

THE INFLUENCE OF THE GENERATIVE ARTIFICIAL INTELLIGENCE ON THE MANAGEMENT OF THE ROMANIAN ORGANIZATION IN 2025

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ABSTRACT: *If 2020 represented the online education phenomena explosion, an explosion obviously caused by the pandemic, an explosion whose effects are fading today, with hybrid education failing to establish itself, but only for the hybrid jobs field, 2025 seems to be the year of the Artificial Intelligence (AI). The paper aims to address, through reports made by Price Waterhouse Cooper (PwC), Google or World Economic Forum (WEF), studies or reports produced between July 2024 and January 2025, the state of use and implementation of AI in Romania in areas such as the labor market, education or public administration. Also, in this paper, I held virtual dialogues with Generative AI (GenAI) class software, such as Microsoft's Copilot and Chat GPT, and I have obtained interesting answers for the topic addressed in the paper. It can be appreciated that the coming years will be significantly influenced by AI, GenAI and other software of this type, and the changes that will be brought to society will be spectacular.*

KEY WORDS: *Artificial Intelligence, Generative AI, Chatbot, Romania, Job Market, Education, Public Administration.*

JEL CLASSIFICATIONS: *O330, C880, J230.*

1. INTRODUCTION

Fifteen years ago, I wrote numerous papers about the implementation of Business Intelligence (Edelhauser E., 2010, Edelhauser E., 2011), a kind of AI for the business field, and it was considered a revolutionary software for the Romanian industry. Now, a simple search on the website of a prestigious global publisher for publishing scientific studies and research, Multidisciplinary Digital Publishing Institute (MDPI), revealed that if over 27,000 articles dedicated to AI were published between 1996 and 2025, 24,000 of these were published in the last 4 years, and 7,000 in the last year. Romanian researchers have published almost 200 papers dedicated to AI at this

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publishing house in the last year, ranking in the top 20 countries worldwide in terms of interest in this field.

Today in IT a new area emerge - Artificial intelligence (AI), generative AI tools and AI chatbot. Artificial intelligence (AI) has transformed how we work and play in the last two years, allowing almost anyone to write code, create art, and even make investments.

A chatbot is known today, through the popular chatbot applications. Chatbots can offer something that search engines can't, namely direct answers in a more personal way. Chatbots are popular because people want to get answers quickly. Chatbots can handle a variety of requests in a conversation-like format. A chatbot is faster, more engaging, and more convenient.

ChatGPT is produced by Open AI, and represent the first thing that comes to mind when we're asked about AI chatbots. It is, after all, the most widely used chatbot. ChatGPT doesn't always cite its sources and can sometimes provide completely incorrect answers. But, ChatGPT Plus is more accurate and is available for \$20 per month. Also, another version, ChatGPT Team, offers collaboration tools for \$30 per user per month.

Google Gemini is the best AI chatbot for Google users, but the biggest selling point of using Gemini is the fact that it integrates seamlessly with the Google account. Google recently introduced Gemini Live, a voice assistant that can engage in human-like conversations. This version is available now, on anyone's phone or tablet. Gemini is free for Google and Android users, but for \$20 per month, anyone can access premium features like Gemini in Gmail and Docs.

Microsoft Copilot is the best AI chatbot for Microsoft users. Microsoft Copilot has evolved into a much more powerful tool compared to its predecessor, Bing Chat. Like ChatGPT, Copilot can also search the web and process information, but it can also provide answers with links to the sources it uses. For a more seamless experience, it can integrate with Microsoft 365 apps like Word and Excel for \$30 per user per month.

2. THEORETICAL FRAMEWORK

2.1. Romania through the eyes of an AI chatbot - How AI Will Impact Business Life

Artificial intelligence will profoundly change the way companies work. The use of AI will be expanded to large enterprise companies - for IT departments, internal developers, customer service teams, and other categories of employees with the goal of strengthening workflow automation and rapidly increasing productivity.

