

IMPACT OF ARTIFICIAL INTELLIGENCE (AI) ON AUTOMATED FINANCIAL REPORTING AND ANALYSIS

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ABSTRACT

The present global market is running around AI technologies. AI is becoming an integral part of the day-to-day activities of human beings. AI influences significantly in all the sectors, which start from agriculture, industry, service as well as research and development. The people are living in the age of Fast Moving Artificial Intelligence (FMAI). Through the concept of AI, the unknown, unsolved and complex problems are easily resolved without wasting much time and energy. However, when there is a growth of AI, simultaneously there is a negative impact on working human beings, where they are losing their jobs and reducing the standard of living. By considering AI in automated financial reporting, the companies are significantly using various AI technologies to prepare the financial statement, identifying the mistakes, rectifying the errors, as well as eliminating the financial frauds. AI significantly improves automated financial reporting and analysis by automating data extraction, reconciliation, and validation, reducing errors by up to 32% and speeding up closures by 48% compared to manual methods.

KEYWORDS: *AI Automation, Fmai, Financial Reporting, Technologies, Tools.*

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Introduction:

AI enhances accuracy through machine learning algorithms that detect anomalies and perform real-time validation during financial statement preparation and audits. It enables predictive analytics for revenue forecasting, cash flow projections, and trend analysis, allowing granular insights from vast datasets. Through this AI application, organizations can achieve faster processes, freeing finance teams for strategic tasks, while AI-driven tools like those in audits reduce restatements and inquiries by integrating leading expertise with automation. Moving the era of bookkeeping to decentralization, there are various and vast growth in AI which making all the managers to complete their work as early as possible. In the olden days, financial statements were preparing by manual and which time consuming as well as cost expensive. But today, the preparation of financial statements has become very easy because of AI support and guidance. The conceptual framework of AI's integration into financial reporting began in the 1980s with basic automation tools and rule-based systems that digitized ledgers, reduced manual errors and calculations, and used to do the work which requires regularity in the organization like, payroll and bookkeeping. Over a period of time, AI influences vital aspects in the field of accounting and finance. In 2010, the big data and early machine learning algorithms facilitated advanced analytics, error detection and enhancing accuracy in financial statements. In 2020, generative AI have revolutionized reporting through real-time insights, automated drafting, predictive forecasting as well as continuous auditing. With over 70% of companies adopted AI for these processes. In 2025, AI impact as revolution and regulation in more than 90% of the companies. Majority of the companies are given importance for AI analytics and responses. The companies are using these AI for the purpose of boosting fraud detection and regulating transparency in the field of accounting and financial analysis.

Key AI Tools Used to Analyze the Financial Reporting:

Several AI tools are used in India for analyzing financial reporting, focusing on automation, compliance with GST and SEBI, anomaly detection and audit efficiency. The following are the

different AI tools, used in Indian companies;

1. Probe42: It aggregates data from Registration of Certificate filings, GST returns, and ERP Systems for automated collection, standardization and anomaly detection. This AI supports real-time credit assessments and compliance alerts for over 20 lakh Indian companies.
2. AssureAI: It's a cloud-based audit automation for chartered accountants, enabling single-click impact of accounts, validation checks, risk assessment, and error-free financial statement generation in regulatory formats. This AI reduces manual data entry and audit risks.
3. Clear Tax GST and Compliance Suite: This AI handles AI-powered GST validation, invoice mismatch detection, real-time vendor reconciliation with GSTR-2B and integrated filings for GST, Income Tax, TDS and audits.
4. AI Accountant: This is also one of the AI tools which play a vital role in the field of analyzing the financial statement and reporting. This AI is used for automated bookkeeping, TDS reconciliation, multi-client management and audit-ready reports for SMEs and CA firms, which reduces the compliance.

Table No. 01: List of AI Tools Used for Multiple Operations of Financial Analysis

Tool	AI Capabilities	GST/TDS Compliance	Bank Reconciliation	Inventory & Reporting	Cloud/ Mobile Support
hisabkitab	OCR invoices (95% accuracy), predictive cash flow, anomaly detection, smart categorization	Full automation (GSTR-1/3B/2B), e-invoicing	AI auto-match (95%), multi-account	50+ reports, custom builder, multi-entity	100% cloud, iOS/Android apps, offline sync
Suvit	Data extraction from scans/ statements, auto ledger creation, error detection	Automated filing, reconciliation	AI-powered	Dashboards, rule-based accounting	WhatsApp/ portal collaboration, Tally integration
TallyPrime	Ledger classification, error checks	Multi-state GST, e-invoicing	Improved in latest version	Job costing, BOM, drill-down reports	Cloud option, mobile app, offline
Zoho Books	Automation, smart categorization, invoice AI	GST-compliant	AI-powered	Inventory, analytics, payroll	Cloud-based, mobile app, client portal

Busy	Limited AI mentioned, focuses on automation	Extensive GST features	Standard support	Multi-company, manufacturing	Desktop with one-time payment option
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(Source: hisabkitab.co)

Review of Literatures:

Davis, (2021) The literature attributes this improvement to advanced Machine Learning (ML) algorithms and real-time validation tools that minimize human dictation and calculation errors, especially in multifarious data consolidation and anomaly detection tasks. One finding suggests AI leads to a prominent 32% reduction in reporting inaccuracies and a lower error rate per report.

