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THE IMPACT OF ARTIFICIAL INTELLIGENCE ON WORK-LIFE BALANCE IN ORGANIZATIONS

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Purpose: The aim of this article is to examine how artificial intelligence (AI)-based solutions impact work - life balance (WLB) and the benefits and risks associated with their implementation in organizations. The study addresses the need to understand the role of AI in shaping working conditions and employee well-being.
Design/ methodology /approach: A narrative literature review and desk research approach were employed, including qualitative analysis of secondary data from reports by international institutions and consulting firms (OECD, WEF, Deloitte, EY, PwC, McKinsey, Microsoft & LinkedIn, CIPD). The analysis was framed within the theoretical frameworks of role conflict and enrichment, boundary control, conservation of resources theory, and self-determination theory.
Findings: The results indicate an ambivalent impact of AI on WLB. Under favorable organizational conditions, technology increases efficiency, reduces cognitive load, and enables greater work flexibility, which promotes role enrichment and resource accumulation. Otherwise, in the absence of clear rules and support, AI leads to increased technostress, a sense of surveillance, and a blurring of the boundaries between work and private life. A key moderator is the implementation context - strategy, governance, organizational culture, and employee competencies.
Research limitations/implications: The analysis is based on industry-specific and global reports, which focus primarily on large organizations and technology sectors. The data is cross-sectional and often declarative, limiting the ability to assess the long-term impact of implementations and their impact on different types of organizations.
Practical implications: Organizations should implement AI in a humanized manner, i.e., according to clear principles, with transparent governance, training, and a digital well-being policy. AI can become a tool supporting flexibility and reducing burden if implementations are linked to a culture of participation and monitoring the impact on well-being.
Social implications: Effective AI implementations can improve employee quality of life, reduce stress, and support work-life balance, which is important for labor market policies and sustainable development strategies. Otherwise, technology can exacerbate competency inequalities and job pressures.
Originality/value: This article integrates the findings of global reports with key WLB theories, proposing a conceptual model of AI's impact on work-life balance. It identifies the conditions under which AI acts as a resource and the risk factors leading to a loss of control over boundaries. It provides value to management HR researchers and public politicians, as well as practitioners implementing technologies in organizations.

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Category of the paper: Research paper.

1. Introduction

In an era of dynamic technological transformations and the evolving nature of work, work - life balance (WLB) is gaining importance in both scientific literature and in human resources management practice, as well as in public policies, especially those related to family and labor market issues. With the ongoing digitization and automation of organizational processes, we are observing the expansion of remote work options, the widespread adoption of flexible employment options, and the growing availability of technologies enabling the performance of professional duties regardless of time and place. These phenomena are part of broader transformations characteristic of the digital economy, in which the boundaries between the professional and private spheres are becoming increasingly fluid (Schor, 2020). At the same time, expectations regarding employees' constant readiness to respond to organizational needs, work intensity, and the constant availability of mobile technologies outside of traditional working hours are growing, which can lead to technostress overload and impaired well-being (Kumar, 2024; Ayyagari et al., 2011).

These trends raise questions about the extent to which AI-based tools can support work-life balance and the extent to which they can contribute to its disruption. Artificial intelligence is currently one of the most important directions of technological development in organizations, influencing the way work is organized, task design, performance monitoring, and decision-making processes are supported. In the context of WLB, AI can act as both a resource that increases autonomy, efficiency, and the ability to better match workloads to employee capabilities, as well as a factor that reinforces the pressure of constant availability and work intensification, especially in conditions of algorithmic management.

On the one hand, the development of artificial intelligence tools in the workplace opens up vast opportunities for process improvement and increased efficiency. AI allows for the automation of routine and administrative tasks, intelligent scheduling, and optimization of resource utilization. Through advanced data analysis, it supports decision-making, trend forecasting, and risk identification. It also enables the personalization of employee experiences, recommending development paths and training, while simultaneously monitoring workload and team well-being. In the areas of communication and collaboration, AI offers tools for real-time translation, content generation, and report and presentation creation, while in the area of security, it offers intelligent threat detection systems. All of this makes AI a key element of organizational transformation, impacting both operational efficiency and work quality. There is evidence in the literature that the use of such tools can reduce employee workload,

improve their sense of autonomy and competence, and consequently, improve the quality of professional and personal life (Huang, Zhao, 2025; García-Madurga et al., 2025; Brynjolfsson et al., 2025). On the other hand, the development of artificial intelligence in organizations is associated with significant threats, which are increasingly highlighted in the literature. These include growing digital surveillance, which enables detailed monitoring of employee activity, which can lead to a sense of permanent control. The "always-on" phenomenon, resulting from the easy availability of digital tools, promotes extended working hours and makes it difficult to disconnect from responsibilities, which in turn leads to the erosion of the boundaries between work and private life. Furthermore, research suggests that high levels of exposure to AI technologies, particularly in the context of automation and control, may result in decreased job satisfaction if implementations are not focused on supporting employees but on maximizing productivity (Acemoglu et al., 2023; Vitak, Zimmer, 2023; Hickok, Maslej, 2023; Zitek, Schlund, 2024).

Given the above, organizations face the challenge of designing and implementing AI solutions that truly support employee well-being and work-life balance, rather than merely serving as a tool for work intensification. In this context, it seems justified to deepen our understanding of the mechanisms through which AI can support WLB, as well as to identify the conditions under which these mechanisms operate effectively (Gualano et al., 2023).