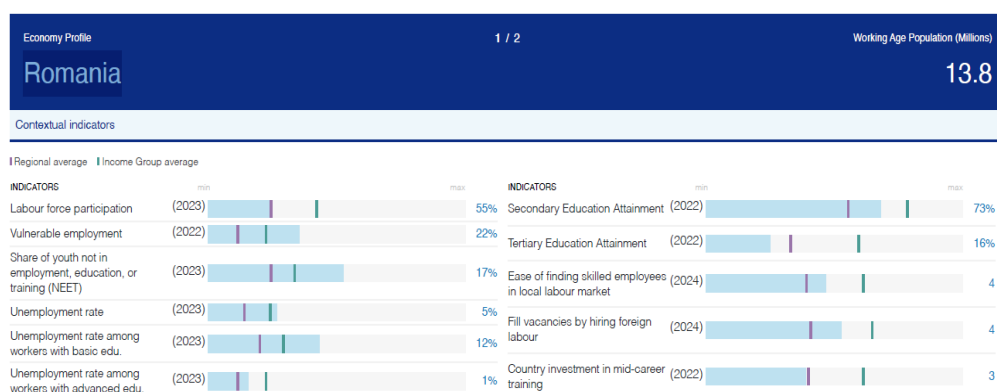
PwC report: The majority of Romanian employees want to use artificial intelligence (AI) and learn new skills, against the background of increasing workload and accelerated changes in companies. PwC's Global Workforce Hopes and Fears Survey 2024 is based on a survey of over 56,000 employees in 50 countries and regions, including over 500 in Romania (PwC, 2024).

Romania Insider: AI technology will be increasingly used in Romanian companies. Artificial intelligence (AI) technology is becoming increasingly popular in

companies in Romania. According to a recent study by the consulting company VUCAMIX, 86% of companies in the local market have already adopted AI, in various forms. However, in 40% of cases, it was the personal initiative of the employees, not a company decision. A total of 107 respondents from organizations operating in various industries and regions participated in the VUCAMIX study (Marica, 2024).

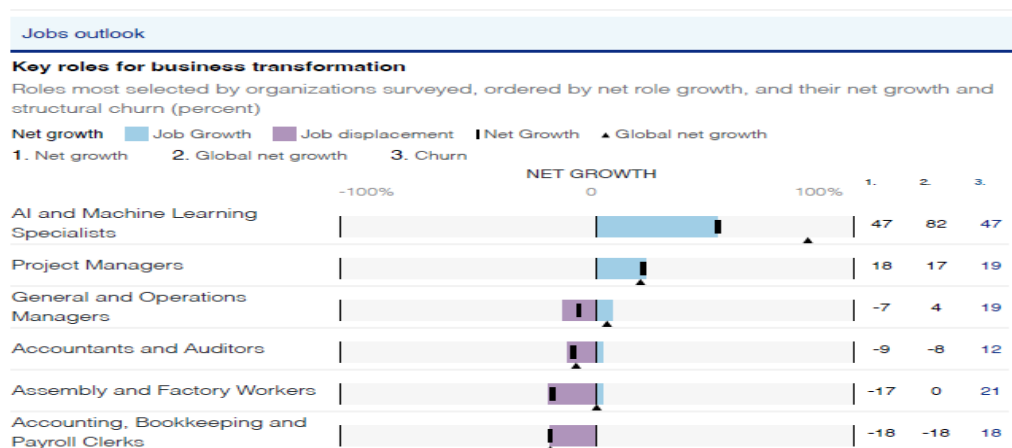
2.2. AI influence in education and in the labor market in Romania

An image of Romania, respectively an economic profile, highlights an active population of 13.8 million and a regional average placement.



Source: Future of Job Report 2025

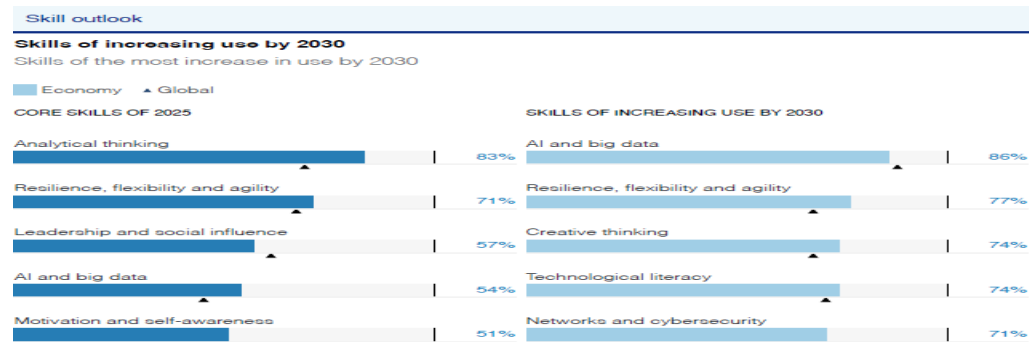
Figure 1. Romania in 2025



Source: Future of Jobs Report 2025, p. 186

Figure 2. Trends in business transformation for Romania

Two areas stand out as opportunities, respectively areas generating jobs in the future, namely AI and PM. Four other areas represent threats to the labor market and generally refer to repetitive activities.



