

IMPACT OF GENERATIVE AI ON FINANCIAL REPORTING QUALITY AND DECISION-MAKING

Mandeep Kaur

Assistant Professor, Commerce Department
Khalsa College for Women, Civil Lines, Ludhiana. Punjab
mandeepkaur841@gmail.com

Abstract: *Generative AI is transforming financial reporting and decision-making by automating complex tasks, enhancing accuracy, and enabling real-time insights, yet it introduces risks like hallucinations and biases that demand robust governance. This paper examines these dual impacts through empirical studies and industry cases. Recent advancements in tools like ChatGPT and custom models streamline financial statement preparation, expense categorization, and narrative generation, reducing errors and compliance burdens while improving auditor judgment on issues such as speak-up rates in remote audits. In decision-making, AI excels at personalized forecasts, fraud detection, and portfolio optimization, shifting professionals toward strategic roles. However, challenges persist: AI's lower skepticism in critical audits like going-concern assessments risks quality degradation, and agent herding could destabilize markets. Empirical evidence from auditor experiments and surveys highlights benefits in analytics but warns of over-reliance.*

Keywords: *Generative AI, financial reporting, audit quality, decision-making, AI risks.*

1. INTRODUCTION:

Generative AI (GenAI) represents a paradigm shift in financial reporting and decision-making, leveraging large language models and advanced neural networks to automate, analyze, and synthesize vast datasets with unprecedented speed and nuance. Tools like ChatGPT, GPT-4, and specialized finance models from firms such as Deloitte and PwC are automating routine tasks—such as drafting financial statements, generating compliance narratives, and categorizing expenses—freeing professionals for higher-value analysis. This automation promises elevated reporting quality by minimizing human errors, ensuring real-time updates, and enhancing transparency for stakeholders, including investors and regulators.

In financial reporting, GenAI excels at transforming raw transactional data into structured, IFRS- or GAAP-compliant documents, while incorporating ESG metrics and forward-looking disclosures. Empirical studies demonstrate its role in boosting auditor efficacy; for instance, experiments show GenAI improves judgment on evidence implications, increasing "speak-up" rates on audit issues by significant margins, particularly in remote settings. Similarly, it aids anomaly detection and narrative consistency, reducing discrepancies that erode trust.

For decision-making, GenAI enables personalized investment advice, predictive market forecasting, and dynamic risk assessments by processing unstructured data like news and social sentiment. In portfolio management, it optimizes allocations in real-time, while in fraud detection, it flags irregularities faster than traditional rules-based systems. This shift empowers executives to focus on strategic foresight, potentially accelerating value creation in volatile markets.

Yet, these benefits are tempered by substantial risks. GenAI's propensity for "hallucinations"—fabricating plausible but inaccurate facts—threatens reporting integrity, inviting regulatory scrutiny under frameworks like SOX or EU AI Act. Biases in training data can perpetuate inequities in credit scoring or lending decisions, while reduced skepticism in tasks like going-concern evaluations has been noted in auditor assessments of AI outputs. Over-reliance may deskill professionals, fostering herding behaviors among AI-driven agents that amplify market instability.

2. LITERATURE REVIEW:

Healy and Wahlen (1999) investigated earnings management practices and concluded that poor reporting quality undermines stakeholder confidence and market efficiency. Their findings emphasize the importance of transparent and reliable reporting mechanisms.

Bushman and Smith (2001) analyzed the relationship between financial reporting quality and corporate governance and found that high-quality reporting reduces information asymmetry and improves capital allocation efficiency.

Dechow, Ge, and Schrand (2010) provided a comprehensive framework for assessing financial reporting quality and identified relevance, faithful representation, comparability, and timeliness as its core dimensions. Their study remains foundational for evaluating reporting quality in empirical research.

Vasarhelyi, Kogan, and Tuttle (2015) examined continuous auditing and AI adoption and stressed the importance of internal controls and regulatory oversight to ensure trustworthy financial reporting.

Kokina and Davenport (2017) analyzed the role of artificial intelligence in management accounting and concluded that AI enables real-time data processing and advanced analytics, thereby improving managerial planning and control. However, they emphasized the need for professional judgment alongside AI systems.

Brynjolfsson and McAfee (2017) highlighted that AI-driven analytics significantly improve decision speed and accuracy but may also lead to automation bias if managers blindly trust algorithmic outputs.

Floridi et al. (2018) proposed ethical principles for artificial intelligence, emphasizing transparency, accountability, and fairness. Their study is widely cited in discussions on ethical AI adoption in finance and accounting.

