natek

CEE IT MARKET REPORT 2025

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TWO DECADES DEVELOPING THE CEE'S IT LANDSCAPE

As we proudly celebrate **NATEK's 20th anniversary in 2025**, it is with great pleasure that I introduce the **NATEK CEE IT Market Report 2025**. Building on the success of last year's inaugural edition, this report reaffirms **our commitment to delivering data-driven insights and strategic perspectives** on one of the **world's most dynamic and fast-evolving IT landscapes**. This milestone year offers not only a moment of reflection - on **two decades of growth, learning, and trusted partnerships** - but also an opportunity to look ahead. We remain **focused on shaping the future of technology services across Central and Eastern Europe**, a region we are proud to call home.

In this edition, we explore the **forces accelerating the region's IT evolution**: double-digit market growth, surging investment in AI and cybersecurity, and the transformational impact of nearshoring, infrastructure development, and emerging talent flows. The message is clear: **CEE is no longer just an emerging player - it is helping lead the global tech economy**.

Our journey over the past 20 years has been driven by the **trust of our customers** and the **passion of our people**. This report is a testament to that journey - anchored in the values that define us: **Accountability, Expertise, and Partnership**. I warmly invite you to explore the **trends shaping the next chapter of IT in CEE**. Whether you are considering the region for expansion, innovation, or investment, may this report support your decisions and inspire your strategies.

A heartfelt **THANK YOU** to everyone who contributed to this publication - a true demonstration of the talent and dedication within our organization. **Here's to the next 20 years of excellence, collaboration, and shared success.**

Enjoy the read!

JOANNA PEJO
Interim CEO

EXPERT COMMENT

01 KEY FINDINGS

KEY FINDINGS IN POLAND

AI DEVELOPMENT

Poland is enhancing the **growth of AI** through **significant investments** from both the government and the private sector, including a **EUR 240 million fund for AI development**.

IOT MARKET EXPANSION

IoT market in Poland is **growing at a rate of 14.7% annually**,and is expected to reach **EUR 1.6 billion by 2025**.

DIGITAL TRANSFORMATION LEADERSHIP

Poland is at the **forefront of digital transformation** in CEE, with increasing **investments in infrastructure, cloud computing, and AI** to strengthen its tech ecosystem.

EDUCATION INITIATIVES

To meet the **growing industry demand**, Poland is focusing on **AI education**, with plans to **train thousands of professionals in IT and cybersecurity by 2026**.

Source: ConQuest Consulting analysis

KEY FINDINGS IN THE CZECH REPUBLIC

IT MARKET SLOWDOWN

The IT market in the Czech Republic is **growing at a slower pace** compared to other CEE countries, with an **annual growth rate of only 2.8%** between 2020 and 2024.

SKILLS GAP CHALLENGES

63% of IT companies in the Czech Republic report **difficulties in finding qualified employees** due to a **mismatch between the education system and industry needs**, and a lack of trained specialists.

BOOSTING AI AND SEMICONDUCTORS

The Czech government will **invest EUR 1.7 billion in research and development in 2025**, focusing on **artificial intelligence** and **semiconductors**.

RISING CYBERATTACK THREATS

The Czech Republic faces significant challenges from **increasing cyberattacks**, which negatively impact small and medium-sized enterprises.

Source: ConQuest Consulting analysis

KEY FINDINGS IN BULGARIA

ADVANCING RESEARCH CAPABILITIES

Bulgaria has launched **two supercomputers**, Discoverer and Hemus, valued at **EUR 12 million** and **EUR 15 million**, respectively, boosting its position in CEE for **advanced research capabilities**.

STEADY GROWTH IN E-COMMERCE MARKET

In 2024, **e-commerce** in Bulgaria accounted for approximately **11% of the total industry expertise distribution**, reflecting steady growth in online shopping.

NATIONAL AI MODEL DEVELOPMENT

Bulgaria developed **BgGPT, its own AI model**, with **EUR 114 million in funding**, positioning it to compete with models like GPT-4.

BLOCKCHAIN ADOPTION

Regulatory frameworks for **blockchain** are being developed in Bulgaria, driving **innovation in cryptocurrency and digital transactions**.

Source: ConQuest Consulting analysis

KEY FINDINGS IN SLOVAKIA

DYNAMIC IT MARKET GROWTH

Slovakia's IT market is **growing rapidly**, with a **CAGR of 17.3% from2020 to 2024**, driven by **favorable tax policies** and **access to a qualified workforce**.

ATTRACTIVE IT SALARIES

IT specialist salaries in Slovakia are **competitive** and **attractive** for companies seeking qualified professionals, compared to other CEE countries.

INVESTMENTS IN NETWORK INFRASTRUCTURE

Slovakia's network infrastructure is set to **lead the market** in the CEE region, reaching **EUR 202 million in 2025**, with a **CAGR of 5.8% through 2029.**

ENHANCING IT CONNECTIVITY

Slovakia is heavily **investing in its digital infrastructure**, including **fiber optics** and **5G networks**, to enhance connectivity and support further growth in the IT sector.

Source: ConQuest Consulting analysis

02 MACROECONOMIC ENVIRONMENT

CEE REGION'S ECONOMY EXPANDS AS UNEMPLOYMENT FALLS BY 27%

ABOUT THE CEE REGION

102.4 M

POPULATION IN THE CEE REGION

3.7%

AVERAGE UNEMPLOYMENT RATE IN THE CEE REGION

3%

INFLATION RATE IN THE CEE REGION

2,239 BN

GDP IN THE CEE REGION (EUR)

The CEE region represents a significant share of the European Union, with a **population of 102.4 million**, accounting for **23% of the EU's total population** in 2024. The **unemployment rate has decreased to 3.7%**, marking a **27% decline** from 5.1% in the previous year's report.

In 2024, the **GDP of the CEE region reached over EUR 2,239 billion**, making up **12% of the European Union's total GDP** of EUR 18,979 billion. Meanwhile, the **inflation rate** in the region stands at **3.0%**, compared to 2.7% in the EU.

Source: ConQuest Consulting analysis based on Worldometer database; Statista database; Eurostat database: World Bank Group database; World Population Review database

POLAND STANDS OUT WITH LOW UNEMPLOYMENT

ABOUT POLAND

36.6 M

POPULATION IN POLAND

2.7%

AVERAGE UNEMPLOYMENT RATE IN POLAND

3.9%

INFLATION RATE IN POLAND

807 BN

GDP IN POLAND (EUR)

Poland, with a **population of 36.6 million**, is **one of the largest economies in the CEE region**. The **unemployment rate of 2.7%** is **among the lowest in Europe**, indicating a **strong labor market. Inflation at 3.9% remains moderate**, but higher than in Western Europe.

As of 2024, Poland's **GDP stands at EUR 807.29 billion**, solidifying its position as **a key economic player** in the CEE. The country also excels in the IT sector, with a **highly skilled workforce** and **strong outsourcing capabilities.**

Source: ConQuest Consulting analysis based on Eurostat database; Statista database; World Population Review database

ROBUST EXPORTS AND LOW UNEMPLOYMENT SUSTAIN CZECHIA'S GROWTH

ABOUT THE CZECH REPUBLIC

10.9 M

POPULATION IN THE CZECH REPUBLIC

2.6%

AVERAGE UNEMPLOYMENT RATE IN THE CZECH REPUBLIC

2.3%

INFLATION RATE IN THE CZECH REPUBLIC

353 BN

GDP IN THE CZECH REPUBLIC (EUR)

A **strong export sector, stable fiscal policies**, and a **developed economy** support the Czech Republic's resilience in 2024. With an **unemployment rate of 2.6%** and **inflation at 2.3%**, growth remains steady.

The country's **GDP of EUR 353 billion** is driven by industries like automotive manufacturing, electronics, and machinery. A **strong industrial tradition, high productivity**, and a **skilled workforce** continue to attract investors and businesses.

Source: ConQuest Consulting analysis based on Eurostat database; Statista database; World Population Review database

BULGARIA'S BUSINESS-FRIENDLY ENVIRONMENT CONTINUES TO ATTRACT GLOBAL INVESTORS

ABOUT BULGARIA

6.4 M

POPULATION IN BULGARIA

4.3%

AVERAGE UNEMPLOYMENT RATE IN BULGARIA

2.8%

INFLATION RATE IN BULGARIA

103 BN

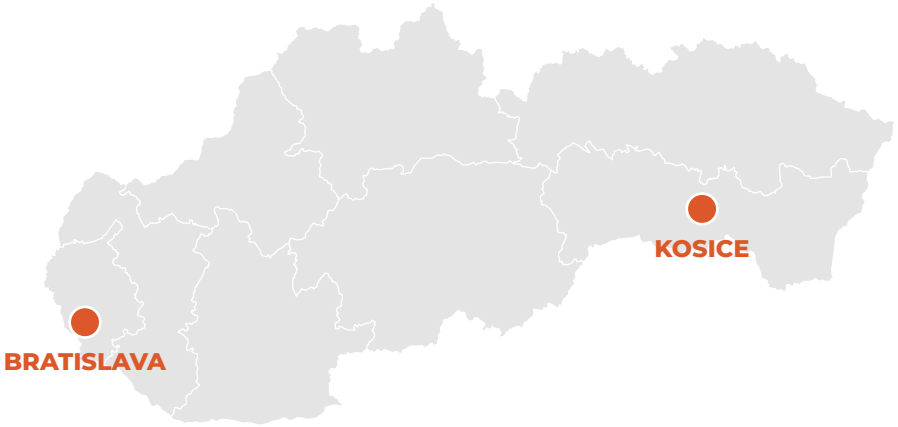
GDP IN BULGARIA (EUR)

With **6.4 million people**, Bulgaria remains a **smaller yet steadily developing economy** in the CEE region. The **unemployment rate of 4.3%** in 2024 reflects **labor market flexibility**, while **inflation at 2.8%** stays under control.

The country's **GDP of EUR 103 billion** is largely fueled by manufacturing, agriculture, and outsourcing. Despite demographic pressures, its **low tax rates** and **strategic location** continue to draw investors.

Source: ConQuest Consulting analysis based on Eurostat database; Statista database; World Population Review database

SLOVAKIA MAINTAINS STRONG INDUSTRIAL GROWTH WITH EUROZONE STABILITY



ABOUT SLOVAKIA

5.4 M
POPULATION IN SLOVAKIA

5.8%
AVERAGE UNEMPLOYMENT RATE IN SLOVAKIA

2.8%
INFLATION RATE IN SLOVAKIA

137 BN
GDP IN SLOVAKIA (EUR)

In 2024, Slovakia maintains a **strong industrial base**, particularly in automotive manufacturing and remains the **top car producer per capita** in recent years. **Unemployment stands at 5.8%**, while **inflation is stable at 2.8%**.

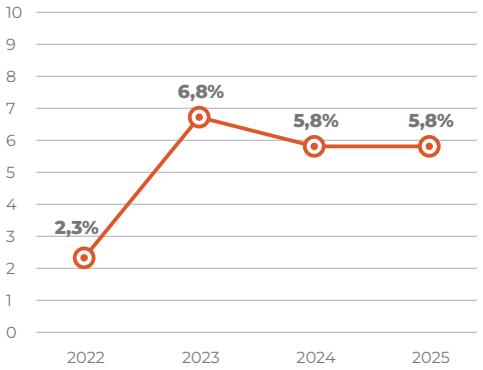
The **GDP of EUR 135 billion** is driven by automotive production, electronics, and mechanical engineering, with **Germany as a key trade partner.** As a member of the European Union and part of the Eurozone, Slovakia benefits from **economic stability**, which supports both investment and trade.

Source: ConQuest Consulting analysis based on Eurostat database; Statista database; World Population Review database

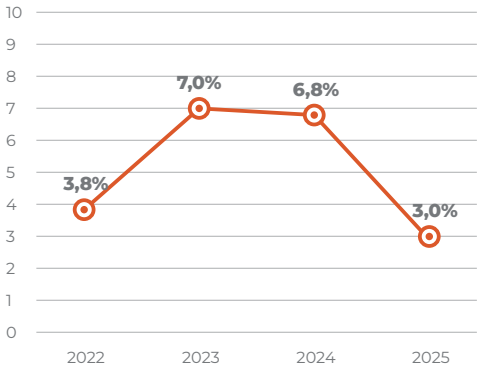
LOWER INTEREST RATES DRIVE IT SECTOR EXPANSION

INTEREST RATES IN 2022-2025

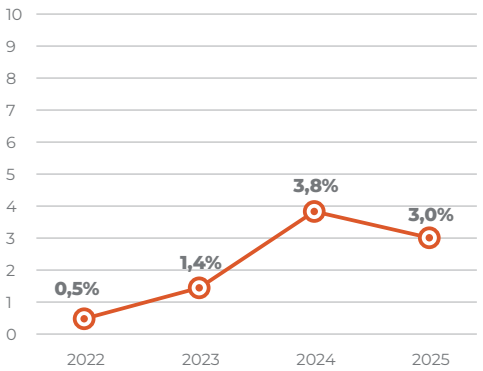
POLAND



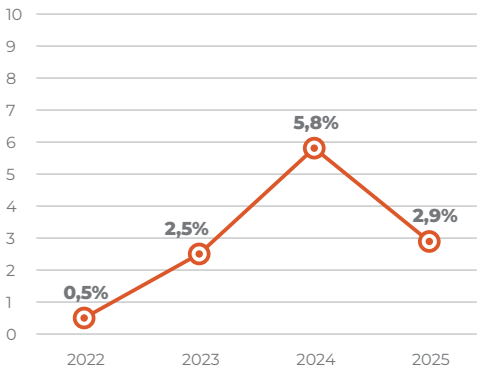
CZECHIA



BULGARIA



SLOVAKIA



Interest rates in Poland, Czechia, Bulgaria, and Slovakia in 2025 are having significant effects on their IT sectors.

In **Poland**, with rates at **5.8%**, higher borrowing costs have **slowed down tech investments**, but the country's established IT market **continues to attract foreign capital**. **Bulgaria**, with a lower rate of **3.0%**, has benefited from **easier access to financing, driving growth in sectors like AI and cybersecurity**. In **Slovakia**, where rates are at **2.9%**, **financing is more affordable**,supporting local tech activity, while **strong EU ties and regional IT collaborations** help maintain market stability. In the **Czech Republic**, with rates at **4.0%**, demand for IT services such as AI and cloud computing remains strong, despite the **increased expense of financing**.

Overall, with **interest rates gradually declining** across the region, the **IT sector continues to grow**, supported by **strong demand for digital solutions**, even as financing costs remain a challenge in some countries.

Source: ConQuest Consulting analysis based on Statista database; Trading Ecomomics database

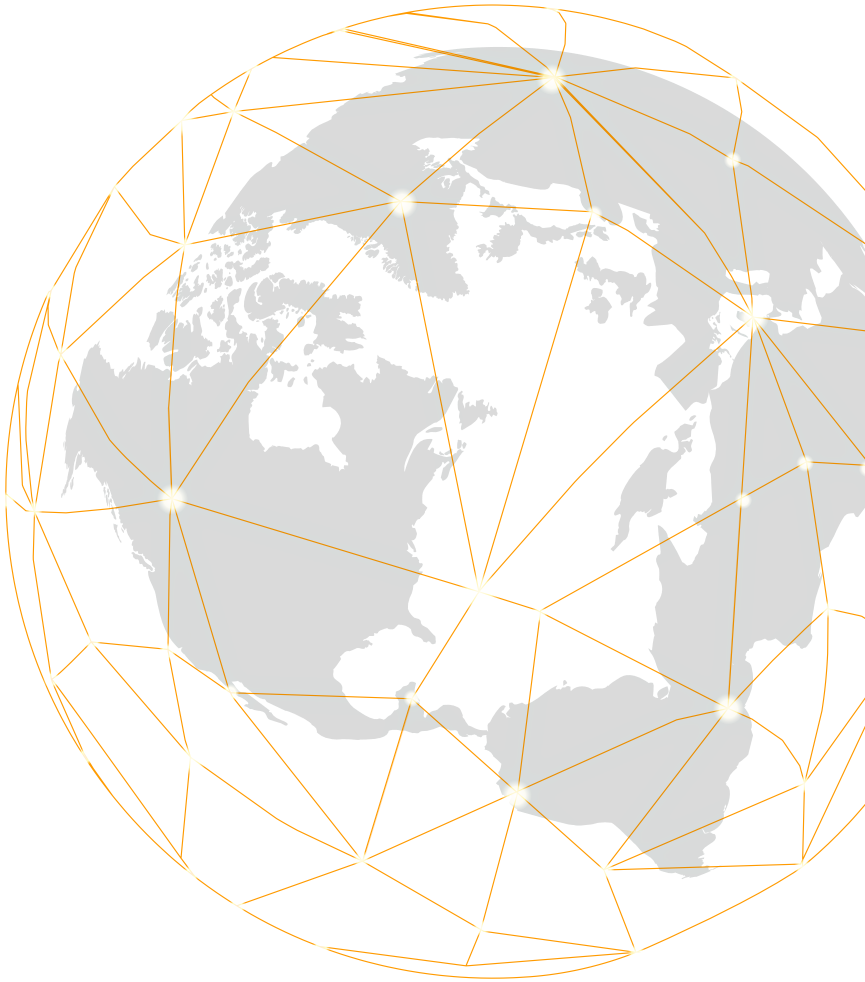
SUPPLY CHAIN DISRUPTIONS AND ENERGY RELIANCE CONTINUE TO PRESSURE THE CEE IT SECTOR

IMPACT OF THE GEOPOLITICAL SITUATION ON THE IT MARKET

In 2024, the IT market in the CEE region experienced **growth amid geopolitical and economic shifts.** The sector benefited from **increased private consumption and investment** as regional **GDP rebounded from 0.7% in 2023 to 2.4% in 2024**.

However, **geopolitical tensions**, particularly Russia's invasion of Ukraine, **disrupted supply chains** and created **economic uncertainty**. The influx of skilled **Ukrainian IT professionals strengthened local labor markets**, while **sanctions on Russia forced companies to seek new markets** and partners.

Meanwhile, **Slovakia and Hungary faced vulnerabilities due to their reliance on Russian energy**, impacting IT sector stability. Despite **inflation declining from 11.2% in 2023** to **4.6% in 2024**, tight labor markets and fiscal transfers kept core inflation high, which, in turn, **affected IT wages and operating costs**. Central banks cautiously **adjusted monetary policy**, balancing economic support with inflation risks. These factors collectively shaped the CEE IT market, fostering both challenges and opportunities in a rapidly evolving geopolitical landscape.



Source: ConQuest Consulting analysis based on S&P Global, „CEE Sovereign Rating Outlook Midyear 2024", 2024; Scope Ratings, „CEE 2024 Sovereign Outlook", 2024

OVER 40% RELIANCE ON RUSSIAN ENERGY POSES RISKS, WHILE THE BALTICS ACHIEVE INDEPENDENCE BY JOINING EU ELECTRICITY GRID IN 2025

ENERGY DEPENDENCE OF HUNGARY AND SLOVAKIA

Heavily reliant on Russian energy imports, these two countries rank among the most energy-dependent in Central and Eastern Europe. In 2021, **Hungary secured a 15-year agreement with Russia for the annual supply of 4.5 billion cubic meters of natural gas**, effectively limiting diversification efforts. Additionally, in 2023, **nuclear power constituted 44.8% of Hungary's** and **61.3% of Slovakia's electricity production**, underscoring their significant **reliance on Russian nuclear fuel.** Despite ongoing geopolitical tensions, Hungary maintains close energy ties with Russia, citing **favorable pricing** and the need to **shield domestic consumers from the energy crisis**. However, this dependence exposes both nations to geopolitical risks and potential supply disruptions.

BALTIC REGION ENDS RELIANCE ON RUSSIAN POWER GRID

On February 8, 2025, **Lithuania**, **Latvia**, **and Estonia** completed their desynchronization from the Russian and Belarusian power systems, **integrating into the European power grid** the following day. This strategic move, initiated in 2007, aimed to **bolster regional energy security** and **fully integrate the Baltic states into the European Union's energy market**. By severing ties with the **BRELL ring** - a legacy of Soviet-era infrastructure - the Baltic nations have **reduced their vulnerability to political pressures** from Moscow, enhancing both their energy sovereignty and the stability of the EU's energy supply.

