METHODS OF DECISION-MAKING WITH THE HELP AI TOOLS: THE EXTERNAL ENVIRONMENT AND ITS EFFECTS ON THE USE OF NEW TECHNOLOGY

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Rezumat: *Inteligența artificială (AI) joacă un rol tot mai important în procesul de luare a deciziilor, oferind instrumente care analizează rapid cantități mari de date și ajută la identificarea celor mai bune soluții. În economie și afaceri, tehnologia AI poate îmbunătăți previziunile, optimiza strategiile și reduce riscurile. În România, adoptarea noilor tehnologii este influențată de factori interni și externi, precum deschiderea către inovație și infrastructura digitală. Pentru analiza percepției utilizatorilor, cercetarea a utilizat o abordare mixtă, cu un chestionar și interviuri semistructurate. Rezultatele indică faptul că AI este percepută pozitiv, cu un potențial crescut de automatizare și eficientizare a muncii. Totuși, costurile ridicate și lipsa reglementărilor constituie bariere semnificative. Participanții subliniază că AI nu va înlocui complet angajații, ci va sprijini sarcinile repetitive și va contribui la eficiența decizională. Integrarea eficientă a AI necesită investiții în educație digitală și infrastructură, dar și o cultură organizațională deschisă spre inovație.*

Cuvinte cheie: decizii, inteligența artificială, organizație, fundamentare decizională, evoluție economică.

Abstract: *Artificial intelligence (AI) plays an increasingly important role in the decision-making process, providing tools that analyze large volumes of data and help identify optimal solutions. In economics and business, AI can enhance forecasting, optimize strategies, and reduce risks. In Romania, the adoption of such technologies depends on factors like innovation openness and digital infrastructure. To explore user perceptions, this research applied a mixed-method approach, combining a survey with semi-structured interviews. Results show that AI is positively perceived for its potential to automate tasks and increase efficiency. Nevertheless, high costs and lack of regulatory frameworks remain key challenges. Respondents believe AI will support, not replace, human workers, especially in repetitive or data-intensive tasks. Effective integration of AI requires investment in digital education and infrastructure, alongside a cultural shift toward innovation within organizations.*

Keywords: decisions, artificial intelligence, organization, decision-making, economic evolution.

JEL Classification: A120, M100, M150, O120, O330.

1. Introduction

Amid growing uncertainty and complexity in the economic landscape, organizational leaders are compelled to make quick and well-founded decisions. This context has favored the integration of technologies such as artificial intelligence (AI) into decision-making processes, transforming how information is collected, analyzed, and used to guide organizational strategies and actions. Moreover, AI provides a faster and more efficient means of action for various corporate decision-makers.

Organizations are influenced by internal and external factors, which determine continuous adaptation to maintain competitiveness. Internal factors include organizational structure, culture, human resources, technological capabilities and decision-making processes, while external factors are divided into macroenvironment (economic, political, social, technological) and microenvironment (customers, competitors). A company's external environment influences its stability and performance, and it is always undergoing changes that are driven by forces such as technological evolution, economic, socio-cultural and ecological factors, but also by the internal dynamics of the firm, such as leadership and organizational culture.

The implementation of AI technologies in the organizational framework of companies brings both material and financial benefits, among these series of significant benefits of the new technology in company management we can mention the increased speed of the decision-making

process, the reduction of errors and the integration of a complex analysis at a general level. However, these advantages come with important challenges. Among these are the dependence on digital infrastructure, vulnerabilities to cyber-attacks and the risk of creating an organizational comfort zone that limits innovation and adaptability.

Analyzing the external environment is crucial to meeting consumer needs, developing effective strategies and ensuring access to necessary resources, constantly adapting organizational subsystems to external changes. This context has favored the integration of technologies such as AI into decision-making processes, transforming the way information is collected, analyzed and used to guide organizational strategies and actions, but also to provide a faster method of action for organizations.

The research will focus on factors such as the accuracy of analyses generated by AI, the ease of interpreting results, the influence of AI on reducing decision-making uncertainty, the level of trust of managers in these tools, as well as the impact on organizational efficiency and performance.

