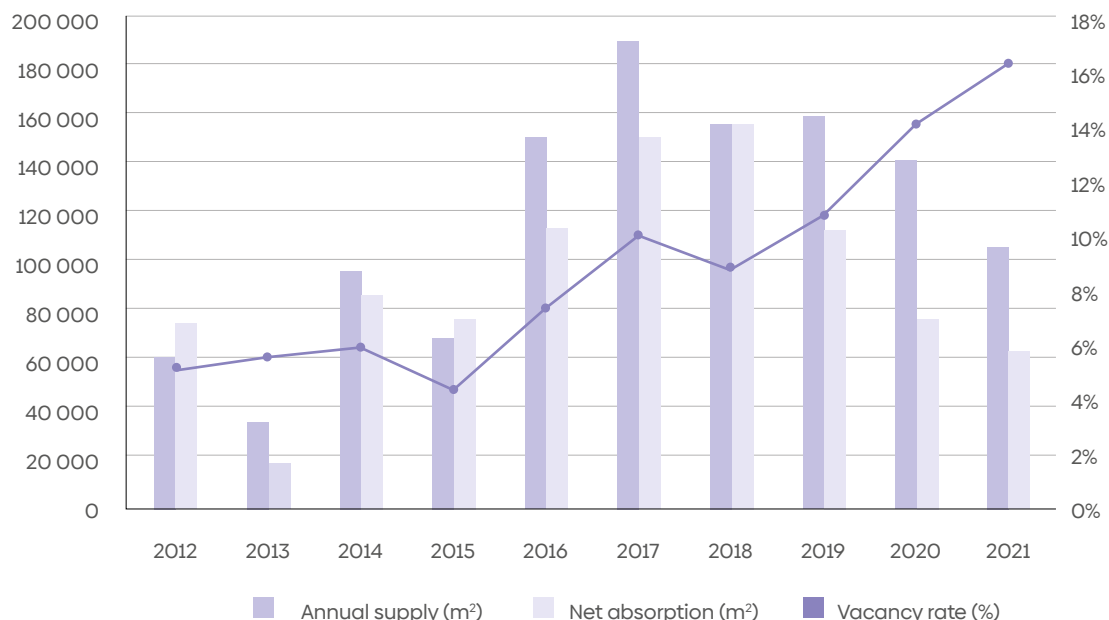
Source: Cushman & Wakefield, 2022

## Availability of office space

The decline in tenants' activity due to the Covid-19 pandemic and the relatively high level of new office space supply led to a significant increase in the availability of office space in the past 24 months. The vacancy rate amounted to 16.1% in the late 2021 and increased by 2.1 pp compared to the same period in 2020. In the opinion of Cushman & Wakefield, the high availability of office space is a short-term phenomenon, which will be

affected by a reduction in the number of new projects planned for delivery in 2022-2023 and a gradual recovery in transactional activities. In the opinion of Cushman & Wakefield, the vacancy rate will return to the compression path over the next 12 months. On the other hand, the absorption rate of office space will affect developers' decisions on launching new projects planned for delivery in 2024-2025.

## Vacancy rate (in %), absorption and annual supply (in m<sup>2</sup>) in Krakow office market



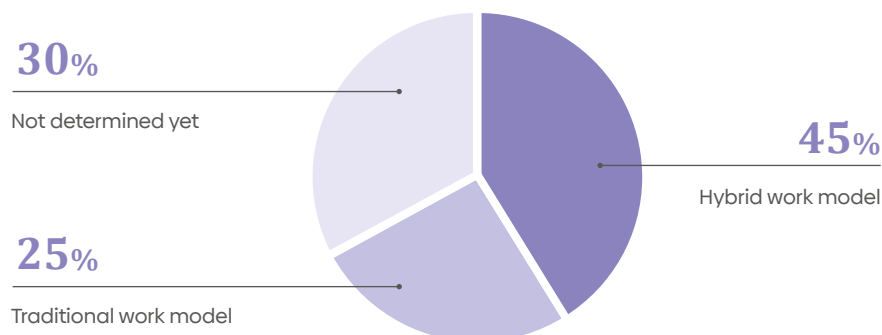
Source: Cushman & Wakefield, 2022

## Work model

As many as 45% of the respondents indicated that they would ultimately implement a hybrid work model that combined work performed in an office with homeworking. The model that assumed 3 days of remote work (38%) and the total flexibility (27%) was mentioned as the most popular form of hybrid work. The traditional work model was chosen by nearly 25% of the respondents, where 63% accepted remote work only in exceptional situations.