Source: ConQuest Consulting analysis based on Institute of Central Europe, „Sto gyélaty? Węgry konsekwentnie uzależniają się od rosyjskich źródeł energii", 2022; European Commision, „Litwa, Łotwa i Estonia niezależne od rosyjskiej energetyki", 2025; Business Insider, „Wielka synchronizacja w rejonie Bałtyku. Koniec z reliktem ZSRR", 2025

CEE EVOLVES WITH AI GROWTH AND UKRAINIAN IT TALENT, DRIVING INNOVATION AND INCREASING ENERGY DEMANDS

GROWING ENERGY DEMAND

The **rapid advancement of artificial intelligence** has significantly **increased energy consumption**, driven by the **high computational demands of AI models. Data centers**, which are central to AI operations, currently account for **approx. 1-2% of global electricity usage**, with projections indicating a **160% surge in energy demand by 2030**. This rising consumption has put pressure on electricity grids and contributed to **increasing energy costs**, as infrastructure expansion struggles to keep pace with demand. In response, **major technology companies such as Google and Microsoft are investing in renewable energy solutions** and more **efficient computing systems** to **balance sustainability** with the growing need for AI-driven processing power.

INFLUX OF EASTERN SPECIALISTS

At the same time, the CEE region has seen a **significant rise in the number of Ukrainian IT professionals** entering its labor market, **filling talent gaps and strengthening the technology sector**. Their expertise has supported the region's expanding AI and data-driven industries, enhancing CEE's position as a **competitive hub for innovation**. However, this arrival of talent also brings **new challenges**, including the **need for effective integration strategies and support systems** to sustain long-term growth in the technology sector.

Source: ConQuest Consulting analysis based on Goldman Sachs, „AI is poised to drive 160% increase in data center power demand", 2024; Reuters, „Ukrainian migrant exit could squeeze Eastern Europe's economies", 2025

03
THE STATE OF IT MARKET

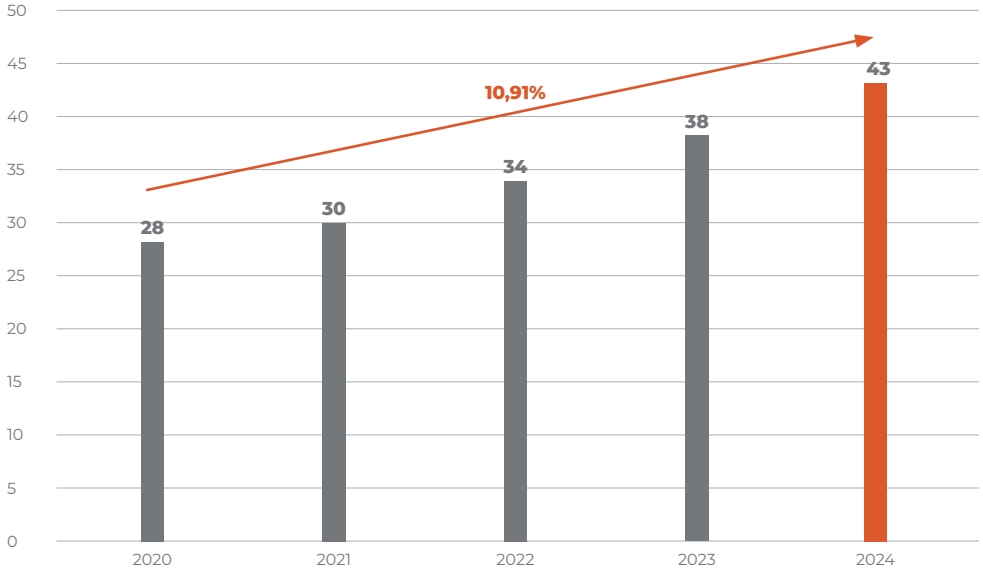
IT GROWTH IN CEE DRIVEN BY RISING IMPORTANCE OF ARTIFICIAL INTELLIGENCE AND CYBERSECURITY

CEE IT MARKET

The CEE IT market grew at an **average annual rate of 10.9% between 2020 and 2024**.

Poland is the largest IT market, reaching a **value of EUR 27.4 billion** in 2024, while **Bulgaria is the fastest-growing market,** with a **CAGR of 20.7%** during the same period. IT development in CEE is driven by the **growing value of cloud services, artificial intelligence and rising investments in cybersecurit**y. In addition, many companies are **turning to outsourcing service** in the region due to **cost advantages** and **access to skilled professionals.**

Value of CEE IT market (bln EUR) in 2020-2024

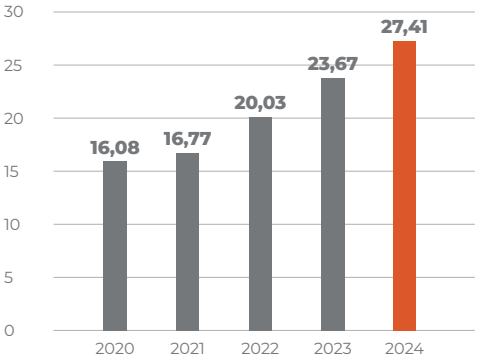


Source: ConQuest Consulting analysis based on Statlista database and report Technavio, "Czech Republic - IT Market by Type, Application and End-user - Forecast and Analysis 2024-2028", 2024 and article Vertihar, "Will the Polish IT Market Improve in 2025?", 2024

POLAND HAS THE LARGEST IT MARKET IN THE CEE REGION

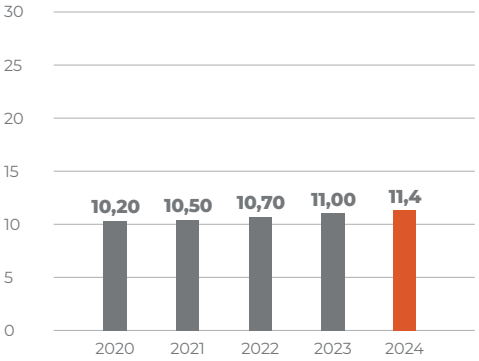
IT SECTOR VALUE (BLN EUR) IN 2020-2024

POLAND



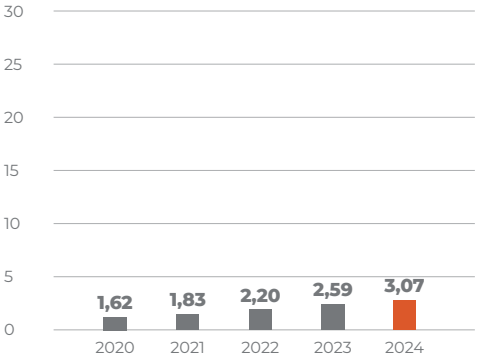
The CAGR of the Polish IT market from 2020 to 2024 was **14.3%**. The country's current government appears to recognize the strategic importance of the IT industry and has implemented **new policies and initiatives to support its development**. Examples of this include the **organization of training programs** and providing **expanded access to broadband internet.**

CZECHIA



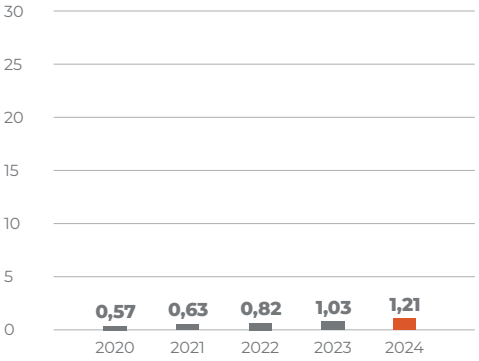
The CAGR of the IT market in the Czech Republic during 2020-2024 was **2.8%**. An **increasing number of cyberattacks** is regarded as one of the **main threats to the development of the IT market** in the country. These attacks have the **greatest impact on small and medium-sized enterprises** (SMEs), which often lack robust IT security infrastructure.

SLOVAKIA



The Slovak IT market has recorded a CAGR of **17.3%** during 2020-2024. Slovakia offers favorable conditions for the development of IT companies due to access to a **qualified workforce and attractive tax policie**. In addition, the **government actively supports the IT sector** through various initiatives.

BULGARIA

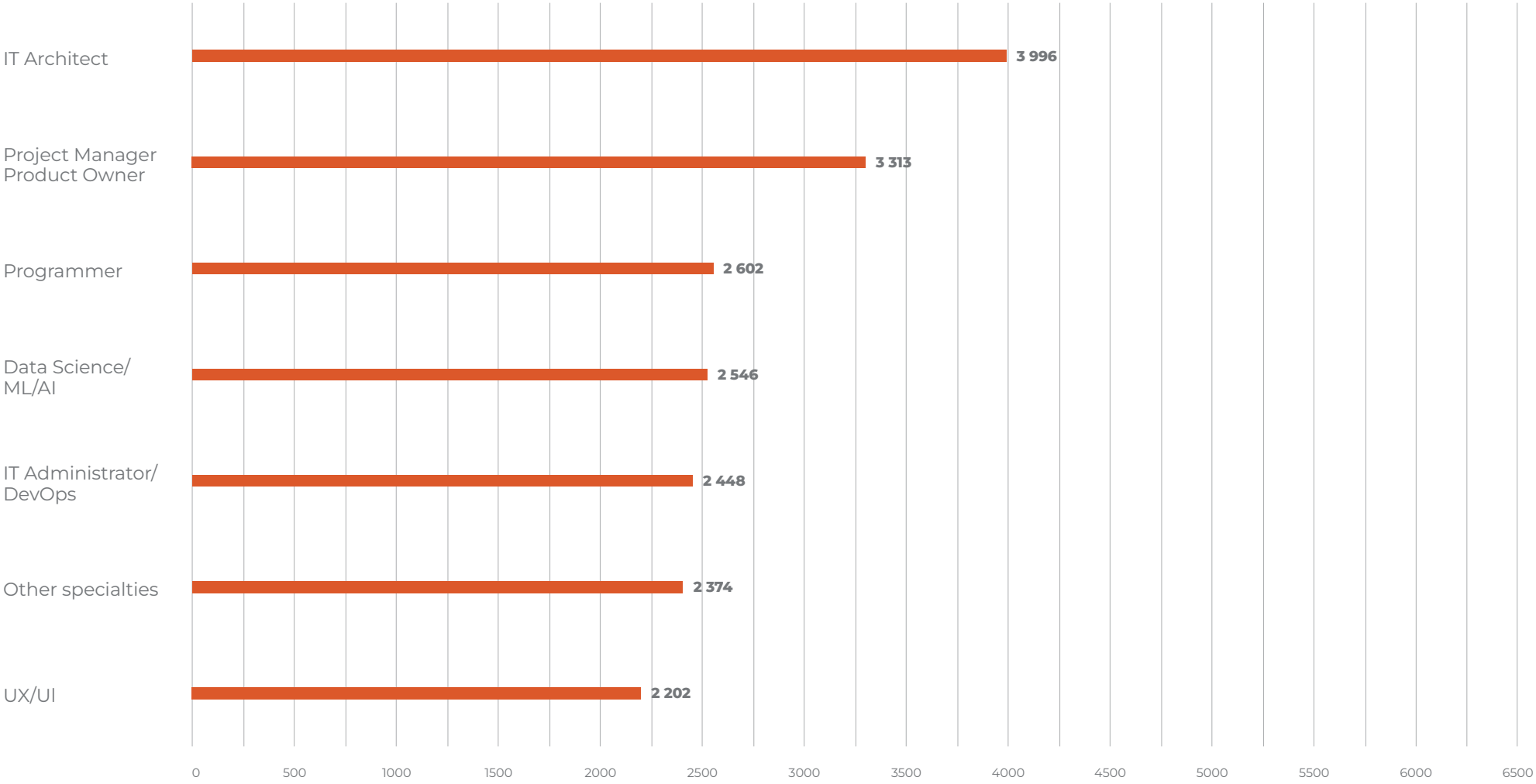


The CAGR of the IT market in Bulgaria during 2020-2024 was **20.7%**. The main factors driving this significant growt in the country's IT market are the **rising adoption of cloud technologies** and the **expansion of cybersecurity solutions**.

Source: ConQuest Consulting analysis based on Statlista database and report Technavio, "Czech Republic - IT Market by Type, Application and End-user - Forecast and Analysis 2024-2028", 2024 and article Vertihar, "Will the Polish IT Market Improve in 2025?", 2024

IT ARCHITECTS EARN AN AVERAGE OF NEARLY EUR 4 THOUSAND IN POLAND

AVERAGE SALARIES BY POSITION IN THE IT SECTOR ON CONTRACT IN POLAND IN 2025 (EUR)



Source: ConQuest Consulting analysis based on Bulldogjob report, "Raport społeczności IT" 2025

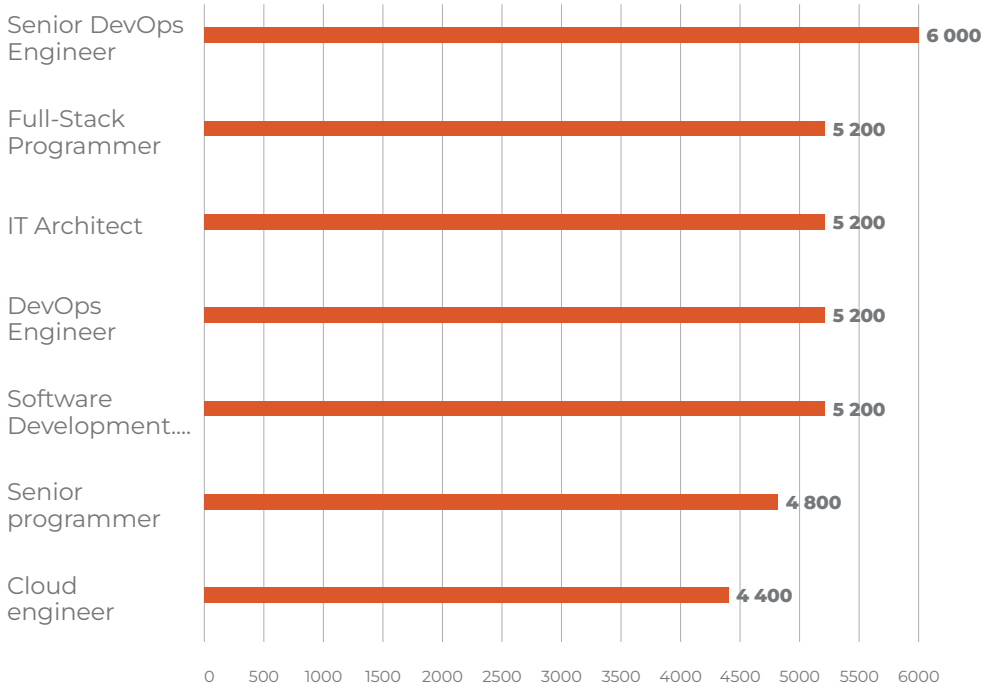
MORE THAN HALF OF COMPANIES IN THE CZECH REPUBLIC HAVE TROUBLE FINDING AN IT SPECIALIST

SALARIES IN IT SECTOR IN THE CZECH REPUBLIC IN 2024

Software Developers, IT Administrators, Architects, Testers, Managers, Cloud Engineers, Cybersecurity Specialists, and Data Analysts are in greatest demand. The increase in employers' interest in certain positions is also linked to the **emergence of artificial intelligence**.

Among the most popular programming languages are **JavaScript, PHP, Java, C++, Python, C# and languages for Android and iOS**. As many as **63% of IT companies are struggling to find qualified talent**, due to, among other things, inadequate schooling opportunities.

Average salaries in IT sector in Czech Republic in 2024 (EUR)



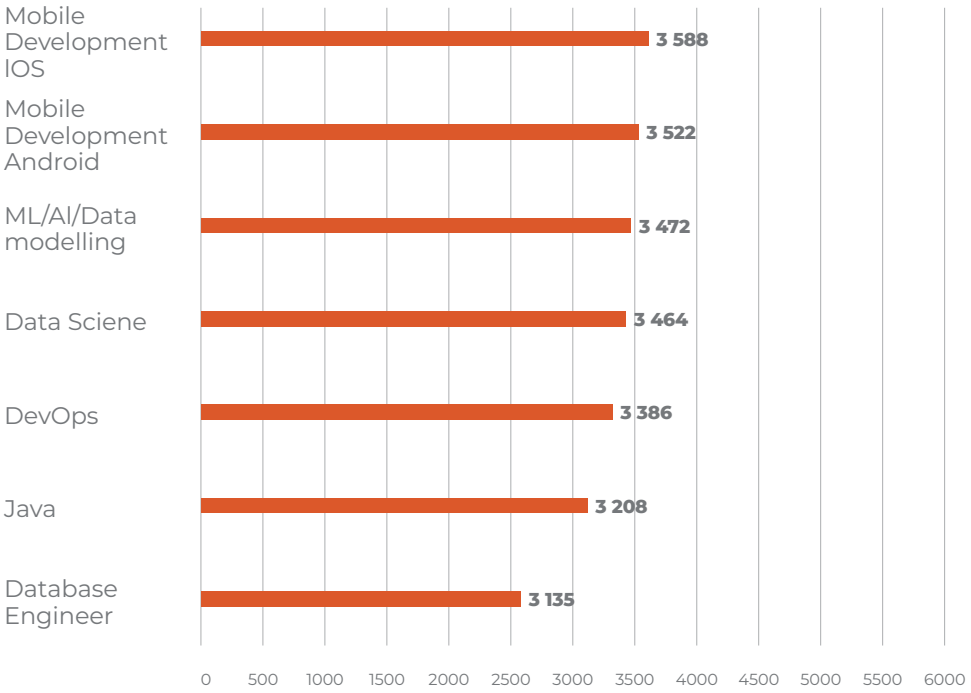
Source: ConQuest Consulting analysis based on articles NuCamp „Top 10 Best Paid Tech Job in Czech Republic in 2025", 2025; Cz.cpl, „Jaké jsou nejžádanější IT pozice, dovednosti a platy na českém trhu?", 2024

MOST IT PROFESSIONALS IN BULGARIA EARN LESS THAN EUR 4 THOUSAND

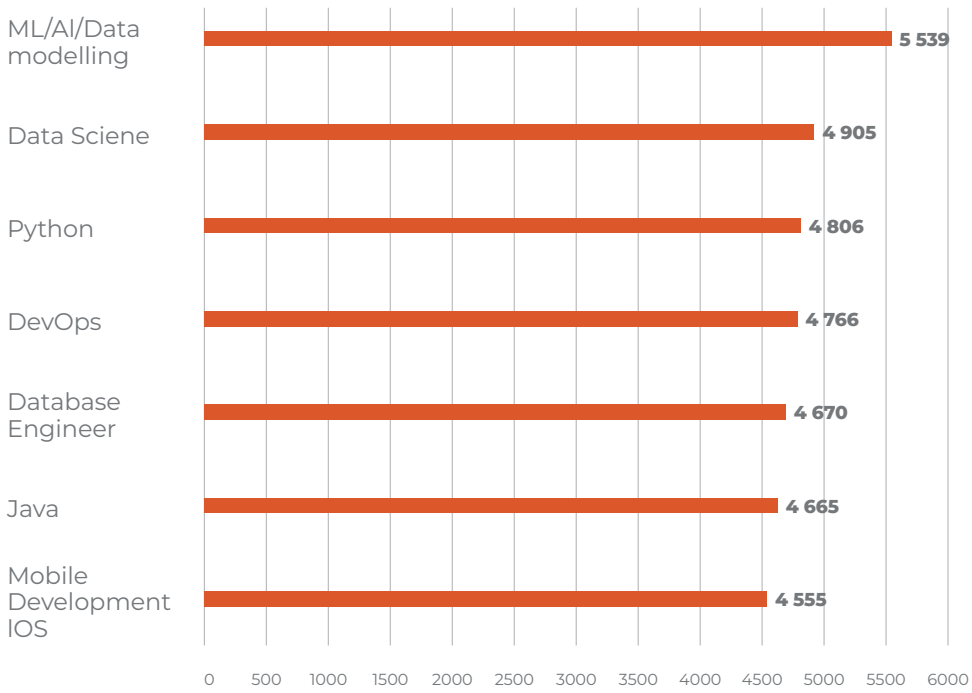
BULGARIA

In the survey, **35% of respondents** reported **incomes between EUR 1 282.55 and 2 556.50**, while **another 35%** earn **between EUR 2 556.76 and EUR 4 090.40**. About **20% of professionals earn more than EUR 4 090.40**, while **4%** indicated that their income **does not exceed EUR 766.95**. It is also worth noting that Bulgaria stands out in the EU in terms of the **high proportion of women in the IT industry - they account for 28.2% of specialists**, which is due to the high level of education in the country.

