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# ARTIFICIAL INTELLIGENCE AND LEADERSHIP: A REVOLUTION IN MANAGEMENT STRATEGIES

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# ABSTRACT

Artificial intelligence (AI) is radically transforming organisational structures, leadership approaches and workforce management in today's business world. This study examines the impact of AI on workforce and organisational culture and discusses how digital leadership is being shaped. The impact of AI on organisational structures enables the development of a more agile, flexible and data-driven management approach. In addition, it has been observed that AI has made recruitment, performance management and employee development processes in human resources management more efficient and has directed the workforce more effectively. However, the ethical dimensions of this transformation process and its effects on employees should also be taken into consideration. While AI increases the productivity of organisations, it requires considering critical responsibilities such as employee safety and privacy. This study draws attention to the opportunities and challenges that the digital transformation process presents for organisations by discussing the effects of AI on leadership, workforce management and organisational culture. As a result, the effective use of AI enables organisations to develop in a more sustainable and strategic way, while enabling leaders to prepare for the future by increasing their digital skills.

Keywords: Artificial intelligence, Leadership, Executive, Management

# INTRODUCTION

Artificial intelligence (AI), as an increasingly adopted technology in today's business world, is transforming organisational structures, workforce strategies and leadership conceptions. The integration of AI into the workforce is reshaping not only operational processes but also organisational culture and management strategies (Sharma & Chopra, 2013). While this transformation enables leaders to make more agile and strategic decisions, it also changes the way employees do business (Li et al., 2022). The impact of AI on organisational structures has contributed to the development of a more efficient, data-driven and agile management approach. The use of AI enables organisations to adapt more quickly, allowing leaders to direct their strategic planning in a more informed way (Kitsios and Kamariotou, 2021; Ifitri et al., 2024). In this context, understanding the effects of AI on human resource management, leadership approaches and organisational culture is critical to maximise the potential benefits of this technology for organisations (Brougham & Haar, 2018).

The role of AI in workforce management has a wide range of impacts, from monitoring employee performance to achieving strategic goals. AI provides significant benefits to organisations, especially in areas such as workforce planning and talent management (Peifer et

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al., 2021). However, the adoption of this technology not only provides efficiency, but also requires considering the social impacts on the workforce (Chevalier & Dejoux, 2021). This study aims to examine the effects of AI on organisational structures and culture and discuss how leaders can effectively use this new technology.

### Artificial Intelligence and Leadership: Stepping into a New Era

AI is fundamentally transforming organisational structures and ways of doing business by reshaping the understanding of leadership. The integration of AI not only enables leaders to make more efficient decisions, but also allows them to shape organisational strategies more quickly and accurately. While in traditional leadership approaches, decisions are often based on intuition, this process is now more objective and data-driven thanks to the data analyses provided by AI (Shamim, 2022; Peng, 2022). The impact of AI on leadership provides more transparency and speed in the decision-making processes of leaders. The use of AI improves leaders' data-driven thinking skills as well as human-centred thinking (Maddula, 2018; Thillaivasan & Wickramasinghe, 2020). The speed and accuracy provided by AI in leadership processes are not only limited to daily operational decisions, but also offer great advantages to leaders in strategic planning. Moreover, the integration of AI makes the organisational structure more agile and dynamic, accelerating leaders' achievement of organisational goals (Robbins et al., 2014; Daft, 2016).

The impact of AI on leadership and management processes also enables leaders to direct the workforce more effectively. AI-supported analyses help leaders to measure the performance of their employees more accurately, provide them with effective feedback and prepare more personalised development plans (Pettigrew, 1992; Burgelman et al., 2018). In this way, leaders develop more efficient management strategies and the organisation can achieve its long-term goals in a healthier way. AI not only accelerates leaders' decision-making processes, but also makes business processes more efficient and strategic. While the integration of AI makes the leadership approach data-driven, agile and more effective, it also enables organisations to achieve their goals faster (Pettigrew, 1992; Maddula, 2018; Thillaivasan & Wickramasinghe, 2020; Robbins et al., 2014; Daft, 2016; Burgelman et al., 2018).