More than 30% of all the respondents have not made a decision yet on the model of their organization's return to office, which translates into the lack of specific actions as regards the further use of office space and is primarily dictated by the uncertainty as to the further course of the pandemic. What is significant, none of the respondents indicated they were to abandon their office space permanently.

## Has your company already determined for how many days your employees are to return ultimately to the office once the pandemic is over?

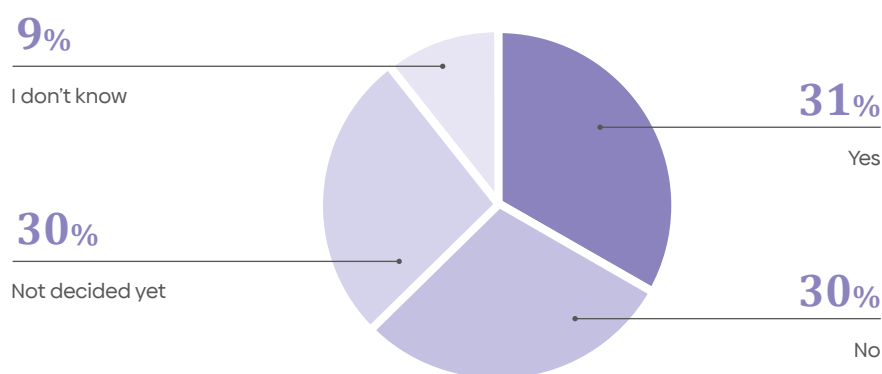


Source: Cushman & Wakefield, 2022

## Changes in office space

Nearly one-third of all the respondents have introduced changes to the operation of their office space during the pandemic (11%) or plan to introduce the same within the next 12 months (20%). Thirty percent of all the respondents have not decided yet on adapting their office space to the new reality. The lack of unambiguous information about the end of the pandemic prompts some companies to apply the „wait & see” strategy with respect to the further use of office space. Fewer than 30% of the respondents declared that they would not introduce any changes, which may result from the stage of the lease contract, or the lack of capital expenditure usually provided by the owner to fit out or modernize the space

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



Source: Cushman & Wakefield, 2022





## Dominika Kowalska

Associate | Workplace  
Strategy & Change Management  
at Cushman & Wakefield

### Greater flexibility is the new reality in organizations' operations.

In March this year, two years will have passed since many companies employing white collars switched to the remote mode. Some of those companies have already developed a hybrid work policy that combines homeworking with working in an office; some of them continue to work entirely remotely because services provided by their employees are so critical to their business that they cannot afford mass quarantines, sick leaves, and thus empty runs.

For this reason, a hybrid work model will become the predominant model in many companies. Numerous studies show that employees are equally efficient when dividing their time between working in an office and homeworking, and the employees themselves declare they take more satisfaction from their work and are simply happier.

Furthermore, Polish offices have struggled with the overcrowding problem for many years; nothing was done with the problem because it was seen as a sign of the company's growth and success. When viewed from the side, hybrid work can be the very solution that will finally introduce the flexibility so much talked about in the context of solutions for business and the work model itself, which cannot be fully implemented without employee mobility.

Implementation of a hybrid work model in an organization also allows for more dispersed work. Consequently, it is a very attractive form of work for innovative organizations, especially in the IT sector. Thanks to this work model, these organizations can work with the most talented individuals located not only within a city or a country but within a much larger geographic region.



