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Impact of Generative Artificial Intelligence on Managerial Productivity and Decision-Making Quality

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Abstract:
Generative Artificial Intelligence (GenAI) is changing how managers work by helping them complete tasks faster and make better decisions. This study looks at how using GenAI affects managerial productivity and the quality of decisions in organizations, especially in India. Data was collected from 350 managers and analysed using statistical methods. The results show that GenAI helps managers save time by handling routine tasks like report writing and data analysis. This allows them to focus more on important activities such as planning and problem-solving. It also improves decision-making by providing useful insights and predictions. However, some challenges still exist, such as errors in AI output, bias, and over-dependence on technology. The study also finds that managers who understand AI well and organizations that provide proper support can get more benefits from GenAI. Overall, GenAI can improve both productivity and decision-making, but it should be used carefully with human judgment.

Keywords: Generative Artificial Intelligence (GenAI), Managerial Productivity, Decision-Making Quality, Artificial Intelligence Adoption, Human–AI Collaboration, Digital Transformation, Organizational Performance, AI Literacy, Data-Driven Decision Making, Business Analytics.

1. INTRODUCTION

The rapid advancement of artificial intelligence has significantly transformed organizational processes and managerial practices across industries. In recent years, Generative Artificial Intelligence (GenAI) has emerged as a powerful technological innovation capable of producing human-like outputs, including text, insights, and predictive analyses. Unlike traditional AI systems that primarily focus on task automation, GenAI extends its capabilities to cognitive augmentation, enabling managers to enhance both operational efficiency and strategic decision-making.

Managerial roles have evolved in response to increasing data complexity and the need for faster, more informed decisions. Modern managers are required to process large volumes of structured and unstructured information while maintaining accuracy and strategic alignment. In this context, GenAI plays a critical role by automating routine tasks such as report generation, data summarization, and communication drafting. This reduction in repetitive workload allows managers to allocate more time to high-value activities, including strategic planning, innovation, and stakeholder engagement.

In addition to improving productivity, GenAI has a profound impact on decision-making quality. High-quality managerial decisions are typically characterized by accuracy, timeliness, and alignment with organizational objectives. GenAI enhances these aspects by providing real-time analytics, predictive modelling, and scenario simulation capabilities. By enabling data-driven insights, GenAI reduces information asymmetry and supports evidence-based decision-making. Furthermore, it has the potential to mitigate common human cognitive biases by offering objective and consistent analytical outputs.

Despite its advantages, the adoption of GenAI presents several challenges and risks. Issues related to algorithmic bias, lack of transparency, and interpretability of AI-generated outputs can affect the reliability of decisions. Additionally, excessive dependence on AI systems may reduce critical thinking and independent judgment among managers. These concerns highlight the importance of integrating human expertise with AI capabilities to ensure balanced and effective decision-making processes. Another important factor influencing the effectiveness of GenAI is the level of AI literacy among managers and the degree of organizational support. Managers with higher AI literacy are better equipped to interpret AI outputs and utilize them effectively in decision-making. Similarly, organizations that provide adequate training, infrastructure, and leadership support are more likely to achieve successful AI implementation and maximize its benefits.

Although existing research has explored the impact of artificial intelligence on productivity and decision-making, most studies have examined these aspects independently. There is a lack of comprehensive research that integrates both managerial productivity and decision-making quality within a unified framework, particularly in the context of emerging economies such as India. Addressing this gap is essential for understanding the broader implications of GenAI adoption in managerial settings.Therefore, this study aims to examine the impact of Generative Artificial Intelligence on managerial productivity and decision-making quality while considering the moderating roles of AI literacy and organizational support. By adopting a mixed-method approach, this research provides both empirical evidence and practical insights, contributing to the growing body of knowledge on human–AI collaboration and digital transformation in organizations.