In light of the above, the aim of this article is to examine how AI-based solutions can support work-life balance. To achieve this goal, a narrative literature review and secondary analysis of selected reports and data on the use of AI in the context of work-life balance were undertaken. The theoretical section discusses the concepts of roles and boundaries at work in the context of AI, highlighting their importance for the organization of work and private life. Next, the mechanisms of AI's impact on employee well-being are presented in light of the resource-overload theory (Conservation of Resources COR Theory) and the self-determination theory (Self- Determination Theory; SDT), considering both the potential benefits and risks of its implementation. The empirical study was based on secondary data analysis, including reports from international institutions and industry studies, including: PwC (2025), McKinsey & Company (2025), EY (2025), Microsoft & LinkedIn (2024), Deloitte (2024), CIPD (2025), EY (2025), WEF (2023), and OECD (2023). It should be emphasized that these sources, while valuable and current, may reflect specific institutional or business perspectives, which may influence the presentation of phenomena related to the use of artificial intelligence in the context of WLB. Furthermore, the dynamic development of AI technology means that some findings may be subject to rapid change, and the available data still do not cover all aspects of the impact of these solutions on the functioning of employees and organizations. Therefore, the conclusions presented in this article should be considered primarily as an indication of key directions for interpretation and possible trends, rather than as unequivocal, empirically determined results. At the same time, the presented analysis can serve as a starting point for further research on the role of AI in shaping working conditions, particularly in the context of

well-being and quality of professional life. This approach also allows us to grasp the complexity of the relationship between technology and human functioning in the work environment, preparing the ground for broader theoretical and practical reflection.

This article adds value by integrating a technological perspective with the concept of employee well-being, analyzing the dual impact of AI: first, as a tool supporting flexibility and reducing workload, but also as a potential source of technological stress and blurring the boundaries between work and life. This approach allows for the formulation of recommendations for management practice and public policies aimed at designing and implementing AI solutions in an ethical, transparent, and well-being-friendly manner. Based on the analysis of reports and reference to key theories (role conflict and enrichment, boundary control, resource theory, and self-determination), a conceptual model of AI's impact on WLB was developed, illustrating both positive mechanisms (automation, workload reduction, flexibility) and negative ones (technostress, surveillance, blurring the boundaries), as well as the role of organizational, cultural, and procedural moderators in shaping the ultimate effect on work-life balance.

2. Theoretical approaches to work-life balance and artificial intelligence

Over the past decade, the dynamic development of artificial intelligence (AI) and digital technologies has had a profound impact on organizational structures, work models, and employee experiences and well-being. The literature emphasizes that digital transformation is multidimensional, encompassing both technological and psychosocial changes. Therefore, analyzing its consequences for work - life balance (WLB) requires drawing on a broad spectrum of management theories, organizational psychology, labor sociology, and public policies (OECD, 2019; WEF, 2023).

The concept of work -life balance (WLB) refers to the degree to which an individual is able to harmoniously combine the demands of professional life with the needs and obligations of the private sphere. The scientific literature emphasizes that this balance does not mean a simple division of time between work and personal life, but rather a subjective sense of well-being resulting from an adequate match between the employee's resources and the expectations stemming from both areas of functioning (Greenhaus, Allen, 2011, p. 162). This concept combines a psychological perspective on satisfaction, stress, and cognitive load with an organizational perspective, encompassing, among other things, work flexibility, employment models, and practices supporting employee well-being. At the same time, WLB is rooted in theories of interaction between life roles, which describe both role conflicts (work - family conflict) and their possible synergy (work - family enrichment), constituting a potential source of resources for employees (Voydanoff, 2005, p. 825).

Contemporary approaches to WLB also emphasize the importance of the technological context, which redefines the boundaries between work and private life. Digitization, remote work, and mobile communication technologies have increased the flexibility of task performance, but at the same time, they have intensified the phenomena related to the penetration of professional duties into the home sphere. In this context, WLB becomes a dynamic state of balancing the tensions resulting from multiple roles, with an individual's ability to manage boundaries (boundary management) playing an increasingly important role. In relation to the above, it should be noted that in the literature on WLB, two classical groups of theories are of particular importance: boundary and border theories and role conflict and enrichment models. Boundary theories, developed by Ashforth, Kreiner, and Fugate (Ashforth, Kreiner, Fugate, 2000) and later supplemented by Clark (Clark, 2000), assume that work and private life operate in separate domains that may be more or less permeable. An individual regulates the boundaries between these areas through strategies of segmentation (maintaining a clear division) or integration (creating smooth transitions). The influence of digital technologies and artificial intelligence leads to the weakening of traditional work-private life boundaries, which is confirmed by empirical research results (Duan et al., 2023; Reinke et al., 2024). Communication tools, collaboration platforms, and remote work systems expand employee availability, which may lead to the erosion of temporal and psychological boundaries (Mazmanian et al., 2013).

The second group of theories comprises role conflict and enrichment models, derived from the concepts of Greenhaus and Beutell (Greenhaus, Beutell, 1985). Work-family conflict (WFC) occurs when the demands of one role prevent the fulfillment of the other, which may be temporal, energetic, or behavioral. Technology research has shown that intensive use of digital tools increases the likelihood of time and energy conflict through extended work hours and information overload (Boswell, Olson-Buchanan, 2007). In recent years, however, the concept of work -family enrichment has received increasing attention, according to which resources acquired in one role can support functioning in the other (Greenhaus, Powell, 2006). In this context, AI can act as an enriching factor, for example, by reducing routine tasks, providing time flexibility, and better work organization, which promotes greater harmony between life domains.