### Artificial Intelligence and Digital Leadership Approach

AI is radically transforming the understanding of digital leadership. Digital leadership requires not only managing technology but also integrating it into organisational strategies and adopting a more agile, flexible and data-driven leadership style (Pettigrew, 1992; Burgelman et al., 2018). The impact of AI on leadership enables leaders to make more informed decisions and manage their organisations more efficiently (Robbins et al., 2014; Daft, 2016). While AI offers digital leaders the opportunity to accelerate and optimise business processes, it also makes the process of achieving organisational goals more efficient.

Digital leaders can determine the strategic orientations of their organisations more accurately with the data provided by AI. In this context, digital leadership enables leaders to think datadriven and make strategic decisions with the tools provided by AI (Shamim, 2022; Peng, 2022). Leaders equipped with AI can manage the workforce more effectively and direct organisational processes more flexibly and quickly. This enables organisations to become agile and respond faster to changes in the external environment (Maddula, 2018; Thillaivasan &

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Wickramasinghe, 2020). The impact of AI on digital leadership becomes evident not only when leaders make decisions, but also when they shape organisational culture. With the analytical data provided by AI, digital leaders can more accurately identify the needs of employees and accelerate the achievement of organisational goals. In addition, the integration of AI into leadership strategies enables leaders to guide employees more effectively and follow their development more efficiently (Pettigrew, 1992; Burgelman et al., 2018).

Digital leadership requires adopting a more informed, agile and strategic leadership style thanks to the data-driven tools provided by AI. The role of AI in digital leadership enables leaders to make faster and more accurate decisions in achieving organisational goals, enabling organisations to direct their workforce more effectively (Robbins et al., 2014; Daft, 2016; Maddula, 2018).

### **Artificial Intelligence and Change in Management Structures**

AI creates significant changes on management structures. The integration of AI makes organisational structures more dynamic, agile and data-driven, which enables leaders to make faster and more accurate decisions (Akat et al., 1999). This process requires the adoption of more flexible and collaborative management models instead of traditional hierarchical structures. Big data analytics provided by AI enables organisations to manage their internal functioning in a more transparent and effective way (Wood, 1999; Da Silva et al., 2022).

The impact of AI on management structures enables organisations to adapt faster and respond more effectively to changes in the external environment. This is reshaping the way leaders manage the workforce and the processes of achieving strategic goals (Shrestha, 2019; Ballamudi, 2019). This change in management structures is transforming not only decisionmaking mechanisms but also organisational culture. Digital leaders can prepare their organisations for the future faster by using AI effectively (Aytürk & Peker, 2000). AI enables more accurate and faster decisions by using big data analytics and machine learning algorithms in management processes. Managers can reach organisational goals faster by using their workforce and resources more efficiently with the analyses provided by AI (Pettigrew, 1992; Burgelman et al., 2018). This process enables organisations to achieve a more sustainable structure and makes management processes more efficient.

The impact of AI on management structures also allows increasing organisational flexibility and optimising business processes. In this way, leaders can make more agile and data-driven decisions, while organisations can adapt more quickly to the external environment (Gürdal, 1990). The impact of AI on this transformation makes it possible to manage the workforce more effectively and to adapt the organisational structure to the rapidly changing business world. The integration of AI into management structures enables organisations to become more agile, flexible and efficient. While this process makes it more efficient for leaders to manage the workforce, it also accelerates the adaptation processes of organisations to the external environment (Pettigrew, 1992; Akat et al., 1999; Burgelman et al., 2018).

# Artificial Intelligence and Human Resources Management

AI reshapes human resource management, making organisational processes more efficient and effective (Hakimpoor et al., 2011). The integration of AI into recruitment, performance

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management and training processes increases the speed and accuracy of management processes and makes the decision-making processes of human resources professionals more data-driven (Mariska et al., 2021). This integration also allows to measure employees' competencies more accurately and provide them with customised development plans (Lichtenthaler, 2020). The role of AI in human resource management contributes to more effective formulation and implementation of workforce strategies. By instantly monitoring employee performance, AIbased systems provide faster feedback to managers and increase the overall efficiency of the organisation (Li et al., 2019). This data facilitates managers to develop strategies for training and development processes, while at the same time increasing employee motivation (Shrestha, 2019; Ballamudi, 2019; Mariska et al., 2021).