2. LITERATURE REVIEW

2.1 Generative Artificial Intelligence and Managerial Productivity

Generative Artificial Intelligence (GenAI) has emerged as a transformative technology influencing managerial productivity by enabling automation, augmentation, and knowledge synthesis. Recent empirical studies demonstrate that GenAI significantly reduces time spent on repetitive tasks such as documentation, reporting, and data summarization, with estimates indicating a reduction of approximately 35–45% in managerial workload. This efficiency gain allows managers to focus on higher-value activities, including strategic planning and innovation.

Field experiments conducted in organizational settings further support these findings. For instance, large-scale experimental research indicates that GenAI adoption can increase productivity through improved task execution and reduced friction in workflows, leading to measurable improvements in organizational performance. Similarly, OECD (2025) reports highlight that GenAI enhances not only productivity but also creativity and innovation, thereby contributing to broader economic growth and organizational competitiveness.

Moreover, recent studies suggest that productivity gains are not uniform across all users. Less experienced employees tend to benefit more from AI assistance, indicating that GenAI can act as a skill equalizer (Dell'Acqua et al., 2023; Brynjolfsson et al., 2023). However, other research cautions that excessive reliance on AI-generated outputs may lead to superficial productivity gains without meaningful value creation, often referred to as "pseudo-productivity" or low-quality output generation.

Furthermore, sector-specific studies reveal that GenAI adoption in industries such as IT and retail leads to increased efficiency and improved task performance, although challenges such as inaccurate outputs and regulatory concerns persist. These findings suggest that while GenAI has strong potential to enhance productivity, its effectiveness depends on proper implementation and human oversight.

2.2 Generative AI and Decision-Making Quality

Decision-making quality is a critical determinant of organizational success, and GenAI has been shown to significantly enhance this dimension by providing data-driven insights and predictive analytics. Research indicates that GenAI improves decision accuracy by enabling managers to analyse large datasets and generate scenario-based insights, thereby supporting evidence-based decision-making.

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Recent studies highlight that AI-assisted decision-making reduces cognitive biases such as anchoring and overconfidence, leading to more rational outcomes (Shrestha et al., 2021). Additionally, GenAI enables faster decision cycles by providing real-time information, thereby improving responsiveness in dynamic business environments.

However, emerging research from 2025–2026 presents a more nuanced perspective. Studies indicate that while GenAI improves decision speed and efficiency, it may also introduce new risks, including information overload and increased cognitive complexity. Furthermore, research on ambiguity resolution suggests that GenAI can enhance decision quality by identifying inconsistencies and providing structured insights, but its effectiveness is limited by its inability to fully understand contextual nuances.

Another critical concern is the reliability of AI-generated outputs. Research shows that GenAI systems may produce biased or inaccurate recommendations if trained on flawed datasets, thereby affecting decision outcomes. These limitations highlight the importance of maintaining human oversight in AI-assisted decision-making processes.

2.3 Human–AI Collaboration in Managerial Contexts

The concept of human–AI collaboration has gained significant attention in recent literature as a key factor influencing the effectiveness of GenAI systems. Rather than replacing human decision-makers, GenAI is increasingly viewed as a complementary tool that enhances human cognitive capabilities.

Studies suggest that human–AI collaboration leads to improved decision outcomes by combining the strengths of both entities. AI systems excel in data processing and pattern recognition, while humans contribute contextual understanding, ethical reasoning, and strategic thinking. This synergy creates a "human and AI" model that enhances both productivity and decision-making quality.

Recent research also emphasizes the importance of interaction design in human–AI collaboration. Process-oriented AI support, which assists users step-by-step rather than providing complete solutions, has been found to improve decision quality and user engagement. Additionally, studies highlight that organizations adopting collaborative AI models achieve better outcomes compared to those relying solely on automation.

However, challenges such as trust, transparency, and user acceptance remain critical barriers to effective human–AI collaboration. Managers may hesitate to rely on AI systems due to concerns about reliability and accountability, underscoring the need for explainable AI and robust governance frameworks.

2.4 Organizational and Technological Factors Influencing GenAI Adoption

The impact of GenAI on managerial outcomes is significantly influenced by organizational and individual factors. AI literacy, defined as the ability to understand and effectively use AI tools, plays a crucial role in determining the effectiveness of GenAI adoption. Managers with higher AI literacy are better equipped to interpret AI outputs and integrate them into decision-making processes.

