



School of Social Sciences

Master in Business Administration (MBA)

Postgraduate Dissertation

***Public Sector Employees' Perception of the Use and Effectiveness of AI
Tools in Public Sector HR Management.***

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Patras, Greece, March 2025

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“Public Sector Employees' Perception of the Use and Effectiveness
of AI Tools in Public Sector HR Management”

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*“Dedicated to my children, **Christos-Chrysostomos** and **Nikolas**, who are a source of inspiration and strength in every step I take. Their love and presence motivate me to keep striving to become a better person.*

*To my husband, **Matthaios**, who stands by my side in every decision I make, and to my parents, **Christos** and **Nina**, who have shaped me into the person I am today. ”*

Abstract

Human Resource Management (HRM) plays a vital role in shaping organizational performance by directly influencing effectiveness, productivity, and employee engagement. In the public sector, HRM strives to improve service delivery to citizens. Technological advancements have placed HRM at a crucial juncture, where adopting AI tools is increasingly essential for restructuring processes and addressing organizational challenges.

This study investigates the role and impact of AI in HRM, drawing insights from existing literature. It focuses on the opportunities and risks of integrating AI into Public Sector HR practices. While the private sector has extensively explored AI adoption in HR, a significant research gap remains concerning Public Sector employees' perceptions and acceptance of such technologies.

The dissertation aims to capture Public Sector employees' attitudes toward the usefulness and effectiveness of AI in HRM. It examines the factors shaping their responses, whether supportive or skeptical and considers the potential of AI to enhance HR efficiency. The research is based on quantitative data collected through questionnaires, offering valuable perspectives on the evolving relationship between AI and Public Sector human resource management.

Keywords

HR, AI, Public Sector

“Η αντίληψη των υπαλλήλων του δημόσιου τομέα για τη χρήση και την αποτελεσματικότητα των εργαλείων τεχνητής νοημοσύνης στη διαχείριση ανθρώπινων πόρων του δημόσιου τομέα”

“Νικολέτα Γεωργουσίδου Κυριακίδου”

Περίληψη

Περίληψη

Η Διαχείριση Ανθρώπινου Δυναμικού (ΔΑΔ) διαδραματίζει καθοριστικό ρόλο στη διαμόρφωση της απόδοσης ενός οργανισμού, επηρεάζοντας άμεσα την αποτελεσματικότητα, την παραγωγικότητα και τη δέσμευση των εργαζομένων. Στον δημόσιο τομέα, η ΔΑΔ επιδιώκει τη βελτίωση της παροχής υπηρεσιών προς τους πολίτες. Η ταχεία πρόοδος της τεχνολογίας έχει θέσει τη ΔΑΔ σε ένα κρίσιμο σταυροδρόμι, όπου η υιοθέτηση εργαλείων ΤΝ καθίσταται ολοένα και πιο απαραίτητη για τον ανασχεδιασμό διαδικασιών και την αντιμετώπιση οργανωτικών προκλήσεων.

Η παρούσα μελέτη διερευνά τον ρόλο και τον αντίκτυπο της ΤΝ στη ΔΑΔ, αντλώντας στοιχεία από την υφιστάμενη βιβλιογραφία. Εστιάζει τόσο στις δυνατότητες όσο και στους κινδύνους που συνδέονται με την ενσωμάτωση της ΤΝ στις πρακτικές ανθρώπινου δυναμικού του δημόσιου τομέα. Αν και η υιοθέτηση της ΤΝ στον ιδιωτικό τομέα έχει μελετηθεί εκτενώς, εξακολουθεί να υπάρχει σημαντικό ερευνητικό κενό όσον αφορά τις απόψεις των εργαζομένων στον δημόσιο τομέα.

Η παρούσα διπλωματική εργασία αποσκοπεί στην αποτύπωση των στάσεων των υπαλλήλων του δημόσιου τομέα σχετικά με τη χρησιμότητα και την αποτελεσματικότητα των τεχνολογιών ΤΝ στη ΔΑΔ. Εξετάζει τους παράγοντες που διαμορφώνουν τις απόψεις τους, είτε θετικές είτε αρνητικές, και αξιολογεί τον βαθμό στον οποίο η ΤΝ μπορεί να ενισχύσει την αποδοτικότητα των λειτουργιών της ΔΑΔ. Η έρευνα βασίζεται σε ποσοτικά δεδομένα που συλλέχθηκαν μέσω ερωτηματολογίων, προσφέροντας χρήσιμες προοπτικές

για τη δυναμική σχέση ανάμεσα στην ΤΝ και τη δημόσια διοίκηση στον τομέα της διαχείρισης ανθρώπινου δυναμικού.

Λέξεις – Κλειδιά

Διαχείριση Ανθρώπινου Δυναμικού, Τεχνητή νοημοσύνη, Δημόσιος τομέας,

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List of Abbreviations & Acronyms

AADE – *Independent Authority for Public Revenue (Greek tax and customs administration)*

AI - *Artificial Intelligence*

ANN- *Neural Networks*

ASEP – *Supreme Council for Civil Personnel Selection (Greek independent authority for Public Sector hiring)*

ATS- *Applications tracking systems*

AWS - *Amazon Web Services*

CIS - *Comprehensive Information System*

CNIL - *Commission Nationale de l’Informatique et des Libertés (French National Commission on Informatics and Liberties)*

CRM- *Customer Relationship Management*

CV - *Curriculum Vitae*

EKDDA – *National Centre for Public Administration and Local Government (Greek Public Sector training and education institution)*

ESG- *Environmental, Social, Governance*

EuroHPC – *European High Performance Computing Joint Undertaking*

HR - *Human Resources*

HRIS - *Human Resource Information System*

HRM - *Human Resources Management*

IRCC-*Immigration, Refugees, and Citizenship Canada*

ML - *Machine Learning*

NTA - *National Transparency Authority*

NPM - *New Public Management*

PEOU- *Perceived Ease of Use*

PU - *Perceived Usefulness*

SAP-*Systems, Applications, and Products in Data Processing*

SPSS - *Statistical Package for Social Sciences*

TAM - *Technology Acceptance Model*

UTAUT - *Unified Theory of Adoption and Use of Technology*

1. Introduction: Definition of HR and AI

1.1 Definition of HR

1.1.1 The Fundamental Principles of HR

HR is a company's strategic and organizational tool that helps people optimize their performance and contribute to achieving strategic objectives. According to Papalexandris and Bourantas, HRM is the process by which businesses attract, develop, motivate, and retain talent, resulting in a productive and effective workplace. ([Παπαλεξανδρή, Ν., & Μπουραντάς, Δ. 2024](#))

Consequently, HRM encompasses a broad spectrum of activities related to labor management, including recruiting and selection, training, incentive programs, and workplace relationships. It is grounded on the concept that people are a company's most valuable asset and that effective management may provide a notable competitive advantage. ([Noe, Hollenbeck, Gerhart, & Wright, 2016](#))

HRM is a strategic approach to managing people within an organization, enabling practical contributions to achieving the company's goals. It includes a wide range of activities, such as:

✓ Recruitment and selection of personnel

Every business relies on HRM to attract applicants, assess them, and, using suitable processes, select and integrate new hires into the organization. First, there is a needs analysis and planning. Those in charge of this procedure note the qualities, abilities, and responsibilities required for the job from candidates. Following this, the company's future employment requirements are evaluated in light of internal changes, departures, and expansion. Recruitment encompasses all activities designed to attract qualified applicants. Internal sources (promotions, internal transfers, or recommendations from current employees), external sources (advertisements in newspapers and websites, cooperation with employment agencies, universities, professional associations, and LinkedIn), and

recruitment tools (use of HR information systems and software for posting positions and managing applications) can all be used this process.

Personnel selection comes next, basically assessing candidates to select those most suitable for the role's requirements. At this point, applicant interviews, psychometrics, other exams, CVs, and application analyses help to guide the final personnel selection choice. The procedure does not stop with hiring. The success of the choice depends equally on the seamless integration of the new hire. Consequently, the new employee must be given knowledge of the company's culture and direction by mentors or supervisors. ([Noe et al., 2016](#))

✓ **Training and development**

Training emphasizes learning the information and skills necessary for the person's current employment. This method begins with an assessment of the staff members' needs to ensure they can meet the demands of their new role. Appropriate instruction comes next. First, the present performance of current staff members is evaluated; then, focused training follows.

Defining the goals, content, approaches, and instruments required for the training, the needs analysis comprises training requirements at the corporate, departmental, and individual levels. The programs are then implemented using suitable approaches, such as seminars, training courses, workshops, e-learning, and other contemporary techniques. At last, a review has been conducted, showing the success of the initiatives in improving the staff's performance within the business. ([Noe et al., 2016](#))

✓ **Performance management**

This relates to how focused techniques help monitor and improve employee performance. Performance management, from this perspective, is not only a technical evaluation but also a link between personal performance and the corporate plan, as well as a means to achieve competitive advantage. The encouragement of better performance and direction of effort from management and staff depends on individual motivation, which also determines their intensity. While the surroundings might help or impede output, performance simultaneously depends on the person's abilities, expertise, and experience.

Performance management systems help companies to spot the need for training and development. Good performance management helps skills to be retained and developed. This offers a continuous means of competitive advantage as the success of the strategy depends directly on the performance of the personnel. ([Noe et al., 2016](#))

✓ **Payroll and benefits**

Maintaining a fair and efficient workplace depends on payroll and benefits in HRM serving their important roles. More precisely, payroll involves more than just accurate and timely salary payments. Workers must be paid proportionately to the value they provide to the company and in line with industry norms (internal equity). Moreover, an open, honest compensation system lowers uncertainty and strengthens employee confidence. Payroll management must also consider labor laws, taxes, and rules to avoid legal hotbeds.

Conversely, the most complex aspect of the role is the perks, as they directly impact employee motivation and satisfaction. Health insurance, retirement schemes, and other legally mandated social benefits are among the mandatory benefits. Others are optional, including private insurance, flexible work schedules, wellness programs, meal coupons, and presents. These advantages help build an atmosphere where staff members are appreciated and supported. ([Noe et al., 2016](#))

✓ **Maintaining a positive work climate**

Maintaining a good working environment is a crucial factor in determining a company's performance. This state of affairs goes beyond the lack of disputes or unpleasant feelings in the workplace. Quite the reverse; it fosters an atmosphere that improves employee well-being, cooperation, and dedication. Workers must be able to voice their ideas, thoughts, and concerns freely, without fear of repercussions.



Figure 1: HR Practices (Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M., 2016)

Furthermore, it is crucial to establish a motivating workplace with equitable staff treatment and an open decision-making process. HR Management also has the responsibility of preserving a balanced work environment. After all, workers who believe their efforts are appropriately appreciated tend to show greater loyalty to the company. A good atmosphere manages conflict to support cooperation and problem-solving rather than avoiding it. (Ployhart, R. E., & Hale Jr, D. (2014)).

1.1.2 The Key Challenges in HR

The ever-changing global conditions cannot impact the structure and operation of HRM. HR thus deals with numerous difficulties. Historically, HR's responsibilities included daily operational tasks such as employee payroll, maintaining personnel records, and ensuring adherence to relevant legislation. In many companies today, HRM is closely tied to achieving corporate objectives. Moreover, HRM has a significant impact on corporate strategy, as HR professionals continually track the effectiveness of HR activities against corporate goals.

An additional challenge is the growing Need for New Skills. HR professionals must possess a broader range of skills to fulfill their strategic role today effectively. A characteristic example is Business Acumen (Cho, W., Choi, S., & Choi, H., 2023), which enables HR professionals to stand out by anticipating organizational workforce needs aligned with predefined strategies.

Technical knowledge is another essential talent HR staff workers must possess. This capacity will help individuals develop skills in using HR software (HRIS, People Analytics) and applying AI technology for hiring, performance management, and training. Finally, HR managers should excel in "Change Management," demonstrating their ability to effectively manage organizational changes that meet corporate objectives and staff needs.

Business sustainability is an organization's capacity to adopt ethical conduct, adapt to social and economic changes, and preserve the environment, which presents another challenge. The backgrounds of companies like Lehman Brothers and Enron ([Μάντζαρης, Κ. 2022](#)) demonstrate the devastating consequences that can result from poor HR practices and unethical behavior. The discussion on ethical issues in HR assumes that organizations have ethical responsibilities toward all their stakeholders, including governments, owners, shareholders, managers, employees, suppliers, and customers ([Nankervis et al., 2011](#)).

The development of a culture that fosters diversity and equality is another responsibility HR is expected to do. More specifically, HR practices are connected to organizational culture or climate, which is the shared view of what defines an organization in terms of practices, policies, procedures, and rewards, as well as what is considered necessary, which behaviors are expected, and how these behaviors are rewarded ([Μάντζαρης, Κ. 2022](#)). Programs aimed at employee well-being should be implemented by the organization, including support systems, health campaigns, and work-life balance initiatives. HR must also establish policies that support "green" projects, thereby reducing the company's environmental impact.

Global competitiveness necessitates that companies reassess their HR policies and adapt their strategies to accommodate diverse legal and cultural environments. Big data, e-HRM, AI, and technology significantly change HR operations. Through creative ideas that connect staff members with the company's strategic goals, technology demonstrates the potential to create "high performance." However, the ability of companies to retrain staff and modify processes determines the effectiveness of these systems. ([Noe, Hollenbeck, Gerhart, & Wright, 2016](#))

1.1.3 A snapshot of HR today

Examining the difficulties of modern HRM now helps us understand how prominent industry leaders have responded. Have they been able to fit these demands into their regular

routines? This section will examine three businesses and assess their ability to accommodate a new order.

One such classic is **Unilever**, a global consumer goods corporation in the food, drink, personal care, and cleaning products sectors. Dove, Lipton, Knorr, Hellmann's, and Ben & Jerry's are its most well-known brands. Using sophisticated technology, Unilever streamlined the hiring process. It specifically ran and evaluated digital interviews using AI technology. With information on the candidates' personalities, cognitive styles, and skills, AI technology gave HR managers an impartial assessment. It reduced the prejudices of conventional interviews, accelerated the recruiting process, and allowed applicants to participate in remote interviews, enabling more flexible procedures. ([Koman, G., Boršoš, P., & Kubina, M. 2024](#)).

Another such is **Salesforce**, an American technology business focused on cloud computing and Customer Relationship Management (CRM) products. Maintaining staff welfare presented challenges, particularly during the COVID-19 pandemic. It thus developed wellness initiatives, comprising mental health assistance and mindfulness seminars, while enhancing company culture using virtual events and flexible working schedules. Using these deeds improved the corporate culture of the firm as well as the favorable environment inside it. On the one hand, an employee getting such perks becomes more functional and efficient for the business; on the other hand, a climate of trust is generated between the employee and the organization. ([Salesforce, 2020](#))

Renowned for products such as the Windows operating system and Office, the multinational technology giant Microsoft offers physical goods and software online. It allowed its staff to work remotely up to 50% of their time following the epidemic, helping to ease the shift to hybrid working methods. It also adopted technology like Microsoft Teams, designed to enhance productivity. HR teams can optimize recruitment and interview processes by discussing the results with other company members through Teams. The Microsoft Teams application also allows HR departments to share departmental resources and documents with other departments. Likewise, an HR department can design, prepare, and execute new employee training programs. ([ClearPeople. n.d.](#))

At last, using analytical tracking of production data, **Amazon**, the leading firm in e-commerce, AI, and cloud services through Amazon Web Services (AWS), addressed the challenge of ensuring the well-being of its warehouse staff. Amazon could spot tiredness symptoms using this technology, fostering a better and more pleasant workplace.

However, this approach has sparked questions about employee personal data privacy. The French Data Protection Authority (CNIL) fined Amazon France Logistique €32 million on December 27, 2023, for developing an overly intrusive system for tracking employee activities and performance. The CNIL decided that the monitoring system was overkill, mainly due to the data collected on each employee's idle hours, productivity, and quality. This event highlights the delicate balance between protecting employees' rights and privacy and utilizing technology to improve working conditions. ([Lawspot, 2023](#))

1.2 Definition of AI

1.2.1 The Basics of AI

AI refers to computer systems capable of performing complex tasks that have historically been done only by humans, such as reasoning, decision-making, or problem-solving ([IBM Consulting, 2023](#)). AI is a general term encompassing various fields, including cognitive computing and machine learning. It is a subfield of computer science that focuses on simulating intelligent computer behavior. Natural language processing, speech recognition, speech-to-text conversion, language translation, tone analysis, visual perception, and other fields have all seen the successful use of AI. ([Guenole, N., & Feinzig, S., 2018](#))

Artificial neural networks (ANN) and machine learning (ML) are two of the most potent methods for building AI. A subset of machine learning, ANN is grounded in the operation of the human brain. Comprising "neurons," or nodes, are systems with layered organization. ML is an AI method in which systems can "learn" from data without explicit programming. It is predicated on data-analyzing algorithms with pattern recognition and decision-making or prediction capability.

Great speed and precision enable ANN and ML to rapidly examine enormous volumes of data. This allows users to base their judgments on this data and identify unclear trends that

conventional approaches may overlook. Studies have shown that ANN is remarkably adaptable for solving complex, non-linear problems. It finds application in many spheres, from trash management and infrastructure enhancement to energy and water usage prediction.

These methods also automate repetitive tasks, reducing the human labor load and increasing efficiency. They are often used for future projections, including environmental changes, resource demand, and estimates of future efficiency. This facilitates better planning and management of companies' operations. These techniques have also proven effective in various fields, including health, environmental protection, security, transportation, and financial management. ([Sousa, W.G., Melo, E. R. P., Bermejo, P. H. S., Farias, R. A. S., & Gomes, A. O., 2019](#))

1.2.2 AI delivers value in HR today.

AI has effectively provided significant value to current HRM by showing how businesses handle their HR. Above all, the adoption of AI technologies helps HR departments save time and reduce expenses by automating repetitive tasks. AI can evaluate resumes (CVs), use intelligent algorithms to rank prospects and select the best fit for each role.

One such instrument is Hire value ([Koman, G., Boršoš, P., & Kubina, M., 2024](#)), which helps AI systems evaluate vast amounts of data and identify the best applicants, thereby reducing subjectivity. Identifying passive prospects who would not have otherwise applied to the company is another use for the recruiting process.

Moreover, automated scheduling technologies can streamline the process by identifying suitable times for internal meetings and applicant interviews, as organizing meeting dates can be a nuisance for all parties involved ([Jobylon, 2024](#)). AI also enhances payroll management by utilizing automated solutions that ensure accuracy and compliance with legal requirements.

Data analysis is another benefit of AI, providing HR departments with tools for making quick and effective decisions. AI specifically examines workforce data to identify and highlight outstanding talent, as well as project future staffing requirements.

AI also helps with employee performance assessment by identifying training requirements and providing recommendations for individualized programs, thereby enhancing overall workforce quality. Monitoring employee performance, AI systems will provide tailored comments and development suggestions. Customized training recommendations, tailored to their job requirements and market-driven trends, would be provided to employees ([Malik, A., 2024](#)).

Focusing solely on abilities and expertise, AI technologies may filter personal data, such as gender and age, thereby excluding themselves ([Jobylon, 2024](#)). AI supports justice and objectivity in HR management by lowering human bias in hiring and appraisal procedures. More precisely, assessment systems may be designed to make conclusions based solely on facts, thereby avoiding subjective opinions and prejudices.

Ultimately, AI technologies will play a crucial role in supporting employee well-being and mental health. AI apps can identify burnout symptoms and offer treatments that incorporate flexible working schedules, including the creation of hybrid work models. One excellent example is the use of hybrid work models, which enhance productivity and promote work-life balance ([Oracle, 2019](#)).

1.2.3 Challenges of adopting AI

As workers become aware of the benefits of automation and customization, AI is gaining increasing acceptance in the workplace. Particularly in HRM, AI provides tools to enhance the decision-making process, reduce administrative complexity, and facilitate fair and transparent procedures. ([Jobylon, 2024](#))

Still, concerns about job loss due to AI persist. Some contend that instead of a net loss of employment, it marks a change in duties. Therefore, rather than viewing AI and new technologies as hazards to daily life, one should see them as tools for enhancing output and performance. After all, many tasks are well-suited for AI and automation, freeing up time for responsibilities better suited to the human mind. ([Jobylon, 2024](#))

AI is a contemporary reality that is reshaping HR’s operations rather than being a future technology. Now is the moment to incorporate AI, as companies that utilize it have a strategic advantage. First, AI can perform tedious tasks like CV screening, freeing HR

experts to focus on strategic work. It also offers analytics tools to spot trends and patterns, enabling smart decisions. Finally, staff members may get customized job advancement and skill improvement advice using AI capabilities. On the other hand, the lack of human interaction, guidance, and even inspiration for those involved cannot provide the same level of engagement and motivation as traditional methods. Human interaction can provide personalized feedback, emotional support, and inspiration to both subordinates and supervisors within the industry. Therefore, a balance must be struck, and clear boundaries established between AI and human intervention. Additionally, increased surveillance and monitoring of employees through AI systems may limit their autonomy, potentially leading to reduced job satisfaction and the creation of a high-control and high-pressure environment. ([Charlwood & Guenole, 2022](#)).

By streamlining the hiring process, tools like chatbots and machine learning algorithms cut the time and expenses needed. AI models can predict future needs, enabling strategic planning within the business and supporting the identification of top performers and retention initiatives. AI systems can provide difficult-to-grasp results. Hence, it might be tough to justify their choices to stakeholders. Unexpected outcomes might raise ethical, fairness, and security questions. The lack of transparency in AI systems may also hinder compliance with regulations and standards([Schneider, J., Abraham, R., Meske, C., & Brocke, J. V., 2022](#)).

Conversely, for those engaged, the absence of human connection, direction, and even inspiration cannot offer the same degree of involvement and drive as more conventional approaches. Human contact may provide individualized comments, emotional support, and motivation for managers and subordinates in the sector. Thus, there has to be a balance and well-defined limits separating AI usage from human intervention. Furthermore, higher surveillance and monitoring of staff members using AI systems may restrict their autonomy, lowering job satisfaction and creating a high-stress, high-control environment. ([Charlwood & Guenole, 2022](#))

Many AI systems are essentially "black boxes"; therefore, users and stakeholders may find it challenging to understand how decisions are made. This lack of openness could lead to a lack of responsibility, as HR managers may rely on algorithms without understanding the underlying decision-making criteria. Inappropriate employment decisions, unfair employee

evaluations, or even discrimination may result from the improper configuration of AI by legal frameworks and regulations. Particularly concerning the security of personal data and the privacy of individuals involved, AI in HR raises serious ethical and legal questions. Organizations that fail to apply suitable compliance rules increase their risk of legal action.

Another issue AI solutions must address is staff resistance to technology adoption. Fearing errors or prejudice, workers and companies might hesitate to rely on AI in fraud detection decision-making. Many workers without the required training may be vulnerable due to their inadequate knowledge of AI-based technology and inability to react appropriately. ([Bello, O. A., & Olufemi, K., 2024](#)).

Furthermore, the High Development and Maintenance Costs of AI applications are a significant concern, as AI models' development, training, and continuous updating require substantial financial and human resources. Fraud methods are constantly evolving, making continuous algorithm upgrades essential for their effectiveness. This fact further increases the maintenance and development costs of AI technologies. Hence, specific circumstances are required for practical application, such as suitable training for HR experts in utilizing AI tools and incorporating ethical values and transparency into the procedures for employing AI. ([Oracle, 2019](#))

Finally, regulations and legal frameworks restrict the use of AI algorithms, making their implementation in real-world conditions challenging. These challenges highlight the importance of developing ethical, transparent, and responsible AI applications to ensure their effectiveness in detecting and preventing fraud. ([Bello, O. A., & Olufemi, K., 2024](#)).

1.2.4. Technology Acceptance Models

In this section, we will analyze some of the models developed to propose ways for organizational stakeholders to adopt new technologies. Introducing AI in organizations is one of the most critical issues in modern technology management. Although AI can improve decision-making, reduce operating costs, and enhance efficiency, complete integration often faces opposition.