2. Usage of AI Technologies in Europe and in Romania

2.1. The Organization's External Environment

The external environment represents the totality of exogenous factors, such as competition, suppliers, demographic, economic and political factors, which influence the economic stability of a company. These factors are similar and common to all companies, but the strength of their impact may vary depending on the specific context of each organization. The success of a company is directly linked to its ability to adapt and monitor the influence of these factors in the external environment (Tombrachevici, 2022). It influences any company, regardless of its size or other characteristics, but the way it is perceived, and its impact varies depending on several factors, such as the company's profile, its size, its notoriety and the policy adopted.

The external environment does not evolve in a constant and predictable way. The components of the environment are characterized by dynamic, irregular and often unpredictable change. This dynamic means that companies must continuously adapt to new conditions in order to remain competitive. Starting from this premise, the paper will examine the influence of AI technologies, which have their origin in the external environment of Romanian companies, reflecting Western trends both in the present and in the future of organizations in Romania. It can be assumed that these trends easily penetrate the Romanian market due to the presence of multinational companies and corporations, which, although headquartered abroad, operate through subsidiaries in Romania.

These entities play a key role in boosting competitiveness at the national level, forcing the local market to constantly adapt to maintain its relevance. The study conducted by Ipsos (2023) analyzes the perceptions and level of knowledge of Romanians regarding AI, compared to 30 other countries. The results highlight that 77% of Romanians believe that they understand what AI is, ranking 4th globally, while 62% of the same Romanian respondents say that they know which products and services use AI, 12 percentage points above the global average.

2.2. The Organization's Internal Environment

Within an organization, decisions are made by one or more people, such as managers, shareholders, or other stakeholders. In small or medium-sized organizations, the responsibility for making decisions usually lies with the manager or owner. In contrast, in large organizations, decision-making authority is usually delegated to a small group of managers or shareholders, depending on the specific context, and decisions are rarely made by a single individual. These aspects contribute to shaping the position and decision-making role of people who occupy leadership positions within organizations.

Today, there are countless ways and people who can inform decisions in an individual's daily life, however, much of human cognition and decision-making is not a direct result of deliberate information gathering and processing but instead emerges subconsciously in the realm of intuition (Dane et al., 2012). Intuition, in the context of decision-making, is defined as the ability to generate direct knowledge or understanding and arrive at a decision without relying on rational thought or logical inference (Sadler-Smith and Shefy, 2004). Higher intuition can be understood as an inner feeling (the original term used was "gut-feeling") or business instinct regarding the outcome of an investment or a new product. Intuitive decision-making involves imagination, sensitivity, rumination, creativity, and what psychologists such as Carl Jung have referred to as intuitive intelligence: the human ability to analyze alternatives with deeper perception, transcending ordinary functioning based solely on rational thought (Bishop, 2000).

These are some of the principles of human decision-making. But what about the new type of intelligence that is becoming increasingly present in everyday life? In his work, Mohammad Hossein Jarrahi (2018) argues, based on a considerable number of sources, that although AI can significantly contribute to the substantiation of human decisions, it does not take the decisions by itself. Rather, AI is just another tool used by humans in the decision-making process.

2.3. Usage of AI Technologies

AI is perceived by many as a versatile and effective tool, easy to use and capable of simplifying various problems. It can serve a wide range of purposes and is often recommended by professionals for use in multiple fields. However, AI cannot replicate a distinctive human advantage: personal experience and intuition, aspects mentioned in the introduction of the chapter. Why, then, is AI becoming increasingly promoted and used by so many? The answer seems simple. Not all individuals have the talents and capabilities necessary to substantiate essential decisions of entrepreneurial life. If three decades ago, great entrepreneurs constantly assumed risks in every decision, the modern entrepreneur has a wide range of tools designed to summarize, simplify and identify the optimal options for his decisions. (Jarrahi, 2018)

Continuous technological progress has radically transformed the way modern organizations operate, having a significant impact on their operations and strategy. Among the main trends in technological evolution are (Șendrea, 2017):

- Use of advanced and personalized technologies: The development and implementation of sophisticated technological solutions allow the adaptation of products and services to the specific needs of consumers, contributing to increased customer satisfaction.
- Complex production equipment: Process automation and the use of advanced production equipment, including industrial robots, have increased efficiency and reduced operational costs.
- Integration of AI: The implementation of AI in the production process has led to the optimization of workflows, and to improved business decisions.
- High-performance methods of information management: Significant advances in the collection, storage, transmission and use of data have led to the improvement of the quality of products and services offered.

