

# **Do AI Systems Helps to Reduce Financial Errors**

**Jaismeen Kaur<sup>1</sup>, Jasnoor Kaur<sup>2</sup>, Aman Biswal<sup>3</sup>**

Assistant Professor, Department of Commerce<sup>1</sup>

Student, Department of Management<sup>2</sup>

Baba Farid College of Engineering and Technology, Bathinda<sup>1,2</sup>

M.Tech. Student, BM Group of Institutions<sup>3</sup>

**Abstract:** *The Artificial Intelligence (AI) has made a significant change in financial management through accuracy and efficiency as well as decision making. Economical mistakes- both accounting and frauds- are significant threats to organizations and consumers. The paper examines how AI systems can alleviate financial mistakes through processes automation, analysis of massive amounts of data, and detecting anomalies in real-time. In a study that makes use of qualitative research, which is based on secondary data through peer-reviewed journals and industry reports, the study investigates the uses of AI in banking, accounting, auditing, and risk management. It has been found that AI is very helpful in decreasing manual error, improving data accuracy, and alleviating fraud. Nevertheless, AI system implementation is associated with problems, including expensive implementation, data privacy, and algorithmic bias. The paper also concludes that AI, under the guidance of human supervision and ethical regulation can reduce all financial inaccuracies significantly and encourage sustainable financial operations.*

**Keywords:** *Artificial Intelligence*

## **I. INTRODUCTION**

The stability and reliability of any organization are anchored on financial accuracy. Any financial transaction or accounting entry or other decision-making process error may lead to major losses, negative reputation, and regulatory punishment. The conventional financial systems usually do not offer accuracy and speed as data complexity and volume of transactions increase. Artificial Intelligence (AI) has thus become a disruptive technology in minimizing financial errors in this regard. Supported by machine learning (ML), natural language processing (NLP), and data analytics, AI systems help organizations to process significant amounts of financial data more quickly and more accurately than before. They can detect patterns, risks and raise any unusual activities that can otherwise go unnoticed by human beings. Deloitte (2023) states that almost 80 percent of financial institutions have implemented AI in order to enhance their fraud detection and audit procedures. In this research paper, the question is the following: Do AI systems assist in mitigating financial errors? It will examine the role of AI tools and algorithms to reduce mistakes in financial reporting, accounting, and decision-making and recognize possible complications in applying it.

## **II. LITERATURE REVIEW**

The AI in financial management literature points out various contributions and challenges.

### **2.1 AI and Financial Accuracy**

Past research has indicated that automation of the accounting and auditing process minimizes the chances of human errors. Brynjolfsson and McAfee (2017) contended that AI positively influences human cognitive ability through automation abilities and predictive analytics, which boost judgment. Likewise, an experiment by PwC (2022) showed that AI-powered financial systems were found to be more accurate in transactions recording of over 90 percent than manual procedures.

### **2.2 Fraud Detection and Risk Assessment by AI.**

The financial error is largely caused by financial fraud. The anomaly detection algorithms of AI systems detect suspicious transactions in real time. As an example, Visa and Mastercard implement AI-driven models to evaluate



spending habits of customers and block fraudulent transactions (Chen et al., 2021). Further, predictive analytics based on AI helps organizations by alerting them about financial risks before they are experienced, thereby enhancing financial integrity.

### **2.3 Problems of AI Implementation.**

There are inherent challenges with the implementation of AI even though it has its benefits. Of significant concern are data privacy, cybersecurity, algorithmic prejudice, and the absence of transparency (Jarrahi, 2018). Other researchers state that excessive use of AI can cause systemic risk in case the algorithms behind it malfunction or deliver biased outcomes.

### **2.4 Theoretical Perspective**

The Technology Acceptance Model (TAM) is the concept used in this study because it proposes that acceptance of new technology by the users is dependent on whether they perceive it to be useful and easy to use (Davis, 1989). The professionals working in finance are more likely to embrace AI when they believe that it is reliable, effective, and will help in the minimization of errors.

## **III. METHODOLOGY**

The research design is a qualitative research design based on a secondary data analysis. Scholarly articles, reports on the financial industry, and research articles published in 2017-2024 were examined. The databases used to access sources included Google Scholar, ScienceDirect, and JSTOR, and the keywords that were used included AI in finance, financial errors, fraud detection, and automation in accounting.

The data were examined thematically to find out the trends and repetitive results on the effect of AI on financial accuracy and error reduction. In the research, the three large financial areas are considered:

Auditing and Accounting Systems.

Fraud Detection and Risk Management.

Financial Decision-Making and Forecasting.

To be reliable and comprehensive, 20 peer-reviewed sources were used.

