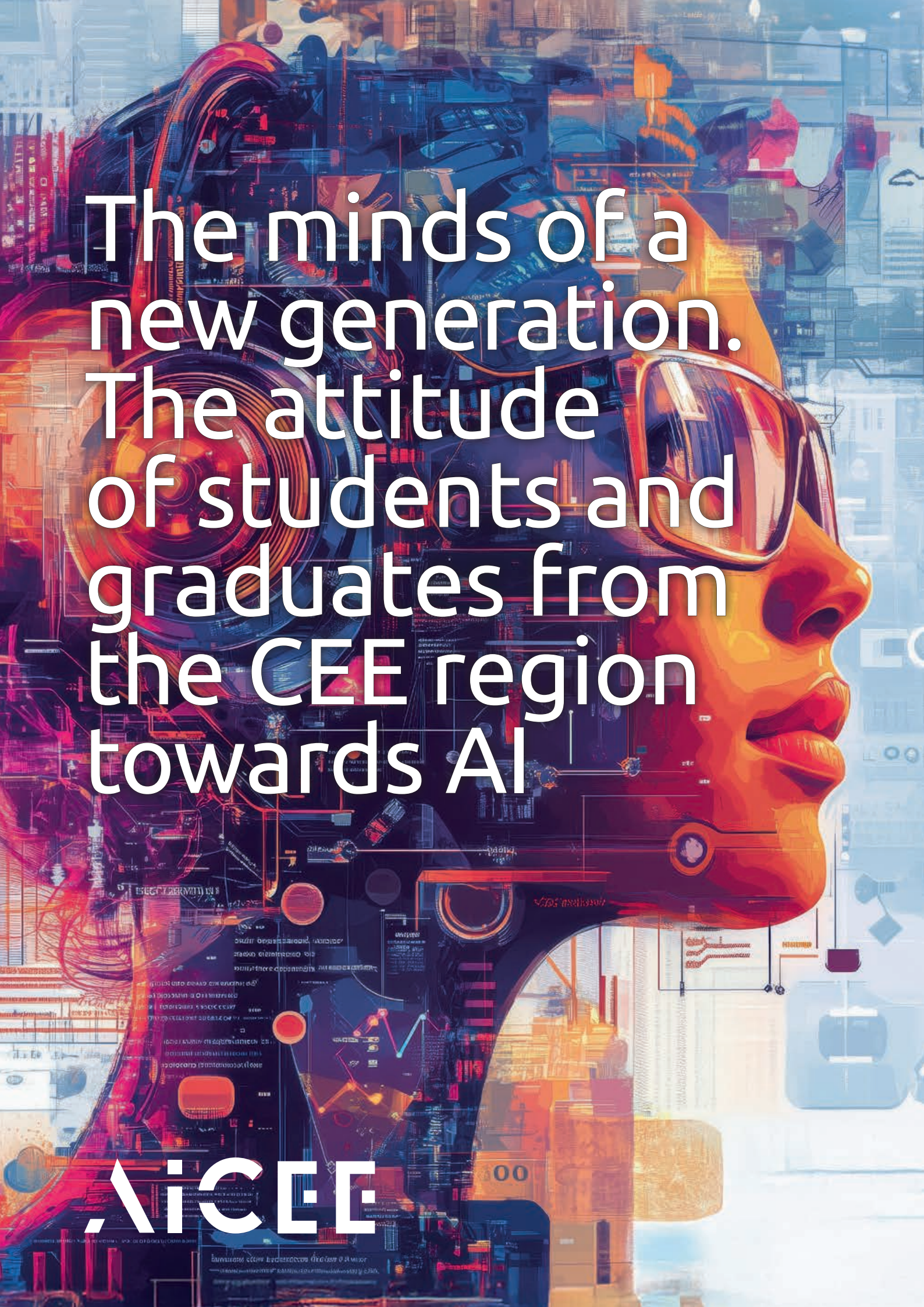




The minds of a
new generation.
The attitude
of students and
graduates from
the CEE region
towards AI

NiCEE



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Author

Iga Kołacz-Bieńkuńska

Proofreading

Aeddan Shaw

Design

Mariola Figura

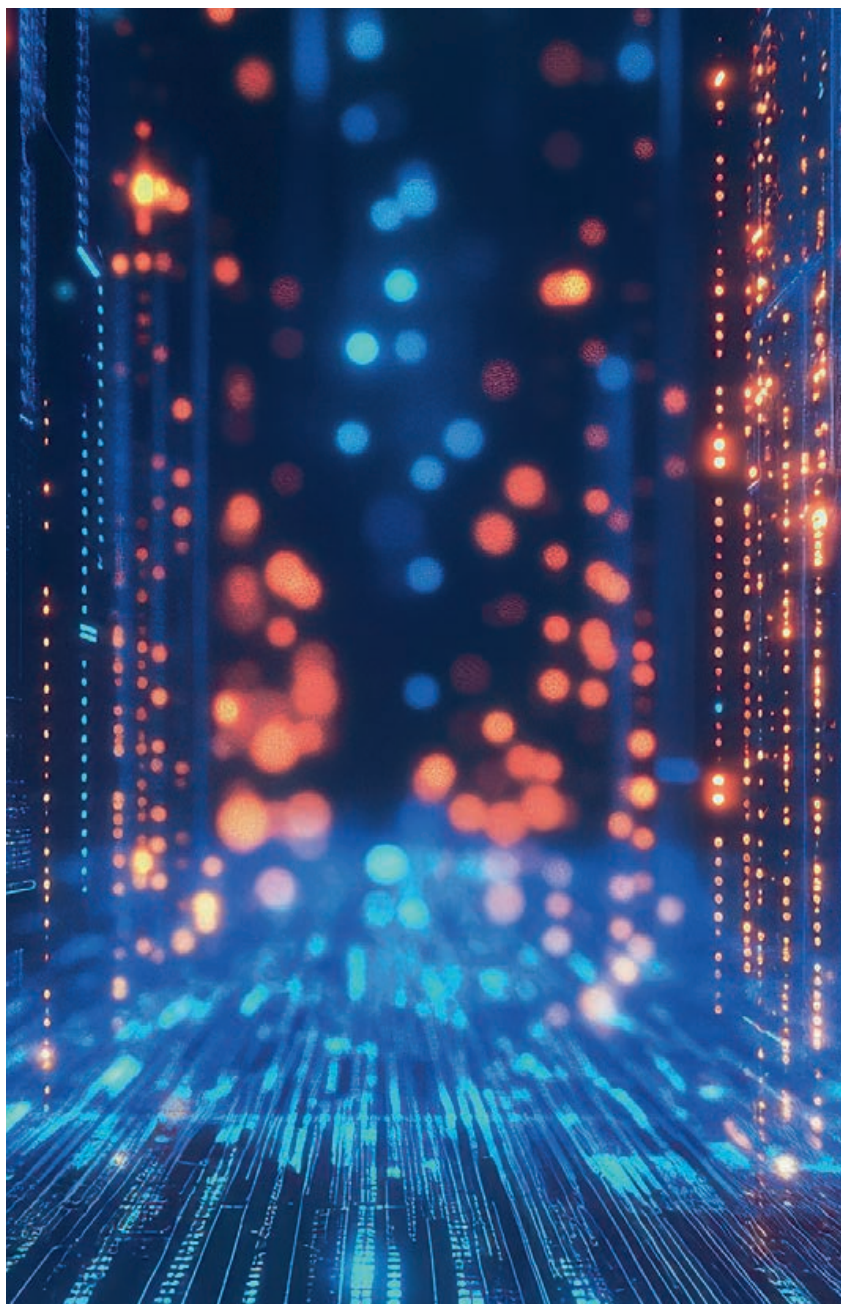
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Dariusz Matuszewski

Publisher

AI CEE Foundation
projects@aicee.tech

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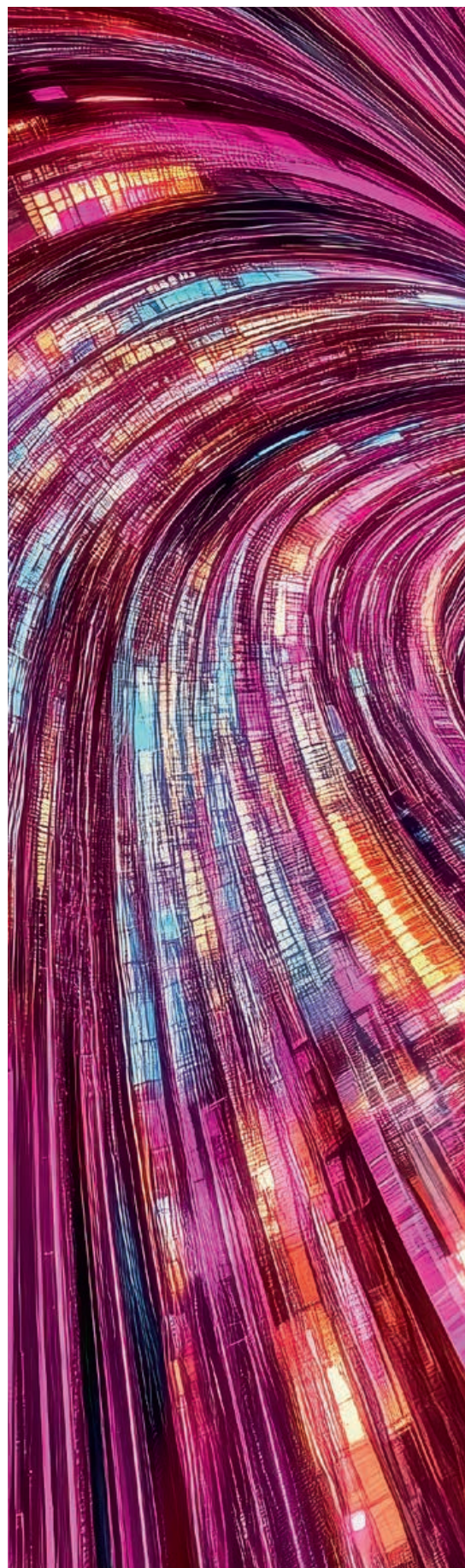




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Abstract

This report examines the attitudes, knowledge, and usage trends of artificial intelligence among university students and recent graduates across six Central and Eastern European countries: Poland, Czechia, Slovakia, Slovenia, Lithuania, and Romania.

Based on an extensive survey of 3,010 respondents, the findings highlight notable regional differences in AI adoption and perception. Romania and Poland emerged as the most open to AI integration, whereas Lithuania displayed the lowest levels of enthusiasm.

In terms of actual AI tool usage, Slovenians reported the lowest engagement, followed closely by Romanians. Meanwhile, respondents from Slovakia and Czechia demonstrated the highest utilization rates, reflecting a strong embrace of AI-driven solutions.

Although AI usage remains relatively low among Romanians, they demonstrated the strongest interest in developing AI skills and the highest perceived need for AI training to enhance their professional competitiveness.

By contrast, Czechs and Slovaks showed less enthusiasm for additional AI education, possibly reflecting a higher existing proficiency in the field.

Concerns about AI's impact on employment varied significantly across countries. Slovaks and Poles were the most apprehensive about job displacement, whereas Slovenians and Czechs expressed minimal concern.

Despite these differences, perceptions of AI's usefulness remained consistently positive across all surveyed countries, ranging from 79% to 84%.

These country-specific trends highlight the need for tailored approaches to AI education and implementation strategies. This report provides valuable insights for educational institutions, policymakers, and businesses aiming to address knowledge gaps in AI adoption across the CEE region, ensuring the responsible integration of these technologies while mitigating potential risks.



Top 5 Facts

1. AI Enthusiasm Is High Among Students and Graduates, But Understanding Remains Limited

A digital revolution is unfolding across universities, as students and graduates express strong enthusiasm for artificial intelligence. Eager to harness AI's potential, many are actively integrating it into their studies and job searches. However, a key challenge remains – while excitement for AI is undeniable, understanding its full scope and capabilities is still evolving.

2. AI Revolutionizing Education – But Everyday Use Remains Selective

Artificial intelligence is making waves in the education sector, with students and graduates recognizing its immense value as a learning tool. Survey results confirm that AI is most appreciated for academic support, helping users streamline their studies and enhance their learning experience.

However, outside the classroom, attitudes shift. When it comes to everyday life and work, AI's usefulness is perceived more selectively. While some embrace AI-driven solutions, others remain cautious about integrating them into daily routines.

3. AI Raises Concerns Over Ethics and Security – But Job Loss Fears Take a Backseat

As artificial intelligence continues to reshape industries, public concerns are shifting. The biggest worries surrounding AI aren't related to technical limitations or tool availability—instead, respondents are most concerned about its impact on employment, education, and data security.

Surprisingly, fears of widespread job losses due to AI remain secondary. A more immediate concern? Plagiarism. More respondents worry about AI leading to an increase in academic dishonesty than about AI-driven automation disrupting their careers.

4. Students Struggle to Understand AI Policies at Their Universities

Despite half of students acknowledging that their university has regulations regarding AI, their knowledge of these rules remains limited. At the same time, a significant proportion – 35% – admitted that they don't even know whether their university supports AI tools. This gap in awareness raises concerns about how effectively institutions communicate AI-related policies. With AI becoming an integral part of modern education, universities may need to take stronger action to ensure students are informed and prepared.

5. Students Recognize AI as a Key Skill for Their Future Career

AI knowledge is quickly becoming an essential professional asset, and students and graduates are taking note. Already, 39% of job seekers believe AI expertise is required in their future profession.

This sentiment is particularly strong among graduates in technical fields, who emphasize AI's growing role in shaping industries. As AI continues to revolutionize the workforce, will universities and training programs keep pace with the demand for AI-literate professionals? The future belongs to those who adapt!





We have entered the second quarter of the 21st century with AI-driven tools that leverage machine learning on an unprecedented scale. The advancement of intelligent systems presents numerous opportunities, enabling the processing of vast amounts of information, facilitating automated decision-making, and even forecasting trends. The rapid technological acceleration brought about by artificial intelligence is particularly evident in key sectors such as healthcare, transportation, and energy. Over the past decade, we have witnessed innovations that enhance scientific research in ways that surpass human cognitive abilities.

However, alongside this excitement comes legitimate concerns regarding the safety and ethical implications of implementing AI-driven solutions. Ultimately, AI is merely a tool – its impact depends entirely on how it is utilized. When applied responsibly, it has the potential to save lives and prevent disasters; conversely, unethical use can lead to unforeseen risks. AI can foster collaboration and strengthen global research initiatives, yet it also has the capacity to deepen existing societal inequalities. As we continue to integrate AI into various aspects of life, ensuring ethical governance and responsible innovation will be paramount in shaping a future where technology serves humanity for the better.

Concerns about the effects of AI development and its societal impact not only fuel criticism of its use but may also hinder its progress. The future depends on how swiftly and effectively new generations of users adapt to a reality where advanced AI algorithms – such as large language models – become integral to daily life, enhancing our quality of life.

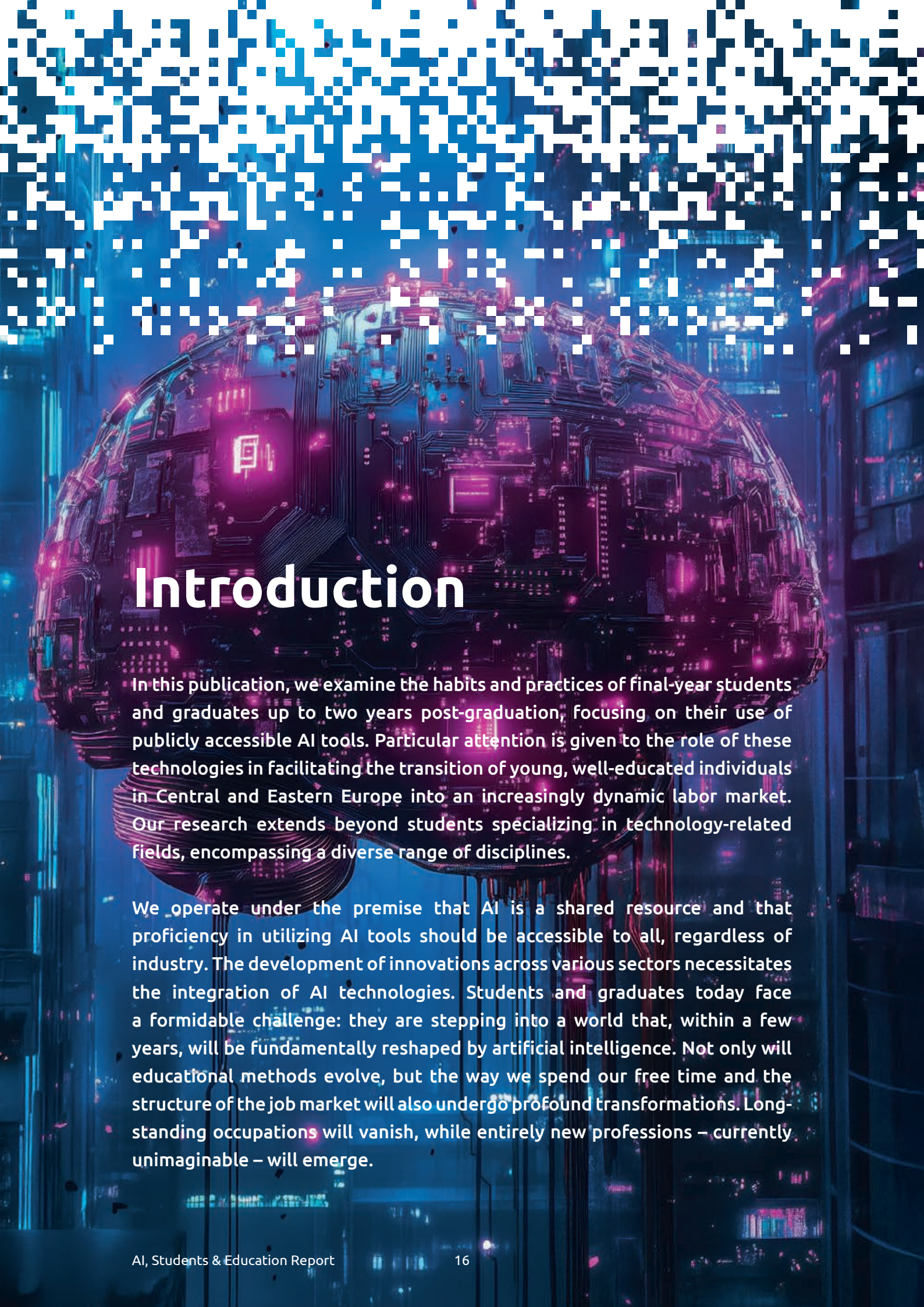
At the AI CEE Foundation, our mission is to mitigate inequalities that may emerge as artificial intelligence continues to evolve. Our initiatives focus on equipping individuals with the knowledge necessary to prepare for the transformative changes brought by digitalization. We examine critical areas such as education and the public sector within the CEE region, offering insights to decision-makers who shape regulatory frameworks and uphold high standards. In developing our perspectives, we leverage expertise from academic professors, analysts, researchers, sociologists, human resources professionals, artificial intelligence specialists, and other key contributors. Through collaboration and informed policymaking, we strive to create a more equitable AI-driven future.

This report is based on research conducted among students and recent graduates from universities in Poland, Czechia, Slovakia, Slovenia, Lithuania, and Romania. We firmly believe that studying this group and their stance on AI development will help bridge the gap between science and business. Creating an environment for acquiring AI-related knowledge and exchanging experiences is invaluable, serving as a cornerstone for building resilient economies.

Our objective is to highlight to the education sector the critical importance of AI-related competencies across virtually all professions. Neither young, well-educated individuals nor their professors can afford to disregard the increasing integration of AI into daily life. If we aim to succeed on the global stage in science and business while enhancing the CEE region's competitiveness, proactive measures must be taken. Moreover, collaboration is essential. A nation's future depends on how its students evolve, and this competitiveness remains a key priority across all political sectors.

AICEE Team





Introduction

In this publication, we examine the habits and practices of final-year students and graduates up to two years post-graduation, focusing on their use of publicly accessible AI tools. Particular attention is given to the role of these technologies in facilitating the transition of young, well-educated individuals in Central and Eastern Europe into an increasingly dynamic labor market. Our research extends beyond students specializing in technology-related fields, encompassing a diverse range of disciplines.

