

AI-Driven Transformation of Tax Practices in India: A Study on Automation, Risk-Aware Compliance, and Future-Readiness in CA Firms

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Abstract

This research study explores the transformation of tax practices through AI technologies in India. The main areas of interest are automation, risk-aware compliance, and future-readiness of Chartered Accountant (CA) firms. The study employs a mixed-method approach and focuses on purposive sampling of 54 tax professionals to evaluate AI adoption, the benefits, and the challenges for such processes as ITR filing, GST reconciliation, and e-invoicing. The use of regression analysis indicates that the leading causes of workflow efficiency are client satisfaction and time-saving, both driven by AI technology. On the other hand, the findings also suggest an opposite effect on efficiency when excessively automated data accuracy and risk detection processes are the focus, thus indicating the necessity of a judicious AI integration strategy. Hence, the results point to AI as an essential instrument in the reengineering of tax workflows while emphasising the significance of its careful deployment to prevent overly relying on automation.

Keywords: Artificial Intelligence, Tax Automation, Risk-Aware Compliance, Workflow Efficiency, AI Adoption, Tax Practices India

1. Introduction

AI is moving fast, and it's reshaping how taxes are handled worldwide. Indian tax pros probably aren't left behind either. Some firms use AI tools now - automating tasks and improving accuracy in risk checks. They stay ahead of upcoming issues in tax rules, at least in theory. Plus, the government's push for faster ITRs, better GST matches, and digital invoices makes things harder on staff. These jobs used to take a lot of time and often had errors. To cut down on workloads, CA firms are testing OCR, RPA, and NLP systems. They aim to reduce human effort and boost client trust. But it works better when data flows smoothly. More than ever, tech helps handle complex filings without breaking down. The results? Faster processing and fewer mistakes. But how much this really helps remains unclear.

2. Review of Literature

Digitising tax audits began with faceless assessments - no officers, no offices, just screens. The CBDT handbooks explain how appeals move through digital forms. They track performance goals too: reduce bias, cut delays, increase access. These documents help accountants follow procedures without human touch. A lot of effort went into designing fair rules for automated systems.

CATs now process returns in real time. The 2023-24 finance report breaks down collections across states. It maps revenue growth and tracks changes in the number of taxpayers. That data shows how policy shapes income flow over time. You can see if new laws led to broader participation or just shifted compliance habits.

The ICAI code doesn't just set behaviour, it defines boundaries around trust. Accountants must remain neutral when handling private financial data. Objectivity isn't optional, and it's part of their duty. AI tools may become smarter, but they still need human oversight to maintain ethical integrity. Without clear standards, even smart software could harm client confidence.

KPMG, Deloitte, EY, and PwC drop regular reports on how tech reshapes taxes, in particular, how CA firms adapt. The Deloitte piece on tax overhaul talks about modernisation, trends, and tech-driven shifts in service delivery. What's left unsaid? Are those updates really keeping up with real-world needs? And EY's Indian AI compliance report digs deep into operational hurdles, mostly for small practices.

Taxmann's budget breakdowns offer close-up looks at new laws - the Union Budget 2024 is dissected section by section. You'll see exactly where thresholds changed and what new clauses now apply to client advisory work. Without this kind of detail, professionals might miss key changes in tax audit rules or exemptions for legal services.

TaxGuru's online platform turns government digital schemes into everyday stories. They cover faceless audits, how notices come through email instead of letters, and the messiness of virtual hearings. Practitioners get frontline insights: how delays happen when documents go missing in e-proceedings. It isn't perfect - but it gives a raw look at how actual clients respond to these tools.

ClearTax, Zoho, and Tally publish blog posts showing how their AI tools work in real life. Their content explains AI-driven tax filing and GST compliance - solid examples you can follow without needing technical degrees.

GSTN's 2023 - 24 annual report breaks down its tech setup. It tracks huge data flows across the system, shows fraud alerts in motion, and uses smart analysis to check compliance instantly. Real-time checks stop evasions before they grow big.

ICAI's digital learning site covers automation, data tools, AI, and online services for accountants. The material pushes CPAs toward using new skills. They turn into tech-savvy advisers who help clients meet today's digital rules instead of just doing old-school bookkeeping.

India's digital tax efforts fall short of OECD standards - despite global advances in automation and data use. They publish detailed guides on AI, big data, and system sharing across borders. But these reports show how top nations improve efficiency through smart tools and open data flows. India still relies on outdated models. Taxpayers get poor service during transitions. Compliance checks remain manual, not fully automated. Systems don't speak to each other smoothly yet.

