

Change Management In The Age Of Ai: Case Of Ai Application In Human Resource Management.

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Abstract:

Algorithm-assisted human resource management is revolutionizing HR practices. AI's levels of intervention take various forms: automation, creation, and task improvement. Although this technology offers several advantages for organizations, our article outlines the main modes of organizational change in AI development. We also present the role of various organizational change factors in successfully achieving this transformation. These factors help understand how companies can adapt and leverage technological advancements to improve performance and competitiveness.

KEYWORDS : Human Resources, Artificial Intelligence, Organizational Change, Management, Technological transformation

1 INTRODUCTION

In the era of artificial intelligence (AI), managing technological change has become a crucial issue for companies, especially in Human Resource management (Sipahi & Artantaş, 2022). This type of change is part of a broader theoretical framework related to organizational change theory. It is defined as a transformation process within an organization impacting formal rules, individual and collective behaviors, and the socio-organizational functioning in general (De Rozario & Pesqueux, 2018). These transformations can be voluntary, directed, and planned or spontaneous and continuous (Landrieux-Kartochian, 2013). Since the foundational work of Kurt Lewin in the 1950s, who introduced the concept of the three phases of change (unfreezing, change, refreezing), to modern approaches integrating strategic, contextual, and experiential dimensions, change management has evolved to meet the complex challenges of organizational transformations.

In this perspective, integrating AI into HRM offers numerous opportunities to improve the efficiency and performance of HR processes (Rathore, 2023). For example, the automation of administrative tasks (Ganatra & Pandya, 2023), the predictive management of jobs and skills (Sabil et al., 2023), and the psychological support of staff (Agustono et al., 2023). However, this integration also poses significant challenges in change management, particularly due to potential employee resistance and the impact on organizational culture (Almatrodi et al., 2023; Polisetty & Sheela, 2023).

In this work, we aim to explore the following question: ***What are the modes of AI integration in companies and their HRM practices?*** In this article, we will first present the theories of organizational change management. Then, we will focus on organizational changes within HR services. In the third section, we will study the contribution of AI to human resource management. Finally, we propose a conclusion.

2. ORGANIZATIONAL CHANGE MANAGEMENT THEORY: LITERATURE REVIEW

Organizational change is defined as a process that leads to more or less profound transformation within an organization. It can affect formal rules, individual and collective behaviors, and the general socio-organizational functioning. These transformations can be voluntary, directed, and planned or spontaneous and continuous (Collerette et al., 1997).

The starting point for change management is found in Kurt Lewin's work in the 1950s. Lewin introduced the idea that change recipients develop resistances that can largely be overcome by group evolution. According to him, change follows a three-phase process: unfreezing, changing, and refreezing. Unfreezing prepares the organization for change by breaking old habits; change introduces and adopts new methods; and refreezing stabilizes these new practices so they become the norm. Lewin's work was fundamental for social psychology and sociology studies, influencing Schein (1983), who extended Lewin's concepts to include organizational culture and its impact on change.

In the 1970s-1980s, Kanter advanced the change wheel model, defining accompanying levers such as communication and training. This approach emphasizes the tools and techniques necessary to facilitate change, stressing the importance of preparation and support for individuals within the organization. Kanter (1980-1990) also highlighted the importance of leadership and leaders' ability to inspire and motivate their teams through transitions (Kanter, 1983). This approach was complemented by Argyris's work (1977, 1982), who explored the notion of double-loop learning, where organizations learn not only to solve problems but also to question and modify underlying values and norms.

Andrew Pettigrew's articles (1990) and John P. Kotter (1996) highlighted the limitations of instrumental approaches. They showed that change does not occur solely as a project but in an alternation of continuous changes and disruptions. Pettigrew (1987) introduced the concept of contextual change, emphasizing that organizational transformations must be understood in their historical, cultural, and political contexts (Pettigrew, 1987). Kotter (1996), on the other hand, developed an eight-step model for managing change, emphasizing the creation of a sense of urgency, forming powerful coalitions, and effectively communicating the change vision (Kotter, 2012). In the 2000s, researchers such as Réjean Rondeau (2008), Céline Bareil (2004), and reflections by Autissier, Moutot, and Bensebaa (2012) advanced contextual variables for changes and the accompanying systems. This paradigm highlights the importance of strategic and organizational alignment, considering each organization's contextual specifics to achieve change success. Autissier and Moutot (2003) elaborated specific strategies for different types of change, emphasizing the importance of understanding the internal and external dynamics that influence the success of transformations (Autissier et al., 2018).