The concept of boundary control, introduced by Kossek, Ruderman, Hannum, and Braddy (Kossek et al., 2012), is an extension of boundary theory. It assumes that what is crucial for well-being is not the existence of segmentation or integration itself, but whether a person has the ability to choose their preferred boundary management style. Research indicates that work technologies, including AI, can both support the sense of control (e.g., through automation and personalization) and limit it (e.g., by generating forced accessibility), which makes this theory particularly useful in the context of analyses related to digitalization.

However, to explain not only how individuals negotiate boundaries but also why role conflict or role enrichment occurs under certain conditions, it is necessary to incorporate resource-based and motivational perspectives. Conservation of Resources (COR) theory (Hobfoll, 1989) and its extension, the Work - Home Resources Model (ten Brummelhuis, Bakker, 2012), indicate that work-life balance is largely a function of the availability, flow, and conservation of resources, both material and psychosocial. In this context, artificial intelligence can serve as an organizational resource that reduces cognitive load, automates routine tasks, and supports time management, which facilitates the creation of a "gain spiral" and role enrichment (García-Madurga et al., 2024). For example, intelligent work scheduling systems or task prioritization algorithms can increase the sense of control over one's schedule and thus improve the balance of personal resources. On the other hand, AI can act as a resource eroder when its implementation is associated with the pressure of constant availability, algorithmic surveillance or the need to quickly acquire new competences, which initiates "loss spirals" and intensifies role conflict (OECD, 2023; Yan, Gai, 2024).

This perspective is complemented by the Self-Determination Theory (SDT) (Deci, Ryan, 1985; Ryan, Deci, 2000), which emphasizes the importance of resource quality by fulfilling three basic psychological needs: autonomy, competence, and relationships. Implementing AI in organizations can support these needs, for example, by increasing autonomy through the personalization of work tools, developing competences through interactive learning systems, and strengthening relationships by reducing communication overload and better managing team time (Huang, Zhao, 2025). However, when AI technologies are used to intensify control, monitor activity, or force real-time responses, they can undermine autonomy and relationships, which negatively impacts well-being and work-life balance (Ryan, Deci, 2000; Kossek et al., 2012).

Integrating COR and SDT with boundary and role theories creates a multilevel analytical framework: structural (boundaries and roles), mechanistic (resource flows), and motivational (resource quality). This approach is particularly useful in the context of AI technologies, which can act both as a resource (e.g., reducing cognitive load, saving time, providing decision support) and as a source of new demands (e.g., pressure for constant availability, algorithmic surveillance, the need to adapt to new tools), thus influencing resource balance and the fulfillment of psychological needs (García-Madurga et al., 2024; Yan, Gai, 2024). In practice, this means that the impact of AI on WLB varies and depends on the implementation design. Technologies that support autonomy and boundary control may become a key resource in this balance, while solutions that violate privacy and intensify work pose a threat to it.

The ambivalence surrounding AI's impact on WLB is most clearly manifested in the area of technological surveillance and related phenomena, such as technostress. It is precisely the way organizations utilize algorithmic work monitoring and control systems that determines whether AI becomes a resource supporting well-being or a factor in its erosion. Algorithmic productivity monitoring systems, used in sectors based on remote work and the gig economy,

among others, are criticized as a source of additional stress and a sense of loss of privacy (Mateescu, Nguyen, 2019). Researchers emphasize that the level of acceptance for AI in the workplace is closely linked to the transparency of its operating principles, the extent of employee control over the system, and the degree to which technology is perceived as supporting, rather than replacing, humans. In this context, the importance of a human-centered AI approach is growing, which advocates co-creating technology in a manner consistent with human values, needs, and limitations (Shneiderman, 2020).

As noted above, the analysis of technological stress (technostress) remains an important research direction. Ragu -Nathan and co-authors (Ragu-Nathan et al., 2008) identify its main sources, among others, as excessive system complexity, frequent technological changes, unclear requirements for working with digital tools, and a sense of constant information overload. Some researchers indicate that the new generation of intelligent tools can reduce technostress through intuitiveness and automation, but it can also lead to new forms of burden resulting from the opacity of algorithms and difficulties in building trust in systems (Tarafdar et al., 2019).

In summary, the literature clearly indicates that the relationship between artificial intelligence and work-life balance is complex and multidimensional. It requires an approach that integrates various perspectives that consider both the resource potential of the technology and the risks arising from its inadequate implementation. Theories of COR and SDT are crucial here, emphasizing the role of resources, autonomy, and agency as the foundations of well-being. At the same time, a growing number of studies and reports emphasize the need to humanize AI, i.e. design and implement solutions in an ethical, transparent and human-centric manner. In light of these analyses, artificial intelligence appears not as a neutral tool of automation, but as a factor capable of co-creating new work models that can promote employee well-being, provided it is managed responsibly and with due regard for individual psychological resources. The ambiguous impact of artificial intelligence on work-life balance is also confirmed by empirical data, the conclusions of which are presented below.

3. Research methodology

This section of the article analyzes secondary data from reports by international institutions and industry studies, presenting global trends, research findings, and recommendations regarding AI implementation in the context of work and well-being. The analysis focuses on four main dimensions: (1) job satisfaction and quality when automating routine tasks, (2) the potential of AI to relieve employee workload and facilitate work organization, (3) risks, inequalities, and the importance of the implementation context, and (4) the importance of organizational, cultural, and procedural conditions for implementation effectiveness.