# Start-ups ecosystem

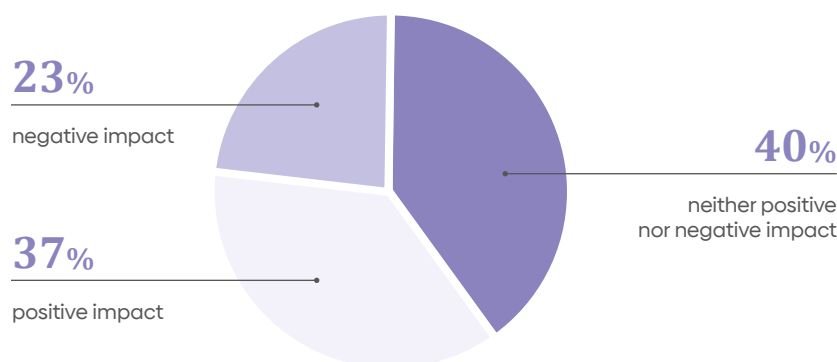
## Polish start-ups update

In the 2021 edition of this publication, we reported that considering the global economic slowdown, start-ups had done relatively well. After the second year of the pandemic, this statement still holds true in the city of Krakow, and more generally in the Polish start-ups' ecosystem. Indeed, the COVID-19 crisis has had either a positive impact or none on the development of start-ups, with 59% of Polish start-ups generating more revenue than a year ago. Finally, to mention, 2021 was a record year in terms of financing rounds, as stated by the think-tank Startup Poland, in their Polish Startups Report 2021.

### Is the pandemic still affecting Polish start-ups?

23% of Polish start-ups surveyed by Startup Poland in 2021 declared a negative impact on their business. This is however less than in 2020, when it negatively impacted 39% of start-ups, mainly due to difficulties in acquiring new customers and a drop in sales

### Pandemic impact on Polish start-ups in 2021

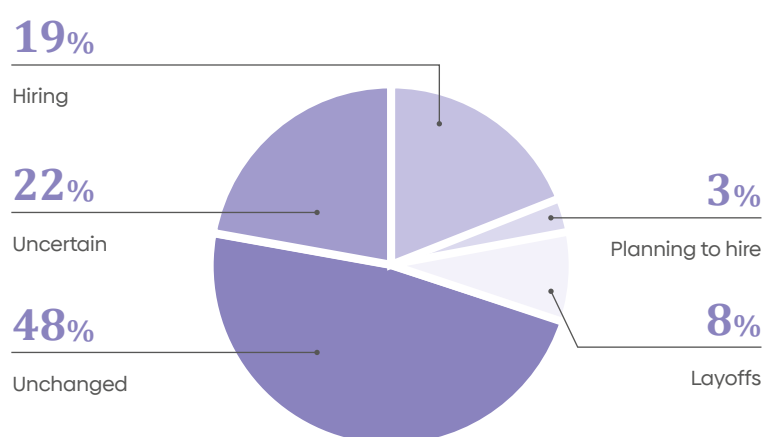


Source: Startup Poland, Polish Startups Report 2021, survey conducted on 229 respondents

## Are Polish start-ups' recruitment activities impacted by the pandemic?

Nearly half of start-ups surveyed (48%) declared that their headcount remained unchanged in 2021 (no hires, no layoffs), which can be interpreted as a sign of stability in times of crisis, but also, as immobility in a more prosperous time. This is a significant change in comparison to the previous year (63%). Only 8% of start-ups indicated a negative impact of the pandemic on employment where they had to lay off employees.

### Headcount changes in Polish start-ups in 2021 due to the COVID-19 pandemic

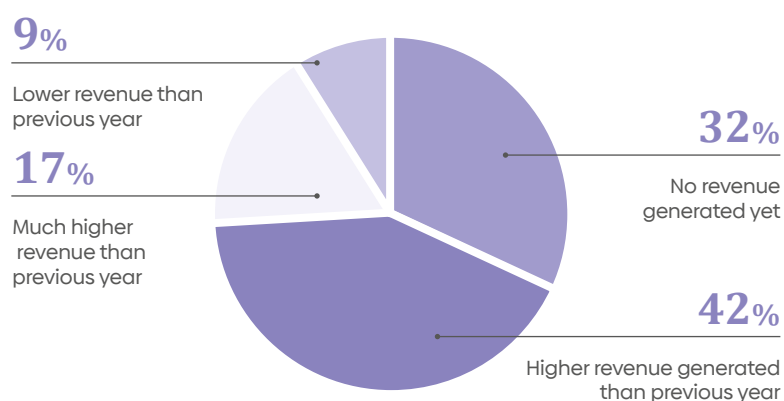


Source: Startup Poland, Polish Startups Report 2021, survey conducted on 229 respondents

## Are Polish start-ups generating revenue?

59% of Polish start-ups generated more revenue in 2021 than in the previous year, which is close to 20 percentage points more than during the last survey conducted in 2020.