Armenakis & Bedeian (1999) and Autissier & Giraud (2013) proposed a vision of change not as an obstacle to overcome but as an opportunity to develop actors' change capacities through experiential devices. This paradigm values learning and experimentation as means to strengthen resilience and flexibility in the face of change. Armenakis and Bedeian (1990) identified critical success factors for change implementation, such as employees' psychological preparation and active leader involvement (Armenakis & Bedeian, 1999b). Autissier and Giraud (2013) deepened this approach by proposing support methods based on immersive experiences and collaborative workshops to facilitate acceptance and adoption of new practices. These various paradigms show the evolution of perspectives on organizational change, from approaches focused on individual resistances and management techniques to models integrating strategic, contextual, and experiential dimensions. Each paradigm provides specific tools and concepts to understand and manage the complex dynamics of change in organizations (Autissier et al., 2013).

2.1. CHANGE FACTORS

Change factors represent the dynamic and often interconnected elements that influence the direction and pace of development within an organization, society, or system. Understanding these factors is crucial for anticipating challenges and opportunities that may arise. The figure below presents a schematic representation of the main elements responsible for individual and collective change within the organization, spanning from the present to the future.

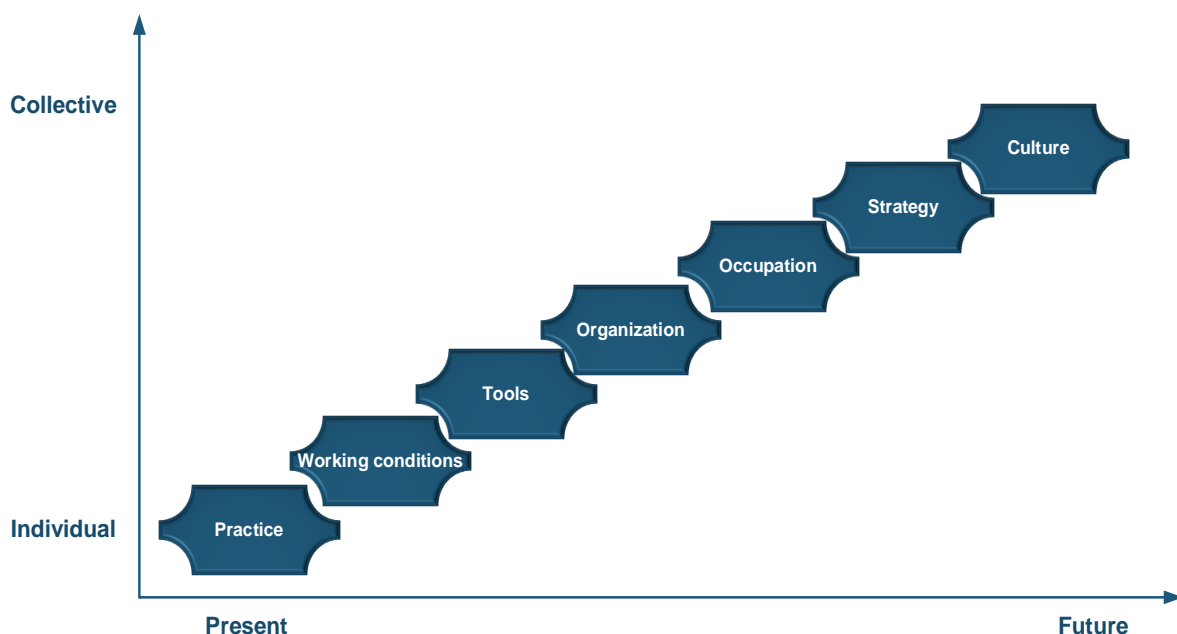


Fig. 1. Factors of Organizational Change

SOURCE: AUTISSIER ET AL. (2015; P 142)

These factors include practices, working conditions, tools, organization, occupation, strategy, and culture. Practices, which refer to the daily actions and behaviors of individuals, often constitute the starting point for organizational change. By modifying these practices, the organization can gradually establish new working methods adapted to future objectives. Working conditions, including the physical environment, work hours, safety, and employee well-being, play a crucial role in employee motivation and performance. Improving these conditions can facilitate change acceptance and reduce resistance. Tools, such as technologies, software, and equipment, are essential for modernizing work processes. The introduction of new tools or the updating of existing ones can increase work efficiency and quality.

The organization, which refers to the company's internal structure, determines how tasks are distributed and how information flows. Reorganizing this structure can eliminate inefficiencies, improve coordination among teams, and align the structure with strategic objectives. Occupation, representing employees' skills, roles, and responsibilities, is crucial for meeting the changing demands of the market and technology. Training employees and redefining roles allow the organization to better adapt to new economic and technological realities. Strategy, including the organization's long-term plans and objectives, guides all other transformations, ensuring clear and consistent direction. Finally, organizational culture, composed of shared values, beliefs, norms, and behaviors, shapes interactions among employees and with the outside world. Changing the culture is often the most difficult but also the most crucial aspect of organizational change. A culture aligned with strategic objectives fosters an environment where employees are engaged, motivated, and ready to embrace necessary changes. By addressing these factors systematically and interactively, organizations can navigate the complexities of change more effectively, ensuring successful and sustainable adaptation to a constantly evolving environment.