Source: *Future of Jobs Report 2025*, p. 186

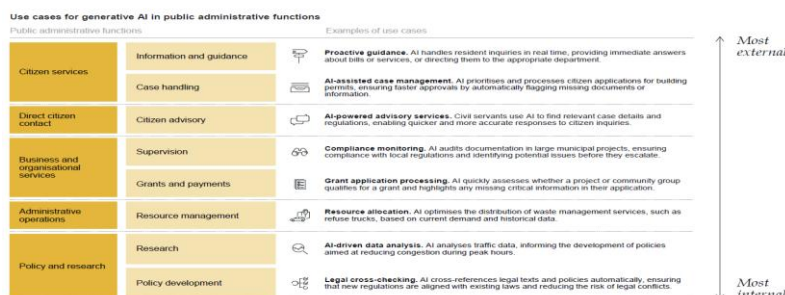
Figure 3. Trends in education for Romania

Education is the one that must be most prepared for these changes and therefore it must focus on the future of analytical thinking, AI and flexibility.

2.3. AI in Romanian Public Administration

Almost 70% of public functions could benefit from the automation offered by Artificial Intelligence tools, according to a study conducted by Google. A percentage of 69% of jobs in the Romanian public administration have the potential to use generative artificial intelligence in operations, which will increase efficiency and allow employees to focus on solving complex problems. In addition, 8% of jobs can benefit from the automation of more than half of current tasks through AI, thus freeing up time for activities with higher added value.

Generative AI can improve efficiency and service quality of administrative tasks



Source: *The opportunity of AI in public administration in Romania*, p. 12

Figure 4. Generative AI influence in administrative tasks

At the same time, 24% of jobs in the public sector will remain unchanged due to the low potential for the use of AI, namely those that mainly involve direct interactions with people or physical tasks. A survey conducted among employees in the Romanian public administration indicates that 54% of them use AI tools, while only 23% of the institutions they belong to have invested in AI solutions. Investments in AI in Romanian public institutions are motivated by decreasing costs, increasing productivity, improving employee well-being, and reducing the number of repetitive tasks that civil servants have to do.

3. RESULTS

3.1. Case study 1: Microsoft's CoPilot and Bing

To demonstrate the relevance and efficiency of using GenAI software, I have transformed the title of the paper into a question for artificial intelligence and using Microsoft's CoPilot, and I have obtained the following answer:

In 2025, Artificial Intelligence (AI) is expected to significantly influence the management of Romanian organizations in several key areas:

1. *Strategic Decision-Making*: AI can provide managers with advanced analytics and insights, enabling more informed and strategic decisions. By analyzing large datasets, AI can identify trends and patterns that might not be immediately apparent to human analysts.
2. *Operational Efficiency*: AI-driven automation can streamline various operational processes, reducing the time and effort required for routine tasks. This includes everything from supply chain management to customer service, where AI chatbots can handle inquiries efficiently.

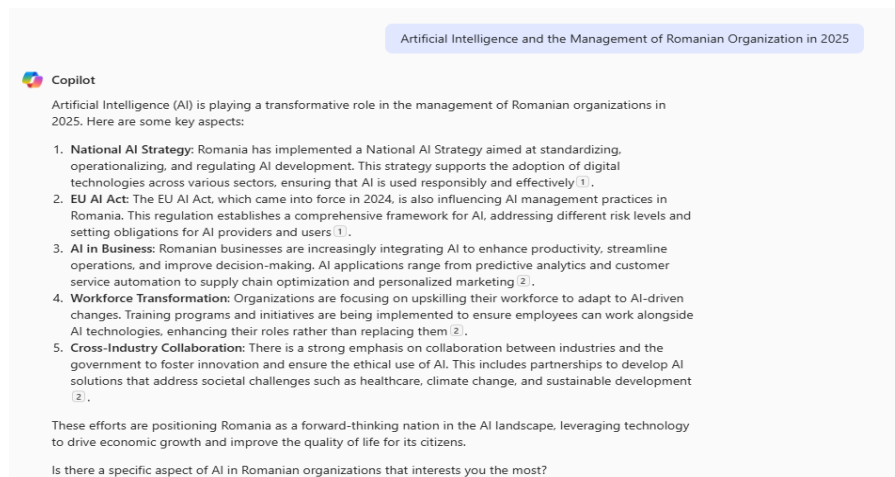


Figure 5. Microsoft's CoPilot answer for the question: "Artificial Intelligence and the Management of Romanian Organization in 2025"