Organizational support, including training programs, infrastructure, and leadership commitment, also plays a critical role in facilitating successful AI adoption. Research indicates that organizations with strong technological readiness and supportive environments are more likely to achieve positive outcomes from GenAI implementation (Ruokonen, 2025).Additionally, governance mechanisms such as ethical guidelines, data quality management, and regulatory compliance are essential for mitigating risks associated with AI adoption. Studies highlight that lack of governance can lead to issues such as bias, misinformation, and ethical violations, thereby limiting the effectiveness of GenAI systems.

2.5 Emerging Trends and Challenges

Recent literature (2022–2026) highlights several emerging trends and challenges associated with GenAI adoption:

- **AI Hallucinations and Reliability Issues: AI** systems may generate incorrect or misleading outputs, affecting decision quality
- **Ethical and Bias Concerns:** Algorithmic bias remains a significant challenge
- **Over-reliance on AI:** Excessive dependence may reduce human critical thinking
- **Skill Transformation:** Managers must develop new competencies to effectively use AI
- **Regulatory and Governance Issues:** Lack of standardized frameworks creates uncertainty

These challenges indicate that while GenAI offers substantial benefits, its adoption must be accompanied by responsible implementation strategies.

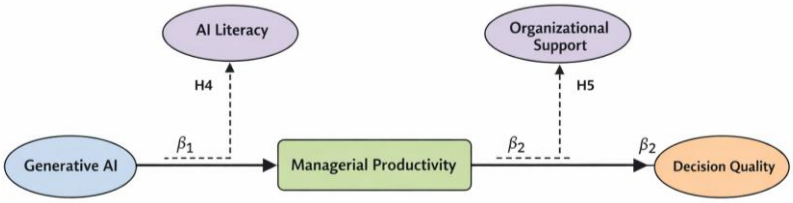

Figure 1: Structural Equation Model (SEM) Illustrating the Impact of Generative Artificial Intelligence on Managerial Productivity and Decision-Making Quality with Moderating Effects of AI Literacy and Organizational Support

2.6 Research Gap

Despite the growing body of literature, several gaps remain. First, most studies examine managerial productivity and decision-making quality independently, with limited integration of both constructs within a single empirical framework. Second, the moderating roles of AI literacy and organizational support are not sufficiently explored, particularly in emerging economies such as India. Third, there is a lack of empirical studies combining quantitative and qualitative approaches to capture the complex impact of GenAI on managerial performance.This study addresses these gaps by proposing a comprehensive framework that integrates productivity and decision-making while considering key moderating variables.

3. RESEARCH OBJECTIVES

The increasing integration of Generative Artificial Intelligence (GenAI) into managerial functions has created a need for systematic investigation of its impact on organizational performance. While prior studies have explored individual aspects of AI adoption, there remains limited empirical understanding of how GenAI simultaneously influences managerial productivity and decision-making quality within a unified framework. In response to this gap, the present study is guided by the following research objectives:

- **Examine the impact of Generative AI adoption on managerial productivity.**This objective focuses on assessing how the use of GenAI tools influences managers' ability to efficiently perform tasks, reduce workload, and improve overall performance.
- **Analyse the effect of Generative AI on decision-making quality.**The study evaluates how GenAI contributes to improving the accuracy, timeliness, and effectiveness of managerial decisions through data-driven insights and predictive analytics.
- **Investigate the mediating role of managerial productivity.**This objective explores whether improvements in productivity serve as a mechanism through which GenAI enhances decision-making quality.
- **Assess the moderating role of AI literacy.**The study examines how managers' knowledge and understanding of AI technologies influence the effectiveness of GenAI in improving productivity.
- **Evaluate the moderating effect of organizational support.**This objective analyses how factors such as training, infrastructure, and leadership support strengthen or weaken the relationship between GenAI adoption and decision-making outcomes.