Average salaries by position in the IT sector for employees with 2-5 years of experience in Bulgaria in 2024 (EUR)



Average salaries by position in the IT sector for employees with 5+ years of experience in Bulgaria in 2024 (EUR)



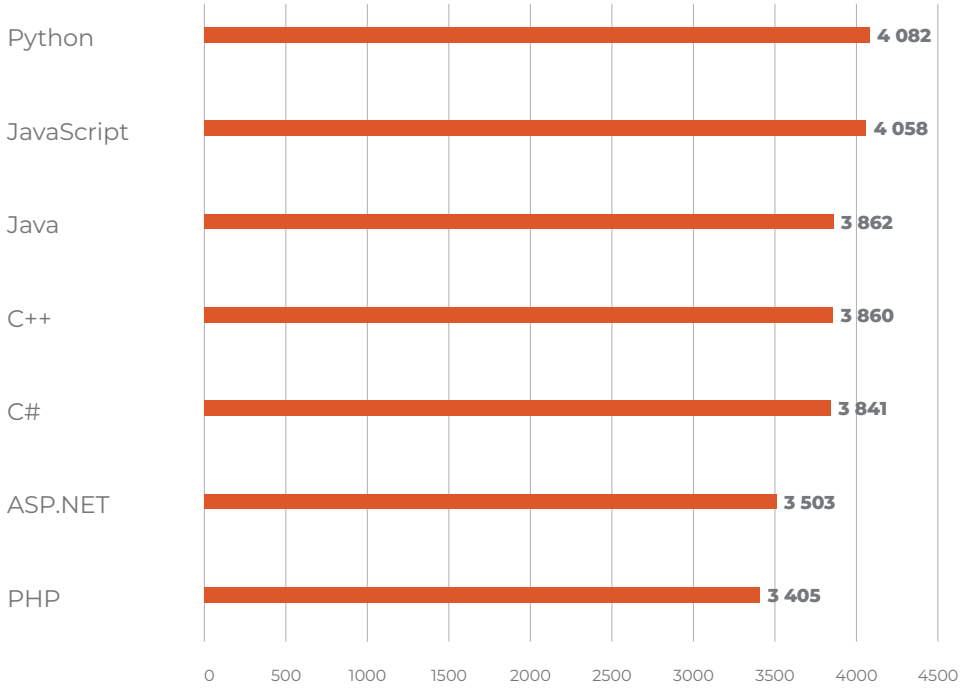
Source: ConQuest Consulting analysis based on Report N-iX „Top IT outsourcing destinations of Eastern Europe: Market report", 2024 and article Dev.bg, „Заплатите в IT индустрията в България през 2024 г.", 2024

COST OF IT SPECIALISTS IS COMPETITIVE IN SLOVAKIA COMPARED TO OTHER CEE COUNTRIES

AVERAGE SALARIES OF PROGRAMMERS IN SLOVAKIA BY PROGRAMMING LANGUAGE IN 2024

Although the rates of Slovak programmers in the ICT sector are **higher than the national average**, they remain **significantly lower compared to Western countries** and are still **competitive in the CEE region**. This is why more and more **international companies are eager to hire Slovak programmers**, as they can **save costs** while getting highly competent professionals.

In terms of tech-stack rates, **C++, JavaScript Developers, and PHP Developers** in Slovakia are paid the lowest annual salaries, while Slovak **Python Developers and TypeScript Programmers** receive the **most generous compensation in the compared countries**.



Source: ConQuest Consulting analysis based on articles Alcor, „Slovak Developers: Benefits, Rates & IT Market Overview", 2024 and website Platy.sk, „Salaries in the category: Information Technology", 2025

CEE COUNTRIES INVEST IN AI AND INFRASTRUCTURE TO BOOST ECONOMIC COMPETITIVENESS

IT INVESTMENTS IN CEE

Poland, the Czech Republic, Bulgaria, and Slovakia are investing mainly in **AI, expanding internet accessibility among the population, and enhancing citizens' digital skills**.

Polish AI startups are **raising the most funds** among CEE countries, amassing **EUR 171 million in 2024**. Among the largest investments is also infrastructure expansion, such as **broadband internet rollout in the Czech Republic**. The main goals of the CEE countries' projects are to **improve the competitiveness of the region, raise the standard of living, provide adequate conditions for the development of the IT market, and secure national cyberspace**.

Source: ConQuest Consulting analysis based on The Recurisve, "The Recursive-State of AI in CEE Report.", 2024 and website www.commision.europa.eu

ENHANCING IT CAPABILITIES THROUGH STRATEGIC PARTNERSHIPS

Schwäbisch Hall

As we advance our digital transformation, expanding our IT capabilities through collaboration with experts in Central and Eastern Europe has proven to be a valuable strategy. The region is **home to highly skilled professionals with deep expertise in cloud computing and software development**. A **strong focus on STEM education** and a **culture of technical excellence** ensures that we work with teams that are both **innovative and adaptable**.

By building these partnerships, we achieve **cost efficiency without compromising quality**. The **geographical and cultural proximity to Germany** facilitates smooth cooperation, aligned working styles, and real-time collaboration - critical factors for delivering complex IT projects successfully. Moreover, the region's **growing innovation ecosystem** and **stable regulatory environment** provide a **solid foundation for long-term engagement**.

With this approach, we can **focus on our core business while ensuring that our technology landscape remains cutting-edge, resilient, and ready for the future**.

NEBOJSA BOJOVIC

Head of Information Management & Data Analytics

EXPERT COMMENT

POLISH AI STARTUPS LEAD CEE IN FUNDING RAISED IN 2024

IT INVESTMENTS IN POLAND

EUR 671 million

MICORSOFT'S INVESTMENT IN POLAND

Microsoft has announced that it intends to **spend EUR 671 million by the end of June 2026** to **expand its hyperscale cloud and AI infrastructure in Poland**, as well as work with the Polish Ministryof Digital Affairs on **strengthening national cyber security**. The investment will support the **expansion of existing data centers**, introducing an **expanded set of Microsoft's cloud computing platform services** to meet customer demand in the region. The goal is to **accelerate the deployment of AI and the cloud, increase the competitiveness of the economy**, **develop digital technologies**, **educate citizens on the topic of artificial intelligence**, and **create new jobs**. By the end of 2025, the company is expected to **train 1 million people** - IT professionals, teachers, lecturers, and business leaders - in AI and cybersecurity.

EUR 171 million

AI STARTUPS

Poland manages to top many rankings when it comes to startups and investments. In 2024, the Polish AI startups **attracted almost EUR 171 million**, with **Eleven Labs at the front**, a company which specializes in advanced speech processing technologies based on artificial intelligence, raising the most – **EUR 74 million**. In addition, an **Artificial Intelligence Fund is planned to be established in Poland**. It will serve as an advisory body aimed at **supporting the development and implementation of artificial intelligence in the country**, with the government also **allocating EUR 240 million for AI development activities**.

Source: ConQuest Consulting analysis based on The Recurisve, "The Recursive-State of AI in CEE Report.", 2024 and articles IT wiz, „Powstanie Fundusz Sztucznej Inteligencji – na rozwój AI w Polsce rząd przeznaczy 1 mld zł", 2024; News.micorsoft, „Microsoft ogłasza inwestycję 2,8 mld zł w infrastrukturę chmurową, sztuczną inteligencję, umiejętności oraz cyberbezpieczeństwo w Polsce", 2025

CZECH GOVERNMENT INVESTS IN BROADBAND AND 5G NETWORK DEVELOPMENT

IT INVESTMENTS IN THE CZECH REPUBLIC

EUR 1.72 billion

INVESTMENT IN AI

Czech AI startups raised **EUR 21 million** between January and August 2024, compared to EUR 87 million in all of 2023, indicating a **decrease in funding**. However, the Czech Republic continues to be eager to invest in AI. The government is set to **increase its research and development budget by nearly 8%**, to **EUR 1.7 billion in 2025**, the largest rise since 2017, focusing on areas like **artificial intelligence and semiconductors**.

EUR 580 million

BROADBAND INTERNET ACCESS

A **national ultra-high-capacity network development plan** was approved on **March 1, 2021**. The Czech Republic is implementing the **National Plan for the Development of Very High Capacity Networks**, which calls for the **construction of reliable broadband infrastructure** and the **development of 5G networks**. Investments are focused on backhaul and access networks, especially in rural and hard-to-reach areas. By 2026, **23,000 new gigabit connections** will be built and **350 railroad cars** will be equipped with 5G converters. The **total investment in broadband development** in the Czech Republic is about **EUR 580 million.** Of this, about **75%** will **come from public funds**, with the remainder coming from the private sector.

Source: ConQuest Consulting analysis based on The Recurisve, "The Recursive-State of AI in CEE Report.", 2024 and website www.commision.europa.eu

BULGARIAN INSTITUTE HAS DEVELOPED ITS OWN AI MODEL THAT COMPETES WITH CHATGPT

IT INVESTMENTS IN BULGARIA

EUR 114 million

RESEARCH CENTER

Thanks to the cooperation of several institutions, the **Institute for Informatics, AI and Technology (INSAIT) was established in 2022**. It received **more than EUR 114 million** from the Bulgarian government and companies such as Amazon and Google. In 2024, the institute announced the launch of a **new version of Bulgaria's first major language model, BgGPT**. Bulgaria is the first Central and Eastern European country with a **separate AI language model** developed by a public organization. **BgGPT 27B outperforms both OpenAI's free GPT-4o-mini and Anthropic's Haiku** model and is comparable to GPT-4o (paid).

EUR 26,5 million

SUPERCOMPUTERS

The launch of a machine called **Discoverer** was announced in 2021. It is a **supercomputer whose computing power is expected to help develop research** on topics such as engineering, energy and modeling molecular interactions. The **value of this investment was EUR 12 million**. Furthermore, another supercomputer, **Hemus**, **worth EUR 15 million**, was launched in 2023. Bulgaria, with two such machines, stands out in the CEE region, but it is still behind **Poland, which has three such computers**.

Source: ConQuest Consulting analysis based on article The Recursive, „Bulgaria Becomes the First CEE Country to Launch a Globally Competitive Publicly Developed LLM", 2024; Przybliżamy Bułgarię, „Największe bułgarskie osiągnięcia naukowe i technologiczne w roku 2023", 2024 and website www.discoverer.bg

SLOVAKIA WANTS TO INTRODUCE FIBER OPTICS IN EVERY HOUSEHOLD BY 2030

IT INVESTMENTS IN SLOVAKIA

EUR 960 million

FIBER OPTICS ACROSS THE COUNTRY

By 2030, Slovakia's national broadband plan envisions **coverage for all households with speeds of at least 100 Mbps**, expandable to 1 Gbps, as well as **coverage for socio-economic drivers with gigabit connectivity**. The investment is estimated at approximately **EUR 960 million**. This project will positively impact the **development of digital infrastructure and enhance residents' digital skills**.

EUR 39 million

AI STARTUPS

In 2024, the **startup ecosystem in Slovakia remained relatively steady** compared to the previous period, securing significant **investments totaling EUR 39 million**. Slovakia, however, aims to further develop AI. The first **AI-focused high school in Europe opened in Bratislava**, offering programs in **hybrid application development and digital game development**, with an emphasis on practical skills.

Source: ConQuest Consulting analysis based on The Recurisve, "The Recursive-State of AI in CEE Report.", 2024 and website www.commision.europa.eu

RISING DEMAND FOR CONVENIENCE IS ACCELERATING THE GROWTH OF E-COMMERCE AND AI IN POLAND

IT MARKET TRENDS IN POLAND

ONLINE SALES GROWTH

Poland is **one of the fastest-growing e-commerce markets in Europe**, reaching **EUR 33.33 billion in 2024**, and is projected to **grow to EUR 46.04 billion in 2028**, with an average annual **growth rate of 8%**. One in three **Polish Internet users purchases from foreign stores**, mainly in search of products available at better prices or that are unavailable on the domestic market. The most popular goods bought online are clothing and accessories, footwear, books, music, movies, and cosmetics. Poles use various online shopping platforms, but tend to **buy most often via Allegro**.

AI DEVELOPMENT

The **artificial intelligence market in Poland was worth EUR 1.33 billion in 2024** and is projected to **reach EUR 6.09 billion by 2030**. The labor market follows suit, with **22% more vacancies in 2024** than the year before. The increased **use of digital technologies, growing awareness about health, and the convenience of online health services** are the main factors driving the growth of the artificial intelligence market. AI technology finds applications in creating autonomous systems, recognizing images, speech, and patterns in large data sets, and countering cyberattacks. Artificial intelligence will affect industries such as **medicine**, **education and security**.

Source: ConQuest Consulting analysis based on Statlista database and No Fluff Jobs "IT labor market in Poland in 2024.", 2024

CZECHIA AIMS TO BECOME A MAJOR PLAYER IN THE AI MARKET

IT MARKET TRENDS IN THE CZECH REPUBLIC

GROWING IMPORTANCE OF CYBERSECURITY

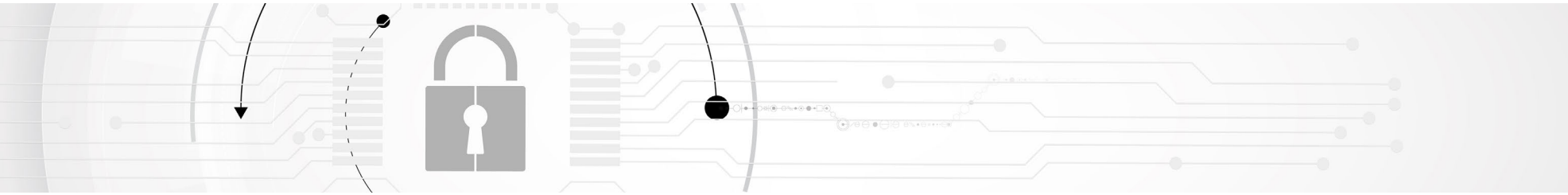
In the Czech Republic, institutions fend off an average of **about 2 thousand cyberattacks per week**, and forecasts indicate that this number will continue to rise. By comparison, Poland records only about 1,430 attacks per week. As a result of the growing threat, the Czech Republic is stepping up **investment in digital security**. The country is considered an **EU leader in the field of cybersecurity**, mainly due to the activities of many institutions working in this field. In addition, authorities are introducing new legislation and holding numerous meetings and conferences on digital security.

Although the **country employs around 221 thousand ICT professionals**, there has been a significant **shortage of cybersecurity experts**. The main reason for this phenomenon is **inadequate salaries in the public sector**, which make it difficult to recruit and retain qualified employees.

DEVELOPMENT OF ARTIFICIAL INTELLIGENCE

The **artificial intelligence market is estimated to reach EUR 783.22 million in 2025** and **grow to EUR 2.66 billion by 2030**, at a compound annual growth rate of 27.66%.

The Czech Minister of Industry and Trade, Jozef Síkela, believes that Czechia **should not only be a user, but also a developer of advanced artificial intelligence technologies**. The first step in this direction was the update of the Czech Republic's strategy related to AI development in July 2024, which aims, among other things, to **improve education, develop digital skills, foster business innovation, and improve administration**. This indicates the strategic importance of the artificial intelligence market as an **important investment area for the state**.



Source: ConQuest Consulting analysis based on Statlista database and NÚKIB, "Report on the State of Cybersecurity in the Czech Republic," 2023; N-iX, "Top IT outsourcing destinations of Eastern Europe," 2024 and and Telko.in article, „Liczba cyberataków na Polskę od początku roku wzrosła o 60 proc.", 2024 and websites www.czechtrade.com, mpo.gov

OUTSOURCING SEGMENT ACCOUNTS FOR THE LARGEST PART OF THE IT MARKET IN BULGARIA

IT MARKET TRENDS IN BULGARIA

GROWING OUTSOURCING

Revenue in the Bulgarian IT market is projected to grow at a CAGR of 6.08% between 2025 and 2029, **reaching EUR 483.72 million in 2025**. The **outsourcing segment** is expected to be the **key driver of this growth**, generating **EUR 188.77 million**. The sector's strong performance is largely attributed to Bulgaria's **highly qualified IT workforce** and **competitive labor costs**.

Currently, the country **employs 110 thousand IT professionals**, who consistently achieve high rankings in international programming assessments. Additionally, Bulgaria's **10% corporate tax rate**, **the second lowest in the European Union**, further strengthens its appeal as a destination for IT investments and outsourcing services.

GROWING IMPORTANCE OF INNOVATION

The **IoT market in** Bulgaria reached **EUR 716.05 million in 2024** and is expected to **grow to EUR 1.13 billion by 2029**, at a CAGR of 9.57%.

Major Bulgarian cities such as Sofia, Varna, Burgas, Plovdiv, and Vratsa have **implemented smart city initiatives** in the areas of smart traffic management, smart lighting, IoT sensors for air quality monitoring, smart grids for energy management, and waste management systems aimed at increasing urban efficiency and reducing environmental impact. EU funds support the **modernization of urban infrastructure and the integration of IoT into public services**, while the national strategy focuses on **digital innovation and sustainable urban development**.

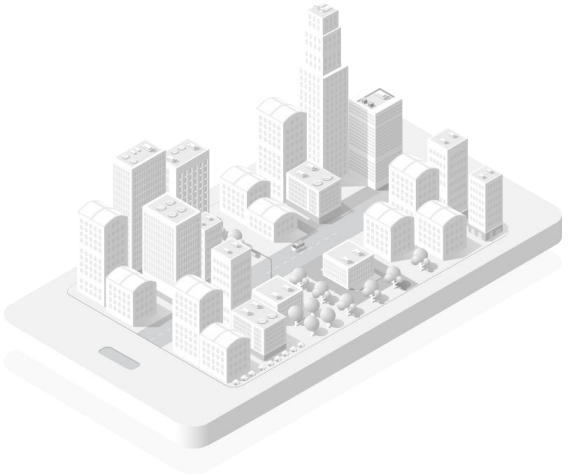
Source: ConQuest Consulting analysis based on Statlista database and Mordor Intelligence, "Bulgaria ICT Market Size & Share Analysis - Growth Trends & Forecasts (2025 - 2030)," 2024; Coursera, "Global Skills Report," 2023; and website www.trade.gov

IOT AND SMART CITIES ARE GROWING RAPIDLY IN SLOVAKIA

IT MARKET TRENDS IN SLOVAKIA

GROWING VALUE OF THE GAMING INDUSTRY

Revenues in the Slovak games market are estimated to reach **EUR 311.36 million in 2025**. The CAGR is expected to be 5.49%, which will translate into an estimated **market value of EUR 377.17 million** and the **number of users reaching 1.6 million in 2029**. Slovakia's gaming industry is seeing rapid growth, especially in the **mobile sector**, reflecting the growing demand for interactive entertainment among young, tech-savvy people. In addition, **local programmers are considered among the most skilled in the world**, which also plays a major role in developing the sector.



GROWTH OF THE IOT INDUSTRY AND SMART CITIES

The **IoT market in Slovakia reached EUR 1.25 billion in 2024**, with a projected annual growth rate of 15.04%, l**eading to EUR 2.62 billion in 2029**. Currently, the largest segment of the IoT sector is the **automotive industry**, reaching a **market volume of EUR 337.94 million**, demonstrating the high potential and high demand for IoT solutions in this area. The **smart cities market is estimated to reach EUR 101.29 million in 2024** and is projected to **grow to EUR 216.47 million in 2029** (CAGR of 16.4%). Smart cities and digital urban transformation projects are **creating opportunities for foreign investment** by companies specializing in IoT, smart grid technology, infrastructure, and urban digital solutions.

Source: ConQuest Consulting analysis based on Statlista database and Sario Slovak investment and trade development agency, "Information&Communications Technology Sector in SLOVAKIA", 2022 and website www.trade.gov

IT GROWTH IS CONSTRAINED BY TALENT SHORTAGES, CYBER THREATS, AND AI REGULATIONS

CHALLENGES FACED BY THE IT SECTOR

IT TALENT SHORTAGE AND SKILL GAPS

One of the most pressing issues is the **IT talent shortage and skills gap**. The global demand for skilled professionals far exceeds supply, with **4 million cybersecurity experts needed worldwide**, and a **50% talent gap in AI and data science**. Additionally, the **software development sector faces a shortage of 4 million developers by 2025**, leading to project delays and increased costs. The IT job market is becoming increasingly competitive, with about **60% of IT professionals struggling to find employment**, as positions for **junior roles are becoming increasingly scarce**. Furthermore, to meet the rising demand, candidates must possess specialized skills and experience, as employers are increasing their expectations.

ESCALATING CYBERSECURITY THREATS

Another major concern is the **rise of cybersecurity threats**. **Cybercrime is projected to cost businesses EUR 9.66 trillion annually by 2025**, driven by ransomware attacks and AI-powered cyber threats. The **average ransomware payout has doubled within just a year**, reaching **EUR 1.42 million per attack**, while AI-generated deepfake scams and automated cyber-attacks further complicate cybersecurity defenses.

AI REGULATION, ETHICS AND BIAS RISKS

The rapid rise of artificial intelligence brings **regulatory, ethical, and algorithmic bias risks**. The **EU AI Act is the world's first major AI law**, setting comprehensive compliance standards for AI applications. **Bias in AI-driven decision-making is another major issue**, affecting hiring, lending, and law enforcement. Additionally, generative AI models often produce **false** or **misleading information**, raising concerns about misinformation and legal liability. The consequences for companies may include **challenges in AI deployment and financial penalties for non-compliance with regulations**.

