

AI’s Effect on Organizational Decision-Making: An Analysis of Collaboration and Communication

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Abstract

Across many industries, artificial intelligence (AI) is changing decision-making procedures and organizational structures. This study looks at how AI affects organizational decision-making, with a particular emphasis on communication and teamwork. The project investigates how AI-driven tools facilitate internal communication systems, increase team coordination, and improve data analysis. It also assesses issues including technological dependence, ethical dilemmas, and reluctance to change. The study comes to the conclusion that although AI greatly increases decision speed, accuracy, and cooperation efficiency, organizational culture, personnel flexibility, and strategy integration are necessary for effective deployment.

Keywords: Artificial Intelligence, Decision-Making, Collaboration, Communication, Organizational Performance, AI Integration

Introduction

One significant technical advancement that is changing contemporary corporations is artificial intelligence. AI is essential for assisting managers in making decisions, from automated communication systems to predictive analytics. Businesses are depending more and more on AI-based tools to forecast trends, analyze large, complicated datasets, and streamline processes.

Organizational decision-making has always depended on human judgment, experience, and a limited amount of data analysis. On the other hand, incorporating AI improves efficiency, lowers uncertainty, and permits evidence-based decision-making. AI affects staff collaboration and communication in addition to data processing by enabling real-time information exchange and workflow automation.

The impact of AI on corporate decision-making is examined in this research, with a focus on how it influences communication and cooperation frameworks.

Literature Review

Previous studies have shown that AI enhances decision-making quality by providing accurate data-driven insights. Research indicates that AI-powered decision support systems improve strategic planning and operational effectiveness.

The importance of teamwork to an organization's success has also been demonstrated by academics. Intelligent workflow systems, chat bots, and collaboration platforms are examples of AI tools that help with cross-functional coordination. Platforms for

communication driven by artificial intelligence (AI) increase business transparency by facilitating rapid messaging, sentiment analysis, and automated responses.

However, research also identifies issues such as hazards to data privacy, employee resistance, ethical quandaries, and an excessive dependence on automated technologies.

Research Objectives

1. To investigate how AI functions in corporate decision-making.
2. To examine how teamwork is affected by AI.
3. To assess the impact of AI on communication within organizations.
4. To determine the obstacles to implementing AI.
5. To offer suggestions for integrating AI successfully.

Research Methodology

A descriptive and analytical research design served as the foundation for this Research

- Data Sources: Secondary data gathered from publications, reports, case studies, and research journals.
- Research Methods: Qualitative evaluation of current research and business procedures.
- Scope: Pay attention to how businesses are using AI tools for teamwork and decision-making.

Artificial Intelligence's Role in Organizational Decision Making

AI improves judgment in the following ways:

- Predictive analytics: predicting consumer behavior and market trends.
- Automation: lowering the amount of manual labor and increasing operational effectiveness.
- Data processing: Accurately and swiftly analyzing big datasets.
- Decision Support Systems: Giving managers up-to-date information. AI reduces human bias, increases accuracy, and improves speed in strategic and tactical decisions.

AI and Organizational Collaboration

AI strengthens collaboration in the following ways:

- Improved Information Sharing

Improved Information Sharing refers to the enhanced exchange of accurate, timely, and relevant information among individuals, teams, or departments within an organization. It ensures that the right information reaches the right people at the right time, enabling better coordination, transparency, and decision-making.

In the context of modern organizations—especially with the integration of Artificial Intelligence (AI)—information sharing has become more efficient and data-driven. AI-powered systems collect, analyze, and distribute information in real time, reducing communication gaps and minimizing errors.

- Workflow optimization

By allocating tasks to team members according to their priorities, workload, and skill set, automated task allocation improves workflow, decreases manual labor, and boosts output. This guarantee: Tasks are finished on schedule. The team's workload is evenly distributed.

Errors resulting from manual allocation are reduced. Members of the team concentrate on high-priority tasks. Overall productivity and teamwork increase

- Virtual Collaboration

In distant work environments, AI-powered virtual collaboration solutions facilitate smooth communication and teamwork by providing capabilities such as: Video conferences and real-time messaging Virtual whiteboards and screen sharing. Managing and monitoring tasks Scheduling meetings automatically. A clever summarization and transcription Improved access control and security. These resources increase output, encourage teamwork, and improve the efficiency of distant work.

Knowledge Management

AI systems serve as a central repository for knowledge, effectively storing and retrieving organizational knowledge through: Knowledge graphs and structured databases Easy search through natural language processing Automated classification and tagging Security precautions and access control ongoing education and upgrade. This decreases knowledge gaps, increases productivity, and makes it possible to quickly retrieve important information. Cross-departmental coordination consequently improves dramatically.

AI and Organizational Communication

AI transforms communication through:

- Chat bots and Virtual Assistants: Providing instant responses.
- Automated Reporting Systems: Delivering structured information.
- Sentiment Analysis Tools: Understanding employee feedback.
- Language Processing Systems: Enhancing clarity and inclusivity.

These technologies improve transparency, reduce miscommunication, and enhance employee engagement.

Challenges in AI Implementation

Despite its advantages, AI adoption faces several challenges:

- High implementation costs
- Data security and privacy concerns
- Resistance to technological change
- Ethical considerations
- Over-dependence on automated systems

Organizations must develop proper training programs and ethical frameworks to address these issues.

Findings

The study reveals that:

- AI significantly improves decision-making accuracy and speed.
- Collaboration becomes more structured and efficient through AI tools.
- Communication processes are streamlined and more transparent.
- Successful AI implementation requires organizational readiness and leadership support.

Conclusion

Artificial Intelligence has become a strategic asset in modern organizations. Its integration into decision-making processes enhances collaboration and communication efficiency. While AI offers substantial benefits, its effectiveness depends on proper planning, employee training, and ethical governance.

Organizations that strategically integrate AI with human intelligence can achieve sustainable competitive advantage.

Recommendations

1. Invest in employee training programs for AI literacy.
2. Develop ethical AI policies and data governance frameworks.
3. Encourage a collaborative culture supportive of technological innovation.
4. Combine human judgment with AI-generated insights for balanced decision-making.

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