We operate under the premise that AI is a shared resource and that proficiency in utilizing AI tools should be accessible to all, regardless of industry. The development of innovations across various sectors necessitates the integration of AI technologies. Students and graduates today face a formidable challenge: they are stepping into a world that, within a few years, will be fundamentally reshaped by artificial intelligence. Not only will educational methods evolve, but the way we spend our free time and the structure of the job market will also undergo profound transformations. Long-standing occupations will vanish, while entirely new professions – currently unimaginable – will emerge.

Although previous generations have also experienced shifts in employment landscapes, the pace of change today is unprecedented. As artificial intelligence advances, acquiring new skills is no longer merely a means for career progression or professional reinvention – it is becoming an absolute necessity. To remain competitive in the workforce, continuous skill development will be essential. This marks another pivotal transformation, reminiscent of the digital revolution sparked by the advent of the Internet and the widespread adoption of computers.

Higher education, which is designed to prepare students for their professional careers, once again finds itself in an exceptionally complex and pivotal position. Universities should serve as one of the most important spaces where new generations gain an understanding of both the benefits and risks associated with AI. Therefore, it is essential to consider how and to what extent institutions of higher learning should integrate AI education into their curricula.

This study was conducted to explore how young people are navigating a world that has embraced AI almost overnight. We aimed to determine whether they are receiving the necessary support in this area. Additionally, this publication offers guidance for companies—particularly those in the software-as-a-service sector – on designing AI tools, identifying key focus areas, and effectively engaging this user demographic.

The primary objective of the study is to develop strategies for enhancing support programs tailored to students and recent graduates who, for various reasons, either do not utilize AI solutions or do so only to a limited extent, thereby diminishing their prospects of securing employment. This challenge cannot be ignored. The World Economic Forum’s Future of Jobs Report 2025 underscores the profound and lasting impact AI will have on our lives. According to the report, broadening digital access is expected to be the most transformative trend—both across technology-related developments and overall – with 60% of employers anticipating it will reshape their business by 2030. Furthermore, 86% of companies expect AI and information-processing technologies to revolutionize their industries within the same timeframe.

The report also highlights the teaching profession as one of the key roles driving business transformation.

When preparing *The Minds of a New Generation: The Attitude of Students and Graduates from the CEE Region Towards AI* report, we took into account the complex macroeconomic and geopolitical factors influencing the pace of AI-driven technological development across EU Member States. Notably, the EU is actively advancing efforts to regulate AI-based solutions.

As we finalize this study, the AI Act – the first-ever legal framework designed to address AI-related risks and position Europe as a global leader in AI governance – has just come into force. As of 2 February 2025, the use and market introduction of particularly high-risk AI systems that meet the criteria for practices prohibited across the EU are now banned. Non-compliance with these regulations may result in administrative fines of up to EUR 35 million. On the same day, the AI Literacy Act took effect, obligating employers – including AI system providers and users – to ensure employees receive the necessary AI knowledge and skills to perform their roles effectively.

Further regulations, set to take effect in August 2025, will impose additional requirements on providers of general-purpose AI models, including large generative AI systems capable of creating text, images, and other outputs. These regulations will also extend to national market regulators. The AI Act applies directly across all EU Member States without requiring transposition into national law. Meanwhile, international debates continue over the optimal extent of AI regulation, with some advocating for increased oversight while others argue in favour of deregulation.

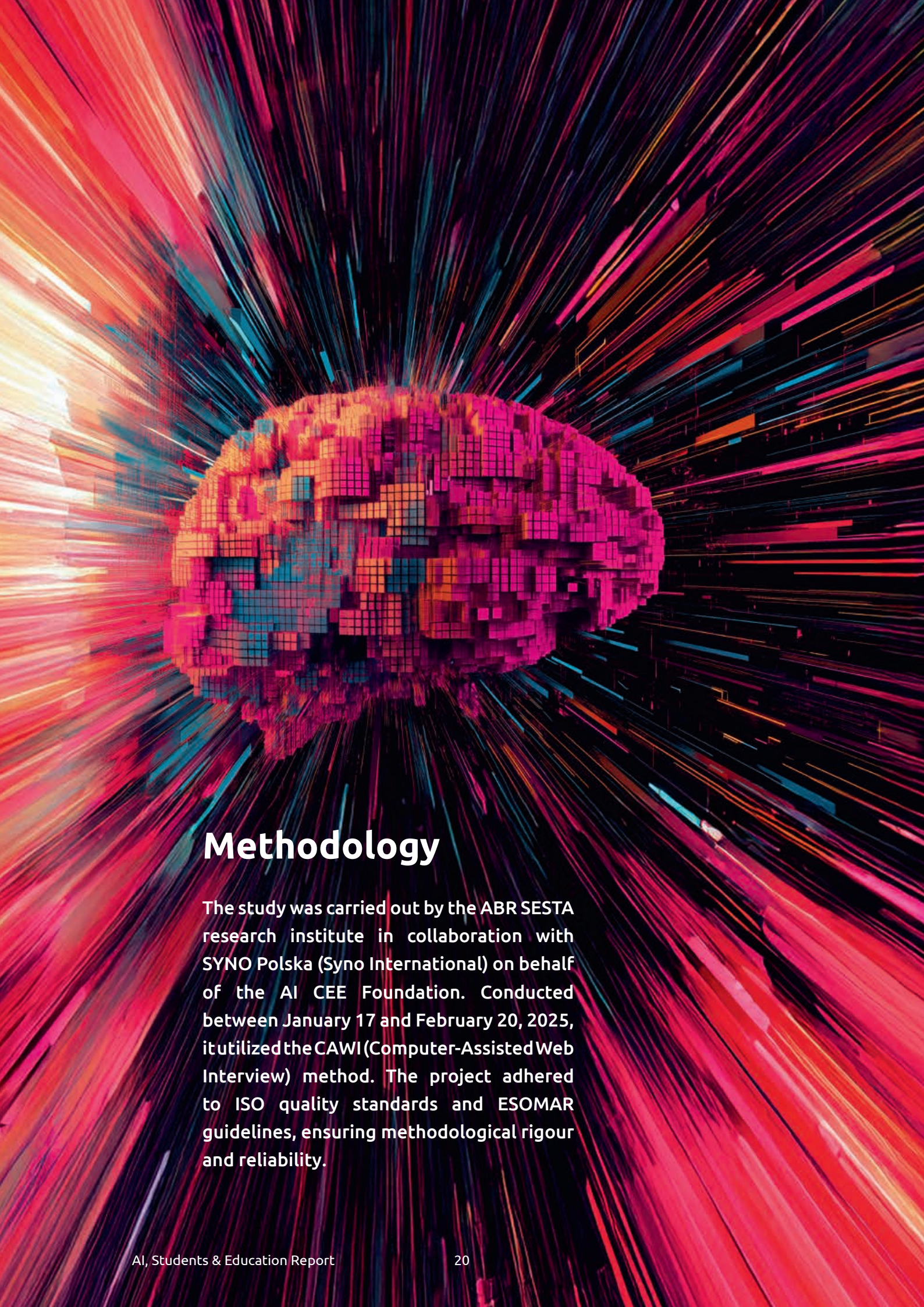
Central and Eastern Europe faces both significant challenges and promising opportunities in AI adoption, shaped by its diverse demographics, economies, and socio-economic landscapes. While some CEE countries have high proportions of low-skilled workers, others lead the way in digital education. Understanding the intricate relationship between AI and students, graduates, universities, and employers is crucial for developing targeted strategies that harness AI's potential for inclusive growth and equitable digital transformation across Europe.

For this study, we focused on six countries: Poland, Romania, and Czechia – three of the largest economies in the region – as well as Slovakia, Lithuania, and Slovenia, which, despite having smaller markets, have made substantial investments in AI. The selection of these countries was driven by their diversity

in terms of size, economic development, and industrial structure. Each of them places a different emphasis on AI. In recent years, numerous research centres dedicated to AI development have emerged, along with platforms connecting experts, researchers, and companies operating in the artificial intelligence sector.

A particularly positive trend is the active involvement of these governments in AI initiatives. In Czechia, the Czech National AI Strategy, introduced in 2019, coordinates AI-related activities and aims to position Czechia as a European leader in innovation by 2030. Other countries analysed also have national AI strategies: Romania (Romania's AI Strategy), Poland (AI Policy), Lithuania (Lithuanian Artificial Intelligence Strategy), Slovakia (Slovak AI Strategy), and Slovenia (Slovenia's National AI Strategy). Additionally, Lithuania has established GovTech Lab Lithuania, a government laboratory leveraging AI and other technologies to modernize public services. In Poland, the Ministry of Digital Affairs has formed an AI team tasked with developing recommendations for enhancing state operations through AI. Furthermore, Poland has also seen the creation of the AI Chamber CEE, an organization bringing together startups, companies, institutions, and NGOs, although it operates independently from the government.

Ultimately, the selection of these six countries has provided a broad perspective on the characteristics of the region, enabling a comparative analysis of AI adoption and development across Central and Eastern Europe.



Methodology

The study was carried out by the ABR SESTA research institute in collaboration with SYNO Polska (Syno International) on behalf of the AI CEE Foundation. Conducted between January 17 and February 20, 2025, it utilized the CAWI (Computer-Assisted Web Interview) method. The project adhered to ISO quality standards and ESOMAR guidelines, ensuring methodological rigour and reliability.

The study outlined in this report was conducted with a clear purpose and involved a sample of 3,010 individuals. It focused on students (excluding first-year students) and recent graduates up to two years after graduation, all residing in selected countries across Central and Eastern Europe. The respondents were distributed as follows: Czechia (503), Lithuania (503), Poland (500), Romania (503), Slovakia (501), and Slovenia (500). The vast majority fell within the 20–44 age group. The sample was selected arbitrarily based on residency and student status criteria.

The study aimed to explore the habits and practices of students and recent graduates of higher education institutions in their use of publicly available AI tools, with a particular focus on their role in facilitating entry into the job market. The majority of respondents (77%) were current students, enabling an in-depth analysis of their attitudes toward AI.

Additionally, the study provided a comparative perspective, examining how current students' expectations of universities regarding AI education align with the attitudes of recent graduates on the same subject. Although only a few years separate these two groups, comparing their responses offered valuable insights into how quickly young people adapt to the evolving landscape of AI-driven solutions.

A qualitative assessment of the responses was conducted using various methods, including an analysis of answers to open and semi-open questions. The collected responses underwent thorough validation, with interview duration, consistency, and logical coherence carefully examined. Interviews deemed too brief or conducted carelessly were excluded from the final dataset.

The survey questions were developed in consultation with experts specializing in a broad range of technologies, as well as academic professionals from universities. Additionally, the report incorporates insights from artificial intelligence experts representing each of the participating countries. These expert statements were gathered and analysed by the AI CEE Foundation in March and April 2025.

Chapter 1

Who are the minds of a new generation?

The minds of a new generation were defined as college students who had completed at least one year of their studies and graduates who had earned their degree within the past two years. Narrowing the focus to this specific group provided valuable insights into students' attitudes toward AI tools, ensuring that all participants had at least some experience with higher education. Expanding the study to include recent graduates allowed for a comparative analysis of their AI-related experiences versus those of current students.

The graduates in this study completed their programs between 2022 and 2024. This means that some of them were leaving university just as the world was beginning to hear about ChatGPT. In November 2022, OpenAI – the creator of the model – made it publicly accessible, marking a groundbreaking moment that spurred the development of numerous other large language models. Many of these models are now available for general use, either for free (basic versions) or at a relatively affordable price for students (premium versions of LLM-based platforms start at approximately USD 20 per month).

In just a few years, AI tools have evolved from a niche technological innovation into practical resources widely used by students, businesses, and HR professionals seeking new talent.

The survey was completed by 3,010 respondents, 77% of whom were students, while graduates accounted for the remaining 23%. There are no significant differences between countries regarding the ratio of students to graduates, with the percentage of students ranging from 67% to 85% across the surveyed nations.

Although the vast majority of respondents are still pursuing their studies, with only 23% having completed their education, an impressive 66% of all participants have attained some level of higher education. This may be attributed to two key factors: some individuals have previously studied another subject, while others follow an academic path comprising multiple stages of higher education (e.g., pursuing a master's degree after completing a bachelor's or engineering degree).

Variations in national education systems are reflected in the distribution of respondents across countries. For instance, in Poland, Romania, and Lithuania, at least 76% of participants have completed some form of higher education, whereas in Czechia, this figure stands at 47%

What is their education level?



What is their education level?



Sample: All respondents, N=3010

Business and Management emerged as the most popular field of study among respondents, with 21% currently enrolled in these programs and 30% of graduates having completed studies in this discipline – indicating a noticeable decline in interest. The most significant drop in enrolment for Business and Management was observed in Lithuania (from 36% to 20%) and Romania (from 31% to 17%).

Technical and IT Studies ranked as the second most popular field, chosen by 19% of respondents, followed closely by Social Sciences and Humanities at 18%. Conversely, the least popular fields of study were Intercultural and Linguistic Studies (4%) and Sports and Recreational Studies (6%).

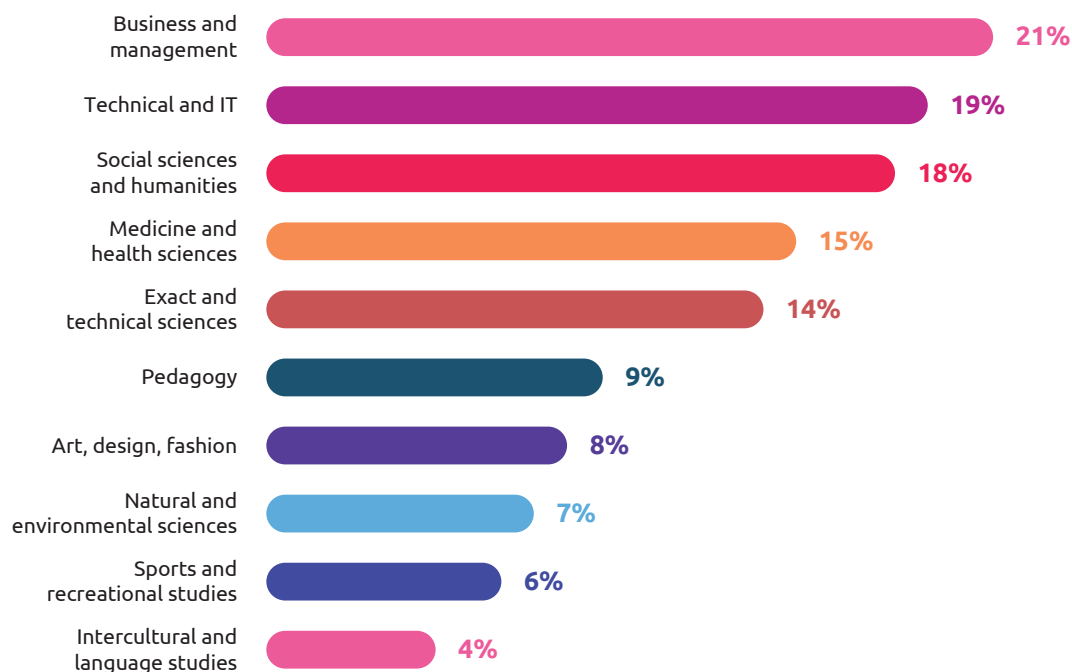
Overall, the ranking of the most popular fields of study remains largely consistent between students and graduates, with no significant differences observed across the surveyed countries.

Interestingly, in Slovakia, young people have shown a growing preference for Social Sciences and Humanities, as well as Medicine and Health Sciences, at the expense of Technical and IT Studies. Among Slovak graduates, 26% completed Technical and IT Studies, whereas only 18% of current students have chosen this field – a noticeable decline in interest.

Conversely, the opposite trend is observed in Slovenia, Romania, and Lithuania, where the number of students pursuing Technical and IT Studies exceeds that of graduates in these fields.

Consistent with recent years, interest in Pedagogical Studies remains relatively low – only 10% of surveyed graduates hold a degree in this discipline, and an even smaller proportion, just 9%, are currently enrolled in it. Poland has the highest percentage of students studying pedagogy (12%), though the field has seen a decline in enrolment, as 15% of Polish graduates previously completed studies in this area.

What are the respondents studying?

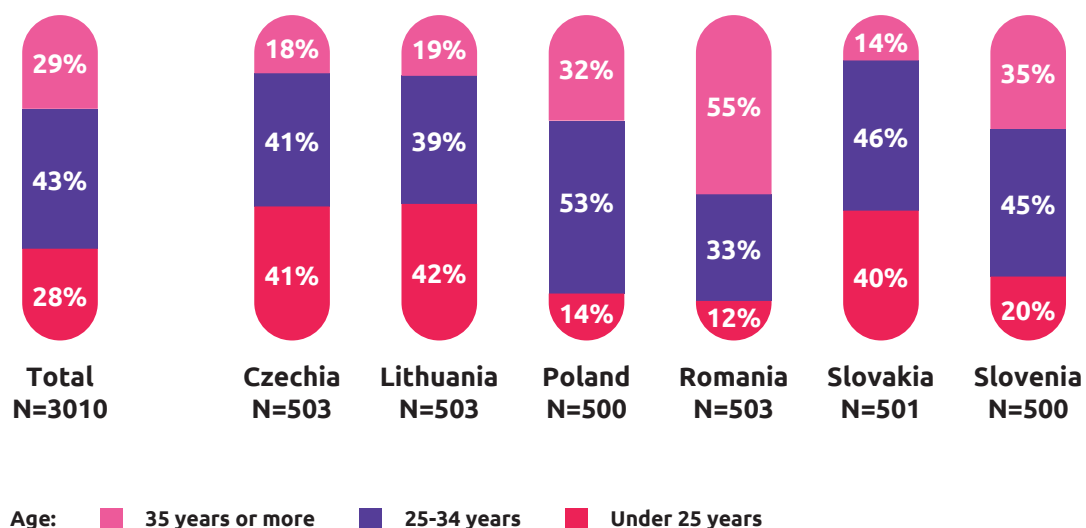


Sample: Respondents who are currently studying, N=2307.

Women comprised the majority of the study group, accounting for 55% of respondents. The most pronounced gender disparity was observed in Lithuania, where women (students and graduates) made up 61% of the sample. In contrast, Romania exhibited an equal gender distribution (50/50), meaning that men did not represent a majority in any of the analysed countries.

The largest age demographic consisted of individuals aged 25–34, comprising 43% of respondents. However, a considerable portion of participants were over 35 (29%) or under 25 (28%). Age distribution varied significantly across countries, with the highest concentration of younger respondents (under 25) found in Czechia, Lithuania, and Slovakia. Conversely, Romania had the largest proportion of older respondents (over 35).

Respondent Profile



Sample: all respondents, N=3010.

Most of the students who participated in our survey were enrolled in full-time studies (54%), while the remainder pursued part-time (23%) or online programs (19%). A smaller percentage engaged in dual studies, alternating between academic coursework and practical experience (6%), or evening studies (5%).

Poland and Slovenia had the lowest proportion of full-time students (43%), whereas Slovakia (65%) and Czechia (64%) had the highest. The flexibility in study modes plays a crucial role in enabling individuals from smaller towns to access higher education without the need to relocate.