The impact of AI on human resource management is not limited to operational processes. AI can also make organisational change processes more efficient. Managers can make the organisational structure more flexible and agile with AI-supported decision-making processes (Oyekunle & Boohene, 2024; Ifitri et al., 2024.) This process enables employees to adapt quickly to changing workforce needs and contributes to organisations to achieve their strategic goals faster (Sharma & Chopra, 2013). The application of AI in human resources management enables organisations to be more agile, efficient and innovative (Gezici, 2023).

However, there are also concerns about the ethical use of AI in human resource management. Since AI has the capacity to process employees' personal data, the security and privacy of this data is of great importance. Human resource professionals should act in accordance with ethical principles and respect the privacy of employees when using AI-based systems (Lichtenthaler, 2020). An ethical management approach ensures that the data provided by AI is used accurately and fairly, which increases the credibility of organisations and employee loyalty. In general, it can be stated that AI can make human resources management more efficient, while at the same time increasing organisational flexibility. The advantages of AI in workforce management are effective in a wide range of areas, from individual employee development processes to organisational strategies. However, the ethical use of this technology is a critical responsibility for human resources professionals and when managed correctly, it guarantees the long-term success of organisations (Li et al., 2019; Lichtenthaler, 2020).

#### **Artificial Intelligence and Leadership**

AI transforms organisational structures by reshaping leadership understanding and management strategies (Maddula, 2018; Thillaivasan & Wickramasinghe, 2020). The impact of AI on leadership accelerates the decision-making processes of leaders and enables them to make more efficient and strategic decisions (Shamim, 2022). The big data analytics provided by AI enables leaders to predict future trends, which enables organisations to make more informed decisions and determine their strategic orientation (Peng, 2022). AI is also significantly changing the way leaders manage their workforce. AI-supported decision-making systems enable leaders to direct the workforce more effectively and achieve organisational goals faster. In addition, the data-driven analyses provided by AI enable leaders to provide more accurate and immediate feedback, while monitoring employee performance and identifying areas for improvement (Robbins et al., 2014; Daft, 2016). The use of such technology enables leaders to be more agile and flexible, making the organisational structure more efficient (Li et al., 2022).

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Leaders' integration of AI into their management strategies is not only limited to operational processes, but also leads to a change in organisational culture and workforce dynamics. AIbased systems make it possible to more accurately identify the needs of employees and create development plans that suit them. This enables leaders to manage the workforce in a more motivating and interactive way (Hakimpoor et al., 2011; Sharma & Chopra, 2013). The integration of AI into leadership strategies enables organisations to become more innovative and sustainable. Moreover, the effects of AI on leadership are not only limited to organisational efficiency, but also affect the way leaders fulfil their societal responsibilities. By using AI, leaders can develop more environmentally friendly, ethical and fair management practices. This process enables leaders to fulfil their ethical responsibilities while strengthening organisations' relationships with society (Lichtenthaler, 2020). The proper use of AI enables organisations to build stronger relationships with both internal and external stakeholders. In general, it can be stated that AI makes leaders' strategic decision-making processes more efficient, agile and data-driven. This process enables organisations to become stronger and more sustainable. By using AI, leaders can not only increase the efficiency of their organisations but also contribute to society by fulfilling their ethical responsibilities (Sharma & Chopra, 2013; Shamim, 2022; Peng, 2022).

### **Artificial Intelligence and Workforce Management**

AI is significantly transforming workforce management processes. The introduction of AI in organisations offers great opportunities to manage the workforce more efficiently, improve performance and make better decisions. However, the proliferation of this technology may increase anxiety and turnover intentions in some workforce members (Brougham & Haar, 2018). The impact of AI on employees can create demotivation, job security concerns and uncertainty in professional identities in organisations (Chevalier & Dejoux, 2021).

