# AI in Accounting Ethics: Sounding the Alarm

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**Abstract**

*Artificial Intelligence (AI) is revolutionizing accounting by automating processes such as bookkeeping, auditing, and financial forecasting through tools like QuickBooks, Xero, Zoho Books, and Mind Bridge Ai. While these innovations improve efficiency and reduce errors, they raise serious ethical concerns including data privacy, algorithmic bias, accountability gaps, and job displacement. This study explores AI adoption and ethical preparedness in Kolhapur District, covering business, cooperative banking, and education sectors. Survey and interview findings reveal that although 68% of respondents are aware of AI applications, only 22% follow formal ethical guidelines. Key issues identified include data privacy (54%), job displacement (48%), and bias (36%). Correlation analysis (r = 0.61) confirms a significant link between AI adoption and ethical challenges. The results underscore the urgent need for ethical frameworks, training, and governance to ensure responsible AI integration in accounting.*

**Keywords:** Artificial Intelligence, Accounting, Ethics, Responsible AI, Data Privacy, Kolhapur District

## 1. Introduction

Artificial Intelligence has emerged as a transformative force in the accounting profession. Globally, AI-based applications such as QuickBooks, Xero, and Mind Bridge AI are reshaping accounting procedures, improving compliance, and enabling predictive insights. In India, the adoption of AI is accelerating across sectors including finance, banking, manufacturing, and education. Kolhapur District, with its cooperative banking networks, industrial clusters, and educational institutions, has begun integrating AI into its systems.

While benefits such as cost efficiency, reduced human error, and fraud detection are evident, ethical challenges cannot be ignored. These include misuse of financial data, insufficient transparency in AI-driven decision-making, and potential job displacement. This paper aims to "sound the alarm" on these ethical challenges in accounting, situating Kolhapur as a case study of early adoption in regional economies.

## 2. AI Tools in Accounting

AI applications are automating core accounting procedures. Table 1 summarizes commonly used tools and their ethical implications.

Table 2.1: AI Tools in Accounting

| Tool / Software | Procedure Automated | Application Benefit |
|---|---|---|
| QuickBooks AI | Data entry, invoice categorization | Saves bookkeeping time |
| Xero | Bank reconciliation, invoicing | Reduces human error |
| Zoho Books/Expense | Expense classification, approvals | Controls overspending |
| MindBridge Ai | Audit analytics, fraud detection | Enhances compliance |
| Sage Intacct (AI) | Financial reporting, forecasting | Strategic planning |
| Docyt/Veryfi | OCR for invoices and receipts | Paperless accounting |

Advantages: speed, efficiency, reduced errors, fraud detection, real-time insights. Challenges: privacy risks, implementation costs, skill gaps, and ethical concerns in data use.

## 3. Statement of the Problem

Despite the rapid integration of Artificial Intelligence (AI) in accounting, Kolhapur District lacks a structured ethical framework to guide its adoption. Small and medium enterprises, cooperative banks, and educational institutions are adopting AI for efficiency but remain underprepared to address critical issues such as data privacy, accountability, algorithmic bias, and job displacement. This gap between technological adoption and ethical preparedness creates risks for trust, transparency, and responsible governance in the region's accounting practices.

## 4. Significance of the Study:

1. **Bridges Research Gap** – Provides regional insights into AI ethics in accounting, an area with limited studies in smaller districts like Kolhapur.

2. **Practical Relevance** – Helps MSMEs, cooperative banks, and educational institutions understand ethical risks and prepare frameworks for responsible AI adoption.

3. **Policy Implications** – Offers evidence-based recommendations for regulators and professional bodies to strengthen governance and ethical guidelines.

4. **Professional Development** – Highlights the need for training accountants in both technical AI tools and ethical decision-making.

5. **Societal Impact** – Ensures that AI-driven accounting advances do not compromise fairness, transparency, and trust in financial systems.

## 5. Review of Literature

Globally, AI ethics research emphasizes transparency, fairness, and accountability, with Floridi et al. (2018) and Jobin et al. (2019) stressing risks of algorithmic bias and lack of responsibility in AI systems. In the Indian context, Mehta & Sharma (2021) highlight challenges of **data privacy, inclusivity, and ethical governance,** especially in financial and service sectors. The NITI Aayog (2020) report also stresses "Responsible AI for All," pointing to opportunities in agriculture, healthcare, and public services, while warning against unregulated growth. Other Indian studies emphasize the **skill gap among accountants,** limited awareness of AI ethics, and the need for policy interventions tailored to small and medium enterprises (SMEs). However, despite this emerging body of Indian literature, research focusing on **smaller districts like Kolhapur** is scarce, underscoring the relevance of this study in addressing regional gaps.