Perceived Usefulness (PU), which refers to the opinion that utilizing technology will increase work performance, and Perceived Ease of Use (PEOU), which corresponds to the perception that the technology can be used without difficulty, define the adoption of technology. Davis (1989) created the Technology Acceptance Model (TAM) to achieve these goals. TAM claims that workers who feel AI would help them and who do not face challenges in its use are more inclined to embrace it. [\(Marikyan, D., & Papagiannidis, S. 2024\)](#)

Venkatesh et al.'s 2003 Unified Theory of Adoption and Use of Technology (UTAUT) combines many technology adoption models. It highlights four main elements that influence the intention to apply technology. Performance expectation, first, is the way technology could improve organizational performance. Effort Expectancy thus relates to the degree of technological application inside the company and its procedures. Social Influence questions the extent to which people think technology should be applied. Last but not least, facilitating conditions include technical and organizational systems that allow the use of technology within a particular company. [\(Marikyan, D., & Papagiannidis, S., 2023\)](#)

The effective use of AI in companies depends on both organizational transformation and technology. Kotter's 8-Step Change Model (1996) comprises eight phases and provides a structured approach for effectively introducing new technology.

Making one urgent is the **first** step. To ensure that the company is mobilized and acknowledges the opportunities and risks that make change essential for its overall functioning, an organization must inform its stakeholders about the necessity of change.

The development of a leading coalition comes **second**. Establishing a strong team of people from all company levels who will assist in the transformation and promote leadership and cooperation among important stakeholders helps accomplish this.

The **third** phase involves developing a strategic vision and initiatives. This helps define the intended future and generates plans and projects to assist the transformation.

The **fourth** phase presents a change vision, which can be achieved by spreading the vision throughout the company through consistent and significant communication, thereby increasing employee awareness across multiple channels.

Removing hurdles that impede change, such as antiquated procedures or opposition to change, and fostering a culture that supports initiative-taking will help enable action in the **fifth** phase.

Planning and accomplishing small, quantifiable achievements to raise staff morale and honoring and rewarding these victories can help generate short-term wins and sustain the momentum of transformation in the **sixth** phase.

The **seventh** phase involves maintaining acceleration, which entails keeping the transformation process ongoing by continually applying effective techniques and seeking new opportunities.

The **final stage** involves instituting change in the culture, which is achieved by embedding it into the company's values and procedures and ensuring that new practices become integrated into the organizational culture, making the change viable in the long term. ([Kotter J., 2024](#))

2. Implementations of AI tools and HR

2.1 Implementations of AI tools

2.1.1 Implementations of AI Tools in HR

AI technologies are beneficial in HRM when the hiring process is automated, allowing AI tools and algorithms to select applicants, thereby saving time and reducing recruiting costs. Application tracking systems (ATS) primarily utilize AI to automatically evaluate resumes and select the most suitable candidates based on experience and keywords.

Recruitment chatbots have also been developed; examples of these applications include SAP Conversational AI, which is integrated into SAP SuccessFactors, enabling the automation of applicant contact, answering frequently asked candidate questions, and scheduling interviews ([D’Costa, 2025](#)). Moreover, AI can assist in analyzing employee data, as AI tools

process large datasets to provide valuable insights into employee performance and professional development.

In the field of employee training, AI can create personalized training programs. It is used to tailor training and skill development to each employee's needs. Personalized Training Plans are developed as AI tools to analyze employees' needs and performance and recommend customized training programs. Equally important is the contribution of new technological tools to Performance and Employee Experience Management. Specifically, AI analyzes employee communication (e.g., emails) to assess satisfaction and morale, enabling timely interventions. AI forecasts employee performance through data, guiding decisions about training requirements or promotion demands.

AI tools, such as chatbots, help to reduce the workload for HR departments by responding to employee questions about business policies, benefits, and procedures. AI systems use data analysis to project future workforce needs, assisting companies in formulating a recruiting plan. ([The Guardian, 2024](#))

Consequently, while automated processes save companies time and money, AI technologies reduce the possibility of human mistakes in operations, including applicant selection. Moreover, AI improves openness as data-driven judgments lower subjectivity.

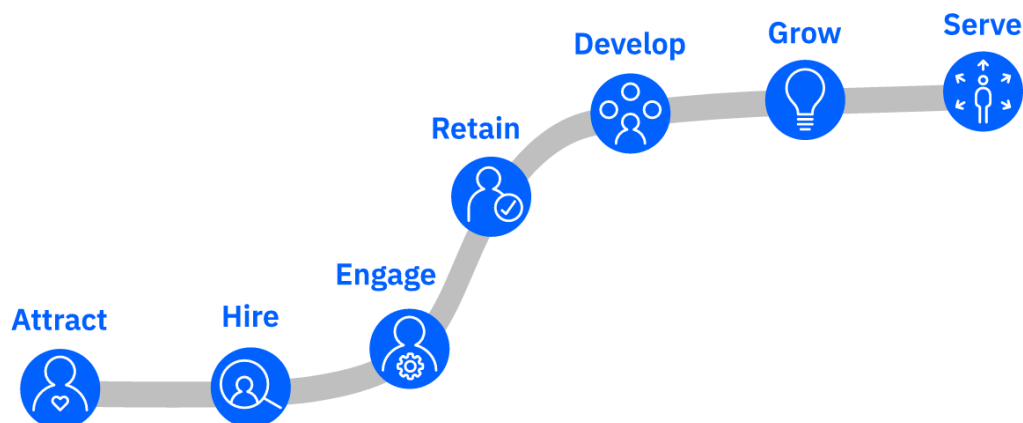


Figure 2. Deployment of AI in HR can occur across the entire talent lifecycle ([ibm-business-case-ai-in-hr.pdf](#))

On the other hand, in certain cases, concerns about bias arise, as AI training data contain biases. As a result, AI decisions may be biased. Additionally, the adoption of AI requires advanced technological infrastructure and specialized personnel. Privacy issues become another challenge as employee data must be safely protected. Lastly, it is essential to emphasize that AI serves as a tool for enhancing the strategic management of human resources, rather than replacing HRM.

Application of AI in HR	Examples of expected benefits	Examples of outcome measures
Enhanced candidate experience	<ul style="list-style-type: none"> • More informative pre-hire communication • Better match of job seekers to roles 	<ul style="list-style-type: none"> • Candidate conversion rate • New hire productivity
Efficient and effective recruitment	<ul style="list-style-type: none"> • Better prioritization of job requisitions • Accelerated time-to-hire • Accurate assessment of diverse candidates • Identification of the most qualified candidates 	<ul style="list-style-type: none"> • Skill shortages or unfilled vacancies • Average time to fill open positions • Selection ratios of minority and majority candidates • New hire productivity
Enhanced motivation	<ul style="list-style-type: none"> • Better manager support for their employees • Improved employee experience 	<ul style="list-style-type: none"> • Employee retention • Engagement or experience survey scores
Smarter compensation planning	<ul style="list-style-type: none"> • Increased pay transparency for employees • Optimized compensation budgets aligned with business strategy 	<ul style="list-style-type: none"> • Compensation satisfaction survey scores • Overpaid or underpaid worker count
Personalized learning	<ul style="list-style-type: none"> • Accelerated employee skill acquisition • Better alignment of employee skills with business strategy • Enhanced learning experience 	<ul style="list-style-type: none"> • Match between current and required skills mix, skill gap closure • Employee productivity • Course enrollments and completion rates
Career development for all	<ul style="list-style-type: none"> • Employee driven career management • Employee clarity on opportunities 	<ul style="list-style-type: none"> • Career satisfaction survey scores • Number of internal job applications and moves
24/7/365 Employee support	<ul style="list-style-type: none"> • Better informed and more productive employees via faster, more accurate answers to questions • Reduced number of support center staff 	<ul style="list-style-type: none"> • Number of process violations or exceptions • Labor costs

Figure 3 Expected benefits and outcomes of AI applications in HR ([ibm-business-case-ai-in-hr.pdf](#))

The successful use of AI depends on the technology being integrated into procedures, providing suitable training, and ensuring staff acceptability. Particularly in fields such as recruiting and training, AI offers powerful tools for enhancing HRM, specifically by increasing efficiency and transparency. ([Alon-Barkat, S., & Busuioc, M., 2023](#))

Integrating AI into HR can provide significant benefits, including enhanced employee experience, improved cost control, and increased efficiency. However, organizations must maintain human oversight in processes to ensure fairness and the ethical application of technology.

2.1.2 Implementations of AI tools in the public sector

Public Sector AI tools may help improve the quality and efficiency of services provided to residents. First, they help Public Sector services be more efficient, as the use of AI technologies can automate repetitive work, save time and expense on procedures, and free staff members to concentrate on more demanding activities free from the influence of unnecessary bureaucratic procedures. ([Chilunjika, A., Intauno, K., & Chilunjika, S. R., 2022](#))

In many countries, AI has already begun to play a role in government processes, such as fraud detection, taxation, healthcare, and predicting social needs. By using AI tools, corruption can be addressed more effectively, as reducing human intervention in key processes can limit instances of preferential treatment of citizens. ([Alhosani, K., & Alhashmi, S. M., 2024](#)). It may also be a primary catalyst of Public Sector innovation. Already showing promising results, AI applications in public administration, environmental protection, and financial management have raised production and improved decision-making. Practical and extensively applied methods like ANN and ML. ([Sousa et al., 2019](#))

On the other hand, even while Public Sector AI technologies have significant chances to increase impartiality and efficiency in decision-making, they also present significant difficulties. Initially, AI cannot automatically correct human biases. Instead of eliminating them, it can, in some cases, amplify them. For example, when people use algorithms, they are more likely to accept decisions that align with their stereotypes, such as the biases they already hold. Moreover, there exists a notion called "automation bias". This means that even when data indicates algorithmic conclusions are incorrect, humans can accept them. As stated differently, the employment of AI calls for prudence, as, should we be careless, we may find ourselves depending more on prejudices instead of helping us avoid them. Strict oversight and openness in algorithmic operations are thus required to prevent prejudice and improve responsibility to avoid injustice. Therefore, there is a need to develop ethical frameworks that will guide the use of AI, balancing benefits with potential social impacts. ([Alhosani, K., & Alhashmi, S. M., 2024](#)).

Public Sector employees need training to understand the limitations and challenges of using AI to mediate decision-making effectively. The successful integration of AI in the Public

Sector requires careful, holistic planning that includes technological advancement, human judgment, and institutional changes. Otherwise, there is a risk that algorithms will reinforce existing inequalities instead of reducing them. ([Alon-Barkat, S., & Busuioc, M., 2023](#)).

A successful and efficient Public Sector AI application depends on the convergence of technical, organizational, and human elements. First, the fundamental strategy should be human-centric, as the integration of AI should not replace people but enhance their capacities, enabling them to focus on more challenging and strategic tasks. Furthermore, AI requires investments in intangible organizational capital, such as performance management, process reform, staff training, and assessments. These developments must be combined to ensure that AI offers actual value to the company. It is noteworthy how crucial financing is for the public sector's efficient application of AI. The support through public and European subsidies significantly contributes to implementing an AI strategy. Additionally, after securing resources, emphasis should be placed on the need for organizational and technological coordination. ([Nurski, L., 2023](#)) At this point, it is worthwhile to examine some countries that have already implemented AI tools in the Public Sector and study their interactions with society. ([Kuziemski, M., & Misuraca, G., 2020](#))

The Department of Immigration, Refugees, and Citizenship **Canada** (IRCC) has set AI algorithms to classify and manage immigration applications. Utilizing AI in the immigration process aims to expedite and enhance decision-making accuracy in Canada. The system automates application classification and evaluation, therefore saving time and money. It is designed to sort applicants based on ethnicity, educational background, professional experience, and language proficiency. ([Miklaylov S.J., Esteve M., & Campion A., 2018](#)) The AI technology IRCC uses means that Candidates rated low-risk move through the process more quickly, and more complex cases are submitted to human reviewers.

Still, criticism has focused on the transparency of procedures, the ability to challenge decisions, and the application of personal data in AI-driven judgments. Strict rules on using AI in immigration have been established in response to concerns about discrimination and a lack of transparency. The increasing desire for more accountability among advocacy organizations has prompted the government to draft new laws for the fair and transparent use of automated technology.

The government of **Poland** has developed an AI system to classify individuals who are jobless and determine the type of assistance each one would require. Although this program aimed to improve employment service efficiency, its execution led to significant criticism despite being a worthy goal. Analyzing the personal information of jobless individuals, the AI system categorized them according to their level of support and the type of assistance they may receive, such as financial aid, training programs, and priority in job placement. The strategy aimed to ensure that programs targeting those most in need would enable the optimal use of resources. ([Miklaylov S.J., Esteve M., & Campion A., 2018](#))

Although the approach had certain advantages, it was criticized for a lack of openness and bias, as relevant authorities often did not verify the automated outcomes. Unemployed people lacked access to the standards that were used to categorize them into various groups. Many judgments were made without the guidance of certified experts, which raises concerns about misclassification. The system is supposedly designed to discriminate against groups of individuals based on prejudices and incorrect presumptions.

Finally, the system's abolition resulted from worries about inequality and infringing on individuals' rights. Since the AI tool's judgments could neither be questioned nor probed, the Polish Constitutional Court ruled that they infringed upon fundamental rights. Constitutional breaches, at last, led to program shelving.

In **Finland**, the AuroraAI project utilizes AI technology to assess citizen data, offer tailored services, forecast future citizen needs to provide timely assistance and connect various government institutions to enhance overall public support. Finland's Aurora AI project aims to adapt public services according to demand. Though novel, this method raises questions regarding public involvement, data sensitivity, and transparency. ([Miklaylov S.J., Esteve M., & Campion A., 2018](#))

First, the system gathers and examines a large volume of personal data, which raises issues about citizen protection and privacy. People are usually ignorant of the decisions that influence their lives or the knowledge they use. They worry that data-based AI applications might not be fully under human control. The program's effectiveness depends on the training of engaged parties and people and on the legislative framework developed outlining the use of data. Still under construction, the initiative is a worldwide model of how AI might

revolutionize public services provided as long as open regulations and rigorous supervision back it.

It is, therefore, evident that AI can transform the public sector. Still, the success of this endeavor depends on a legislative framework that balances the protection of citizens' rights with the proper use of programs. Experiences from the three countries demonstrate that striking a balance between innovation and transparency is crucial for maintaining public trust in the administration. Thus, we conclude that while AI can transform the public sector, achieving optimal results requires careful planning, robust ethical frameworks, and a broader social consensus. ([Miklaylov S.J. & Esteve M. & Campion A., 2018](#)).

2.2 HR in the public sector: *Challenges, Practices, and Future Directions*

Strategic HRM enhances organizational performance, boosting productivity, reducing employee turnover, and enhancing efficiency. Meanwhile, most studies focus on the private sector, creating a research vacuum in the public sector. Public Sector HRM influences the quality, efficiency, and functioning of public services.

In many nations, public agencies are usually the biggest employers. The quality of health, education, social welfare, and economic services depends critically on the performance of public personnel. While HRM has many ideas in line with the private sector, the Public Sector demands a distinct strategy as it emphasizes openness, responsibility, and the public interest.

Public services seek to provide public value rather than profit-driven outcomes. They can have competing objectives, including preserving resources versus maintaining high-quality services. Institutional rules and political decisions, such as collective bargaining agreements, shape Public Sector Human Resource Management (HRM). Regular changes in goals may impact the stability of human resource policies, posing challenges for long-term talent management and organizational culture ([Knies et al., 2024](#)).

Modern Trends and Innovations in Public Sector HRM

Modern social and technical developments require new trends and approaches in human resource management. First among the important advances is the improvement in staff

capacity and involvement. These days, HRM approaches center on employees' ongoing growth via programs for skill development and training. They also want to upgrade the HRIS, including the digitalization of procedures, which increases data availability and promotes openness in hiring and assessments by facilitating access to data. Lastly, performance assessment, grounded in data such as objective performance measurement, is given top priority and depends more on quantifiable outcomes than on employee seniority. [\(Brown, 2004\).](#)

Furthermore, the public sector is crucial regarding sustainability and social responsibility. Future adaptation of public services depends critically on using Green HRM and integrating ESG (Environmental, Social, Governance) principles.

From the Traditional Model to New Public Management (NPM)

Public Sector human resource management has always been associated with bureaucracy as it emphasizes stability, legality, and equality and gives these priorities. Conventional HRM depended on rigorous policies guaranteeing consistency and openness. Seniority dominated hiring and promotions; employees appreciated excellent job stability and perks.

NPM brought changes stressing more cost control and efficiency. Important modifications first included the distribution of tasks. Local administrative authorities acquired more freedom. HR information systems also help to increase openness, streamline administrative procedures, and provide data access.

Notwithstanding development, NPM changes brought difficulties like anxiety about employment stability and trouble drawing in new workers. The current aging workforce calls for adjustments in training and recruitment rules. Furthermore, financial restrictions can prevent one from investing in technology and research.

Future Prospects and Growth Opportunities

Notwithstanding the challenges, the Public Sector may gain from technology such as AI and data analytics tools to enhance talent management, performance assessment, and hiring procedures. Funding leadership development and education will help the Public Sector succeed. Changing demographics and technology are necessary for developing fresh

governance strategies that enhance public and employee confidence through transparent and participatory HR systems. The Public Sector can change its HR policies and implement creative ideas to improve social responsibility and sustainability. ([Brown, 2004](#)).

3.AI in the Greek Administration

3.1 AI in the Greek public sector

Continuous technological advancement drives the Greek Public Sector to invest in digital tools that enable employees to develop skills aligned with technological progress. The digital assistant (chatbot) integrated last year into the Gov.gr platform is a precursor to the transformations AI can bring to the public sector. This tool allows citizens to search for information and complete nearly any transaction through voice or text commands.

Specifically, the *mAigov* application is the Greek public sector's first digital assistant leveraging AI. It is designed to simplify and expedite communication processes with public services, facilitating citizens' daily activities. The assistant responds to citizen inquiries in natural language, both written and spoken, and provides step-by-step guidance for completing Public Sector services. It utilizes data from 1,607 services and 3,270 administrative procedures from the National Registry of Administrative Procedures, known as “Mitos.” ([Insider, 2023](#))

Using Microsoft Azure OpenAI technology, the platform guarantees compliance with the Responsible AI Standard. Its goals are to provide better access to public services, increase process openness and user-friendliness, and automate everyday processes, thereby enhancing the efficiency of public administration.

Designed to serve as a customized tour guide for those wishing to visit Greece, this new digital software, mAiGreece, utilizes AI. Once released on June 10, 2024, the software will be available for free download on phones and computers via the Google Play Store and Apple App Store. In 31 languages, you can write or ask questions; your geolocation (GPS) and the decisions you make will determine the unique responses you get. mAiGreece

maintains data on significant sites, including hospitals, embassies, museums, buildings, and beaches. The 112 button also features an emergency mode. ([Καθημερινή, 2024](#))

The National Transparency Authority (NTA) is expanding the digital modernization of its **audit activities** by adding AI via a Comprehensive Information System (CIS). Initiated by the Information Society, the project aims to raise Public Sector responsibility and openness. Among the several uses expected from AI applications are complaint management and evaluation, asset status auditing and disciplinary process management, audit operations and inspection monitoring, and the automated development of supporting documentation. Consequently, using the aforementioned application is expected to result in faster and more effective audits, reduced bureaucracy, and the elimination of printed documents, as well as improved identification and prevention of corruption. ([Money review.gr, 2025](#))

In **healthcare**, generative AI facilitates more effective clinical management. For example, overburdened doctors often handle a large amount of documentation and may utilize AI systems to produce clinical notes quickly and accurately. Furthermore, generative AI tools (GENAI) ([Δελεβέγκος, Δ., 2025](#)) can serve as diagnostic assistants, generating potential diagnoses and treatment plans, and enhancing the documentation of clinical options. By incorporating these AI capabilities into healthcare operations, companies can provide enhanced medical services, advanced research, and robust data privacy protection. ([Ασθενίδης, Σ., 2024](#))

Another creation is the collaboration with UBITECH, the Ministry of Digital Governance, and the Hellenic Cadaster, wherein AI has been introduced into a judicial review mechanism. This approach applies a legal rule checklist spanning over 35 events, including mortgages, leases, real estate transfers, and parent gifts. It lists the necessary legal considerations to review for every kind of case. The AI tool uses prompt engineering to extract relevant data from databases and guide the GPT-4 language model in pinpointing corresponding elements within document content. Users can view all the identified elements and are automatically directed to the highlighted sections in PDF documents for further review and decision-making.

The advantages include significantly shortened data processing times and reduced management costs of legal contracts. Modern natural language processing methods ensure

the accurate identification of key contract aspects, facilitating a more reliable and well-documented review process. Furthermore, the AI system is suggested to managers automatically, allowing them to focus on the most essential features of each agreement. Notwithstanding this technological innovation, human specialists still make final judgments, guaranteeing good judgment. Including AI in administrative decisions is a highly effective way to enhance public administration performance. A leading innovator in the Hellenic Cadaster, it releases HR and enhances citizens' legal security.

Greece also actively supports European projects, such as the development of an AI facility connected to the DAEDALUS supercomputer. This infrastructure will provide sophisticated computing tools for creating and testing innovative AI models and applications, thereby enhancing Greece's AI competitiveness.

Under the "Pharos – The Greek AI Factory for Accelerating AI Innovation" project, one of the main initiatives in Greece is building one of the first AI factories in Europe. Approved by the EuroHPC Joint Undertaking, the project aims to provide modern computational resources, facilitate access to massive datasets, and develop dependable AI solutions that comply with EU regulations. Utilizing satellite data for resource management and addressing the impacts of climate change, the factory will also foster innovation in various fields, including sustainability.

One of the key projects under the "Pharos – The Greek AI Factory for accelerating AI innovation" is the construction of one of the first AI factories in Europe. Approved by the EuroHPC Joint Undertaking, the project aims to provide current computational resources, give access to vast data, and produce consistent AI solutions in compliance with EU laws. The factory will also inspire creativity in sectors such as sustainability by utilizing satellite data for resource management and addressing the consequences of climate change. ([Εθνικό Κέντρο Τεκμηρίωσης - ΕΚΤ., 2024](#))

Supporting a competitive ecosystem of startups and small to medium-sized businesses, the investment emphasizes the development of innovative AI-powered services in healthcare, the Greek language and culture, and sustainable development. Greece has taken notable steps to implement significant legal measures that control and advance artificial intelligence in the digital age. The European Union's 2024/1689 Regulation, commonly referred to as

the "AI Law," came into force on August 2, 2024. Outlining specific criteria and duties for developers and AI operators to ensure AI systems respect fundamental rights, safety, and ethical standards, this is the first comprehensive legal framework for artificial intelligence at the international level. Since the legal issues surrounding AI encompass questions of personal data privacy, ethics, and algorithmic decision-making, Greece is aligning with the European Regulation on AI (EU AI Act) and establishing a national regulatory framework for the use of these technologies. Regulatory systems and ethical guidelines are initially established to ensure accountability and transparency. Law 4961/2022 on emerging information technologies establishes the foundation for using AI in public administration. ([Στράτη-Βάντζου, Α., 2024](#))

Beyond the aforementioned, **Greece's legislative framework for AI aims to create a secure and innovative environment** where AI will develop **with respect for fundamental rights** and contribute to **economic growth and social well-being**.

3.1.1 AI in the Greek Public Sector HR

Another field in which Greek Public Sector acceptance of AI finds application is HR management. Acknowledging the need for creativity in enhancing public administration, the Greek government is initiating projects that utilize AI for strategic workforce planning and HRM optimization, aiming to improve the recruitment, training, and assessment processes for civil workers.