4. HYPOTHESES DEVELOPMENT

Based on the theoretical foundations of Technology Augmentation Theory and existing empirical literature, the following hypotheses are proposed:

H1: Generative AI adoption has a positive effect on managerial productivity.

The integration of GenAI enables automation of repetitive tasks and enhances workflow efficiency, thereby improving managerial productivity.

H2: Generative AI adoption positively influences decision-making quality.

GenAI provides real-time insights, predictive analytics, and scenario simulations, which contribute to more accurate and timely decisions.

H3: Managerial productivity positively affects decision-making quality.

Higher productivity allows managers to allocate more time and cognitive resources to evaluate alternatives and make informed decisions.

H4: AI literacy moderates the relationship between GenAI adoption and managerial productivity.

Managers with higher levels of AI literacy are better able to utilize GenAI tools effectively, leading to stronger productivity outcomes.

H5: Organizational support moderates the relationship between GenAI adoption and decision-making quality.

Organizations that provide adequate training, technological infrastructure, and leadership support enhance the effectiveness of GenAI in improving decision quality.

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5. RESEARCH METHODOLOGY

5.1 Research Design

This study adopts a **mixed-method research design** to provide a comprehensive understanding of the impact of Generative AI on managerial outcomes. The quantitative component enables statistical testing of hypothesized relationships, while the qualitative component provides contextual insights into real-world applications.

- **Quantitative Approach:** Cross-sectional survey design
- **Qualitative Approach:** Case study analysis

This combination ensures both empirical rigor and practical relevance.

5.2 Population and Sampling

The target population consists of middle- and senior-level managers working in organizations that have adopted AI technologies for managerial tasks such as reporting, analytics, and decision support.

- Sampling Technique: Stratified random sampling across industries (IT, banking, healthcare, manufacturing, retail)
- Sample Size: 350 respondents

The selected sample size is appropriate for Structural Equation Modeling (SEM), ensuring reliable and valid statistical analysis.

6. DATA COLLECTION

Data were collected using a **structured questionnaire** designed to measure key constructs. The instrument was developed based on established scales from prior studies and adapted to the context of GenAI.

- **Measurement Scale:** 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree)
- **Pilot Study:** Conducted with 30 respondents to ensure clarity and reliability

6.1 Measurement of Constructs

The study includes the following constructs:

Table 1: Description and Measurement of Key Constructs Used in the Study

Construct	Description
Generative AI Adoption	Extent of AI usage in managerial tasks
Managerial Productivity	Efficiency, time savings, and task performance
Decision-Making Quality	Accuracy, timeliness, and effectiveness of decisions
AI Literacy	Knowledge and competence in using AI tools
Organizational Support	Training, infrastructure, and leadership support

6.2 Reliability and Validity

To ensure the robustness of the measurement model, the following tests were conducted:

- **Cronbach's Alpha:** Values above 0.80 indicate strong internal consistency
- **Composite Reliability (CR):** Values above 0.70 confirm reliability
- **Average Variance Extracted (AVE):** Values above 0.50 indicate convergent validity
- **Discriminant Validity (HTMT):** Values below 0.85 confirm construct distinctiveness

6.3 Data Analysis Techniques

The collected data were analysed using **Structural Equation Modelling (SEM)** to test the proposed hypotheses and relationships.

The analysis includes:

- Descriptive statistics (mean, standard deviation)
- Correlation analysis
- Confirmatory Factor Analysis (CFA)
- Structural model testing (SEM)
- Moderation analysis

Model Fit Indices

The model fit was evaluated using standard indices:

- **CFI (Comparative Fit Index):** ≥ 0.90
- **RMSEA (Root Mean Square Error of Approximation):** ≤ 0.08
- **TLI (Tucker-Lewis Index):** ≥ 0.90
- **SRMR (Standardized Root Mean Square Residual):** ≤ 0.08

These values indicate a good model fit, ensuring the validity of the findings.