Source: ConQuest Consulting analysis based on Gartner „Gartner Forecasts Worldwide IT Spending to Grow 9.8% in 2025'' 2024, IEA „ Analysis and forecast to 2026" 2024, Statista „ Challenges to enterprise cloud computing usage worldwide in 2019 to 2024" 2024, IBM „ AI skills gap" 2024, Steve Morgan „ Cybercrime To Cost The World $10.5 Trillion Annually By 2025" 2020, WeForum „ AI governance trends: How regulation, collaboration and skills demand are shaping the industry" 2024, WeForum „ The cybersecurity industry has an urgent talent shortage. Here's how to plug the gap" 2024

RAPIDLY INCREASING COSTS OF IT INFRASTRUCTURE MAINTENANCE THREATEN FURTHER DEVELOPMENT

CHALLENGES FACED BY THE IT SECTOR

CLOUD COMPUTING COST, COMPLEXITY AND SECURITY CHALLENGES

Cloud computing continues to grow, but cost control, complexity, and security present significant challenges. **84%** of companies **struggle to manage cloud costs**, often overspending due to inefficiencies. **Multi-cloud strategies (AWS, Azure, Google Cloud) are now used by 89% of businesses**, but managing integrations and security remains difficult. Due to the growing dominance of those three major cloud providers, businesses may be forced to **incur higher costs**, which could limit their ability to effectively manage cloud service expenses.

IT INFRASTRUCTURE MODERNIZATION AND SUSTAINABILITY CHALLENGES

IT infrastructure modernization and sustainability are becoming urgent priorities. Many enterprises still rely on outdated IT systems, which hinder digital transformation and introduce security risks. AI-driven workloads require **high-performance computing** and **expanded data center capacity**, further stressing IT infrastructure. Additionally, **data centers consume 460 terawatt-hours of electricity annually**, increasing pressure to develop more sustainable IT solutions.

RISING COSTS AND FINANCIAL PRESSURES

Financial pressures are also mounting across the IT sector, with companies struggling to balance costs and innovation. **Cloud spending is projected to reach EUR 624.5 billion in 2024**, yet many organizations struggle to optimize their investments. Additionally, CISPE found that **European businesses and public sector bodies were paying EUR 1.03 billion per year on Microsoft licensing penalties** and this value may increase in following years due to the use of illegal monopolistic practices. **Cybersecurity budgets continue to rise**, but proving ROI remains a challenge. Meanwhile, **data centers consume 2% of global electricity**, increasing operational costs.

Source: ConQuest Consulting analysis based on Gartner „Gartner Forecasts Worldwide IT Spending to Grow 9.8% in 2025'' 2024, IEA „ Analysis and forecast to 2026" 2024, Statista „ Challenges to enterprise cloud computing usage worldwide in 2019 to 2024" 2024, IBM „ AI skills gap" 2024, Steve Morgan „ Cybercrime To Cost The World $10.5 Trillion Annually By 2025" 2020, WeForum „ AI governance trends: How regulation, collaboration and skills demand are shaping the industry" 2024, WeForum „ The cybersecurity industry has an urgent talent shortage. Here's how to plug the gap" 2024

REMOTE WORK IN IT: A LASTING SHIFT SHAPING THE FUTURE

The **IT industry was among the first to embrace remote work**, while some specialists operated entirely offsite, even before COVID-19. The pandemic accelerated the **shift to remote work**, making it the default arrangement wherever feasible. Some companies quickly abandoned it once restrictions eased, while others adopted **hybrid models** before the pandemic officially ended. Since then, the landscape has remained dynamic, including in the CEE region, where **flexible work models remain particularly relevant** in the growing IT sector.

There is **no single standard today**: remote work policies vary by sector, country, and company. **Large corporations like Meta (Facebook, Instagram), Alphabet (Google), Apple, and Tesla have mandated a return to offices** - often in hybrid models but sometimes requiring full-time office presence. The office rental market initially faced a downturn, with declining prices and reduced demand. However, it later rebounded, with an **increase in office leases and new commercial buildings**.

According to data from Bulldogjob, IT remains a unique sector in this regard. While the **share of fully remote roles has been declining** - from 84% in 2022 to 61% in 2024 - **hybrid models are gaining popularity**, now covering almost 30% of roles (with 1 to 4 remote days per week). Meanwhile, **less than 10% of IT roles require full-time onsite presence**. This is consistent with trends observed in the CEE region, where **outsourcing and access to talent across borders continue to support remote and hybrid models**.

Santander

KRZYSZTOF ŁYCZKO

IT Chapter Leader - Systems Analyst

EXPERT COMMENT

REMOTE WORK IN IT: A LASTING SHIFT SHAPING THE FUTURE

Remote work has become a lasting trend. In the U.S., the percentage of workdays performed from home stabilized at 25% in early 2023 - five times higher than pre-pandemic levels. While Polish data does not extend as far back, remote work has steadily increased since Q2 2022. As of Q3 2024, 10.5% of Polish workers report working remotely.

The consensus among economists is that **hybrid work does not negatively impact productivity**. Estimates for fully remote work vary, ranging from a 30% drop in productivity to a 13% increase. However, the average estimate suggests a 10% decline. Interestingly, a significant percentage of **professionals (25%) perceive their work as inefficient, regardless of their work setting**. This highlights the **importance of effective self-organization, team management, and project oversight**.

Artificial intelligence is emerging as a key tool for enhancing productivity. AI-driven solutions can **streamline workflows, automate repetitive tasks,** and even **improve secure coding practices for IT specialist**s.

From an economic perspective, **hybrid work makes employment more attractive,** increasing labor supply. This is **beneficial for both women and men**, allowing **greater flexibility in balancing work and personal responsibilities** such as childcare. Given the looming demographic challenges worldwide, this factor is crucial for sustaining workforce participation. The future of remote work in IT remains uncertain, but it is clear that **flexibility and digital transformation will continue to shape the industry for years to come**.

KRZYSZTOF ŁYCZKO

IT Chapter Leader - Systems Analyst

Santander

EXPERT COMMENT

04

IMPACT OF NEW TECHNOLOGIES ON THE IT MARKET

THE CEE REGION IS A GROWING DIGITAL HUB, WITH EUR 593 MILLION IN AI INVESTMENTS AND 28 MILLION 5G SUBSCRIPTIONS IN 2024

REVIEW OF TECH GROWTH IN THE CEE REGION

AI investments in CEE startups **have grown significantly**, contributing to a total of **EUR 5 billion since 2021**, underscoring the region's expanding role in the global AI landscape.

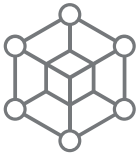
Blockchain adoption is accelerating across Europe, with the **market valued at EUR 2.80 billion in 2022** and expected to continue its **rapid growth** in the coming years. **Blockchain IoT** revenues have also seen **substantial increases**, with projections indicating strong growth moving forward.

Additionally, **5G subscriptions** in CEE are set to **rise sharply**, enhancing the region's digital infrastructure and connectivity by **2029**.

These advancements are establishing CEE as a **central player in the ongoing digital transformation** across industries.

593 M

AI INVESTMENTS IN CEE IN 2024 (EUR)



87.2%

BLOCKCHAIN MARKET CAGR UNTIL 2030

28 M

5G SUBSCRIPTIONS IN CEE IN 2024

56.8%

BLOCKCHAIN IOT CAGR UNTIL 2030

Source: ConQuest Consulting analysis based on Statista database; Grand View Research database; The Recursive, „The Recursive's State of AI in CEE 2024", 2024; IDC, „European Spending on Artificial Intelligence to Reach $133 Billion by 2028", 2024

POLAND AND BULGARIA ARE DRIVING IOT INNOVATION AND GROWTH IN CEE

NEW TECHNOLOGY MARKET IN POLAND AND BULGARIA

POLAND

Poland is at the **forefront of digital transformation**, with the Industrial IoT sector expected to reach **EUR 1.60 billion** in **2025**, growing annually by **14.70%**, to **EUR 2.96 billion** by **2029**. The Consumer IoT market is also expanding rapidly, projected to **grow at 12.64%** annually, hitting **EUR 2.25 billion** by **2029**. Additionally, **Poland's National Digital Strategy 2035** aims to modernize infrastructure and expand digital services. These advancements position Poland as a **leading tech hub** in CEE, driven by strong government policies and a rapidly developing IoT sector.

The Polish **digital advertising** market grew by **13.3%** in **2024**, reaching a value of **EUR 1.92 billion**, accounting for **53.7%** of the total advertising market.

BULGARIA

Bulgaria is witnessing rapid AI and blockchain adoption, with the IoT market projected to generate **EUR 654.15 million** in **2024**, **growing at 9.57%** annually, reaching **EUR 1.08 billion** by **2029**. AI startups secured **EUR 53 million** by **September 2024**, with major investments in AMPECO (**EUR 25 million**) and Dronamics (**EUR 13 million**). The country is also heavily investing in blockchain education, **promoting innovation in finance and logistics**. These efforts are turning Bulgaria into an **emerging center for AI** and blockchain, supported by international investments and a growing IoT market.

In **2024**, **Ecommerce** in Bulgaria accounted for approximately **11%** of the total industry expertise distribution.

Source: ConQuest Consulting analysis based on Statista database; Decent Cyber Security, „Poland Unveils Landmark Digital Strategy 2035", 2024; BSV Blockchain, „Educating Poland and Central Europe on the power of the BSV blockchain", 2023; The Recursive, „In 2024, Bulgaria's Startups Raised Only Half of 2023's Total, The State of AI in CEE Report Shows", 2024; Reporterzy.info, „Pierwszy bilion dolarów. Rynek reklamy 2024 i prognozy na 2025", 2024; N-ix, „Software development in Eastern Europe: Market research and top vendors", 2024

SMART CITIES AND SOFTWARE DEVELOPMENT DEFINE LEADERSHIP IN CEE FOR CZECHIA AND SLOVAKIA

NEW TECHNOLOGY MARKET IN SLOVAKIA AND THE CZECH REPUBLIC

SLOVAKIA

Slovakia's IoT market is projected to grow significantly, reaching **EUR 1.38 billion by 2025** and continuing to expand at **a strong pace**, reaching **EUR 2.51 billion by 2029**. The automotive IoT sector is a major contributor, with **substantial growth** expected. In **2024**, AI investments saw a surge, with Slovak startups securing **EUR 39 million**, surpassing regional peers. Noteworthy investments include **CloudTalk** and **Powerful Medical**, underlining Slovakia's **growing leadership** in both AI and IoT, particularly in the **automotive and industrial sectors**.

Network infrastructure in Slovakia will lead the market, reaching **EUR 202 million** in **2025**, with revenue growing at a **5.83% CAGR** through **2029**.

THE CZECH REPUBLIC

The Czech Republic remains **a leader in IoT innovation**, particularly in **manufacturing** and **smart cities**. The IoT market is projected to reach **EUR 1.93 billion by 2025**, with automotive IoT leading at **EUR 495 million**, growing annually by **7.33% to EUR 2.74 billion by 2029**. The country's software sector continues to grow, with over **130 thousand developers and 10 thousand tech graduates** annually, fueling the rise of startups like **Better Stack** and **Filuta AI**. Country's strong position in automotive IoT and digital infrastructure could **lead in smart transportation** and connected **mobility solutions**.

As of **December 2024**, the Czech Republic had the **second-highest 5G coverage** in Europe, reaching approximately **95.4%** of the population.

Source: ConQuest Consulting analysis based on Statista database; Nucamp, „Inside Czech Republic's Thriving Tech Hub: Startups and Success Stories", 2024; USP, „Blockchain, AI, AR and IoT – Architects' Outlook", 2024; The Recursive, „Slovakia's AI Startups Outpaced Czechia in 2024 Funding, AI Report Shows", 2025; 6Wresearch, „Slovakia AI in IoT Market (2025-2031) Outlook", 2025

SCALABLE DATA SOLUTIONS POWERING THE FUTURE OF BANKING

Bank Pekao

The financial sector in CEE, like the broader IT market, is experiencing a **fundamental shift driven by the rapid expansion of digital services and the growing need for scalable, high-performance data solutions.** As companies across industries adapt to increasing data volumes, **banks remain at the forefront of this transformation**, leveraging both traditional and modern architectures to stay competitive.

While relational databases continue to underpin regulatory and financial operations, we see a significant **adoption of NoSQL databases, Spark frameworks, and Hadoop-based data lakes to handle diverse and unstructured data**. This trend aligns with the broader **regional shift toward hybrid cloud models**, where security, scalability, and cost optimization are key decision factors. According to industry insights, **cloud adoption in CEE is accelerating**, with **financial institutions increasingly investing in solutions that combine on-premise reliability with the flexibility of cloud platforms**.

Beyond infrastructure, **AI and automation are becoming critical to processing vast datasets efficiently**. The **need for real-time analytics is driving the adoption of distributed computing,** enabling financial institutions to reduce processing times and enhance decision-making. As regulatory requirements evolve and operational efficiency remains a priority, **scalable, cloud-integrated architectures will define the next phase of IT transformation in the banking sector**.

BŁAŻEJ LUTKOWSKI
IT Director

EXPERT COMMENT

05 ARTIFICIAL INTELLIGENCE

THE DYNAMIC DEVELOPMENT OF AI IN CEE WILL RESHAPE DEMAND FOR SPECIFIC OCCUPATIONS

HOW IS AI CHANGING THE REGION'S LABOR MARKET

Artificial intelligence is significantly shaping the labor market in Poland, particularly in the financial, legal, administrative, and IT sectors, where **22% of Poles** work in occupations vulnerable to automation. The impact varies by gender, with **28% of working women** employed in highly automation-prone professions, compared to **17% of men**. Additionally, **44% of people with higher education** hold jobs that could be automated by AI. Between 2021 and 2024, the percentage of companies implementing AI **increased from 3% to 6%**, which gives Poland **20th** position in Europe. Moreover, the polish IT market is moving towards increased AI adoption and automation, requiring continuous digital transformation and workforce reskilling to stay competitive.

64% of Bulgarians view AI as a **positive** technology, recognizing its potential to **improve** business and professional processes. From 2021 to 2024, the percentage of companies using at least one AI technology **increased from 3% to 6%**. Despite small market volume in IT sector, Bulgaria is **steadily advancing in AI implementation** and is trying to catch up with competitors.

Source: ConQuest Consulting analysis based on Statista database, Eurostat database, European Commission, „Artificial Intelligence and the future of work", 2025; Milka Galabova, „Artificial intelligence, automation and bulgarian labour market" 2024; Korgul, Witczak, Święcicki, „AI na polskim rynku pracy" 2024

AI ADOPTION IS RAPIDLY INCREASING IN THE CZECH REPUBLIC AND SLOVAKIA, WITH POSITIVE PERCEPTION

HOW IS AI CHANGING THE REGION'S LABOR MARKET

In the Czech Republic, over the next five years, **AI will replace more than 50% of competencies in 11% of professions.** The highest risk concerns occupations based on routine manual and administrative tasks, such as service workers, administrative and keyboard clerks and customer service workers. Despite this shift, **66% of the population views AI in the workplace positively**.

Moreover, the **adoption of AI technology among businesses increased from 4% in 2021** to **11%** in **2024**, positioning the Czech Republic **16th in Europe** in this regard. The rapid adoption of AI is transforming the Czech IT market, driving demand for AI specialists and supporting the country's development in digital transformation.

Currently, **25% of jobs on the Slovak labor market are exposed to artificial intelligence**, while **68% of Slovaks view AI adoption in the workplace as positive**, highlighting a strong acceptance of technological advancements. Furthermore, the **integration of AI in business operations is accelerating**, as the **percentage of companies utilizing AI technology** between 2021 and 2024 **increased from 5% to 11%**. This growth has positioned Slovakia **17th in Europe in terms of AI adoption** and will support the further development of the domestic IT market.

Source: ConQuest Consulting analysis based on Statista database, Eurostat database, European Commission, „Artificial Intelligence and the future of work", 2025; Fatun, Pazour, „Modelling the impact of Artificial Intelligence on the labour market in Czechia" 2021; OECD, „Job Creation and Local Economic Development 2024 - Country Notes: Slovak Republic" 2024

FROM IT EXPERT TO AI SPECIALIST: THE NEXT CAREER SHIFT

Artificial Intelligence is not just transforming IT operations - it is fundamentally **reshaping the skills and competencies required of IT professionals**. As highlighted in the report, **AI-driven technologies are creating entirely new roles**, such as MLOps engineers, AI cybersecurity specialists, and AI ethics officers, while also **demanding that existing professionals adapt to new ways of working**.

One of the most significant changes is the **increasing need for expertise in AI infrastructure and security**. Organizations are now seeking **professionals skilled in deploying, maintaining, and scaling AI/ML systems**, as well as **specialists who can defend against adversarial AI attacks and protect data integrity**. In the CEE region, where IT outsourcing and nearshoring are well-established, this shift presents both a challenge and an opportunity - **companies must ensure that their talent pool evolves in line with these industry demands**.

At the same time, **AI is reshaping traditional career paths**. The automation of repetitive tasks means that **entry-level IT positions are at risk**, leading to a reduced demand for junior employees. However, this is balanced by the **emergence of new skills, such as prompt engineering and AI-driven task management**, which are increasingly valued across industries. The report highlights that **professionals with strong data management, machine learning, and AI security skills will be best positioned to succeed** in this changing landscape.

MARCIN TERLECKI

Head of Architecture Services, Digital Solutions

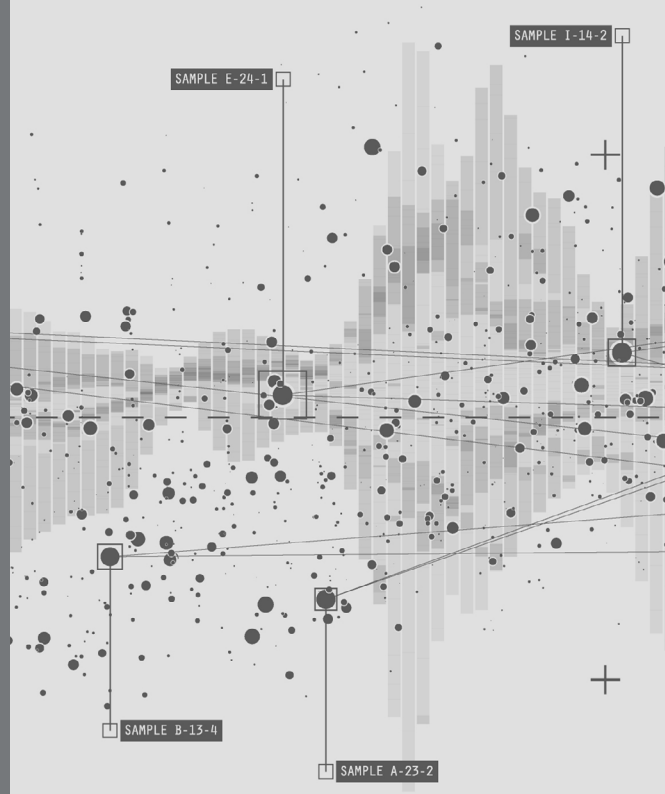
DNV

EXPERT COMMENT

FROM IT EXPERT TO AI SPECIALIST: THE NEXT CAREER SHIFT

Another key takeaway is the **growing demand for AI education and training**. While the number of AI courses and certifications has surged, the report notes that many training materials focus on entry-level knowledge rather than practical implementation. This presents a gap in the market, where **companies need professionals who can integrate AI into real-world IT operations, not just understand its theoretical principles**.

Looking ahead, the future of IT talent in CEE and beyond will depend on **continuous learning, adaptability, and specialization in AI-driven fields**. Companies that invest in AI upskilling and cybersecurity measures will not only stay competitive but also position themselves as leaders in the evolving digital economy.



MARCIN TERLECKI

Head of Architecture Services, Digital Solutions

EXPERT COMMENT

AI SKILLS ARE ESSENTIAL FOR EMPLOYEES TO STAY COMPETITIVE IN THE FUTURE IT MARKET

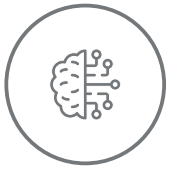
HOW AI IS CHANGING THE COMPETENCY REQUIREMENTS OF IT PROFESSIONALS AND CREATING NEW ROLES

The advancement of artificial intelligence requires IT professionals to develop key competencies to enhance the efficiency of IT service delivery.

First, **machine learning** and **deep learning** enable algorithm optimization and the deployment of neural networks for data analysis. Another essential qualification is **prompt engineering**, which ensures that AI models generate accurate responses through refined queries. Moreover, **model interpretation** and **evaluation** improve reliability, transparency, and error mitigation.Additionally, **AI-driven automation** in IT management enhances infrastructure monitoring, predictive maintenance, and resource allocation.