### Polish start-up generating revenue in 2021



Source: Startup Poland, Polish Startups Report 2021, survey conducted on 229 respondents

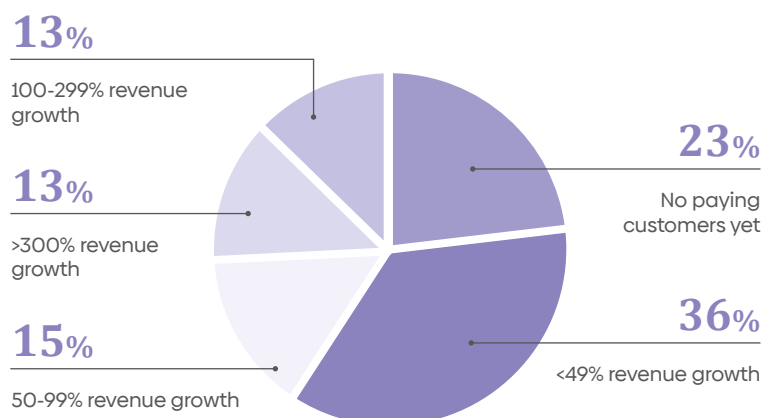


# Focus on Krakow start-ups

## Revenue

Taking a closer look at Krakow and the revenue generated by Krakow start-ups, 23% of start-ups do not have paying customers yet according to OMGKRK's Krakow Startups Report on a survey conducted in 2021 on 140 start-ups operating in the city. Further statistics note that 17 companies (13%) declared a 300% annual revenue growth in 2021.

### Annual revenue growth of Krakow start-ups in 2021



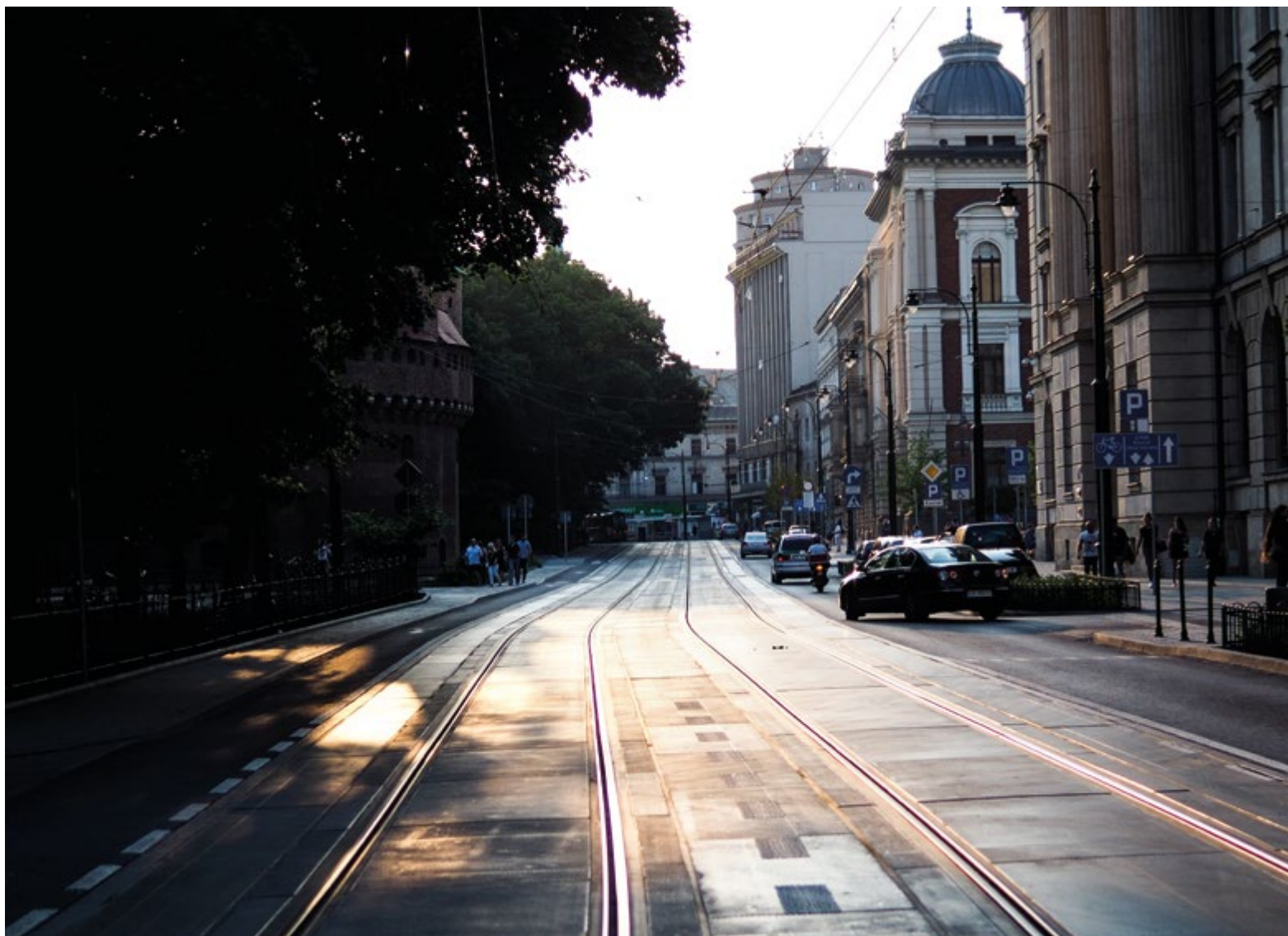
Source: OMGKRK, Krakow Startups Report 2022 survey conducted on 140 respondents

