

EMPLOYEES PERCEPTION OF THE IMPORTANCE OF USING ARTIFICIAL INTELLIGENCE (AI) IN THE WORK PROCESS

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Abstract

This paper attempts to provide a comprehensive and pragmatic understanding of AI implementation, analyzing its advantages and disadvantages. In addition, the study attempts to identify potential barriers to integrating AI into automated organizational decision-making. The study employs an exploratory research approach through interviews conducted with 26 employees in various positions within the organization, both in the public and private sectors, to capture diverse perspectives within the organization. The analysis identified the prominent effects of AI adoption in the work process, namely data security and privacy, job insecurity, information overload, as well as barriers to the adoption of automated decision-making, which include social interaction, regulations, lack of trust and transparency, dynamic business environments, loss of power and control as well as ethical considerations. This research broadly examines the interactions between technology and humans, offering recommendations for the successful adoption and use of AI in the work process.

Keywords: Artificial Intelligence, human resources, work process, technology, efficiency.

JEL Classification: M15, O33, J24

1. Introduction

The rapid advances in artificial intelligence technology have increasingly impacted different aspects of life, including how general work tasks are approached and executed. Artificial intelligence is no longer a futuristic concept but a business imperative, with organizations looking to harness its potential to increase efficiency, productivity, and decision-making.

Artificial intelligence still lacks a single, universally accepted definition, but Weinert et al. (2022) note that it is a field of study that encompasses the development of systems and machines capable of performing tasks that typically require human intelligence, such as learning, problem-solving, decision-making, perception, and language understanding.. More specifically, AI aims to create computer systems capable of adapting to new information, learning from experience, and making independent decisions, just like humans.

An essential and hard-to-opt aspect of AI in the work process is its ability to improve decision-making. AI-powered systems can analyze large amounts of data and identify patterns that surpass human cognitive abilities, enabling organizations to make more accurate decisions (Kshetri, 2021). This has particular implications for core competencies and business processes, such as knowledge management, where AI can enhance human capabilities and generate improved outcomes.

Rapid advances in artificial intelligence have brought both opportunities and challenges for employees. While AI can improve productivity, efficiency, and accuracy, its implementation has also created a source of stress and anxiety for many employees (Lane et al., 2023).

One of the main concerns about integrating AI in the workplace is the fear of employee replacement. As AI-based systems progress, there is a growing perception that they can replace human employees, particularly in repetitive or rule-based tasks (2023 Work in America Survey: Artificial Intelligence, Monitoring Technology and Psychological Wellbeing, 2023). The speed at which this is developing has sparked growing concern about the potential impact on the labor market. Numerous studies have found that many jobs in various industries are at risk of being automated or replaced by AI-based technologies (Yang, 2020). These issues may lead to increased stress and insecurity among employees, as they face the uncertainty of job security and the potential need to develop new skills to remain competitive in the labor market (2023 Work in America Survey: Artificial intelligence, monitoring technology and psychological well-being, 2023) (Langer & Landers, 2021).

Another critical challenge is the ethical and moral implications of implementing AI, which can create significant stress among employees (Khan et al., 2021).

Employee perceptions of artificial intelligence as a threat can significantly impact organizations. Research suggests this perceived threat can lead to inflexibility in implementing AI technologies (Li, 2023). This paradox stems from the dual nature of employee attitudes towards AI - some may exhibit positive attitudes if they perceive benefits from using the technology. In contrast, others may harbor negative attitudes due to fears of job change or loss of control (Lichtenthaler, 2019). Studies have shown that when employees perceive artificial intelligence as a threat, they may become resistant to adopting and integrating it into the workplace (Lane et al., 2023).

Prioritizing employee well-being is essential in the workplace because numerous studies have highlighted the adverse effects of stressful working conditions on various aspects of employee performance, including productivity, job satisfaction, and overall well-being (Ajayi, 2018) (Kamaruddin, 2017).

2. Methodology and objectives of the study

This study aims to identify the influence of AI adoption on work processes, focusing on both the positive and prominent negative aspects of adoption. In addition, it also attempts to identify possible barriers to the implementation of automated decision-making.

The study investigates how employees perceive the integration of AI in their organizations, building on previous research conducted by Malik N., Tripathi S.N., Kar A.K., Gupta S., NEOMA Business School, Reims, France on "The Impact of Artificial Intelligence on Employees Working in Industry 4.0" and Booyse D., Scheepers C.B. on "Barriers to the adoption of automated processes in organizational decision making using artificial intelligence", aiming further to explore the implications of AI adoption on employee experiences and to identify possible barriers to the implementation of automated processes in organizations.