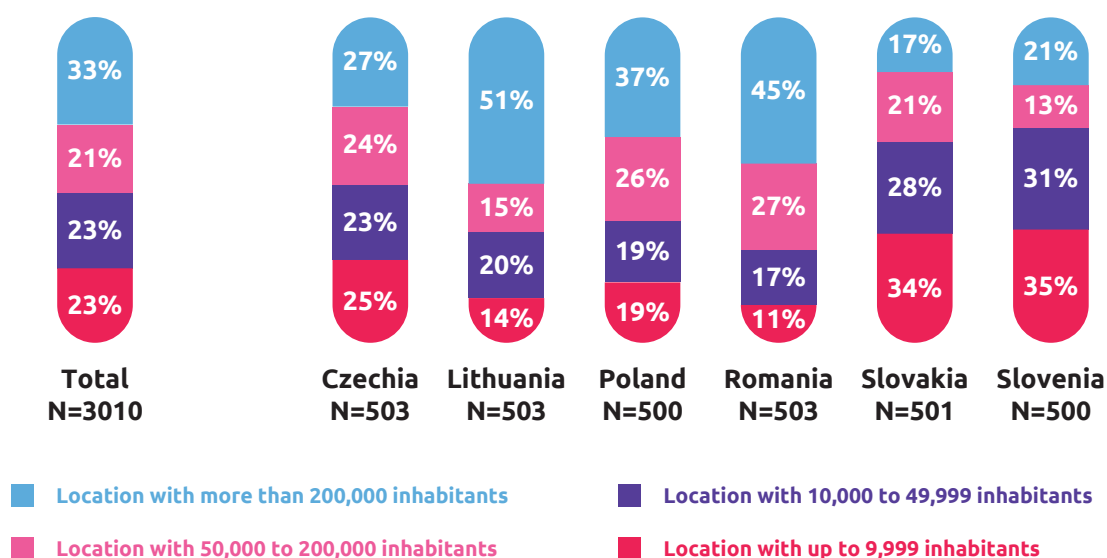
For the purposes of this study, we examined respondents' places of residence and their financial situation. The analysed sample is diverse: 33% of participants live in large cities with over 200,000 inhabitants, 21% reside in medium-sized cities (50,000–200,000 inhabitants), 23% live in small towns (10,000–50,000 inhabitants), and another 23% in towns with fewer than 10,000 inhabitants.

Country-specific trends emerge in the data: students and graduates from Slovakia and Slovenia are more likely to reside in small towns, whereas the opposite is true in Lithuania, Poland, and Romania, where respondents predominantly come from large and medium-sized cities. Czechia aligns most closely with the overall average.

The study also reveals that some students and graduates have relocated from smaller towns to larger cities, resulting in a distinct shift in proportions. An equal percentage of respondents (28%) come from the largest cities and the smallest towns, while 25% are from small towns and 19% from medium-sized cities.

Across all of the analysed countries, there is a clear trend of migration toward larger urban areas. The most significant increase was observed in Lithuania, where the proportion of students and graduates residing in large cities grew by 12 percentage points compared to those originally from these areas.

Size of Place of Residence



Sample: all respondents, N=3010

A significant 63% of students reported having moved for their studies. The highest percentages of student relocations are found in Slovenia (70%), Slovakia (69%), and Czechia (69%). This migration typically occurs between cities rather than across borders.

When asked, „Are you currently studying in your country of origin?” the vast majority (94%) responded in the affirmative, with 11% noting that they had previously participated in an international exchange program. Overall, only 6% of respondents are studying abroad. In terms of student migration, Slovakia and Slovenia have the highest proportions, whereas Romania has the lowest.

To gain a deeper understanding of respondents’ financial situations, we asked them to assess their economic well-being on a five-point scale. The largest portion of respondents described their financial status as average, with 46% stating that they had enough resources for daily expenses but needed to budget carefully.

The second-largest group (31%) rated their situation as good, indicating they could afford many things without needing to save significantly. Meanwhile, 16% of respondents reported living modestly, including 4% who characterized their circumstances as very modest. Notably, 4% of participants stated that they lacked sufficient funds for basic needs – equating to approximately 120 individuals living at or below the poverty line based on their self-assessments.

Conversely, 7% of respondents described their financial situation as very good, allowing them to afford certain luxuries. Poland had the highest percentage (48%) of individuals who rated their financial status as good or very good, while Slovakia recorded the highest proportion of respondents reporting economic hardship, with 21% stating they lived modestly or very modestly.

Additionally, respondents were asked about their family structure, specifically whether they had siblings. The number of household members can influence the financial resources available to respondents, though this impact may vary. It is important to note that a significant portion of respondents are under 25 years old and may not yet be financially independent.

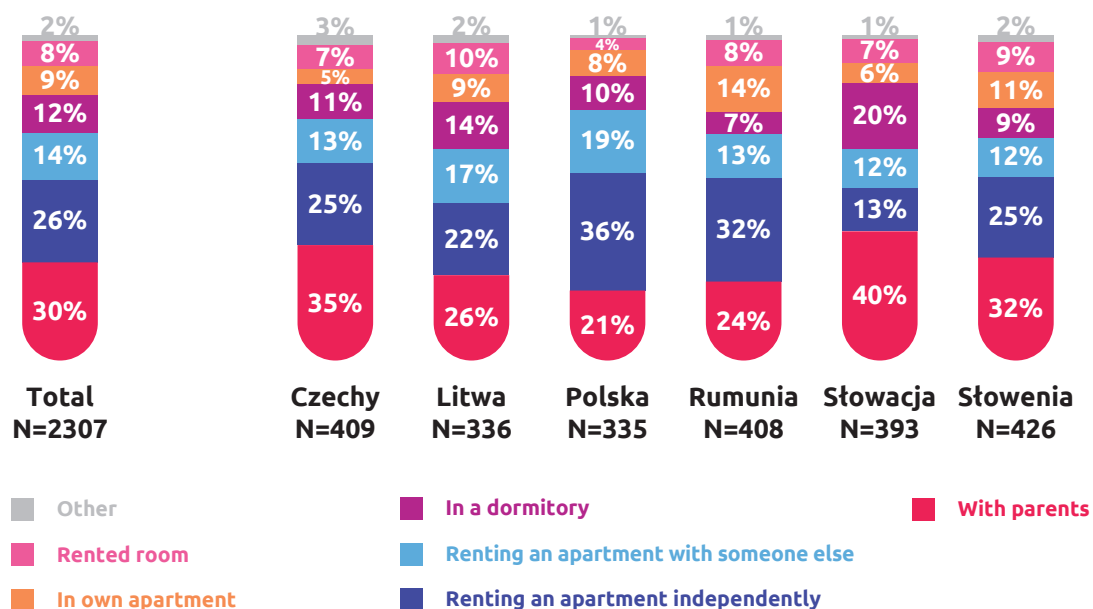
According to our data, 82% of respondents have at least one sibling. Among them, 43% have one brother or sister, 23% have two siblings, 9% have three, and 7% come from large families with four or more siblings. This distribution

remains consistent across the surveyed countries, with one exception – Czechia, which has the lowest percentage of only children (13%). In contrast, in other nations, this figure hovers around 20%.

The analysis of students also provided insights into their living arrangements. Among respondents, 26% rent an apartment independently, while another 9% live in their own apartment – though this does not necessarily mean they do not have roommates. The majority, however, are not fully independent.

Thirty percent of current students still live with their parents, 14% rent an apartment with others, 12% reside in student dormitories, and 8% share an apartment with a roommate. There are noticeable differences between countries in this regard. Slovakia has the highest proportion of students living with their parents (40%), whereas Poland has the lowest (21%). Various factors may contribute to these differences, including financial situation, proximity to the university, and preferred mode of study. Notably, students in Poland are more likely than those in the other analysed countries to rent an apartment independently (36%).

Place of Residence During Studies



Sample: Respondents currently studying, N=2307.

Chapter 2

The attitude of young talent from the CEE region towards AI

2.1. Level of knowledge about AI

Usage of AI Tools

82% USE AI TOOLS

Czechia 88%

Lithuania 82%

Poland 84%

Romania 75%

Slovakia 89%

Slovenia 74%

Sample: all respondents, N=3010

One of the primary objectives of this report was to determine whether young, well-educated individuals from Central and Eastern Europe use AI-powered tools and whether they fully understand the technology and its applications. The study reveals that while students and graduates generally have a positive attitude toward AI, their understanding of the technology remains inconsistent. Although they are eager to use AI, many lack a clear definition of what it truly entails.

Only slightly more than half of respondents (55%) correctly identified AI as a distinct field of knowledge. Nearly as many (45%) held misconceptions about its meaning. Among them, 28% believed AI to be “the intelligence that machines and robots possess.” These individuals also agreed with statements suggesting that AI is “implemented by humans at the programming stage and developed by machines” and that AI tools are “created by artificial intelligence – hence the name.”

Additionally, 18% of respondents mistakenly thought AI was a programming language, similar to Java or PHP, designed to teach machines. They also misunderstood deep learning, describing it as “learning that requires delving deep into fields of inquiry to tap into machine intelligence and program it for human needs.”

These findings clearly indicate that even educated individuals who actively use AI tools may lack a fundamental understanding of what AI actually is. This underscores the urgent need to enhance awareness and education in this domain.

The level of understanding of AI varies across countries. Lithuania and Slovenia rank highest in this regard, with 58% of respondents correctly defining AI. In contrast, Poland recorded a lower accuracy rate, with only 50% of respondents providing the correct definition.

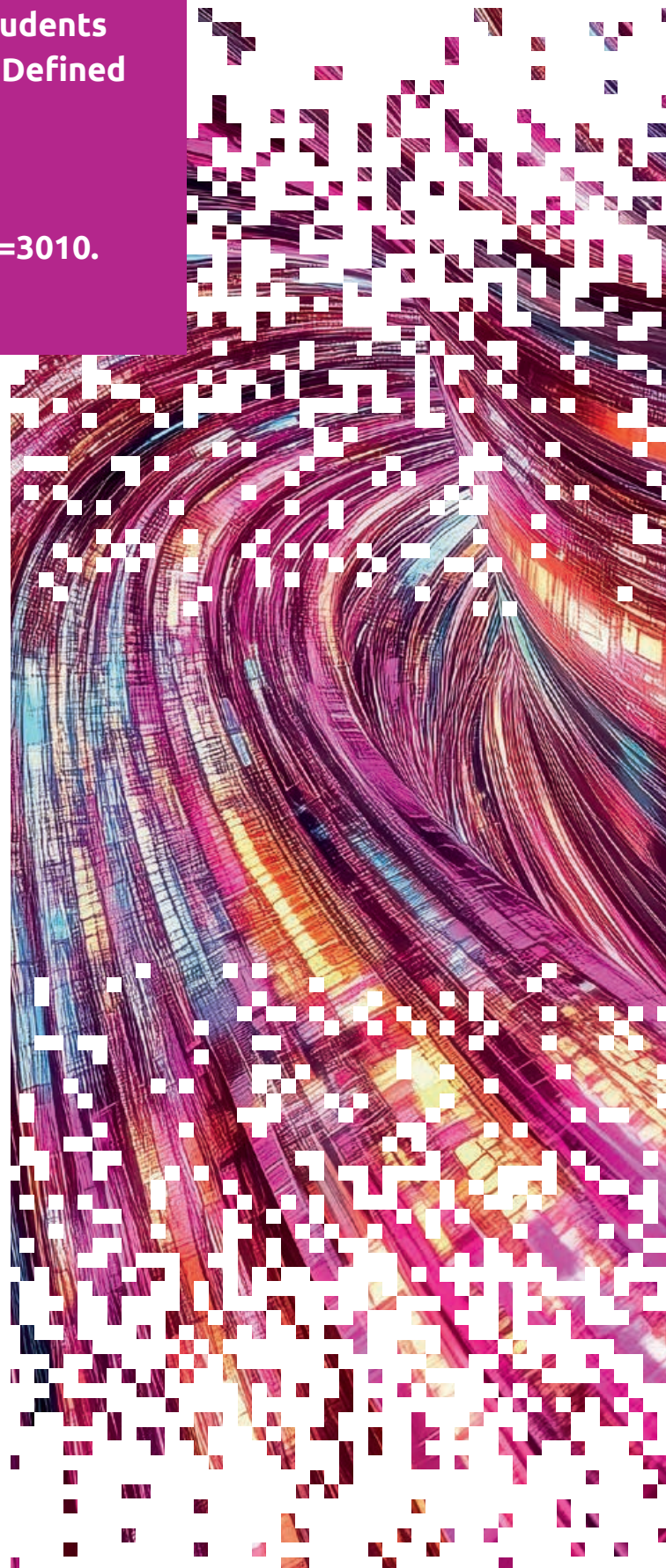
Education plays a significant role in shaping AI literacy. University graduates are more likely to accurately define AI than current students, suggesting that completing a degree contributes to a deeper understanding of the subject. Among graduates, 60% correctly identified AI, compared to 53% of students.

**AI Knowledge Gap:
Only 55% of Students
and Graduates Defined
AI Correctly**

**Sample: all
participants, N=3010.**

It is difficult to determine definitively whether respondents' understanding of AI is influenced by their place of residence. However, residents of large cities demonstrated the highest level of knowledge in this area, with 58% providing the correct definition – suggesting that greater access to modern technologies and information may play a role. Interestingly, respondents from small towns (56%) showed a stronger understanding than those from medium-sized cities (52%), highlighting that AI literacy does not always correlate directly with urbanization.

The group we studied is far more proficient in using AI than in discussing it. Students and graduates across all surveyed countries struggled with questions assessing their spontaneous knowledge of AI tools. However, when provided with a prompt, it became clear that they actively use many of these technologies.



The most widely recognized tool was ChatGPT, with 61% of respondents identifying it without any assistance. In contrast, respondents had difficulty naming AI tools beyond those developed by the American company OpenAI. Awareness of competing AI models was significantly lower – only 10% of participants mentioned Gemini (Google), 6% were familiar with the Chinese DeepSeek, and 4% identified Copilot (Microsoft).

Recognition of other AI tools was even more limited, with only 2% of respondents aware of the DALL-E program, while just 1% identified MidJourney, Siri, Google, Perplexity AI, Canva, Bing AI, DeepL, Claude, Grammarly, and Grok AI. Notably, 24% of respondents failed to name a single AI tool without prompting, highlighting a remarkably low level of familiarity with AI technologies overall.

ChatGPT, widely recognized since its launch in 2022, was available in its GPT-4o version at the time of our research (January–February 2025), with the anticipated release of GPT-4.5 – a more advanced iteration – on the horizon.

During this period, significant attention was also drawn to DeepSeek, which debuted earlier than expected on January 20, 2025, ahead of its originally announced launch date of May 2025. Meanwhile, in March 2025, Google introduced another major language model, Gemini 2.5 Pro.

The high-profile releases and widespread discussions surrounding ChatGPT, Gemini, and DeepSeek undoubtedly contributed to their visibility, shaping respondents' awareness of AI tools and influencing the results of our study on students' and graduates' spontaneous recognition of such technologies.

Our study found that spontaneous awareness of ChatGPT was highest among residents of Slovakia (70%) and Czechia (68%) and lowest in Slovenia (52%). Additionally, younger respondents – students and graduates under 25 – were significantly more likely to recognize the tool (70% of this group was familiar with ChatGPT) compared to those over 35 (46%).

Higher education and urban living also appeared to correlate with increased awareness of AI tools, likely due to greater exposure to new technologies. The second most recognized AI tool among respondents was Gemini, with the highest recognition in Czechia (14% of Czech respondents were familiar with it).

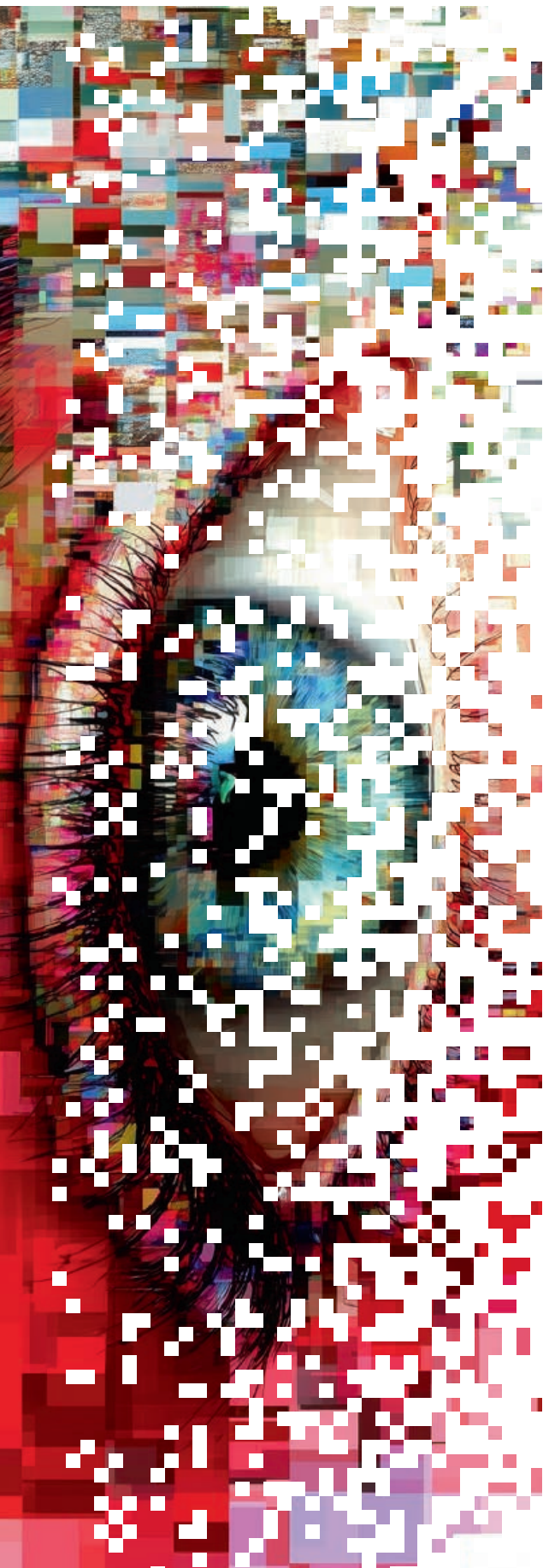
Gender differences were evident in spontaneous recognition, with men more likely than women to identify Gemini (12% vs. 8%). Similarly, residents of larger cities were more aware of the tool (12%) than those in smaller towns (8%). Brand awareness was also highest among individuals with a technical education.

DeepSeek had the strongest recognition in Slovenia, with 10% of respondents from this country familiar with the tool. Like Gemini, DeepSeek was more commonly recognized by men and those with a technical background.

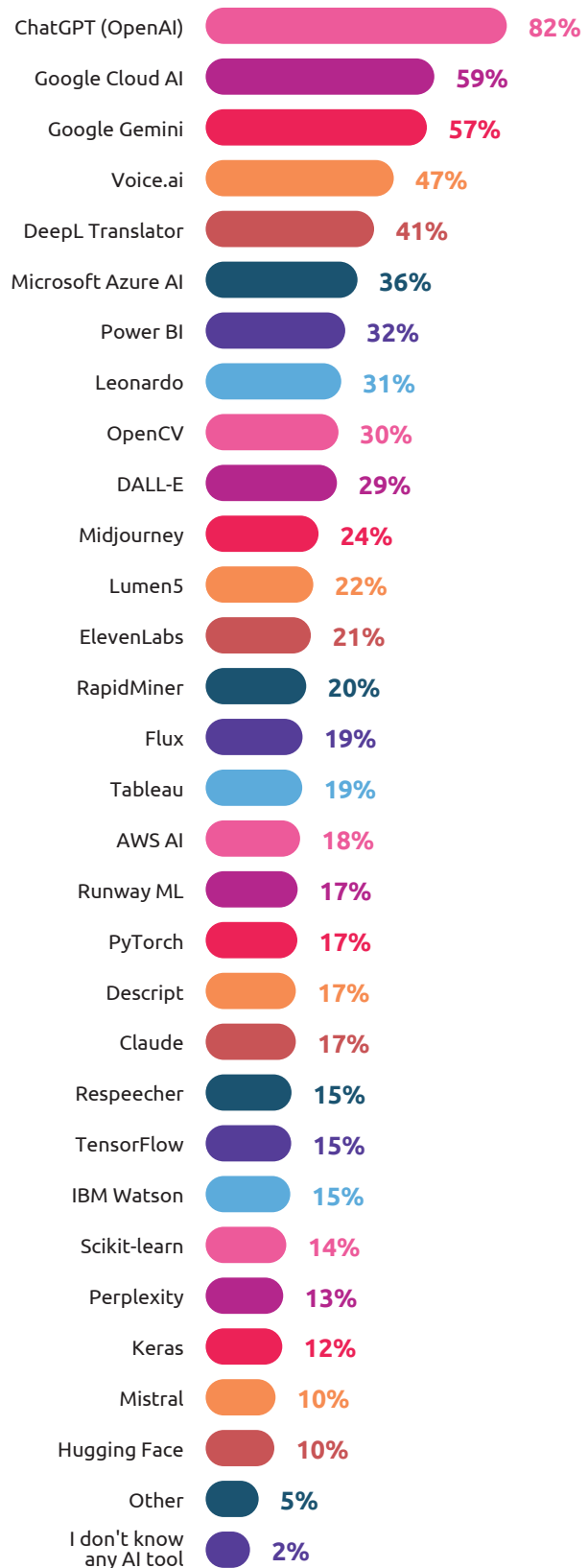
Overall, AI tool awareness was higher among respondents in a good financial situation. The most significant disparity was observed with ChatGPT: 66% of respondents in a good financial position knew the tool, compared to 62% in an average financial situation and 49% of those living modestly.