The selection of these areas stems from the need to capture both the positive potential of AI and the limitations that can impact WLB. The first dimension, concerning job satisfaction and quality, allows us to assess whether and to what extent the automation of routine tasks facilitates and accelerates work, reduces monotony, and increases employee competence, which is related to the resource and overload theory (COR). The second dimension, reducing employee workload and improving work time organization, examines how AI can enhance autonomy and control over work time, which aligns with the assumptions of self-determination theory (SDT) and role and boundary theory. The third dimension, concerning risk, inequality, and implementation context, allows us to assess the extent to which a lack of appropriate support, competencies, or implementation strategy limits potential benefits and may increase inequalities between employees. The fourth dimension, however, indicates that simply providing AI tools is not enough; organizational culture, leadership, implementation procedures, and training strategies are key factors in determining whether AI actually improves WLB.

The analysis is based on secondary data from industry reports and global studies, including: PwC (2025), McKinsey & Company (2025), EY (2025), Microsoft & LinkedIn (2024), Deloitte (2024), CIPD (2025), EY (2025), WEF (2023), and OECD (2023). The selection of these sources was dictated by their timeliness, reliability, and representativeness of data on AI implementations in various economic sectors. Methodologically, the analysis is conducted based on a desk-based approach. Research, which involves the selection, critical evaluation, and synthesis of secondary data. This approach involved a review of reports and studies published by institutions with high methodological credibility, focusing on the currency, representativeness, and quality of available information. Specifically, the selection of sources was based on explicit inclusion criteria: year of publication ≥ 2019; credibility (peer-reviewed reports or studies from institutions with an established reputation); direct relevance to the impact of AI solutions on working conditions and WLB; transparency of method and data. Items that did not meet at least one of the criteria, as well as comments, opinions without an empirical basis, were excluded. The results were interpreted within the context of role and boundary theory, resource and overload theory (COR), and self-determination theory (SDT), enabling an assessment of how AI implementations impact employee resources, a sense of autonomy and control, and the ability to maintain work-life balance.

This approach allowed for a synthetic assessment of AI's potential in the context of WLB, identifying both the positive opportunities and limitations associated with implementing AI in organizations. While maintaining scientific rigor and basing conclusions on reliable empirical data, selecting these areas also enabled us to link the report findings to a theoretical framework and provide practical implications for managers and designers of AI workflows.

4. Analysis and research results

Satisfaction and work quality and the automation of routine tasks

Analysis of the latest reports and studies on the implementation of artificial intelligence in the workplace indicates that these technologies, often in a positive way, can significantly change the quality of work. According to data included in the PwC report "The fearless future: 2025 Global AI Jobs Barometer", industries with high exposure to AI, i.e. those in which the majority of professions perform tasks susceptible to support or automation by artificial intelligence, record a three-fold increase in revenue generated by each employee. At the same time, employees with AI skills (including promt - engineering, cooperation with AI agents) received on average a 56% higher salary premium (compared to 25% in 2024) than people in similar positions without these competences. Importantly, all surveyed industries saw an increase in the use of AI and a much faster change of skills in professions requiring artificial intelligence - 66%, and in 2024 - 25%. The data may indicate that adaptation and acquisition of new competences are becoming crucial, and AI contributes to increased productivity and increased work value. Consequently, even at the organizational level, work becomes more effective, which may translate into better task organization, reduced routine workload and increased ability to focus on tasks requiring creativity or decision-making. These results are consistent with the theoretical assumption that AI can serve as a resource, freeing up employee time and energy resources (COR), which in turn can contribute to improved well-being and work - life balance (PwC, 2025).

Additionally, an OECD report analyzing the impact of AI on work quality, titled "The Impact of AI on the Workplace", shows that employees engaging in AI work often report improved working conditions. Approximately 80% of respondents working with AI stated that AI had a positive impact on their productivity, and approximately 60% said it increased job satisfaction. According to the report's authors, AI is sometimes perceived as a tool for reducing monotony, eliminating boring, repetitive, or burdensome tasks (e.g., manual, dangerous, routine), which can improve work quality and increase acceptability. Importantly, where AI is used for management purposes, including monitoring, evaluation, and task allocation, so-called "algorithmic management" many people report increased work intensity.

Increased intensity, monitoring, and reduced autonomy in task performance are aspects that can negatively impact work-life balance if the pace and pressure are high (OECD, 2023). The report also indicates that there is a risk that employees who are not highly qualified or do not directly use AI may experience a decline in work quality, including: a greater burden of simple, monotonous tasks, which in turn may affect a possible decrease in autonomy or employment stability. The OECD report indicates that AI has the potential to improve work quality, reduce mechanical work, increase productivity, and provide decision-making support, which in turn can foster greater satisfaction, better engagement, and perhaps more flexible and

meaningful work. For employees with the right skills and in the right conditions, AI can indeed translate into a better work experience, but this potential is not automatic. A prerequisite is conscious, responsible implementation of AI, taking into account work organization, privacy protection, and the provision of appropriate support in the form of training and consultation. Without this, instead of reducing workload, AI can lead to the opposite effect: increased pressure, intensity, and worsening workload (OECD, 2023). Similar conclusions emerge from research by Brynjolfsson, Li, and Raymond, who show that in a group of over five thousand customer service agents, the introduction of a generative AI assistant increased productivity (the number of requests resolved per hour) by approximately 15% on average. For less experienced or lower-skilled employees, the gains were more pronounced, both in speed and quality of work. Moreover, some respondents indicated that AI helps them learn and develop competencies (e.g., language). This suggests that AI, if properly designed, can enhance employee resources, which promotes better work quality and perhaps better workload (less stress, greater satisfaction, less monotony) (Brynjolfsson et al., 2025).