While AI brings benefits in a number of areas of workforce management, it also brings some challenges. While AI-based systems monitor employee performance more objectively, they can also lead to digital inequalities among employees. While some employees may want to work in more creative and innovative jobs instead of being subject to the control of AI, others may see the replacement of these technologies as a threat (Sithambaram & Tajudeen, 2023). This may complicate the way organisations manage their workforce and increase the difficulties employees face in adapting to AI. Integrating AI into workforce management also brings a new approach to the training of the workforce. AI can be used to assess employees' capabilities and provide them with personalised training opportunities. In this way, the development needs of employees can be determined more accurately and more appropriate development plans can be created for them (Samarasinghe & Medis, 2020; Budhwar, 2022). However, it can also be stated that using AI in this way can have a positive impact on employees' job satisfaction and increase their commitment to the organisation. Human resources professionals should use the data provided by AI ethically and protect the privacy rights of employees (Gür et al., 2019). Otherwise, there may be a loss of trust among employees and the overall productivity of the organisation may suffer. While AI offers great opportunities in workforce management, it also brings some challenges. In order to overcome these challenges, organisations need to analyse the impacts of AI well and develop strategies to ensure that employees adopt this technology. In order to use AI effectively in workforce

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management, it is of great importance to observe ethical rules and pay attention to the safety of employees (Brougham & Haar, 2018; Gür et al., 2019).

### Artificial Intelligence and Organisational Culture

AI plays an important role in the evolution of organisational culture. Organisational culture is a dynamic system that reflects the shared values, norms and behavioural patterns in an organisation. The increasing role of AI in organisations accelerates the transformation of this culture. Especially in digital transformation processes, AI makes organisational structures more transparent, data-driven and flexible, which requires organisational culture to keep pace with these changes (Chevalier & Dejoux, 2021). By reshaping the way employees do business, AI enables more open communication and greater collaboration, which contributes to the development of organisational culture (Nalbantoğlu, 2021).

The impact of AI on organisational culture includes a number of factors that change the way employees work. By speeding up and simplifying business processes, AI allows employees to engage in more creative and strategic tasks. However, the widespread use of AI enables the development of a culture based on digital skills among employees. This causes the organisational culture to become more innovative, flexible and data-driven (Li et al., 2022). Moreover, decision-making processes supported by AI enable employees to take part in a more participatory and collaborative work environment, thus enabling the organisational culture to become more open and integrated (Peifer et al., 2021). However, the impact of AI on organisational culture brings some challenges. Employees may have concerns about the impact of technology on the workforce with the integration of AI into organisational processes. This may create negative effects such as job insecurity, stress and loss of motivation in the workforce. In this context, leaders and managers need to understand the effects of AI on employees and manage this change more smoothly (Kitsios & Kamariotou, 2021). Furthermore, organisations should communicate the potential benefits of AI to their employees and provide training opportunities for them to adopt this technology (Brougham & Haar, 2018).

# CONCLUSION

It can be said that AI has radically changed the understanding of leadership and organisational structures. The impact of AI not only accelerates the decision-making processes of leaders, but also enables organisations to become more strategic and data-driven (Lichtenthaler, 2020). The role of AI in workforce management enables more efficient management of employee development processes, more accurate workforce planning and faster achievement of organisational goals (Gür et al., 2019; Li et al., 2022). However, the impact of AI on organisational structures not only creates opportunities but also brings some challenges. While the adaptation of employees to AI requires an increase in the digital skills of leaders, it also reveals the need to pay attention to social factors such as employee satisfaction and job security (Hakimpoor et al., 2011; Brougham & Haar, 2018). In this context, the use of AI should ensure employee safety and privacy, taking into account the ethical responsibilities of organisations (Shrestha, 2019; Ballamudi, 2019). Overall, the impacts of AI on workforce management and leadership indicate that it will enable organisations to become more agile, efficient and sustainable in the future. For this transformation to be successfully achieved, leaders need to embrace AI not only as a technological tool but also as part of the organisational culture (Li et al., 2022; Peifer et al., 2021). While AI offers great opportunities in workforce management, it

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should also be used in accordance with ethical principles. This balance helps organisations to fulfil their social responsibilities while securing their long-term success (Chevalier & Dejoux, 2021).

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