Which AI tools are students and graduates truly familiar with?

Both students and graduates are familiar with a variety of AI tools, even if they struggle to recall their names or – likely – fail to recognize that the applications they use are AI-powered. However, when presented with specific names, they are able to identify them. Only 2% of respondents reported being completely unfamiliar with any AI tools – a stark contrast to the 24% indicated in the study testing spontaneous recognition. When prompted, ChatGPT emerged as the most widely recognized tool, with 82% of respondents acknowledging familiarity. Google Cloud AI ranked second (59%), followed by Google Gemini (57%). At the other end of the spectrum, the least recognized AI tools were Voice.ai (47%) and DeepL Translator (41%). Awareness of ChatGPT was highest in Czechia and Slovakia, where 86% of respondents were familiar with it. Younger participants, particularly those under 25, demonstrated even greater recognition, with an impressive 90% of this age group knowing ChatGPT. Familiarity with this tool is higher among technical graduates and residents of larger cities. Google Cloud AI is most widely recognized in Romania (66%) and Poland (65%), while awareness is lower in Lithuania and Slovakia (54%). Recognition of Google Cloud AI increases notably with age, as 65% of respondents aged 35 and older are familiar with it. Higher levels of education also correlate with greater awareness, as do employment status and gender – men and working professionals are more likely to know about this tool. Similarly, Gemini is more commonly recognized among men and older individuals, with 60% of respondents over 35 indicating familiarity. Technical graduates exhibit the highest awareness of Gemini.



Assisted Knowledge of AI Tools



Sample: all respondents, N=3010

Younger generations are the primary users of AI tools.

AI-based tools have become an integral part of daily life for most respondents, with 82% of students and graduates actively using them. The highest AI adoption rates were observed in Slovakia (89%) and Czechia (88%), while Slovenia (74%) and Romania (75%) showed comparatively lower – but still substantial – levels of engagement.

The widespread use of AI tools is undoubtedly driven by their growing significance across various aspects of life, including work, education, and entertainment. Differences in AI adoption between countries may be influenced by several factors, such as the degree of digitalization, the accessibility of AI technologies, their level of integration into everyday social and professional activities, and awareness of AI hallucinations.

Younger generations tend to be more receptive to new technologies and have greater familiarity with their applications. Among respondents under 25, 90% reported using AI tools, whereas this figure dropped to 72% among those over 35.

While spontaneous knowledge of AI did not vary significantly based on place of residence, a clear difference emerged when students and graduates were asked about the AI tools they actively use. Residents of larger cities showed a higher usage rate (85%) compared to those from small towns (77%).

Financial status also influenced AI adoption, with high-income individuals more likely to engage with these tools (87%) than those with lower incomes (75%). Additionally, the field of study played a key role – AI tools were most commonly used by students and graduates of technical disciplines (86%), followed by humanities (81%) and natural sciences (82%). This trend is unsurprising, as technical fields integrate modern technologies more extensively than other academic areas.

Students and graduates primarily use AI tools for tasks such as information retrieval, text writing and editing, language translation, and linguistic accuracy checks.

ChatGPT was the most widely used AI tool among respondents, with 79% relying on this generative AI chatbot. Google Gemini, a suite of advanced generative AI models developed by Google DeepMind and Google Research, ranked second, with nearly one in three respondents (27%) using it.

Additionally, one in five respondents (19%) utilized DeepL Translator, a neural machine translation service known for its high-quality translations powered by advanced AI techniques. A similar proportion (18%) engaged with Google Cloud AI, a suite of tools and services designed to help businesses and developers build, deploy, and manage artificial intelligence and machine learning models at scale.

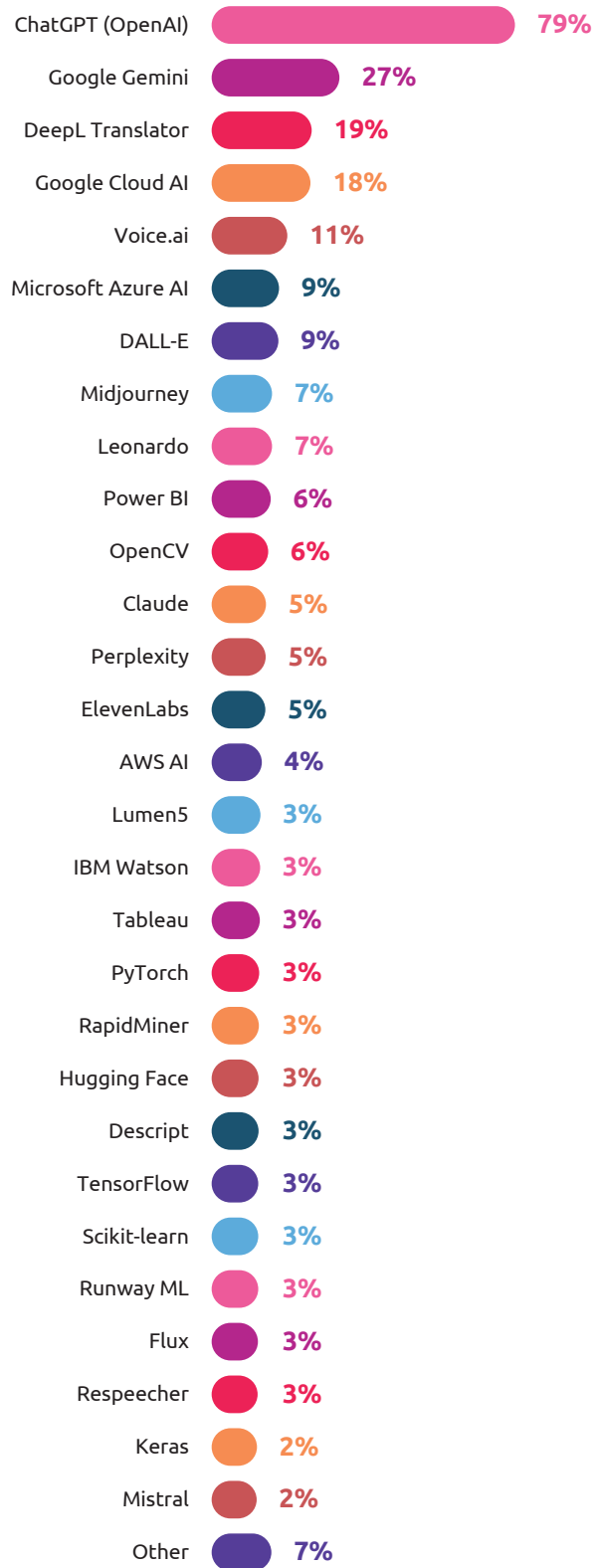
Chatbots and translation tools have broad everyday applications, making them among the most widely used AI tools. In contrast, more specialized AI applications tend to have a smaller user base.

Our research indicates that 11% of respondents have used Voice.ai, an advanced AI-powered voice-changing tool that enables real-time or recorded voice modifications for various purposes, including gaming and content creation. Microsoft Azure AI, which supports developers and organizations in building, deploying, and managing AI-powered applications, and DALL-E, OpenAI's generative AI model for image creation, were each used by 9% of students and graduates.

AI tools commonly employed in digital art and graphic design also appeared on the list, with 7% of respondents using MidJourney and Leonardo—two competing platforms for generating digital images. It is possible that some users were experimenting with both to compare their capabilities.

Meanwhile, data analysis tools such as Power BI (6%), Tableau (3%), and TensorFlow (3%) had relatively low adoption rates, suggesting that their users primarily belong to a more specialized professional demographic. Additionally, 6% of students and graduates engaged with OpenCV, an open-source software library for computer vision and machine learning applications widely utilized across industries for real-time visual processing.

Most Frequently Used AI Tools



Sample: respondents using AI tools, N=2465





Romania and Poland have the highest number of AI tool users

Most AI users engage with these tools regularly, although at a moderate intensity. Twenty-eight percent of respondents reported using AI for less than an hour per day, while an additional 20% used AI for up to three hours daily. More intensive usage – exceeding four hours per day – was observed in 11% of respondents, with Romania (18%) and Poland (13%) recording the highest proportions of heavy users.

A significant 38% of respondents could not specify their daily AI usage, most commonly stating that it „depends on their needs.” The highest flexibility in AI usage was found in Lithuania and Slovakia, where respondents reported adjusting their usage based on circumstances more frequently than in other countries (40% in both cases).

Interestingly, a small fraction – 3% of all users – engaged with AI exclusively on weekends. Weekend AI usage was most prevalent in Poland and Slovenia (4% each) and least common in Czechia and Lithuania (2% each).

2.2. Level of openness and satisfaction with artificial intelligence

Students and graduates who use AI daily tend to have a neutral stance toward it – 51% of users reported that they were not significantly surprised by AI tools. However, a substantial portion (45%) had positive experiences with AI, influenced largely by their familiarity with the technology.

The factors that shaped their favourable impressions included the quality of responses (28% of positively surprised users cited this) and the speed of data processing and information retrieval (26%). Additionally, the interactive nature of AI and its ability to adapt to user needs played a role – 13% were pleasantly surprised that AI not only personalizes responses but also communicates politely and appears to „understand emotions.”

For some users (10% of those positively surprised), AI proved valuable in supporting work, studies, and daily tasks. Others appreciated its continuous development and advancement (7%), its creative capabilities, including generating text, images, and music (5%), and its intuitive, user-friendly design (3%).

Only 6% of users reported negative experiences with AI. The most common complaint – cited by two out of three of these respondents – was the presence of incorrect, inaccurate, or fabricated information. This underscores the ongoing challenge of eliminating AI hallucinations as a critical step in improving AI technology.

Other concerns included AI’s lack of precision in performing tasks, its potential for misuse and security risks, repetitive responses, difficulties in recognizing context, and outdated data. Addressing these issues will be essential for enhancing AI reliability and user trust.

**72% of students
and graduates
are open to AI
solutions**

**Sample: all
respondents,
N=3010.**



Positive experiences play a key role in shaping openness to AI-based solutions, and the overall findings are encouraging – 72% of all respondents expressed a willingness to embrace AI. The highest acceptance rates were observed in Romania (80%) and Poland (77%), while Lithuania recorded the lowest (55%).

A generally positive attitude toward AI was noted across all surveyed countries, though regional differences in acceptance levels were apparent. The proportion of respondents hesitant to adopt AI remained low, averaging just 9%. Lithuania had the highest percentage of sceptics (13%), whereas Romania had the lowest (4%). AI acceptance also increases with age. Among students and graduates over 35, 36% reported strong openness to AI, compared to only 20% of those under 25. This trend suggests that older AI users, who typically have more professional experience, are better positioned to understand its practical applications.

Education plays a significant role in shaping attitudes toward AI. Individuals with higher education are more likely to express openness to AI (74%) compared to those with secondary education (68%). The highest acceptance levels were observed among respondents with a technical background (79%), likely due to their greater exposure to new technologies and their practical applications. In contrast, those with education in the humanities and natural sciences demonstrated lower levels of openness.

Professional status also influences AI acceptance. Among employed respondents, 74% expressed openness to AI, whereas this figure dropped to 64% among the unemployed. One contributing factor is the need to adapt to modern technologies in the workplace, which fosters greater engagement with AI tools.

How do young, well-educated individuals utilize artificial intelligence?

The vast majority of students and graduates regard AI tools as valuable, with 82% of respondents describing them as either definitely helpful or rather helpful. AI received the highest ratings from individuals with higher education (84%) and those studying or working in technical fields (86%).

As previously noted, a strong correlation exists between familiarity with technology and recognizing its benefits. Residents of larger cities also reported greater appreciation for AI, with 86% expressing positive opinions, compared to 78% in small towns.

Among the surveyed countries, Slovenia recorded the highest level of positive feedback (84%), while Lithuania had the lowest (79%). In other nations, approval rates ranged between 80% and 83%.

How does AI support our respondents? Primarily, it assists them in academic tasks. Students and graduates find AI particularly useful for information retrieval (77%), translation and proofreading (75%), design (72%), solving complex computational problems (71%), and writing research papers (71%).

Among the surveyed countries, Romania reported the highest levels of AI usefulness in academic activities. There, 83% of respondents found AI helpful for translations, while 81% relied on it for information searches. In contrast, Lithuania recorded the lowest usability rates, particularly in design (61%) and research paper assistance (63%).

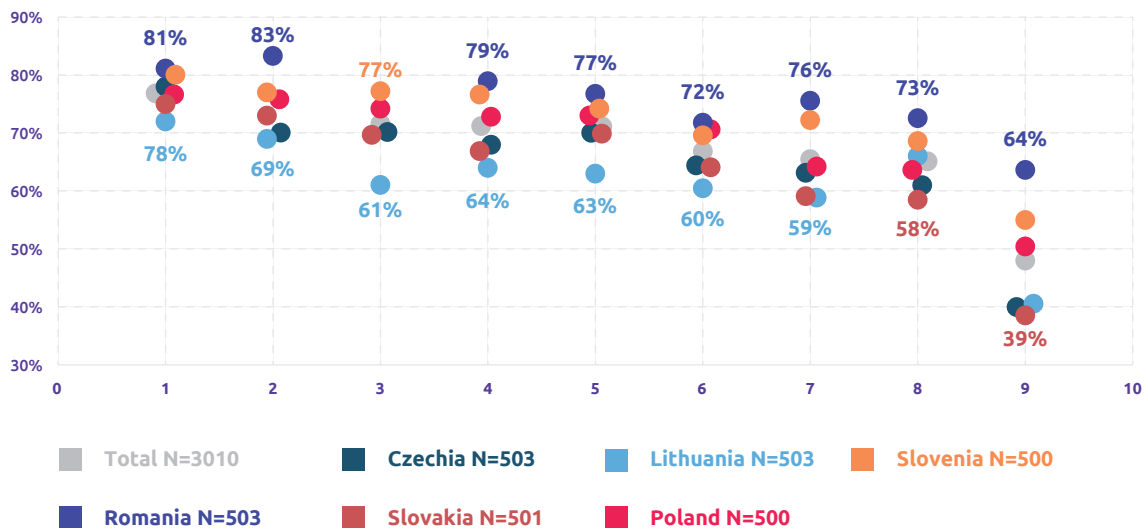
Students and graduates use AI beyond their academic pursuits, albeit to a lesser extent. Many incorporate AI tools into their daily routines, primarily for writing documents (67%) and generating entertaining content (65%). The highest engagement in these applications was observed in Romania and Slovenia, while Lithuania and Slovakia exhibited more scepticism.

Our survey found that AI was not widely valued in the professional sphere, which is unsurprising given that many respondents had yet to enter the workforce. When AI was used professionally, it was primarily for automating routine tasks (65%) and job searching (48%).

Significant regional differences emerged in attitudes toward AI-assisted job searching. In Romania, 64% of respondents found AI helpful in securing employment, whereas in Slovakia, only 39% shared this view

Usefulness of AI in Different Areas

Sum of responses: definitely useful + rather useful



1. For study purposes – help with finding information
2. For study purposes – help with translation and language correction
3. For study purposes – help with designing
4. For study purposes – help with solving complex computational tasks
5. For study purposes – help with writing papers
6. In daily life – help with writing applications, letters, emails, and other documents
7. For entertainment – generating text, images, and music
8. At work – automation of routine tasks
9. Job search

Sample: All respondents, N=3010

Improving the AI user experience is another key consideration. We asked respondents who found AI tools unhelpful what could change their perception.

For 27% of AI sceptics, the most effective solution would be additional, regularly scheduled lessons with an expert who could provide practical guidance on AI usage. Other recommended approaches included webinars and online courses (24%) and internships at technology companies (21%).

Respondents also highlighted networking events with industry professionals (19%), positive media coverage (15%), workshops conducted by leading AI companies (14%), and educational trips (14%) as valuable ways to enhance understanding and engagement with AI. These responses underscore the crucial role of education and clear communication in fostering AI literacy.

2.3. Access to Information on Artificial Intelligence

Most students and graduates had acquired knowledge about AI independently, primarily by searching the Internet – a method used by 73% of respondents. Additionally, 35% reported learning about the latest AI solutions through conversations with friends.

Universities played a lesser role as a primary source of AI-related information, with only 22% of students and graduates relying on formal education for this purpose. Training programs and workshops (15%) and influencers (15%) were cited less frequently, while 6% of respondents attributed their AI knowledge to their parents.

The data suggests that individuals who learn about AI online are more likely to define it accurately, trust it, and find it useful. A similar pattern is observed among those who obtain AI-related information through universities. Conversely, knowledge gained from friends is linked to greater openness toward AI but may be less structured.

**22% learn about
ai-related news
at university**

**Sample: All
respondents,
N=3010.**

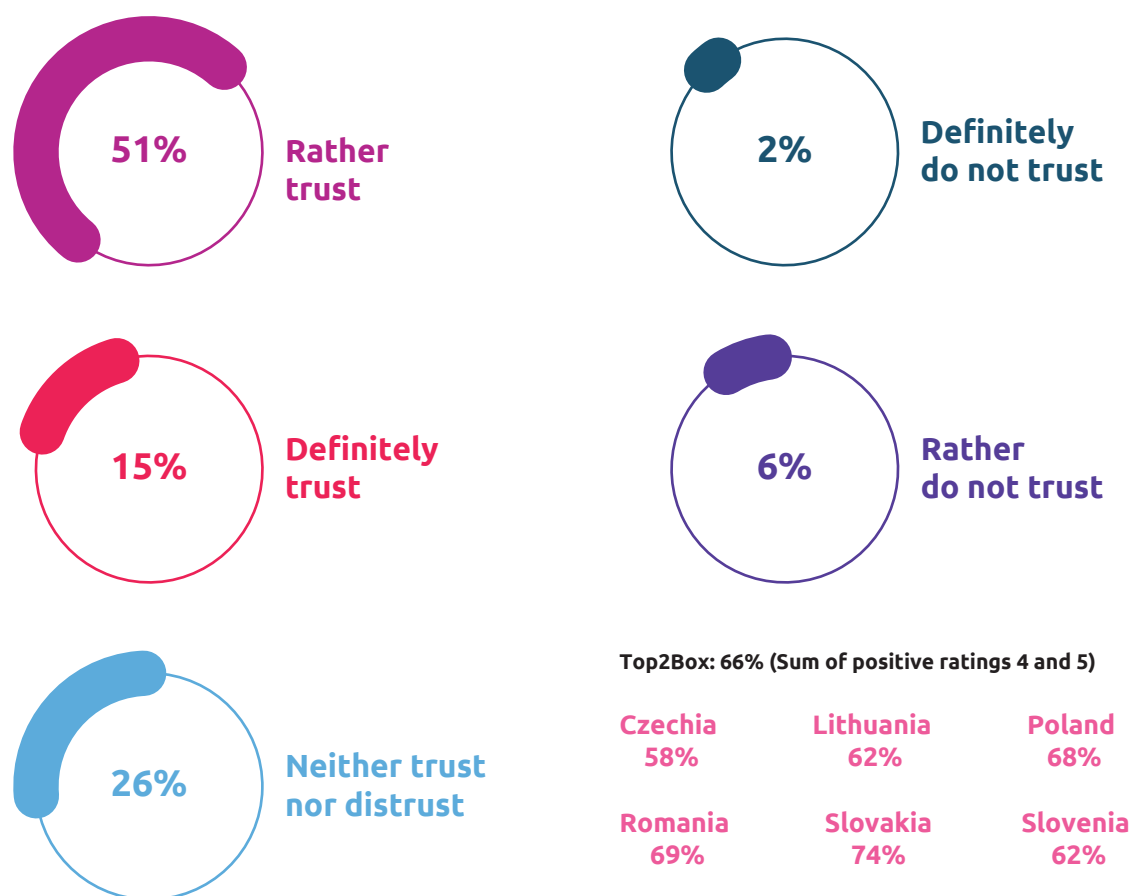
Notably, only 5% of respondents explicitly stated that they do not seek out information about AI.