Correct Public Sector worker training is the state's top priority and key goal. In cooperation with Google, the Ministry of the Interior organized seminars to introduce staff members to AI and offered free training courses for all levels of digital skills, thereby equipping public sector personnel for the new era of AI. ([Γεωργιοπούλου, Τ., 2024](#))

The primary objective of the new technology reality is to enhance the Public Sector job recruitment process. One project the Ministry of the Interior is working on, funded by the Recovery Fund, is the "Development and operation of a tool for strategic workforce planning in the Public Sector using AI." First, this platform will enhance strategic recruiting planning by incorporating data from public services, including retirements, staff transfers to other services, organizational needs, and government objectives. ([Χαρκοφτάκη, Μ., 2024](#))

Deloitte is building the platform on a budget of €7 million and expects to complete it within eighteen months. Concurrently, it will be speedier and more transparent to recruit through ASEP, therefore minimizing delays. Analyzing labor demands and skill sets can help Public Sector staffing be more geographically distributed, skillful, and candidate-qualified. The automated data evaluation made possible by the new AI-based program will enable central administration to make quicker and more precise decisions. Nine Public Sector organizations, including AADE, the Ministry of Education, and the Municipality of Thessaloniki, will initiate the deployment of an experimental platform. ([Κασιμάτης, Δ., 2024](#))

AI has the potential to transform HR processes entirely in the public sector. Reducing bias is one key goal. AI tools provide objective criteria, minimizing prejudice in recruitment and employee evaluations. The central administration will evaluate every employee equally in recruitment and in-service performance evaluations. Additionally, automation and increased process speed will save time, allowing employees to perform their duties more efficiently and be redeployed to other tasks.

Performance evaluation has become mandatory in recent years across all Public Sector departments. It applies to both supervisors and subordinates, as well as vice versa. AI can create a more effective evaluation platform that guides employees on areas for improvement based on results. Consequently, every department and employee can progress through appropriate training programs. AI can also support the design of personalized training and skill development programs, enhancing departmental efficiency and employee confidence.

AI supports education through personalized training programs, with the principle of lifelong learning needs to be integrated into public sector strategies. Recruitment and evaluation in the Public Sector can be enhanced through the use of AI tools. Algorithms ensure more objective and transparent candidate selection, eliminating discrimination while saving time. Simultaneously, performance evaluations can become more precise, based on data and accurate results through AI-driven applications.

Furthermore, automated systems like chatbots can enhance employee and citizen communication. While citizens get quicker and more precise answers to their needs, employees may concentrate on strategic operations. By effectively deploying AI, the public

sector can enhance its operations and meet current needs, providing more effective, open, transparent, and citizen-centered services. In Greece, HR's future is digital; AI will play a crucial role in transforming public administration.

3.1.2 Public Administration Prepares for the New Era

Public Sector employees are expected to adjust to the new reality and expectations of the contemporary workplace. In association with Google and the National Center for Public Administration and Local Government (EKDDA), the Ministry of the Interior hosts AI training sessions to integrate past AI applications into Public Sector activities. Dubbed "AI for All," the educational effort is merely the beginning of a program intended to encompass all public sector functions gradually. ([Υπουργείο Εσωτερικών, 2024](#))

The initial training course consisted of three seminars led by seasoned and specialized Google teachers. While the third workshop, "Leadership for the Digital Age," was intended for executives holding managerial roles in the public sector, two of the seminars targeted public employees, focusing on topics such as "Boost Your Productivity with AI" and "Problem-Solving Methodologies."

Within the broader AI Skilling Initiative in Greece, Google and the Ministry of the Interior are collaborating on a project focused on AI education in Greece. The initiative aims to accelerate digital transformation with AI while ensuring that equitable opportunities are accessible to everyone.

Digital governance and modernizing public administration depend significantly on AI. In this respect, Parliament has been presented with new legislation, known as "Emerging Information and Communication Technologies, Strengthening Digital Governance," which provides the legislative framework for both the public and commercial sectors to apply AI.

An essential provision of the bill is to keep a record of AI systems used by governmental services and commercial sector enterprises. This will ensure the transparent and effective management of these systems and that their usage complies with moral and security criteria.

The bill also states that employees are aware of how AI is applied in the workplace. This section ensures that employees understand how technology affects their working environment and how it protects their rights. The proposal establishes a Coordination

Committee to assist in the governance and oversight of AI use, as well as an AI Observatory within the Ministry of Digital Governance. These organizations will be responsible for monitoring the implementation of policies and developing a strategy for the sustainable national development of this technology ([Taxheaven, 2022](#)).

Finally, with the initiative of the Prime Minister of Greece, Mr Mitsotakis, a Consultative Committee on AI was founded comprising Professors and researchers from top universities (MIT, University of Oxford, EKPA, AUTH), Experts in AI, law, and bioethics, and Representatives from the public and private sectors with experience in innovation and technology, to create a transition plan for Greece into the new era of AI. It was decided that Greece needed to create a strategy to use AI's possibilities and fit it with world technological advancements. The strategy seeks the thorough integration of AI with governmental administration, companies, and society to form a strong and sustainable digital future for the nation.

The Plan suggests symbolic initiatives emphasizing the evolution of infrastructure, skills, and legal frameworks for AI in Greece, including:

- ✓ **National Data Governance** is the development of transparent policies for data access and use in addition to data collection and administration systems
- ✓ Aiming to establish a leading **research and educational institution** in cooperation with foreign institutions and businesses, the establishment of a **Center of Excellence** for AI seeks to do
- ✓ **Digital Education and Skills** via AI learning systems, competition, and hackathon organizing for emerging technologies
- ✓ **Public Sector AI** is defined by Public Sector AI use in creating AI applications for innovative public services and improving governmental efficiency via automated operations
- ✓ **Legal and ethical framework** wherein the evolution of rules for the safe and moral use of AI will ensure the protection of personal data and the rights of individuals

These projects form Greece's approach and support social well-being, sustainable development, and creativity. ([Daskalakis et al., 2024](#))

4. Methodology

4.1 Questionnaire Design

The first part of the thesis examines the theoretical background of how AI impacts the public sector and the human resources department within every organization. In the second part, a quantitative research method is employed to investigate the behavior and perceptions of Public Sector employees regarding a specific issue: the integration of technologies in HRM, with an emphasis on AI.

Quantitative research was chosen because it was deemed more appropriate. It focuses on numerical data and produces beneficial statistical results. Specifically, it can reveal patterns or behaviors within a population sample. Therefore, the Google Forms platform created an online questionnaire for Public Sector employees. The link to the questionnaire is <https://forms.gle/SxDxfXyTd8aZTnE37>.

The online questionnaire was chosen because it is the most suitable method for easily accessing people and quickly collecting large amounts of data. Additionally, one of the most significant advantages of the online questionnaire, which contributed to the data analysis, is that it gathers the data, facilitating subsequent processing.

The questionnaire was drafted in both Greek and English. English was not chosen as the exclusive language because we wanted to provide our research participants with ease. People tend to be more spontaneous and honest when responding in their native language. The questionnaire was distributed via emails within the service where I serve, Kipi Customs, and to colleagues in neighboring services. Social media platforms, such as Facebook, Viber, and Messenger, were also used to share the information.

On the first page of the questionnaire, the title of the thesis, my name, and the fact that I am a postgraduate student at the Hellenic Open University were mentioned. It was highlighted that this research is part of my dissertation, and the study aims to understand how Public Sector employees perceive the use and effectiveness of AI tools in HRM. It was made clear that the respondents' participation was voluntary and confidential. It was noted that completing the questionnaire would take approximately 5-7 minutes. Finally, I thanked them for their participation.

As for the structure of the questionnaire, it was divided into four groups:

1. Demographic data
2. Familiarity with AI
3. Use of AI tools in HR
4. Employees' perceptions and attitudes

Section A, which concerns the respondents' demographic data, included seven questions. More specifically, it covered the age group, gender, educational level, degree title, years of work experience in the Public Sector organization where they are employed, current position or rank, and finally, the Public Sector organization where they work today. Most of the questions are closed-ended, except for the question regarding the degree title, where each participant wrote the title of their degree.

Section B concerns the familiarity of Public Sector employees with AI and consists of six questions. The first question in this section asked whether they knew what AI was. The participants had the option of answering yes or no. Those who answered that they knew what AI was continued with the rest of the questionnaire. Conversely, participants who indicated that they did not know were directed to the final question, where they had to indicate how positive they were about learning more about AI.

Section C consisted of questions regarding the use of AI tools in HR. This section contains five closed-ended questions, following the Likert system. Emphasis was placed on the responsibilities of human resources, which AI tools, such as personnel recruitment, performance evaluations, training and retraining, and professional development, could influence. The last question in this section concerns whether and to what extent the use of AI tools in personnel recruitment could reduce time and cost.

The **fourth** and **final section** concerns the perceptions and attitudes of Public Sector employees. It consists of seven questions. In the final question of this subsection, and consequently, of the entire questionnaire, participants are given the opportunity to briefly express whether there is anything else they would like to share regarding the use of AI in

HR. The questionnaire presented in Appendix A was drafted to create a simple and comprehensible tool with straightforward questions.

4.2 Sampling and data collection

Due to limited time, the questionnaire was administered over approximately ten days (February 10, 2025, to February 20, 2025). A total of 201 questionnaires were collected. The resulting data were collected through the online platform Google Forms and compiled into an Excel spreadsheet. Then, the data were imported into the statistical software package SPSS, version 29. Initially, we will examine the descriptive statistical elements derived from the questionnaire collection. Descriptive statistics involves techniques for organizing, describing, and summarizing numerical data. At this level, we refrain from making predictions or drawing conclusions about the data we examine. Instead, we attempt to organize the data collected from the questionnaires so that it is easier to read, interpret, and obtain a preliminary estimate of the research results. ([Πούσσο, Π. Α., & Τσαούσης, Γ., 2011](#))

4.2.1 Section A: Demographic Data

Q1: The first question pertains to the *age groups*. The responses are divided into subgroups. The largest portion of participants falls within the 36 to 45 age group, accounting for 44.8%. This is followed by the 46 to 55 age group, representing 39.3%, while there is only one participant in the 18 to 25 age group.

1. Age Group
201 απαντήσεις

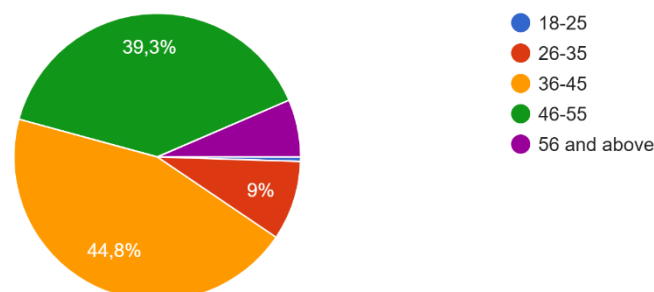


Figure 4: Age Distribution of Respondents

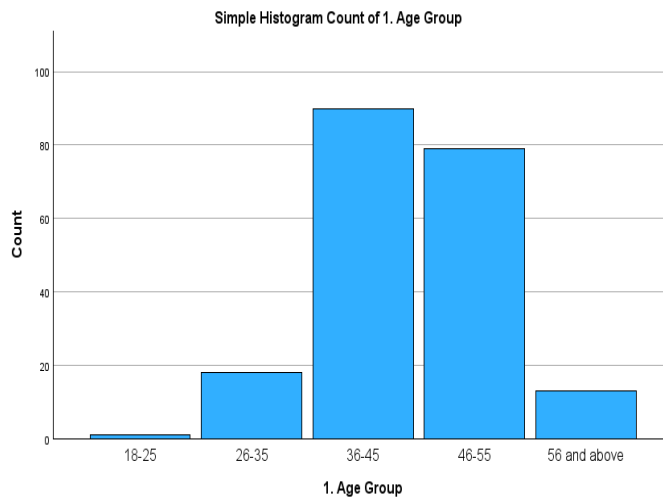


Figure 5: SPSS Histogram of Age Distribution of Respondents

1. Age Group					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	1	,5	,5	,5
	26-35	18	9,0	9,0	9,5
	36-45	90	44,8	44,8	54,2
	46-55	79	39,3	39,3	93,5
	56 and above	13	6,5	6,5	100,0
	Total	201	100,0	100,0	

Table 1: SPSS Table of Age Distribution of Respondents

Q2: In this question, we can see the participants' gender. Women are the majority, with a percentage of 74.6%. Meanwhile, only 51 out of the 201 men who completed the survey participated.

2. Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ανδρας / Male	51	25,4	25,4	25,4
	Γυναίκα / Female	150	74,6	74,6	100,0
	Total	201	100,0	100,0	

Table 2: SPSS Table of Gender Distribution of Respondents

2. Gender
201 απαντήσεις

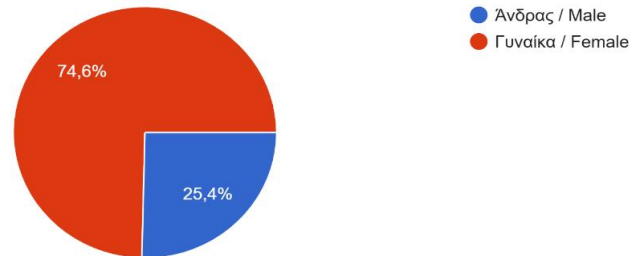


Figure 6: Gender Distribution of Respondents

Q3: Regarding the educational level of the participants, the majority held a master's degree, with a percentage of 53.2%. Closely following were graduates of higher education institutions (Universities and Technical Institutions), with 25.9%. Next in the ranking were secondary school and high school graduates, with 16.4%, and finally, those holding a doctoral degree, with 4.5%.

3. Level of education
201 απαντήσεις

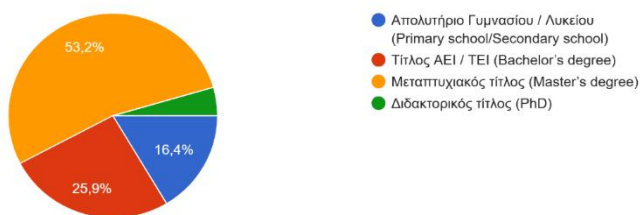


Figure 7: Educational Level of Respondents

3. Level of education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Απολυτήριο Γυμνασίου / Λυκείου (Primary school/Secondary school)	33	16,4	16,4	16,4
	Τίτλος ΑΕΙ / ΤΕΙ (Bachelor's degree)	52	25,9	25,9	100,0
	Μεταπτυχιακός τίτλος (Master's degree)	107	53,2	53,2	74,1
	Διδακτορικός τίτλος (PhD)	9	4,5	4,5	20,9
	Total	201	100,0	100,0	

Table 3: SPSS Table of Educational Level of Respondents

Q4: In this question, participants were allowed to write their answers freely regarding the title of their degree. However, this created difficulties in the statistical analysis. For this reason, I adjusted the responses to have a standardized title and be measurable. For example, there were variables such as "economics" and "economic sciences," which were renamed to "Bachelor's in Economic Sciences." The results show that economics dominates both at the undergraduate and postgraduate levels. This was expected, as I previously mentioned that I work at the Independent Authority for Public Revenue (A.A.D.E.), and the most significant access I had was to colleagues in this field, most of whom have related academic titles. Following these are postgraduate degrees in Law and Accounting, which are also relevant to our organization.

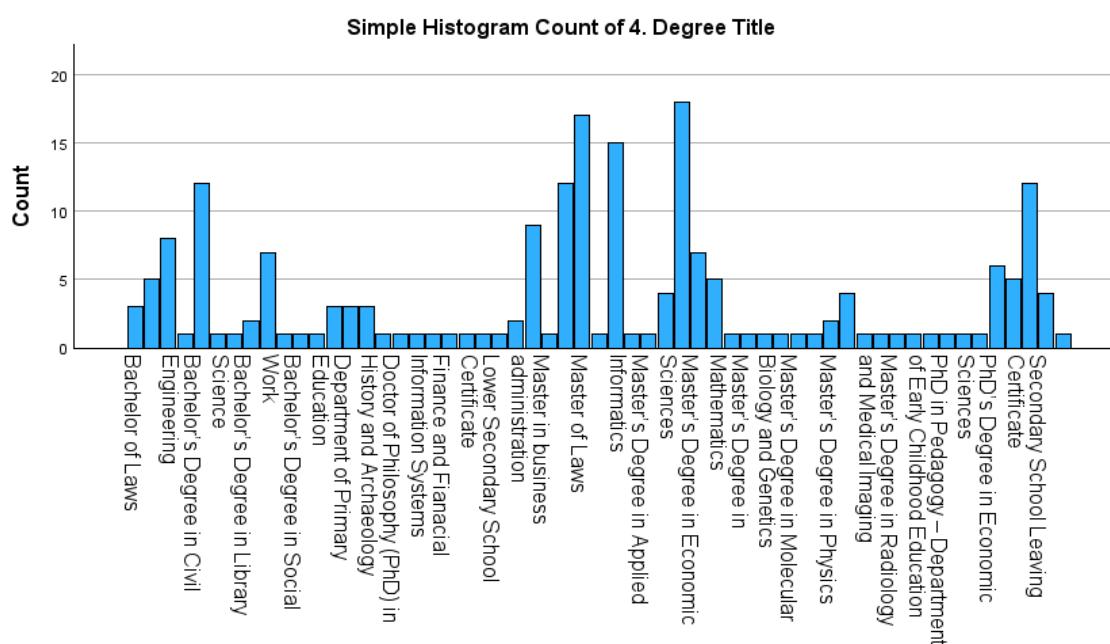


Figure 8: SPSS Histogram of Respondents' Degree Titles

4. Degree Title

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor of Laws	3	1,5	1,5	1,5
	Bachelor's Degree in Accounting	5	2,5	2,5	4,0
	Bachelor's Degree in Business Administration	8	4,0	4,0	8,0
	Bachelor's Degree in Civil Engineering	1	,5	,5	8,5
	Bachelor's Degree in Economic Sciences	12	6,0	6,0	14,4
	Bachelor's Degree in Information Management	1	,5	,5	14,9
	Bachelor's Degree in Library Science	1	,5	,5	15,4
	Bachelor's Degree in Philosophy	2	1,0	1,0	16,4
	Bachelor's Degree in Public Administration	7	3,5	3,5	19,9
	Bachelor's Degree in Social Work	1	,5	,5	20,4
	Bachelor's Degree in Telecommunications and Informatics	1	,5	,5	20,9
	Computer Networks & Security	1	,5	,5	21,4
	Department of Primary Education	3	1,5	1,5	22,9
	Diploma in Electrical and Computer Engineering	3	1,5	1,5	24,4
	Doctor of Medicine	3	1,5	1,5	25,9
	Doctor of Philosophy (PhD) in History and Archaeology	1	,5	,5	26,4
	Doctor of Philosophy (PhD) in Nursing Science	1	,5	,5	26,9
	Emergency Medical Technician	1	,5	,5	27,4
	Finance and Financial Information Systems	1	,5	,5	27,9
	French Language and Literature	1	,5	,5	28,4
	Leadership in M&A	1	,5	,5	28,9
	Lower Secondary School Certificate	1	,5	,5	29,4
	Master in business administration	9	4,5	4,5	33,8
	Master in Logistics Management	1	,5	,5	34,3
	Master of Business Administration	12	6,0	6,0	40,3
	Master of Laws	17	8,5	8,5	48,8
	Master of Science in Statistics	1	,5	,5	49,3
	Master's Degree Surveying Engineering	1	,5	,5	49,8
	Master's Degree in English Language and Literature	2	1,0	1,0	50,7
	Master's Degree in Accounting and Finance	15	7,5	7,5	58,2
	Master's Degree in Applied Informatics	1	,5	,5	58,7
	Master's Degree in Archival and Library Science	1	,5	,5	59,2
	Master's Degree in Civil Engineering	4	2,0	2,0	61,2
	Master's Degree in Economic Sciences	18	9,0	9,0	70,1
	Master's Degree in Educational Sciences – Early Childhood Education	7	3,5	3,5	73,6
	Master's Degree in English Language and Literature	5	2,5	2,5	76,1
	Master's Degree in Mathematics	1	,5	,5	76,6
	Master's Degree in Mechanical Engineering	1	,5	,5	77,1
	Master's Degree in Midwifery	1	,5	,5	77,6
	Master's Degree in Molecular Biology and Genetics	1	,5	,5	78,1
	Master's Degree in Nursing	1	,5	,5	78,6
	Master's Degree in Pharmacy	1	,5	,5	79,1
	Master's Degree in Physics	2	1,0	1,0	80,1
	Master's Degree in Psychology	4	2,0	2,0	82,1
	Master's Degree in Public Administration	1	,5	,5	82,6
	Master's Degree in Radiology and Medical Imaging	1	,5	,5	83,1
	PhD in Information Management	1	,5	,5	83,6
	PhD in Pedagogy – Department of Early Childhood Education	1	,5	,5	84,1
	PhD in Physical Education	1	,5	,5	84,6
	PhD in Political Science and History	1	,5	,5	85,1
	PhD's of Laws	1	,5	,5	85,6
	PhD's Degree in Economic Sciences	1	,5	,5	86,1
	Post-Secondary Vocational Training in Finance	6	3,0	3,0	89,1
	Secondary Education in Computer Science	5	2,5	2,5	91,5
	Secondary School Leaving Certificate	12	6,0	6,0	97,5
	Secondary Technical Vocational Nursing School	4	2,0	2,0	99,5
	Technical Vocational Education Diploma in Information Technology	1	,5	,5	100,0
	Total	201	100,0	100,0	

Table 4: SPSS Table of Distribution of Respondents' Degree Titles

Q5: In this question, the responses are almost evenly distributed into five nearly equal parts; the question aimed to determine the years of professional experience in the public sector. The most common response was "more than 20 years," with a percentage of 23.9%, followed closely by "11 to 20 years" at 22.9%. With a minimal difference, the following category includes employees with "6 to 10 years" of service in the public sector, accounting for 21.4%. Employees with "2 to 6 years" experience make up 19.4%; finally, the newly appointed probationary employees category stands at 12.4%.

5. Years of professional experience in the public institution where you work
201 απαντήσεις

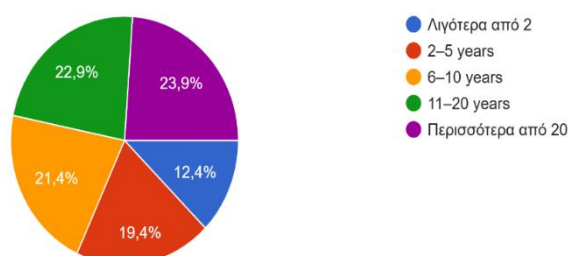


Figure 9: Years of Professional Experience in the Public Institution

5. Years of professional experience in the public institution where you work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 2 years	25	12,4	12,4	76,1
	2-5 years	39	19,4	19,4	42,3
	6-10 years	43	21,4	21,4	63,7
	11-20 years	46	22,9	22,9	22,9
	more than 20 years	48	23,9	23,9	100,0
	Total	201	100,0	100,0	

Table 5: SPSS Table of Years of Professional Experience in the Public Institution

Q6: The majority of respondents are employees, accounting for 81.1%. They are followed by department heads, with a significant gap of 11.4%, while newly appointed probationary employees make up 3%. At the bottom of the ranking are directors, comprising only 2%. Additionally, 5 of the 201 participants selected the option "other" when asked about their job position.

6. Current Job Title/Rank
201 απαντήσεις

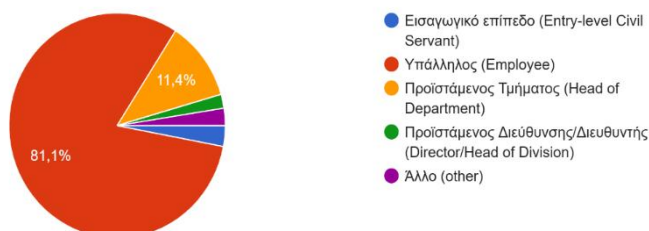


Figure 10: Current Job Title/Rank of Respondents

6. Current Job Title/Rank		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Εισαγωγικό επίπεδο (Entry-level Civil Servant)	6	3,0	3,0	5,5
	Υπάλληλος (Employee)	163	81,1	81,1	100,0
	Προϊστάμενος Τμήματος (Head of Department)	23	11,4	11,4	18,9
	Προϊστάμενος Διεύθυνσης/Διευθυντής (Director/Head of Division)	4	2,0	2,0	7,5
	Άλλο (other)	5	2,5	2,5	2,5
	Total	201	100,0	100,0	

Table 6: SPSS Table of Current Job Title/Rank of Respondents

Q7: The next question investigates the Public Sector organization employed by the participant. The following table presents the distribution of employees across various Public Sector organizations based on a sample of 201 individuals. Most employees belong to the tax administration sector, as 56.2% (113 individuals) work in Tax Offices, Customs, and the General Directorate of Tax Administration (IARP).