3. *Human Resources Management*: AI can revolutionize HR by automating recruitment processes, enhancing employee engagement, and providing personalized training programs. AI tools can help identify the best candidates, predict employee turnover, and tailor development plans to individual needs.
4. *Customer Experience*: AI can enhance customer experience by providing personalized interactions and support. AI systems can analyze customer data to offer tailored recommendations and solutions, improving satisfaction and loyalty.
5. *Innovation and Competitiveness*: AI fosters innovation by enabling organizations to develop new products and services more quickly. Romanian companies can leverage AI to stay competitive in the global market by adopting cutting-edge technologies and practices.
6. *Compliance and Risk Management*: AI can help organizations comply with regulations and manage risks more effectively. By monitoring activities and identifying potential issues, AI systems can ensure that organizations adhere to legal and ethical standards.

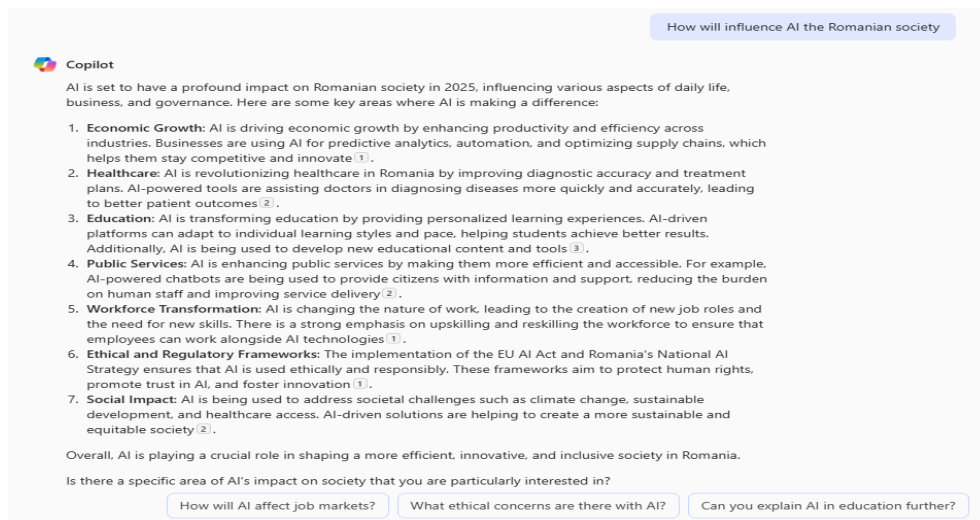


Figure 6. Microsoft's CoPilot answer for the question: “How will influence AI the Romanian society”

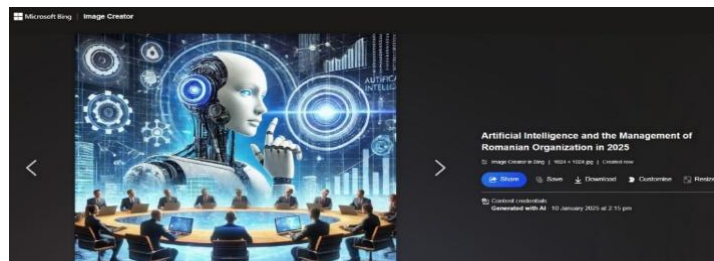


Figure 7. Microsoft Bing Image Creator for the question “Artificial Intelligence and the Management of Romanian Organization in 2025”

3.2. Case study 2: Chat Generative Pre-trained Transformer (Ghat CPT)

I turned the title of the paper into a question for artificial intelligence, and using Chat GPT (Chat Generative Pre-trained Transformer - Open AI 2022), and I have obtained the following answer: "*Artificial Intelligence (AI) and the Management of Romanian Organizations in 2025*".

The integration of Artificial Intelligence (AI) into organizational management has been a transformative global trend, and Romanian organizations are no exception. As we look into 2025, AI's impact on Romanian companies continues to grow, with advancements across various sectors shaping operations, decision-making, and organizational cultures. Here's a detailed look at the interplay between AI and management in Romanian organizations in 2025.

1. AI-Driven Decision-Making

Romanian companies increasingly rely on AI to process large datasets, enabling managers to make data-driven decisions with precision and speed. Tools leveraging AI in predictive analytics, market trend analysis, and financial forecasting have empowered managers to anticipate risks and seize opportunities more effectively. For instance:

- Retail and E-commerce: AI-driven consumer behavior analytics help businesses optimize inventory and personalize customer experiences.
- Banking: AI tools for fraud detection and credit risk assessment streamline decision-making in financial institutions.