In an age of fake news and AI-generated misinformation, being mindful of information sources is more crucial than ever. Academic institutions offer a reliable foundation for factual accuracy, whereas information found online varies widely in quality – from credible knowledge hubs to misleading or outright false content.

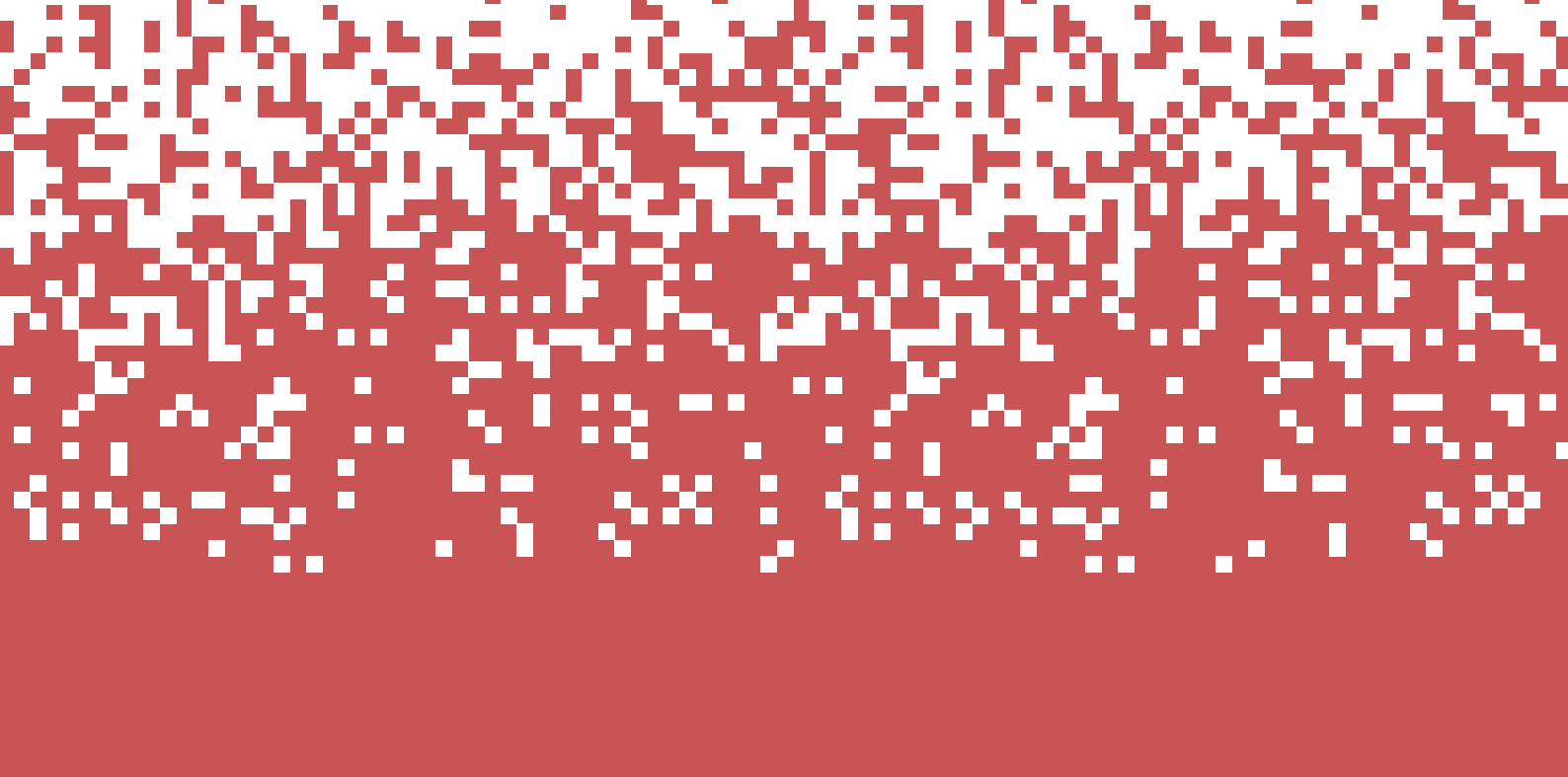
Given the breadth of digital platforms, adopting a thoughtful approach to both internet-based materials and AI-generated content is essential. Critical thinking, a cautious level of scepticism, and verifying sources play key roles in ensuring the accuracy and reliability of the information we consume.

One of the key objectives of the study was to assess whether students and graduates question the accuracy of AI-generated information. The findings revealed that two out of three AI users (66%) place trust in the information provided, with 51% expressing moderate trust and another 15% indicating high trust. The highest levels of confidence in AI were observed in Slovakia (74%) and Romania (69%), while 8% of respondents reported having no trust in AI-generated content. This notable level of trust persists despite 92% of respondents having encountered incorrect AI-generated answers at some point. It is important to highlight that, according to the data, inaccurate responses only occur sporadically. The fact that users continue to trust AI – despite nearly all of them having experienced false information – suggests that they are aware of its limitations and possess the ability to critically evaluate its outputs.

Trust in Answers or Information Provided by AI



Sample: Respondents using AI tools, N=2465



It is imperative that universities assume a leading role in the dissemination of knowledge pertaining to artificial intelligence.

This not only encompasses the responsible utilisation of AI but also the development, training and adaptation of novel models. It is the responsibility of universities to utilise their expertise in data curation, algorithmic thinking, and interdisciplinary research. This could be achieved, for example, through the organisation of hackathons that facilitate collaboration between the natural sciences, social sciences, and humanities in the process of generating open-source AI models.

These initiatives are conducive to critical reflection on ethical and social implications, ranging from biases to the potential for deskilling, thereby ensuring that AI serves humanity rather than manipulative agendas.

The study revealed that the predominant learning source for students regarding AI is online (73%), with a significant proportion (35%) acquiring knowledge from friends. Notably, only 22% of students reported university as their primary learning source. While internet-based learning can nurture correct definitions and trust, it may lack systematic guidance.

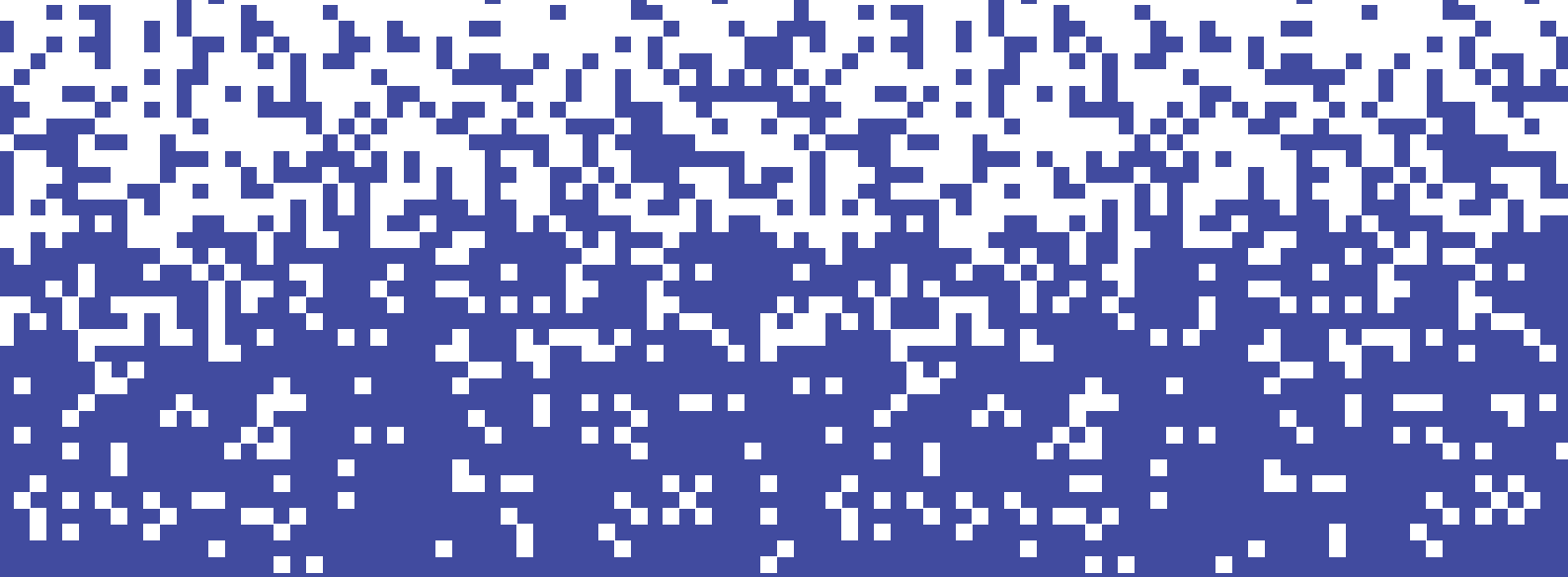
Conversely, universities have the capacity to integrate real-world development skills, instil ethical reasoning, and emphasise AI's role in cutting-edge research, thereby achieving a balance between innovation and concerns regarding privacy, trust, and misleading outcomes.

When young people rely on unverified sources, there is a risk that AI knowledge becomes shaped by profit-driven or populist techno-ideologies. In this regard, universities must assume the role of guardians of informed optimism, offering robust, research-based education that emphasises social responsibility, protects against biases, and empowers students to shape AI for the greater good.

**Assoc. Prof.
Constantin Vică**

Research Centre in Applied Ethics,
University of Bucharest





Half of respondents are satisfied with the quality of answers generated by AI. What does this mean and how can it affect universities?

As for the quality of AI-generated answers, let's be honest, it's mostly average and often biased... these tools we call large language models, which some even call artificial intelligence... are they in fact just sophisticated, high-tech plagiarism and an imitation of real intelligence? What I mean is that the entire architecture of transformers, or generative artificial intelligence, is built on deep learning, multiple (by definition 3 or more) layers of artificial neurons and scraping lots of data as inputs (the whole internet in fact, probably including the dark web). In terms of logical reasoning or simulation of advanced mental processes that the human brain is capable of, even the most complex artificial intelligence model that has ever existed is still miles away from the effectiveness and capabilities of the student's brain that we teach today.

We must recognize that these are primarily just systems for imitating human language and behind them are just very quick statistics & calculation of probability of the next word. The only thing that can amaze you is their speed and scope, nothing else. In fact, we have two completely different areas of research within AI. Machine Learning and Machine Reasoning. The first is driving the current trend of Gen AI; the second, in my opinion, is where the future is.

The average student is satisfied with an average answer generated from an average model based on average data. I respect that but, in my opinion, what university education is (or should be) all about is not just about teaching students facts, or providing them some knowledge. It's about teaching them how to think critically & how to cooperate socially.

My favourite philosopher once said that the surest way to corrupt a youth is to instruct them to hold in higher esteem those who think alike than those who think differently. And Gen AI tools are all just about "thinking" alike and converging on the average. Don't get me wrong, I don't want to ban anything. But by allowing students to use anything that is available, aren't we just corrupting our youth & NOT teaching them how to think differently, how to stay creative and innovative?

Is it really smart to let our machines think, create and innovate in our stead? What kind of "the minds of a new generation" do we really want?

**Radovan
Kavický**

President & Principal
Data Scientist at GapData Institute



2.4. Concerns Regarding AI Development

Non-AI users

While AI users generally express a high level of trust in the technology, concerns about its implications persist among both users and non-users alike. Some respondents do not perceive AI as intimidating, suggesting that they view its potential benefits as outweighing the risks.

To better understand AI scepticism, we asked those who do not use AI about their reasons for avoiding it. The most commonly cited barriers were the high cost of AI tools and concerns about privacy, each mentioned by 38% of non-users. Financial constraints and data security ranked as their top priorities.

Additionally, 37% of respondents expressed apprehension about AI generating inaccurate information, while 33% reported a general lack of trust in AI systems. Addressing these concerns will be crucial in fostering broader AI adoption.

Country-specific differences in responses reveal distinct concerns about AI adoption. The greatest apprehension regarding the cost of AI tools was observed in Slovakia (46%) and Slovenia (42%), whereas Lithuania exhibited the lowest level of concern (29%).

Privacy concerns were most prevalent in Slovenia (49%) and Slovakia (46%), while this factor held less significance in Lithuania (27%). Czechia stood out as the most sceptical country, with 43% of students and graduates expressing distrust in AI.

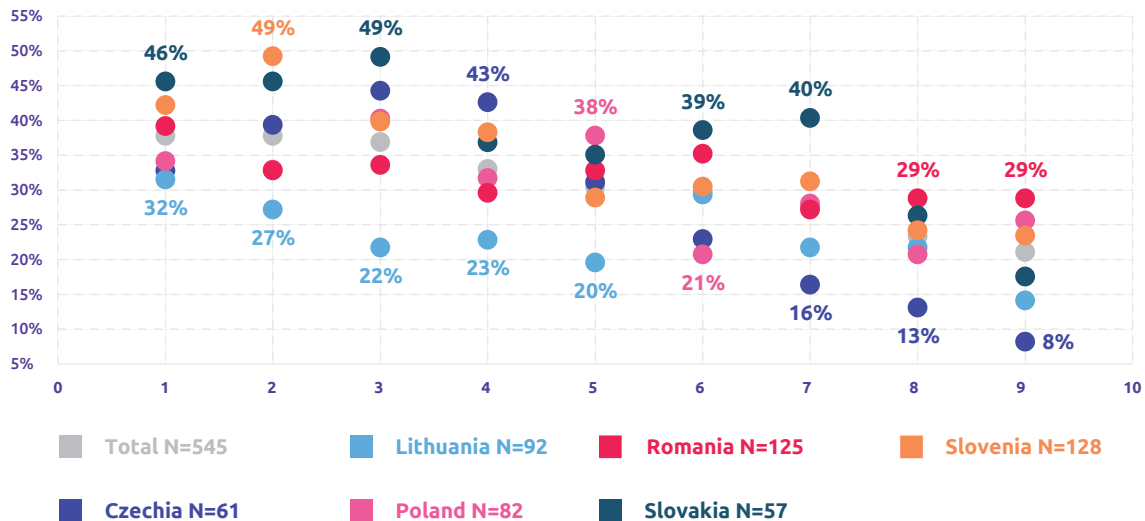
Additionally, 30% of respondents indicated that they saw no need for AI in their lives, suggesting that they did not perceive any practical applications for the technology—this sentiment was most common in Poland. Another 30% reported that they refrained from using AI due to uncertainty about how to navigate it, describing it as „too difficult.”

Slightly fewer respondents (28%) doubted AI’s benefits, while 21% stated that none of their friends used AI, reinforcing their reluctance.

Access to the Internet was generally a minor obstacle, affecting 23% of respondents. However, this barrier was more pronounced in Romania (29%) and Slovakia (26%).

Barriers to Using AI

Sum of responses: rather agree + definitely agree



1. AI tools are too expensive
2. I am afraid of losing my privacy
3. I am afraid that AI will mislead me
4. I lack trust in AI technology
5. I have no need to use AI
6. I don't know how to use it; it seems difficult
7. I don't believe it brings benefits
8. My internet connection is too weak
9. None of my friends use it

AI users

Daily AI users encounter various dilemmas regarding its application. When asked whether there were situations in which they deliberately avoided using AI, most respondents answered negatively – 27% stated there were no such scenarios, while another 37% were unable to pinpoint a specific moment where ethical concerns would prevent them from using AI.

However, one area where AI users expressed hesitation was education and scientific research, with 12% of respondents reluctant to rely on AI for these purposes. Privacy and personal data concerns were cited by 5% of users, while 3% or fewer mentioned copyright issues, religious and ideological considerations, disinformation, or loss of control as barriers.

When explaining their reservations, some respondents preferred to avoid using AI in fields involving human interactions – such as psychological support– arguing that such work „requires a personal human touch.” Others voiced concerns about AI potentially reinforcing social biases related to race, gender, and economic disparities. Additionally, respondents emphasized that scientific research requiring process validation should be „based on real data, not simulations.”

Women are more sceptical than men about the use of AI in education—16% of women and only 8% of men (among daily AI users) expressed concerns about this issue. Scepticism was also more prevalent among individuals with a humanities background (13%) and those who were not professionally active (17%).

The highest level of AI-related scepticism in education was observed among respondents under 25 (17%) and was most pronounced in Lithuania (17%).

Conversely, AI was more readily accepted by men (30%), individuals with higher education (29%), graduates and students of technical fields (32%), and residents of larger cities (29%). By country, Poland (34%), Romania (34%), and Lithuania (31%) had the highest number of respondents who reported no barriers to AI adoption. Notably, Lithuania showed the most divided opinions on the matter.

Threats arising from the development of artificial intelligence

More than half (54%) of students and graduates surveyed expressed concerns that AI development could lead to feelings of helplessness, job displacement, and a decline in overall education quality. These worries were particularly pronounced in Slovenia, Poland, and Romania.

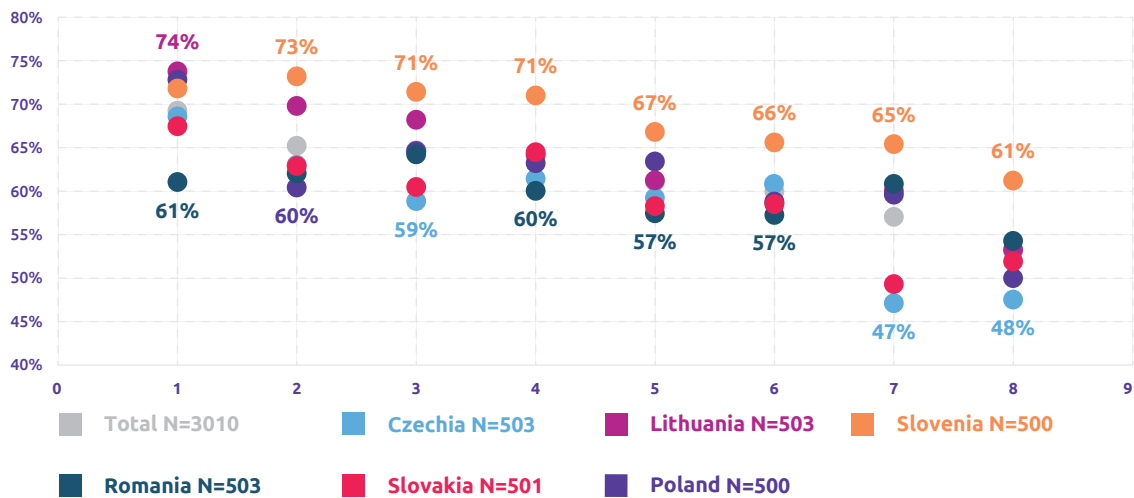
Security and ethical concerns also ranked high – 51% of respondents feared their image could be used without consent, while 49% worried that they or their loved ones might fall victim to AI-driven fraud. These concerns were most prevalent in Slovenia and Romania.

Other barriers to AI adoption, such as the overwhelming number of available tools (43%) and their complexity (26%), were cited by fewer respondents. Additionally, 28% indicated that a lack of time to learn new technologies was a limiting factor.

The study suggests that the primary challenges surrounding AI are less about accessibility or ease of use and more about its impact on professional life, education, and privacy. AI's role in society remains undefined, and notably, 41% of respondents believed that AI could eventually take over the world in an uncontrolled manner.

Potential Consequences of AI Development

Top2Box (Sum of responses: definitely has an impact + rather has an impact)



1. People becoming lazy
2. Lack of critical thinking
3. Increase in plagiarism
4. Abandoning reading books and articles, relying solely on AI knowledge
5. Job loss due to automation
6. Security threats – sharing personal information with unknown entities
7. Theft of intellectual property
8. Increased social and technological inequalities

Sample: All respondents, N=3010

Interestingly, respondents were more concerned about a potential rise in plagiarism than the risk of job displacement due to AI development.

Many students and graduates viewed AI as a contributor to human complacency – 69% believed that AI fosters laziness. Additionally, 64% felt that AI diminishes critical thinking, increases plagiarism, and discourages reading, fearing that people may become overly reliant on AI-generated knowledge.

Concerns about automation-driven job loss were cited by 61% of respondents, while slightly fewer expressed worries about personal data security and the theft of intellectual property. Moreover, 53% agreed that AI exacerbates social and technological inequalities.



Students and graduates are more likely to report fearing that ai will increase plagiarism than job losses

Sample: all respondents, n=3010.