2.2. CHANGE TYPOLOGY

Environmental changes create organizational dynamism by provoking structural and organizational changes within companies. Each type of change responds to specific needs and contexts, ranging from gradual and reactive adaptation to rapid and imposed transformations, including more structured and experimental approaches.

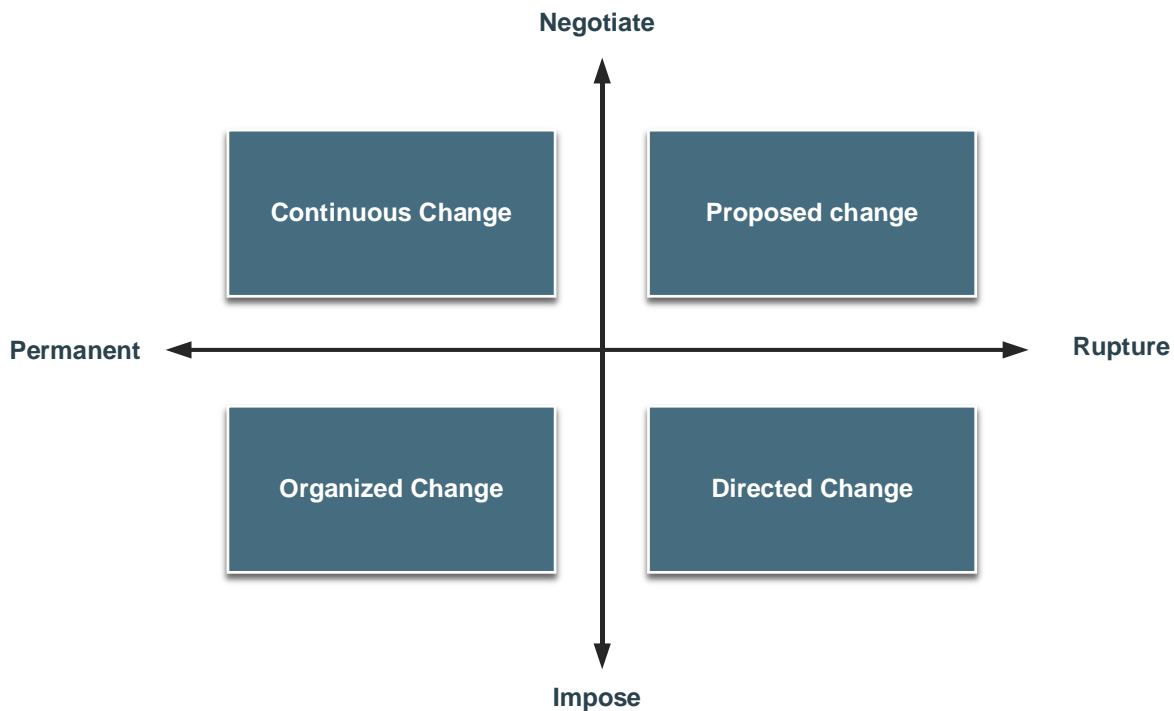


Fig. 2. The change Typology Matrix

SOURCE: AUTISSIER ET AL. (2013)

Understanding these typologies enables organizations to better choose and implement the most suitable change strategies for their specific situations. We identify four types of organizational change:

❖ Continuous Change

Continuous change emerges unorganized within the organization, often in response to an awareness triggered by an internal or external event. This type of change is characterized by its gradual and constant adaptation to circumstances without prior formal planning. Organizations adopt this type of change when they react opportunistically to opportunities or threats, adjusting their practices over time to remain competitive and relevant in a dynamic environment.

❖ Proposed Change

Proposed change is initiated by the organization's management, defining expected outcomes and setting a precise timeline. Within this framework, organization members are free to use their chosen methods and make necessary resource trade-offs to achieve the set objectives. This type of change allows for a certain level of autonomy and creativity from employees while ensuring that individual efforts are aligned with the organization's strategic goals. Management

provides a clear framework and expectations, leaving teams to determine the best ways to achieve them.

❖ **Directed Change**

Directed change is driven by management in a prescriptive manner, with a strong emphasis on execution and very limited room for negotiation. This type of change is often justified by an urgent situation (or burning platform), where the need for quick action takes precedence over discussion and compromise. Decisions are made top-down, and employees must follow precise directives with little latitude. This type of change is generally used in crisis situations or when rapid transformations are necessary for the organization's survival.