3. Research Methodology

Title: AI-Driven Transformation of Tax Practices in India: A Study on Automation, Risk-Aware Compliance, and Future-Readiness in CA Firms

3.1 Research Objectives

1. To examine the extent of Artificial Intelligence (AI) adoption in Chartered Accountant (CA) firms in India for tax-related services.
2. To analyse how AI is transforming automation of tax processes such as ITR filing, GST reconciliation, and e-invoicing.
3. To evaluate how AI enhances risk-aware compliance by identifying errors, anomalies, and potential audit triggers.
4. To assess the future-readiness and strategic mindset of CA firms in adopting AI tools and overcoming barriers such as cost, awareness, and regulation.

3.2 Hypotheses

Null Hypothesis (H₀): Accuracy of data, client satisfaction, time-saving, and risk detection, all driven by AI, have no significant influence on the efficiency of the workflow in tax practices.

Alternative Hypotheses (H₁):

H_{1a}: An AI lifestyle that meets the needs of clients and is time-saving is the main factor contributing to business efficiency in tax practices.

H_{1b}: The efficiency of workflow perceived is significantly negatively impacted as a result of over-automation in data accuracy and excessive focus on risk detection.

3.3 Research Design

The study adopts a descriptive and analytical research design with a mixed-method approach, combining quantitative and qualitative data. It is exploratory in nature, aiming to understand real-world AI adoption in tax practices through structured data collection and secondary research.

3.4 Sample Design

Sampling Technique: Purposive Sampling

Sample Size: 54 tax professionals

Target Respondents: Practising Chartered Accountants, Tax Consultants, and professionals actively involved in GST compliance, ITR filing, TDS returns, and advisory services.

Selection Criteria: Those who are directly engaged in taxation operations or compliance activities within small to mid-sized CA firms in India and are professionals.

3.5 Data Collection Methods

Primary Data:

Structured questionnaire via Google Forms among the selected tax professionals through the professional network.

The questionnaire components had multiple-choice questions and a Likert scale rating.

Secondary Data:

- i. The research articles and news from Taxmann, Economic Times, and TaxGuru-type platforms
- ii. The AI-tax software integrations like ClearTax, TallyPrime, and Zoho Books providers' documentation and blogs
- iii. Portals like GSTN, Income Tax India Portal, and E-Invoicing for policy and technology insights

3.6 Data Analysis Tools and Techniques

- i. Data analysis was done with Microsoft Excel and Google Sheets.
- ii. The answers of the Likert scales were analysed to interpret the agreement or disagreement levels related to the AI's efficiency, cost concerns, and automation impact.
- iii. Linear regression analysis was done to measure the effect of AI-driven factors on the efficiency of the workflow.

4. Data analysis and Interpretation

Table 4.1: Model Summary of Multiple Regression Analysis

Model Summary - To what extent has AI improved your workflow efficiency?

Model	R	R ²	Adjusted R ²	RMSE
M ₀	0.000	0.000	0.000	0.883
M ₁	0.630	0.397	0.334	0.720

Note. M₁ includes: Do you agree with the following benefits of AI in tax practice? (Likert scale: 1 = Strongly Disagree, 5 = Strongly Agree) [Improves data accuracy]. Do you agree with the following benefits of AI in tax practice? (Likert scale: 1 = Strongly Disagree, 5 = Strongly Agree) [Enhances client satisfaction]. Do you agree with the following benefits of AI in tax practice? (Likert scale: 1 = Strongly Disagree, 5 = Strongly Agree) [Saves time in routine filing]. Do you agree with the following benefits of AI in tax practice? (Likert scale: 1 = Strongly Disagree, 5 = Strongly Agree) [Helps detect risks or anomalies early]. Do you agree with the following benefits of AI in tax practice? (Likert scale: 1 = Strongly Disagree, 5 = Strongly Agree) [Lowers staff burden]

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Table 4.2: ANOVA Table for the Multiple Regression Model

Model		Sum of Squares	df	Mean Square	F	p
M ₁	Regression	16.42	5	3.283	6.325	< .001
	Residual	24.92	48	0.519		
	Total	41.33	53			