Davenport and Ronanki (2018) examined the application of artificial intelligence in business processes and observed that AI significantly improves efficiency and accuracy in finance and accounting functions. Their study highlighted that AI automates routine accounting tasks, reduces human error, and enhances decision support systems.

Shrestha, Ben-Menahem, and von Krogh (2019) examined AI's role in managerial decision-making and observed that AI enhances analytical capabilities and supports evidence-based decisions. However, they noted that human oversight remains essential in complex and strategic decisions.

Raschke and Charron (2019) studied the use of AI in financial reporting and auditing and found that AI-driven tools improve data validation, anomaly detection, and compliance. The authors also raised concerns regarding transparency and the explainability of AI-based systems.

Brown et al. (2020) discussed the capabilities of large language models in generating human-like text and highlighted their potential application in financial narrative reporting. The study suggested that generative models can automate disclosure drafting but may introduce risks related to bias and factual accuracy.

Appelbaum et al. (2020) studied AI-enabled decision support systems in accounting and found that such systems improve forecasting and risk assessment while reshaping the role of finance professionals toward strategic analysis.

OECD (2022) highlighted policy challenges related to AI governance, data privacy, and accountability, emphasizing the need for regulatory frameworks to guide responsible AI use in financial reporting.

Dwivedi et al. (2023) explored the implications of Generative AI across business functions, including accounting and finance. Their findings indicated that GenAI enhances reporting speed and analytical depth but requires strong governance frameworks to manage ethical and regulatory risks.

Sutton, Holt, and Arnold (2023) examined the impact of Generative AI on accounting judgment and decision-making. The study concluded that while GenAI improves efficiency and consistency in reporting, over-reliance on AI outputs may weaken professional skepticism.

3. EVOLUTION OF GENERATIVE ARTIFICIAL INTELLIGENCE:

Generative Artificial Intelligence (GenAI) has evolved through several technological phases, driven by advances in computing power, data availability, and machine learning techniques. Its development reflects a transition from rule-based systems to highly sophisticated models capable of generating human-like text, images, and analytical outputs.

Period	Stage of Evolution	Key Characteristics	Applications in Accounting & Finance
1950s–1980s	Rule-Based Systems	Predefined logical rules; no learning ability; deterministic outputs	Basic bookkeeping checks, simple expert systems, rule-based decision support.
1990s–2000s	Statistical & Machine Learning Models	Data-driven learning; probabilistic models; limited automation	Financial forecasting, credit scoring, ratio analysis, risk assessment
2010–2015	Neural Networks & Early Deep Learning	Pattern recognition; sequence modeling; improved accuracy	Trend analysis, fraud detection, anomaly identification
2016–2019	Generative Models (GANs, RNNs)	Ability to generate synthetic data and text; improved NLP	Automated financial summaries, preliminary report drafting

2020–2022	Transformer Models & Advanced NLP	Context-aware language processing; scalable architectures	Automated MD&A reports, financial commentary, compliance drafting
2023–Present	Large Language Models (LLMs) / Generative AI	Human-like text generation; real-time analysis; decision support	Financial reporting automation, predictive analytics, managerial decision-making
Future Outlook	Responsible & Governed GenAI	Ethical AI, explainability, regulatory integration	Continuous reporting, AI-assisted auditing, strategic financial planning