❖ **Organized Change**

Organized change occurs when the purpose of the change is not very clear and the objectives are difficult to quantify. In this context, organization members are provided with specific working methods and timelines within an experimental logic. This type of change allows testing different approaches and adjusting strategies based on feedback. The focus is on learning and adaptation, recognizing that objectives may evolve as new practices are implemented and evaluated.

3. ORGANIZATIONAL CHANGE IN HRM: THE CONTRIBUTION OF AI

Human Resource Management (HRM) encompasses a set of practices, policies, and systems aimed at attracting, developing, motivating, and retaining employees within an organization (Bangbon et al., 2023). HRM seeks to maximize employee performance by aligning their skills and goals with those of the organization, thereby creating a productive and harmonious work environment (Ploscaru et al., 2023). The main functions of HRM include administrative task management (Allègre & Andréassian, 2008), psychological personnel management (Igalens, 2006), and predictive management of employment and skills (Allègre & Andréassian, 2008). There are three management modes within the expertise of the HR department in the company:

3.1. ADMINISTRATIVE TASK MANAGEMENT

Administrative task management includes all processes and activities related to personnel administration within the organization. This encompasses several crucial aspects, which are summarized in the table below, detailing the main tasks involved in managing routine administrative duties:

Table 1: Main Tasks in Administrative Task Management

Tasks	Description
Recruitment and Selection (Peretti & Peretti, 1998)	This involves searching for and hiring the most qualified candidates for available positions. The process includes drafting job descriptions, posting job ads, pre-screening applicants, conducting interviews, and selecting candidates.
Contract Management (Bogg & Freedland, 2016)	This includes drafting, negotiating, and managing the renewal and termination of employment contracts. It ensures that all terms and conditions of employment are clearly defined and adhered to.
Payroll and Benefits (Sharma & Sharma, 2024)	This function involves managing salaries, bonuses, and social benefits (such as insurance and pensions), and ensuring compliance with legal payroll obligations. Effective payroll administration is essential for maintaining employee satisfaction.
Absence and Leave Tracking (Saravanan, 2013)	Managing absences due to illness, paid leave, parental leave, and other types of leave. Rigorous tracking ensures transparent and equitable management of absences.
Record Keeping	Maintaining personnel records, including personal information, work history, performance evaluations, and training records. Good record-keeping is essential for effective human resource management and legal compliance.
Legal Compliance (Red, C. L., & Teng-Calleja, M. 2021)	Ensuring the organization adheres to labor laws and employment regulations. This includes monitoring legislative changes and implementing policies and procedures to ensure compliance.

Source: Synthesis of authors

Martory et al. (1988) emphasize that administrative task management plays a crucial role in the smooth functioning of any organization by encompassing various essential activities to manage personnel effectively. It allows for the automation and streamlining of HR processes such as payroll, absence management, and record keeping, thereby reducing human errors and increasing overall efficiency. By delegating repetitive administrative tasks to automated systems, HR managers can focus on strategic activities, thereby increasing productivity. Additionally, Tao (2005) demonstrated that administrative management ensures the company

complies with all labor laws and regulations, reducing the risk of sanctions and litigation, while guaranteeing the security of sensitive employee data. Samudra (2023) suggests that effective payroll management ensures employees are paid correctly and on time, thus contributing to their satisfaction and motivation, while clear and transparent tracking of absences and leave enhances their trust. Furthermore, Guan (2021) supports that effective administrative management allows for the control and optimization of costs associated with human resources and strategic allocation of resources by providing a clear overview of employee skills and availability.

3.2. PSYCHOLOGICAL PERSONAL MANAGEMENT

Psychological personal management aims to promote the mental and emotional well-being of employees, which is crucial for maintaining a healthy and productive work environment (Kashdan, 2010). It includes several key elements, summarized in the table below, detailing the main tasks involved in psychological personal management:

Table 2: Main Tasks in Psychological Personal Management

Tasks	Description
Psychological Support (Chkheailo & Tkahenko, 2020)	Implementation of psychological support programs, including counseling services to help employees manage stress, anxiety, and other personal or professional issues. Modern methods focus on the staff to enhance their performance.
Work Climate (Bharthvajan, 2014)	Creation of a positive work climate, fostering harmonious interpersonal relationships, a respectful work environment, and support for diversity and inclusion. Satisfaction surveys and team-building initiatives are often used to improve the work climate.
Work-Life Balance (Delecta, 2011; Veronica & Gunasekara, 2022)	Development of policies and practices promoting work-life balance, such as telecommuting, flexible hours, and wellness programs. This balance is crucial for employee satisfaction and retention.
Conflict Management (Liao & Pandeli, 2023)	Establishment of conflict resolution mechanisms to address disputes between employees fairly and constructively. This includes mediations, formal complaint procedures, and conflict management training programs.