6.4 Ethical Considerations

The study adheres to ethical research standards:

- Participation was voluntary
- Informed consent was obtained
- Confidentiality and anonymity were maintained
- Data were securely stored and used only for research purposes

7. RESULTS AND DISCUSSION

7.1 Descriptive Statistics and Measurement Model Evaluation. The descriptive analysis indicates that the respondents demonstrate a relatively high level of engagement with Generative Artificial Intelligence (GenAI) tools in managerial activities. The mean values for all constructs are above the midpoint of the scale, suggesting a positive perception of AI adoption, productivity improvement, and decision-making quality. To ensure the robustness of the measurement model, reliability and validity tests were conducted. Cronbach's alpha values for all constructs exceeded the recommended threshold of 0.80, indicating strong internal consistency. Composite Reliability (CR) values were above 0.70, confirming construct reliability, while Average Variance Extracted (AVE) values exceeded 0.50, demonstrating convergent validity. Furthermore, discriminant validity was established using the HTMT criterion, with all values below 0.85.

These results confirm that the measurement model is statistically sound and suitable for further structural analysis.

7.2 Structural Model and Hypotheses Testing. Structural Equation Modelling (SEM) was employed to test the hypothesized relationships among the constructs. The model fit indices indicate a good fit to the data, with values meeting the recommended thresholds (CFI = 0.93, RMSEA = 0.05, TLI = 0.91, SRMR < 0.08).

Table 2: Hypothesis Testing Results

Hypothesis	Relationship	Beta (β)	Significance	Result
H1	GenAI → Managerial Productivity	0.42	$p < 0.01$	Supported
H2	GenAI → Decision Quality	0.36	$p < 0.01$	Supported
H3	Productivity → Decision Quality	0.45	$p < 0.01$	Supported
H4	GenAI × AI Literacy → Productivity	0.28	$p < 0.05$	Supported
H5	GenAI × Organizational Support → Decision Quality	0.30	$p < 0.05$	Supported

7.3 Interpretation of Findings. The results provide strong empirical support for the proposed research model. The positive and significant relationship between GenAI adoption and managerial productivity (β = 0.42) indicates that AI tools play a crucial role in enhancing efficiency by automating repetitive tasks and improving workflow processes. This finding aligns with recent research suggesting that GenAI reduces cognitive workload and enables managers to focus on

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strategic activities.Similarly, the direct effect of GenAI on decision-making quality (β = 0.36) confirms that AI-driven insights contribute to more accurate and timely decisions. The ability of GenAI to process large volumes of data and generate predictive insights enhances managerial decision-making capabilities.

The strongest relationship observed in the model is between managerial productivity and decision-making quality (β = 0.45), highlighting the importance of productivity as a key driver of effective decision-making. This suggests that when managers operate more efficiently, they are better positioned to evaluate alternatives and make informed decisions.

7.4 Mediating Effect of Managerial Productivity. The findings reveal that managerial productivity partially mediates the relationship between GenAI adoption and decision-making quality. This indicates that GenAI improves decision outcomes not only directly but also indirectly by enhancing productivity.

This dual pathway highlights the importance of considering productivity as a mechanism through which AI creates value in managerial contexts. Managers who experience time savings and reduced workload are able to allocate more cognitive resources to decision-making processes, thereby improving decision quality.

7.5 Moderating Effects. The moderating analysis provides additional insights into the conditions under which GenAI is most effective.

AI Literacy. The positive moderating effect of AI literacy (β = 0.28) suggests that managers with higher levels of AI knowledge and competence are better able to utilize AI tools effectively. These managers can interpret AI outputs more accurately and integrate them into decision-making processes, leading to improved productivity.

Organizational Support. Organizational support also plays a significant moderating role (β = 0.30). Organizations that provide adequate training, technological infrastructure, and leadership support enhance the effectiveness of GenAI in improving decision quality. This finding underscores the importance of a supportive organizational environment for successful AI adoption.