However, AI technologies in Romania are the least used in the economic field. According to a study conducted by Eurostat (2025) in 2024, less than 4% of medium and large enterprises in Romania used AI technology in their work activity, compared to the European average of 13.48% (Figure 1).

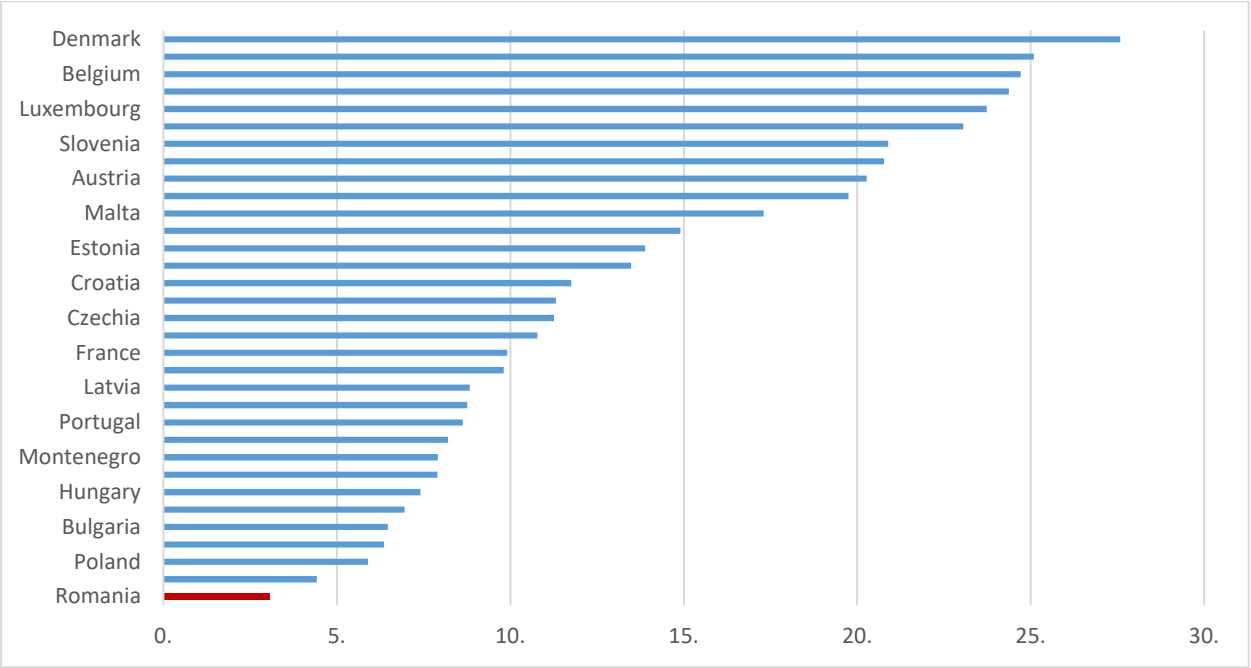

Fig. 1. AI Used by Medium and Large Enterprises in 2024

Source: Eurostat (2025)

From the previous graph, we can observe an upward trend in Europe, as well as in Romania. When viewed through the lens of globalization, Romania's neighboring countries represent part of the external environment influencing Romanian companies. It is important to emphasize that the influence of the external environment on companies is not unidirectional. Companies, in turn, shape the environment in which they operate, just as they are shaped by it. This ongoing interaction underscores the need for continuous analysis of environmental factors to support organizational adaptation and long-term success.

2.4. Risks Associated with AI

The comfort zone is considered one of the greatest risks for a company or entrepreneur. When a company's management reaches a position where hypothetically speaking, profits increase without additional efforts, the organization becomes vulnerable to both unpredictability and active competition. Smaller companies, which must constantly strive to remain in the market, develop a more versatile ability to adapt, which can give them a distinct competitive advantage.