The potential of AI to relieve employees and facilitate the organization of working time

Implementing artificial intelligence in organizations is increasingly seen as a tool that can significantly reduce employee workload and improve workflow. McKinsey & Company's "AI in the Workplace: A Report for 2025" indicates that, of the 3,613 employees surveyed, as many as 13% report using AI in at least 30% of their daily tasks - three times more than managers estimated. AI is therefore becoming a common support in operational work, enabling the delegation of routine and administrative tasks that previously consumed a significant portion of employees' time and energy. The study indicates that many employees and managers expect generative AI to become a key element of daily duties, and that implementing AI on a larger scale could free up a significant portion of time spent on administrative tasks, planning, and management, allowing for better use of time both at work and outside of it (McKinsey & Company, 2025).

Information from Microsoft & LinkedIn 's 2024 Work Trend Index report indicates that 3 out of 4 people surveyed say they already use AI in their work, demonstrating the widespread adoption of tools supporting daily tasks. Among those who regularly use AI, strong claims of benefits emerge, with users saying that AI helps them save over 30 minutes a day. These same users indicate that AI allows them to focus on their most important tasks. They waste less time on routine, repetitive tasks, which improves efficiency and job satisfaction. The report also shows that in Poland, 61% of employees use generative AI in their daily tasks, and these tools have the potential to increase operational efficiency and reduce employee workload (Microsoft & LinkedIn, 2024).

Similar analyses can be found in the OECD report presented above, which shows that AI users report improved work efficiency and reduced time spent on monotonous activities, allowing them to focus on tasks requiring greater creativity and decision-making (OECD, 2023). It is worth emphasizing that the effectiveness of this support is strongly dependent on the implementation context, as employees who participated in the implementation process and received appropriate training reported greater autonomy at work and better control over their daily organization, which is consistent with the SDT theory of sense of competence and autonomy at work (Deci, Ryan, 2000). Report The World Economic Forum (WEF) also emphasizes that the development of AI leads to a shift in competences towards tasks requiring critical thinking and creativity, and the automation of simple, repeatable processes reduces the burden on employees (WEF, 2023). In turn, Chartered The Institute of Personnel and Development (CIPD) points out that the implementation of AI in HR and administration can improve the management of working time, schedules and task monitoring, which translates into less workload for employees and greater flexibility in performing duties (CIPD, 2025).

From a resource-based theory (COR) perspective, automating routine tasks and AI support for administrative tasks can be interpreted as increasing an employee's available resources, including time, energy, and attention, which can be used for recovery, professional development, or non-work-related responsibilities (Hobfoll, 1989). These same observations align with the concepts of work and role boundaries. AI allows for better management of work rhythm and work-life boundaries, provided that implementation is well-thought-out and organizationally supported.

Analysis of selected reports indicates that AI has the potential to significantly reduce employee workload and improve workflow. Implementation conditions are crucial to achieving these results, including organizational preparation, training, a work culture that supports autonomy, and active employee participation in the tool adaptation process. When these conditions are met, AI can contribute to increasing employees' time and cognitive resources, reducing the burden of routine tasks, and improving work -life balance.

Risks, inequalities and conditions affecting well-being – the importance of the implementation context

As AI-based technology implementations become more popular, so too does the number of signals pointing to potential threats, inequalities, and negative impacts on employee well-being. The impact of AI at work is strongly dependent on the implementation context and organizational conditions, as previously noted. A Deloitte report shows that organizations that invest in AI and, in parallel, in employee training experience increased productivity and reduced routine task burdens. However, companies without appropriate training strategies and process preparation risk that AI will increase pressure and a sense of overload among employees, especially in departments less prepared to use generative tools (Delloite, 2024). A study published by Microsoft & LinkedIn points to significant inequalities in employee access to AI.

Although a significant portion of employees use it in their daily tasks, significant variations still exist depending on the role, level of digital competence, and type of tasks performed. The potential for reducing workload and better organization of working time is not equally available, which may deepen inequalities and a sense of injustice among employees (Microsoft & LinkedIn, 2024). The increasing automation of routine tasks and a shift in competencies towards critical thinking, creativity, and the ability to collaborate with technology are a significant factor in the transformation of work. However, such a shift may exclude employees with lower qualifications or in roles less supported by AI, leading to increased job insecurity, a sense of lack of control over work schedules, and cognitive stress. From the perspective of WLB, this means potential inequalities in the benefits of automation and opportunities for better work time management (WEF, 2023). Additionally, the results of the EY report entitled " Work Reimagined 2025" indicate that although 88% of respondents declare support from AI in everyday tasks, currently only a small percentage, approximately 5%, uses AI in an advanced way that maximizes its benefits (EY, 2025). This discrepancy between declarations and actual use suggests that without a proper adaptation strategy and organizational support, the potential of AI remains largely untapped, which reduces the chance of real support for WLB. The OECD emphasizes that the effects of AI on employee well-being depend on organizational policies, work culture, and supervision over the use of tools. The report indicates that the lack of transparent rules for the use of AI, monitoring workload, and support for competence development can lead to inequalities in access to AI benefits, increase pressure and the risk of burnout, and limit the sense of control over one's own working time (OECD, 2023). The CIPD recommends creating policies and rules for the use of AI, including monitoring tasks and schedules, to counteract inequalities and excessive workload. The lack of such a policy can lead to a situation in which AI operates inconsistently across departments and roles, which negatively impacts well-being, satisfaction, and flexibility in work (CIPID, 2025). PwC points out that automating routine tasks promotes increased job satisfaction and quality, but only when implemented thoughtfully and with employee needs in mind. Lack of such preparation increases the risk of inequalities in the benefits of AI and may also worsen work-life balance if tasks are shifted or the workload is concentrated on less advantaged groups (PwC, 2025).