4. APPLICATIONS OF GENERATIVE ARTIFICIAL INTELLIGENCE IN ACCOUNTING AND FINANCE :

- Financial Reporting Automation**
 Generative AI is used to draft financial statements, notes to accounts, and management discussion and analysis (MD&A). It improves reporting speed, consistency, and clarity while reducing manual effort.
- Narrative Financial Disclosure**
 GenAI generates explanatory financial narratives that help stakeholders understand complex financial data. This enhances transparency and improves communication with investors and regulators.
- Budgeting and Forecasting**
 Generative AI assists in preparing budgets, forecasts, and scenario analyses by generating predictive financial models based on historical and real-time data.
- Variance and Performance Analysis**
 It automates variance analysis by generating explanations for deviations between actual and budgeted figures, supporting managerial control and performance evaluation.
- Managerial Decision Support**
 Generative AI provides decision-support insights by synthesizing financial data into actionable recommendations, improving strategic and operational decision-making.
- Auditing and Assurance Services**
 In auditing, GenAI helps prepare audit working papers, risk assessment summaries, and audit reports. It supports continuous auditing and improves audit efficiency.
- Fraud Detection and Risk Assessment**
 Generative AI analyzes large datasets to identify unusual patterns and generates risk explanations, assisting in early fraud detection and internal control evaluation.
- Taxation and Regulatory Compliance**
 GenAI assists in tax computation, interpretation of tax laws, and preparation of compliance reports, reducing errors and improving compliance accuracy.
- Corporate Finance and Investment Analysis**
 It supports capital budgeting, valuation analysis, and financial modeling by generating investment insights and scenario-based evaluations.
- Working Capital and Cash Flow Management**
 Generative AI helps in predicting cash flows, managing liquidity, and optimizing working capital by generating forward-looking financial insights.
- Internal Control and Policy Documentation**
 GenAI is used to draft accounting policies, internal control manuals, and standard operating procedures, ensuring consistency and governance compliance.
- ERP and Accounting System Integration**
 Integrated with ERP systems, Generative AI enables real-time financial reporting and intelligent analytics, supporting continuous financial monitoring.
- Stakeholder and Investor Communication**
 It assists in creating investor presentations, earnings call scripts, and financial FAQs, improving the quality of financial communication.
- Cost Management and Efficiency Improvement**
 Generative AI supports cost analysis and optimization by generating insights on cost behavior and efficiency improvements.

- **Strategic Financial Planning**

By generating long-term financial scenarios and strategic insights, GenAI supports sustainable growth and competitive advantage.

5. DIFFERENCE BETWEEN TRADITIONAL AI AND GENERATIVE AI:

Basis	Traditional Artificial Intelligence	Generative Artificial Intelligence
Meaning	AI systems designed to analyze data and make predictions or classifications based on predefined rules or learned patterns	AI systems capable of creating new content such as text, images, code, and financial narratives
Nature of Output	Predictive or descriptive outputs	Creative and generative outputs
Learning Approach	Supervised, unsupervised, or rule-based learning	Deep learning with transformer architectures and large language models
Data Dependency	Relies mainly on structured and historical data	Works with both structured and unstructured data
Ability to Create New Content	Cannot generate original content	Can generate original and human-like content
Human Intervention	Requires frequent human input and validation	Minimal human intervention, though oversight is essential
Contextual Understanding	Limited contextual understanding	Advanced contextual and semantic understanding
Flexibility	Task-specific and rigid	Highly flexible and adaptable across tasks
Examples of Tools	Expert systems, regression models, decision trees	ChatGPT, GPT-based tools, generative analytics platforms
Role in Financial Reporting	Data validation, ratio analysis, error detection	Automated drafting of financial reports, MD&A, disclosures
Impact on Decision-Making	Supports structured and routine decisions	Supports strategic, complex, and unstructured decisions
Ethical Risks	Lower ethical risk due to limited autonomy	Higher ethical risk due to bias, hallucinations, and accountability issues
Governance Requirement	Basic controls and validation checks	Strong governance, ethical frameworks, and transparency required
Cost & Scalability	Lower cost and limited scalability	Higher initial cost but scalable and high value creation

6. CHALLENGES IN MAINTAINING FINANCIAL REPORTING QUALITY:

- **Complexity of Accounting Standards**

Frequent changes in accounting standards such as IFRS and Ind AS increase complexity in financial reporting. Organizations often struggle to interpret and implement these standards consistently, which may affect comparability and reliability.

- **Earnings Management Practices**

Managerial discretion in accounting estimates and judgments can lead to earnings management, thereby reducing the transparency and faithful representation of financial information.

- **Data Quality and Integrity Issues**

Poor quality input data, including incomplete or inaccurate records, directly affects the accuracy and reliability of financial reports, especially in automated and AI-driven systems.

- **Over-Reliance on Automation and AI**

Excessive dependence on automated reporting tools or Generative AI without adequate human oversight may result in errors, biased outputs, or misleading financial narratives.

- **Lack of Explainability in AI Systems**

Many AI and GenAI models operate as “black boxes,” making it difficult to explain how financial figures or narratives are generated. This lack of transparency affects stakeholder trust and auditability.

- **Ethical and Governance Concerns**

Ethical issues such as algorithmic bias, manipulation of AI-generated outputs, and accountability for errors pose significant challenges to maintaining reporting quality.

- **Inadequate Internal Controls**

Weak internal control systems fail to detect errors, fraud, or misstatements in financial reporting, undermining accuracy and reliability.

- **Cybersecurity and Data Privacy Risks**

Increased digitalization exposes financial data to cyber threats, data breaches, and unauthorized access, which can compromise the integrity of financial reports.