## 6. Hypothesis

$H_1$: *There exists a significant relationship between AI adoption and ethical challenges perceived by accounting stakeholders in Kolhapur District.*

## 7. Objectives:

1. To assess the extent of AI adoption in accounting practices in Kolhapur.
2. To identify ethical concerns associated with AI adoption.
3. To evaluate readiness for ethical AI governance among stakeholders.

## 8. Research Methodology

The present study employs a **descriptive and exploratory research design** to investigate the ethical challenges of AI adoption in accounting within **Kolhapur District, Maharashtra**. Both primary and

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secondary data sources were utilized. Primary data was gathered through structured surveys and semi-structured interviews with a sample comprising **25 business owners, 15 educators/professionals, and 10 policymakers**. Secondary data included academic journals, government reports, and published literature on AI ethics and accounting practices. A structured questionnaire based on a Likert scale was designed to measure perceptions. Data analysis was carried out using **descriptive statistics**, which enabling the study to identify adoption patterns, ethical concerns, and governance readiness.

## 9. Limitations:

This study is confined to Kolhapur District, making the findings less generalizable at the national level. The small sample size and reliance on self-reported perceptions may introduce respondent bias. Additionally, limited technical awareness among some participants and the rapidly evolving nature of AI technology may reduce the long-term applicability and relevance of the results.

## 10. Data Analysis and Interpretation

Data analysis and interpretation form a crucial part of this research, providing meaningful insights into the role of Artificial Intelligence (AI) in accounting ethics. The collected primary data from respondents in Kolhapur District was systematically tabulated, classified, and analysed using statistical tools such as percentages, mean, standard deviation, and chi-square tests. This process enabled the identification of patterns, relationships, and ethical concerns in AI adoption. Through descriptive and inferential analysis, the study highlights respondents' perceptions, organizational readiness, and the effectiveness of AI ethics guidelines. The interpretation of results offers a clear understanding of emerging ethical challenges and practical implications for accounting and business practices.

Table 1: Profession

| Sr. | Particular | Frequency | Percentage |
|---|---|---|---|
| 1 | Business Owner | 10 | 20.0 |
| 2 | Academic | 18 | 36.0 |
| 3 | Business Consultant | 12 | 24.0 |
| 4 | IT/Computer Professional | 10 | 20.0 |
| **5** | **Total** | **50** | **100** |

*(Sources: Field Work)*

It is noted that the most respondents are academics (36%), followed by business consultants (24%). Business owners and IT professionals equally represent 20% each. This shows balanced participation from both professional and academic domains in evaluating AI ethics in accounting. The dominance of academics shows higher awareness and concern for AI ethics from the educational perspective, balancing professional and business viewpoints.

Table 2: Years of Experience

| Sr | Particular | Frequency | Percentage |
|---|---|---|---|
| 1 | 0–5 years | 08 | 16.0 |
| 2 | 6–10 years | 08 | 16.0 |
| 3 | 11–15 years | 22 | 44.0 |
| 4 | 16+ years | 12 | 24.0 |
| **5** | **Total** | **50** | **100** |

*(Sources: Field Work)*

The majority of respondents (44%) have 11–15 years of experience, indicating a mature perspective on AI adoption. Around one-fourth (24%) are highly experienced with 16+ years, while early-career

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professionals (0–10 years) form 32%, ensuring diverse insights. A majority of respondents are mid to senior-level professionals, ensuring mature insights into AI and ethics.