In order to gain a comprehensive understanding of the impact of AI on the labor process, the study deliberately included a diverse group of respondents. This group includes both management and line managers from different departments, providing a broader view of the influence that AI can have.

Only respondents who are familiar with the concept of artificial intelligence and its implications for the work process were selected for the study.

The objectives of the qualitative study were multiple and complex, aiming both to gain a deep understanding of respondents' perceptions of AI technologies and to identify best practices and challenges:

- Exploring how AI helps or hinders workflow both within the organization and on work tasks performed by the respondent;
- Identifying the feelings users experience as a result of using AI in their work routines;

- Identifying and examining potential barriers to adopting AI in the work process.

An interview guide structured in three distinct parts was used for data collection.

The first part includes data about respondents and the organization in which they are employed.

The qualitative study sample includes 26 respondents from five organizations with different fields of activity, 13 public and 13 private respondents. Among them, we have 7 respondents holding managerial positions with higher education, 1 holding managerial positions with secondary education, 16 holding executive positions with higher education, and 2 holding executive positions with secondary education. Respondents were selected from the following departments: Finance and accounting, Human Resources, Purchasing, Sales, Marketing, Logistics, Production, and Infrastructure. The respondents' seniority in the organization ranged from 1 year to 20 years.

The second part addresses the respondents' perspective on how AI could influence their daily tasks and overall working time. Although numerous studies show that AI has enabled organizations to improve their existing performance and perform their daily functions efficiently (Tewari & Pant, 2020), the present analysis revealed that seven of the respondents believe that AI cannot help them in their daily work tasks and that the function they are performing is difficult to digitize.

The third part of the research utilized an interview guide structured with 14 open-ended questions on different topics related to approaching AI in the labor process. This approach aimed to delve into both the positive and negative aspects of integrating artificial intelligence into work processes while revealing potential obstacles to the implementation of automated decision-making in organizations.

The interview was analyzed to identify common themes and patterns in the respondents' answers, and tools such as Wordclouds were used to visualize keywords extracted from their answers.

3. Analysis of the results of the qualitative study

The first open-ended question of the interview seeks a general opinion on the use of AI in the organization's workflow.

The most used word was "work", mentioned eleven times. Eighteen respondents considered AI a valuable tool in their work process, reporting that it would help them in their daily tasks and facilitate overall organizational efficiency.

Figure no.1 Keyword cloud for the answers to the first question, processed by the online tool Wordclouds



Source:<https://www.wordclouds.com/>

The fourth open-ended question focuses on respondents' subjective experiences and how AI makes employees feel. It focuses on their emotional and psychological well-being.

The most used word was "employees", mentioned eleven times. Fifteen respondents believe that adopting AI in an organization can bring positive experiences. In addition, some respondents believe that AI can alleviate the time pressures associated with high workloads and reduce the stress caused by this.

Figure no.4 Keyword cloud for the answers to the fourth question, processed by the online tool Wordclouds



Source:<https://www.wordclouds.com/>

The fifth open question concerns the negative impact on work processes, i.e., whether adopting AI creates inefficiencies, complexities, or obstacles in getting work done.

The most frequently used word was "work", mentioned 22 times. Twenty-four respondents expressed concern that adopting AI could negatively impact work processes, highlighting the importance of carefully considering these potential drawbacks during adoption to avoid disrupting the overall functionality of the organization.

Figure no.5 Keyword cloud for the answers to the fifth question, processed by the online tool Wordclouds



Source:<https://www.wordclouds.com/>

The sixth open-ended question focuses on respondents' subjective experience of whether adopting AI at work makes them feel stressed, undervalued, fearful, or dissatisfied with their work.

Figure no.8 Keyword cloud for the answers to the eighth question, processed by the online tool Wordclouds



Source:<https://www.wordclouds.com/>

The ninth open question explores the complex relationship between social connectedness, ethical considerations, and AI adoption in the workplace. It examines whether employees' lack of social connectedness influences their willingness to embrace AI tools. In addition, it investigates whether workplace regulations act as a barrier to adopting AI in the labor process.