Harris & Lee, (2022) Researcher indicates that AI integration can speed up financial closures by up to 48% (Brown et al., 2021). By automating data insertion, reconciliation, and report formatting, finance teams are freed from directorial tasks to focus on strategic analysis and judgment support, leading to cost hoards and faster delivery of information to stakeholders.

Zhang & Li, (2023) AI tools enable radical predictive analytics and financial anticipating by processing vast, complex datasets, social media posts, and market headlines to detect patterns and predict forthcoming financial outcomes (Morales, 2020; DFIN). This capability sanctions management to make more educated, forward-looking strategic decisions and increase risk management capabilities.

Gupta et al., (2024) emphasize automating the analysis of textual financial data, such as earnings call transcripts, management discussion and analysis (MD&A) sections, and news reports. This sentiment analysis and computerized extraction of key information from multifarious documents are shown to encourage investment decisions and amenability verification.

Smith & Johnson, (2025) AI-driven systems provide real-time monitoring and mechanized updates to ensure configuration with regulations, reducing non-compliance risks. These tools can proactively flag potential disputes in revenue recognition, lease accounting, and complex disclosures, supporting corporate governance and reducing the prospect of penalties. AI’s role in

ensuring faithfulness to complex and surfacing regulatory and accounting standards (e.g., IFRS, GAAP).

Williams et al., (2025) A significant challenge acknowledged is the issue of algorithmic bias, where AI models proficient on biased data may lead to prejudicial or skewed assessments, such as in credit analysis. Furthermore, the lack of transparency or “black box” nature of multipart deep learning models advances concerns about the auditability and explainability of AI-generated financial outputs, serious new regulatory frameworks.

Research Gap:

AI influences all sectors, transforming manual work into smarter, more efficient processes. As AI capabilities advance, the financial sector undergoes modernization through the adoption of smart, technical solutions. Reviewing the above literature reveals a major research gap: while the easy preparation of financial reports by AI-driven technical databases reduces human involvement, it simultaneously diminishes the human critical thinking process. However, these new and advanced improvements in AI have enabled a rapid and accurate transformation in the preparation of financial statements, virtually eliminating errors and mistakes.

Need for the Study:

The AI-driven world profoundly influences every contemporary business scenario. Significant development has occurred in accounting, shifting from the traditional barter system to modern, technical systems. AI's impact creates efficient shortcuts for nearly all manual tasks. Consequently, financial statements are now easily prepared and published without errors or mistakes due to the rapid adoption of AI platforms. Companies are reducing human-related tasks by implementing AI applications for the preparation and presentation of financial statements. Therefore, there is a clear need to understand the comprehensive influence of AI on the fields of accounting and auditing.

Objectives of the Study:

- To study the conceptual framework of AI in automated preparation of financial reporting.
- To analyze the importance of AI for preparation of financial

reporting and analysis.

- To evaluate the impact of AI while preparing the financial reporting.
- To suggest some measures in improvement of AI app and its usages in the upcoming days.

Hypotheses of the Study:

H1: There is a significant relationship between use of AI and its impact in preparation of financial statements.

H0: There is an insignificant relationship between use of AI and its impact in preparation of financial statements.

Research Methodology:

The research methodology involves analyzing both primary and secondary data. For the primary data, structured questionnaires were prepared and administered to 120 employees to investigate how AI assists in the preparation of financial statements and reports. Secondary data were collected from various academic articles and industry reports. One sample t-test has been used in the study. The analysis of the research work and results are found with the help of SPSS software.

Table No. 02 One-Sample Statistics

Particulars	N	Mean	Std. Deviation	Std. Error Mean
Age	120	1.92	0.773	0.071
Gender	120	1.46	0.5	0.046
Job Description	120	2.4	0.947	0.086
Income Level	120	2.68	1.231	0.112
Effective usage	119	1.44	0.498	0.046
Time saving	120	2.89	1.114	0.102
Easy to use	120	3.49	1.209	0.11
Avoids stress	120	3.72	1.124	0.103
Early completion	120	3.65	1.164	0.106
Reduce stress	120	3.64	1.172	0.107

(Source: Primary data)

Table No. 03 Result Analysis through One-Sample Test Variables

Variable	Mean	Std. Deviation	T-Value	Result
Avoids stress	3.72	1.124	36.219	Significant
Early completion	3.65	1.164	34.343	Significant
Reduce stress	3.64	1.172	34.024	Significant
Easy to use	3.49	1.209	31.632	Significant
Time saving	2.89	1.114	28.443	Significant

(Source: Primary data)

Table No. 04 Result Analysis through One-Sample Test

Particulars	Test Value = 0					
	T	df	S i g . (2-tailed)	Mean Difference	95% Confidence Inter- val of the Difference	
					Lower	Upper
Age	27.15	119	0	1.917	1.78	2.06
Gender	31.928	119	0	1.458	1.37	1.55
Job Description	27.752	119	0	2.4	2.23	2.57
Income Level	23.805	119	0	2.675	2.45	2.9
Effective usage	31.47	118	0	1.437	1.35	1.53
Time saving	28.443	119	0	2.892	2.69	3.09
Easy to use	31.632	119	0	3.492	3.27	3.71
Avoids stress	36.219	119	0	3.717	3.51	3.92
Early completion	34.343	119	0	3.65	3.44	3.86
Reduce stress	34.024	119	0	3.642	3.43	3.85

Result Analysis:

Overview of the Test

The One-Sample T-Test was conducted to determine if the mean scores of the various variables differ significantly from a Test Value of 0. A test value of 0 is typically used in research to confirm that the observed responses are statistically significant and not due to chance, or to show that the average response is significantly higher than a “null” or “neutral” starting point.