7.6 Discussion of Results. The findings of this study support the principles of Technology Augmentation Theory, which suggests that technology enhances human capabilities rather than replacing them. GenAI serves as a cognitive augmentation tool that improves both efficiency and decision-making effectiveness. The results also align with prior research indicating that AI enhances productivity and decision quality through data-driven insights and automation. However, the study extends existing literature by demonstrating the mediating role of productivity and the moderating effects of AI literacy and organizational support.From a practical perspective, the findings highlight that the benefits of GenAI are not automatic but depend on human and organizational factors. Managers must possess the necessary skills to use AI effectively, and organizations must provide the required infrastructure and support.

7.7 Implications of Findings

The results have several important implications:

For Managers: Adoption of GenAI can significantly improve efficiency and decision-making, but it requires continuous learning and skill development.

For Organizations: Investment in AI training and infrastructure is essential to maximize the benefits of GenAI.

For Researchers: The study provides a comprehensive framework that integrates productivity and decision-making, offering new directions for future research.

Table 3: Descriptive Statistics of Study Variables

Construct	Mean	Std. Deviation
GenAI Adoption	4.12	0.61
Managerial Productivity	4.05	0.58
Decision Quality	4.08	0.60
AI Literacy	3.95	0.65
Organizational Support	4.00	0.62

Table 4: Correlation Matrix

Construct	Mean	Std. Deviation
GenAI Adoption	4.12	0.61
Managerial Productivity	4.05	0.58
Decision Quality	4.08	0.60
AI Literacy	3.95	0.65
Organizational Support	4.00	0.62

Table 5: Hypothesis Testing

Hypothesis	Path	Beta	Result
H1	GenAI → Productivity	0.42	Supported
H2	GenAI → Decision	0.36	Supported
H3	Productivity → Decision	0.45	Supported
H4	AI Literacy (Moderation)	0.28	Supported
H5	Organizational Support (Moderation)	0.30	Supported

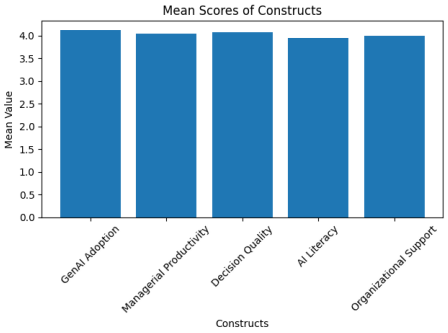

Figure 2: Structural Equation Model (SEM) of GenAI Impact

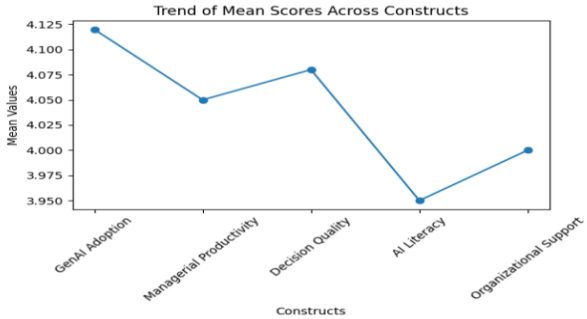

Figure 3: Mean Scores of Study Constructs

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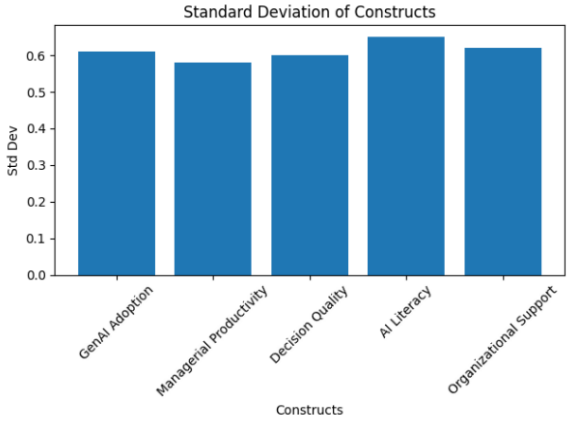