Do they recognize instances of exclusion?

Most students and graduates do not perceive AI as inherently exclusive or inaccessible to specific social groups. However, certain stereotypes persist. While most respondents believe AI is widely available, some still associate its effective use with specialized knowledge or youth.

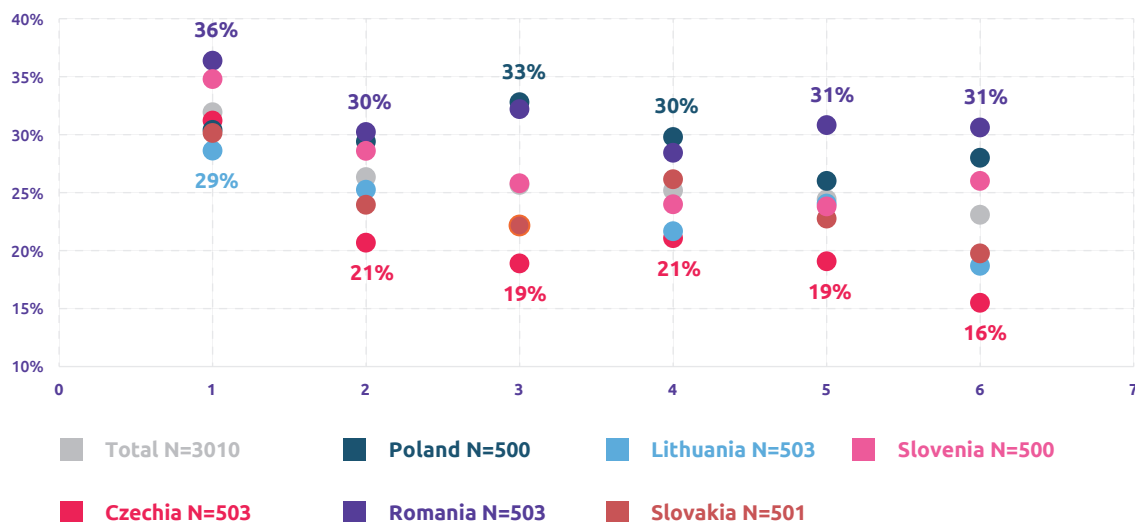
A third of respondents felt that technological experience is necessary to use AI effectively, while a fourth believed that individuals with a scientific mindset are best equipped to utilize it. These views were most commonly expressed by residents of Romania (36%) and Slovenia (35%).

Additionally, a quarter of respondents believed that AI tools are not adequately adapted for people with disabilities and shared the perception that AI is designed primarily for younger users. These concerns were most prevalent in Romania and Poland, with 28%-33% of respondents voicing them.

Similar reservations were noted regarding language and education – nearly the same proportion of respondents felt that AI is only accessible to those proficient in English or with a high level of education. These views were most commonly held by students and graduates in Romania (31%) and Poland (26%-28%), while scepticism was lowest in Czechia and Lithuania (16%-24%).

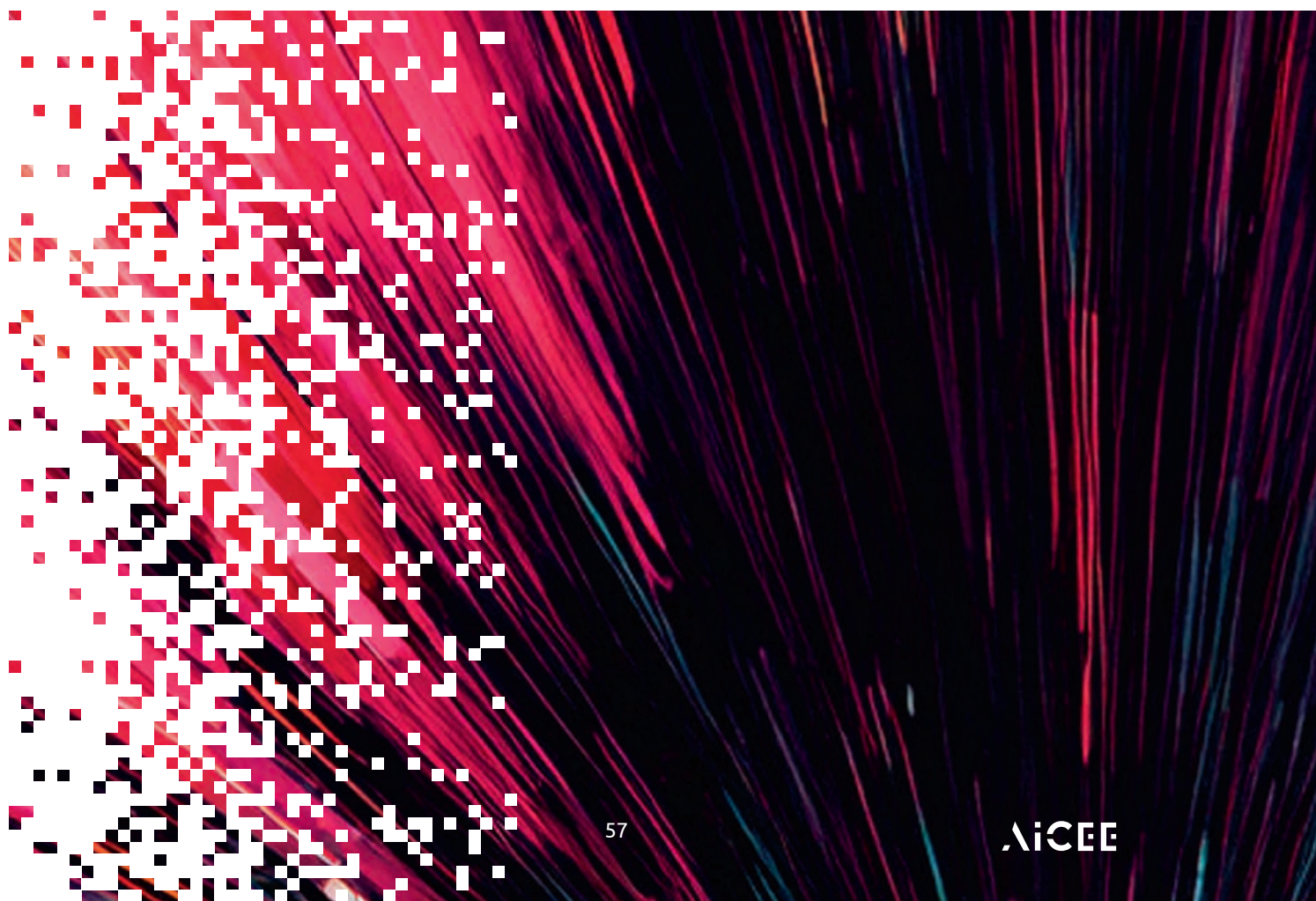
Accessibility of AI in Different Social Groups

Top2Box (Sum of responses: definitely agree + rather agree)



1. Only people with technological experience will be able to effectively use AI
2. Only people with a technical mindset will be comfortable with it
3. AI tools are not suitable for people with disabilities
4. They are tools only for young people
5. They are tools only for people who know English
6. They are tools only for those with a high level of education

Sample: All respondents, N=3010



Is it worth thinking critically about artificial intelligence, or should we be more open to technological innovations?

It would be necessary to define what openness to technological innovation means, but let us assume that we call openness the readiness to incorporate such innovations „in cooperation“. Critical thinking for me is all about knowing where, and more importantly how much, I can count on AI. I think that knowledge of the field we are asking about, and even general knowledge are good indicators of openness to AI. I think that a lack of knowledge about the technology itself in addition to a lack of general knowledge leads to two extremes – too much trust or too little trust. AI systems that are publicly available (such as ChatGPT) are a great tool to support our work. I emphasize the word „support“ because it is crucial. If AI is supposed to „replace“ the lack of knowledge – it will not work. Take for example a simple task such as creating an image.

Let's say we want a cat on a chair. We are able to “prompt” ChatGPT to create such an image and then evaluate the result that we get. If we do not like it, we will say that the cat should be bigger or smaller, white, spotted, etc. I guess no one will have a problem here, because we know what we want and we are able to evaluate what we will get!

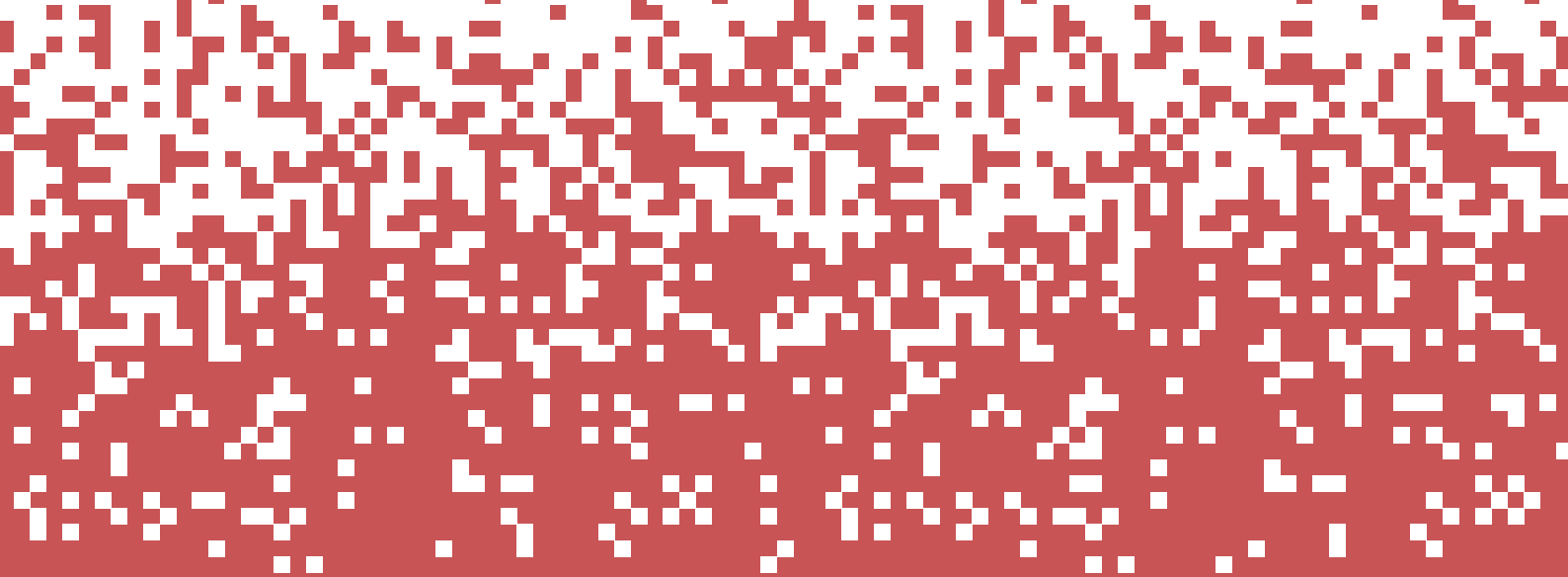
Exactly the same thing should happen in any other case. If we want to receive a presentation, then yes, AI will produce “something”, some preliminary plan with points. But this is not something that we should take and use “as is”. It is just a sketch, an idea, or maybe even a “brainstorming element” that will trigger creative processes in our brain. If this happens, then thanks to this “yeast”, we will bake a unique presentation, which in the end may more or less resemble the initial proposal of AI. However, it will be “our” product. What is more, we will give life to this presentation – we will deliver it, explain the details to the audience, answer their questions, etc.

So, it’s probably clear by now what I’m going to say about the conditions for greater trust. You can’t trust an AI – it’s a tool. Do we trust a chainsaw? In a way, yes, but I don’t think anyone would ask the question with the same subtext as with AI. We know how to use a chainsaw (or not), what to use it for, and what the consequences will be if we’re not careful. Similarly, when it comes to AI – you need to know what the tool is for and what the consequences will be if we’re not careful, in order to avoid “The Texas Chainsaw Massacre.”

**Maria
Ganzha
PhD., D.Sc.**

Faculty of Mathematics and Informatics,
Warsaw University of Technology





What conditions need to be met for students to start trusting AI more?

There are several aspects that should be taken into consideration. Transparency is perhaps one of the most important of these. Explaining how a decision was taken or how an answer was generated will enable students to understand how AI works, how it generates answers, and where it might go wrong. Simply using black-box AI systems does not feel trustworthy. Another important aspect is the accuracy/performance of the AI system, i.e. systems with higher accuracy rates/performance levels will inherently be considered more trustworthy. The main issue here stems from the fact that accuracy/performance can never be perfect (learning theory tells us that the lowest error an AI can achieve is the Bayes error rate), so there will always be some level of uncertainty regarding AI models. However, the same can be said about humans. People are also prone to committing errors, so we can never fully trust the fact that a certain person is not going to make a certain mistake. In summary, there are ways to increase the level of trustworthiness, e.g. building highly accurate and explainable models, but beyond a certain point, we have to accept the fact that AI systems, like humans, can never be fully trusted. Hence, we always need to rely on human oversight when using models. Nevertheless, if AI systems were regarded rather as assistants, it would perhaps decrease the students' expectation levels of such systems.

Critical thinking is exactly what we should encourage. Yet, at the same time, we should also set appropriate expectations regarding AI systems, i.e. should not expect models to achieve 100% accuracy when this is not possible.

Should we be more open to AI?

Yes, but being open to AI does not mean using it without questioning the results. First, we should set the correct expectations and use AI systems for what they are currently capable of. We should also be open to interacting and clarifying our questions/tasks, when AI systems fail to respond correctly. Guiding AI models to make them understand a task they should perform is often very helpful. Last but not least, we should be open to embracing new AI systems and technologies. As the research in this domain is advancing at a fast pace, newer models are more likely to exhibit improved capabilities. Therefore, we should not avoid using them just because we have been disappointed with previous interactions with older AI systems.

**Radu
Ionescu
PhD**

Professor of Computer Science
at the University of Bucharest



Chapter 3

The Role of Universities in AI Education



3.1. According to Students, Are Universities Prepared for AI?

Universities are gradually embracing artificial intelligence

For universities, the logical path forward is to educate new generations using the latest technological advancements. While our report does not assess whether universities incorporate AI knowledge into their curricula, it does examine how students and graduates perceive their institutions in this regard.

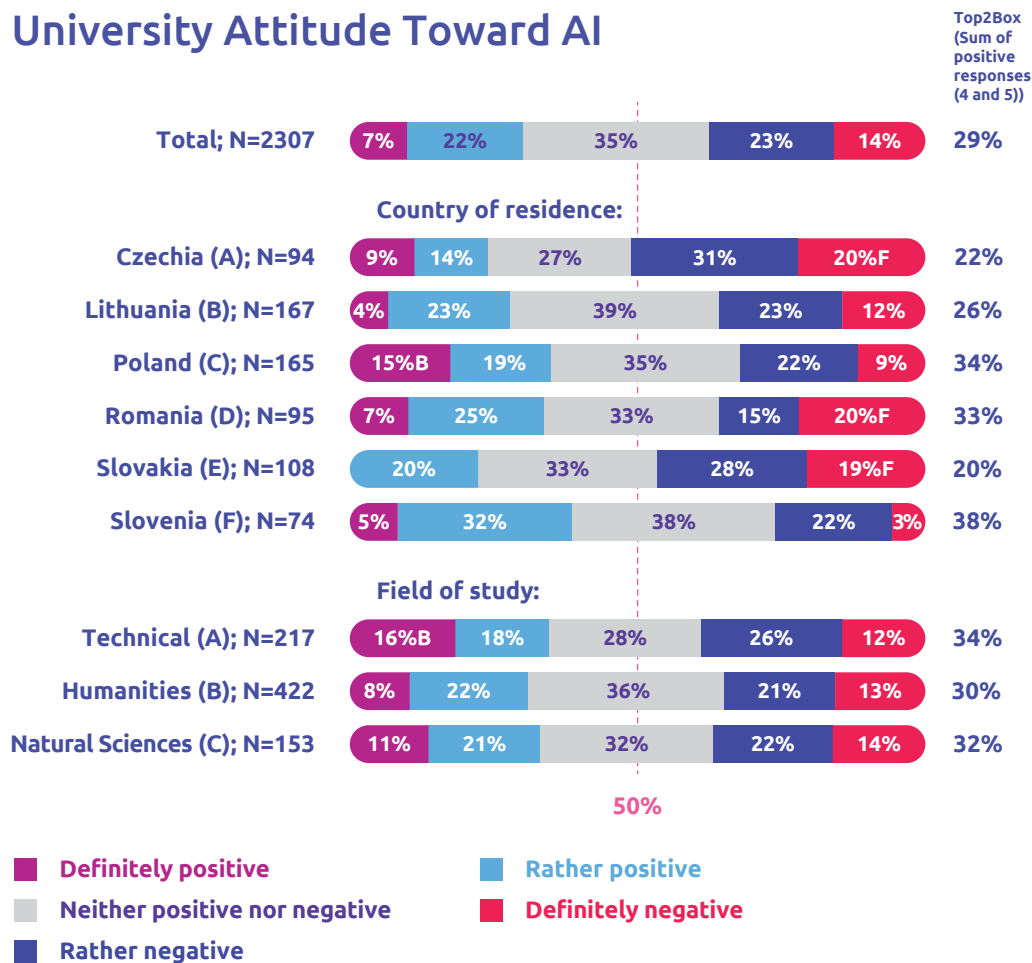
The findings provide insight into the expectations of younger generations regarding AI in higher education. Notably, students and graduates from Czechia, Lithuania, Poland, Romania, Slovakia, and Slovenia were eager to engage with AI solutions – but primarily outside the university setting. Moreover, they rated institutional support for AI as relatively low.

Only one in three students (33%) felt that their university encouraged AI tool usage, while 32% viewed their institution as unsupportive. Among graduates, an even smaller percentage (29%) considered their university AI-friendly, suggesting a gradual improvement in institutional attitudes toward the technology.

According to students, universities in Romania (43%) and Poland (42%) were the most open to AI, whereas those in Czechia (22%) and Slovakia (24%) exhibited the least openness. While AI adoption remained limited across the board, students were more likely to perceive institutional support for the technology (33%) compared to graduates (29%).

Additionally, 37% of graduates believed their university was not AI-friendly, indicating that the topic was not widely accepted or formally integrated into curricula during their academic years.

University Attitude Toward AI



Sample: Respondents currently studying, N=2307

Engineering students were more likely to view their universities as AI-friendly, with 41% of respondents from this group expressing this perception – compared to 32% of humanities students and 28% of those studying natural sciences. This suggests that AI is more widely accepted and potentially better integrated within engineering programs.

The most common reasons for not using AI in university settings were a lack of need or obligation (cited by 22% of respondents) and a preference for independent learning and work (18%). Additionally, some students pointed to university-imposed restrictions (13%), concerns about AI reliability and potential errors (11%), and limited availability or inadequacy of AI tools at their institution (10%)

The reluctance of universities to accept AI stems mainly from fear of change and a lack of clear policies regarding the use of new technologies.

Many universities still do not know how to approach AI – whether to treat it as a threat to academic integrity or as a tool to support learning. This is understandable, as AI is changing the way students learn, and academic staff often cannot keep up with the pace of this change.

Steps must be taken to address the lack of clear regulations – not only at the university level, but also internationally. Initiatives such as EuonAIr European University, which we run as Leon Kozminski Academy and which promotes the responsible use of AI in education, can help develop good practices. EuonAIr focuses on the responsible use of AI in education and science. Its main goal is to develop standards that will allow universities and students to use AI consciously, ethically and in accordance with academic principles. The point is not to treat AI as a threat, but to understand its capabilities and find the right role for it in the teaching process. Universities often do not know how to approach AI – whether to allow students to use it or introduce restrictions.

The lack of clear guidelines leads to chaos and sometimes even to unjustified bans. EuonAIr aims to address this by creating a framework that helps academic institutions understand how to implement AI in a way that delivers value. The initiative's work extends beyond regulation to education – for both students and faculty. The idea is that AI shouldn't be seen as a shortcut, but as a tool to support intellectual development, analytical thinking, and creativity. Instead of banning AI, universities should teach students how to use these tools wisely. After all, AI is already the norm in business and science, so it's better to prepare students for the real world than to keep them isolated from modern solutions.

First, education – and not just for students, but also for faculty. Universities should organize training courses that demonstrate how AI can support critical thinking, data analysis, and creativity, rather than serving as a “shortcut.”