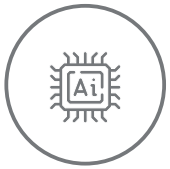
By acquiring these skills, IT professionals will be **better equipped to implement AI effectively** and **adapt to a rapidly evolving technological landscape**, ensuring their competitiveness in the job market.

MACHINE LEARNING



DEEP LEARNING

PROMPT ENGINEERING



MODEL INTERPRETATION AND EVALUATION

AI-DRIVEN AUTOMATION

Source: ConQuest Consulting analysis based on Sarah White „How AI is reshaping demand for IT skills and talent", Martyna Petrus „How does AI change the IT sector and what professional future does it create", Coders Lab „Jak sztuczna inteligencja zmieni rynek pracy w sektorze IT", NoFluffJobs „Jak sztuczna inteligencja zmienia świat pracy w branży IT".

NEW AI-RELATED ROLES WILL SHAPE THE FUTURE OF THE IT JOB MARKET

HOW AI IS CHANGING THE COMPETENCY REQUIREMENTS OF IT PROFESSIONALS AND CREATING NEW ROLES

The rapid advancement of artificial intelligence is driving the emergence of entirely new job roles within the IT industry.

Prompt Engineers are becoming essential for optimizing AI interactions, ensuring that models generate precise and contextually relevant responses. **AI Compliance Managers** are now critical in overseeing the ethical and regulatory aspects of AI deployment, safeguarding organizations against legal and reputational risks. With the growing reliance on AI, **Model Auditors** are responsible for evaluating algorithm reliability, identifying biases, and improving transparency. Additionally, **IT Automation Engineers** are playing a key role in integrating AI-driven automation into IT infrastructure, optimizing system performance and operational efficiency.

These newly emerging positions underscore **how AI is not only revolutionizing technology but also reshaping the professional landscape in IT**.

PROMPT ENGINEER

AI COMPLIANCE MANAGER

AI MODEL AUDITOR

IT AUTOMATION ENGINEER

Source: ConQuest Consulting analysis based on Sarah White „How AI is reshaping demand for IT skills and talent", Martyna Petrus „How does AI change the IT sector and what professional future does it create", Coders Lab „Jak sztuczna inteligencja zmieni rynek pracy w sektorze IT", NoFluffJobs „Jak sztuczna inteligencja zmienia świat pracy w branży IT".

INNOVATION MEETS RESILIENCE: THE EVOLVING TECH LANDSCAPE OF CEE

VALUE TRANSFORMATION SERVICES
an IBM subsidiary

The increasing complexity of IT systems and expanding attack surface are driving an **elevated demand for technical expertise and operational resilience**. The CEE region is responding to this challenge with a **strong focus on automation, security, and high-performance IT services**. The report highlights that nearly **half of IT and communications companies in the region are integrating and leveraging AI** to enhance their capabilities. Their primary goals are to **automate processes, optimize performance, and strengthen system resiliency**. This is not only in line with market trends, but also tailored to meet emerging demands. Businesses no longer just maintain IT operations, they now **actively seek improvements and aim to be future-proof**.

Cybersecurity is another pressing matter. With rising cyber threats and increasing regulatory demands, **organizations are prioritizing proactive security measures and compliance-driven IT strategies**. As the report underlines, companies face the **challenge of continuously optimizing critical systems**, while at the same time **maintaining high availability and resilience**.

Those that will stand out are companies capable of **combining technical excellence with an innovation-driven mindset** - leveraging automation to enhance efficiency, reducing operational risks, and ensuring that IT infrastructure is built to support long-term digital growth. As the CEE market continues to develop, **its role as a provider of skilled and flexible IT resources and advanced solutions** is becoming more crucial than ever.

EXPERT COMMENT

CHRISTOPH HOLZWEBER

Head of Open Platform Services

THE AI ADOPTION PERCENTAGE IN THE LEADING 3 INDUSTRIES RANGES FROM 30% TO 50%

TOP 3 SECTORS IN ADOPTING AI IN THE EU IN 2024

IT AND COMMUNICATIONS SECTOR

In **2024, 48.7%** of businesses in the **IT** and **communications** sector utilize AI. The technology is applied to automate processes, analyze data, improve cloud services, and develop **AI-driven tools** like **chatbots** and **image recognition**. Poland, the Czech Republic, and Slovakia are particularly active in driving regional AI development.

PROFESSIONAL, SCIENTIFIC, AND TECHNICAL ACTIVITIES

AI adoption in the **professional**, **scientific and technical** sector reaches **39.6%** in **2024**. Companies in this field leverage AI for **research automation**, advanced **data analysis** and **optimizing technical services**. AI contributes to significant advancements in industries like **biotechnology**, **engineering** and **data science**, offering tools for **complex simulations** and **predictive modeling**.

REAL ESTATE SECTOR

In the **real estate** industry, **31.4%** of companies in the EU are implementing AI technologies. AI is used for **analyzing market trends**, managing properties, **predicting market values**, and streamlining transactions. It aids in making more informed business decisions and **enhances customer interactions** through **personalized recommendations** and automated services.

Source: ConQuest Consulting analysis based on Eurostat database

IN THE UPCOMING YEARS, BUSINESSES IN THE EU WILL RELY MORE ON AI AS A KEY DIFFERENTIATOR FOR GROWTH AND INNOVATION

The adoption of artificial intelligence in businesses across the European Union shows significant regional and company size variations.

According to **Eurostat data from 2024**, an average of **13.5% of EU companies with at least 10 employees had implemented AI technologies,** representing a **5.5 percentage-point increase** compared to the previous year. This growth reflects the increasing recognition of AI as a **transformative tool for enhancing productivity, automating processes and driving innovation**

However, adoption rates still differ widely between countries, with some regions - particularly **Northern and Western Europe - showing higher levels of AI integration than others**, especially Central and Eastern Europe. As AI technologies become more accessible, the gap between countries and company sizes is expected to narrow, providing new opportunities for businesses across the EU.

Source: ConQuest Consulting analysis based on Eurostat database

MACHINE LEARNING AND AUTOMATION ARE CRUCIAL IN SHAPING THE AI TECHNOLOGY SECTOR

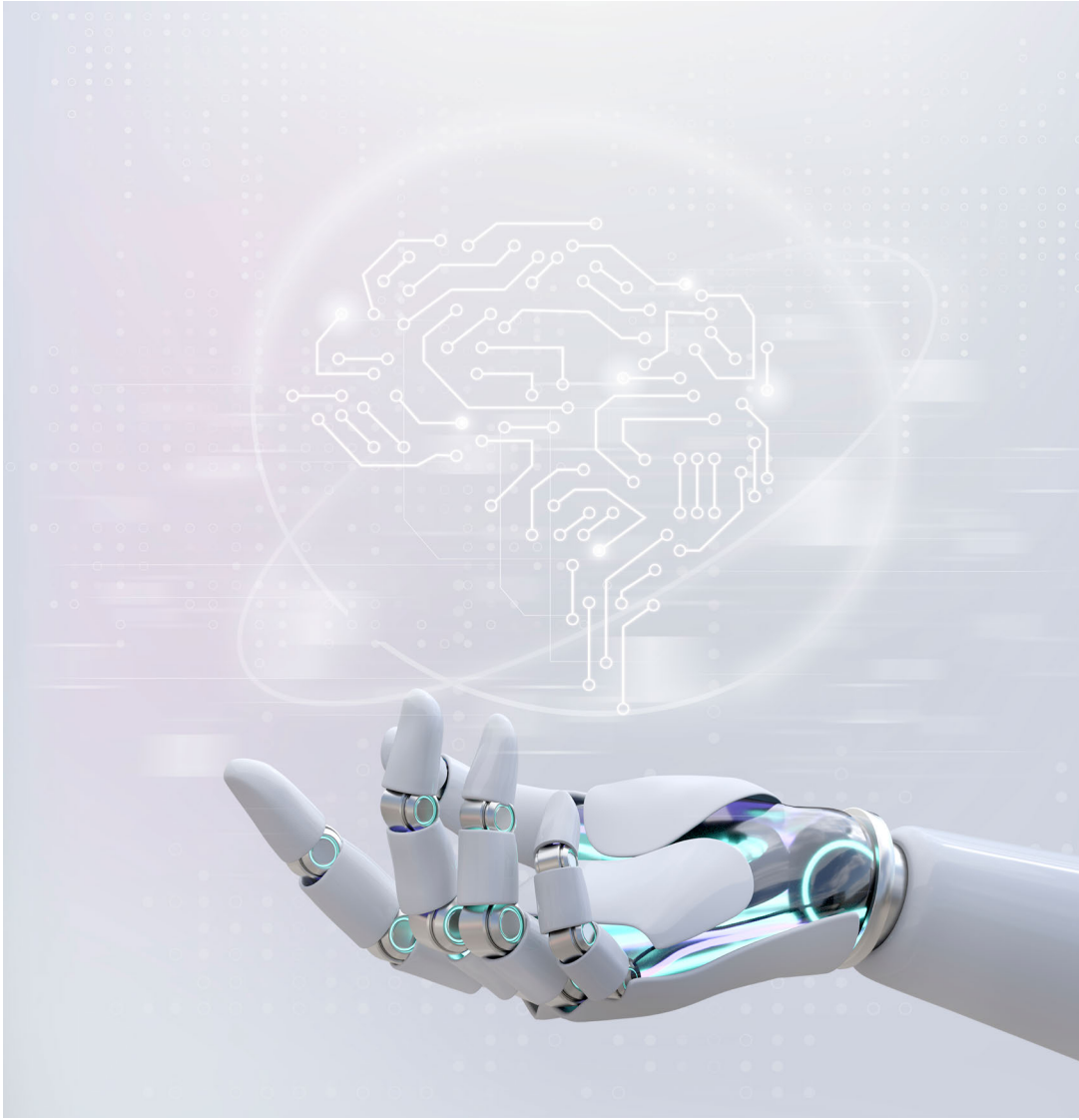
AI TECHNOLOGIES IN LARGE ENTERPRISES

Large enterprises in the EU are leading the way in adopting AI technologies compared to small and medium-sized enterprises (SMEs).

In 2024, **21.4% of large enterprises used text mining**, a technology that enables businesses to **extract valuable insights from unstructured data**, such as customer feedback, social media posts, and product reviews. Another significant AI application in large businesses is **machine learning for data analysis**, which was adopted by **20.6%** of enterprises. This technology allows companies to **analyze large datasets, identify patterns, and make data-driven decisions** that can improve efficiency and drive innovation. Additionally, **workflow automation** and **decision-making tools**, used by **20.4%** of large enterprises, help **streamline business processes, improve operational efficiency, and reduce human error**.

Interestingly, **autonomous systems**, **such as self-driving vehicles or robotic systems, were the least adopted,** with only **7.2%** of large enterprises implementing these technologies. Industries with the highest adoption rates of **self-operating schemes** include **manufacturing** and **logistics**.

Despite their potential, these systems face significant challenges, such as **safety concerns**, **regulatory hurdles** and **technological limitations**.



Source: ConQuest Consulting analysis based on Eurostat database

TEXT MINING IS THE MOST WIDELY ADOPTED AI TOOL IN EU BUSINESSES

LEADING AI TECHNOLOGIES IN EU ENTERPRISES

Text mining, used by **21.4%** of enterprises, is **one of the most widely applied AI tools**. It helps businesses **understand customer sentiment, detect trends, and analyze large volumes of data to** extract useful information.

Natural language generation (NLG) is also growing in use, with **5.4%** of EU companies implementing it. NLG helps **automate content creation,** including generating reports, chat responses, and even emails, reducing the workload of human employees and enhancing efficiency. **Speech recognition** technology, used by **4.8%** of enterprises, enables **voice command systems and transcription tools**, enhancing customer service and automating data entry.

Furthermore, **machine learning for data analysis,** employed by **20.6%** of enterprises, is essential for businesses that need to **analyze large datasets, find patterns, and improve decision-making**. This technology is particularly popular in industries like finance, retail, and logistics. **Image recognition**, used by **3.2%** of enterprises, has become critical in sectors such as healthcare, where it **aids in diagnostics through medical imaging,** as well as in security and retail, where it **supports facial recognition and visual search**.

Source: ConQuest Consulting analysis based on Eurostat database

AUTONOMOUS SYSTEMS IMPROVE EFFICIENCY BY OPTIMIZING TASKS IN TRANSPORTATION

AI IN AUTOMATION AND AUTONOMOUS SYSTEMS

AI plays a critical role in **automating business processes and improving decision-making** across various industries.

In 2024, **4.8%** of EU enterprises used AI for **robotic process automation (RPA)**, a technology that **automates repetitive tasks** such as data entry, invoicing, and customer service responses. By implementing **RPA**, businesses can significantly **reduce operational costs, improve accuracy, and increase productivity** by freeing up human employees for more strategic tasks.

While automation is gaining traction, **autonomous systems** like self-driving vehicles and AI-driven robots are still in the **early stages of adoption**. Only **7,2%** of enterprises implemented AI-driven autonomous systems for decision-making in 2024. These systems face significant barriers, including **safety concerns**, **complex regulatory environments** and **technological challenges**, which hinder widespread adoption. Despite these obstacles, autonomous systems hold great potential for industries such as transportation, logistics, and manufacturing, where they could **reduce human labor costs**, **increase safety and improve efficiency in operations**.

Source: ConQuest Consulting analysis based on Eurostat database

AI IS REVOLUTIONIZING INDUSTRIES IN CEE, SUPPORTING PRODUCTIVITY AND CUTTING COSTS

83% of **CFOs** in Poland view AI as a critical component of their **business strategy**, with many anticipating signi-ficant **cost savings** from its deployment.

THE IMPACT OF AI ON BUSINESS EFFICIENCY

The integration of Artificial Intelligence significantly **enhances business efficiency** and **drives cost reductions**. In Central and Eastern Europe, AI is projected to increase the region's GDP by up to **EUR 100 billion** annually **by 2030**. Generative AI plays a key role in **optimizing operations**, automating tasks and improving decision-making, especially in sectors like **finance**. AI applications such as **credit scoring** and **fraud detection** help **improve efficiency**, while automating repetitive tasks **frees up employees** for higher-value work. As a result, AI is expected to **boost labor productivity** by **3% annually**, contributing to the overall economic expansion.

COST SAVINGS IN CENTRAL AND EASTERN EUROPE

Cost reduction is the **most cited benefit** of AI adoption. In CEE, sectors like manufacturing and healthcare are leveraging AI to **lower operational costs** through **automation**. For example, generative AI could **cut costs by 30-40%**, especially in tasks that are repetitive and time-consuming. On the other hand, businesses can save up to **10-15%** annually in **operational expenses** by improving **resource management**. This efficiency is not limited to large companies, even smaller businesses benefit from **optimizing resources** and **reducing waste**. To fully capture AI's economic potential, companies must invest in digital infrastructure, workforce retraining and **AI innovation strategies**.

Source: ConQuest Consulting analysis based on McKinsey, „Time to place our bets: Europe's AI opportunity", 2024; Prawo.pl, „Redukcja kosztów najczęściej oczekiwaną korzyścią z zastosowania generatywnej AI", 2024; Deloitte, „Getting ready for the GenAI journey? – korzyści oraz wyzwania według dyrektorów finansowych", 2024; Implement Consulting Group, „The €100 billion economic opportunity of generative AI in Central Eastern Europe", 2024

GROWING ADOPTION OF AI IN THE CEE REGION IS OUTPACING THE SUPPLY OF SPECIALISTS

DEMAND FOR AI SPECIALISTS IN CENTRAL AND EASTERN EUROPE

The rapid advancement of AI technologies and their increasing adoption across various industries are transforming the business landscape. Over **75%** of companies have **started investing in AI**, and **55%** of organizations have a **defined AI strategy**. As a result, the demand for AI specialists in the CEE region is surging, with more **companies seeking skilled professionals to implement and optimize AI-driven solutions**.

Between **2016** and **2023**, **job postings requiring AI skills have increased 3.5 times faster than all other job listings**. Key industries driving this demand include **professional services,** where the need for AI specialists is **3 times** higher than in other sectors, the **financial sector**, which experiences a **2.8 times** greater demand and the **ICT industry**, where AI-related roles are needed **5 times** more compared to other fields. Furthermore, between **2023** and **2024**, **demand for AI and machine learning roles increased by 59%**, reflecting the growing investment in AI across Poland.

The trend of AI hiring and training more AI specialists shows no signs of slowing down. Although **AI and big data are not yet among the top core skills** for mass employment, **ranking only 15th today**, companies are prioritizing their development. **By 2027**, AI will be the **3rd most important focus in corporate training programs** and the **number one priority for large enterprises with over 50 thousand employees.**

However, the **growing demand for AI expertise far exceeds the current supply of qualified professionals**. In 2023, Europe faced a **shortage of 500 thousand AI specialists**, highlighting the **urgent need for investments in AI education and workforce development** to bridge the talent gap.

Source: ConQuest Consulting analysis based on PwC report „Gotowi na sztuczną inteligencję" 2024, World Economic Forum „ Future of Jobs Report" 2023, PwC „ PwC's 2024 AI Jobs Barometer" 2024, Grafton report „ Raport wynagrodzeń w branży IT" 2024, ERP-view „ Europa w globalnym wyścigu AI: czy odpowiedzialność wystarczy, by dogonić światowych liderów?" 2024

PERSONALIZATION AND AI AS A RESPONSE TO CUSTOMER DIVERSITY IN CEE

Customer diversity is the foundation of modern marketing. Every consumer, regardless of demographic group, income or status, has a unique shopping profile. Demographic characteristics are just the tip of the iceberg and psychographic factors - lifestyle, values, interests - play a key role. **With millions of customers we have millions of stories.**

In the context of the CEE region, which is characterized by dynamic economic growth and the growing role of digital technologies and AI, customer diversity becomes even more pronounced. According to the report, Poland - the largest IT market in the region - has seen **the largest investments in artificial intelligence and cloud solutions**. It is these technologies that **enable effective management of huge data sets and directing highly personalized communication to specific groups of recipients**.

Customer diversity is both a challenge and an opportunity for banks. On the one hand, it **requires more complex and detailed analyses**, on the other - it **allows for the creation of effective and personalized marketing strategies**. Behavioral segmentation, based on the analysis of data on customer behavior, is a key tool for building long-term relationships.

BARTOSZ WITORZEŃĆ

Head of CRM and Data Science

Bank Pekao

EXPERT COMMENT

PERSONALIZATION AND AI AS A RESPONSE TO CUSTOMER DIVERSITY IN CEE

In this spirit, we implemented the **Omnibank CRM project at Bank Pekao S.A. – the first comprehensive CRM implementation in the public cloud in Polish banking**. Thanks to the support of the data processing platform, advanced analytics and the use of cloud solutions, we are able to **send personalized content to the user of the application and online banking within fractions of a second**.

The main assumption was that with millions of customers, each of them has their own individual needs and history, and must therefore be **taken care of in an individual way**. We want to communicate with customers based on mutual understanding and dialogue, using new data provided online and making decisions on what to display using AI. This was our response to the needs of a diverse market – not only in Poland, but also in the entire CEE region, where **personalization is becoming a key element in building a competitive advantage**.

BARTOSZ WITORZEŃĆ
Head of CRM and Data Science

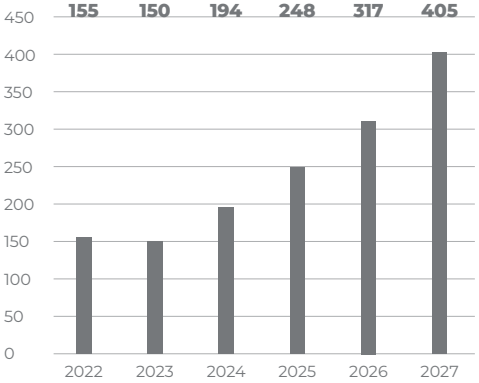
Bank Pekao

EXPERT COMMENT

INCREASING DEMAND FOR AI SPECIALISTS ACROSS CEE REGION REFLECTS THE SECTOR'S GROWING IMPACT ON ECONOMIC DEVELOPMENT

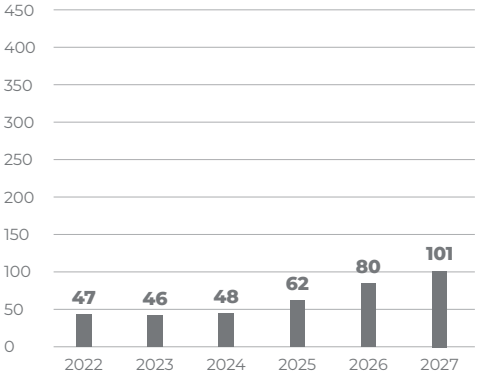
JOB POSTINGS FOR AI SPECIALISTS (IN THOUSANDS OF EMPLOYEES) 2022-2027

POLAND



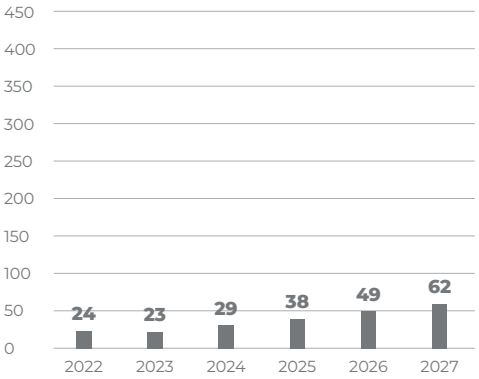
The AI market in Poland is projected to reach **1.6 billion EUR in 2025**. With an expected annual growth rate of **27.8%**, the market volume is forecasted to grow significantly, reaching **5.3 billion EUR** by 2030. This growth is further supported by the substantial increase in demand for other IT services in Poland, driven by the country's highly skilled workforce and competitive pricing.