Note. M₁ includes: Do you agree with the following benefits of AI in tax practice? (Likert scale: 1 = Strongly Disagree, 5 = Strongly Agree) [Improves data accuracy]. Do you agree with the following benefits of AI in tax practice? (Likert scale: 1 = Strongly Disagree, 5 = Strongly Agree) [Enhances client satisfaction]. Do you agree with the following benefits of AI in tax practice? (Likert scale: 1 = Strongly Disagree, 5 = Strongly Agree) [Saves time in routine filing]. Do you agree with the following benefits of AI in tax practice? (Likert scale: 1 = Strongly Disagree, 5 = Strongly Agree) [Helps detect risks or anomalies early]. Do you agree with the following benefits of AI in tax practice? (Likert scale: 1 = Strongly Disagree, 5 = Strongly Agree) [Lowers staff burden]

Note. The intercept model is omitted, as no meaningful information can be shown.

Table 4.3: Regression Coefficients for the Model

Model		Unstandardized	Standard Error	Standardized	t	p
M ₀	(Intercept)	4.222	0.120		35.134	< .001
M ₁	(Intercept)	4.006	0.672		5.964	< .001
	Do you agree with the following benefits of AI in tax practice? (Likert scale: 1 = Strongly Disagree, 5 = Strongly Agree) [Improves data accuracy]	-0.566	0.210	-0.450	-2.696	.010
	Do you agree with the following benefits of AI in tax practice? (Likert scale: 1 = Strongly Disagree, 5 = Strongly Agree)	0.982	0.203	0.882	4.834	< .001

Table 4.3: Regression Coefficients for the Model

Model	Unstandardized	Standard Error	Standardized	t	p
[Enhances client satisfaction]					
Do you agree with the following benefits of AI in tax practice? (Likert scale: 1 = Strongly Disagree, 5 = Strongly Agree) [Saves time in routine filing]	0.471	0.186	0.365	2.537	.014
Do you agree with the following benefits of AI in tax practice? (Likert scale: 1 = Strongly Disagree, 5 = Strongly Agree) [Helps detect risks or anomalies early]	-0.471	0.166	-0.448	-2.836	.007
Do you agree with the following benefits of AI in tax practice? (Likert scale: 1 = Strongly Disagree, 5 = Strongly Agree) [Lowers staff burden]	-0.372	0.191	-0.379	-1.953	.057

Interpretation

The linear regression analysis looked into the extent to which different AI-driven factors affected the workflow efficiency of tax practices. The model had a moderate explanatory power ($R^2 = 0.397$), which means that the AI-related predictors explain approximately 39.7% of the variance of the perceived workflow efficiency.

The most important points of the coefficients are:

Client satisfaction ($\beta = 0.982$, $p < 0.001$) and time-saving in routine filing ($\beta = 0.471$, $p = 0.014$) have significant positive effects on workflow efficiency. AI features that improve client experience and cut down on the time used for repetitive tasks, thereby leading to increased operational performance, are strong factors.

On the other hand, the data accuracy improvement ($\beta = -0.566$, $p = 0.01$), early risk/anomaly detection ($\beta = -0.471$, $p = 0.007$), and lowering of staff burden ($\beta = -0.372$, $p = 0.057$) variables are negatively related to efficiency. These findings indicate that if too much automation is done that is focused on accuracy and risk detection, it can complicate the process or slow down the pace, maybe because of over-automation or increased monitoring needs.

The lowering of staff burden's negative influence indicates that the over-utilisation of AI tools may diminish the staff's engagement or oversight, which in turn can negatively impact the perception of the workflow.

The ANOVA results ($F = 6.325, p < 0.001$) show that the model is statistically significant, confirming that these AI factors do indeed influence workflow efficiency.

5. Findings

AI shows up in tax workflows, like a branch office, and starts shifting things around. It makes routine jobs move faster. So this helps clients feel better served. But if systems take over too much, people start to feel left out. Interaction with AI hits a peak where users lose trust. That drop hurts how smoothly things run. Staff reactions vary based on what part of the operation they handle. Some areas see gains, and others don't respond at all. The results don't always go the same way. Change depends on role, not just tech use. A few teams stay neutral even though others grow more efficient. Overdoing automation creates friction instead of flow.

6. Recommendations

Strategic AI Integration: Chartered Accountancy firms should leverage AI technologies that are capable of transforming client experiences and minimising the dull repetitive activities of the accounting professionals, e.g., automated ITR filing & GST reconciliation.

Balanced Automation: Refrain from extreme automation in the areas of data accuracy verification and risk detection. Intending AI adoption with the human workforce should be a way of keeping up with good-fat control and quality management by forestalling bottlenecks in the work process and even arising from the control of tasks and responsibilities.