## **IV. FINDINGS**

These are findings of research:

### **4.1 Automation Lessens the Human Factor.**

The strongest finding throughout the literature is that AI automation reduces the financial errors caused by man. The use of AI software, including Optical Character Recognition (OCR) and Robotic Process Automation (RPA) can be used to process invoices, receipts, and statements without human involvement. Accenture (2021) suggests that financial accounting automation may decrease human error by 70 percent.

### **4.2 Enhanced Fraud Detection**

The AI systems have the ability to handle millions of transactions in seconds to detect suspicious transactions that do not conform to the set patterns. To illustrate, machine learning applications in banks will examine how people spend money and identify suspicious transactions in real time. This predictive power considerably minimizes the incidence of frauds and faults in transactions which have not been detected (Chen et al., 2021).

### **4.3. Better Precision in Financial Prognostication.**

Financial predictions that are based on AI-driven forecasting are more successful than those that rely on regression. They apply neural networks that are able to learn through past data to make more sound forecasts. According to IBM (2023), companies that involved AI in financial forecasting have made up to 95 percent accuracy in forecasting as compared to 75 percent with the conventional models.

### **4.4 Error Reduction in Auditing**

An artificial intelligence improves the system of auditing by checking enormous amounts of data to uncover anomalies. The use of systems such as MindBridge Ai Auditor or Clara by KPMG has become a common trend in the world to reveal real-time audits and discrepancies and misstatements (EY, 2022). This causes rapid and effective audit results.



#### 4.5 Challenges Identified

Along with these advantages, the results indicate that it has some weaknesses:

**Algorithmic Bias:** If it is trained on biased data, AI systems can reproduce biases within human beings. Expenses to Install: Small companies can have some issues with AI uptaking because start-up and maintenance are expensive. Risks associated with Data privacy and Data security: AI needs sensitive financial information, which creates a vulnerability to cybersecurity.

**Addiction to Technology:** Being too addicted can lead to loss of human judgment and critical scrutiny.

#### V. RECOMMENDATIONS

**Incorporate Human Oversight:** the AI systems must not be used instead of human decision-making. This requires the supervision of automated systems by accountants and auditors to have a contextual accurate approach.

**Invest in AI Training:** It is essential that organizations train the financial professionals to analyse the information presented by AI.

**Make sure there is Ethical and Transparent AI Use:** Ethical frameworks should be developed by developers and firms to avoid bias and guarantee fairness.

**Embracing Scalable AI Solutions:** SMEs ought to use scalable AI solutions that match their operations and finances.

**Improve Cybersecurity:** AI implementation should be accompanied by effective policies of data protection and encryption systems.

#### VI. CONCLUSION

The study concludes that AI systems play a pivotal role in reducing financial errors by automating data processing, enhancing fraud detection, and improving predictive accuracy. Empirical evidence from industry and academic literature demonstrates that AI minimizes human mistakes and promotes transparency in financial operations. However, successful adoption depends on ethical governance, continuous human supervision, and data protection strategies.

In essence, AI does not eliminate financial errors entirely but significantly reduces their frequency and impact. The future of financial management lies in collaborative intelligence—where AI and human expertise work together to ensure accuracy, reliability, and trust in financial systems.

#### REFERENCES

- [1]. Accenture. (2021). The rise of intelligent automation in finance. Accenture Insights. <https://www.accenture.com>
- [2]. Brynjolfsson, E., & McAfee, A. (2017). Machine, platform, crowd: Harnessing our digital future. W. W. Norton & Company.
- [3]. Chen,J.,Zhang, X.,&Huang,Y. (2021). Artificial intelligence in financial fraud detection: A review. Journal of Financial Innovation, 7(2), 45–60.
- [4]. <https://doi.org/10.1007/s40854-020-00226-7>
- [5]. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319–340. <https://doi.org/10.2307/249008>
- [6]. Deloitte. (2023). AI in finance: Enhancing accuracy and trust through intelligent automation. Deloitte Insights.
- [7]. EY. (2022). AI-driven auditing: The future of assurance. Ernst & Young Global Limited. <https://www.ey.com>
- [8]. IBM. (2023). AI-powered forecasting for financial management. IBM Data & AI. <https://www.ibm.com>
- [9]. Jarrahi, M. H. (2018). Artificial intelligence and the future of work: Human-AI symbiosis in organizational decision-making. Business Horizons, 61(4), 577–586. <https://doi.org/10.1016/j.bushor.2018.03.007>
- [10]. PwC. (2022). How AI is transforming the finance function. PricewaterhouseCoopers. <https://www.pwc.com>