The same rule can be applied to the use of AI as a tool for substantiating decisions in an organization. When decisions are made with minimal human input, significant consequences can arise for both the company and its employees. Although AI offers versatility and facilitates the simplification of options, it can also create a false sense of security, making any decision seem obviously positive. Subsequently, various errors that have found their way into the algorithm may become visible, thus having unforeseen effects on the organization. This already leads to a modern Taylorism embodied in many forms of algorithmic management, which intentionally or unintentionally aspires to the disqualification of workers, treating them as programmable machines or their total elimination from organizational processes for the sake of efficiency (Frischmann and Selinger, 2017).

AI offers some companies a high level of comfort, being superior to humans in many ways when viewed from a manager's perspective. AI can operate continuously, in a non-stop format, without complaints, without the risk of strikes and without the need for special accommodation or relaxation conditions, while demonstrating integrity and loyalty to the company. However, it also presents significant vulnerabilities. It is dependent on electricity and a fixed location, which makes it difficult to relocate in emergency situations. It is also exposed to cyberattacks and software

failures, which can generate additional costs for the company. In the long term, the use of AI can involve increasing operational expenses.

However, while we have mentioned some of the advantages and risks of AI technology from an organizational perspective, what will happen if the very leadership of a company, its managers and those responsible for its governance end up becoming "addicted" to this technology? By ignoring classical reasoning, either out of convenience or incapacity, and basing their decisions exclusively on the recommendations of algorithms, could they lose the ability to critically analyze and make autonomous decisions?

Such a dystopian scenario is, for now, hypothetical, but its premises are already present in contemporary reality. One of the first barriers to this hypothethical trend is represented by educational institutions, such as schools and universities, which, in the last five years, have been faced with an increasing number of works and projects carried out entirely with the help of software based on AI. Although, for the time being, these practices do not directly affect the organizational environment of companies, the willingness of new generations to give up traditional "work" in favor of the comfort offered by algorithms may be an indication of the direction in which we are heading.

2.5. Research Hypotheses

Starting from the previously analyzed conceptual framework, a set of hypotheses are formulated to investigate the relationship between internal and external factors and the usage of AI technologies. These hypotheses reflect how various contextual, personal and organizational influences can shape the perception, adoption and impact of the use of AI in personal and/or professional activities. The formulated hypotheses are presented below, each of which will be tested within the empirical approach of the paper:

The first hypothesis assumes that elements outside the organization or external to the individual's mindset, such as socio-technological trends, regulations, social norms, or cultural influences, can have a decisive impact on decisions to adopt the use of AI technologies. It is anticipated that these contextual variables exert a significant influence on how AI is integrated into daily or professional activities.

Hypothesis 1 (H1): External factors fundamentally influence the use of AI technologies for different application purposes.

In the second hypothesis, the focus falls on the influences within the social circle close to the individual or organization: family, colleagues, friends and their role in shaping decisions regarding the approach to AI technologies. It will be assumed that interactions and internal social dynamics can guide or constrain the way in which an individual or organization adopts and uses AI technologies, both personally and professionally.

Hypothesis 2 (H2): Internal factors will significantly influence the use of AI technologies in various fields of application.

The third hypothesis explores the influence of individual traits such as personal values, motivations, prior experiences, and positions of authority on how goals for AI use are defined. It is believed that the interests and beliefs of users, including organizational leaders, play a critical role in shaping the direction of adoption and implementation of intelligent technologies.

Hypothesis 3 (H3): Personal factors determine the purposes of using AI technology.

The fourth hypothesis investigates a possible proportional relationship between the degree of intentionality in the use of AI and the occurrence of negative consequences. It is assumed that

with the increase in the degree of involvement in the use of AI technologies, associated risks such as systemic errors, technological dependence, privacy impairment or diminished human responsibility in decision-making may also arise.

Hypothesis 4 (H4): As the intention to use AI technologies increases, negative effects also increase.