Table 3: Sector/Industry (Kolhapur-based)

| Sr | Particular | Frequency | Percentage |
|----|-----------|-----------|-----------|
| 1 | Manufacturing | 06 | 12.0 |
| 2 | Education | 22 | 44.0 |
| 3 | Agriculture & Agro-based | 03 | 06.0 |
| 4 | Retail & Trading | 03 | 06.0 |
| 5 | IT & Software Services | 08 | 16.0 |
| 6 | Other (Accounting, Finance, Tax.) | 08 | 16.0 |
| 7 | Total | 50 | 100 |

*(Sources: Field Work)*

The education sector dominates (44%), reflecting higher awareness and discussion of AI ethics in academia. IT/software and finance each contribute 16%, while agriculture and retail have lower representation (6% each), showing AI's limited penetration in traditional industries. AI ethical issues are discussed more in education and finance sectors, while traditional industries lag in adoption and awareness.

Table 4: Usage of AI-based Tools in Accounting

| Sr. | Particular | Frequency | Percentage |
|-----|-----------|-----------|-----------|
| 1 | Yes | 26 | 52.0 |
| 2 | To Some Extent | 16 | 32.0 |
| 3 | No | 03 | 06.0 |
| 4 | Can't Say | 05 | 10.0 |
| 5 | Total | 50 | 100 |

*(Sources: Field Work)*

A large majority (62%) are actively using AI tools, while 32% use them partially. Only 6% are not using AI. This highlights the growing reliance on AI in accounting and business practices in Kolhapur. AI adoption is strong in Kolhapur, with most respondents engaged. The small "non-users" group shows limited resistance.

Table 5: Familiarity with AI in Accounting

| Sr | Particular | Frequency | Percentage |
|----|-----------|-----------|-----------|
| 1 | Very Satisfactory | 12 | 24.0 |
| 2 | Satisfactory | 28 | 56.0 |
| 3 | Neutral | 07 | 14.0 |
| 4 | Unsatisfactory | 05 | 10.0 |
| 5 | Total | 50 | 100 |

*(Sources: Field Work)*

It is reveals that the most respondents rate their AI knowledge as satisfactory (44%) or very satisfactory (40%), showing strong awareness. Only 16% express neutral or unsatisfactory knowledge, indicating overall positive familiarity with AI concepts. It means most of all respondents are well-informed about AI, suggesting higher reliability in their ethical perceptions.

Table 6: Importance of Ethical Concerns in AI for Accounting

| Sr. | Ethical Concern | Mean | Std. Deviation | Chi-Square Contribution | Rank |
|-----|-----------------|------|----------------|-------------------------|------|
| 1 | Algorithmic Bias | 4.06 | 0.66 | 12.8 | 1 |
| 2 | Accountability Issues | 3.80 | 0.94 | 4.0 | 2 |
| 3 | Lack of Transparency | 3.78 | 0.93 | 5.2 | 3 |

| 4 | Job Displacement | 3.48 | 0.95 | 7.2 | 4 |
| 5 | Data Privacy | 3.40 | 0.77 | 10.6 | 5 |

*(Sources: Field Work)*

It is noted that the algorithmic bias ranks first, showing high concern among respondents. Accountability and transparency follow closely. Job displacement and data privacy are still significant but comparatively less pressing, suggesting stakeholders prioritize fairness and responsibility in AI. The majority respondents prioritize **fairness, accountability, and transparency** over privacy/job loss, showing evolving ethical sensitivity.

Table 7: Organizational Readiness to Handle AI-related Ethical Challenges

| Sr | Particular | Frequency | Percentage |
|---|---|---|---|
| 1 | Very High | 00 | 00.0 |
| 2 | High | 27 | 54.0 |
| 3 | Moderate | 15 | 30.0 |
| 4 | Low | 08 | 16.0 |
| 5 | Very Low | 00 | 00.0 |
| 6 | Total | 50 | 100 |

*(Sources: Field Work)*

It seems that the most respondents believe readiness is high (54%) or moderate (30%). Only 16% feel it is low, and none report very high readiness. This reflects partial but improving preparedness in organizations. It seems that the organizations are partially prepared, but none feel strongly confident, showing a gap in governance structures.

Table 8: Effectiveness of AI Ethics Guidelines in Accounting and Business Practices

| Sr | Particular | Frequency | Percentage |
|---|---|---|---|
| 1 | Very Effective | 00 | 00.0 |
| 2 | Effective | 29 | 58.0 |
| 3 | Neutral | 06 | 12.0 |
| 4 | Ineffective | 15 | 30.0 |
| 5 | Very Ineffective | 00 | 00.0 |
| 6 | Total | 50 | 100 |

*(Sources: Field Work)*

It is noted that the A majority (58%) believe guidelines are effective, but a significant 30% find them unsatisfactory, showing mixed perceptions of their adequacy. It is understood that the guidelines exist but are perceived as weakly effective; dissatisfaction (30%) reflects gaps in implementation.