## Top challenges of Krakow start-ups

OMGKRK survey revealed the 3 top challenges faced by Krakow startups in 2021: recruitment, pitching/ investor relationships, and marketing. However, these challenges vary depending on the start-ups' development stage. Here is an overview of the respective challenges for the 4 stages defined by OMGKRK in their Krakow Startups Report.

1 Discovery Phase	2 Validation Phase	3 Growth Stage	4 Mature Phase
29 companies	32 companies	42 companies	17 companies
<b>3 Top challenges</b>	<b>3 Top challenges</b>	<b>3 Top challenges</b>	<b>3 Top challenges</b>
<ul style="list-style-type: none"> <li>Business strategy, business modeling 63,1%</li> <li>Pitching / Talking to investors 57,9%</li> <li>Legal, admin or accounting 47,3%</li> </ul>	<ul style="list-style-type: none"> <li>Pitching / Talking to investors 45%</li> <li>Marketing 45%</li> <li>Sales 41,1%</li> </ul>	<ul style="list-style-type: none"> <li>Recruitment 59%</li> <li>Expansion / Internationalization 40%</li> <li>Marketing 36,3%</li> </ul>	<ul style="list-style-type: none"> <li>Recruitment 81,2%</li> <li>Marketing 43,7%</li> <li>Expansion / Internationalization 31,2%</li> </ul>

Source: OMGKRK, Krakow Startups Report 2022 survey conducted on 140 respondents



## Focus

### Mature start-ups in Krakow

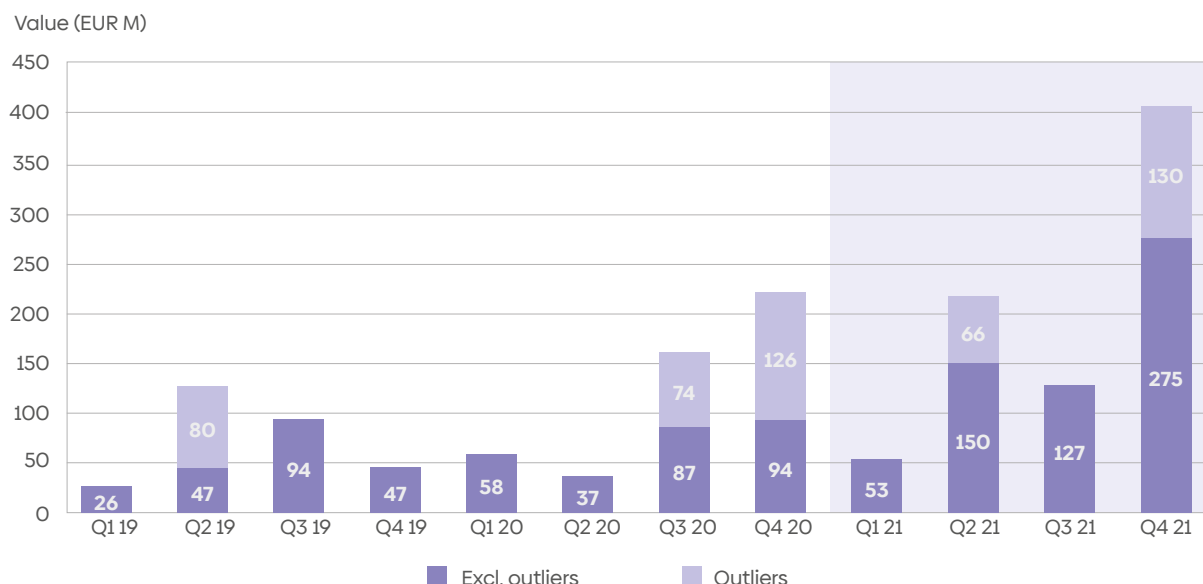
In their Krakow Startups Report, OMGKRK has established a list of mature companies in Krakow, consisting of Autenti, Bidroom, Bitpanda, Elmodis, Kitopi, Azimo, Kontakt.io, Synerise, ReliaSol, Grenton, SILVAIR, Pomelody, Lekta AI, Sinterit, Revolut, FLYR and Brainly.