**Motivation
Development
(Verma, 2022)**

Implementation of recognition and reward systems to encourage and motivate employees, including personal and professional development initiatives. Recognition programs may include bonuses, promotions, certificates of recognition, and employee appreciation events.

Source: Synthesis of authors

Psychological personal management has an important role in the well-being of employees and the overall performance of the company (Voskoboynikov, 2018). By focusing on the mental and emotional support of employees, it helps create a healthy, productive, and harmonious work environment (Voskoboynikov, 2016). Mukherjee (2021) highlights that the benefits of incorporating psychological dimensions within companies include improving employee well-being by reducing stress and anxiety through counseling and coaching services, as well as promoting a work-life balance through telework policies and flexible hours. Creating a positive and inclusive work climate makes employees feel valued and respected, which increases their engagement and productivity. Additionally, recognition and reward systems motivate employees to achieve their goals. GaneshKumar (2021) emphasized that effective conflict management, with resolution mechanisms and conflict management training, reduces absenteeism and turnover. Finally, Ananchenkova & Tonkonog (2017) noted that promoting personal and professional development programs allows employees to acquire new skills, fostering their individual growth and loyalty to the company. Thus, psychological personal management is essential for the company's performance and growth, improving employee satisfaction and contributing to an optimal work environment (Tovmasyan, 2017).

2.3.PREDICTIVE MANAGEMENT OF EMPLOYMENT AND SKILLS (PMES)

Predictive Management of Employment and Skills (PMES) is a strategic approach aimed at anticipating and planning personnel and skill needs to meet the organization's future objectives (Dhivya & Sujatha, 2023). The main components of PMES include:

Table 3: Main Tasks in Predictive Management of Employment and skills

Tasks	Description
Needs Analysis (Amir, 2019)	Evaluation of current and future skill and human resource needs based on the organization's strategic objectives. This analysis helps identify skill gaps and plan necessary actions to address them.
Resource Planning (Gilbert, 2006)	Development of plans to align staffing and skills with growth forecasts, future projects, and technological advancements. This includes planning for recruitment, promotions, and internal transfers.
Training and Development (Kumar, 2022)	Creation of continuous training programs and skill development initiatives to prepare employees for the organization's future needs. This includes technical training, management training, and personal development programs.
Mobility and Careers (Kudus et al. 2023)	Creation of career and internal mobility plans to allow employees to progress within the organization based on their skills and aspirations. Succession planning and talent development programs are often implemented to ensure continuity and organizational growth.
Talent Management (Garavan, 2023)	Identification and management of key talents within the organization, including the recruitment of external talents and retention of internal talents. This includes the implementation of talent development programs, mentoring, and coaching to maximize employee potential.

Source: Synthesis of authors

Predictive Management of Employment and Skills is a strategic tool for companies, enabling them to anticipate and plan future personnel and skill needs. This proactive approach offers numerous advantages, such as anticipating technological, economic, and organizational changes, thereby reducing critical skill shortages (Bibi, 2021). PMES also promotes internal mobility and career management, optimizing human resources and increasing employee satisfaction and engagement (Chien, 2015). By precisely planning skill needs, companies can make targeted investments in training, reducing costs and maximizing return on investment. Moreover, PMES enhances organizational performance by aligning employee skills with the

company's strategic objectives, thus increasing efficiency and competitiveness. It makes the company more responsive and adaptable to new market demands. PMES plays a key role in skill evaluation, gap identification, resource planning, succession planning, and designing appropriate training programs. It also identifies and manages key talents, fostering their development and retention. In summary, PMES ensures that the company is prepared to meet future challenges and seize growth opportunities, thereby optimizing overall performance (Roulet, 2014).

4. THE CONTRIBUTION OF AI TO HUMAN RESOURCE MANAGEMENT

AI is revolutionizing human resource management by offering advanced solutions for administrative task management, psychological personnel management, and predictive management of employment and skills (Ganatra & Pandya, 2023). It enhances the efficiency, accuracy, and responsiveness of HR processes while enabling more strategic and personalized talent management (Agustono et al., 2023; Ganatra & Pandya, 2023; Paigude et al., 2023). With AI, companies can anticipate future needs, support employee well-being, and optimize human resources to achieve their strategic objectives (Tan & Alshaikhe, 2023).

