

# AI INNOVATIONS POWERING ORGANISATIONAL PERFORMANCE



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In today's rapidly evolving business landscape, the integration of Artificial Intelligence (AI) has become a cornerstone for enhancing organisational performance. From optimising decision-making processes to transforming business operations, AI innovations are driving significant improvements across various sectors. This article explores how AI is powering organisational performance, drawing insights from recent research and case studies.

## ENHANCING DECISION-MAKING WITH AI

One of the critical areas where AI has made substantial inroads is decision-making. Traditional decision-making processes, often hampered by biases and a lack of real-time data, are being transformed by AI-driven insights. Decision Intelligence (DI), for instance, is an emerging framework that combines data science, social science, and managerial science to empower organisations to make fast, accurate, and consistent decisions <sup>1,2</sup>.

The use of AI in decision-making involves several components, such as data fabric, decision models, and orchestration. These components work together to provide connected insights, contextual analytics, and continuous intelligence, enabling organisations to respond swiftly to changing conditions and complex scenarios <sup>1</sup>. For example, in crisis management scenarios, AI systems can process data from various sources, optimise resource allocation, and monitor situations in real-time to provide actionable insights <sup>3</sup>.

## STRATEGIC PLANNING AND RESOURCE ALLOCATION

AI's role in strategic planning and resource allocation cannot

be overstated. AI-augmented strategic planning frameworks, such as AISPF (AI-Augmented Strategic Planning Framework), integrates AI tools like trend analysis, forecasting, and strategy simulation to enhance decision-making processes <sup>2</sup>. These tools help organisations identify emerging threats, simulate strategic options, and develop detailed action plans, thereby improving their strategic initiatives and resource allocations <sup>4</sup>.

A practical example of AI in action based on the IKE Institute's work with NATO is the optimisation of logistics operations. By employing a Data-Driven Decision Matrix, NATO can evaluate various logistical strategies based on cost efficiency, speed of deployment, reliability, and scalability, ultimately selecting the most effective approach.

## AI-DRIVEN BUSINESS VALUE REALISATION

High-performing organisations view AI as a strategic asset, essential for maintaining competitive advantage and driving business value. To effectively harness AI, organisations need to build a business strategy infused with AI, rather than treating AI as a separate technical strategy <sup>3</sup>. This involves prioritising AI investments across different

business model elements, assessing the impact and urgency of AI applications, and leveraging unique data to create 'Competitive Moats' <sup>5</sup>.

The realisation of AI benefits requires a systematic approach. Gartner outlines five key practices for AI benefit realisation: building an AI value story, defining a value hypothesis, building an action plan, testing the value hypothesis, and tracking leading and lagging KPIs. These practices ensure that AI initiatives are aligned with business goals and deliver measurable outcomes <sup>6</sup>.

## GENERATIVE AI AND BUSINESS PRODUCTIVITY

Generative AI is revolutionising business productivity by automating and augmenting various tasks. For instance, generative AI can significantly reduce the time required to write job descriptions, transforming a task that traditionally took 90 minutes into a five-minute process <sup>4</sup>. Such efficiencies not only save time but also enhance overall productivity and operational effectiveness.

Moreover, generative AI applications extend beyond simple automation. They include complex tasks like document search and summarisation, customer support, and personalised content creation for communication, sales and

marketing amongst other operational tasks. These applications can lead to substantial improvements in business processes and multi-role impacts, providing a competitive edge in the target market or domain of operations <sup>2,3</sup>.

## DISTRIBUTED AND AUTONOMOUS GOVERNANCE

The shift towards distributed and autonomous governance is another area where AI is making a profound impact. Traditional top-down governance models are being replaced by distributed governance frameworks that decentralise decision-making authority and processes across multiple nodes within an organisation <sup>4</sup>. This approach enhances agility, adaptability, and timely responses to dynamic

## INNOVATION ENABLING TRANSFORMATION

Innovation is at the heart of enabling organisational transformation through AI. By fostering a culture of continuous improvement and experimentation, organisations can leverage AI to drive innovation across various domains. AI technologies not only automate routine tasks but also enable employees to focus on higher-value activities that require creativity and strategic thinking <sup>7,8</sup>.

For instance, AI-driven platforms can provide real-time feedback and coaching to employees, enhancing their skills and performance. This kind of innovation is crucial in developing a more agile and responsive workforce capable of

shown that AI can enhance productivity and economic growth by automating routine tasks, improving efficiency, and creating new opportunities for innovation. McKinsey estimates that AI could potentially add around \$13 trillion to global GDP by 2030, increasing the annual growth rate of GDP by about 1.2 percentage points <sup>4, 5</sup>.

AI technologies improve GDP by enhancing labour productivity. For instance, automation and AI can perform repetitive tasks more efficiently than humans, allowing workers to focus on more complex and value-added activities. This shift not only increases the overall output but also drives economic growth by fostering innovation and creating new markets <sup>4, 9</sup>. Furthermore, sectors such as healthcare,

navigate the complexities of the modern business environment, the strategic integration of AI will be crucial for maintaining competitive advantage and driving sustainable growth. By leveraging AI's capabilities, organisations can not only optimise their operations but also unlock new opportunities for innovation and value creation, ultimately contributing to economic growth and improved GDP.

## REFERENCES

- McKinsey & Company (2024). Gen AI: A Cognitive Industrial Revolution.
- McKinsey & Company (2023). The organization of the future: Enabled by gen AI, driven by people.
- Betterworks (2024). Intelligent Performance with AI-powered Recommendations.
- Deloitte Insights. (2023). Powering human impact with technology.
- McKinsey & Company. (2024). AI, automation, and the future of work: Ten things to solve for.
- Gartner (2023). Capture AI Value With These 5 Benefit Realization Best Practices.
- Xu, M., David, J. M., & Kim, S. H. (2018). The Fourth Industrial Revolution: Opportunities and Challenges. *International Journal of Financial Research*, 9(2), 90-95. doi:10.5430/ijfr.v9n2p90
- Brougham, D., & Haar, J. (2018). Smart technology, artificial intelligence, robotics, and algorithms (STARA): Employees' perceptions of our future workplace. *Journal of Management & Organisation*, 24(2), 239-257. doi:10.1017/jmo.2016.55
- Kaplan, A., & Haenlein, M. (2019). Siri, Siri, in my hand: Who's the fairest in the land? On the interpretations, illustrations, and implications of artificial intelligence. *Business Horizons*, 62(1), 15-25. doi:10.1016/j.bushor.2018.08.004
- Bessen, J. E. (2019). AI and Jobs: The Role of Demand. National Bureau of Economic Research (NBER), Working Paper No. 24235.



conditions, critical for successful digital transformation.

Autonomous governance, driven by AI, empowers roles and teams with the authority to make distributed decisions while balancing risk and performance <sup>3</sup>. By integrating AI into governance structures, organisations can achieve better outcomes, reduce response times, and foster innovation both at the centre and the edges of their operations <sup>2</sup>.

adapting to rapidly changing business environments. Moreover, AI can identify patterns and trends that may not be visible to human analysts, providing deeper insights that drive strategic innovation and competitive advantage <sup>4</sup>.

## AI'S IMPACT ON GDP

AI's transformative potential extends to macroeconomic scales, with significant implications for Gross Domestic Product (GDP). Studies have

finance, defence and manufacturing have already witnessed significant contributions from AI, leading to more robust and resilient economic performance <sup>9,10</sup>.

## CONCLUSION

AI innovations are undeniably powering organisational performance by enhancing decision-making, strategic planning, business productivity, and governance. As organisations continue to