Second, implementing clear rules, rather than chaotic prohibitions. Regulations should recognize the differences between fair use and misuse of AI.

Third, integrating AI into curricula, especially in fields where it already has a huge impact, such as management, IT, or marketing.

What can universities gain from these developments? More innovation, better prepared graduates and greater interest on the part of students. Studies show that AI can increase productivity and quality of work – companies already understand this, and universities should not be left behind. If they open up to AI, they can become more attractive and competitive, not only to students, but also to employers looking for future talent.

**Professor
Aleksandra
Przegalińska**

Vice-Rector for International Cooperation
and ESR – Kozminski University
Head of the HumanRace Research Center



Universities set their own rules

Approximately one in three students (35%) admitted they were unsure whether their university supported the use of AI tools. This suggests that many students lack awareness of existing AI-related regulations within their institutions.

What does this entail? Some universities have implemented internal guidelines – often referred to as an „AI constitution” – which outline agreements restricting the use of AI for thesis writing. These measures aim to uphold academic integrity, prevent plagiarism, and ensure the quality of student work.

However, the purpose is not to ban AI outright, but rather to educate students on how to use these tools responsibly. Universities emphasize the importance of respecting intellectual property, relying on credible sources, and developing research skills rooted in verified information.

Half of the students surveyed stated that their university had regulations regarding AI use, but awareness of these policies remained limited – particularly in Poland (where 45% of students were familiar with AI-related regulations) and Romania (46%), the countries with the lowest recognition of such rules. Lithuania had the highest percentage of students aware of AI regulations (60%).

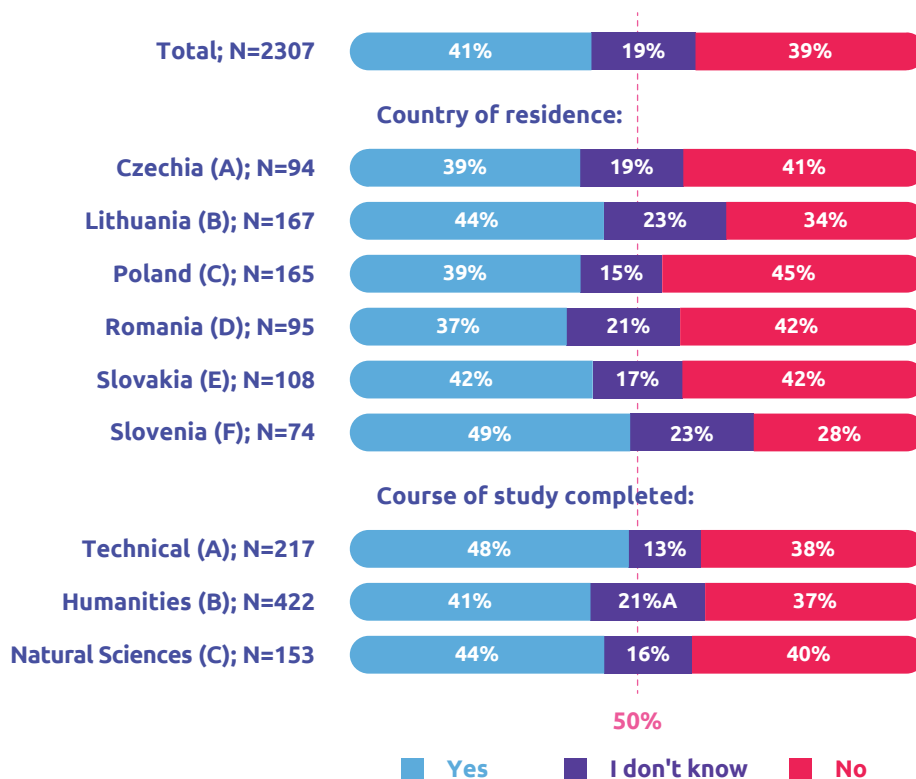
Poland also recorded the highest share of respondents who believed that no AI-related regulations existed at their university (32%).

When analysed by field of study, students in technical disciplines were the most informed about AI policies, with 57% expressing awareness. In contrast, natural sciences students were the least familiar with these regulations (only 44%), and among them, the highest percentage (28%) denied the existence of such policies altogether.

University graduates, having had less exposure to AI regulations during their studies, were even less informed – only 41% recalled the existence of AI-related guidelines, while 39% believed no such policies were in place.

Graduates' awareness of AI regulations also varied by country, with the highest levels observed in Slovenia (49%) and Lithuania (44%), and the lowest in Romania (37%).

Were there any rules regarding the use of AI at your university?



Sample: Respondents currently studying, N=2307.



3.2. Lecturers as Advocates for AI Literacy

Academics are reserved regarding artificial intelligence

Students' perceptions of universities are heavily influenced by their interactions with lecturers during classes. When evaluating lecturers' levels of competence and willingness to share knowledge about artificial intelligence, opinions among students and graduates were divided, with negative assessments prevailing.

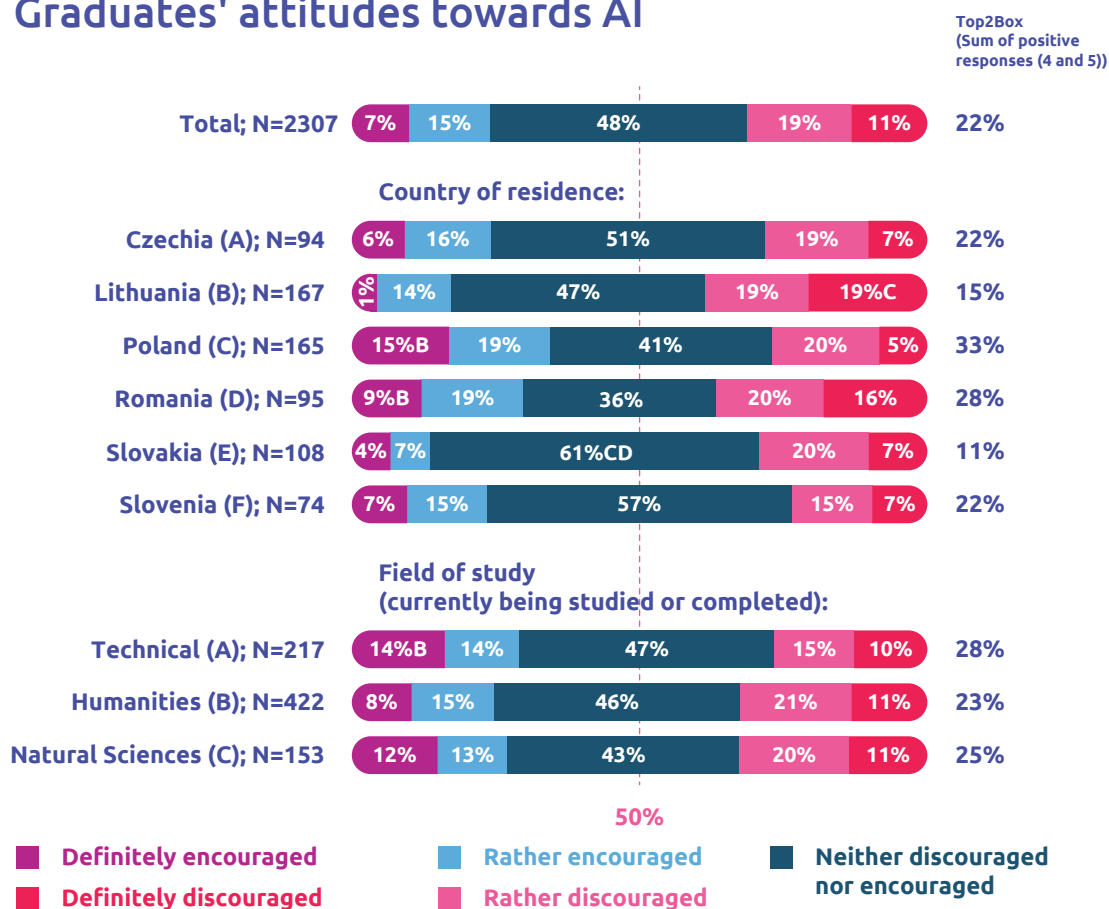
According to respondents, lecturers rarely encouraged the use of AI tools. Only 22% of graduates felt supported by academic staff, with slightly higher encouragement at technical universities (28%). Among current students, the numbers were marginally better – 30% reported that their professors promoted AI tool usage, while 28% felt that professors actively discouraged them from incorporating AI into their studies.

Technical faculty were perceived as the most receptive to AI, with 40% of students in these fields acknowledging a greater openness – likely because AI tools are seen as natural aids for data analysis and problem-solving. In contrast, lecturers in humanities (29%) and natural sciences (27%) were more hesitant to encourage AI adoption.

These findings suggest that outside of technical disciplines, AI is met with greater scepticism and is not universally recognized as a valuable educational tool. Concerns may stem from doubts about the credibility of AI-generated content or ethical considerations regarding its use.

Regionally, students in Romania reported the highest levels of lecturer support for AI (40%), whereas the lowest levels were observed in Lithuania (22%) and Slovakia (24%).

Graduates' attitudes towards AI



Sample: Respondents currently studying, N=2307.

While students are eager to embrace AI, lecturers do not always share the same enthusiasm. AI regulations and acceptance within academia remain unclear, highlighting the need for clearer communication and better integration of AI into the teaching process.

Interestingly, most respondents believed that lecturers were familiar with AI tools but rarely used them – only in select situations. When asked “Do lecturers know AI tools?” an overwhelming 77% of students answered yes.

Lecturers were perceived more favourably by students than graduates – among graduates, 65% believed that lecturers were familiar with AI tools, suggesting a shift in perception over time.

The generational gap in technological adoption plays a notable role in AI usage among lecturers. Both students and graduates agreed that younger lecturers were more likely to use AI tools, though their engagement remained relatively rare.

Despite widespread familiarity with AI, most lecturers used it infrequently – according to students, only 20% incorporated these technologies into their daily routines.

Student responses indicated the highest awareness of lecturers' AI knowledge in Poland (81%), Czechia and Lithuania (80% each), and Slovenia (79%), while the lowest awareness was recorded in Slovakia (72%) and Romania (70%).

Among graduates, the highest recognition of lecturers' AI expertise was also noted in Poland (75%), whereas Czechia had the lowest percentage (56%).

Graduates who believed their lecturers were unfamiliar with AI largely attributed it to a lack of understanding of how to use the technology effectively.



3.3. Classes focused on AI

Awareness of the need to acquire knowledge about AI is growing among young people

Our study indicates that AI education is not always fully integrated into university curricula. Nevertheless, the majority of students (78%) reported no difficulties in using AI for their studies.

Among students who refrained from using AI, some attributed their decision to limited accessibility within their university, while others cited restrictions imposed by academic integrity policies. Simply put, when a university does not support AI tools, some students adjust accordingly to meet institutional expectations.

Using AI for thesis writing is one thing, but attending dedicated classes that teach AI tool principles is another. When we asked students whether their university offered courses on AI tools, the response was surprising – only 5% stated that such classes existed.

Where AI courses were available, students noted that they were typically led by industry experts or academic lecturers. This suggests a strong demand for AI education.

Our research further supports this: 57% of students expressed interest in attending additional AI-focused classes, with technical field students being especially eager to participate.

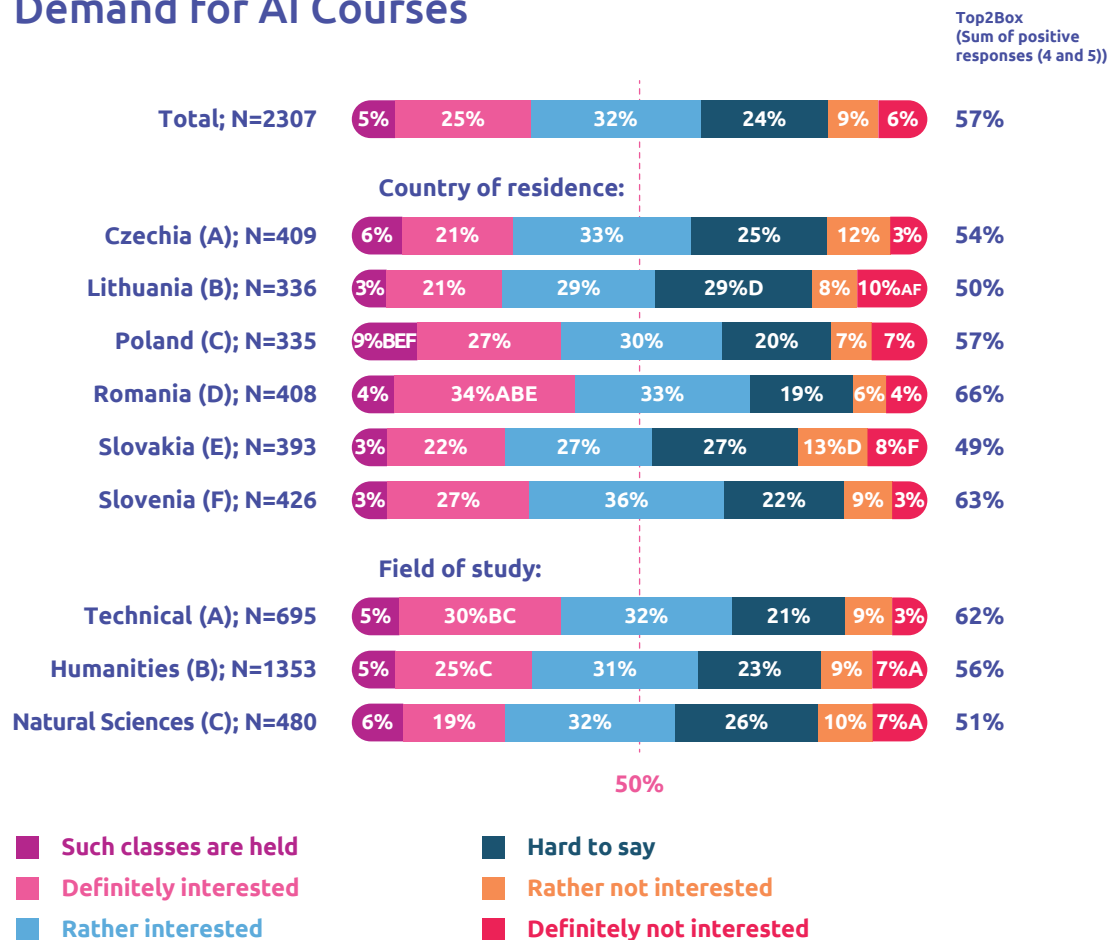
Interest in AI education is strong among both students and graduates, though demand is notably higher among graduates – 65% expressed a willingness to take AI courses if they were still in college, compared to fewer than 60% of current students. This discrepancy may stem from graduates recognizing AI's growing relevance in the job market and seeking to bridge knowledge gaps.

**AI Education
Scarce:
Only 5% of
Students Report
AI Classes at
Their University
Sample:
respondents
currently
studying, N=2307.**

Interest levels also vary by country. Among students, the highest enthusiasm for AI education was observed in Romania (66%) and Slovenia (63%), while the lowest was recorded in Lithuania (50%) and Czechia (54%). While technical field students showed the greatest interest in AI courses (62%), a significant portion of humanities students (55%) also saw value in learning about AI.

Meanwhile, 24% of students remained undecided – potentially due to a lack of familiarity with AI applications.

Demand for AI Courses



Sample: Respondents currently studying, N=2307.

A promising trend is that when AI classes were offered at universities, they were held with relative consistency. Among students aware of such courses, 42% reported that they took place once a month, while 25% stated they were held at least once a week. Only 8% noted that AI classes occurred less frequently than 2-3 times per semester.

According to student responses, AI instruction was delivered by knowledgeable professionals, with industry experts (58%) and academic lecturers (55%) being the most common instructors. Additionally, individuals from the business sector played a notable role in AI education, contributing to 29% of these classes.

A positive trend has emerged in universities that offer AI classes, with these courses being conducted on a fairly regular basis. Among students aware of such programs, 42% noted that classes were held once a month, while 25% reported they occurred at least once a week. Only 8% stated that AI courses were offered less frequently than 2-3 times per semester.

Students also confirmed that AI instruction was provided by highly knowledgeable professionals, with industry experts (58%) and academic lecturers (55%) being the primary instructors. Additionally, individuals from the business sector contributed to AI education, making up 29% of those leading these courses.

How do students use AI tools to make their university studies easier? Here are the most common examples of AI use cited by students solely for university purposes: for searching for information (58%), data analysis (41%), writing papers and essays (40%), creating presentations (37%), for research and learning new things (34% each). Every fourth student (23%) used AI in the context of programming and software development. A slightly higher number, 28%, used AI to learn foreign languages, and 26% used it to organize their time and tasks. The same number (26%) used AI in their studies for entertainment. Students in Slovakia (81%), Czechia (80%), and Lithuania (80%) used AI most often for university tasks, while Romania was the least likely to use it (72%).

Students who did not use AI at university primarily cited a lack of necessity or obligation – 22% of respondents identified with this reason. Additionally, 18% preferred to learn and work independently rather than rely on AI tools.

Fewer students attributed their non-use of AI to university-imposed restrictions, limited availability of AI resources, or concerns about AI-generated errors.

One respondent, a natural sciences student from Lithuania, expressed a more philosophical concern, stating, „Using AI to facilitate tasks takes away my personal expression and freedom of thought.”

Students, write your papers with AI!

As long as you teach universities that bachelor's and master's degrees are meaningless in their current form. Lecturers and supervisors, please teach students to think critically, check sources, eliminate generalizations, look for holes in arguments co-created with AI. Teach them to be alert, to exchange intellectual opinions, to think in an orderly manner, to train attention and concentration. Invite voice assistants to the classroom so that students know what to ask them and how to do it. Make sure that they know how to ask them questions themselves!

Students need artificial intelligence. And if universities want to play a cultural role, not only teaching but also shaping attitudes, building tools and ways of thinking that prepare students for life in the modern world, the matter becomes clear. Only 5% of respondents confirm the existence of AI courses in their universities. I assume that a number of AI-related topics are hidden in content devoted to other topics. The problem lies in preparing academic staff to teach AI. AI tools and capabilities are changing so quickly that even people who are directly involved in AI have difficulty keeping up. We cannot expect academics to abandon their research and focus on AI. But since so few people associated with universities have the knowledge and skills needed to conduct such classes, we have to reach out to practitioners. Perhaps, analogous to inter-faculty units providing language or pedagogical education, it would be worth considering such units providing education in digital tools. Not only artificial intelligence, but also using advanced functions of text editors and spreadsheets, working with bibliographies, and creating simple automations. They could also show the 15% of students who clearly reject our given topic that it is no longer possible to study the humanities or sciences without the help of artificial intelligence.

**Dr Marta M.
Kania**
CEO Circuit Tree



Chapter 4

Advancing Professional Growth Through AI Tools

4.1. How does ChatGPT look for a job?

Job searches in the chatbot age

Students recognize the intense competitiveness of the job market and actively seek experience before completing their studies. Our findings reveal that the vast majority (79%) of respondents were professionally active, with nearly half (45%) working full-time.

As expected, professional activity increases after graduation, with 9 out of 10 graduates employed. However, our study also highlights a significant employment rate among students – 75% had already entered the workforce while pursuing their degrees.

Financial considerations likely play a role in this trend, as many students seek employment to improve their financial stability

Among the analysed group, Romania (87%) and Poland (86%) had the highest employment rates, reflecting strong interest in securing jobs. Conversely, Slovakia recorded the lowest employment rate (70%), while students and graduates in Lithuania showed the least interest in job-seeking (53%).

Across all surveyed countries, individuals with a technical education were the most professionally active – 85% were employed full-time or part-time, completing internships, or working under employment contracts. In comparison, employment rates were slightly lower among humanities graduates (78%) and natural sciences graduates (77%).

Students are more likely than graduates to explore job opportunities, with 65% actively browsing job listings compared to 54% of graduates. However, only 21% of respondents had taken the next step by applying for a position that interested them.

**79% of students
and graduates
are employed**

**Sample:
all respondents,
n=3010.**



Notably, nearly half of job seekers incorporated AI tools into their search process. Our study found that 47% of respondents used AI solutions to support their job hunt. How? The findings may be surprising, especially to older generations—62% of students and graduates primarily relied on chatbots to prepare for recruitment interviews.