Selected Key Characteristics of mature companies:

- Half of the mature companies are local subsidiaries of foreign companies, so only 7 Krakow-born startups (Autenti, Brainly, Elmodis, Kontakt.io, Silvair, Grenton, Lekta AI, Pomelody and Sinterit) have been classified to this category.
- Almost all companies in this group are registered as limited liability companies, except Synerise (established as a Joint-stock company). What is interesting is that nearly 60% of these companies are managed by a CEO, who is a 1-st-time founder. Only 2 of the teams have mixed-gender founders, while a significant majority of companies are being managed by male founders.
- 53% of the companies received A round financing, while the remaining group of companies received mainly C round financing. 76,5% of companies received total funding higher than 5M EUR.

# Financing

## Value of VC investment in Poland by quarter (in EUR M)



Source: PFR Ventures, Polish VC market outlook 2021

\*Megarounds that distort the statistical picture. A megaround is considered to be a transaction that exceeds 10% of the value of all investments in a given period.

2021 was a record year in terms of VC investments in the Polish market, with a total of EUR 801M. Although investments fell dramatically in Q1 2021, by the following quarter it had already returned to the level of Q4 2020 reaching EUR 200M+. Q4 2021 saw a groundbreaking record with a total value of EUR 405M and 4 of the Top 5 rounds in 2021.

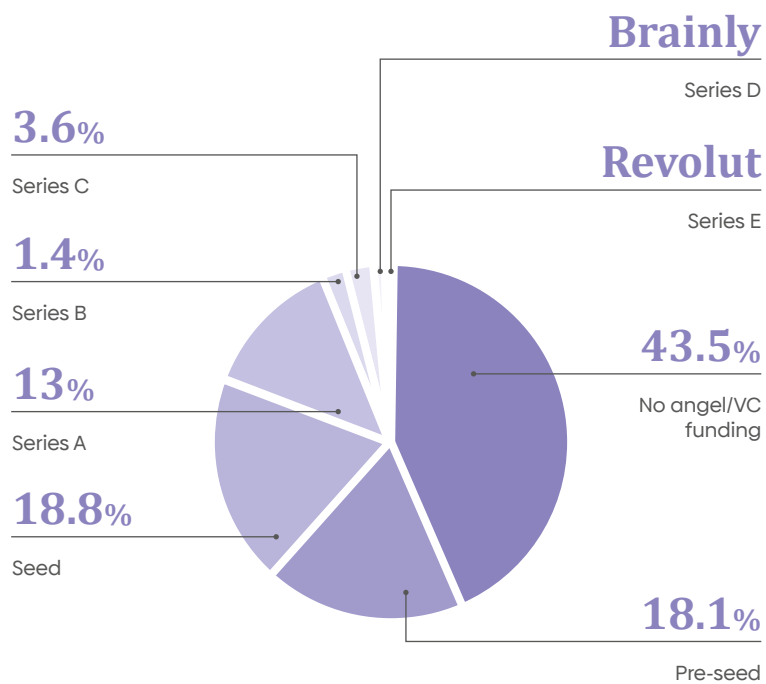
## Top 5 rounds of VC investments in Poland in 2021

<b>Docplanner</b> (Medtech)	<b>EUR 130M</b> [estimated] Series F	Q4 2021
<b>Uncapped</b> (Fintech)	<b>EUR 66M</b> Series B	Q2 2021
<b>Ramp</b> (Fintech)	<b>EUR 47M</b> Series A	Q4 2021
<b>Packhelp</b> (E-commerce)	<b>EUR 40M</b> Series B	Q4 2021
<b>Infermedica</b> (Medtech)	<b>EUR 26M</b> Series B	Q4 2021