CZECHIA



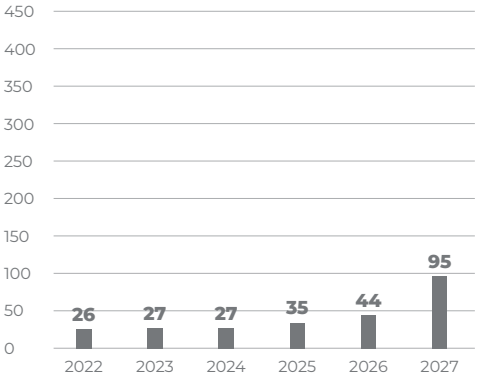
The artificial intelligence sector in the Czech Republic is predicted to reach **682.1 million EUR by 2025**. With CAGR of **27.7%** between 2024 and 2030, the market is projected to surge **to 2.3 billion EUR** by 2030. The expansion is fueled by the growing adoption of AI technologies across various industries, bolstered by the country's robust digital infrastructure and innovation initiatives.

SLOVAKIA



Slovakia's Artificial Intelligence market is forecasted to grow to **0.3 billion EUR by 2025**. With CAGR of **27.7%** from 2024 to 2030, the sector is projected to expand to approximately **1 billion EUR** by 2030, driven in part by the increasing demand for AI-driven cybersecurity solutions to protect against cyber threats.

BULGARIA



By 2025, Bulgaria's AI sector is expected to reach **0.2 billion EUR**. With an anticipated annual growth rate of of **27.7%**, the market is forecasted to expand to **0.7 billion EUR by 2030**, supported by the country's competitive costs and favorable business environment.

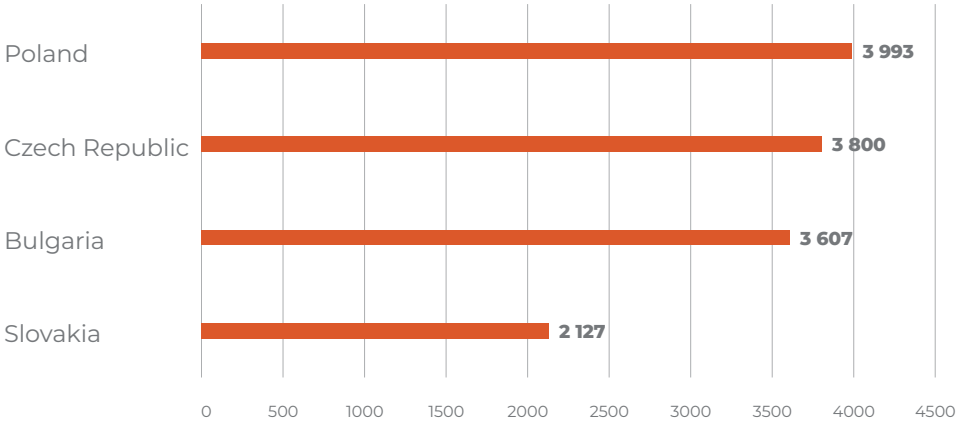
Source: Conquest Consulting analysis based on Statista „Artificial Intelligence" 2025, Statista „ IT Services" 2025, Statista „ Poland, Czech Republic, Slovakia, Bulgaria: Gross domestic product (GDP) at current prices from 1987 to 2029" 2024, Trading Economics „Poland, Czech Republic, Bulgaria, Slovakia: Workers" 2024, Lightcast „ The Lightcast Global AI Skills Outlook" 2024.

AI ENGINEERS EARN BEST IN POLAND AMONG CEE COUNTRIES

AI ENGINEERS SALARIES IN CEE

Average salaries for the positions ranged from **more than EUR 2 thousand to nearly EUR 4 thousand**, and estimates suggest that by 2030, salaries for artificial intelligence professionals in CEE are **expected to increase by about 20%**. In **Poland**, open positions in this area in 2024 were **22% more than a year earlier**.

Average salaries of Artificial Intelligence Engineer in CEE in 2025 (EUR)



Source: ConQuest Consulting analysis based on website www.erieri.com

DIVERSE LEARNING OPPORTUNITIES IN AI EMERGE WITH ABUNDANT FREE RESOURCES AND THE GROWING POPULARITY OF COURSES IN EVERY LEVEL OF ADVANCEMENT

POPULARITY OF LEARNING PLATFORMS

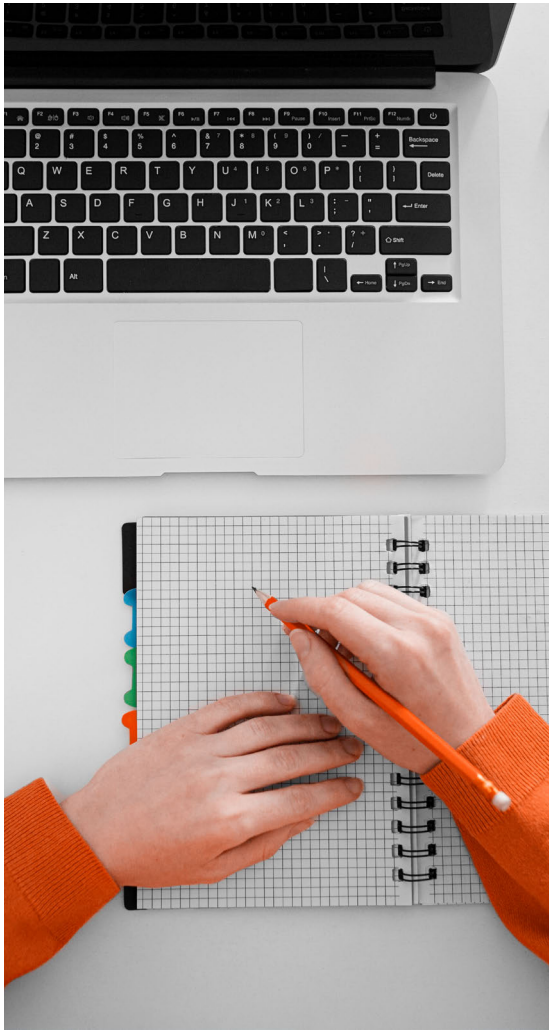
Coursera is the **largest platform** for online courses and AI courses are among its bestsellers. This reflects the **growing global demand for AI education**, as more learners seek to develop skills in this **rapidly expanding field**.

AI COURSES FOR EVERYONE

Google, Microsoft, and the Polish government offer numerous **free AI courses**, making AI education widely accessible. With beginner-level courses often free, it's clear that there is a strong push to **equip more people with AI skills**, reflecting the **growing demand for AI expertise**.

VARIOUS TYPES OF AI COURSES

There are many **beginner-level courses available**, covering the fundamentals of AI, including the basic usage of **AI tools like ChatGPT** and other similar bots, as well as programming and data analysis. **Advanced courses** focus on machine learning, deep learning, data science and AI ethics. Programs like IBM SkillsBuild, Stanford Engineering Everywhere, openHPI and Huawei ICT Academy provide specialized training in AI, cybersecurity and cloud computing (most of them are free of charge). **AI education is accessible to everyone**, with learning opportunities available at **all levels**.



Source: ConQuest Consulting analysis based on Business Insider, Stanford University and Coursera data

THE DEMAND FOR AI TRAINING ACROSS VARIOUS SECTORS IS HIGH, YET EDUCATIONAL INSTITUTIONS LACK EFFECTIVENESS IN TEACHING THE SUBJECT

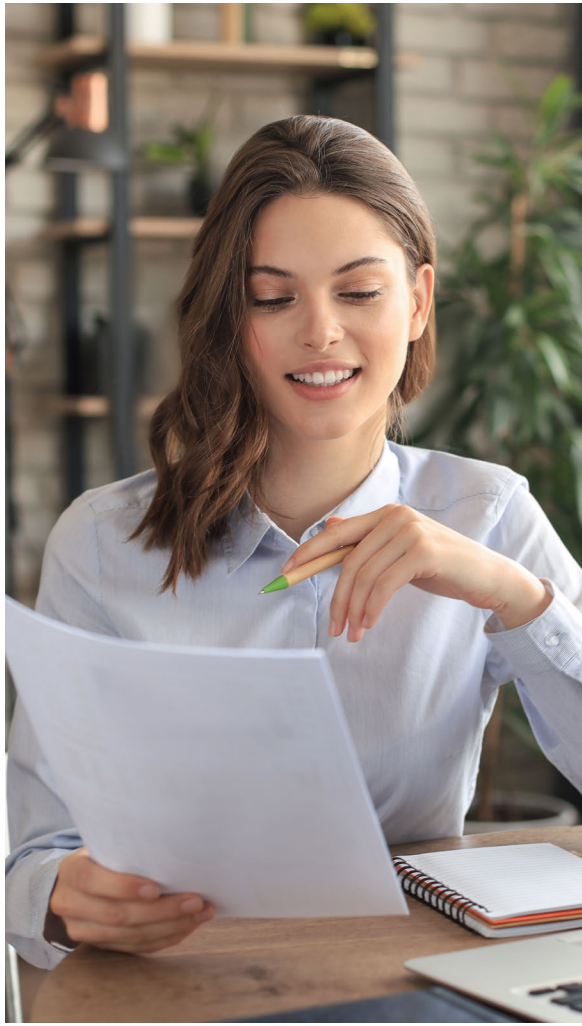
NEED OF AI KNOWLEDGE

The data sourced in the US highlights a **significant gap between AI knowledge** and its **growing importance** across various sectors.

In education, a vast majority (**87%**) of **teachers have not received AI training**. **90%** of **school students want to learn more about AI**. While **86%** of **college students already use AI**, **58%** feel their **knowledge is insufficient** and **80%** are **dissatisfied with the AI education provided in college**. This shows a **strong demand for AI education at all levels**, but institutions are not keeping pace with students needs. More structured AI training for both teachers and students is essential.

In business, AI is becoming a critical tool, with **97%** of **entrepreneurs believing AI will benefit their businesses** and **83%** of **companies prioritizing AI in their strategies**. Additionally, **79%** of **small and medium-sized business owners want to improve their AI skills**. This indicates that while AI is a major focus for businesses, there is still a **skills gap that needs to be addressed** through corporate AI training to stay competitive. At the same time, **63%** of **organizations plan to adopt AI globally within the next three years**.

As AI adoption continues to grow, **public awareness and education will be crucial** in ensuring both individuals and businesses can fully leverage its potential. A similar trend may emerge in the CEE region.



Source: ConQuest Consulting analysis based on National University, CampusTechnology, Aiprm and Coursera data

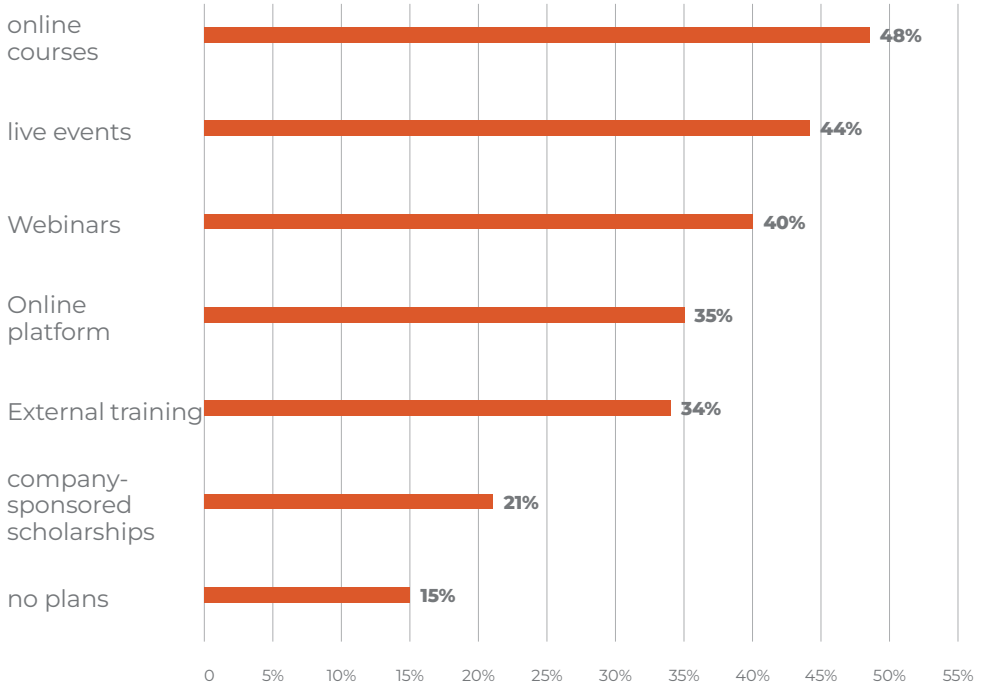
85% OF COMPANIES HAVE AI TRAINING PLANS FOR THEIR EMPLOYEES

LEARNING & DEVELOPMENT INVESTMENT PLANS FOR AI TRAINING IN THE US IN 2023

AI training plans in US companies suggest that **flexible, digital-first learning solutions** are dominating corporate AI training strategies, with a clear focus on accessibility and efficiency, while **live events** and **external AI trainings** also remain a popular and effective method of educating.

As AI continues to reshape industries, companies recognize the **importance of equipping their employees with the necessary skills**. Many organizations are **investing in AI education**, either by providing in-house training or funding external courses to ensure their workforce stays competitive in the evolving job market.

The trend suggests that other regions, including CEE, may adopt similar training approaches.



Source: ConQuest Consulting analysis based on Statista data

COMPANIES SHOULD EDUCATE USERS ABOUT POTENTIAL RISKS REGARDING AI DATA BREACHES

INFORMATION ACQUISITION BY ARTIFICIAL INTELLIGENCE

Language models are trained on various data sets, such as **images**, **recordings or health and financial information**, through which users' privacy can be compromised. This information comes from **publicly available databases, recordings of conversations with artificial intelligence or IoT devices,** among others. Much of this data used to train artificial intelligence meets the definition of personal data under the provisions of the GDPR, **making artificial intelligence a threat to share personal information**.

LACK OF EDUCATION USING AI

Another problem with data privacy when using artificial intelligence is **users' lack of awareness of the consequences of sharing their data with AI**. Research shows that only **53% of Generation Z** respondents are aware that AI algorithm developers **must get permission to use user data to train their product**. It is therefore necessary to properly educate audiences about the problems that may arise from this and how to guard against it.

EXCLUSIVE AI TOOLS

Due to the problems arising from AI's acquisition of private data, companies are oftenly choosing to **purchase AI-based tools solely for enterprise use**. These programs are capable of for example creating meeting notes, answering emails or reading documents. By having an exclusive tool, an organization **protects itself from data leakage**.

Source: ConQuest Consulting analysis based on articles LexDigital, „Dane osobowe w systemach AI. Jak sztuczna inteligencja przetwarza nasze dane?", 2023; LBP Legal, „Czy potrafimy zadbać o bezpieczeństwo swoich danych w modelach LLM (AI) takich jak ChatGPT?", 2024; EY, „Badanie EY: Pokolenie Z i AI – duża wiedza o szansach, mała o zagrożeniach", 2025

BUILDING STRONG PARTNERSHIPS

Bank Pocztowy

The NATEK CEE IT Market Report 2025 highlights **significant growth in the CEE IT market**, driven by **investments in AI and digital transformation**. For financial institutions, artificial intelligence presents a transformative opportunity to **enhance operational efficiency and customer experience**. The report indicates that Poland's AI market is projected to reach EUR 1.6 billion by 2025, with a CAGR close to 30%. This growth underscores the **potential for AI to revolutionize the financial sector by automating processes, improving risk management, and personalizing customer services.**

However, the **challenge lies in adapting the business to effectively utilize AI**. Financial institutions must **undergo a comprehensive transformation to integrate AI into their operations**. This involves not only investing in AI technologies but also rethinking organizational structures, processes, and cultures to support AI adoption.

One of the primary hurdles is the **need for a skilled workforce capable of developing, implementing, and managing AI systems**. The **competition for top AI talent is fierce**, with global tech giants intensifying their recruitment efforts. Financial organizations must **innovate their talent acquisition strategies**, fostering environments that nurture AI expertise. By doing so, they can leverage AI to its fullest potential, ensuring long-term competitiveness and leadership in the digital financial landscape.

JACEK PRESZ

IT Management Bureau Director

EXPERT COMMENT

THE EUROPEAN UNION INTRODUCES AI REGULATIONS SUPPORTING INNOVATION AND ENSURING SECURITY

IMPACT OF EU REGULATIONS ON AI DEVELOPMENT

The first EU regulation on artificial intelligence, called the "**AI Act**," was established on May 21, 2024, by the EU Council and published on July 12, 2024. It represents a **groundbreaking legal framework** that significantly impacts the development of AI technologies in Europe. A key element is the **classification of AI systems according to their risk level**, ranging from high-risk systems that require strict evaluation and transparency to technologies with minimal impact, such as chatbots. The regulation also introduces **bans on the use of unacceptable systems**, such as **behavior manipulation** or **remote biometric identification**, which is aimed at increasing safety and social trust in artificial intelligence.

Next regulation that applies to EU countries is "**Ethics Guidelines for Trustworthy AI**" developed by the High-Level Expert Group on Artificial Intelligence. These guidelines emphasize the creation of AI systems that are **lawful** and **ethical** throughout their lifecycle. The document promotes principles such as **respect for human autonomy**, **harm prevention**, **fairness** and **transparency**. The main goal is to **build public trust** and ensure that AI technology **benefits individuals and society while minimizing risks**.

Furthermore, use of artificial intelligence in the EU is also subject to the **General Data Protection Regulation**, which **ensures the protection of personal data**. Any AI system that processes personal data must comply with the principles of data privacy, including **transparency**, **accountability** and **protection of individuals' rights**. This regulation ensures that AI technologies **do not infringe on privacy rights while fostering their ethical and responsible development**.

Source: Conquest Consulting analysis based on Official Journal of the European Union „Regulation (EU) 2024/1689 of the European Parliament and of the Council" 2024, www.odo24.pl

SEVERE PENALTIES FOR NON-COMPLIANCE WITH THE AI ACT

IMPACT OF EU REGULATIONS ON AI DEVELOPMENT

The AI Act promotes innovation by creating **consistent legal standards within the European Union**, facilitating the development and application of AI technologies in various sectors, including healthcare, education, and transportation. At the same time, requirements related to risk assessment and transparency may **increase adaptation costs**, particularly for **small** and **medium-sized enterprises**.

The complexity of the regulations and the need for cooperation between member states may also lead to **delays in implementation**, but in the long term, these regulations aim to **create a safe and trusted AI ecosystem** in Europe. Furthermore, non-compliance with the regulation can result in significant **fines up to EUR 35 million** or **7% of global annual turnover** (whichever is higher) for violations of prohibited practices or data requirements. Other breaches may incur **fines of up to EUR 15 million** or **3% of turnover**. Also **providing incorrect or incomplete information to authorities** can lead to **fines of EUR 7.5 million** or **1.5% of turnover**.

EU member states have already implemented or are in the process of introducing the AI Act, ensuring a **unified approach to artificial intelligence regulation**. Currently, no CEE countries plan to introduce their own regulations deviating from the EU standards, which will ensure legal consistency and facilitate the sustainable development of AI in Europe.