While AI, with the right approach, can indeed support work reorganization and reduce employee workload, there are many prerequisites that must be met, including an appropriate implementation strategy, training, fair management, sensitivity to inequalities, and a concern for privacy and autonomy. Without these, the risks associated with work intensification, loss of autonomy, inequality, and stress may outweigh the benefits.

The importance of organizational, cultural and procedural conditions for effective AI implementations in the context of work -life balance

An analysis of international reports shows that the impact of artificial intelligence on work-life balance depends primarily on the quality of an organization's preparedness, not just on the availability of technology. Deloitte points out that companies are still struggling with the gap between the rapid development of tools and the ability to implement them safely and effectively. Key barriers include a lack of trust in results, data-related risks, and insufficient employee competencies (Deloitte, 2024). McKinsey emphasizes that only 1% of leaders rate their organizations as mature in integrating AI into work processes, despite the majority of employees being ready to use these solutions (McKinsey, 2025).

EY highlights the discrepancy between high levels of AI adoption (88% of employees) and organizations' low preparedness to utilize its potential – only 28% of companies have implemented appropriate talent and training strategies. The lack of support and clear policies leads to increased workload and technological stress (EY, 2025). Similar conclusions emerge from a Microsoft & LinkedIn report, which shows that 78% of employees use bring-your-own-AI (BYOAI) tools, often beyond the organization's control. The lack of policies in this area increases the risk of security breaches and blurs the lines between work and personal life (Microsoft & LinkedIn, 2024).

At the same time, OECD research indicates that employee training and consultation are crucial for building trust and mitigating concerns about algorithmic surveillance. Organizations that involve employees in the implementation process achieve better results in terms of work quality and well-being (OECD, 2023). The CIPD recommends creating clear rules for the use of AI, covering ethics, privacy, and transparency, which reduces technostress and strengthens a sense of control (CIPD, 2025). PwC data shows that companies that treat AI as part of their growth strategy, rather than simply a cost-cutting tool, achieve higher productivity growth and develop employee competencies more quickly (PwC, 2025). A study by Brynjolfsson, Li, and Raymond shows that the use of generative AI can increase productivity by approximately 15%, especially among less experienced employees, improving service quality and reducing stress (Brynjolfsson, Li, Raymond, 2025).

As the above suggests, AI can support work -life balance if implementations are based on a clear strategy, consistent governance, a culture of participation, and investment in competencies. Otherwise, the risk of pressure, a sense of surveillance, and a blurring of work boundaries increases. Organizations that integrate AI into processes in a structured manner, monitor the impact on well-being, and communicate implementation goals achieve lasting benefits in both employee productivity and quality of life (Deloitte, 2024; EY, 2025; McKinsey, 2025; Microsoft & LinkedIn, 2024; OECD, 2023; PwC, 2025).

5. Research results and conclusions - a conceptual model of the impact of artificial intelligence (AI) on work-life balance (WLB)

The analysis, based on four dimensions: task automation, potential for relief, risk and inequality, and organizational conditions, allowed us to compare the data from the reports with key WLB theories. The results confirm the mechanisms described in the concept of role conflict and enrichment (Greenhaus, Beutell, 1985). AI can reduce cognitive load and shorten working hours, which promotes role enrichment, but in the absence of clear rules and support, it leads to blurred boundaries and role conflict (EY, 2025; Microsoft & LinkedIn, 2024). From the perspective of the conservation of resources theory (Hobfoll, 1989) and the work -home resources model (ten Brummelhuis, Bakker, 2012), AI acts as a factor of resource gain or loss, where training and governance enhance resources, while implementation chaos and technostress deplete them (OECD, 2023; Deloitte, 2024). In turn, the self-determination theory (Deci, Ryan, 1985) highlights the importance of autonomy and competences, which can be supported by AI if implementations are participatory and transparent (CIPD, 2025).

Combining these findings with empirical data allowed us to develop a conceptual model of AI's impact on WLB, which considers both positive mechanisms (automation, flexibility, and workload reduction) and negative ones (technostress, supervision, and boundary blurring), as well as the role of organizational, cultural, and procedural moderators. This model demonstrates that the effect of AI on work-life balance is not deterministic but depends on the quality of the implementation context (Figure 1).