This is followed by the Education sector (schools, universities, vocational training institutes), which accounts for 14.4% of employees (29 individuals), making it the second-

largest category. The Health sector (hospitals, health centers, National Emergency Aid Center) employs 9.5% of employees (19 individuals).

A significant proportion of employees also work in the Public Administration and Local Government sector (7.0%) and the Justice and Public Order sector (5.0%), which encompasses courts, police, fire departments, and correctional facilities. Smaller percentages appear in the Public Enterprises and organizations sector (1.5%) and in Museums and legal Entities of Private Law under the supervision of the Ministry of Development (0.5%).

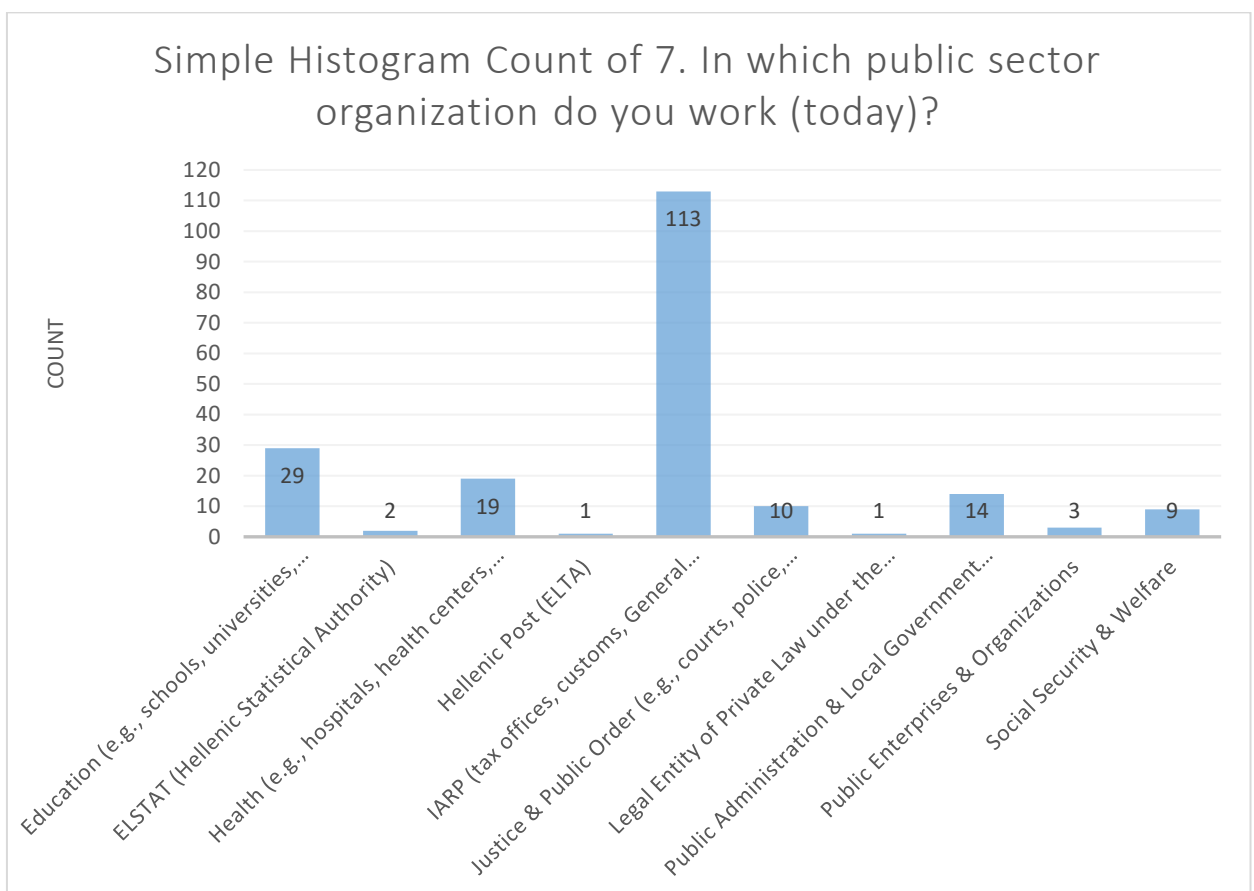


Figure 11: Public Sector Organizations Where Respondents Work

7. In which public sector organization do you work (today)?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Education (e.g., schools, universities, vocational training institutes)	29	14,4	14,4	14,4
	ELSTAT (Hellenic Statistical Authority)	2	1,0	1,0	15,4
	Health (e.g., hospitals, health centers, National Emergency Aid Center)	19	9,5	9,5	24,9
	Hellenic Post (ELTA)	1	,5	,5	25,4
	IARP (tax offices, customs, General Directorate of Tax Administration)	113	56,2	56,2	81,6
	Justice & Public Order (e.g., courts, police, fire department, correctional facilities)	10	5,0	5,0	86,6
	Legal Entity of Private Law under the supervision of the Ministry of Development. Museum	1	,5	,5	87,1
	Public Administration & Local Government (e.g., ministries, municipalities, regions)	14	7,0	7,0	94,0
	Public Enterprises & Organizations	3	1,5	1,5	95,5
	Social Security & Welfare	9	4,5	4,5	100,0
	Total	201	100,0	100,0	

Table 7: SPSS Table of Public Sector Organizations Where Respondents Work

4.2.2 Section B: Familiarity with Artificial Intelligence

In this section, we will use a sample of 201 Public Sector employees from various public services to study the participants' familiarity with artificial intelligence.

Q8: The first question in this section asks whether the participants know what AI is. The response can be either yes or no. Those who select yes proceed with the rest of the questionnaire. Conversely, those who choose no are directed to a final question regarding how positive they are about learning more about artificial intelligence. Once they answer this question, they can submit their responses and complete the survey.

8. Are you familiar with Artificial Intelligence (AI)?
201 απαντήσεις

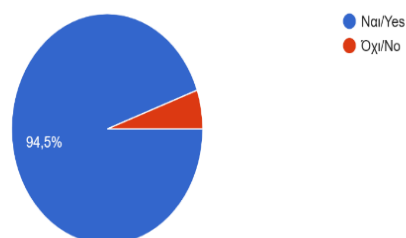


Figure 12: Familiarity with AI Among Respondents

8. Are you familiar with Artificial Intelligence (AI)?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ναι/Yes	190	94,5	94,5	94,5
	Όχι/No	11	5,5	5,5	100,0
	Total	201	100,0	100,0	

Table 8: SPSS Table of Familiarity with AI Among Respondents

Out of the total participants, 190 continued with the rest of the questionnaire, while 11 were asked to answer a question about how positive they were about learning more about AI.

How positive are you about learning more about artificial intelligence (AI)?

11 απαντήσεις

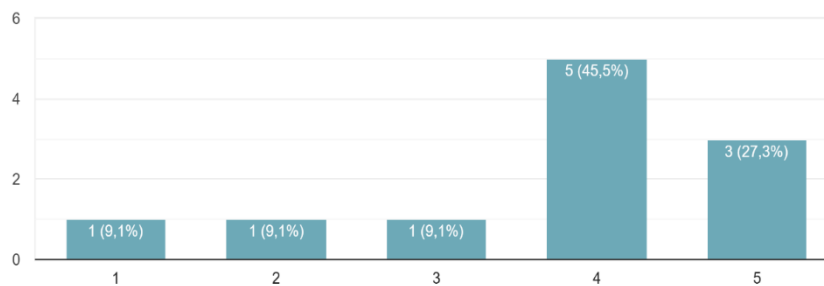


Figure 13: Respondents' Attitude Toward Learning More About AI

How positive are you about learning more about artificial intelligence (AI)?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	,5	9,1	9,1
	2	1	,5	9,1	18,2
	3	1	,5	9,1	27,3
	4	5	2,5	45,5	72,7
	5	3	1,5	27,3	100,0
	Total	11	5,5	100,0	
Missing	System	190	94,5		
	Total	201	100,0		

Table 9: SPSS Table of Respondents' Attitudes Toward Learning More About AI

The majority, although unaware of the definition of artificial intelligence, were **quite positive** about learning more, with a percentage of **45.5%**. They are followed by those who are **very positive** at **27.3%**, while the remaining participants follow with **9.1%**. Only **9.1%** were **entirely negative**.

From **Question 9 to Question 21**, the responses are measured on a **Likert scale**, where:

- **1** represents **Not at all**
- **2** represents **A little**
- **3** represents **Moderate**
- **4** represents **A lot**
- **5** represents **Very much**

This scale is used to assess participants' perceptions and attitudes across various aspects related to the survey.

Q9: From this question onward, the number of participants decreases to **190**, as the **11** who did not continue were excluded, as previously explained.

38.9% of participants state that their understanding of AI technology is moderate, while **31.1%** consider it good. The distribution extremes show the lowest percentages, with **2.6%** of participants believing that they do not understand AI at all and **9.5%** stating that they understand it very well. Additionally, 34 participants (**17.9%**) report having a limited understanding of AI technology.

9. How well do you think you understand artificial intelligence (AI) technology?

190 απαντήσεις

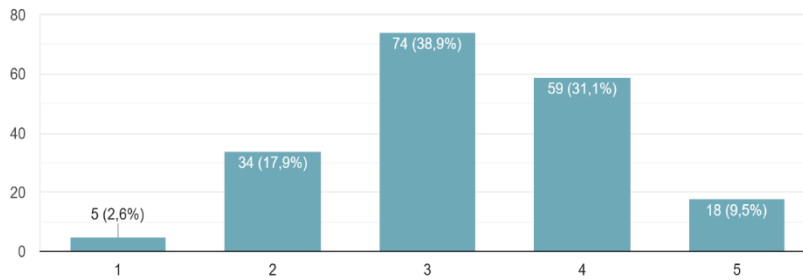


Figure 14: Respondents' Self-Assessment of Understanding AI Technology

9. How well do you think you understand artificial intelligence (AI) technology?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	2,5	2,6	2,6
	2	34	16,9	17,9	20,5
	3	74	36,8	38,9	59,5
	4	59	29,4	31,1	90,5
	5	18	9,0	9,5	100,0
	Total	190	94,5	100,0	
Missing	System	11	5,5		
Total		201	100,0		

Table 10: SPSS Table of Respondents' Self-Assessment of Understanding AI Technology

Q10: Although AI increasingly integrates into our daily lives, our research reveals that **22.6%** of participants **do not use AI at all** in their personal lives—**33.7%** report **low usage frequency**, while only **5.8%** state that they use AI **frequently**. Meanwhile, **23.7%** of participants indicate a **moderate** use of AI, and **14.2%** report a **considerable** use of AI in their personal lives outside of work.

10. "How often do you use artificial intelligence in your personal life?"

190 απαντήσεις

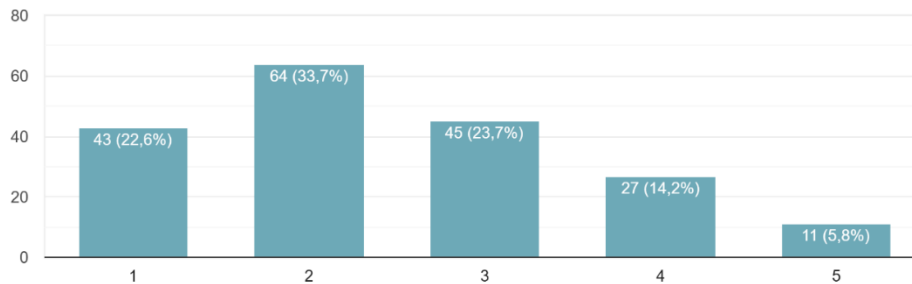


Figure 15: Frequency of AI Usage in Respondents' Personal Lives

10.How often do you use artificial intelligence in your personal life?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	43	21,4	22,6	22,6
	2	64	31,8	33,7	56,3
	3	45	22,4	23,7	80,0
	4	27	13,4	14,2	94,2
	5	11	5,5	5,8	100,0
	Total	190	94,5	100,0	
Missing	System	11	5,5		
Total		201	100,0		

Table 11: SPSS Table of Frequency of AI Usage in Respondents' Personal Lives

Q11: In contrast to using AI in their personal lives, employees generally appear to be more open to accepting the significance of AI in the public sector, although their stance remains balanced. Specifically, **34.7%** of participants consider AI to be of **moderate importance** in public administration, **31.1%** characterize it as **very important**, while only **7.4%** think it is **extremely important**.

On the other hand, **9.5%** believe that AI is **not important at all**, and **17.4%** consider it **only slightly important**. Overall, most **participants (52.1%)** assess the importance of AI as

moderate or low, while **38.5%** evaluate it as **very or extremely important**. This balanced stance reflects a cautious yet open approach towards AI's potential in the public sector.

11. How important do you consider the use of Artificial Intelligence for your work in the public sector?"

190 απαντήσεις

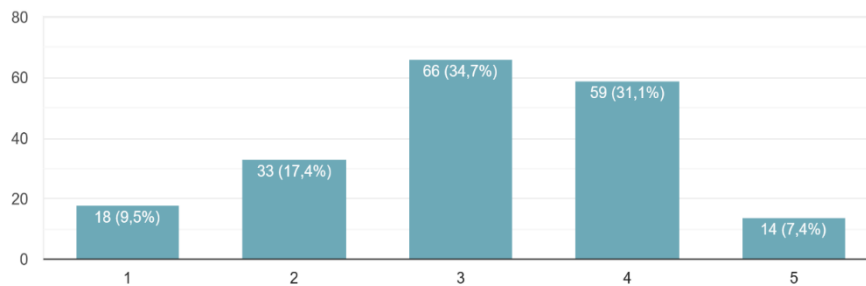


Figure 16: Perceived Importance of AI for Work in the Public Sector

11. How important do you consider the use of Artificial Intelligence for your work in the public sector?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	18	9,0	9,5	9,5
	2	33	16,4	17,4	26,8
	3	66	32,8	34,7	61,6
	4	59	29,4	31,1	92,6
	5	14	7,0	7,4	100,0
	Total	190	94,5	100,0	
Missing	System	11	5,5		
Total		201	100,0		

Table 12: SPSS Table of Perceived Importance of AI for Work in the Public Sector

Q12: Participants were asked how comfortable they would feel using AI tools in their work. The responses show a relatively positive attitude towards AI adoption. Of the respondents, 47.9% (32.6% + 15.3%) would feel comfortable or very comfortable using AI tools, while 32.1% are moderately comfortable. However, 20% (14.2% + 5.8%) of participants expressed discomfort with AI usage.

12. How comfortable would you feel if you had to use Artificial Intelligence tools in your work?
190 απαντήσεις

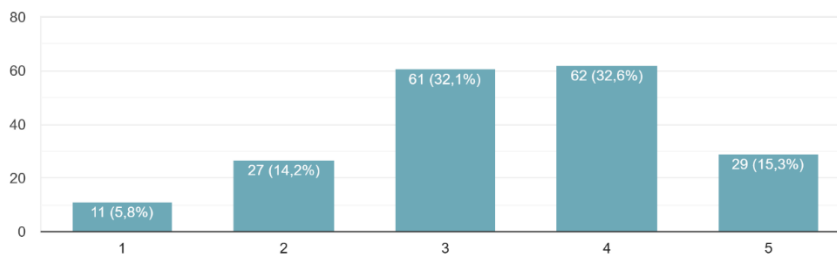


Figure 17: Respondents' Comfort Level in Using AI Tools at Work

12. How comfortable would you feel if you had to use Artificial Intelligence tools in your work?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	11	5,5	5,8	5,8
	2	27	13,4	14,2	20,0
	3	61	30,3	32,1	52,1
	4	62	30,8	32,6	84,7
	5	29	14,4	15,3	100,0
	Total	190	94,5	100,0	
Missing	System	11	5,5		
Total		201	100,0		

Table 13: SPSS Table of Respondents' Comfort Level in Using AI Tools at Work

The modest responses (34.7% for the importance of use and 32.1% for comfort) indicate that many employees remain neutral or uncertain about AI's role and ability to use it effectively.

Q13: 48.9% of participants assessed AI's impact on the Public Sector in the future as significant, while 32.1% considered it very significant. This means that **81%** of respondents recognize AI as an important tool for the future of the public sector, capable of influencing its operations. This demonstrates a firm **trust in AI's potential** to modernize and improve Public Sector functions.

14.2% perceive AI’s impact as **moderate**, indicating a degree of **uncertainty or skepticism** regarding its full potential.

Only **4.8%** rated AI’s impact as **low or nonexistent**, showing that **very few participants** believe AI will have **no significant influence** on public administration.

13. To what extent do you believe AI can impact the functioning of the public sector in the future?
190 απαντήσεις

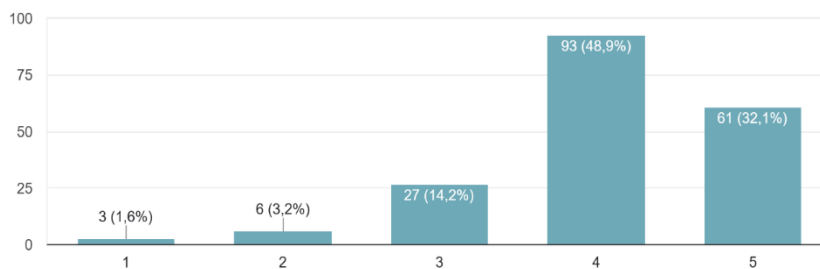


Figure 18: Perceived Impact of AI on the Future Functioning of the Public Sector

13.To what extent do you believe AI can impact the functioning of the public sector in the future?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	1,5	1,6	1,6
	2	6	3,0	3,2	4,7
	3	27	13,4	14,2	18,9
	4	93	46,3	48,9	67,9
	5	61	30,3	32,1	100,0
	Total	190	94,5	100,0	
Missing	System	11	5,5		
Total		201	100,0		

Table 14: SPSS Table of Perceived Impact of AI on the Future Functioning of the Public Sector

Concluding **Section B**, we observe that Public Sector employees recognize that **AI will play a crucial role in the future (81%)**, but only **38.5%** consider it important today. This suggests that while they acknowledge its long-term contribution to the public sector, they may not yet see it as **immediately significant** as they have not yet witnessed its practical integration into their daily professional activities. These findings highlight the need for more education and practical application of AI in the public sector.

Additionally, **more employees feel comfortable using AI (47.9%)** than those considering it **very important (38.5%)**. This indicates that those already familiar with AI feel more comfortable using it, even if they do not yet see it as essential in their profession.

Statistics						
		9. How well do you think you understand artificial intelligence (AI) technology?	10. How often do you use artificial intelligence in your personal life?	11. How important do you consider the use of Artificial Intelligence for your work in the public sector?	12. How comfortable would you feel if you had to use Artificial Intelligence tools in your work?	13. To what extent do you believe AI can impact the functioning of the public sector in the future?
N	Valid	190	190	190	190	190
	Missing	11	11	11	11	11
Mean		3,27	2,47	3,09	3,37	4,07
Std. Deviation		,952	1,158	1,075	1,085	,855
Skewness		-,078	,481	-,294	-,336	-1,056
Std. Error of Skewness		,176	,176	,176	,176	,176
Kurtosis		-,392	-,595	-,518	-,451	1,625
Std. Error of Kurtosis		,351	,351	,351	,351	,351

Table 15: SPSS Table of Descriptive Statistics of AI-Related Survey Questions

We reach the same conclusions when observing the mean values of the variables. Specifically, participants believe they have a good understanding of AI ($M = 3.27$), but its frequency of use in their personal lives is low ($M = 2.47$). Additionally, although participants do not frequently use AI, they consider it important for the Public Sector ($M = 3.09$). Regarding AI acceptance in the workplace, most participants feel comfortable with AI in their work environment, with a mean score of 3.37. At the same time, they strongly believe that AI will have a positive impact on the Public Sector in the future ($M = 4.07$).

4.2.3 Section C: Use of AI tools in Human Resources Management.

We are moving on to the next section, where we will study a sample of Public Sector employees and examine how they perceive AI tools in HR.

Q14: Participants are asked to assess how effective they believe using AI would be in personnel recruitment in the public sector.

Specifically, **31.1%** of participants rated AI as **moderately effective**, while the same percentage considered it **reasonably practical**. This suggests that the majority believe AI has some usefulness, but not absolute success.

On the other hand, **27.9% (10%+17.9%)** expressed skepticism about AI’s effectiveness, giving it low ratings. **Ten percent of participants considered it ineffective, while 17.9% rated it as minimally adequate.**

Finally, only **10%** of respondents evaluated AI as **highly effective**, suggesting there is still room for improvement in implementing these tools.

14. How effective do you consider the use of AI tools in public sector recruitment?
190 απαντήσεις

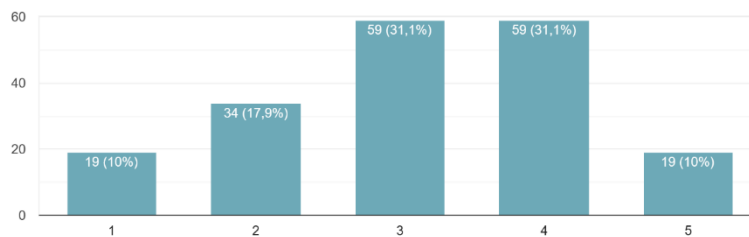


Figure 19: Perceived Effectiveness of AI Tools in Public Sector Recruitment

14. How effective do you consider the use of AI tools in public sector recruitment?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	19	9,5	10,0	10,0
	2	34	16,9	17,9	27,9
	3	59	29,4	31,1	58,9
	4	59	29,4	31,1	90,0
	5	19	9,5	10,0	100,0
	Total	190	94,5	100,0	
Missing	System	11	5,5		
Total		201	100,0		

Table 16: SPSS Table of Perceived Effectiveness of AI Tools in Public Sector Recruitment

Q15: In response to the question, **"How objective do you think the results of AI tools could be in the employee evaluation process?"** **8.9% (17 people)** considered AI tools to be not objective at all, while **19.5% (37 people)** deemed them minimally aim in the evaluation process, expressing low confidence in AI’s objectivity. **35.8% (68 people)** rated objectivity as moderate (**score of 3**), making it the most popular choice. Finally, **24.7% (47 people)** estimated that AI is entirely objective, and **11.1% (21)** evaluated it as objective.

Thus, the most significant percentage of participants (**35.8%**) believe AI's objectivity in the evaluation process is **moderate**, while **28.4%** (**8.9%** + **19.5%**) appear skeptical. On the other hand, **35.8%** (**24.7%** + **11.1%**) have a positive stance, assessing the objectivity of AI tools as **moderately to completely reliable**.