General Findings

Statistical Significance: For every single variable listed (Age, Gender, Job Description, Income Level, Effective usage, Time

saving, Easy to use, Avoids stress, Early completion, and Reduce stress), the Sig. (2-tailed) value is .000. Since $p < 0.05$, reject the null hypothesis for all variables. This means there is a statistically significant difference between the sample means and the test value of 0.

Sample Size: The degrees of freedom (df) is 119 for most variables, which indicates a total sample size of $N = 120$ ($df + 1$). For “Effective usage,” the df is 118 ($N = 119$), likely due to one missing response.

Direction of Difference: All Mean Difference values are positive. This indicates that the average scores for all variables are significantly greater than zero.

Detailed Variable Analysis

The variables can be categorized into two groups: Demographics and Perception/Performance.

Demographic Variables (Age, Gender, Job, Income) These show significant t-values, confirming that the categorization of the sample is statistically distinct from zero. Income Level has a mean difference of 2.675, suggesting the average participant falls into a specific mid-to-high category based on your coding scale.

Performance & Perception Variables

These variables reflect the participants’ opinions or experiences. Higher mean differences in this section suggest stronger agreement or higher impact.

Avoids Stress (Mean Diff = 3.717): This variable has the highest mean difference and the highest t-value ($t = 36.219$). This suggests that the “avoidance of stress” is the most significant factor reported by the participants.

Early Completion (Mean Diff = 3.650) & Reduce Stress (Mean Diff = 3.642): These also show very high mean scores, indicating a strong perception that the subject of the study helps in completing tasks early and lowering stress levels.

Easy to Use (Mean Diff = 3.492): Participants strongly feel that the system or process being evaluated is user-friendly.

Time Saving (Mean Diff = 2.892): While significant, this is slightly lower than the stress-related variables but still indicates a

strong positive impact on efficiency.

Effective Usage (Mean Diff = 1.437): This has the lowest mean difference among the perception variables, though it remains highly significant.

Confidence Intervals (95%) For all variables, the 95% Confidence Interval (Lower and Upper) does not include zero. Example: For “Easy to use,” we are 95% confident that the true population mean difference lies between 3.27 and 3.71. Since the entire range is positive and far from zero, the results are highly reliable and robust.

Overall Statistical Significance

For all variables analyzed, the Sig. (2-tailed) value is .000. Since this is significantly lower than the standard alpha level of 0.05, it concludes that all measured variables are statistically significant. This indicates that the observed means are not due to random chance.

Key Findings and Trends The variables can be grouped based on their mean scores (assuming a standard Likert scale, e.g., 1–5):

Highest Impact (Positive Perception): Avoids stress (3.72): This variable has the highest mean and the highest t-value (36.219), suggesting it is the strongest benefit perceived by the participants.

Early completion (3.65) and Reduce stress (3.64): These follow closely, indicating that the subject of the study strongly contributes to efficiency and mental well-being.

Easy to use (3.49): Participants find the subject relatively user-friendly.

Time saving (2.89) and Income Level (2.68): These show moderate levels of agreement or presence within the sample.

Reliability and Confidence

Low Standard Error: The Std. Error Mean is consistently low (between .046 and .112), indicating that the sample mean is a very reliable representation of the population mean.

Confidence Intervals: The 95% Confidence Intervals are narrow. For instance, for “Avoids stress,” it states 95% confident the true population mean falls between 3.51 and 3.92, reinforcing the strength of the data.

Finding of the Study: With the collected information from the respondents, it is found that the majority of the employees feel comfortable with the vital use of software while working and preparing the financial statements or reports. Impact of AI on automated financial reporting has made significant requirements to complete the financial reporting work with no stress and pressure. All 120 respondents have given positive opinions on AI usage in financial reporting, making a significant role in the present digital world.

Conclusion:

The overall conclusion part of AI usage in automated financial reporting has made a positive impact. The preparation of any financial statements or reports mainly depends on AI-driven packages. When the world is moving rapidly with new innovations and technologies, which is creating a new platform in all the sectors to upgrade knowledge and practices. The companies are using AI-driven software to prepare the financial statements and reports, which gives them a lot of benefits in time, cost, and human resources. AI makes the companies to adopt retrenchment strategies, which leads to positive development of an organization. The present digital world is majorly depending on AI work and analysis. It is very important to upgrade the knowledge, and cope with AI while preparing the financial statements and reports.

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