Source: Conquest Consulting analysis based on Official Journal of the European Union „Regulation (EU) 2024/1689 of the European Parliament and of the Council" 2024, www.odo24.pl

THE CEE REGION'S AI MARKET IS SET TO GROW TO 4.5 BILLION EUR BY 2025, SIGNALING INCREASED INDUSTRY ADOPTION

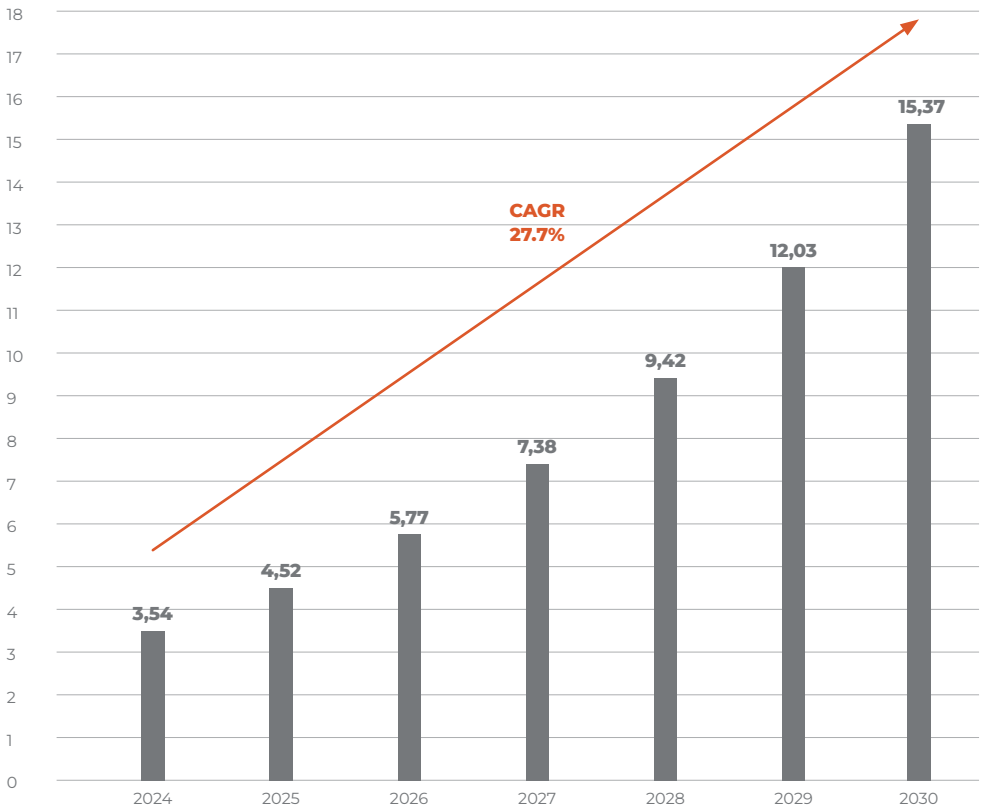
RAPID DEVELOPMENT OF THE AI SECTOR

The Central and Eastern European region is witnessing **significant growth** in the Artificial Intelligence market, with a projected **compound annual growth rate (CAGR) of 27.7%**.

From a **value of approximately 3.5 billion EUR** in **2024**, the AI sector in the region is expected to **reach 15.4 billion EUR by 2030**. This rapid expansion is driven by **increasing AI adoption** across various industries, as businesses and governments **invest in technology and innovation**.

As AI continues to transform industries, the CEE region is set to play **a crucial role** in shaping the future of the technology.

AI Market Value Forecast for CEE (bn EUR)

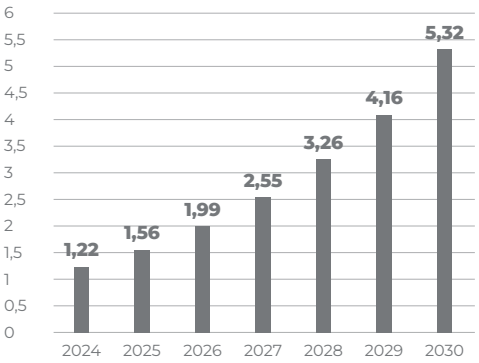


Source: ConQuest Consulting analysis based on Statista database

POLAND HAS THE FIRST AND LARGEST AI MARKET IN THE REGION

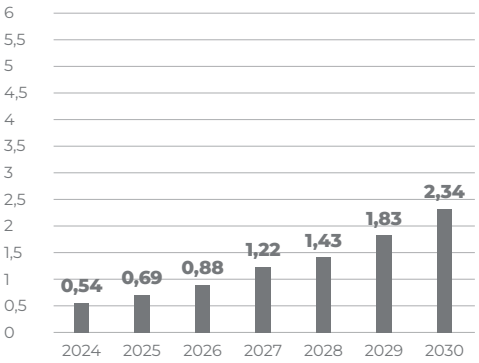
ARTIFICIAL INTELLIGENCE MARKET FORECAST (BN EUR) IN 2024-2030

POLAND



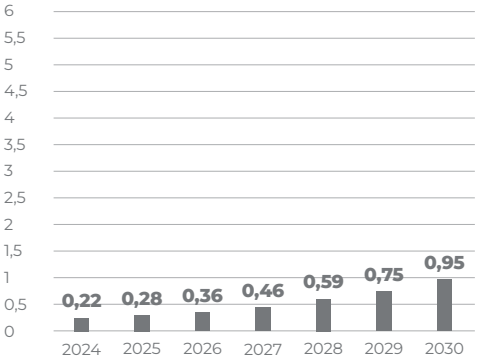
The AI market in Poland is projected to reach **1.6 billion EUR in 2025**. With an expected annual growth rate of **27.8%**, the market volume is forecasted to grow significantly, reaching **5.3 billion EUR** by 2030. This growth is further supported by the substantial increase in demand for other IT services in Poland, driven by the country's highly skilled workforce and competitive pricing.

CZECHIA



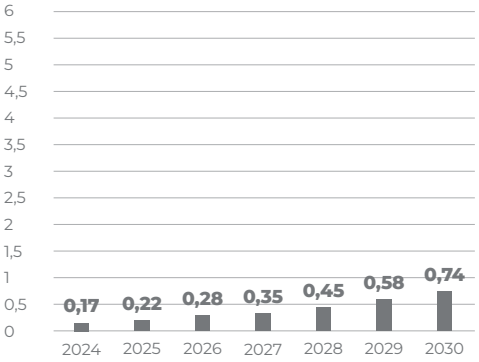
The Artificial Intelligence sector in the Czech Republic is predicted to reach **682.1 million EUR by 2025**. With CAGR of **27.7%** between 2024 and 2030, the market is projected to surge **to 2.3 billion EUR** by 2030. The expansion is fueled by the growing adoption of AI technologies across various industries, bolstered by the country's robust digital infrastructure and innovation initiatives.

SLOVAKIA



Slovakia's Artificial Intelligence market is forecasted to grow to **0.3 billion EUR by 2025**. With CAGR of **27.7%** from 2024 to 2030, the sector is projected to expand to approximately **1 billion EUR** by 2030, driven in part by the increasing demand for AI-driven cybersecurity solutions to protect against cyber threats.

BULGARIA



By 2025, Bulgaria's AI sector is expected to reach **0.2 billion EUR**. With an anticipated annual growth rate of of **27.7%**, the market is forecasted to expand to **0.7 billion EUR by 2030**, supported by the country's competitive costs and favorable business environment.

Source: ConQuest Consulting analysis based on Statista database

AS AI ADOPTION ACCELERATES, CEE IS EMERGING AS A HOTSPOT FOR TECHNOLOGICAL PROGRESS AND INDUSTRY DISRUPTION

The AI market in Central and Eastern Europe is **growing rapidly** due to **increased adoption of digital technologies**, **advancements in AI sub-markets** like Robotics, Machine Learning, and Natural Language Processing, and a **rising demand for personalized and efficient solutions** across industries such as manufacturing, healthcare and finance.

Government initiatives promoting digital transformation, along with **strong educational systems**, a **skilled workforce** and **growing tech ecosystems**, are contributing to the region's development as an **AI hub**.

By 2030, the AI market in CEE is expected to thrive, **creating new opportunities** for both established companies and startups, with **AI playing a crucial role in economic growth and digital modernization**.

Source: ConQuest Consulting analysis based on Statista database

SMART CITY TECHNOLOGIES WILL TRANSFORM URBAN LIVING, TACKLING ENVIRONMENTAL CHALLENGES

AI INDUSTRIES WITH THE HIGHEST GROWTH POTENTIAL

INNOVATIONS SHAPING THE FUTURE OF MOBILITY

The automotive industry, encompassing the production of vehicles, trailers, and transportation equipment, is undergoing a transformation with the rise of **new mobility technologies**. This includes **autonomous vehicles**, **battery electric vehicles** and **on-demand mobility services**. By **2025**, the entire **automotive products market** is projected to reach a value of **EUR 1.3 trillion**. Innovations in these technologies are expected to generate **17%** of global automotive profits, with the **share of profits** from new mobility technologies increasing to **26%** by **2030** and reaching **40%** by **2035**. These advancements are **reshaping the automotive sector** and it's clear that the future of transportation will be largely defined by these technologies, significantly influencing both **industry profits** and the movement of **people and goods worldwide**.

TRANSFORMING CITIES WITH TECHNOLOGY

Smart cities, utilizing technologies like **IoT**, **AI**, **and big data**, aim to **enhance urban living** by addressing challenges such as **traffic**, **energy consumption** and **sustainability**. The global smart cities market is expected to **grow significantly**, with projected revenue reaching **EUR 76.4 billion** by **2025** and a CAGR of **9.6%**, reaching **EUR 110.2 billion** by **2029**. This growth highlights the increasing investment in technologies that **improve efficiency**, reduce environmental impact and enhance quality of life. As a result, smart cities are set to play **a crucial role** in shaping the future of **urban development**.

Source: ConQuest Consulting analysis based on Statista database

POLAND IS THE LARGEST STARTUP MARKET IN CEE

AI STARTUPS IN CEE

AI startups in CEE have **raised at least** EUR 5 billion **between 2021 and 2024**.

The leader in funds raised is **Poland,** with **EUR 170 million** in 2024. **Polish AI startups account for 23% of all AI companies in CEE**. AI startups focus on the health, IT, marketing and finance sectors. The most popular specializations, however, include Machine Learning, Big Data and Computer Vision.

For the further development of AI in CEE, it will be crucial to **raise digital competence and artificial intelligence** which will help the region remain competitive and increase innovation.

Source: ConQuest Consulting analysis based on The Recurisve, "The Recursive-State of AI in CEE Report.", 2024

POLAND'S ELEVENLABS AND BULGARIA'S PAYHAWK ARE THE BIGGEST AI STARTUPS AMONG CEE COUNTRIES

AI STARTUPS IN CEE

EUR 3.4 billion

ELEVENLABS

ElevenLabs was founded in 2022 by Mateusz Staniszewski and Piotr Dąbkowski. The startup offers a tool that uses artificial intelligence to **generate voices**, **speech and sound effects**. The company currently serves more than 36 large corporate clients, including the likes of **the Washington Post and HarperCollins**.

The company's rapid growth is worth noting. In January 2024, ElevenLabs was estimated to be worth around EUR 1 billion and by the end of the same year the startup was **worth more than EUR 3 billion**. ElevenLabs' previous investors, including Andreessen Horowitz and Sequoia Capital, also participated in this round, confirming that the company has a **solid foundation and future potential**.

EUR 1 billion

PAYHAWK

The Bulgarian company is **the first startup to reach unicorn status in the country**, meaning its valuation has **surpassed USD 1 billion**.

Payhawk provides its own platform for businesses to make it easier for companies to **manage their finances through a platform that helps to monitor the processes**. The startup serves companies from various industries in 30 countries. It mainly targets large SME entities and corporate clients.

Source: ConQuest Consulting analysis based on The Recurisve, "The Recursive-State of AI in CEE Report.", 2024 and article Fintek, „Bułgaria doczekała się pierwszego jednorożca. Został nim fintech Payhawk", 2022 and website www.payhawk.com

AI: THE FAST TRACK TO INNOVATION AND EFFICIENCY

I see **AI fundamentally transforming the IT landscape**. **Large Language Models (LLMs) have been catalysts for evolving IT specialists' skills** across every branch. This is particularly evident in **AI-driven coding, which enables businesses to implement tools faster and more efficiently**, streamlining processes. New key competencies, such as **advanced data analysis and AI ethics**, are becoming essential.

AI automates repetitive tasks, **freeing up employees to focus on strategic projects**. **Intelligent automation and predictive analytics enhance operations, reducing errors and downtime, leading to significant cost savings**. With AI, companies can **scale operations swiftly and adapt flexibly to market changes**. AI fuels innovation and competitive advantage, enabling smarter decision-making.

Importantly, **this transformation is happening faster than ever.** Personally, I like to call a project that quickly brings value a "quick win." Today, a quick win is truly quick.

MATEUSZ BIENIEK
Global Data Science Manager

AmRest

EXPERT COMMENT

06 UNIVERSITIES AND EDUCATION

THERE ARE MANY DEVELOPMENT OPPORTUNITIES IN THE FIELD OF AI FOR STUDENTS

AI COURSES AT UNIVERSITIES IN POLAND

JAGIELLONIAN UNIVERSITY

Bachelor in Artificial Intelligence - Faculty of mathematics and computer Science

Program provides a solid theoretical and practical foundation in AI, covering topics such as algorithms, machine learning and neural networks. Students are prepared to work in the rapidly evolving field of artificial intelligence by combining knowledge of computer science with AI applications across various industries.

KOZMINSKI UNIVERSITY

Bachelor in management and Artificial Intelligence

Program is conducted in English and it combines management principles with artificial intelligence, preparing students to leverage AI in business decision-making. Students develop skills in data analysis, machine learning and strategic management.

Source: Conquest Consulting analysis based on www.studia.uj.edu.pl, www.kozminski.edu.pl

THERE ARE MANY DEVELOPMENT OPPORTUNITIES IN THE FIELD OF AI FOR STUDENTS

AI COURSES AT UNIVERSITIES IN CZECH REPUBLIC

CHARLES UNIVERSITY

Bachelor in Artificial Intelligence - faculty of mathematics and physics

Program offers in-depth knowledge of AI technologies, including machine learning, robotics and natural language processing. It prepares graduates for careers in academia, research and the tech industry

CZECH TECHNICAL UNIVERSITY IN PRAGUE

Bachelor in Artificial Intelligence - faculty of information technologies

Program provides education in AI, focusing on algorithms, machine learning and data analysis. After graduation you can obtain occupation as data processing analyst, creator of decision support systems or big data systems administrator.

Source: Conquest Consulting analysis based on www.mff.cuni.cz, www.fit.cvut.cz

THERE ARE MANY DEVELOPMENT OPPORTUNITIES IN THE FIELD OF AI FOR STUDENTS

AI COURSES AT UNIVERSITIES IN BULGARIA

SOFIA UNIVERSITY ST. KLIMENT OHRIDSKI

Bachelor in Artificial Intelligence - faculty of mathematics and informatics

Program provides advanced knowledge in AI, covering machine learning, neural networks and data processing techniques. Graduates are prepared for roles in software companies, developing AI-driven applications such as intelligent search engines, expert systems and smart home technologies.

TECHNICAL UNIVERSITY OF SOFIA

Bachelor in intelligent systems and Artificial Intelligence – faculty of industrial technology

Program trains specialists in the development and application of AI principles, methods and systems. Students are being prepared for careers in engineering, design, research and management.

Source: Conquest Consulting analysis based on www.fmi.uni-sofia.bg, www.mtf.tu-sofia.bg, www.bachelorsportal.com

THERE ARE MANY DEVELOPMENT OPPORTUNITIES IN THE FIELD OF AI FOR STUDENTS

AI COURSES AT UNIVERSITIES IN SLOVAKIA

PAVOL JOZEF ŠAFÁRIK UNIVERSITY IN KOŠICE

Bachelor and master in Artificial Intelligence - faculty of science

Program provides in-depth knowledge of machine learning, data mining and AI algorithms Students gain experience in real-world data analysis projects, preparing them for careers in data science and AI development.

Source: Conquest Consulting analysis based on www.ics.science.upjs.sk, www.bachelorsportal.com

THE NEXT FRONTIER OF TECH INNOVATION

Košice is becoming one of the most dynamic tech hubs in Central and Eastern Europe. While the region's IT growth was once based on cost leverage and labor cost arbitrage, this model is no longer the main driver. The market today expects something more: **deep industry knowledge, modern engineering skills and innovation in key areas like data, Artificial Intelligence and cybersecurity**. This shift is visible in the changing talent demand. Roles such as AI specialists, Data Engineers and Cybersecurity Professionals are increasingly sought after. I'm glad to see that **many companies in the region are investing in their own know-how and moving toward more advanced, value-added services**.

Another major strength of our ecosystem is **strong collaboration** - **not only between companies, but also with universities and local government**. Institutions like Pavol Jozef Šafárik University and the Technical University of Košice provide a **solid foundation for research and talent development**.

At the same time, we need to keep working on the ecosystem itself. Alongside large global players, we should **actively support the growth of smaller, product-oriented companies and startups** - especially in close connection with university research. **A diverse, innovation-driven ecosystem supported by strong communities is the best long-term talent magnet for the region.**

Košice has the ingredients. Now it's about scaling what works and building the next generation of tech leadership from within.

IT VALLEY KOŠICE

JURAJ GIRMAN
Chairman

EXPERT COMMENT

THE IT SECTOR IN CEE CONTINUES TO SHOW REMARKABLE TALENT

IT STUDENTS ACHIEVEMENTS IN ACROSS CEE REGION

The IT sector in Central and Eastern Europe continues to thrive, with **remarkable achievements by students and professionals** from Poland, Czechia, Slovakia, and Bulgaria in various international competitions.

In the **2024 TechFest Hackathon**, Polish students from **Warsaw University of Technology won 7 out of 9** awards. The winning polish team, **Quackers**, developed an **AI-powered chat tool for data analysis**, showcasing the high skill level of Polish IT students. When it comes to Czech Republic, **Michal Haták**, an internationally recognized programmer from **College of Polytechnics Jihlava**, led his team in developing **software for a Canadian real estate investor**, breaking into the North American market.

Furthermore, according to the „Future of IT" report, which rates countries based on IT talent, **Polish programmers are ranked 1st out of 24** countries in North, Central and East Europe. **Slovakia is ranked 4th**, while **Bulgaria holds 8th** position, securing strong standings among other countries. Meanwhile, **Czech programmers are positioned 14th**. The anking shows that these countries are strengthening their positions in the IT sector, with Poland leading the way in terms of talent and the Czech Republic, Slovakia and Bulgaria also recording strong results.

Source: Conquest Consulting analysis based on Emerging Europe„Future of IT" 2024, www.pw.edu.pl, www.rostecky.cz

07 SUSTAINABILITY IN IT

SUSTAINABLE DEVELOPMENT IN IT ENHANCES CORPORATE VALUE WHILE MINIMIZING ENVIRONMENTAL IMPACT

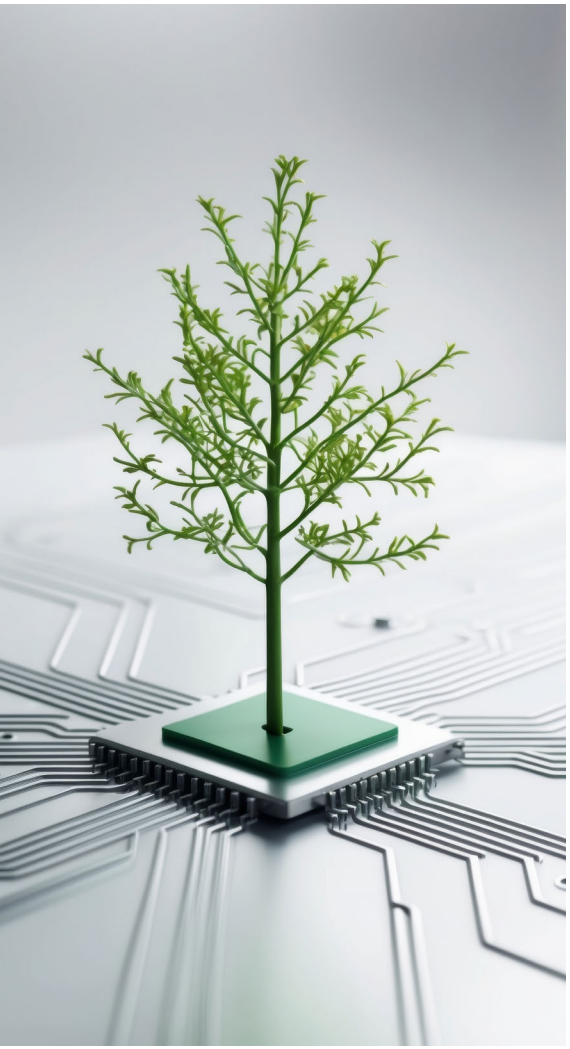
Sustainable development in IT focuses on **minimizing environmental impact** while **enhancing corporate value**. It encompasses the practices and strategies used throughout the lifecycle of information technology, including manufacturing, usage, management and disposal. Sustainable IT aims to **reduce negative effects on the environment**, such as greenhouse gas emissions, resource depletion and electronic waste, while **promoting positive contributions to society**.