This last hypothesis is based on the idea that intentionality and preparation (individual or organizational) in the use of AI can maximize the benefits generated by these technologies. In other words, the clarity of the initial objectives and their alignment with the real needs of use can lead to a more efficient and ethical exploitation of AI, generating positive results in operational, decision-making or social terms.

Hypothesis 5 (H3): The initial purposes of using AI technologies determine a higher degree of positive effects.

The conceptual model for integrating research hypotheses and bases is presented in Figure 2.

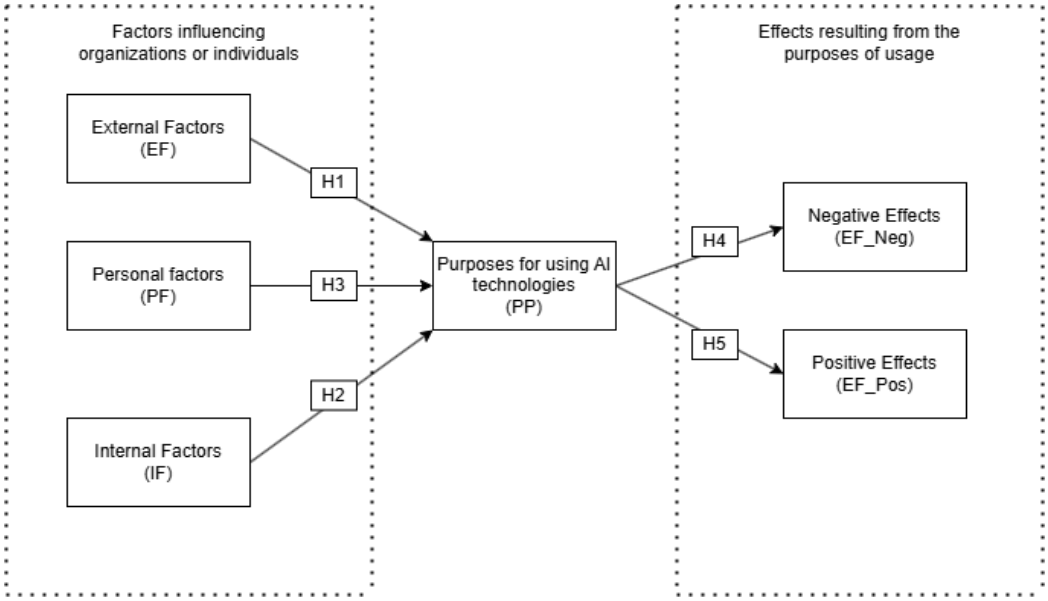

Fig. 2. The conceptual model regarding AI usage

Source: authors

3. Research Methodology

Research was conducted, based on a mixed approach consisting of a questionnaire and an interview, in order to validate the arguments presented in the previous chapter. The main objective of this research was to confirm the existence of an upward trend in the use of AI programs in various fields and spheres of activity, from academic projects to decision-making processes within organizations. The study also aimed to analyze how external factors influence the use of AI technologies both at individual and organizational levels, as well as the effects that this use can generate for both individuals who use AI tools and organizations.

The questionnaire was structured into 8 categories of questions, the first category having an introductory character, intended to familiarize the respondents with the purpose of the study. The research was carried out on a sample of 112 respondents, the majority of the statistical population being students or graduates. Each category was assigned a defining question, followed by a series of statements to which the respondents indicated the degree of agreement or disagreement, using a linear scale (Likert scale), in order to complete the questionnaire, the

respondents had to provide their degree of agreement starting from total disagreement (scored with 1) to total agreement (scored with 5) with the statements provided. Among the most relevant aspects investigated were the influences of the external environment on the use of AI, the purposes for which this technology is used, the perceived positive and negative effects, as well as the perspectives on the evolution of AI in the context of the labor market.

The interview was structured in two sections: the first included three basic questions regarding age, field of activity and socioeconomic status, and the second consisted of six open-ended questions. The questions were similar to those used in the questionnaire, but the main difference was that respondents were not given pre-determined arguments to express their agreement or disagreement with, but were given the opportunity to answer freely, thus providing more nuanced perspectives on the subject. The sample of respondents included three participants: an administrator of a company with over 250 employees, an IT department head and an IT consultant, aged between 25 and 45.