Source: PFR Ventures, Polish VC market outlook 2021

Looking back at the Krakow start-up ecosystem, the highest round ever recorded remains Brainly's Series D (\$80M) in Q4 2020. According to OMGKRK Krakow Startups Report, 43,5% of Krakow start-ups have not applied for external sources of funding. Out of those that have received the financing, most funds have been obtained either in Pre-seed or Seed rounds. Only a few companies secured rounds beyond Series A.

## Krakow start-ups investment rounds



Source: OMGKRK, Krakow Startups Report 2022 survey conducted on 140 respondents







# About MOTIFE

## What we do

We are a consulting company that helps international tech businesses scale up with talent from Poland. We specialize in setting up and managing long-term tech teams.

Our clients are companies from Europe, North America, and Middle East.

We provide an end-to-end service: we help evaluate nearshoring options, then recruit a team, set up an office and support local operations. Our focus is on minimizing risk, reducing complexity, and accelerating time-to-value.



### Recruitment

Our in-house recruitment team works closely with a client to find the best talent with the right fit for the organization. We focus on fostering a strong relation with both hiring managers and with candidates in process.



### Outsourcing and EOR

We offer an option to host the newly recruited engineers on our payroll. We make sure the team feels like they are equal members of the international team.



### Setup and operations management

Alternatively, the engineers can be employed by client's new legal entity in Poland that we establish and run. By hiding the complexity and continuously educating the client's team, we minimize an overhead associated with owning a subsidiary in Poland.

**Need to scale up  
your engineering team?  
Get in touch: [hello@motife.com](mailto:hello@motife.com)**

Learn more at **motife.com**

**Blog**

**Client stories**

**Job offers**

**AUTHORS**

MOTIFE  
ul. Krupnicza 3  
31-123 Krakow  
Poland

[motife.com](http://motife.com)

**PROJECT COORDINATORS**

Nicolas Cormier, Michał Piątkowski

**PHOTOS**

Unsplash, MOTIFE, Max@Yolk, Istock, Depositphotos

**SPECIAL THANKS TO**

Jerzy Muzyk, Katarzyna Wysocka and Dominika Urbańska (Municipality of Krakow), Andrew Hallam (ASPIRE), Przemysław Zakrzewski (ABB), Jacek Przybylski and Łukasz Dąbrowski (Cisco), Kamil Dowłaszewicz and Anna Dziedzic-Kurek (EPAM), Krzysztof Ras (Bitpanda), Robert Liziniewicz (Backbase), Rajesh Bysani and Kuba Piwnik (Brainly), Bill Wilkins (Karhoo), Marcin Welner and Mei Lim (Kitopi), Maciej Grzyb (Forte Digital), Justyna Pawlak-Mihułka and Katarzyna Fedewicz (MBA IT, UEK), Dominika Walec (OMGKRR), Dawid Krawczyk and Magdalena Martynowska (TechnipFMC), Piotr Sedlak, Ph.D. and Szymon Adamczyk (Sedlak & Sedlak), John Nash and Marie-Cécile Huet (Nicholson Search and Selection), Dominika Kowalska, Dariusz Madej and Jan Szulborski (Cushman & Wakefield), Max Burgess (Yolk Community & Workspace), Justyna Czystek (Krakow Technology Park), Michał Porzoczyński (Apptio), Łukasz Drewnowski and Anna Micek (VeloxAlpha), Marek Wiśniewski (Comarch), Katarzyna Hajduk (HSBC), Katarzyna Kwiatek (Brown Brothers Harriman), Tomasz Manugiewicz (Grand Parade), Michał Gąszczyk and Sylwia Zajęc (inhire.io), Andrew Samu (DisruptionBanking), Konrad Kuczek, Monika Wojkowska, Jakub Szufnarowski, James Blackhouse, Kris Grzegorzczak, MOTIFE Team.

Share your thoughts, suggestions or questions by writing to [hello@motife.com](mailto:hello@motife.com)

All names, logos and brands are property of their respective owners.

ISBN 978-83-964901-0-0



# MOTIFE

**motife.com**

**Follow us on social media:**