Staff Engagement: Keep the employees in the loop and up to date through the design of AI workflows that support human judgment rather than replace it, thus making sure automation alleviates the burden without further disengagement. **Training and Awareness:** Visibility enhancement programs may greatly help at the point of understanding agent technology capabilities and identifying the limitations, hence making the entire workforce very efficient with AI tools.

Continuous Monitoring: Keep an eye on a regular basis to determine the extent AI has on work processes' efficiency and then make adjustments to AI deployment to harness the positive effects while eliminating the negative ones.

7. Conclusion

The research reveals that AI is a change agent in Indian tax practices. It basically adds to the efficiency of workflows with client satisfaction and time-saving through automation. On the other hand, the positive effects depend greatly on the balanced use of AI. An overemphasis on automation in data accuracy and risk detection may lower the perceived efficiency, thus calling for a strategic, tempered use of AI. CA firms should adopt AI in a way that combines technology and human skills to generate productivity gains while preventing the negative consequences of over-automation. Such a balanced approach will constitute not only the prerequisite for sustainable improvements in workflows but also the way forward for tax professionals facing the digital era.

References:

1. Income Tax Department. (2024). Annual Report 2023-24. Ministry of Finance, Government of India. Retrieved from <https://incometaxindia.gov.in>
2. Central Board of Direct Taxes. (2024). Handbook on Faceless Assessments and Appeals. CBDT, Ministry of Finance. Retrieved from <https://www.incometax.gov.in>
3. ICAI. (2023). Code of Ethics Volume I & II. Institute of Chartered Accountants of India. Retrieved from <https://www.icai.org>
4. Deloitte India. (2024). Tax Transformation Through Technology. Deloitte Insights. Retrieved from <https://www2.deloitte.com>
5. EY India. (2024). AI and Tax Compliance in India: Opportunities and Challenges. Ernst & Young Knowledge Portal. Retrieved from https://www.ey.com/en_in

6. PwC India. (2024). Navigating Digital Taxation: The Role of AI. PricewaterhouseCoopers. Retrieved from <https://www.pwc.in>
7. Taxmann. (2024). Union Budget 2024 Analysis. Taxmann Publications Pvt. Ltd. Retrieved from <https://www.taxmann.com>
8. TaxGuru. (2023). Faceless Schemes: Practical Implications for Tax Professionals. TaxGuru India. Retrieved from <https://www.taxguru.in>
9. ClearTax. (2024). How AI is Reshaping Tax Filing and GST Compliance. ClearTax Blog. Retrieved from <https://cleartax.in>
10. Zoho Books. (2024). AI Features in Zoho Books for Tax Professionals. Zoho Corporation. Retrieved from <https://www.zoho.com/books>
11. Tally Solutions. (2024). TallyPrime and AI Integration: A Guide for CAs. Tally Education Pvt. Ltd. Retrieved from <https://tallysolutions.com>
12. Ministry of Finance. (2024). Budget Speech 2024-25. Government of India. Retrieved from <https://www.indiabudget.gov.in>
13. GSTN. (2024). Annual Performance Report 2023-24. Goods and Services Tax Network. Retrieved from <https://www.gstn.org.in>
14. ICAI. (2024). Technology Adoption by CA Firms – Opportunities for Practice Growth Digital Learning Hub. Retrieved from <https://learning.icai.org>
15. Economic Times. (2024). AI and Tax Filing: How Professionals Are Automating Their Workflows. The Economic Times. Retrieved from <https://economictimes.indiatimes.com>
16. MCA. (2024). Company Law and Statutory Compliance Portal. Ministry of Corporate Affairs. Retrieved from <https://www.mca.gov.in>
17. OECD. (2023). Tax Administration 2023: Comparative Information on OECD and Other Advanced Economies. Organisation for Economic Co-operation and Development. Retrieved from <https://www.oecd.org>
18. Financial Express. (2024). Faceless Assessments: How AI Is Changing India's Tax Landscape. Financial Express Online. Retrieved from <https://www.financialexpress.com>
19. India Today. (2024). Over 6 Crore ITRs Filed in AY 2024-25: Govt Pushes for AI in Compliance. India Today News. Retrieved from <https://www.indiatoday.in>
20. World Bank. (2023). Digital Public Infrastructure and Tax Compliance in Developing Economies. World Bank Publications. Retrieved from <https://www.worldbank.org>