4.1. ALGORITHMIC MANAGEMENT OF HUMAN RESOURCES

Algorithmic management of human resources represents a revolution in personnel management, integrating artificial intelligence and big data technologies to optimize HR processes. This approach uses sophisticated algorithms to automate and enhance various HR functions, such as recruitment, performance management, training, and talent retention. By analyzing massive volumes of data, these algorithms can identify trends, predict behaviors, and recommend specific actions, allowing companies to make more informed and strategic decisions. Transforming how human resources are managed, algorithmic management promises not only efficiency gains but also increased personalization and reduced human biases, contributing to better human capital management in organizations. We present three key areas of human resource management services:

a. ALGORITHMIC MANAGEMENT OF ADMINISTRATIVE TASKS:

AI significantly improves the efficiency and accuracy of administrative task management (Hughes et al., 2019). Generally, AI systems can organize, store, and retrieve HR documents more effectively, facilitating access to information and ensuring compliance with current regulations (Lucaj et al., 2023).

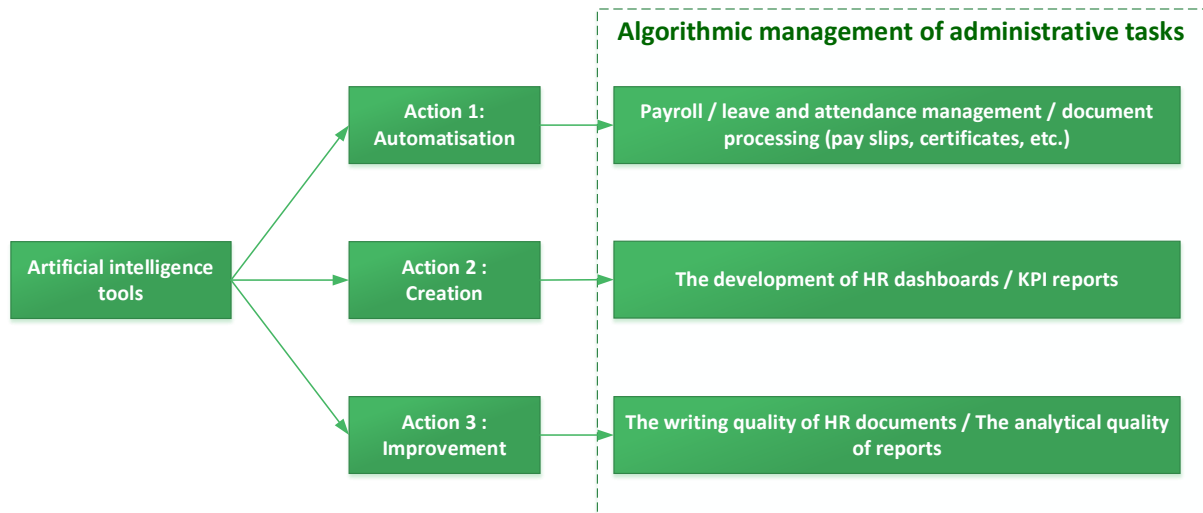


Fig.3. The Contribution of AI Tools to the Algorithmic Management of Administrative Tasks

Source: Synthesis of authors

We identify three major contributions of AI in the algorithmic management of administrative tasks: Automation of Repetitive Tasks: AI allows for the automation of repetitive tasks such as payroll processing, leave management, and personnel record-keeping (Parycek et al., 2023). AI systems can autonomously handle these processes, reducing human errors and freeing up time for HR professionals to focus on strategic tasks (Kelly-Lyth, 2023). Instant Creation of HR Dashboards: AI can instantly generate HR dashboards based on data from HR information systems and KPIs related to HR performance (Imbert, 2014). This capability enhances the analytical quality of HR data and the linguistic quality of HR documents (Veena & Sharma, 2018). Improvement of Data and Document Quality: AI tools improve both the analytical quality of HR data and the linguistic quality of HR documents, ensuring high standards of accuracy and clarity.

b. ALGORITHMIC MANAGEMENT OF EMPLOYEE PSYCHOLOGY

AI plays a role in enhancing the mental and emotional well-being of employees, thereby contributing to a healthier and more productive work environment.