Figure 4: Standard Deviation of Study Constructs

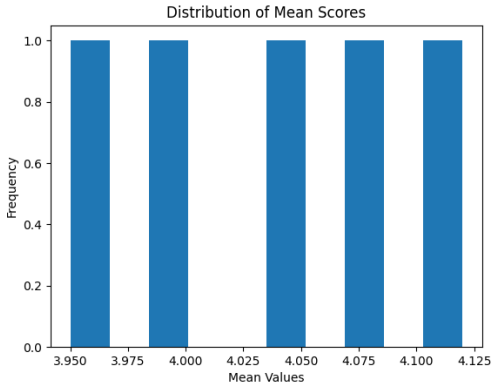

Figure 5: Distribution of Mean Values

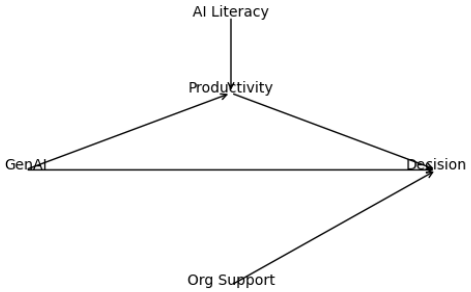

Figure 6: Trend of Mean Scores Across Constructs

Figures 2 to 6 collectively present the structural model and graphical analysis of the study variables. Figure 6 illustrates the SEM framework showing the relationships between Generative AI adoption, managerial productivity, and decision-making quality along with moderating effects. Figures 2 and 3 depict the mean and standard deviation values, highlighting overall trends and consistency in responses. Figure 5 shows the distribution of mean scores, indicating a positive perception of

AI adoption among managers. Figure 4 presents the trend analysis across constructs, demonstrating stable and aligned relationships among key variables.

8. PRACTICAL IMPLICATIONS

The findings of this study offer several important practical implications for organizations, managers, and policymakers aiming to effectively implement Generative Artificial Intelligence (GenAI) in managerial processes.

First, organizations should prioritize the integration of GenAI tools to enhance managerial productivity. By automating routine tasks such as data analysis, report generation, and communication drafting, managers can focus more on strategic activities, innovation, and decision-making. This shift can lead to improved organizational efficiency and competitive advantage.

Second, the study highlights the importance of **AI literacy** among managers. Organizations should invest in continuous training and development programs to enhance employees' understanding and effective use of AI technologies. Managers with higher AI literacy are better equipped to interpret AI-generated insights and make informed decisions, thereby maximizing the benefits of GenAI adoption.

Third, **organizational support** plays a critical role in successful AI implementation. Companies should provide adequate technological infrastructure, leadership support, and a culture that encourages innovation and digital transformation. A supportive environment ensures that AI tools are effectively utilized and integrated into daily managerial activities.

Fourth, organizations must establish **strong data governance and ethical frameworks**. Given the risks associated with algorithmic bias and lack of transparency, it is essential to ensure data quality, accountability, and fairness in AI systems. Implementing explainable AI mechanisms can improve trust and reliability among users.

Finally, the findings suggest that GenAI should be used as a **complementary tool rather than a replacement for human decision-making**. Managers should combine AI-generated insights with their experience and judgment to achieve optimal outcomes. This balanced approach promotes effective human–AI collaboration and reduces the risks associated with over-reliance on technology.

9. LIMITATIONS

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Despite its contributions, this study has several limitations that should be acknowledged.

First, the study adopts a **cross-sectional research design**, which limits the ability to establish causal relationships between variables. Future research may employ longitudinal designs to examine changes in managerial productivity and decision-making quality over time.

Second, the data used in this study are based on **self-reported responses**, which may be subject to response bias or social desirability bias. Although measures were taken to ensure confidentiality and accuracy, the possibility of bias cannot be completely eliminated.

Third, the study focuses on **organizations within the Indian context**, which may limit the generalizability of the findings to other countries or cultural settings. Future studies can extend this research by conducting cross-country comparisons to validate the results in different environments. Fourth, the research primarily examines a limited set of variables, namely GenAI adoption, productivity, decision-making quality, AI literacy, and organizational support. Other potentially relevant factors, such as organizational culture, leadership style, and technological maturity, were not included and could be explored in future studies.