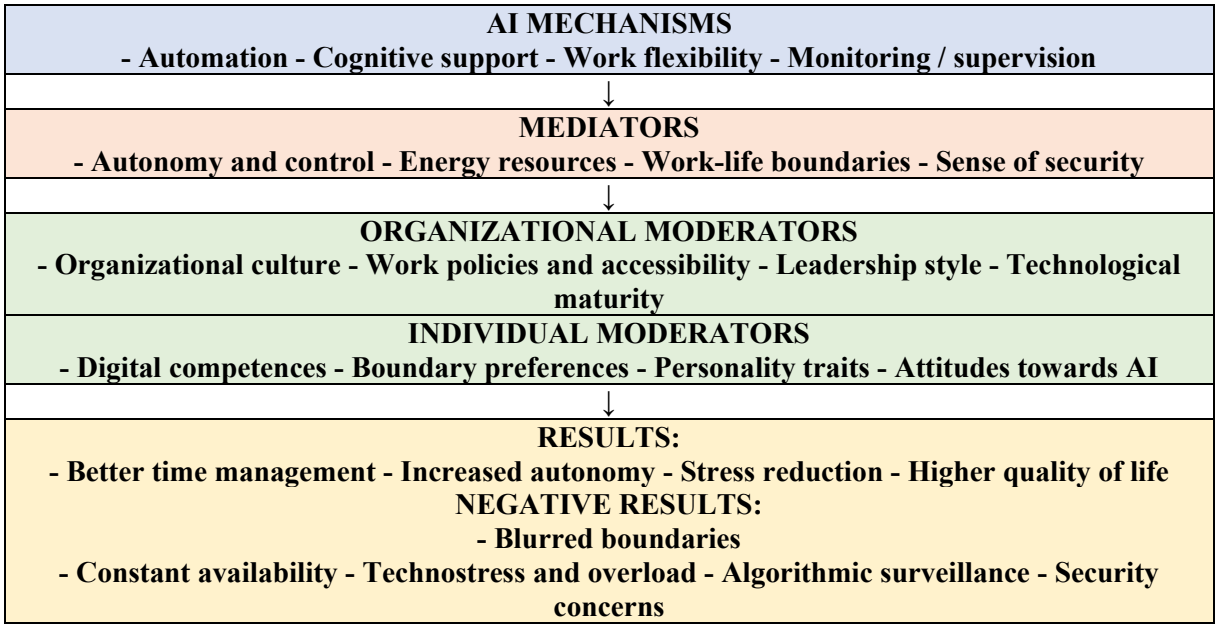

Figure 1. Conceptual model of the impact of artificial intelligence (AI) on work-life balance (WLB). Source: own study.

The proposed conceptual model assumes that the impact of AI on WLB is not linear or one-dimensional, but rather represents a dynamic interaction between technological mechanisms, psychological processes, organizational context, and individual employee characteristics. The model demonstrates that AI technologies can be both a resource and a source of threats to well-being, and that the ultimate effect depends on a combination of factors operating at various levels.

In the first stage of its impact, AI operates through four main technological mechanisms: automation, cognitive support, work flexibility, and algorithmic monitoring. These mechanisms redefine workflows, influencing the structure of time, the scope of responsibilities, and the employee's relationship with technology. Automation reduces task burden and can shorten working hours, while cognitive support relieves mental strain, aiding decision-making and limiting information overload. Flexibility, in turn, fosters greater freedom in organizing work time and adapting it to personal needs, which is the foundation of the modern concept of work -life balance. Simultaneously, algorithmic monitoring can generate pressure, reduce autonomy, and increase technological stress, thus disrupting WLB.

These mechanisms then activate a complex set of mediating processes that explain how AI technologies impact individual employee experiences. Autonomy plays a central role here, being a key determinant of well-being according to self-determination theory (Deci, Ryan, 2000). AI can enhance this autonomy by offering greater flexibility and reducing the number of routine tasks, but it can also undermine it through surveillance and algorithmic control. The second key mediator is energy resources, understood in light of the Conservation of Resources Theory (Hobfoll, 1989). Reducing cognitive load and automating routine activities increase employee resources, while the need to constantly adapt to new tools and information overload may reduce them.

The third mediator is control over work-life boundaries, which determines the degree of role permeability and the ability to maintain balance between these spheres. AI can support boundary segmentation by reducing working time, but it can just as easily blur them through constant digital accessibility and synchronous contact functions. Another mediating process is a sense of technological and professional security, particularly in the context of automation and algorithmic assessment systems. Fears of job loss, lack of competence, or being assessed by the system can significantly reduce well-being and disrupt balance.

The effect of mediators is then modulated by a series of moderating factors, divided into organizational and individual levels. At the organizational level, organizational culture is crucial, as it can foster trust and sustainable use of technology or reinforce a culture of control and pressure. Equally important are work and digital accessibility policies, which regulate the boundaries of AI use and protect employees from excessive burden. The leadership style and technological maturity of an organization influence whether AI is perceived as a support tool or a control mechanism. At the individual level, digital competencies, preferences for role

segmentation or integration, personality traits, and attitudes toward technology are crucial. These elements determine susceptibility to technological stress and readiness to adapt.

Ultimately, the combination of these factors leads to specific WLB outcomes, which can be positive or negative. On the positive side, we see: more effective time management, greater autonomy, reduced cognitive load, and improved quality of private life. On the negative side, we see: blurring of the work-life boundary, increased technostress, a sense of surveillance, and job insecurity. The model thus highlights the fundamental ambivalence of AI technology and its dependence on the implementation context.

The entire model presents a logic in which technology is neither clearly beneficial nor clearly harmful, but becomes a contextual variable whose effects depend on the method of implementation, the quality of organizational support, the maturity of the work culture and the individual perception of the employee.