15. How objective do you think the results of AI tools could be in the employee evaluation process?

190 απαντήσεις

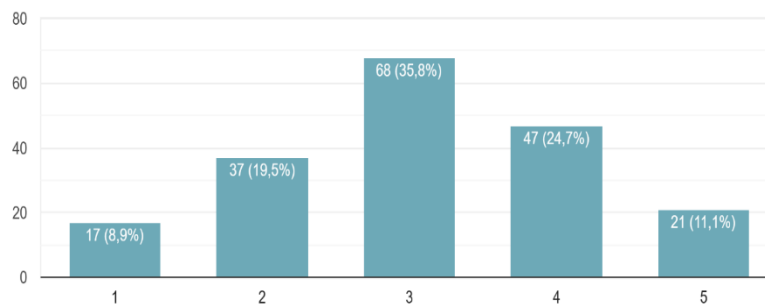


Figure 20: Perceived Objectivity of AI Tools in Employee Evaluation

15. How objective do you think the results of AI tools could be in the employee evaluation process?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	17	8,5	8,9	8,9
	2	37	18,4	19,5	28,4
	3	68	33,8	35,8	64,2
	4	47	23,4	24,7	88,9
	5	21	10,4	11,1	100,0
	Total	190	94,5	100,0	
Missing	System	11	5,5		
Total		201	100,0		

Table 17: SPSS Table of Perceived Objectivity of AI Tools in Employee Evaluation

Q16: In this question, participants were asked to express **to what extent they believe using AI tools would improve employee training and retraining in the Public Sector**. Initially, **2.1% (4 people)** thought that AI would not contribute to improving training, and 10% (19 people) considered its contribution minimal, indicating **limited confidence** in AI's role in this area.

Meanwhile, **31.1% (59 people)** rated AI’s contribution as **moderate**, while **44.2% (84 people)** estimated that AI **would significantly help** in training and retraining. Finally, **12.6% (24 people)** believe AI’s contribution will be **highly significant**.

Most **participants (56.8%) (44.2%+12.6%)** evaluated AI’s contribution **positively**, scoring **4 and 5** regarding its role in improving employee training and retraining. On the other hand, **12.1% (2.1% + 10%)** appear **skeptical**, estimating that AI’s contribution will be **low**.

The **moderate stance (31.1%)** toward AI suggests that, although many participants **see its potential**, there is still **room for improvement** and a need for **further understanding** of its role in employee training.

16. To what extent do you believe the use of AI tools would contribute to improving employee training and retraining?

190 απαντήσεις

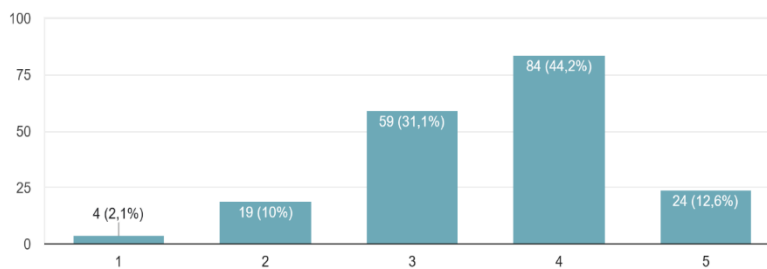


Figure 21: Perceived Contribution of AI Tools to Employee Training and Retraining

16. To what extent do you believe the use of AI tools would contribute to improving employee training and retraining?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	2,0	2,1	2,1
	2	19	9,5	10,0	12,1
	3	59	29,4	31,1	43,2
	4	84	41,8	44,2	87,4
	5	24	11,9	12,6	100,0
	Total	190	94,5	100,0	
Missing	System	11	5,5		
Total		201	100,0		

Table 18: SPSS Table of Perceived Contribution of AI Tools to Employee Training and Retraining

Q17: Respondents were asked to express **how important they believe implementing AI tools could be for managing and improving employee performance in the Public Sector.**

Initially, **the majority of participants (57.9%)** who rated AI with 4 or 5 evaluated its contribution to performance management and improvement **positively**. Specifically, **45.3% (86 people)** believe that AI will **significantly contribute** to managing and improving work performance, while **12.6% (24 people)** consider AI’s impact **extremely significant**.

The **moderate stance (25.8%)** suggests that, while many recognize AI’s potential, there is still **room for improvement** and further exploration of its application in managing employee performance.

On the other hand, **16.3% (2.6% + 13.7%)** appear **skeptical**, estimating that AI’s significance in this area is **limited**. Specifically, **2.6% (5 people)** believe that AI implementation **is not important** for improving performance, while **13.7% (26 people)** consider AI’s contribution **minimal**, demonstrating **low confidence** in its importance.

17. How important do you think the implementation of AI tools could be for managing and improving work performance?
190 απαντήσεις

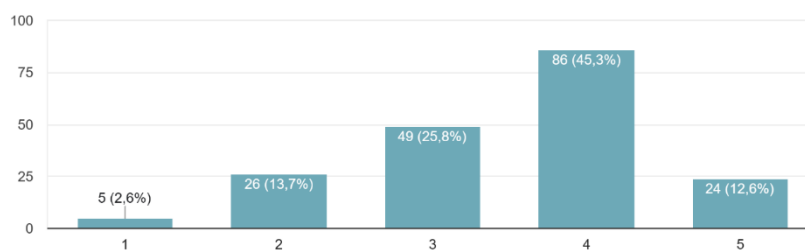


Figure 22: Perceived Importance of AI Tools for Managing and Improving Work Performance

17. How important do you think the implementation of AI tools could be for managing and improving work performance?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	2,5	2,6	2,6
	2	26	12,9	13,7	16,3
	3	49	24,4	25,8	42,1
	4	86	42,8	45,3	87,4
	5	24	11,9	12,6	100,0
	Total	190	94,5	100,0	
Missing	System	11	5,5		
Total		201	100,0		

Table 19: SPSS Table of Perceived Importance of AI Tools for Managing and Improving Work Performance

Q18: In this question, participants' responses concern **the extent to which the use of AI tools in recruitment could reduce the time and cost of this process.**

The **majority of participants (38.9% + 17.9%)** believe that AI usage **could positively impact** the reduction of time and cost associated with recruitment. Specifically, **38.9% (74 people)** think that AI will **significantly help** reduce the cost and time of the recruitment process, while **17.9% (34 people)** believe that AI will make an **extremely significant contribution.**

On the other hand, **16.9% (3.2% + 13.7%)** appear **concerned and cautious**, estimating that AI will **not significantly** reduce the cost and time of the process. Specifically, **3.2% (6 people)** believe that AI **will not reduce the time and expense** of recruitment at all, while **13.7% (26 people)** believe that the **reduction would be minimal.**

Finally, the **moderate stance (26.3%)** suggests that while many recognize AI's **potential to improve recruitment efficiency**, doubts remain, and **its application needs further development.**

18. How much do you believe that the use of AI tools in recruitment could reduce the time and cost of this process?
190 απαντήσεις

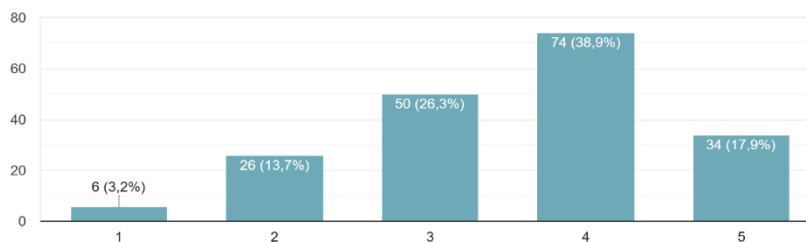


Figure 23: Perceived Impact of AI Tools on Reducing Time and Cost in Recruitment

18. How much do you believe that the use of AI tools in recruitment could reduce the time and cost of this process?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	3,0	3,2	3,2
	2	26	12,9	13,7	16,8
	3	50	24,9	26,3	43,2
	4	74	36,8	38,9	82,1
	5	34	16,9	17,9	100,0
	Total	190	94,5	100,0	
Missing	System	11	5,5		
Total		201	100,0		

Table 20: SPSS Table of Perceived Impact of AI Tools on Reducing Time and Cost in Recruitment

At this point, we can comparatively examine the responses of the **190 participants** in this section to gain insight into employees' attitudes toward the use of **AI tools in the HR sector**. Initially, we can create a **summary table** for responses **Q14 to Q18**, illustrating the **mean** and **standard deviation** of the answers, as shown below.

	N	Minimum	Maximum	Mean	Std. Deviation
14. How effective do you consider the use of AI tools in public sector recruitment?	190	1	5	3,13	1,131
15. How objective do you think the results of AI tools could be in the employee evaluation process?	190	1	5	3,09	1,113
16. To what extent do you believe the use of AI tools would contribute to improving employee training and retraining?	190	1	5	3,55	,911
17. How important do you think the implementation of AI tools could be for managing and improving work performance?	190	1	5	3,52	,969
18. How much do you believe that the use of AI tools in recruitment could reduce the time and cost of this process?	190	1	5	3,55	1,037
Valid N (listwise)	190				

Table 21: SPSS Table of Descriptive Statistics of AI Tools in Recruitment, Evaluation, Training, and Performance Management

Regarding the **Mean**, the values range from **3.09 to 3.55**, indicating that participants have a **moderate to positive stance toward implementing AI tools**. The most **positive evaluations** are given for **Q16 (3.55)**, **Q18 (3.55)**, and **Q17 (3.52)**, while the **lowest rating** is found in **Q15 (3.09)**, which concerns the **objectivity of AI in employee evaluations**. The **highest confidence** is placed in AI for **training and reducing recruitment costs/time**. At the same time, the **most controversial application** is the **objectivity of AI in employee evaluations (Q15)**, with the lowest rating.

Regarding the **Standard Deviation (Std. Deviation)**, the values range from **0.911 to 1.131**, indicating a **relatively small dispersion** in the responses. The **highest variance** is observed in **Q14 (1.131)**, suggesting that **opinions are divided** on the **effectiveness of AI in**

recruitment. Meanwhile, the **lowest variance** is observed in Q16 (0.911), indicating a **more remarkable agreement on the importance of AI in training.**

The **high standard deviation in Q14** suggests that **some participants find AI in recruitment extremely effective, while others are skeptical.**

4.2.4 Section D: Your perceptions and attitudes

Q19: In the first question of this section, participants were asked to express **how useful they believe AI could be in HR.**

36.3% (69 people) believe that AI could be **quite useful** in HR, and **9.5% (18 people)** evaluate it as **extremely useful.** Therefore, **the majority of participants (45.8%)** consider AI **useful** for HR.

On the contrary, **4.7% (9 people)** believe that AI is **not useful in HR**, and **15.8% (30 people)** consider its use **minimally useful.** Thus, **20.5% (4.7% + 15.8%)** appear **concerned**, estimating that AI’s usefulness in this field is **low.**

The **moderate stance (33.7%)** suggests that while many recognize AI’s **potential** in HR, there is still **room for improvement** and a need for **further understanding** of its application.

19. How useful do you think AI could be in human resource management?
190 απαντήσεις

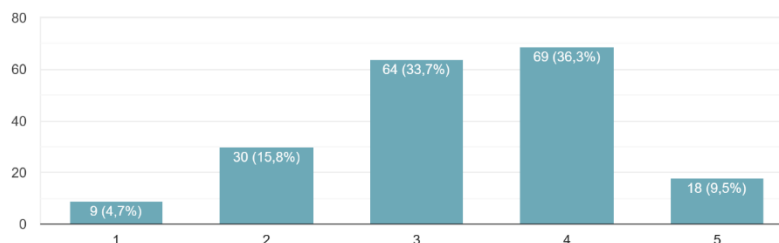


Figure 24: Perceived Usefulness of AI in Human Resource Management

19. How useful do you think AI could be in human resource management?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	9	4,5	4,7	4,7
	2	30	14,9	15,8	20,5
	3	64	31,8	33,7	54,2
	4	69	34,3	36,3	90,5
	5	18	9,0	9,5	100,0
	Total	190	94,5	100,0	
Missing	System	11	5,5		
Total		201	100,0		

Table 22: SPSS Table of Perceived Usefulness of AI in Human Resource Management

Q20: 37.4% (71 participants) generally held a neutral opinion on how fair and objective AI-driven choices are in HR operations, including employee evaluations and recruiting.

Conversely, 32.6% (10% + 22.6%) seem dubious as they think AI guarantees inadequate objectivity and justice. More specifically, 22.6% (43 individuals) assessed AI's objectivity as poor, while 10% (19 people) believed it did not guarantee fair and objective conclusions.

On the other hand, 30% (21.6% + 8.4%) find AI favorable. Specifically, 8.4% (16 individuals) feel that AI can ensure somewhat fair and objective outcomes, whereas 21.6% (41 people) believe AI can provide highly fair and objective decisions.

20. How fair and objective decisions could the use of AI tools ensure in HR processes, such as hiring or employee evaluations?

190 απαντήσεις

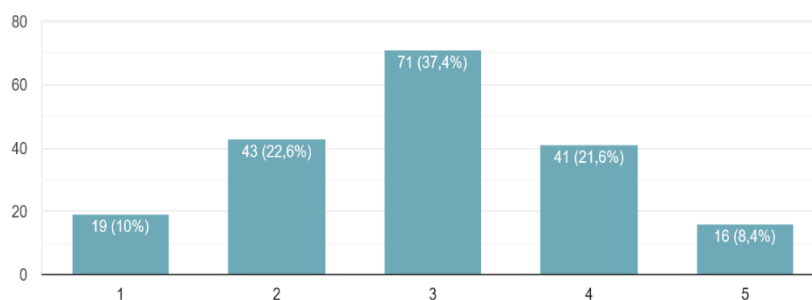


Figure 25: Perceived Fairness and Objectivity of AI in HR Processes

20. How fair and objective decisions could the use of AI tools ensure in HR processes, such as hiring

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	19	9,5	10,0	10,0
	2	43	21,4	22,6	32,6
	3	71	35,3	37,4	70,0
	4	41	20,4	21,6	91,6
	5	16	8,0	8,4	100,0
	Total	190	94,5	100,0	
Missing	System	11	5,5		
Total		201	100,0		

Table 23: SPSS Table of Perceived Fairness and Objectivity of AI in HR Processes

Q21: The next question examines how positively participants view the future use of AI tools in HR. More specifically, 15.8% (30 people) said they see AI use in HR as slightly positive, while 7.9% (15 people) said they do not view it positively in the future.

On the other hand, 28.9% (55 people) took a more positive stance, while 12.1% (23 people) believe that AI use in HR will be very positive. Finally, 35.3% (67 people) took a neutral stance, making up most of the sample. This stance suggests that while many recognize AI’s potential, they remain concerned about its future application in HR.

21. How positive would you be about using AI tools for HR in the future?

190 απαντήσεις

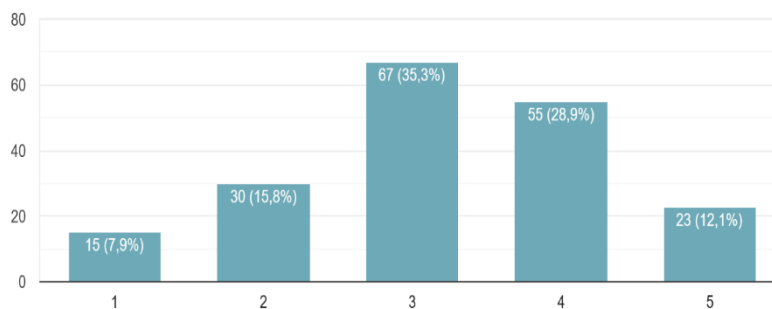


Figure 26: Respondents' Positivity Toward Using AI Tools for HR in the Future

21. How positive would you be about using AI tools for HR in the future?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	15	7,5	7,9	7,9
	2	30	14,9	15,8	23,7
	3	67	33,3	35,3	58,9
	4	55	27,4	28,9	87,9
	5	23	11,4	12,1	100,0
	Total	190	94,5	100,0	
Missing	System	11	5,5		
Total		201	100,0		

Table 24: SPSS Table of Respondents' Positivity Toward Using AI Tools for HR in the Future

Q22: In response to the question, "What do you consider to be the key factors that will influence the acceptance of AI by Public Sector employees?" participants could select more than one answer.

The response that received the most votes was **Employee training and education**, with **68.9% (131 individuals)**, followed by **Adequate technological infrastructure**, with **69.7% (121 individuals)**. Next came **Transparency and fairness in processes**, with **54.2% (103 individuals)**; **Integration of AI into existing processes**, with **51.6% (98 individuals)**, **Efficiency and reliability of AI tools**, with **47.9% (91 individuals)**; **Protection of personal data**, with **46.8% (89 individuals)**, and **Addressing concerns about job loss**, with **42.6% (81 individuals)**.

Other factors included **Clear communication regarding AI benefits**, with **30% (57 individuals)**; **Professional culture and attitude towards innovation**, with **28.4% (54 individuals)**; and finally, **Support from management and senior executives**, with **22.6% (43 individuals)**.

In the "Other" category, one respondent mentioned the **age of employees** as a factor.

\$AI_ACCEPTANCE Frequencies

		Responses		Percent of Cases
		N	Percent	
\$AI_ACCEPTANCE ^a	Training and upskilling of staff	131	15,1%	68,9%
	Adequate technological infrastructure	121	13,9%	63,7%
	Transparency and fairness in AI-driven processes	103	11,9%	54,2%
	Protection of personal data	89	10,3%	46,8%
	Support from management and supervisors	43	5,0%	22,6%
	Clear communication about the benefits of AI	57	6,6%	30,0%
	Efficiency and reliability of AI tools	91	10,5%	47,9%
	Addressing concerns about job loss	81	9,3%	42,6%
	Integration of AI into existing processes in a user-friendly manner	98	11,3%	51,6%
	Professional culture and adaptability of the organization	54	6,2%	28,4%
Total		868	100,0%	456,8%

a. Dichotomy group tabulated at value 1.

Table 25: SPSS Table of Factors Influencing AI Acceptance in the Workplace

22. What do you consider to be the key factors that will affect the acceptance of AI by employees in the public sector? (There may be more than one answer.)

190 απαντήσεις

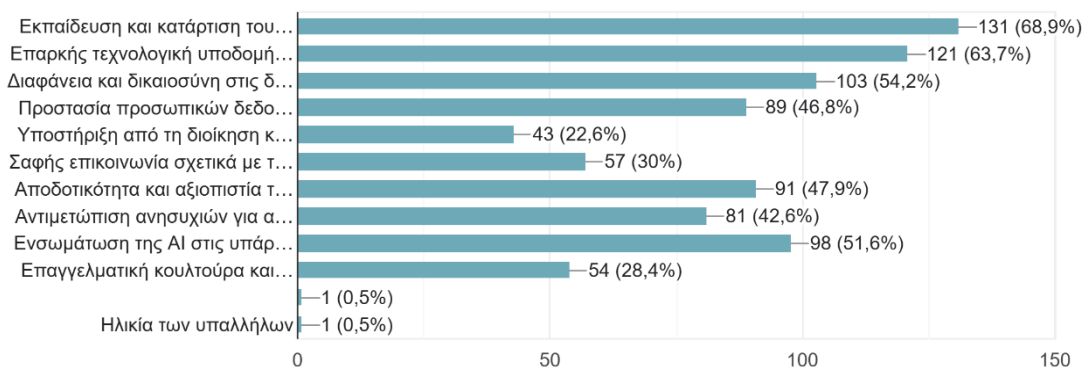


Figure 27: Key Factors Affecting AI Acceptance by Employees in the Public Sector

Therefore, the two most important factors for AI acceptance are **employee training** and **technological infrastructure**. Concerns about data protection and the reliability of AI are also critical factors. Administrative support and organizational culture play a minor role. Finally, clear communication and user-friendliness with AI tools can help increase acceptance.

Q23: In this question, the survey participants are asked to select their most significant concerns regarding the use of AI in HR, with the option to choose more than one answer.

23. What is your biggest concern regarding the use of AI in HR? (There may be more than one answer.)

190 απαντήσεις

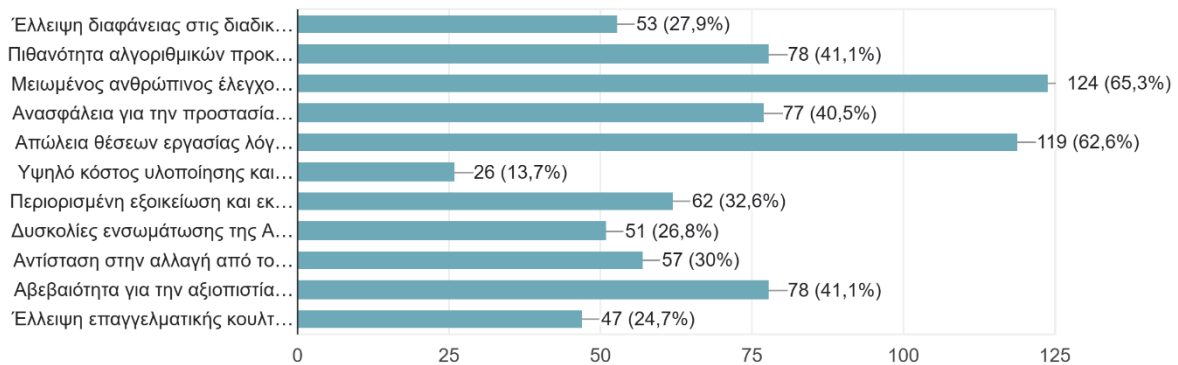


Figure 28: Biggest Concerns Regarding the Use of AI in HR

\$Concerns_AI Frequencies				
Varname		Responses		Percent of Cases
		N	Percent	
\$Concerns_AI ^a	Lack of transparency in processes	53	6,9%	27,9%
	Potential for algorithmic biases	78	10,1%	41,1%
	Reduced human oversight in decision making	124	16,1%	65,3%
	Concerns about personal data protection	77	10,0%	40,5%
	Job loss due to automation	119	15,4%	62,6%
	High implementation and maintenance costs of AI tools	26	3,4%	13,7%
	Limited staff familiarity and training	62	8,0%	32,6%
	Difficulties in integrating AI into existing processes	51	6,6%	26,8%
	Resistance to change from employees	57	7,4%	30,0%
	Uncertainty about the reliability of AI outcomes	78	10,1%	41,1%
	Lack of professional culture within the organization	47	6,1%	24,7%
Total		772	100,0%	406,3%

a. Dichotomy group tabulated at value 1.

Table 26: SPSS Table of Frequencies of Concerns Regarding AI Use in HR

The table presents the participants' most significant concerns regarding using **AI in HR**. The responses were multiple-choice, meaning each participant could select more than one concern. Seven hundred seventy-two (772) responses were given, corresponding to 406.3% of the total number of cases, which means that, on average, each individual selected **four (4) concerns**.

Initially, we observed that the variable **"Reduced human oversight in decision making"** gathered **124 responses** and was the most prevalent answer, with 16.1% (Selected by **65.3% of participants**).

Following this, the variable **"Job loss due to automation"** received **119 responses**, with a percentage of **15.4%** (Selected by **62.6% of participants**). This choice reflects the fear that AI may replace humans in HR processes.

Next, the variable **"Potential for algorithmic biases"** received **78 responses**, with a percentage of **10.1%** (Selected by **41.1% of participants**), showing concern that algorithms may have **embedded biases**.

The variable **"Concerns about personal data protection"** received **77 responses**, accumulating **10.0%** (Selected by **40.5% of participants**). Employees worry about how AI manages **sensitive personal data**.

The variable **"Uncertainty about the reliability of AI outcomes"** gathered **78 responses**, with **10.1%** (Selected by **41.1% of participants**).

The remaining **secondary concerns** are ranked as follows:

- The variable **“Lack of transparency in processes”** has 53 responses and 6.9%.
- The variable **“High implementation and maintenance costs of AI”** has 26 responses and 3.4%.
- The variable **“Limited staff familiarity and training”** has 62 responses and 8.0%.
- The variable **“Difficulties in integrating AI into existing processes”** has 51 responses and 6.6%.
- The variable **“Resistance to change from employees”** has 57 responses and 7.4%.
- The variable **“Lack of professional culture within the organization”** has 47 responses and 6.1%.

Essentially, the **most significant concerns** focus on the **loss of human oversight, job loss, and algorithmic biases**. There is also significant concern about **data protection and the reliability of AI decisions**.

High costs and technical difficulties are not primary concerns but remain **secondary factors**. Additionally, there is **resistance to change** and **concerns about organizational culture**.

Q24: This table presents participants' perceptions regarding the **risks of AI**. Since the responses were multiple-choice, the total percentage of cases exceeds 100% (403.7%), as each participant could select more than one answer.