Companies that **prioritize energy efficiency, responsible procurement and circular economy models** can benefit from **lower costs**, **improved operational efficiency and a stronger reputation**. Additionally, sustainable IT aligns with regulatory requirements and growing consumer expectations, positioning it as a **strategic investment for future growth**. By embracing green technology, businesses can **future-proof their operations, support global environmental goals and establish themselves as leaders in an increasingly eco-conscious market**.

Ultimately, sustainable IT not only contributes to environmental protection but also **fosters innovation and resilience**, ensuring that technology can be harnessed for the benefit of current and future generations.

Source: ConQuest Consulting analysis based on Exorgio Upos, Bank.pl, Circular Computing

BIGGEST IT CORPORATES ARE ADVANCING SUSTAINABILITY AND ECO-FRIENDLY INITIATIVES



OMRON

Omron is **actively reducing greenhouse gas emissions** by improving energy efficiency and increasing its reliance on renewable energy sources. To support a circular economy, the company **extends product lifespans**, **strengthens recycling initiatives** and maximizes resource recyclability. It also prioritizes environmental responsibility by managing hazardous substances, conserving biodiversity and ensuring responsible procurement practices. Omron's sustainability efforts have earned it **three platinum ratings from EcoVadis**, placing it among the **top 1% of businesses in sustainability performance**, along with double A ratings from the CDP for climate change and water security. Additionally, its certification from the Science Based Targets initiative underscores its commitment to **decarbonization**. Through these initiatives, Omron reinforces its dedication to **sustainability** while **enhancing corporate value**.

MICROSOFT

Microsoft's sustainable development initiatives focus on several key areas, including reducing its **environmental footprint** and **helping customers develop sustainable technologies and practices**. The company actively supports environmental regulations and policies that benefit the environment. Additionally, Microsoft leverages artificial intelligence in various projects, such as **decoding durum wheat's DNA** for sustainable agriculture, **detecting leaky pipes** to conserve water, **supporting fish and shrimp farming in Indonesia** and **combating deforestation in the Amazon** with Project Guacamaya.

Source: ConQuest Consulting analysis based on Omron, Microsoft, Iautomatyka, Sustainable Japan

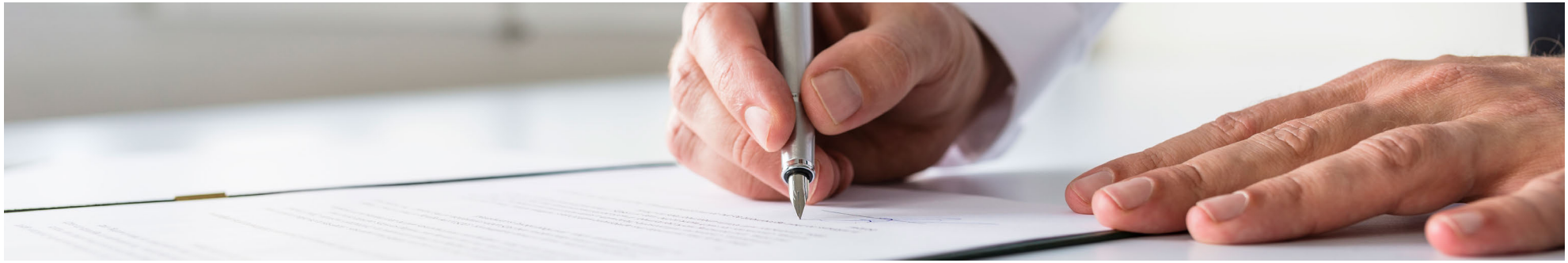
NEW EU REGULATIONS IMPROVE TRANSPARENCY AND ACCOUNTABILITY BUT POSE CHALLENGES FOR COMPANIES THAT ARE NOT ADEQUATELY PREPARED

ESG RATINGS REGULATION

The new EU regulation on ESG ratings aims to **increase transparency**, **consistency**, **and reliability in sustainability assessments**. IT companies relying on ESG ratings for investment and stakeholder trust must now work with rating providers authorized and supervised by the European Securities and Markets Authority. **The regulation requires clear disclosure of methodologies** and data sources used in ESG assessments and mandates the separation of business activities to prevent conflicts of interest. Additionally, **non-EU ESG rating providers must undergo approval processes** to operate within the European market, ensuring greater accountability in sustainability evaluations.

CORPORATE SUSTAINABILITY REPORTING DIRECTIVE (CSRD)

The CSRD significantly expands sustainability reporting obligations, **covering more companies**, **including IT firms**. It introduces the **double materiality principle**, requiring businesses to disclose both the financial impact of ESG factors on their operations and their own **environmental and social footprint**. Reports must comply with the European Sustainability Reporting Standards and undergo external verification to enhance credibility. **IT companies will need to integrate ESG** considerations into their business strategies, assess sustainability risks, and implement data-driven reporting systems. Non-compliance can lead to **financial penalties**, increased regulatory scrutiny, and reputational risks. Additionaly, adhering to these regulations can **result in sizable costs and bureaucratic challenges for companies**.



Source: ConQuest Consulting analysis based on: European Council, Sustainability News, Sysbec, PwC

NEW ESG REGULATIONS CREATE CHALLENGES, OPPORTUNITIES AND EXTRA INVESTMENTS FOR IT

MAJOR ESG REGULATIONS

INCREASED ESG DATA MANAGEMENT REQUIREMENTS

IT companies must **invest in advanced ESG data management systems** and reporting frameworks that comply with new standards like ESRS. Transparency and accuracy in reporting are crucial, **requiring the implementation of new technologies and processes**.

GREATER ACCOUNTABILITY FOR BOARDS AND BUSINESS STRATEGIES

Stricter regulations increase the **responsibility of executives** and company boards for ESG performance, influencing long-term strategic decision-making. **IT firms must adapt their business models**, integrating sustainability as a core component of their operations.

COSTS AND CHALLENGES OF REGULATORY ADAPTATION

Compliance with new regulations **leads to additional operational costs** and the need for continuous adjustments to evolving sustainability standards. While this can provide a competitive advantage and strengthen investor trust, **it requires significant financial and resource investments**.

Source: ConQuest Consulting analysis based on: European Council, Sustainability News, Sysbec, PwC

MAJOR SUSTAINABLE TECHNOLOGIES IN IT BRING AUTOMATION, CIRCULAR ECONOMY, SMART ENERGY MANAGEMENT AND AWARENESS

KEY GREEN IT TECHNOLOGIES FOR EFFICIENT ENERGY USE

AUTOMATION & USER AWARENESS

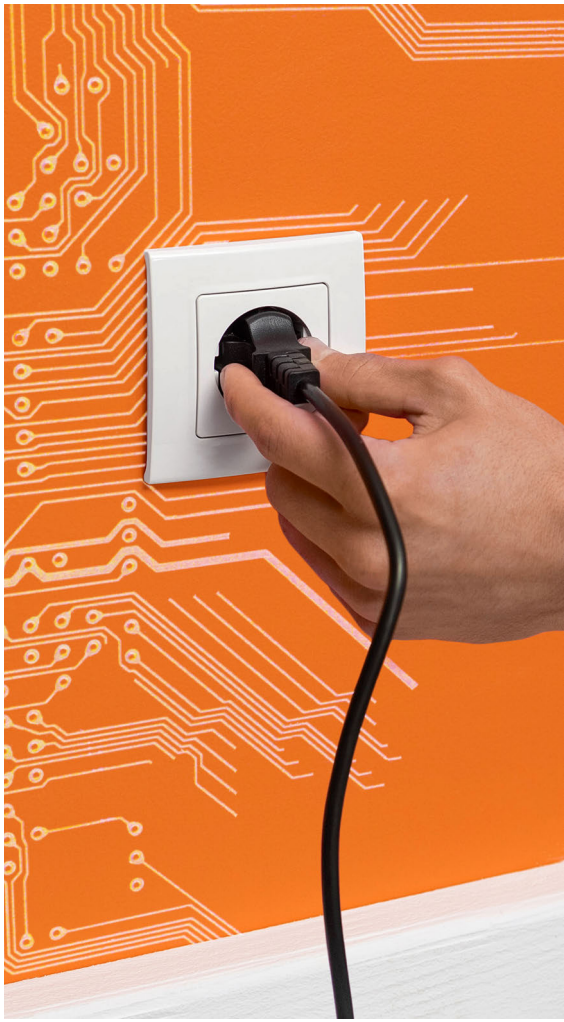
Automation systems in IT allow energy consumption to be adjusted to actual needs, such as dynamically **reducing computing power during periods of low demand**. Smart lighting, centralized print management, and duplex printing reduce waste. **Employee education on simple habits**, like shutting down computers after work, further cuts energy use. These efforts contribute to sustainability while reducing costs.

SUSTAINABLE ELECTRONICS & CIRCULAR ECONOMY

Eco-friendly IT focuses on **recyclable materials** and remanufactured components to **minimize electronic waste**. Companies adopt take-back programs to refurbish and reuse outdated hardware instead of discarding it. Lifecycle assessments (LCA) help identify **environmentally friendly production and disposal methods**. Sustainable sourcing and ethical supply chains further reduce the environmental impact of IT hardware.

SMART ENERGY MANAGEMENT IN IT DEVICES

Automated **power-saving features**, such as sleep mode and auto-shutdown, reduce energy consumption. Adjusting brightness, disabling unused components, and using **Energy Star-certified devices** help lower power usage. IT fleet management tools monitor and optimize energy efficiency. These steps **cut operational costs and carbon emissions** while maintaining performance.



Source: ConQuest Consulting analysis based on: Springer Nature Link, odpowiedzialnybiznes, mobiletrends, Wasko

08 EXECUTIVE SUMMARY

CEE IT MARKET IS GROWING RAPIDLY THANKS TO INVESTMENT IN INNOVATION

INTRODUCTION

The CEE region's economy is expanding, with a **27% decrease in unemployment**. In addition, **inflation in the region remains at 3%**. Poland stands out from other countries in the CEE. The country's **population is more than 36 million citizens**, and **Poland's GDP accounts for nearly one-third of the region's GDP**. The Polish e-commerce is also the fastest growing in Europe.

The IT market in CEE **grew by an average of 11% per year between 2020 and 2024**. Sectors such as **e-commerce, AI, the Internet of Things, and Smart Cities** have experienced particular growth, driven by numerous state-supported investments, including broadband and 5G infrastructure. Although artificial intelligence is viewed positively by CEE citizens, forecasts indicate that it may **replace a significant portion of the workforce**. Despite geopolitical tensions, the market has continued to grow, and the **influx of IT workers from Ukraine** has improved the availability of skilled labor.

The main challenges in the IT market are **cybercrime**, **a shortage of skilled workers, and regulations related to Artificial Intelligence**. The state and private companies are countering this by, among other things, investing in the education of citizens and improving the conditions for IT development.

Average salaries for IT positions range from **EUR 2,000 to EUR 6,000**. The highest salaries are earned by **IT architect and professionals specializing in machine learning and artificial intelligence**.

Source: ConQuest Consulting analysis

POLAND WITH LARGEST IT MARKET IS A KEY PLAYER IN CEE

SUMMARY

In 2024, the **CEE region reached a GDP of EUR 2,239 billion**, representing **12% of the European Union's GDP**. **Poland, with a GDP of EUR 807 billion**, is a key player in the region, characterized by a **skilled workforce and low unemployment**. **The smallest player in CEE is Bulgaria**, but it is growing steadily, attracting foreign investors by offering **low taxation and a strategic location**.

The IT market in Poland, the Czech Republic, Slovakia, and Bulgaria **grew at an average annual rate of 11% between 2020 and 2024**, reaching a **value of EUR 43 billion in 2024**. **Bulgaria was the fastest-growing market** during the period, with a **CAGR of 21%**, while **Poland reached the highest value at EUR 27 billion in 2024**.

The main trends in the market were the development of **AI,** the growing importance of **cybersecurity, Internet of Things and Smart Cities**. **New technologies such as 5G and blockchain** are also experiencing growth. Among the largest IT investments in CEE are the **construction of a fiber-optic cable in Slovakia** worth almost **EUR 1 billion**, and more than **EUR 1.7 billion** to be invested by the Czech government in the **development of Artificial Intelligence**.

Source: ConQuest Consulting analysis

ARTIFICIAL INTELLIGENCE DEVELOPMENT BRINGS BENEFITS AS WELL AS CHALLENGES TO THE IT MARKET

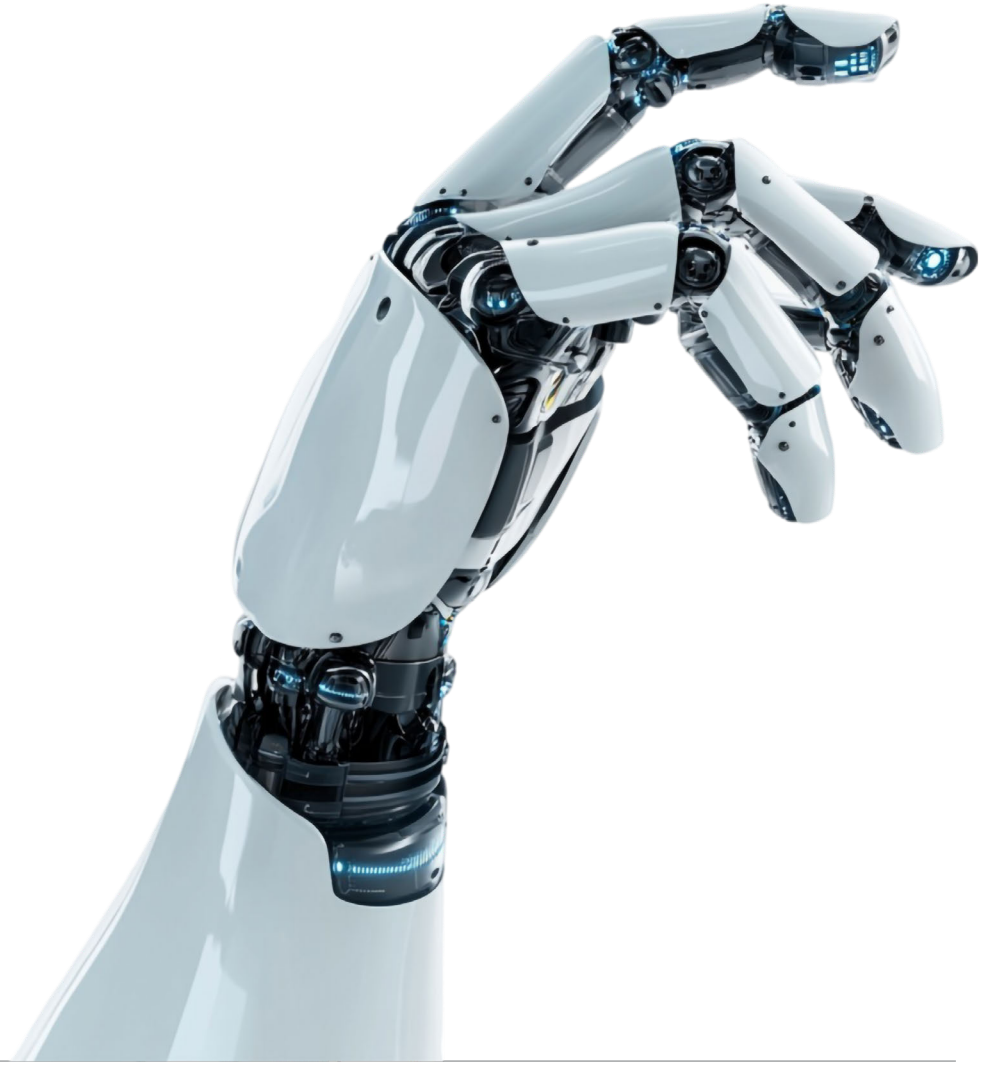
SUMMARY

Major challenges in the IT market include **cybercrime**, **AI regulations, and a shortage of IT talent and skills gaps**. In addition, the **rising cost of expanding IT infrastructure** is hampering further growth.

Artificial Intelligence offers companies the opportunity to **minimize costs** by, among other things, automating processes, but it **also poses a threat to employees by replacing them**. The most vulnerable positions are service workers, administrative and keyboard clerks, and customer service workers.

The highest adoption of AI is seen in sectors such as **IT and Communications, Professional**, **Scientific**, **and Technical Activities**, **and Real Estate**. In 2024, the **AI start-up sector in the CEE region experienced further growth**, with **Poland leading the way**. Polish start-ups raised a total of **EUR 171 million in funding**, the highest amount of any country in the region.

Average salaries for employees in AI range from EUR 2,000 to EUR 6,000, with specialists in Slovakia and Bulgaria receiving the lowest salaries. **Salaries are expected to rise further**, especially in AI-related positions.



Source: ConQuest Consulting analysis

09 ABOUT NATEK

ABOUT NATEK

GET TO KNOW US!

NATEK is a **leading provider of comprehensive IT outsourcing services** in Central and Eastern Europe. Our mission is to **provide high-quality IT solutions and services to international companies while providing a working environment based on partnership for our employees**. Our diverse teams bring expertise from a variety of industries, enabling us to effectively anticipate and respond to our customers' needs.

NATEK has **helped over 60 companies build technical teams** in the CEE region, working with companies from EMEA and North America. Our portfolio includes cooperation with clients from the **Banking, Telecommunications, Technology, Automotive and other industries** who want to gain access to a dynamically developing talent pool in Poland, Czechia, Bulgaria and Slovakia. Thanks to our **experience in building and supervising high-performance IT teams**, NATEK provides specialized support to technology companies at various stages of development.

With **over 1 thousand specialists on board** and **over 200 successfully implemented projects**, we have been **supporting Fortune 500 clients in nearshoring their operations throughout the CEE region** for 20+ years.

This report reflects **NATEK commitment to the IT ecosystem in CEE** and aims to highlight its value and promote the benefits of investing in the region.

Source: CBRE, "CEE Flexible Office Market", 2021; CBRE, "European Flex Office Market Update", 2024

EXPLORE OUR SERVICES

- CLOUD
- INFRASTRUCTURE
- QA
- NETWORK
- MODERN WORKPLACE
- SERVICENOW
- SAP
- SOFTWARE DEVELOPMENT
- RPA
- SERVICE DESK
- BPO
- ANALYTICS SERVICES

HOW CAN WE SUPPORT YOU?

MANAGED TEAM

Let us build the full team for you with proper ramp up plan, competences and project management. We will support your project and advise on project's improvements.

MANAGED SERVICE

We build our services around customers organisation and needs. You can leverage from our existing knowledge, quick ramp-up and full service management.

STAFF AUGMENTATION

We provide wide range of technical competencies of IT specialists based on defined requirements. Our clients enjoy the necessary competences for their project, while we take care of all the rest.

True to our values: **Expertise**, **Accountability** and **Partnership**, everything we do is orientated towards delivering the best service to our customers.

BUILDING STRONG PARTNERSHIPS

The **journey of Amadeus and NATEK** began under extraordinary circumstances, when Amadeus needed to **divert from the beaten track in workforce augmentation**. NATEK team responded with a **customer-centric approach**, presenting a positive business case for a skill-based injection of talent into a mission with a relatively short and unpredictable timeline.

An iterative approach was applied, quickly resulting in the **delivery of profiles well-matched to the skillset sought by Amadeus**. The **"can-do" attitude of NATEK team** led to the first successful placement and initiated the continuous development of business with other Amadeus stakeholders, particularly **expanding its footprint in Warsaw, Poland**.

Within a relatively short timeframe, the two companies managed to forge a **healthy collaboration framework**, ensuring the **optimized self-development of consultants** engaged in Amadeus' missions. Needless to say, **this fruitful cooperation continues to this day**!

BARTOSZ SUJKA
Project & Site Manager

EXPERT COMMENT

THANK YOU FOR 20 YEARS TOGETHER!

Over the past two decades, **NATEK has evolved alongside the IT industry** - expanding services, entering new markets, and **delivering value to global clients**. We appreciate the continued **trust and cooperation** that have shaped our journey so far. Here's to the future of technology, innovation, and shared success.

natek | 20 YEARS ANNIVERSARY

REFERENCES

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- Envato
- NATEK

CONTENT PARTNERS

- Conquest Consulting

SPECIAL THANKS TO

- Bartosz Sujka (Amadeus)
- Bartosz Witorzeńć (Pekao)
- Błażej Lutkowski (Pekao)
- Christoph Holzweber (V-TS)
- Jacek Presz (Bank Pocztowy)
- Juraj Girman (Košice IT Valey)
- Krzysztof Łyczko (Santander)
- Marcin Terlecki (DNV)
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