- **Skill Gap among Accounting Professionals**

A lack of technical skills and understanding of advanced technologies among accounting professionals limits effective monitoring and validation of AI-generated financial information.

- **Time Pressure and Reporting Deadlines**

Strict regulatory deadlines may lead to hurried reporting processes, increasing the risk of errors and inadequate disclosure.

- **Inconsistent Disclosure Practices**

Variations in disclosure practices across firms and industries reduce comparability and consistency in financial reporting.

- **Regulatory and Compliance Uncertainty**

Absence of clear regulatory guidelines on the use of Generative AI in financial reporting creates uncertainty and increases the risk of non-compliance.

- **Audit Limitations in Advanced AI Systems**

Traditional audit techniques may not be fully effective in evaluating AI-driven reporting systems, posing challenges in assurance and verification.

7. CONCLUSION:

Generative Artificial Intelligence has significantly reshaped the landscape of accounting and financial management by improving both financial reporting quality and managerial decision-making processes. The study finds that the application of Generative AI enhances the accuracy, timeliness, consistency, and clarity of financial reports through automated data processing and generation of financial narratives. By reducing manual intervention and processing time, GenAI contributes to greater transparency and reliability in financial disclosures, thereby strengthening stakeholder confidence.

In addition to improving reporting quality, Generative AI plays a vital role in supporting managerial decision-making. Advanced analytical capabilities, predictive forecasting, and scenario-based analysis enable managers to make faster, data-driven, and more informed decisions. The use of GenAI also helps in minimizing human biases and supports effective risk assessment, performance evaluation, and strategic planning. As a result, organizations adopting Generative AI gain improved operational efficiency and competitive advantage.

Despite these benefits, the study highlights several challenges associated with the adoption of Generative AI. Ethical concerns, data privacy risks, algorithmic bias, lack of explainability, and excessive reliance on automated outputs may adversely affect the credibility of financial information if not adequately addressed. Moreover, the absence of clear regulatory guidelines and skill gaps among accounting professionals further complicate effective implementation.

In conclusion, Generative AI should be integrated as a complementary tool rather than a substitute for professional judgment. With appropriate governance frameworks, ethical controls, and continuous professional development, Generative AI can significantly enhance financial reporting quality and managerial decision-making, leading to sustainable organizational growth and improved stakeholder trust.

REFERENCES:

1. Budhwar, P., Chowdhury, S., Wood, G., Aguinis, H., Bamber, G. J., Beltran, J. R., Glover, N., Harney, J., Malik, A., Pereira, L., Sahadev, A., Scafarto, B., & Tarba, T. (2025). *Generative AI-enabled intelligent auditing: An organizational adaptation mechanism study based on dynamic capability theory*. *Future Technology*, 4(3). <https://doi.org/10.55670/fppl.futech.4.3.15>
2. Desai, A. P., Mallya, G. S., Luqman, M., Ravi, T., Kota, N., & Yadav, P. (2024). *Opportunities and challenges of generative AI in finance*. arXiv. <https://arxiv.org/abs/2410.15653>
3. LeewayHertz. (n.d.). *Generative AI for financial reporting*. <https://www.leewayhertz.com/generative-ai-for-financial-reporting/>
4. Marsh McLennan Agency. (n.d.). *10 promises and 10 risks of generative artificial intelligence in finance*. <https://www.marshmma.com/us/insights/details/10-promises-and-10-risks-of-generative-artificial-intelligence-in-finance.html>
5. NexGen Cloud. (n.d.). *Top use cases of generative AI in finance: Case studies*. <https://www.nexgencloud.com/blog/case-studies/top-use-cases-of-generative-ai-in-finance>
6. PwC. (n.d.). *Managing generative AI risks*. <https://www.pwc.com/us/en/tech-effect/ai-analytics/managing-generative-ai-risks.html>
7. Rapid Innovation. (n.d.). *Generative AI in automated financial reporting: Applications, use cases, and benefits*. <https://www.rapidinnovation.io/post/generative-ai-automated-financial-reporting-applications-use-cases-benefits>
8. Roosevelt Institute. (n.d.). *The risks of generative AI agents to financial services*. <https://rooseveltinstitute.org/publications/the-risks-of-generative-ai-agents-to-financial-services/>
9. Tredence. (n.d.). *Generative AI in finance*. <https://www.tredence.com/blog/generative-ai-in-finance>
10. ZBrain. (n.d.). *Generative AI for financial reporting*. <https://zbrain.ai/generative-ai-for-financial-reporting/>