Seven hundred sixty-seven (767) responses were given, with a **total percentage of cases of 403.7%**, meaning that, on average, each individual selected **four (4) different risks**.

24. What do you believe are the most significant risks of using AI tools in your organization? (Multiple answers are possible)

190 απαντήσεις

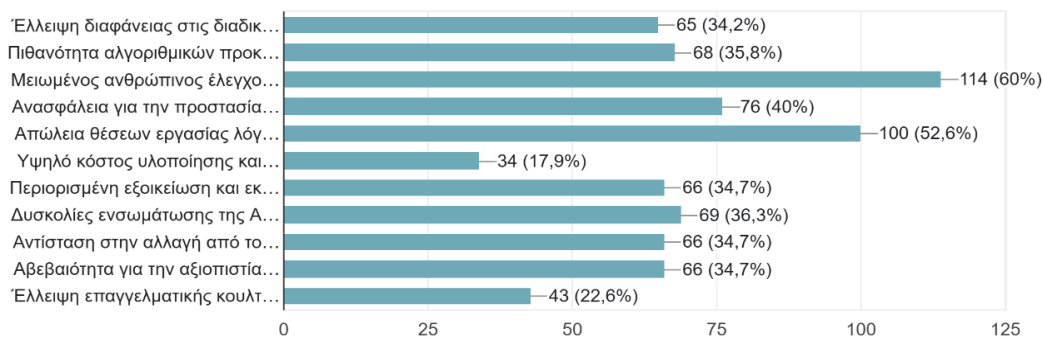


Figure 29: Perceived Risks of Using AI Tools in the Organization

\$AI_RISKS Frequencies

		Responses		Percent of Cases
		N	Percent	
\$AI_RISKS ^a	Lack of transparency in processes	65	8,5%	34,2%
	Potential for algorithmic biases	68	8,9%	35,8%
	Reduced human oversight in decision-making	114	14,9%	60,0%
	Concerns about personal data protection	76	9,9%	40,0%
	Job loss due to automation	100	13,0%	52,6%
	High implementation and maintenance costs of AI tools	34	4,4%	17,9%
	Limited staff familiarity and training	66	8,6%	34,7%
	Difficulties in integrating AI into existing processes	69	9,0%	36,3%
	Resistance to change from employees	66	8,6%	34,7%
	Uncertainty about the reliability of AI outcomes	66	8,6%	34,7%
	Lack of professional culture within the organization	43	5,6%	22,6%
	Total	767	100,0%	403,7%

a. Dichotomy group tabulated at value 1.

Table 27: SPSS Table of AI Risks Frequencies in Organizations

Initially, we will refer to the **main risks**, specifically the variable "Reduced human oversight in decision-making," which received 114 responses and accounted for 14.9% of the total (60.0% of participants). This is the most widespread concern, showing that employees fear automation without sufficient human intervention.

The variable "**Job loss due to automation**" received 100 responses and a 13.0% response rate (**52.6% of participants**). **One of the most significant fears is that AI may replace employees in various processes.**

The variable "**Potential for algorithmic biases**" received **68 responses**, representing 8.9% (35.8% of participants), indicating a strong concern that algorithms may operate with bias.

Next follows the variable "**Concerns about personal data protection,**" with **76 responses** and a percentage of **9.9%** (40.0% of participants in total responses). This response demonstrates a profound concern for personal data security, given that AI utilizes vast amounts of information.

The variable "**Difficulties in integrating AI into existing processes**" received 69 responses, accounting for **9.0%** (36.3% of participants). It is clear that employees worry about adapting AI to existing systems, as the transition may be challenging.

The remaining secondary concerns are ranked as follows:

- The variable **“Lack of transparency in processes”** has 65 responses and 8.5%.
- The variable **“Limited staff familiarity and training”** has 66 responses and 8.6%.
- The variable **“Uncertainty about the reliability of AI outcomes”** has 66 responses and 8.6%.
- The variable **“Resistance to change from employees”** has 66 responses and 8.6%.
- The variable **“High implementation and maintenance costs of AI tools”** has 34 responses and 4.4%.
- The variable **“Lack of professional culture within the organization”** has 43 responses and 5.6%.

Businesses must emphasize human oversight in AI decision-making. Employee training is essential to reduce fear of AI. Organizations must ensure transparency in AI processes to improve employee trust. Policies against algorithmic biases must be developed to address concerns about discrimination through AI.

Q25: In the last question, participants can briefly respond if they want to add anything else.

Most answered that they did not want to add anything. The responses we received from those who wanted to comment were:

"Non-measurable factors that may influence employee performance might not be considered."

"Anything that replaces humans is dangerous and must be scrutinized."

"It is the future in the public sector."

"Many times, in my work, empathy is needed, which is missing from AI."

"Each sector requires a specialized application of AI and continuous upgrading to correspond to AI's operational purpose."

"It is not easy to manage by elderly individuals."

5. Statistical Analysis and Interpretation of Results

Initially, we can examine the reliability of the data, particularly that of Likert scales, by performing Cronbach's Alpha. Reliability is at the core when objective models use variables derived from summative scales as predictive elements. Since summative scales consist of interrelated items intended to assess underlying variables, it is crucial to determine whether the same set of items would lead to the same responses to identical questions if they were reworded and re-administered to the same respondents. ([Abbadia J., 2023](#))

Cronbach's Alpha is a method for assessing reliability that compares the amount of shared variance or covariance among multiple items that make up an instrument with the amount of total variance. If the instrument is reliable, there should be a high level of covariance among all the items relative to the variance.

The questionnaire items to be examined range from question 9 to question 21. The process will be conducted using the SPSS software by selecting Analyze → Scale → Reliability Analysis. Then, we chose the questions that were on the Likert scale.

The interpretation of Cronbach's Alpha is as follows:

- > 0.9 → Excellent reliability
- $0.8 - 0.9$ → Good reliability
- $0.7 - 0.8$ → Acceptable reliability
- < 0.7 → Low reliability (question revision may be required)

In the case of our research, the results are as follows:

Reliability Statistics	
Cronbach's Alpha	N of Items
.907	13

Table 28: SPSS Table of Reliability Analysis

With **Cronbach's Alpha = 0.907**, the measurement tool's reliability is excellent. This indicates that the scale items exhibit high consistency and likely measure the same

underlying characteristic. This suggests that the scale can be used confidently to assess AI acceptance or any other related topic.

Depending on the objectives and research questions we aim to explore, we could conduct various statistical analyses on the data collected from participants' responses to our research questionnaires. In the following sections, we will examine some of these analyses.

5.1 Research Hypothesis between the frequency of AI use in personal life and the perception of the importance of AI in work.

Initially, we formulated two hypotheses, a research hypothesis, and a null hypothesis.

Research Hypothesis (H₁):

"There is a positive correlation between the frequency of AI use in personal life and the perception of the importance of AI in managing and improving performance at work."

Null Hypothesis (H₀):

"There is no statistically significant correlation between the frequency of AI use in personal life and the perception of the importance of AI in work."

We have two variables; **the independent variable is the question** *"How often do you use AI in your personal life?"* (Likert Scale), and the **dependent variable** is the question *"How important do you consider the application of AI tools for managing and improving performance at work?"* (Likert Scale)

To determine the correlation between the two variables, we will run the corresponding option in SPSS. First, we will import the data from the responses in Google Forms via Excel into SPSS. We will use a correlation coefficient, a numerical indicator showing the strength and direction of the relationship between two variables. ([Howitt & Cramer, 2010](#)) According to Howitt and Cramer (2010), several correlation coefficients exist. The most common and useful is the Pearson correlation coefficient.

Correlations			
		10.How often do you use artificial intelligence in your personal life?	17. How important do you think the implementation of AI tools could be for managing and improving work performance?
10.How often do you use artificial intelligence in your personal life?	Pearson Correlation	1	,298**
	Sig. (2-tailed)		<,001
	N	190	190
17. How important do you think the implementation of AI tools could be for managing and improving work performance?	Pearson Correlation	,298**	1
	Sig. (2-tailed)	<,001	
	N	190	190

** Correlation is significant at the 0.01 level (2-tailed).

Table 29: SPSS Correlation Matrix between AI Usage and Perceived Importance in Work Performance

Therefore, to investigate the relationship between the two variables, **Pearson correlation (r)** was used in SPSS, and the resulting table provides the following information:

A **Pearson Correlation Coefficient (r) of 0.298** indicates a **positive correlation**. Although not strong, the positive value of **r** suggests a trend in the same direction. As personal use of AI increases, so does the perception of its usefulness in the workplace.

The correlation **r = 0.298** is **moderate**, meaning that other factors also influence the perception of AI in the workplace. These could include prior professional experience with AI, the company's or organization's culture, and resistance to change.

P-value < 0.001, indicating that the correlation is **statistically significant** at the **0.01 level (99% confidence level)**. The probability that this relationship is random is extremely low (**< 0.1%**), reinforcing the certainty that a correlation exists between the two variables.

According to the findings, those who utilize AI more regularly in their personal life typically understand its value in business. Confirming the research theory, the association is modest but statistically significant. This may be explained by the fact that when individuals use artificial intelligence more daily, they grow to trust it, grasp its operation, and value its contribution to improving their lives. Moreover, those who utilize AI in daily life might be more receptive to including it in their workplace as they have already found its advantages.

5.2 Research Hypothesis on the Correlation Between Age and Perceptions of AI in HR (HR)

Null Hypothesis (H₀):

"There is no statistically significant correlation between employees' age and their perceptions regarding the usefulness, objectivity, and acceptance of AI in HR."

Alternative Hypothesis (H₁):

"Employees' age is statistically significantly related to their perceptions of AI's usefulness, objectivity, and acceptance in HR."

The **Research Variables** are the **independent variable** (*Age (numeric)*) and the **Dependent variables** (*Usefulness of AI in HR, Objectivity of AI decisions in HR, and Positive attitude toward AI use in HR in the future*).

The same procedure will be followed, and a Pearson correlation will be conducted using the SPSS statistical package to examine the relationship between age and the dependent variables. First, we need to convert the **age category from text to a number** for the analysis to function. Detailed instructions on how this specific procedure is carried out can be found in Appendix B.

The following table is generated:

		Correlations			
		Age_Numeric	19. How useful do you think AI could be in human resource management?	20. How fair and objective decisions could the use of AI tools ensure in HR processes, such as hiring?	21. How positive would you be about using AI tools for HR in the future?
Age_Numeric	Pearson Correlation	1	,010	,040	,049
	Sig. (2-tailed)		,889	,583	,504
	N	201	190	190	190
19. How useful do you think AI could be in human resource management?	Pearson Correlation	,010	1	,696**	,666**
	Sig. (2-tailed)	,889		<,001	<,001
	N	190	190	190	190
20. How fair and objective decisions could the use of AI tools ensure in HR processes, such as hiring?	Pearson Correlation	,040	,696**	1	,672**
	Sig. (2-tailed)	,583	<,001		<,001
	N	190	190	190	190
21. How positive would you be about using AI tools for HR in the future?	Pearson Correlation	,049	,666**	,672**	1
	Sig. (2-tailed)	,504	<,001	<,001	
	N	190	190	190	190

** . Correlation is significant at the 0.01 level (2-tailed).

Table 30: SPSS Correlation Matrix for Age and AI Perceptions

The **correlation table** shows the relationship between **age ("Age_Numeric")** and the **three variables related to the perception of AI in HR**.

The **Pearson Correlation coefficient (r)** indicates the **degree and direction** of the relationship between the variables (values range from **-1 to +1**).

The **Sig. (2-tailed) (p-value)** shows whether the correlation is **statistically significant** (**p < 0.05** means the relationship is not random).

Finally, the **N coefficient** represents the **number of individuals in the sample** for each relationship.

1. Age & Perception of AI Usefulness in HR

- **Pearson Correlation (r) = 0.012**
- **p-value = 0.871**

Therefore, **there is no correlation** between age and the perception of how useful AI can be in HR. According to the responses from our sample, different age groups do not exhibit significant differences in how they perceive AI's usefulness in HR.

2. Age & Perception of AI Objectivity in HR Processes

- **Pearson Correlation (r) = 0.040**
- **p-value = 0.583**

Therefore, **there is no statistically significant correlation** between age and the perception of AI's objectivity in HR decisions.

3. Age & Positive Attitude Toward AI Use in HR in the Future

- Pearson Correlation (r) = 0.050
- p-value = 0.493

Therefore, **there is no statistically significant correlation** between age and a positive attitude toward the future use of AI in HR.

Thus, the **null hypothesis (H_0) is confirmed**, meaning **there is no significant relationship** between the research participants' age and their perceptions of AI in HR.

5.3 Research Hypothesis on the relationship between how useful an employee believes AI could be in HR management and their attitude toward AI use in HR.

In this section, we will examine the relationship between an employee's perception of the usefulness of AI in HR management and their attitude toward AI use in HR. To conduct this study, we will define the independent variable as question 19 from the questionnaire: **"19. How useful do you think AI could be in human resource management?"** and use the questions presented in Section C (Q14-Q18) of the questionnaire as the dependent variables. We will apply the Multiple Regression statistical method.

Regression models describe relationships between variables by fitting a line to observed data, estimates of the link between two or more independent variables and a dependent variable, and multiple linear regression. Multiple linear regression allows us to ascertain the degree of strength between two or more independent variables and a dependent variable. ([Bevans, R. 2020](#))

In our case, the **Dependent Variable** is: **"19. How useful do you think AI could be in HR?"**

The **Independent Variables** are:

1. *"14. How effective do you consider the use of AI tools in Public Sector recruitment?"*

2. *"15. How objective do you think the results of AI tools could be in the employee evaluation process?"*
3. *"16. To what extent do you believe the use of AI tools would contribute to improving employee training and retraining?"*
4. *"17. How important do you think implementing AI tools could be for managing and improving work performance?"*
5. *"18. How much do you believe that the use of AI tools in recruitment could reduce the time and cost of this process?"*

In the following table, we see six columns:

The first column includes the independent variable.

The second column contains the B coefficient (Unstandardized Coefficients), which in multiple linear regression indicates how much the dependent variable (DV) changes when the independent variable (IV) increases by one unit while keeping all other variables constant.

If we have the general equation for multiple linear regression:

$$y = \beta_0 + \beta_1 X_1 + \dots + \beta_n X_n + \epsilon$$

- y = The predicted value of the dependent variable
- B_0 = The y-intercept (the value of y when all other parameters are set to 0)
- $B_1 X_1$ = The regression coefficient (B_1) of the first independent variable (X_1) (also known as the effect of increasing the value of the independent variable on the predicted y value).
- ... = Repeat this process for all independent variables you test.
- $B_n X_n$ = The regression coefficient of the last independent variable.
- ϵ = Model error (also known as how much variance exists in our estimation)

[\(Bevans, R. 2020\)](#)

In the third column, we find the Standard Error (Std. Error), which represents the standard error of the B coefficient (also known as the unstandardized coefficient). It demonstrates the

accuracy of the B coefficient estimation and the potential variation that may occur if the same analysis were repeated with different samples. Essentially, it indicates the precision of the B coefficient estimation.

Additionally, it is used to calculate the t-value, which helps us test statistical significance. The B estimation may not be stable if the standard error is high. We prefer low standard errors as they indicate more reliable results.

Next, we encounter the Beta coefficient (Standardized Coefficients), which shows the standardized effect of each independent variable on the dependent variable.

Essentially, B (Unstandardized Coefficients) indicates the actual effect of a variable in its unit of measurement. At the same time, Beta (Standardized Coefficients) indicates the relative impact of the variable, expressed without measurement units, allowing us to compare which independent variable has the most significant effect.

The larger the Beta (whether positive or negative), the greater the effect of the independent variable on the dependent variable. Therefore, we can compare the Beta values of different variables because they are on a standard scale (from -1 to +1). However, we cannot use beta to predict specific values; we can only compare effects between variables.

In the fifth column, we have the t-statistic (t-value), which shows how far the B coefficient is from 0 based on its standard error.

- The larger the t-value, the higher the likelihood that the independent variable has a real effect on the dependent variable.
- The smaller the t-value, the more likely it is that the effect of the independent variable is random.

Finally, in the last column, we find the p-value (probability of error), which indicates whether the effect of the independent variable is statistically significant.

- If $p < 0.05$, the variable has a statistically significant effect, and we accept that it influences the dependent variable.

- If $p > 0.05$, the variable does not have a statistically significant effect and may be rejected.

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	,068	,220		,757
	14. How effective do you consider the use of AI tools in public sector recruitment?	,278	,066	,313	<,001
	15. How objective do you think the results of AI tools could be in the employee evaluation process?	-,084	,069	-,093	,228
	16. To what extent do you believe the use of AI tools would contribute to improving employee training and retraining?	,263	,069	,240	<,001
	17. How important do you think the implementation of AI tools could be for managing and improving work performance?	,259	,070	,250	<,001
	18. How much do you believe that the use of AI tools in recruitment could reduce the time and cost of this process?	,219	,060	,226	<,001

a. Dependent Variable: 19. How useful do you think AI could be in human resource management?

Table 31: SPSS Regression Coefficients for AI Usefulness in HRM

From the above table, the following data emerges:

Q14: The effectiveness of AI in recruitment has the most substantial impact on the perception of AI usefulness in HRM, as $B = 0.278$, Std. Error = 0.066, Beta = 0.313, $t = 4.190$, $p < 0.001$.

- The Std. error is low, indicating that the B estimate is stable and reliable.
- The beta coefficient is 0.313, indicating that this variable has the most significant influence.
- The p-value is < 0.001 , confirming that the variable has a statistically significant effect.

Thus, we understand that the more effective employees perceive AI in recruitment, the more helpful they consider it overall in HRM.

Q15: The objectivity of AI in evaluations does NOT have a statistically significant effect on the perception of AI usefulness in HRM, as $B = -0.084$, Std. Error = 0.069, Beta = -0.093, $t = -1.209$, $p = 0.228$.

- Std. Error is relatively high, indicating that the B estimate is not very reliable.
- Beta = -0.093 suggests the variable has a very low influence.
- P-value = 0.228, above 0.05, indicates that the relationship is not statistically significant.

It is expected that the perception of AI's objectivity in evaluations does not significantly affect the perception of its usefulness in HRM.

Q16: The contribution of AI to improving training has a statistically significant effect on the perception of AI usefulness in HRM, as $B = 0.263$, Std. Error = 0.069, Beta = 0.240, $t = 3.825$, $p < 0.001$.

- The Std. Error is low, making the B estimate stable and reliable.
- The Beta = 0.240 indicates this variable has a significant positive effect.
- The p-value < 0.001 , confirming that the variable has a statistically significant effect.

Thus, the more employees believe that AI contributes to improving training, the more useful they generally consider it in HRM.

Q17: The importance of AI in performance management and improvement has a statistically significant effect on the perception of AI usefulness in HRM, as $B = 0.259$, Std. Error = 0.070, Beta = 0.250, $t = 3.678$, $p < 0.001$.

- The Std. Error is low, making the B estimate reliable.
- The Beta = 0.250 indicates that this variable has a positive and significant effect on the dependent variable.

- The p-value < 0.001 , confirming its statistical significance.

Thus, the more employees consider AI important for performance management, the more helpful they perceive it overall in HRM.

Q18: The perception that AI reduces hiring time and costs statistically significantly affects the perception of AI usefulness in HRM, as $B = 0.219$, Std. Error = 0.060, Beta = 0.226, $t = 3.625$, $p < 0.001$.

- The Std. error is low, indicating that the B estimate is reliable.
- The beta coefficient of 0.226 indicates that this variable has a positive and statistically significant effect.
- The p-value is less than 0.001, confirming that the relationship is statistically significant.

Therefore, employees generally view artificial intelligence in HRM more positively the more they believe it can reduce recruiting expenses and time. Ultimately, the view of artificial intelligence application in HRM is most influenced by the success of AI in recruiting (Beta = 0.313) by means of multiple linear regression. On the other hand, the objectivity of artificial intelligence in assessments (Beta = -0.093) has no appreciable influence on the view of artificial intelligence value. Lastly, important considerations include AI's contribution to training (Beta = 0.240), its relevance in performance management (Beta = 0.250), and its capacity to cut recruiting costs/time (Beta = 0.226).

5.4 Research Hypothesis on how the understanding and use of AI in an employee's personal life, the perceived importance and ease of use of AI in the workplace, and the perception of its future use influence the perception of AI's usefulness in HR.

To conduct this study, we will use hierarchical multiple regression, which allows the researcher to determine the order of independent variables in a multiple regression model.

[\(Howitt, D., & Cramer, D., 2010\)](#)

We define the dependent variable as question 19: "How useful do you think AI could be in HR?" Responses are given on a Likert scale from 1 to 5, with one representing "not at all" and five representing "very much."

The variables defined as **independent variables** are **questions 9 to 13**, which belong to **Section B: Familiarity with AI**, and are as follows:

9. "How well do you think you understand AI technology?"

10. "How often do you use AI in your personal life?"

11. "How important do you consider using AI for your work in the public sector?"

12. "How comfortable would you feel if you had to use AI tools in your work?"

13. "To what extent do you believe AI can impact the functioning of the Public Sector in the future?"

Initially, in SPSS, select the **Analyze** menu, then choose **Regression**, and select **Linear**. In the open window, place **question 19** in the **dependent variable** field. Then, place **questions 9, 10, 11, 12, and 13** in the **independent variable** field. Select one variable at a time and click **Next** to add the following variable. (Appendix B provides a detailed description of the procedure to produce the table below.)

Descriptive Statistics			
	Mean	Std. Deviation	N
19. How useful do you think AI could be in human resource management?	3,30	1,002	190
9. How well do you think you understand artificial intelligence (AI) technology?	3,27	,952	190
10. How often do you use artificial intelligence in your personal life?	2,47	1,158	190
11. How important do you consider the use of Artificial Intelligence for your work in the public sector?	3,09	1,075	190
12. How comfortable would you feel if you had to use Artificial Intelligence tools in your work?	3,37	1,085	190
13. To what extent do you believe AI can impact the functioning of the public sector in the future?	4,07	,855	190

Table 32: SPSS Descriptive Statistics for AI Perceptions

The highest mean score is in Question 13 (4.07); therefore, participants strongly believe that AI will impact the Public Sector in the future.

On the other hand, the lowest mean score is in Question 10 (2.47), indicating that, according to participants, the use of AI in their personal lives is relatively low.

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			
						F Change	df1	df2	Sig. F Change
1	,170 ^a	,029	,024	,990	,029	5,609	1	188	,019
2	,273 ^b	,074	,064	,970	,045	9,162	1	187	,003
3	,483 ^c	,234	,221	,885	,159	38,666	1	186	<,001
4	,523 ^d	,274	,258	,863	,040	10,201	1	185	,002
5	,540 ^e	,291	,272	,855	,018	4,581	1	184	,034

a. Predictors: (Constant), 9. How well do you think you understand artificial intelligence (AI) technology?

b. Predictors: (Constant), 9. How well do you think you understand artificial intelligence (AI) technology? , 10.How often do you use artificial intelligence in your personal life?

c. Predictors: (Constant), 9. How well do you think you understand artificial intelligence (AI) technology? , 10.How often do you use artificial intelligence in your personal life?, 11. How important do you consider the use of Artificial Intelligence for your work in the public sector?

d. Predictors: (Constant), 9. How well do you think you understand artificial intelligence (AI) technology? , 10.How often do you use artificial intelligence in your personal life?, 11. How important do you consider the use of Artificial Intelligence for your work in the public sector?, 12. How comfortable would you feel if you had to use Artificial Intelligence tools in your work?

e. Predictors: (Constant), 9. How well do you think you understand artificial intelligence (AI) technology? , 10.How often do you use artificial intelligence in your personal life?, 11. How important do you consider the use of Artificial Intelligence for your work in the public sector?, 12. How comfortable would you feel if you had to use Artificial Intelligence tools in your work?, 13.To what extent do you believe AI can impact the functioning of the public sector in the future?