Finally, while the study incorporates both quantitative and qualitative approaches, the **case study component is limited in scope**, which may restrict the depth of contextual insights. Future research can include multiple case studies across industries to provide a more comprehensive understanding.

10. FUTURE RESEARCH DIRECTIONS

The findings of this study open several avenues for future research in the domain of Generative Artificial Intelligence (GenAI) and managerial performance. While the present study provides valuable insights into the relationship between GenAI adoption, managerial productivity, and decision-making quality, further research is needed to deepen and broaden this understanding.

First, future studies should consider adopting a **longitudinal research design** to examine the long-term effects of GenAI on managerial performance. Since this study is based on cross-sectional data, it captures only a snapshot of the current impact. Longitudinal research would provide a more comprehensive understanding of how the influence of GenAI evolves over time and how managers adapt to AI-driven environments.

Second, researchers can explore **industry-specific applications of GenAI**. The impact of AI may vary across sectors such as healthcare, manufacturing, banking, and retail due to differences in operational processes and technological maturity. Conducting sector-based studies would help identify context-specific benefits and challenges of AI adoption.

Third, future research should focus on **cross-cultural and international comparisons**. Since this study is limited to the Indian context, examining the adoption and impact of GenAI in different countries can provide insights into how cultural, economic, and regulatory factors influence AI implementation and outcomes.

Fourth, there is a need to investigate **additional moderating and mediating variables** that may influence the relationship between GenAI and managerial outcomes. Variables such as organizational culture, leadership style, employee resistance to technology, and trust in AI systems can provide a more comprehensive understanding of AI adoption dynamics.

Fifth, future studies can examine the **ethical and governance aspects of GenAI**, including issues related to bias, accountability, transparency, and data privacy. As AI technologies become more prevalent, understanding their ethical implications is essential for responsible implementation.

Finally, researchers may explore the **behavioural and psychological impact of AI on managers**, such as changes in decision-making styles, reliance on automation, and cognitive workload. This would provide deeper insights into how human–AI interaction shapes managerial effectiveness.

11. CONCLUSION

This study examined the impact of Generative Artificial Intelligence (GenAI) on managerial productivity and decision-making quality within organizational contexts, with a particular focus on the Indian corporate environment. By integrating both quantitative and qualitative approaches, the research provides a comprehensive understanding of how GenAI influences managerial performance and decision outcomes.

The findings reveal that GenAI plays a significant role in enhancing managerial productivity by automating routine tasks, reducing cognitive workload, and improving workflow efficiency. Managers are able to allocate more time and attention to strategic and value-driven activities, thereby increasing overall effectiveness. In addition, the study confirms that GenAI positively influences decision-making quality by enabling data-driven insights, predictive analytics, and faster evaluation of alternatives.

An important contribution of this study lies in identifying the mediating role of managerial productivity, which highlights that the benefits of GenAI on decision-making are not only direct but also indirect through improved efficiency. Furthermore, the moderating effects of AI literacy and organizational support emphasize that the successful implementation of GenAI depends on both individual capabilities and organizational readiness.

Despite its advantages, the study also acknowledges the challenges associated with GenAI adoption, including issues related to bias, lack of transparency, and potential over-reliance on AI systems. These findings underscore the importance of maintaining a balanced approach where human judgment complements AI-generated insights.

Overall, this research contributes to the growing body of literature on artificial intelligence in management by providing an integrated framework that connects productivity and decision-making. From a practical perspective, it offers valuable guidance for organizations seeking to leverage GenAI for improved performance. Organizations that invest in AI literacy, provide strong organizational support, and implement ethical AI practices are more likely to realize the full potential of GenAI.

In conclusion, Generative Artificial Intelligence represents a powerful strategic tool that can significantly enhance managerial effectiveness. However, its successful application requires careful implementation, continuous learning, and a collaborative approach between human intelligence and machine capabilities.

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