2. Workforce Optimization and HR Management

AI has revolutionized human resource management in Romania by enhancing recruitment, performance monitoring, and employee engagement:

Recruitment: AI-based tools screen candidates efficiently, ensuring organizations hire top talent.

Retention and Development: AI systems analyze employee feedback and performance to suggest personalized career paths, training programs, or identify signs of burnout. However, the adoption of AI also raises questions about employee trust and ethical concerns, requiring careful implementation strategies to balance efficiency with human-centric values.

3. Automation and Process Efficiency

AI-powered automation is a key driver of efficiency in Romanian industries such as manufacturing, logistics, and services:

- Manufacturing: AI-enabled predictive maintenance and quality control improve operational reliability and reduce downtime.
- Logistics: Algorithms optimize supply chain operations, reducing costs and ensuring timely delivery.
- Healthcare: Romanian hospitals increasingly adopt AI in diagnostics, patient management, and operational workflows.

4. AI in Public Administration and Governance

In line with Romania's EU commitments to digital transformation, AI adoption has expanded into public sector management:

- E-Government Services: AI streamlines administrative processes, offering Romanian citizens faster access to services like tax filing and public health systems.
- Urban Planning: AI-driven tools are being used for traffic management and infrastructure development.

5. Challenges in AI Integration

While AI has unlocked immense potential, Romanian organizations face several challenges in its adoption:

- Data Infrastructure: Many organizations struggle with outdated IT systems, limiting AI's effectiveness.
- Skills Gap: A shortage of AI-trained professionals in Romania hampers innovation.
- Ethical Concerns: Ensuring transparency, fairness, and data privacy remains a top priority.
- Regulatory Alignment: Compliance with EU regulations such as the GDPR and forthcoming AI-specific legislation requires ongoing effort.

6. The Future Outlook

By 2025, AI has become a competitive advantage for Romanian organizations willing to embrace it. Success depends on:

- Education and Upskilling: Universities and training programs must prepare a workforce proficient in AI.
- Collaboration: Partnerships between the government, private sector, and academia are vital for building AI innovation ecosystems.
- Cultural Adaptation: Managers need to foster a culture where AI is seen as a tool for augmentation rather than replacement.



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Figure 8. ChatGPT answer for the question: “Artificial Intelligence and the Management of Romanian Organization in 2025”

Conclusion

AI's influence on Romanian organizational management in 2025 is profound, touching every aspect of operations and strategy. While challenges remain, the future looks promising as Romania continues to harness AI's potential, aligning it with its economic and social priorities. A balanced approach emphasizing both technology and humanity will ensure sustainable progress in AI-driven management practices. Would you like this analysis tailored to a specific industry or domain?

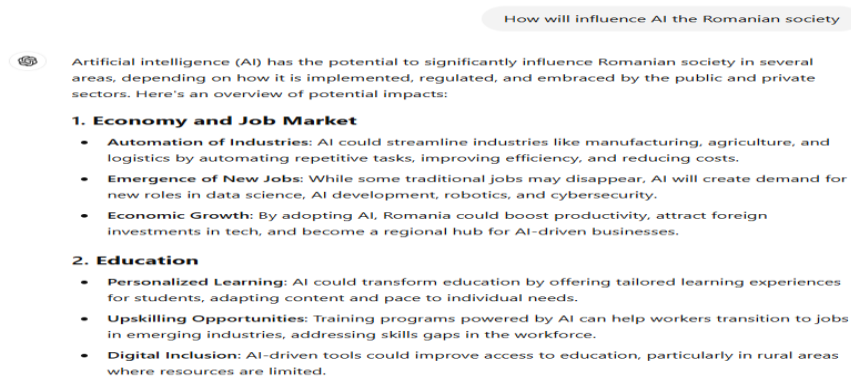


Figure 9. ChatGPT answer for the question: “How will influence AI the Romanian society”



Here is the image based on the concept of AI and the management of Romanian organizations in 2025, blending tradition with cutting-edge technology. Let me know if you'd like any adjustments!

Figure 10. Chat Generative Pre-trained Transformer (ChatGPT) for “Artificial Intelligence and the Management of Romanian Organization in 2025”

4. CONCLUSIONS

Fifteen years ago, I have analyzed the issue of artificial intelligence through the business intelligence component of enterprise software in numerous papers. Today, those papers are much closer to the subjects of those researches, namely managers of organizations or specialists from fields other than IT. In the future, these topics, presented in the current paper, will probably be addressed by an even wider range of beneficiaries, in the context in which AI and GenAI will become common tools. That is

why I will focus my research in 2025 on this field, namely AI, applied in management and education.

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