Table 33: Model Summary: Multiple Linear Regression Predicting Perceived Usefulness of AI in Public Sector HRM

The table illustrates how the regression model improves as new independent variables are added. The most important indicators are:

R: The correlation coefficient indicates how well the model explains variations in the dependent variable.

R Square (R^2): The proportion of the dependent variable's variance that the model explains.

Adjusted R Square: The R^2 adjusted for the number of variables.

R Square Change: The increase in R^2 when a new variable is added.

Sig. F Change: Indicates whether R^2 Change is statistically significant ($p < 0.05$ means that adding the variable significantly improved the model).

To interpret the table, we must analyze each row separately. Each row represents a model, and an additional variable is introduced each time.

Model 1: In this model, we have only one variable, "Understanding of AI" (Question 9), which serves as the predictor.

From the table above, we observe that $R^2 = 0.029$, meaning that AI knowledge explains only 2.9% of the variance in the dependent variable.

Meanwhile, the p-value (Sig. F Change = 0.019) indicates that the model is *statistically significant*.

Model 2: Another variable is added, "Use of AI in employees' personal lives" (Question 10).

Here, we observe that R^2 increases to 7.4% (R^2 Change = 0.045, $p = 0.003$), indicating that this variable adds *significant explanatory power* to the model.

Model 3: In this case, the variable "Importance of AI in the public sector" (Question 11) is introduced.

The table shows a large increase in R^2 to 23.4% (R^2 Change = 0.159, $p < 0.001$), meaning that this variable has a *very strong* impact.

Model 4: The next model adds the variable "Comfort with using AI at work" (Question 12).

Here, we notice that R^2 increases to 27.4% (R^2 Change = 0.040, $p = 0.002$), indicating that comfort with AI use is *significantly related* to the dependent variable.

Model 5: The variable "Perception of AI's future impact" (Question 13) is included in the final case.

Here, R^2 increases to 29.1% (R^2 Change = 0.018, $p = 0.034$), meaning this variable has a *small but statistically significant* effect.

Coefficients ^a											
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part
1	(Constant)	2,714	,258		10,539	<,001	2,206	3,222			
	9. How well do you think you understand artificial intelligence (AI) technology?	,179	,076	,170	2,368	,019	,030	,328	,170	,170	,170
2	(Constant)	2,627	,254		10,351	<,001	2,126	3,127			
	9. How well do you think you understand artificial intelligence (AI) technology?	,043	,087	,041	,497	,620	-,128	,214	,170	,036	,035
	10. How often do you use artificial intelligence in your personal life?	,216	,071	,249	3,027	,003	,075	,356	,270	,216	,213
3	(Constant)	1,873	,261		7,170	<,001	1,358	2,389			
	9. How well do you think you understand artificial intelligence (AI) technology?	-,007	,079	-,007	-,094	,925	-,164	,149	,170	-,007	-,006
	10. How often do you use artificial intelligence in your personal life?	,063	,070	,072	,903	,368	-,074	,200	,270	,066	,058
	11. How important do you consider the use of Artificial Intelligence for your work in the public sector?	,419	,067	,449	6,218	<,001	,286	,552	,479	,415	,399
4	(Constant)	1,667	,263		6,337	<,001	1,148	2,186			
	9. How well do you think you understand artificial intelligence (AI) technology?	-,054	,079	-,052	-,690	,491	-,210	,101	,170	-,051	-,043
	10. How often do you use artificial intelligence in your personal life?	-,002	,071	-,002	-,027	,979	-,142	,138	,270	-,002	-,002
	11. How important do you consider the use of Artificial Intelligence for your work in the public sector?	,308	,074	,331	4,151	<,001	,162	,455	,479	,292	,260
	12. How comfortable would you feel if you had to use Artificial Intelligence tools in your work?	,255	,080	,276	3,194	,002	,098	,413	,451	,229	,200
5	(Constant)	1,167	,350		3,336	,001	,477	1,858			
	9. How well do you think you understand artificial intelligence (AI) technology?	-,054	,078	-,052	-,695	,488	-,209	,100	,170	-,051	-,043
	10. How often do you use artificial intelligence in your personal life?	,006	,070	,007	,087	,930	-,132	,145	,270	,006	,005
	11. How important do you consider the use of Artificial Intelligence for your work in the public sector?	,282	,075	,303	3,786	<,001	,135	,429	,479	,269	,235
	12. How comfortable would you feel if you had to use Artificial Intelligence tools in your work?	,216	,081	,234	2,662	,008	,056	,376	,451	,193	,165
	13. To what extent do you believe AI can impact the functioning of the public sector in the future?	,170	,079	,145	2,140	,034	,013	,327	,328	,156	,133

a. Dependent Variable: 19. How useful do you think AI could be in human resource management?

Table 34: SPSS Coefficients Table for AI Perception Analysis

The Coefficients table provides estimates of the regression model coefficients, indicating the degree to which each independent variable influences the dependent variable.

Dependent variable: "How useful do you think AI could be in HR?" (Question 19).

In the table above, we can identify statistical terms such as:

Unstandardized Coefficients (B): *Indicates the change in the dependent variable for every one-unit increase in the independent variable.*

Standardized Coefficients (Beta): *These represent the relative impact of each independent variable on a standardized scale.*

t and Sig. The t-statistic and p-value (Sig.) determine whether a variable has a statistically significant effect; $p < 0.05$ indicates a significant impact of the variable.

95% Confidence Interval: *This shows the range of possible values for the coefficient.*

Correlations (Zero-order, Partial, Part): *Indicate how each independent variable relates to the dependent variable.*

Each row in the table shows how the coefficients change as new variables are added to the model. Thus, we need to examine the measurements for each model, where a new variable is introduced in each subsequent model.

Model 1 (Baseline Model): Only one variable, "Understanding of AI" (Question 9), is used as an independent variable.

From the table above, we observe $B = 0.179$, $p = 0.019$, indicating a *statistically significant positive effect*.

Standardized Beta = 0.170, meaning this variable explains 17% of the variance.

Hence, the better someone understands AI tools, the more useful they consider it for HR.

Model 2: Adding the variable "Use of AI in personal life" (Question 10):

The table above shows that $B = 0.216$, $p = 0.003$, *indicating a significant effect*.

Beta = 0.249, meaning a strong positive effect.

In this model, the variable "Understanding AI" (Question 9) loses significance ($p = 0.620$).

Hence, using AI in daily life influences perceptions of its usefulness in HR management more than simply understanding AI.

Model 3: Adding the variable "Importance of AI in the Public Sector" (Question 11):

The table above shows that $B = 0.419$, $p < 0.001$, making it the *most essential variable*.

Beta = 0.449, indicating a strong positive effect.

In the third model, the variable "Use of AI in personal life" (Question 10) remains significant but decreases ($B = 0.073$, $p = 0.368$).

In the same model, the variable "Understanding AI" (Question 9) becomes negative ($B = -0.007$, $p = 0.925$), meaning it is no longer significant.

Hence, the perceived importance of AI in the Public Sector is the strongest factor influencing the perception of its usefulness in HR management.

Model 4: Adding the variable "Comfort with using AI tools at work" (Question 12):

From the table above, $B = 0.255$, $p = 0.002$, indicating a *significant effect*.

Beta = 0.276, suggesting a moderately strong effect.

In the 4th model, the variable "Importance of AI in the Public Sector" (Question 11) remains the strongest factor ($B = 0.308$, $p < 0.001$).

Hence, those who feel more comfortable using AI at work perceive it as more valuable in HR management.

Model 5: Adding the variable "Perception of AI’s future impact" (Question 13):

The table above shows that $B = 0.170$, $p = 0.034$, indicating a small but statistically significant effect.

Beta = 0.145, meaning a positive effect, but not very strong.

So, in the last model, the variable "Importance of AI in the Public Sector" (Question 11) still has *the highest predictive power*.

Hence, expectations about AI’s future impact have some influence, but they are smaller than other variables.

	in your work?									
5	(Constant)	1,167	,350		3,336	,001	,477	1,858		
	9. How well do you think you understand artificial intelligence (AI) technology?	-,054	,078	-,052	-,695	,488	-,209	,100	,170	-,051
	10. How often do you use artificial intelligence in your personal life?	,006	,070	,007	,087	,930	-,132	,145	,270	,006
	11. How important do you consider the use of Artificial Intelligence for your work in the public sector?	,282	,075	,303	3,786	<,001	,135	,429	,479	,269
	12. How comfortable would you feel if you had to use Artificial Intelligence tools in your work?	,216	,081	,234	2,662	,008	,056	,376	,451	,193
	13. To what extent do you believe AI can impact the functioning of the public sector in the future?	,170	,079	,145	2,140	,034	,013	,327	,328	,156

a. Dependent Variable: 19. How useful do you think AI could be in human resource management?

Table 35: SPSS Coefficients Table (Continued) for AI Perception Analysis

The quickest way to understand the results is to focus on the table's last model (5th model). Summarizing the results of the **hierarchical multiple regression**, we conclude that the most influential variable is Question 11, which assesses participants' consideration of the importance of AI for their work in the public sector. In Model 5, the standardized Beta coefficient for Question 11 is 0.303. The highest Beta value indicates that this variable has a significant impact on the perception of AI’s usefulness in HR.

The variable “The comfort level employees have in using AI tools at work” also plays a significant role. In Model 5, the Beta coefficient for Question 12 (Comfort in using AI tools at work) is 0.234. This is the second most influential variable, indicating that individuals who feel more comfortable using AI at work tend to perceive it as more valuable in HR.

On the other hand, the variable “use of AI in personal life” (Question 10) is initially important, but its influence diminishes as more variables are added. In Model 2, the variable “AI use in personal life” (Question 10) has Beta = 0.249 and p = 0.003, meaning it is statistically significant and strong. However, as additional variables are introduced (Models 3, 4, and 5), Beta decreases, and p becomes non-significant (in Model 5, Beta = 0.006, p = 0.930). Hence, “AI use in personal life” initially appears to have an effect, but when work-related comfort and AI importance in the Public Sector is considered, its impact disappears.

Meanwhile, understanding AI alone is insufficient to be considered helpful in HR. In Model 1, the variable "Understanding AI" (Question 9) has a beta coefficient of 0.170, p = 0.019,

indicating significance. However, as other variables are introduced (from Model 2 onward), Beta decreases, and in Model 5, it drops to -0.052 with $p = 0.488$. Hence, when other factors are considered, simply understanding AI no longer has an effect.

Finally, expectations about the variable AI's future impact have a small but statistically significant effect. In Model 5, the perception of how AI might impact Public Sector operations in the future (Question 13) has $\text{Beta} = 0.145$ and $p = 0.034$. This means it has a small but statistically significant influence on the perception of AI's usefulness in HR. Although it is not as significant as the importance of AI in the Public Sector ($\text{Beta} = 0.303$), it remains a substantial variable.

6. Conclusion

6.1 Summary of Findings

This study analyzed the perceptions of public sector employees regarding the use and effectiveness of AI tools in HR based on the responses of the Public Sector employees themselves. The above study was conducted using responses from a sample of 201 individuals. The results reveal that although most employees recognize the value and opportunities of artificial intelligence, concerns regarding impartiality, ethical use, and its potential impact on employment security still persist.

The data analysis indicates that employees' adoption of AI products is primarily influenced by their knowledge of technology, confidence in their skills, and organizational support. Furthermore, combining these technologies can significantly enhance staff performance, training, and recruitment if used deliberately.

Understanding AI acceptance requires linking theoretical models of technology acceptance with empirical data to identify the key factors influencing its adoption. In section 1.2.4, reference was made to the Technology Acceptance Models. The research findings confirm the importance of theoretical technology acceptance models, strengthening the connection between theory and practical application.

Initially, the need for training and skill development identified in our research is related to Perceived Ease of Use. Appropriately taught employees help lower learning obstacles and boost the adoption of AI. Moreover, the performance of AI tools influences the inclination to utilize them, so their efficacy and dependability are related to perceived usefulness.

Furthermore, suitable technology infrastructure is linked with enabling conditions. AI adoption will be more challenging if an organization lacks the necessary infrastructure. Additionally, support from management and supervisors is connected to social influence. When leaders in an organization promote the use of AI, the likelihood of its acceptance by employees increases.

Ultimately, the successful implementation of AI in organizations hinges on both technological advancements and organizational transformation. Dealing with worries about

job loss is connected to the need for a clear vision of AI so that workers can focus on its benefits instead of the risks. Similarly, the success of artificial intelligence depends on a company's professional culture and agility, as an open, creative culture is more inclined to embrace new technology.

Nevertheless, properly incorporating artificial intelligence, enhancing staff training, establishing a clear legislative framework, and conducting ongoing evaluations of its impact are necessary. Therefore, further research is recommended over time to determine the real impact of AI on Public Sector processes and improve AI adoption strategies.

6.2 Limitations of the Existing Dissertation

This study provides an insightful analysis of public workers' opinions on the use of AI tools and the success of AI technologies in HR. Hence, certain restrictions should be considered even if they offer great insights.

First, the study focused on a specific sample of Public Sector workers, which may limit the generalizability of the results. Future research may span a longer period and involve a more representative population. This survey included 201 Public Sector workers; responses were collected over 10 days.

Furthermore, the study was conducted mostly among Greek Public Sector workers, especially in Macedonia and Thrace. The results might not be equally relevant to other parts of Greece; hence, more studies should be done abroad using various administrative systems and technical developments.

Moreover, even while this study was grounded in quantitative analysis based on questionnaires, applying other methodological instruments (like mixed techniques; both quantitative and qualitative) would offer a more complete picture. Likewise, integrating qualitative techniques like interviews might provide a closer understanding of employees' attitudes and worries.

The rapid evolution of AI means that the results of this study might soon be obsolete. Thus, constant observation of changes and revision of the research are essential. In the next

research projects, Public Sector workers might assess the application of artificial intelligence in their regular working surroundings.

Finally, even if the study uses statistical techniques for data analysis, workers' impressions and judgments remain personal. External elements might affect answers, including organizational changes, political opinions, and personal experience.

6.3 Recommendations for Future Research

Future studies employing a bigger sample of Public Sector personnel should investigate how AI influences employment in the public sector. They should also examine how algorithms and automation affect employment stability and professional growth. In addition, deep research should thus look to what degree artificial intelligence is applied ethically, thereby guaranteeing fairness and openness in Public Sector recruitment, assessments, and promotions.

Further investigation might also examine staff adaptation to AI technologies and the quality of their training. Comparative analysis of public and commercial sector AI use could highlight areas for development and excellent practices. At last, it is crucial to find out how much artificial intelligence shapes company culture, teamwork, and professional contacts. Appropriate integration of artificial intelligence can help public services to be more stable and efficient, thereby increasing working conditions and general output.

6.4 Final Conclusion and Implications

This study generally supports the usefulness of artificial intelligence in HR and its probable contribution to improving Public Sector HR procedures. Still, the good integration of artificial intelligence needs ethical control, strategic change management, personnel training, and technological development. Understanding the real influence of artificial intelligence and guaranteeing its usage for the advantage of companies and staff depends on future studies and continuous assessment.

Only through a balanced and sustainable AI adoption model can AI serve be an empowerment tool rather than a threat to Public Sector employees. In a rapidly evolving technological landscape, public organizations that invest in employee training, organizational change management, and the development of ethical AI guidelines will be the ones to maximize AI’s benefits most effectively.

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Appendix A: “Research Questionnaire”

Η αντίληψη των υπαλλήλων του Δημόσιου Τομέα για τη χρήση και την αποτελεσματικότητα των εργαλείων τεχνητής νοημοσύνης στη Διαχείριση Ανθρώπινου Δυναμικού του Δημόσιου Τομέα. (Public Sector Employees' Perception of the Use and Effectiveness of Artificial Intelligence Tools in Public Sector Human Resources Management.)

Αγαπητέ/ή κύριε/κυρία,

Ονομάζομαι Γεωργουσίδου Κυριακίδα Νικολέτα και είμαι μεταπτυχιακή φοιτήτρια στο Ελληνικό Ανοικτό Πανεπιστήμιο. Η παρούσα έρευνα αποτελεί μέρος της διπλωματικής μου εργασίας. Η μελέτη έχει ως στόχο να κατανοήσει πώς οι υπάλληλοι στον δημόσιο τομέα αντιλαμβάνονται τη χρήση και την αποτελεσματικότητα των εργαλείων τεχνητής νοημοσύνης (AI) στη διαχείριση ανθρώπινων πόρων (HRM).

Η συμμετοχή σας είναι εθελοντική και εμπιστευτική, και μπορείτε να αποσυρθείτε από την έρευνα οποιαδήποτε στιγμή. Η συμβολή σας θα βοηθήσει να αποκτηθεί μια βαθύτερη κατανόηση για το πώς γίνονται αντιληπτά και πως αξιοποιούνται τα εργαλεία τεχνητής νοημοσύνης στη διαχείριση ανθρώπινου δυναμικού στον δημόσιο τομέα.

Η συμπλήρωση του ερωτηματολογίου θα διαρκέσει περίπου 5-7 λεπτά. Κάνοντας κλικ στο “Επόμενο” παρακάτω, δηλώνετε τη συγκατάθεσή σας να συμμετάσχετε στη μελέτη. Αν δεν επιθυμείτε να συμμετάσχετε, παρακαλώ μην προχωρήσετε.

Σας ευχαριστώ για τη συμμετοχή σας.

Γεωργουσίδου Κυριακίδα Νικολέτα

MBA Student

Ελληνικό Ανοικτό Πανεπιστήμιο

email: std154488@ac.eap.gr

** Υποδεικνύει απαιτούμενη ερώτηση*

1. 1. Ηλικιακή Ομάδα (Age Group) *

Να επισημαίνεται μόνο μία έλλειψη.

- ☐ 18-25
- ☐ 26-35
- ☐ 36-45
- ☐ 46-55
- ☐ 56 and above

2. 2. Φύλο (Gender) *

Να επισημαίνεται μόνο μία έλλειψη.

- ☐ Άνδρας / Male
- ☐ Γυναίκα / Female
- ☐ Άλλο: _____

3. 3. Μορφωτικό επίπεδο (Level of education) *

Να επισημαίνεται μόνο μία έλλειψη.

- ☐ Απολυτήριο Γυμνασίου / Λυκείου (Primary school/Secondary school)
- ☐ Τίτλος ΑΕΙ / ΤΕΙ (Bachelor’s degree)
- ☐ Μεταπτυχιακός τίτλος (Master’s degree)
- ☐ Διδακτορικός τίτλος (PhD)

4. 4. Τίτλος Πτυχίου (Degree Title) *

5. **5. Χρόνια εργασιακής εμπειρίας στον Δημόσιο φορέα στον οποίο εργάζεστε ***
(Years of professional experience in the public institution where you work)

Να επισημαίνεται μόνο μία έλλειψη.

- ☐ Λιγότερα από 2
- ☐ 2–5 years
- ☐ 6–10 years
- ☐ 11–20 years
- ☐ Περισσότερα από 20

6. **6. Τρέχουσα Θέση/Κατάταξη (Current Job Title/Rank) ***

Να επισημαίνεται μόνο μία έλλειψη.

- ☐ Εισαγωγικό επίπεδο (Entry-level Civil Servant)
- ☐ Υπάλληλος (Employee)
- ☐ Προϊστάμενος Τμήματος (Head of Department)
- ☐ Προϊστάμενος Διεύθυνσης/Διευθυντής (Director/Head of Division)
- ☐ Άλλο (other)

7. **7. Σε ποιο φορέα του δημόσιου τομέα εργάζεστε (σήμερα); (In which public sector organization do you work (today)?)** *

Να επισημαίνεται μόνο μία έλλειψη.

- ☐ Υγεία (π.χ. νοσοκομεία, Κέντρα Υγείας, ΕΚΑΒ)/Health (e.g., hospitals, health centers, National Emergency Aid Center)
- ☐ Εκπαίδευση (π.χ. σχολεία, πανεπιστήμια, ΙΕΚ) / Education (e.g., schools, universities, vocational training institutes)
- ☐ Δημόσια Διοίκηση & Αυτοδιοίκηση (π.χ. υπουργεία, δήμοι, περιφέρειες)/Public Administration & Local Government (e.g., ministries, municipalities, regions)
- ☐ Δικαιοσύνη & Δημόσια Τάξη (π.χ. δικαστήρια, αστυνομία, πυροσβεστική, σωφρονιστικά ιδρύματα)/Justice & Public Order (e.g., courts, police, fire department, correctional facilities)
- ☐ ΑΑΔΕ (π.χ. εφορίες, τελωνεία, Γενική Διεύθυνση Φορολογικής Διοίκησης)/IARP (tax offices, customs, General Directorate of Tax Administration)
- ☐ Κοινωνική Ασφάλιση & Πρόνοια (π.χ. ΕΦΚΑ, ΔΥΠΑ/ΟΑΕΔ, δομές κοινωνικής πρόνοιας)/Social Security & Welfare
- ☐ Δημόσιες Επιχειρήσεις & Οργανισμοί (π.χ. ΔΕΗ, ΕΥΔΑΠ, ΟΑΣΑ)/Public Enterprises & Organizations
- ☐ Άλλο: _____

Ενότητα Β: Εξοικείωση με την Τεχνητή Νοημοσύνη (AI) / Familiarity with Artificial Intelligence (AI)

8. **8. Γνωρίζεται τι είναι η Τεχνητή Νοημοσύνη (AI); / Are you familiar with Artificial Intelligence (AI)?** *

Να επισημαίνεται μόνο μία έλλειψη.

- ☐ Ναι/Yes
- ☐ Όχι/No Παράβλεψη και μετάβαση στην ερώτηση 26

9. **9. Πόσο καλά πιστεύετε ότι κατανοείτε την τεχνολογία της τεχνητής νοημοσύνης; / How well do you think you understand artificial intelligence (AI) technology?** *

Να επισημαίνεται μόνο μία έλλειψη.

1 2 3 4 5

Καθ ☐ ☐ ☐ ☐ ☐ Πολύ καλά

10. **10. Πόσο συχνά χρησιμοποιείται την τεχνητή νοημοσύνη στην προσωπική σας ζωή; / "How often do you use artificial intelligence in your personal life?"** *

Να επισημαίνεται μόνο μία έλλειψη.

1 2 3 4 5

Καθ ☐ ☐ ☐ ☐ ☐ Πάρα πολύ

11. **11. Πόσο σημαντική θεωρείτε τη χρήση της Τεχνητής Νοημοσύνης για τη δουλειά σας στον δημόσιο τομέα; / How important do you consider the use of Artificial Intelligence for your work in the public sector?"** *

Να επισημαίνεται μόνο μία έλλειψη.

1 2 3 4 5

Καθ ☐ ☐ ☐ ☐ ☐ Πάρα πολύ

12. **12. Πόσο άνετα θα αισθανόσασταν αν έπρεπε να χρησιμοποιήσετε εργαλεία Τεχνητής Νοημοσύνης στην εργασία σας; / How comfortable would you feel if you had to use Artificial Intelligence tools in your work?"** *

Να επισημαίνεται μόνο μία έλλειψη.

1 2 3 4 5

Καθ ☐ ☐ ☐ ☐ ☐ Πάρα πολύ

13. 13. Σε ποιο βαθμό πιστεύετε ότι η AI μπορεί να επηρεάσει τη λειτουργία του δημόσιου τομέα στο μέλλον; / "To what extent do you believe AI can impact the functioning of the public sector in the future?" *

Να επισημαίνεται μόνο μία έλλειψη.

1 2 3 4 5

Καθ ☐ ☐ ☐ ☐ ☐ Πάρα πολύ

Ενότητα Γ: Χρήση εργαλείων τεχνητής νοημοσύνης στη διαχείριση ανθρώπινου δυναμικού / Use of artificial intelligence tools in human resource management

14. 14. Πόσο αποτελεσματική θεωρείτε ότι θα ήταν η χρήση εργαλείων AI στις προσλήψεις προσωπικού στο Δημόσιο τομέα; / How effective do you consider the use of AI tools in public sector recruitment? *

Να επισημαίνεται μόνο μία έλλειψη.