Both the questionnaire and the interviews were distributed via Google Forms between April and May 2025, targeting students and graduates from the Academy of Economic Studies as well as other stakeholders using AI technologies for various purposes in Romania. A total of 112 responses were collected, of which 7 were eliminated because they were from individuals who did not show a high interest in the research.

The analysis of the collected data was carried out through a combination of descriptive and correlation methods, with the objective of identifying the relationships between the formulated hypotheses and the opinions of the questionnaire respondents, as well as the degree of their significance obtained during the interviews. Also, for the analysis of the hypotheses in particular, the structural equation modeling method was used, which offered the possibility of highlighting the complex relationships between several independent and dependent variables. This approach allowed for a more detailed assessment of the influence of external factors on the use of AI technologies. The SmartPLS 4 program was used to calculate the coefficients (Ringle, et al; 2024).

4. Presentation of the Results Based on the Research

4.1. Evaluation of the Measurement Model and Research Hypotheses

To represent the relationships proposed in the theoretical part and to evaluate the research hypotheses, a PLS-SEM model was built, within which standard calculation algorithms were used to verify the validity and reliability of the model. To test the statistical significance of the results, the bootstrapping function available in the application used was used. The measurement model was evaluated from the perspective of convergent and discriminant validity and reliability, using the Cronbach Alpha coefficients (Table 1), which recorded values above the recommended minimum limit (Ștefan, Olariu and Popa, 2024) of 0.70. External loadings and the average variance extracted (AVE) were also analyzed, obtaining values higher than 0.722 and, respectively, 0.50.

Table 1

Verification and evaluation of the validity of the measurement model

Constructs	Outer loadings	Cronbach alpha	Average variance extracted (AVE)
EF_Neg	0.697- 0.804	0.833	0.715
EF_Poz	0.714- 0.836	0.832	0.662
PF	0.707- 0.784	0.777	0.586
EF	0.728- 0.866	0.738	0.651
IF	0.765- 0.875	0.788	0.701
PP	0.803- 0.833	0.775	0.690

Source: Interpretation of questionnaire data using the SmartPLS application

The Fornell-Larcker criterion (Table 2) was also used to conclude that the final measurement model is valid, by proving that the "square root" of the AVE of each variable was greater than the correlations between the lower variables.

Table 2

Discriminant Validity Assessment - Fornell-Larcker Criterion

Constructs	EF_Neg	EF_Poz	PF	EF	IF	PP
EF_Neg	**0.846**					
EF_Poz	0.257	**0.813**				
PF	0.339	0.636	**0.765**			
EF	0.325	0.640	0.666	**0.807**		
IF	0.392	0.620	0.621	0.618	**0.837**	
PP	0.105	0.536	0.483	0.517	0.477	**0.830**

Source: Interpretation of questionnaire data using the SmartPLS application

The structural model was evaluated from the perspective of collinearity, the coefficient of determination for endogenous constructs (R^2) (Hair et al., 2019). Regarding the values of R^2, the constructs IF, EF and PF explain 32.30% of the variation of the PP construct ($R^2 = 0.323$), while PP explains 1.10% of the variation of EF_Neg ($R^2 = 0.011$) and 28.80% of the variation of EF_Poz ($R^2 = 0.288$).

Regarding the direct effects (table 3), it can be seen that both EF ($\beta = 0.281$; $p < 0.05$; $f2 = 0.056$) and IF ($\beta = 0.195$; $p < 0.01$; $f^2 = 0.031$) significantly influence PP, which validates hypothesis H1, but also hypothesis H2 in a partial way, a hypothesis that is not fully validated, because its p coefficient is not significant, being 0.052, but this value can be explained by the small sample size and the personal opinion of the respondents regarding what internal factors and personal factors mean. At the same time, PP positively influences EF_Poz ($\beta = 0.538$; $p < 0.001$; $f^2 = 0.404$), providing support for hypothesis H5.

Despite the validation of the three hypotheses, hypotheses H3 and H4 cannot be validated due to the insignificant coefficients, but here too we could talk about the limitations of the study.