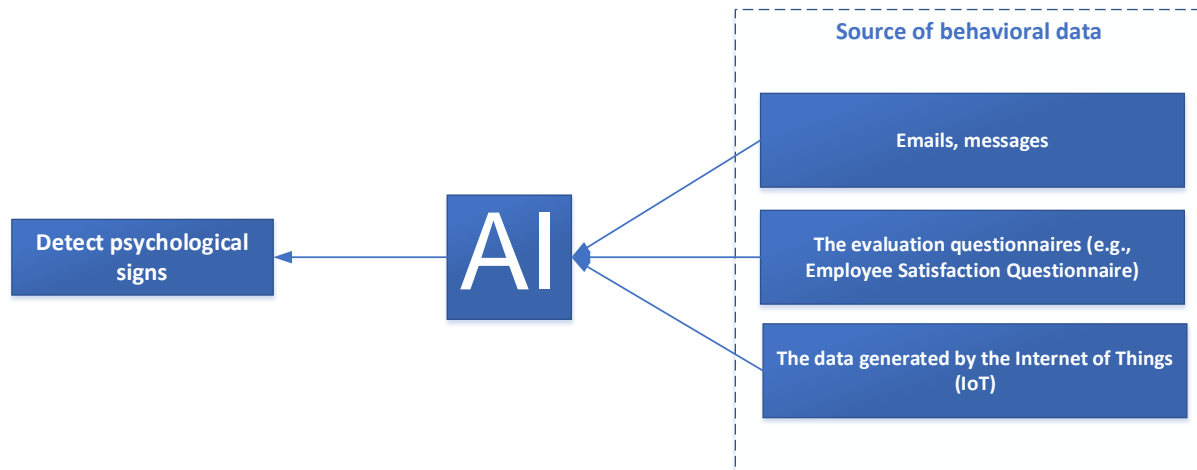


Fig.4. The Contribution of AI Tools to the Algorithmic Management of Employee Psychology

Source: Synthesis of authors

AI tools can analyze employee behavioral data (such as emails, messages, and interactions on internal platforms) to detect signs of stress, burnout, or dissatisfaction (Cox & Jennings, 2024). This enables HR managers to proactively intervene with appropriate support measures. AI tools can analyze employee feedback in real-time to identify trends and potential issues, allowing HR to make informed decisions and adjust well-being strategies accordingly (Fomude et al., 2023). Some companies rely on IoT gadgets to collect physiological data that help evaluate employee behaviors in stressful situations and discomfort (Devi et al., 2023). AI can recommend personalized well-being programs based on individual employee needs, such as coaching sessions, relaxation activities, or stress management advice (Mattke et al., 2013).

c. ALGORITHMIC PREDICTIVE MANAGEMENT OF EMPLOYMENT AND SKILLS (AI-PMES)

AI offers predictive analysis and strategic planning capabilities, thereby enhancing PMES.

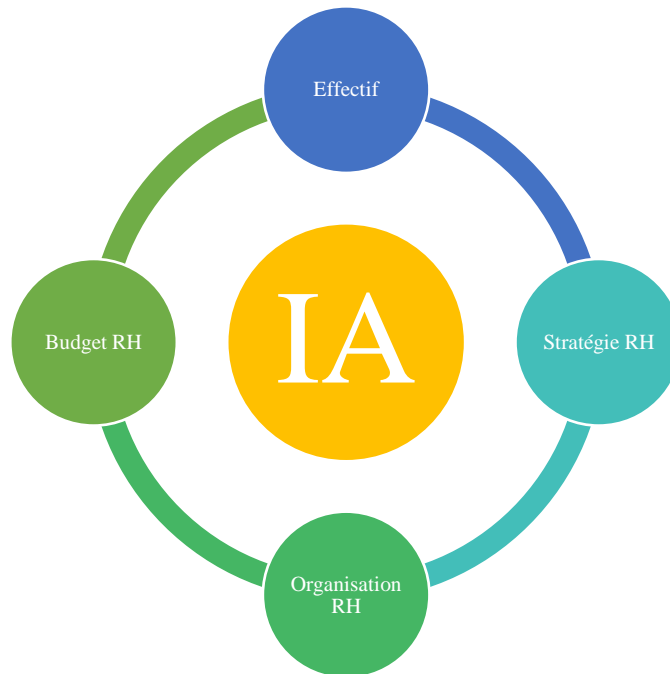


Fig.5. The Contribution of AI Tools to GPEC

Source: Synthesis of authors

AI can analyze current employee skills and identify gaps relative to the future needs of the company (Johnson et al., 2021). It can also suggest training and development paths to bridge these gaps. AI algorithms can predict future staffing needs based on market trends, company growth projects, and turnover rates, helping to develop proactive recruitment and training plans (Baral et al., 2022). AI can identify key talents within the organization and propose personalized development and retention plans (Kaur & Kaur, 2022). Additionally, AI aids in succession planning by identifying employees ready to take on leadership roles (Paigude et al., 2023). By analyzing employee performance data, AI can predict career trajectories and recommend tailored development opportunities, contributing to both individual and organizational growth (Bankar & Shukla, 2023).

4.2. CHANGE MANAGEMENT IN HR SERVICES: AI APPLICATION

The application of artificial intelligence in human resource management necessitates a carefully orchestrated change management strategy. Various organizational change factors, ranging from individual to collective and present to future, are essential for successful implementation.