The most used word was "Interaction," mentioned seventeen times. Twenty-five of the respondents highlighted a notable barrier to AI adoption: a lack of social interaction. They emphasized that a lack of social interaction coupled with potentially restrictive workplace regulations could be a barrier to AI adoption. Respondents emphasized the importance of strong interpersonal relationships for a successful workplace, the lack of which would have negative consequences on organizational performance.

Figure no.9 Keyword cloud for the answers to the ninth question, processed by the online tool Wordclouds



Source:<https://www.wordclouds.com/>

The tenth open question asks how the dynamics of internal and external forces influence the adoption of AI in the organization.

The most used word was "dynamic," mentioned seventeen times. Citing AI's limitations in nuanced situations requiring creativity, foresight, and intuition, twenty-four respondents see rapid

Figure no.10 Keyword cloud of the answers to the tenth question, processed by the online tool Wordclouds

Source:<https://www.wordclouds.com/>

The adverb "No" was the most used word, mentioned twenty-nine times. Twenty-four of the respondents believe there is a lack of transparency in the decision-making process and do not trust decisions made by AI. Respondents emphasize that increased transparency in AI-driven decision-making processes can boost their trust, whereas when AI operates opaquely, it can generate suspicion and distrust.

Source:<https://www.wordclouds.com/>

The most used word was "discrimination", mentioned sixteen times. Twenty-three respondents strongly believe that AI policies should prioritize non-discrimination and ethical considerations. They believe implementing such policies is essential for the responsible use of AI technologies.

Figure no.14 Keyword cloud for the answers to the fourteenth question, processed by the online tool Wordclouds



Source:<https://www.wordclouds.com/>

4. Conclusions

The findings of this study provide valuable human resource insights for organizations introducing AI into the work process. Recognizing the benefits offered by artificial intelligence in the workplace is important, but equally important is addressing the potential barriers and consequences that their implementation could bring.

Prioritizing employee well-being and carefully managing the implementation process are essential steps in alleviating the stress and rigidity associated with adopting AI in the workplace. While respondents emphasize AI's benefits to the work process, both on the work itself and their emotional well-being, they also raise the issue of potential negative consequences on work processes and their emotional state. These issues suggest that organizations should carefully consider the potential consequences of implementing AI in their work processes and try to prevent and mitigate any adverse effects of implementing these technologies.

Among the negative aspects listed by respondents are the loss of jobs through the automation of repetitive tasks, the risks that can arise about data privacy and security, information overload, extra work by eliminating routine tasks, not adapting to the latest digital trends, discrimination, lack of transparency in decision-making and lack of social interaction, which can lead to stress, fear, exhaustion, and even depression. Job loss through AI-based automation can pose significant economic risks such as loss of income, the need for retraining, and career transition.

Survey respondents also emphasized that contemporary AI applications are developed primarily to address particular tasks and that in dynamic environments, they are irrelevant, and the limitations of these technologies make them unsuitable for decision-making. They also added the lack of social interaction as a barrier to the adoption of AI in the work process, which may have consequences not only on adoption but also on organizational performance; they also highlight the need for regulations and policies on AI to mitigate potential ethical concerns that may arise both in the implementation phase and in the ongoing operation of these technologies.

The successful integration of artificial intelligence in the workplace depends on a balance that considers the employees' perception of artificial intelligence in the work process and the

organization's strategies for adopting it. It is essential to analyze how AI makes employees feel, bearing in mind that stress affects individual performance and can negatively impact entity dynamics. By addressing the root causes of stress and promoting a healthy work environment, organizations can promote a more engaged and productive workforce, leading to improved organizational performance and sustainability (Mathews et al., 2022) (Ajayi, 2018).

Organizations that take a holistic human-centered approach to implementing AI can unlock this technology's transformative potential and position themselves for success in the digital age (Wagner, 2020).

Organizations must be aware of the barriers to adopting AI in the work process because the benefits of this human-AI synergy are multiple. By combining people's creative problem-solving and contextual understanding with the computing power and speed of AI, hybrid teams may be able to tackle challenges that would be difficult to solve alone. In addition, human oversight and judgment could help mitigate the risk of errors or biases arising from over-reliance on AI (Fuchs et al., 2024).

Limitations and recommendations for future research:

The study was exploratory and qualitative, using semi-structured interviews. The limited sample size of 26 respondents may limit the generalizability of the findings. A quantitative study incorporating the barriers identified in this research but using a larger sample size could be conducted in a future analysis.

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