Table 3

Hypothesis Testing

Hypothesis	Relation	Beta	f-square
H1	EF - > PP	0.281**	0.056
H2	IF -> PP	0.195	0.031
H3	PF -> PP	0.174	0.022
H4	PP -> EF_Neg	0.102	0.011
H5	PP -> EF_Poz	0.538***	0.404

Notations: *** - $p < 0.001$; * - $p < 0.05$; ** - $p < 0.01$

Source: Interpretation of Questionnaire Data Using the SmartPLS Application

4.2. The Connection Between the Statements of the Questionnaire Respondents and Those of the Interview Respondents

Although not all of the previous hypotheses can be validated following statistical analysis, more than 73% of the respondents to the questionnaire considered that the prolonged use, regardless of the purposes, of AI technologies can negatively affect people's thinking, with an average agreement with this statement of 4.03 on the Likert scale. Also, the use of technologies for recreational purposes had the lowest agreement rate, with an average of 2.90, which may

suggest the upward trend of using AI for what it was designed for, namely, to help people by facilitating unimportant but necessary processes and activities.

On the one hand, based on the results of the questionnaire, we were able to formulate various conclusions. Most respondents believe that AI technologies will transform workplaces, which are perceived as more reliable when the algorithm is provided with all the necessary data. Respondents also believe that AI will contribute to increasing work efficiency, while reducing the duration of work tasks. However, the same respondents also expressed their agreement with statements that highlight certain deficiencies and risks associated with the use of AI. It is worth noting that the opinions of the respondents were very divided on the various topics addressed, with few of them managing to generate a strong degree of agreement or disagreement. An example is the statement that AI will create more jobs, with the majority of participants expressing their disagreement. Among the concerns raised are the negative impact on critical thinking, the risk of excessive dependence on technology, as well as the lack of official regulations approved at international level (Table 4).

Table 4

Percentage of Respondents Agreeing with Each Statement

Statement	Percentage of Respondents Who Agree
Positive Effects	
It will transform existing jobs, but they will require new AI-related skills.	78%
Use for academic or professional purposes.	58%
I believe AI technology saves a significant amount of time for other projects or personal activities.	67%
Negative Effects	
Excessive use of AI technology may reduce people's ability to critically analyze information.	73%
Overreliance on AI-based decisions may lead to a false sense of security.	67%

Source: Questionnaire

On the other hand, the respondents interviewed perceive the evolution of AI technology as a significant advance, capable of generating major benefits for both organizations and data collection and management processes, as well as for operational activities. In their opinion, the risks associated with AI implementation do not seem to outweigh those of the benefits. This perception is consistent with the results of the study conducted by Ștefan, Olariu and Popa (2024), which highlights the positive impact of technology emphases on organizational agility, emphasizing that organizations with advanced digital capabilities become more agile in the face of internal and external changes.

The AI models predominantly used by participants are ChatGPT and Copilot, both of which are premium versions that integrate the most advanced algorithms currently available. This trend reflects an increased adoption of AI use at the individual level, similar to that observed in the VUCAMIX study (2024), which found that 40% of Romanian employees use AI for professional purposes, even though only 46% of companies have officially implemented these technologies.

Regarding the question "In the future, will AI be a tool for managerial decisions in your organization or in other organizations?", all three respondents stated that AI will become an essential tool in the decision-making process, and one of them emphasized that "it will be increasingly used to quickly access information that would otherwise be difficult to collect and analyze." This opinion is supported by the study conducted by IBM (2023), which shows that 43% of CEOs use AI for strategic decision-making, and 36% for operational decisions.

They also believe that the differences between the use of AI by Generation Z and the use by the current generation at the helm of large companies are minimal, with both categories

managing to adapt easily to new technologies and integrate them into their professional and personal activities.

Although there is a consensus on the potential negative effects of AI, respondents considered that these are largely temporary in nature and that the technology will not replace existing jobs but will act as a complementary tool to automate repetitive tasks and increase organizational efficiency. In the event that certain positions may become redundant, they believe that the labor market will adapt over time, and the automation caused by this evolution will lead to a natural redistribution of roles and functions within organizations, a perspective that is also supported in the study conducted by Popescu et al. (2024), which shows that over 75% of Romanian employees are interested in acquiring skills in using AI-based applications, anticipating a transformation of activities, not their elimination.