In contrast, relatively few respondents used AI for job discovery (8%) or CV generation (5%). It's important to recognize that AI tools in this context can serve multiple functions – not only providing insights on potential employers and industry trends but also simulating interview scenarios, both in written and verbal form.

Moreover, candidates can ask chatbots to evaluate their performance in a mock interview and receive constructive feedback on areas that need improvement. Those who effectively leverage AI in the recruitment process significantly enhance their chances of securing employment.

Our research examined the specific ways AI supports students and graduates in their job search. The most common use was for drafting CV content, with 42% of respondents citing this as the most beneficial AI-assisted task. Other significant applications included gathering company information (39%), writing cover letters (34%), designing CV graphics (32%), and proofreading documents (30%).

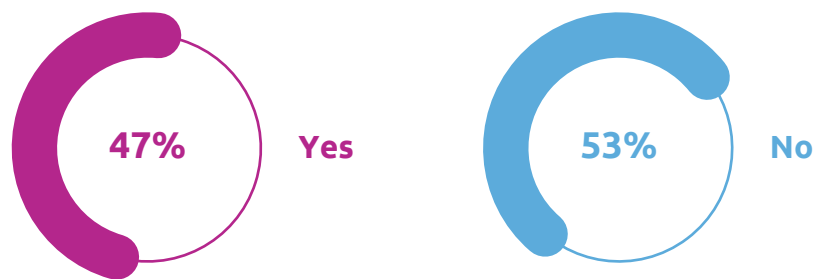
Additionally, 23% of respondents acknowledged using AI to generate a complete set of application materials. A quarter (25%) also prepared for recruitment interviews using AI, treating it as a mock interviewer or sparring partner.

Despite the growing role of AI in job applications, more than half of surveyed students and graduates (53%) had not used AI for recruitment. Most attributed this to a lack of familiarity with AI tools or insufficient skills in using them. Only 15% cited cost as a barrier. Others preferred traditional application methods or simply did not see value in incorporating AI into the process.

AI-assisted recruitment was most widely adopted by students and graduates in Romania (53%), whereas usage was lowest in Lithuania (41%) and Czechia (44%).

Men were more likely to integrate AI into their job searches than women – 54% of male respondents reported using AI tools, compared to 41% of female respondents.

AI as Support in Recruitment



47% Using AI in the recruitment process

62% AI chatbots supporting the recruitment process and interview preparation:

8% AI tools for job search

5% CV and cover letter generators

4% General-purpose AI assistants (phone, computer)

8% Other

14% I don't remember

Sample: Respondents looking for a job, N=1882.

Students and graduates not only rely on AI tools during their job search but are also aware that recruitment processes increasingly incorporate artificial intelligence. Nearly half of the respondents (46%) recognized that AI plays a role in modern hiring procedures.

Additionally, 27% had firsthand experience with AI in recruitment – most commonly during the automated classification of applications and the initial screening of job offers. A clear sign of the times is that 38% of those who encountered AI in recruitment reported having their first job interview conducted by a bot.

4.2. Improving competencies

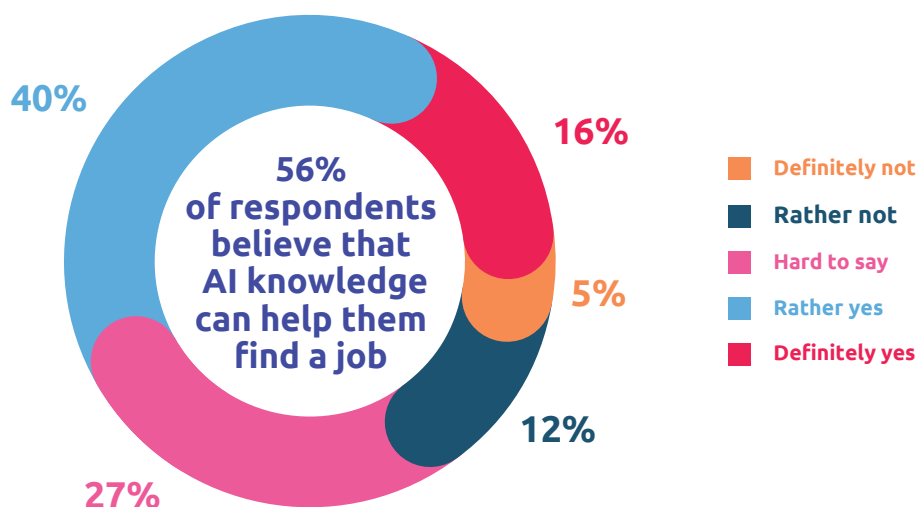
Artificial intelligence has profoundly transformed the job search process. On the one hand, employers now have advanced tools that enable them to screen candidates more efficiently. On the other, companies increasingly expect employees to be proficient in AI-driven applications.

Students and recent graduates have already recognized this shift—39% of job seekers reported that the roles they are pursuing require skills such as proficiency in AI-powered software. Similarly, around 40% of respondents across both groups stated that AI knowledge is crucial for their future careers.

The need for proficiency in specific AI tools is most frequently recognized by technical students and graduates, with 51% acknowledging its importance, while natural sciences students and graduates show the least awareness, at 35%. The highest awareness of AI competency demand in the labor market is observed among students and graduates from Romania, Slovenia, and Poland.

Approaches to this issue vary significantly by country—while nearly half of Romanians (48%) consider AI a necessary skill for their future careers, only 30% of Czech respondents share this view. Moreover, over half of all respondents believe that AI knowledge can improve job prospects. Confidence in AI's value in the labor market is strongest among respondents from Romania (66%) and Poland (62%), while the lowest confidence is observed among those from Slovakia (45%)

AI Knowledge as a Competitive Advantage in the Job Market



Top2Box (Sum of positive responses (4 and 5)):

Czechia 52%	Lithuania 53%	Poland 62%	Romania 66%	Slovakia 45%	Slovenia 56%
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Sample: Respondents looking for a job, N=1882.

Young, educated individuals from the CEE region recognize the growing importance of AI in the job market. However, the majority (around 60%) struggle to identify the specific AI-related competencies required. When asked, they most frequently pointed to practical applications such as trend analysis, data visualization, and generating recommendations (8%).

Fewer respondents (5%) believed that basic AI knowledge is sufficient when applying for a job, while another 5% considered advanced technical expertise – including AI algorithms, deep mathematical understanding, and statistical analysis – to be necessary. Additionally, 4% highlighted programming skills as essential.

Only a small number of respondents emphasized the importance of AI competencies in people and organizational management, education (broadly defined), and enhancing data security. Notably, employers themselves rarely specify the exact AI competencies they expect from candidates. “Employers often include a section stating knowledge of Ai is welcome in job postings, but they don’t specify what it is needed for,” admitted one student from Poland.



Students and graduates are increasingly aware of the evolving demands of the job market. A remarkable 71% expressed their willingness to develop AI-related skills, with Romanian students leading the way at 83%.

At the same time, 43% of respondents acknowledged the need for support in learning AI to enhance their competitiveness in the workforce. The highest demand for AI training was observed among technical field students (48%) and Romanian respondents (59%).

At the other end of the spectrum, students and graduates from Czechia and Slovakia showed the least interest in AI education, with 36% and 37% of respondents from these countries, respectively, indicating a desire for further training.

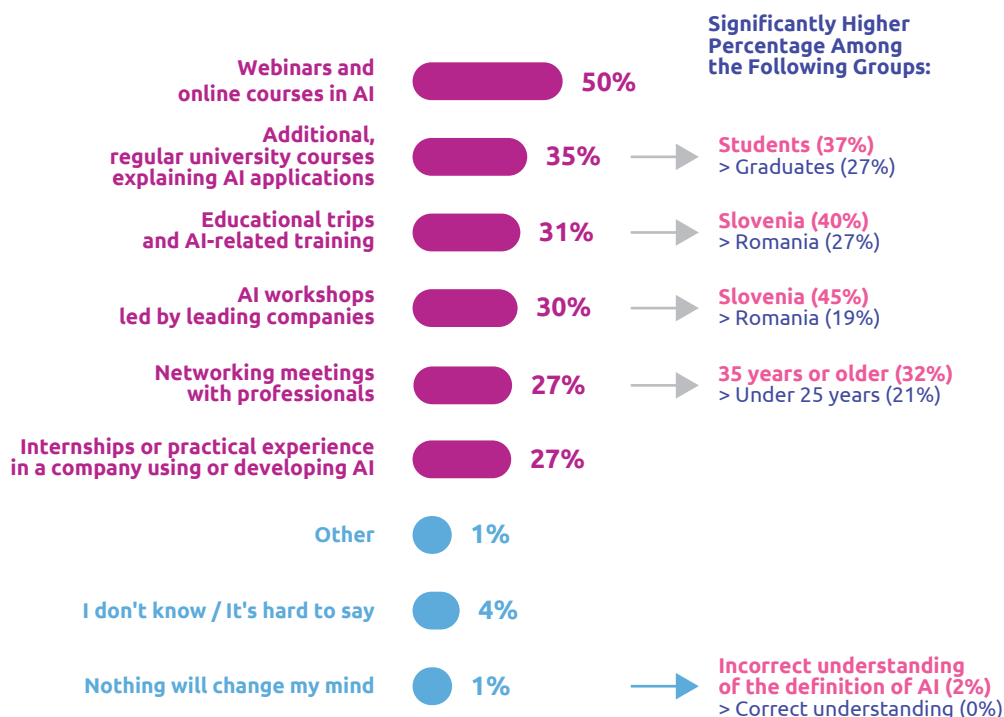
The most accessible learning support comes in the form of webinars and online courses, favored by 50% of respondents. Extracurricular activities at universities are also very popular, with 35% showing interest.

Additionally, a third of respondents expressed enthusiasm for educational trips (31%) and AI workshops hosted by companies (30%). Notably, individuals over the age of 34 more frequently highlighted networking meetings with AI professionals as their preferred method of support.

43% of respondents require support in AI-related learning to enhance their competitiveness in the job market.

**Sample:
all respondents,
n=3010.**

Preferred Sources of Support for Learning AI



Sample: Respondents who would like support in getting to know AI tools, N=1294.

Students and graduates have mixed feelings about AI being used to automate repetitive and time-consuming tasks traditionally performed by humans. AI automation was viewed positively by 44% of respondents, while 39% remained neutral, and 18% had a negative opinion.

The most favorable attitudes toward AI automation came from Romania (52%) and Czechia (44%), whereas in Slovenia, Lithuania, and Slovakia, positive opinions hovered around 40-41%. In Poland, 43% of respondents recognized its benefits.

Students in technical fields were the most receptive to AI automation (53%), while those studying natural sciences were the least enthusiastic (39%). Additionally, people from larger cities showed greater acceptance of AI (53%) compared to residents of smaller towns (33%).

Will artificial intelligence take our jobs?

While AI skills are increasingly required in the job market and task automation is becoming more widespread, well-educated individuals remain largely unafraid. In fact, only 30% of respondents expressed concerns that AI might replace them,

while a significantly larger proportion (47%) did not share these fears. The remaining 22% were undecided, highlighting a need for greater awareness on this issue.

The highest level of concern was observed in Slovakia (43%), whereas Slovenian respondents were the least worried (22%). Job seekers were more uncertain (33%) compared to those not actively looking for work (26%). Additionally, residents of small towns (35%) were more likely to express concerns than those in larger cities (29%).

Moreover, fears of being replaced by AI experts were not widespread, with only 29% of respondents worried about this possibility. In this respect, concerns were highest in Poland (40%) and lowest in Slovenia and Slovakia (both 23%).

One in three respondents (36%) has considered the impact of artificial intelligence on their chosen industries. This concern was most prevalent among respondents from Poland (48%) and Romania (41%), while Czechia (28%) and Lithuania (30%) showed the least awareness of AI's influence.

According to students and graduates, the professions most at risk of automation include:

- Programmers (59%)
- Administration workers (41%)
- Financial sector employees (39%)
- Insurers (29%)
- Store and logistics workers (29%)
- Manual workers in factories and warehouses (26%)

Additionally, 14% of respondents believe that lawyers should also be concerned about automation.

When asked about their preferred career paths, respondents most frequently envisioned themselves working in management and marketing (29%) or the technology sector (25%).

The ability to use AI tools is already becoming a key competence on the job market, and its importance will only grow.

The results of the study show that as many as half of technical graduates see AI as a requirement in their profession, and almost three-quarters of all respondents declare a desire to develop competencies in this area. The results indicating Poland and Romania as countries where young people strongly follow global trends are interesting in this context.

However, it should be emphasized that the study reveals a significant gap: more than two thirds of respondents cannot precisely indicate what specific AI-related competencies are required in the labor market. This is a strong signal to take action in the education sector and beyond. The practical applications of AI indicated by respondents (such as trend analysis, data visualization, basic use of AI tools or programming) show that young people are open to development, but they need clear guidance and support in acquiring practical skills.

In my opinion, the key competencies worth developing are primarily the practical use of AI tools in everyday work – from data analysis, through automation of repetitive tasks, to the ability to critically evaluate the results generated by algorithms and security in the context of AI. And, just as important as technical areas are soft skills, i.e. critical thinking, communication, teamwork and ethical awareness related to the use of artificial intelligence. Let's not forget that AI is not only the domain of technical fields, its applications are becoming increasingly common in business, marketing, social sciences and medicine.

To prepare students and graduates for new professional realities, it is necessary to include AI education elements in all fields of study, not only technical ones. It is also crucial to build bridges between universities and businesses—through workshops, projects established with companies implementing AI and internships in areas related to data analytics and automation. Equally important are certified courses and e-learning platforms, which allow for flexible acquisition of knowledge and skills tailored to individual needs.

We cannot forget about building ethical awareness and resistance to change. AI is not only an opportunity, but also a challenge that requires a responsible approach. It is worth promoting career paths that combine technological competencies with typically human competencies, such as creativity, empathy or leadership. As the research shows, as many as 43% of young people need support in learning AI to increase their competitiveness on the labor market. This is a clear signal for universities, employers and decision-makers to jointly build an education system that responds to the challenges of the future.

**Agnieszka
Czmyr-Kaczanowska**

CEO & Co-founder
Talenti – Women's Talent Bank





The background is a complex, abstract digital pattern. It features a dense network of blue and red lines, some straight and some curved, creating a sense of depth and movement. A prominent feature is a bright, glowing point of light in the center, from which several red lines radiate outwards. The overall color palette is dominated by deep blues and vibrant reds, with white text providing a sharp contrast.

Summary

The study presents a nuanced view of how young, educated individuals in Central and Eastern Europe perceive AI. Significant differences emerge between the analyzed countries—Poland, Czechia, Slovakia, Slovenia, Lithuania, and Romania—as well as between students and graduates, despite only a few years separating them.

The findings reveal that students are more likely to encounter AI-related regulations at universities (50%) compared to graduates (41%), and they integrate AI tools more actively into the learning process (78% of students vs. 64% of graduates). Additionally, only one in five graduates (22%) reported being encouraged by lecturers to use AI, whereas among current students, this figure rises to 30%.

Importantly, both groups express a strong desire to expand their AI competencies, with the demand for additional AI education higher among graduates (65%) than students (57%). This suggests a growing awareness of the importance of AI skills in the labor market.

Differences in AI adoption and attitudes were also observed across the surveyed countries. The most active users of AI tools are residents of Slovakia (89%) and Czechia (88%), while the least active are Slovenians (74%) and Romanians (75%).

In terms of interest in developing AI-related skills, Romanians lead (83%), whereas Lithuanians (66%) and Slovaks (65%) show the lowest enthusiasm.

Concerns about AI's impact on employment also vary significantly. The highest level of concern was recorded in Slovakia (43%) and Poland (37%), while Slovenians (22%) and Czechs (26%) expressed the least anxiety.

Romania stands out as a special case, where interest in AI skill development is exceptionally high, yet actual AI usage remains relatively low.

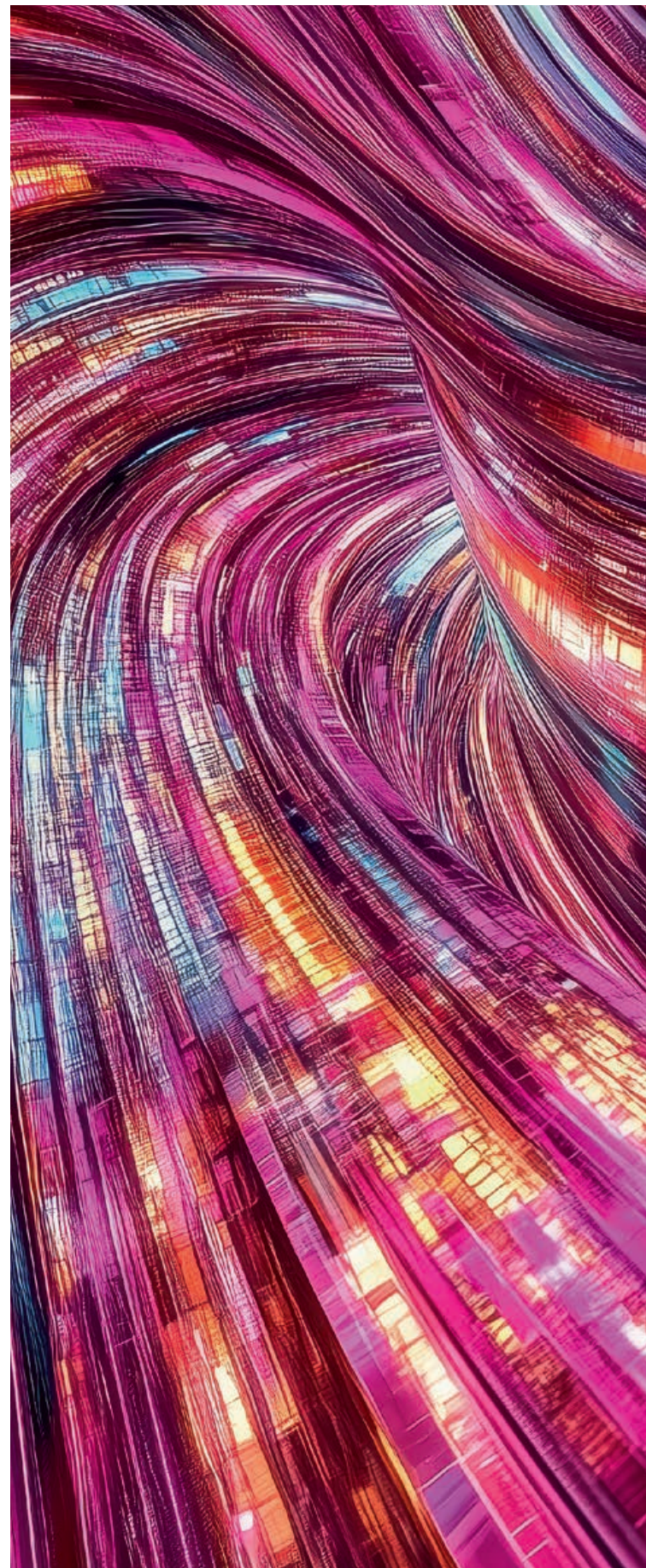
Although most respondents accurately define AI, a significant portion (45%) still holds misconceptions about it. A promising trend is the high level of openness toward AI technologies, though notable regional differences exist.

The highest acceptance rates were observed in Romania (80%) and Poland (77%), while Lithuania (55%) recorded the lowest. Additionally, 82% of respondents reported using AI tools, highlighting their significant role in both academic and professional life among the younger generation.

Among the most common applications of AI, respondents cited information search, translation, task automation, and job search assistance.

Despite the generally positive outlook, respondents express several concerns about the advancement of artificial intelligence. More than half believe that excessive dependence on AI could lead to helplessness in daily life and a decline in education quality. Additionally, one in two respondents fears the potential loss of employment and the unauthorized use of their images.

This underscores the urgent need for a systematic approach to AI education. Retraining programs for lecturers are seen as crucial, as many lack sufficient knowledge of AI tools or struggle to effectively integrate them into the teaching process. Equally important is the introduction of dedicated AI courses into academic curricula, the development of clear regulations governing AI usage in education, the creation of support programs for graduates seeking to enhance their AI competencies, and initiatives that raise awareness of the ethical dimensions of AI technologies.



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