6. Discussion

Analysis of the results in light of work -life balance theory shows that the impact of AI is complex and depends on the organizational context. From the perspective of role conflict and enrichment (Greenhaus, Beutell, 1985), AI can work in two directions. On the one hand, the automation of routine tasks and the reduction of cognitive load promote role enrichment, freeing up time and energy for tasks requiring greater concentration. Field studies confirm an increase in productivity of approximately 15% after the implementation of generative tools, especially among less experienced employees (Brynjolfsson, Li, Raymond, 2025). On the other hand, the lack of clear rules for using AI and insufficient organizational preparation lead to role conflict - blurring work boundaries, pressure for constant availability, and increased technostress (EY, 2025; Microsoft & LinkedIn, 2024).

The perspective of boundary control emphasizes the importance of policies and governance. Reports show that the BYOAI phenomenon (78% of employees use their own tools) without regulation increases the risk of security breaches and hinders the separation of work and private life (Microsoft & LinkedIn, 2024). Organizations that implement clear policies, audit usage, and integrate AI into processes strengthen the sense of control and mitigate negative impacts (Deloitte, 2024; CIPD, 2025).

In light of the Conservation of Resources Theory (COR) (Hobfoll, 1989) and the Work - Home Resources Model (ten Brummelhuis, Bakker, 2012), AI can be a source of resource gains-time, energy, and competencies-if implementations are supported by training and work redesign. Otherwise, resource losses occur, including uncertainty, technological stress, and additional burdens (OECD, 2023; EY, 2025). PwC data shows that organizations that treat

AI as part of their growth strategy, not just cost reduction, achieve higher productivity growth and develop competencies more quickly, which promotes work rhythm stability (PwC, 2025).

From a Self-Determination Theory (SDT) perspective (Deci, Ryan, 1985; Ryan, Deci, 2000), AI can support the needs for autonomy and competence if employees have a say in how it is implemented and access to training. Participation and communication of "AI as support" enhance a sense of agency, while implementations perceived as a tool of control reduce well-being (OECD, 2023; CIPD, 2025).

In summary, AI can reduce role conflict and enhance resources if organizations provide clear rules, training, and a collaborative culture. Otherwise, the technology becomes a source of pressure and loss of control over boundaries. The results support the need to design implementations in the spirit of resource-based theory and self-determination, with well-being metrics alongside productivity.

7. Summary

The aim of this article was to examine how AI-based solutions can support work-life balance and the challenges associated with their implementation in organizational practice. Through a literature review and analysis of existing data, the research objective was achieved, identifying both the potential benefits and risks of implementing AI in the workplace. The results confirm that the impact of technology on work-life balance is complex, multidimensional, and largely dependent on the quality of the implementation context. Under favorable conditions, AI can relieve employees by automating repetitive tasks, reduce cognitive load, and increase work flexibility. This, according to the Conservation of Resources theory and the Work -Home Resources model, promotes role enrichment and the accumulation of personal resources. In organizations with high digital maturity, this technology supports well-being, enabling more effective time management, improved interaction quality, and reduced stress associated with excessive responsibilities.

At the same time, the analysis reveals that improper AI implementation can lead to counterproductive outcomes. A lack of clear rules of use, insufficient training, low competency awareness, and grassroots BYOAI (Bring Your Own AI) practices foster technostress, uncertainty, and a sense of over-supervision. These phenomena weaken control over role boundaries, exacerbate work-life conflict, and can lead to systematic resource depletion, which is supported by the mechanisms described in the concepts of role conflict and enrichment, boundary theory, COR resource theory, and self-determination theory. As a technology with dual potential, AI can therefore equally enhance autonomy and well-being, as well as limit them, depending on the organizational culture and principles under which it is utilized.

Therefore, a key requirement for the effective and responsible use of AI is its humanization. This includes ethical design, transparent implementation, linking it to a digital well-being policy, and building a mature governance environment. Organizations that treat AI not as a cost-cutting tool but as a component of their growth strategy are more likely to leverage its potential to create flexible, trusted, and sustainable work models. However, this requires consistent efforts to develop digital skills, educate users, and regularly monitor the technology's impact on employees, so that early signals of overload or declining well-being can be appropriately addressed.

Although the recommendations presented so far are general principles, their effectiveness depends on their translation into concrete actions. In the area of public policy, introducing the right to “disconnect” in an AI-supported work environment is crucial, as it helps protect the boundaries between work and private life. Regulations regarding algorithm transparency are equally important to reduce the risk of excessive control and stress associated with automated performance monitoring. Such solutions are cited in OECD and WEF reports as a foundation for sustainable technology implementation. At the organizational level, it's worth initially focusing on solutions that are relatively simple and support employee well-being without the risk of excessive control or pressure. An example would be allowing employees to customize settings in AI tools, such as notification times or task presentation preferences. Such features enhance a sense of autonomy and allow for better management of the boundaries between work and private life. Fostering a culture where AI is viewed as a support, not a control tool, is also crucial. This could include training demonstrating how technologies facilitate work organization and free time planning, rather than increasing workload. Such actions are easy to implement and consistent with the idea of role enrichment and border protection, which international reports indicate is crucial for well-being in the era of digital transformation.

Further research is warranted, particularly through longitudinal and experimental studies that will capture the dynamics of changes in work-life balance. Comparing different technology management strategies across diverse sectors and organizational types is also crucial to identify models that best promote well-being. The findings of this study point to directions and mechanisms worth exploring in the future, providing a starting point for in-depth reflection on the role of AI in shaping more inclusive, responsible, and sustainable work environments.

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