Both the questionnaire and interview respondents expressed their agreement with the use of decisions generated by AI-based software, if it has all the necessary data and information. Moreover, some participants considered that, in certain situations, an algorithm can make more efficient decisions than a human, especially when the time factor is of the essence. This trust in decisions made by machines is similar to the conclusions of the study conducted by Logg, Minsos, and Moore (2019), who found that people tend to value algorithmic decisions more than human ones, especially in repetitive and quantifiable contexts.

One of the main barriers preventing the widespread integration of AI technologies in Romanian organizations, despite their use in the personal environment, seems to be the high costs. This aspect is highlighted by one of the interview respondents, who states: "The highest costs in our company are generated by salaries (...) At this moment, we have not identified areas within our activity where AI can replace any employee". This perspective suggests that, currently, the costs associated with the development or acquisition of technologies capable of taking over certain employee tasks are significantly higher than labor costs, a finding that is supported by the study conducted by Călinescu et al. (2024), which highlights that small and medium-sized enterprises in Romania face difficulties in adopting AI due to financial resources and lack of specialized knowledge.

Given that the situations in which AI could completely replace certain positions are limited, also based on the opinions of the respondents, it follows that, for most organizations in Romania, the integration of these technologies would generate additional costs rather than immediate economic benefits. A possible explanation for this situation does not necessarily lie in the technical limitations or in the lack of efficiency of AI technologies, but rather in a specific Romanian or perhaps even regional organizational culture, which could prevent the adoption of a Western mentality, already prevalent in the rest of Europe. Analyzing the previous graph (Figure no. 1), it is observed that the former member states of the Soviet Balkan bloc present a similar degree of delay in the modernization and adoption of AI technologies. However, this hypothesis remains, at this time, a subject of reflection and cannot be considered a scientifically proven argument, but only an empirical one.

5. Conclusions and Limitations

The presented work hopes to familiarize the reader with the concepts of decision support using AI, combining theoretical analysis and practical results to provide a broad understanding of the subject addressed. Along with the use of appropriate methodologies, it allows highlighting relevant perspectives and new directions of exploration. The aim was not to explain modern phenomena of decision support but rather to address the right questions that would put the reader in a situation of reflection on major changes in the managerial field. Moreover, the work is not limited to presenting general conclusions, but proposes continuous research of the phenomenon, addressing both practitioners and researchers.

The analysis carried out in the paper shows that the use of AI tools can considerably improve the efficiency of the decision-making process, by providing complex and rapid analyses

of the available data. At the same time, it was highlighted that the external environment plays a crucial role in the adoption and use of AI, factors such as regulations, technological infrastructure and the level of user training significantly influencing the degree of acceptance and implementation of these technologies, and that the internal environment in turn plays an important role in influencing the external environment, the two being in a continuous cycle of mutual influence.

The results of this research have the potential to encourage and support stakeholders in the process of integrating AI technologies in various professional fields. They can be capitalized on both by analyzing the information presented in the theoretical section and by interpreting the data obtained from the questionnaire and interview. In the current context, Romania seems to follow the European trend of adopting AI technologies in multiple sectors of activity, therefore, this study aims to stimulate the interest of readers in deepening their knowledge about AI and to facilitate their involvement in the process of digitalization and innovation on a personal or professional level.

The authors of the paper are aware of certain limitations of the research, such as the size of the studies conducted or possible external influences that could affect the interpretation of the data. These mentions assure the reader of the rigor of the paper's approach. At the time of writing, the academic world is still in the process of "discovering" the advances made by the major developers of AI technologies and how they have implemented these technologies in the decision-making substantiation of various organizations.

In conclusion, AI has the potential to radically transform the decision-making process, offering innovative and efficient solutions. However, to fully benefit from its advantages, a strategic approach is essential, considering the challenges of the external environment and ensuring a favorable framework for the use of new technologies in Romania. The authors also try, if not to answer important questions, at least to develop them and open new horizons for future studies.

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