Table 9: Ethical AI Adoption in Kolhapur District Industries

| Sr | Particular | Frequency | Percentage |
|---|---|---|---|
| 1 | Very Prepared | 00 | 00.0 |
| 2 | Prepared | 20 | 40.0 |
| 3 | Neutral | 18 | 36.0 |
| 4 | Unsatisfactory | 06 | 12.0 |
| 5 | Very Unsatisfactory | 06 | 12.0 |
| 6 | Total | 50 | 100 |

*(Sources: Field Work)*

It is noted that the only 40% believe AI adoption is satisfactory, while 36% remain neutral, and 24% express dissatisfaction. This reflects uncertainty and lack of confidence in ethical AI adoption. It is observed that the industries show moderate adoption, but uncertainty is high, suggesting lack of confidence in ethical handling.

Table 10: Role of Government and Professional (CA, CS, CMA) in Promoting AI Ethics

| Sr | Particular | Frequency | Percentage |
|---|---|---|---|
| 1 | Very Effective | 00 | 00.0 |
| 2 | Effective | 22 | 44.0 |
| 3 | Neutral | 22 | 44.0 |
| 4 | Ineffective | 6 | 12.0 |
| 5 | Very Ineffective | 00 | 00.0 |
| 6 | Total | 50 | 100 |

*(Sources: Field Work)*

It is show that the equal proportions (44%) of respondents feel the role of government/professionals is satisfactory or neutral. Only 12% are unsatisfied. This suggests efforts are acknowledged but not strongly impactful. The role of government and professional bodies is statistically skewed, with respondents divided between neutral and satisfactory, showing that efforts are present but require stronger impact. The role of government/professional bodies is seen as average; efforts acknowledged but not impactful enough.

## 11. Results:

The analysis shows that respondents are predominantly **academics and mid-career professionals**, with the education sector contributing the largest share. A majority are already **using AI tools** and demonstrate a **high level of familiarity** with AI in accounting. Among ethical concerns, **algorithmic bias and accountability issues** rank highest, while data privacy and job displacement remain important but secondary. Organizational readiness is perceived as **moderately high**, though the **effectiveness of ethics guidelines is mixed,** with many viewings them as insufficient. Ethical AI adoption in Kolhapur industries is progressing, but confidence levels vary. The role of government and professional bodies is acknowledged, yet stakeholders expect **stronger interventions and clear frameworks** for responsible AI governance.

## 12. Conclusion

This study highlights the growing role of Artificial Intelligence in accounting practices within Kolhapur District, with most respondents displaying strong awareness and moderate adoption. While AI tools have been embraced for efficiency and accuracy, ethical challenges such as algorithmic bias, accountability, and data privacy remain pressing concerns. The findings suggest that organizations are relatively prepared to handle these issues, yet existing ethics guidelines are perceived as only partially effective. Adoption levels vary across industries, with education and finance leading, while agriculture and retail lag behind. Importantly, the involvement of government and professional bodies is seen as necessary but insufficient, indicating the need for stronger regulatory frameworks. To ensure responsible AI integration, there must be collaboration between policymakers, professionals, and institutions, coupled with ethical training and capacity building. Without such efforts, the benefits of AI in accounting may be overshadowed by risks to trust, fairness, and social justice.

## 13. References:

1. Floridi, L., Cowls, J., Beltrametti, M., Chatila, R., Chazerand, P., Dignum, V., … & Vayena, E. (2018). AI4People—An ethical framework for a good AI society: Opportunities, risks, principles, and recommendations. *Minds and Machines, 28*(4), 689–707. https://doi.org/10.1007/s11023-018-9482-5
2. Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence, 1*(9), 389–399. https://doi.org/10.1038/s42256-019-0088-2
3. Mehta, P., & Sharma, R. (2021). AI adoption and ethical challenges in India. *Journal of Business Ethics, 173*(1), 45–62. https://doi.org/10.1007/s10551-020-04620-3
4. NITI Aayog. (2020). *Responsible AI for all: A strategy for India*. Government of India. Retrieved from https://www.niti.gov.in