1 2 3 4 5

Καθ ☐ ☐ ☐ ☐ ☐ Πάρα πολύ

15. 15. Πόσο αντικειμενικά θεωρείτε ότι θα μπορούσαν να είναι τα αποτελέσματα των εργαλείων AI κατά τη διαδικασία αξιολόγησης του προσωπικού; / How objective do you think the results of AI tools could be in the employee evaluation process? *

Να επισημαίνεται μόνο μία έλλειψη.

1 2 3 4 5

Καθ ☐ ☐ ☐ ☐ ☐ Πάρα πολύ

16. **16. Πόσο πιστεύετε θα συνέβαλλε η χρήση εργαλείων AI στη βελτίωση της εκπαίδευσης και μετεκπαίδευσης του προσωπικού; / To what extent do you believe the use of AI tools would contribute to improving employee training and retraining?** *

Να επισημαίνεται μόνο μία έλλειψη.

1 2 3 4 5

Καθ ☐ ☐ ☐ ☐ ☐ Πάρα πολύ

17. **17. Πόσο σημαντική θεωρείτε ότι θα μπορούσε να είναι η εφαρμογή εργαλείων AI για τη διαχείριση και τη βελτίωση της εργασιακής απόδοσης; / How important do you think the implementation of AI tools could be for managing and improving work performance?** *

Να επισημαίνεται μόνο μία έλλειψη.

1 2 3 4 5

Καθ ☐ ☐ ☐ ☐ ☐ Πάρα πολύ

18. **18. Πόσο πιστεύετε ότι η χρήση εργαλείων AI στις προσλήψεις προσωπικού θα μπορούσε να μειώσει τον χρόνο και το κόστος της διαδικασίας αυτής; / How much do you believe that the use of AI tools in recruitment could reduce the time and cost of this process?** *

Να επισημαίνεται μόνο μία έλλειψη.

1 2 3 4 5

Καθ ☐ ☐ ☐ ☐ ☐ Πάρα πολύ

19. 19. Πόσο χρήσιμη πιστεύετε ότι θα μπορούσε να είναι η AI στη διαχείριση ανθρώπινων πόρων; / How useful do you think AI could be in human resource management? *

Να επισημαίνεται μόνο μία έλλειψη.

1 2 3 4 5

Καθ ☐ ☐ ☐ ☐ ☐ Πάρα πολύ

20. 20. Πόσο δίκαιες και αντικειμενικές αποφάσεις θα μπορούσε να εξασφαλίσει η χρήση εργαλείων AI σε HR διαδικασίες, όπως προσλήψεις ή αξιολογήσεις προσωπικού; / How fair and objective decisions could the use of AI tools ensure in HR processes, such as hiring or employee evaluations? *

Να επισημαίνεται μόνο μία έλλειψη.

1 2 3 4 5

Καθ ☐ ☐ ☐ ☐ ☐ Πάρα πολύ

21. 21. Πόσο θετικοί θα ήσασταν στη χρήση εργαλείων AI για HR στο μέλλον; / How positive would you be about using AI tools for HR in the future? *

Να επισημαίνεται μόνο μία έλλειψη.

1 2 3 4 5

Καθ ☐ ☐ ☐ ☐ ☐ Πάρα πολύ

22. 22. Ποιοι θεωρείτε ότι θα είναι οι βασικότεροι παράγοντες που θα επηρεάσουν την αποδοχή της AI από τους υπαλλήλους στον δημόσιο τομέα; (οι απαντήσεις μπορεί να είναι περισσότερες από μία) / **What do you consider to be the key factors that will affect the acceptance of AI by employees in the public sector?** (There may be more than one answer.) *

Επιλέξτε όλα όσα ισχύουν.

- ☐ Εκπαίδευση και κατάρτιση του προσωπικού / Training and upskilling of staff
- ☐ Επαρκής τεχνολογική υποδομή / Adequate technological infrastructure
- ☐ Διαφάνεια και δικαιοσύνη στις διαδικασίες που χρησιμοποιούν AI / Transparency and fairness in AI-driven processes
- ☐ Προστασία προσωπικών δεδομένων / Protection of personal data
- ☐ Υποστήριξη από τη διοίκηση και τους προϊσταμένους / Support from management and supervisors
- ☐ Σαφής επικοινωνία σχετικά με τα οφέλη της AI / Clear communication about the benefits of AI
- ☐ Αποδοτικότητα και αξιοπιστία των εργαλείων AI / Efficiency and reliability of AI tools
- ☐ Αντιμετώπιση ανησυχιών για απώλεια θέσεων εργασίας / Addressing concerns about job loss
- ☐ Ενσωμάτωση της AI στις υπάρχουσες διαδικασίες με τρόπο φιλικό προς τον χρήστη / Integration of AI into existing processes in a user-friendly manner
- ☐ Επαγγελματική κουλτούρα και προσαρμοστικότητα του οργανισμού / Professional culture and adaptability of the organization
- ☐ Άλλο: _____

23. **23. Ποια είναι η μεγαλύτερη ανησυχία σας σχετικά με τη χρήση AI στο HR; (οι απαντήσεις μπορεί να είναι περισσότερες από μία) / What is your biggest concern regarding the use of AI in HR? (There may be more than one answer.)**

Επιλέξτε όλα όσα ισχύουν.

- ☐ Έλλειψη διαφάνειας στις διαδικασίες / Lack of transparency in processes
- ☐ Πιθανότητα αλγοριθμικών προκαταλήψεων (bias) / Potential for algorithmic biases
- ☐ Μειωμένος ανθρώπινος έλεγχος στις αποφάσεις / Reduced human oversight in decision-making
- ☐ Ανασφάλεια για την προστασία προσωπικών δεδομένων / Concerns about personal data protection
- ☐ Απώλεια θέσεων εργασίας λόγω αυτοματοποίησης / Job loss due to automation
- ☐ Υψηλό κόστος υλοποίησης και συντήρησης των εργαλείων AI / High implementation and maintenance costs of AI tools
- ☐ Περιορισμένη εξοικείωση και εκπαίδευση του προσωπικού / Limited staff familiarity and training
- ☐ Δυσκολίες ενσωμάτωσης της AI στις υπάρχουσες διαδικασίες / Difficulties in integrating AI into existing processes
- ☐ Αντίσταση στην αλλαγή από τους εργαζομένους / Resistance to change from employees
- ☐ Αβεβαιότητα για την αξιοπιστία των αποτελεσμάτων της AI / Uncertainty about the reliability of AI outcomes
- ☐ Έλλειψη επαγγελματικής κουλτούρας στον οργανισμό / Lack of professional culture within the organization
- ☐ Άλλο: _____

24. **24. What do you believe are the most significant risks of using AI tools in your organization? (Multiple answers are possible)** *

Επιλέξτε όλα όσα ισχύουν.

- ☐ Έλλειψη διαφάνειας στις διαδικασίες / Lack of transparency in processes
- ☐ Πιθανότητα αλγοριθμικών προκαταλήψεων (bias) / Potential for algorithmic biases
- ☐ Μειωμένος ανθρώπινος έλεγχος στις αποφάσεις / Reduced human oversight in decision-making
- ☐ Ανασφάλεια για την προστασία προσωπικών δεδομένων / Concerns about personal data protection
- ☐ Απώλεια θέσεων εργασίας λόγω αυτοματοποίησης / Job loss due to automation
- ☐ Υψηλό κόστος υλοποίησης και συντήρησης των εργαλείων AI / High implementation and maintenance costs of AI tools
- ☐ Περιορισμένη εξοικείωση και εκπαίδευση του προσωπικού / Limited staff familiarity and training
- ☐ Δυσκολίες ενσωμάτωσης της AI στις υπάρχουσες διαδικασίες / Difficulties in integrating AI into existing processes
- ☐ Αντίσταση στην αλλαγή από τους εργαζομένους / Resistance to change from employees
- ☐ Αβεβαιότητα για την αξιοπιστία των αποτελεσμάτων της AI / Uncertainty about the reliability of AI outcomes
- ☐ Έλλειψη επαγγελματικής κουλτούρας στον οργανισμό / Lack of professional culture within the organization
- ☐ Άλλο: _____

25. **25. Υπάρχει κάτι άλλο που θα θέλατε να μοιραστείτε σχετικά με τη χρήση της AI στο HR; / Is there anything else you would like to share regarding the use of AI in HR?**

Παράβλεψη και μετάβαση στην ενότητα 8 (Σας ευχαριστούμε θερμά για τη συμμετοχή και τη συμβολή σας στην πτυχιακή μας εργασία! / Thank you sincerely for your participation and contribution to our thesis!)

Ενότητα Β: Εξοικείωση με την Τεχνητή Νοημοσύνη (AI) / Familiarity with Artificial Intelligence (AI)

26. Πόσο θετικοί είστε στο να μάθετε περισσότερα για την τεχνητή νοημοσύνη *
(AI) / How positive are you about learning more about artificial intelligence
(AI)?

Na επισημαίνεται μόνο μία έλλειψη.

1	2	3	4	5		
<hr/>						
Καθ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Πάρα πολύ

Σας ευχαριστούμε θερμά για τη συμμετοχή και τη συμβολή σας στην πτυχιακή μας εργασία! / Thank you sincerely for your participation and contribution to our thesis!

Αυτό το περιεχόμενο δεν έχει δημιουργηθεί και δεν έχει εγκριθεί από την Google.

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Author’s Statement:

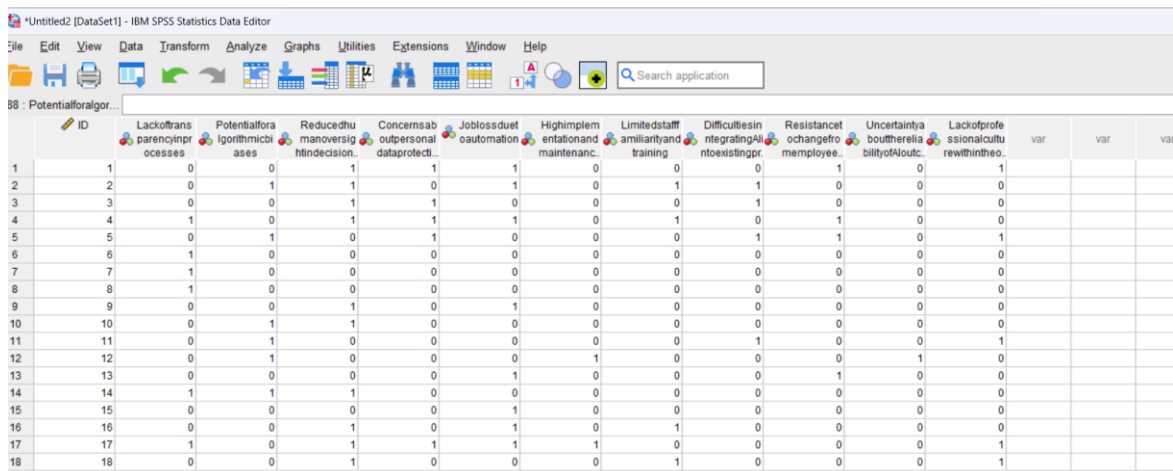
I hereby expressly declare that, according to article 8 of Law 1559/1986, this dissertation is solely the product of my work, does not infringe any intellectual property, personality and personal data rights of third parties, does not contain works/contributions from third parties for which the permission of the authors/beneficiaries is required, is not the product of partial or total plagiarism, and that the sources used are limited to the literature references alone and meet the rules of scientific citations.

Appendix B: “SPSS”

1. Step-by-Step Analysis of Dichotomous Multiple Response Data in SPSS

To derive statistical results for questions **Q22, Q23, and Q24**, we had to separate the responses so that each cell contained 1 or 0. The 1 represents the variable's selection, while the 0 represents its non-selection.

As a result, we obtain a table like the one below:



ID	Lack of transparency in processes	Potential for algorithmic bias	Reduced human oversight in decision-making	Concerns about personal data protection	Job loss due to automation	High implementation and maintenance costs	Limited staff familiarity and training	Difficulties in integrating AI into existing processes	Resistance to change from employees	Uncertainty about the reliability of AI outputs	Lack of professional culture within the organization	var	var	var
1	1	0	0	1	1	1	0	0	1	0	1			
2	2	0	1	1	0	1	0	1	0	0	0			
3	3	0	0	1	1	0	0	0	1	0	0			
4	4	1	0	1	1	1	0	1	0	1	0			
5	5	0	1	0	1	0	0	0	1	0	1			
6	6	1	0	0	0	0	0	0	0	0	0			
7	7	1	0	0	0	0	0	0	0	0	0			
8	8	1	0	0	0	0	0	0	0	0	0			
9	9	0	0	1	0	1	0	0	0	0	0			
10	10	0	1	1	0	0	0	0	0	0	0			
11	11	0	1	0	0	0	0	1	0	0	1			
12	12	0	1	0	0	0	1	0	0	0	1			
13	13	0	0	0	0	1	0	0	0	1	0			
14	14	1	1	1	0	0	0	0	0	0	0			
15	15	0	0	0	0	1	0	0	0	0	0			
16	16	0	0	1	0	1	0	1	0	0	0			
17	17	1	0	1	1	1	1	0	0	0	0			
18	18	0	0	1	0	0	0	1	0	0	0			

Table 36: SPSS Data View - Concerns Regarding AI Use in HR

Then, step by step, we create a **frequency table** using **Multiple Response Sets**.

First, we go to the **Data View** in **SPSS** and ensure that the variables are **binary (0/1)**, meaning:

- **1** = The response has been selected
- **0** = The response has not been selected

Next, we navigate to the menu:

Analyze → Multiple Response → Define Sets

We select the variables that represent concerns about the use of AI. In the **"Dichotomies"** option, we set the **"Counted Value"** to **1**. We assign a name to the **Multiple Response Set** (here, **\$Concerns_AI**). Then, we click **"Add"** and **"Close"**.

In the next step, to create a **Frequency Table**, we go to the menu:

Analyze → Multiple Response → Frequencies

We select the **Multiple Response Set** we created (here, **\$Concerns_AI**) and click **"OK."**

The resulting table will include:

- The **name** of each variable (AI usage concern factors).
- The **number of responses (N)**.
- The **percentage** of each response is relative to the total responses.
- The **percentage of cases** that selected each response.
- The **total response percentage may exceed 100%** since participants could select multiple answers.

2. Methodological Approach for Conducting Pearson Correlation in SPSS

To determine the correlation between the two variables, we will run the corresponding option in **SPSS**. First, we will import the data from the Google Forms responses into SPSS via Excel. We will use a correlation coefficient, a numerical indicator showing the strength and direction of the relationship between two variables. Then, we will select **Analyze → Correlate → Bivariate**.

Hence, we enter the variables we want to test, select **Pearson** as the **Correlation Coefficient**, choose **two-tailed** as the **significance test**, select **flag significant correlations**, and then click **OK**.

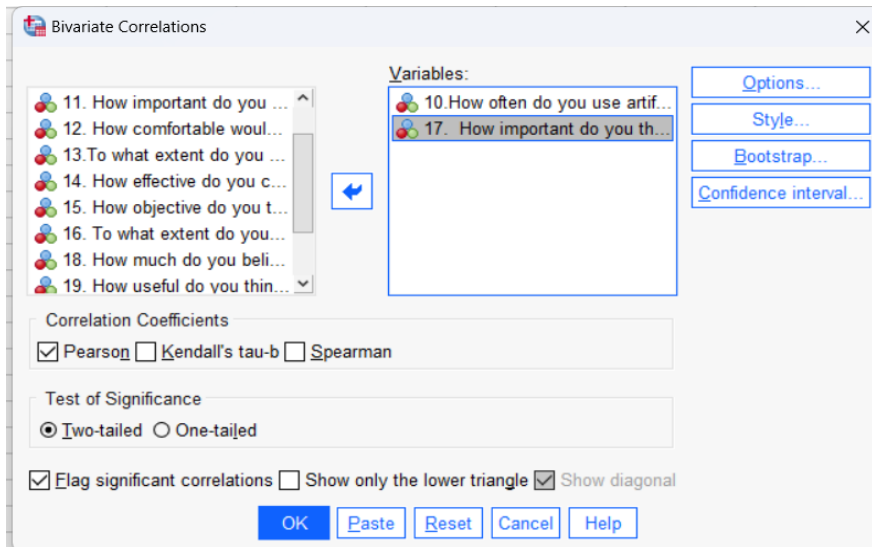


Figure 30: SPSS Bivariate Correlations Setup

3. How to Convert the Age Category from Text to a Number and Perform Regression Analysis in SPSS: Selecting Linear Regression

This will be done by selecting **Transform** and then **Recode into Different Variables**. We will assign a **new name** for the variable (here, we named it **Age_Numeric**) and specify that each group should be replaced by a number, as shown in the following image.

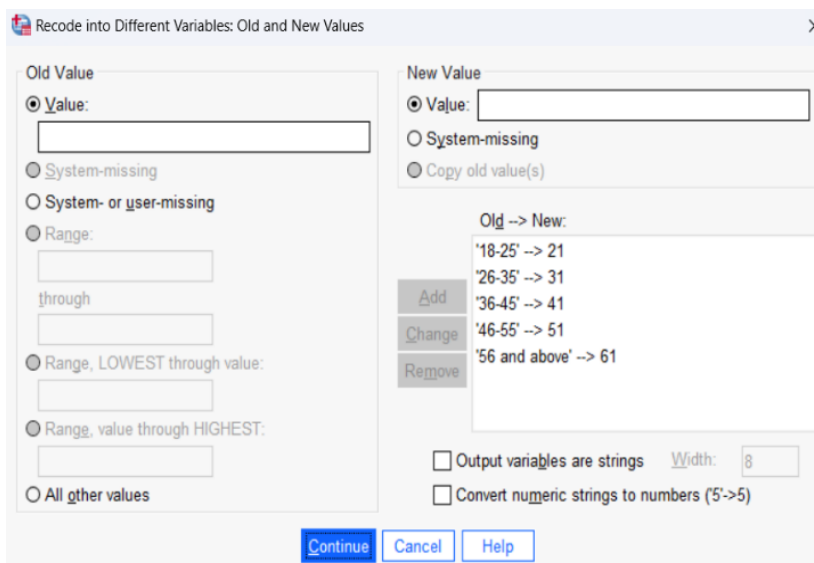
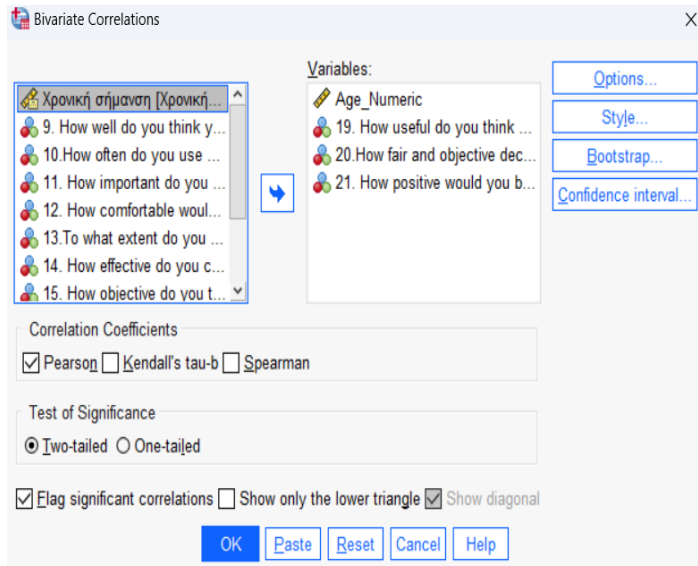


Figure 31: SPSS Recode Window for Age Grouping

Then, we will run the corresponding option in SPSS to determine the correlation between the two variables. First, we will import the data from the Google Forms responses into SPSS via Excel.

We will then select **Analyze → Correlate → Bivariate**.



Like the previous case, we enter the variables we want to test, select **Pearson** as the **Correlation Coefficient**, choose **two-tailed** as the **significance test**, select **flag significant correlations**, and then click **OK**.

Figure 32: SPSS Bivariate Correlations Window for Age and AI Perceptions

Initially, in SPSS, select the **Analyze** menu, then choose **Regression**, and select **Linear**. In the open window, place **question 19** in the **dependent variable** field. Then, place **questions 9, 10, 11, 12, and 13** in the **independent variable** field. Select one variable at a time and click **Next** to add the following variable.

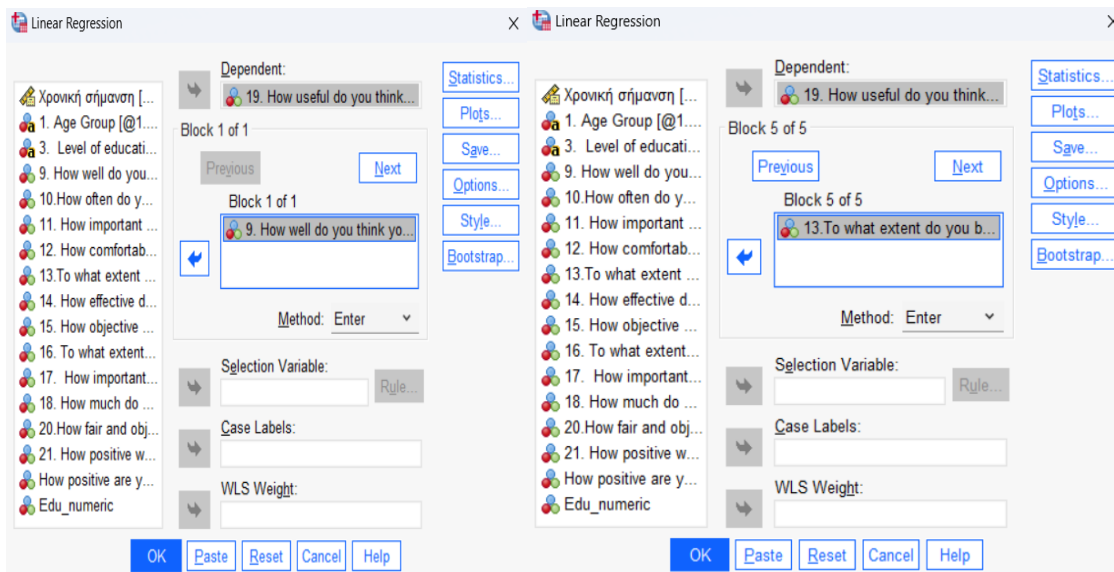
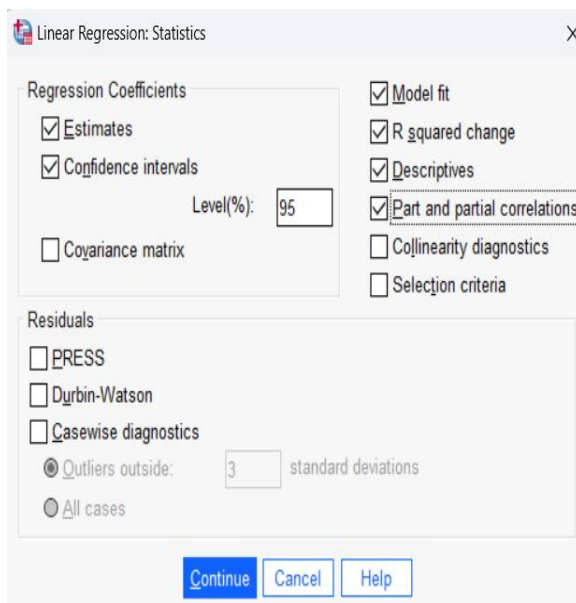


Figure 33: SPSS Linear Regression Window for AI Usefulness in HRM

Table 34: SPSS Model Summary for AI Perception Analysis



Then we choose “statistics...”

We select the Confidence intervals, R-squared change, Descriptive, and Part and partial Correlations checkboxes. Then, we click Continue, and in the previous dialog box, we select OK.

Figure 35: SPSS Linear Regression Statistics Options Window