- ✚ **Practices:** The daily actions and behaviors of individuals often form the foundation for organizational change. Integrating AI into HR tasks alters these practices by automating repetitive processes and introducing new work methods, enabling employees to focus on more strategic tasks (Endacott, 2022).
- ✚ **Working Conditions:** This encompasses the physical environment, work hours, safety, and employee well-being. AI can enhance these conditions by streamlining processes, reducing administrative workload, and providing tools to monitor and improve employee well-being. This is crucial for boosting employee motivation and performance, thus easing the acceptance of change (Milanez, 2023).
- ✚ **Tools:** Technologies, software, and equipment used by staff are vital for modernizing work processes. Implementing AI systems, such as chatbots for common inquiries or algorithms for payroll management, can increase efficiency and work quality by reducing human errors and improving access to information (Mydyti & Kadriu, 2021).
- ✚ **Organization:** The internal structure of the company, including task distribution and information flow, must be adapted to incorporate AI. Reorganization might be necessary to eliminate inefficiencies and enhance team coordination, aligning the organizational structure with new strategic objectives (Sinha, 2023).
- ✚ **Occupation:** The definition of employee skills, roles, and responsibilities evolves with the introduction of AI. Training employees on new technologies and redefining roles enable the organization to better adapt to changing market demands and technological innovations (Perez et al., 2022).
- ✚ **Strategy:** Long-term plans and organizational goals must incorporate AI to guide all other transformations. A well-defined strategy ensures clear and consistent direction, aligning technological initiatives with the organization's overall goals (Pathak et al., 2022).
- ✚ **Culture:** Organizational culture, composed of shared values, beliefs, norms, and behaviors, must align with AI adoption. Changing the culture is often the most challenging yet crucial aspect of organizational change. A culture that values innovation

and adaptability facilitate the acceptance of new technologies and work methods (Palade & Carutasu, 2021).

The application of AI in HRM can fit into different types of organizational changes, each addressing specific needs and contexts:

- ✚ **Continuous Change:** Emerges spontaneously or in response to internal or external awareness events. This type of change allows the organization to gradually adapt to new HR technologies.
- ✚ **Proposed Change:** Initiated by management, defining expected outcomes and setting a timeline. HR employees are free to choose methods and adjust resources to achieve goals, fostering innovation and autonomy.
- ✚ **Directed Change:** Mandated by management with strict implementation constraints. This type of change is often driven by urgent needs, requiring rapid and decisive HR actions.
- ✚ **Organized Change:** When objectives are difficult to quantify, stakeholders may be given specific methods and timelines in an experimental approach, allowing testing and adjustment based on HR feedback.

By understanding these typologies and systematically addressing various change factors, organizations can better choose and implement the most suitable change strategies for their specific situations, ensuring successful and sustainable integration of AI in HRM

5. CONCLUSION

Algorithmic management of human resources, propelled by the integration of artificial intelligence (AI) and big data, signifies a major shift in how companies manage their human capital.

The application of AI in HR processes enhances administrative efficiency, supports employee psychological well-being, and improves the predictive management of employment and skills. This algorithmic approach delivers substantial benefits in terms of precision, responsiveness, and customization while mitigating human biases. AI-driven optimization of administrative efficiency is apparent in the automation of repetitive tasks such as payroll processing, absence management, and personnel record-keeping. This automation not only minimizes human errors but also frees up valuable time for HR professionals, allowing them to concentrate on strategic, high-value tasks. Regarding employee psychological well-being, AI plays a pivotal role by monitoring indicators of stress and burnout through behavioral data analysis. Customized well-being programs can be tailored to individual employee needs, including coaching sessions, relaxation activities, and stress management advice. This personalized approach contributes to creating a healthier and more productive work environment. The predictive management of employment and skills (PMES) is also significantly enhanced by AI, which facilitates the predictive analysis of future personnel needs.

AI algorithms can identify skill gaps and recommend appropriate training and development programs. Additionally, AI helps forecast staffing needs based on market trends, company growth projections, and turnover rates, thus enabling proactive recruitment and training planning. To successfully transition to algorithmic HR management, organizations must implement a well-structured change management strategy that addresses organizational and cultural dynamics.

It is crucial to prepare and support employees throughout this transition by clearly communicating the anticipated benefits and providing adequate training for new technologies. An effective change management strategy also involves managing potential resistance and fostering a culture of innovation and adaptability. By strategically integrating these technologies, companies can not only anticipate future needs and support employees but also maximize overall performance.

This enables them to adapt swiftly and effectively to an ever-changing environment, enhancing their competitiveness in the market. In this way, algorithmic management of human resources, by fully harnessing the capabilities of AI and big data, establishes itself as an essential driver for long-term organizational success.

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