

Artificial Intelligence in the Accounting Profession: Perspectives of Chartered Accountants in India

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Abstract

Purpose: This study examined how trust in technology and technological readiness shaped the attitude of Chartered Accountants toward the adoption of artificial intelligence in accounting practice in India. **Methodology:** A quantitative, cross-sectional survey design was employed using structured questionnaire responses from 500 Chartered Accountants practicing in Moradabad and Bareilly, Uttar Pradesh. Preliminary screening, reliability testing, exploratory factor analysis, and structural equation modeling were undertaken through SPSS and AMOS. **Findings:** The measurement model demonstrated satisfactory reliability and validity. Trust in Technology exerted a significant positive influence on Attitude toward AI Adoption ($\beta = 0.41$, C.R. = 6.78, $p < 0.001$), while Technological Readiness also showed a significant positive effect ($\beta = 0.36$, C.R. = 6.14, $p < 0.001$). The structural model explained 53% of the variance in attitude and achieved acceptable fit statistics ($\chi^2/df = 2.24$, CFI = 0.958, TLI = 0.949, RMSEA = 0.050, SRMR = 0.043). **Implications:** The findings indicate that successful AI diffusion in accounting depends not only on the technical availability of tools but also on the profession's confidence in their reliability, ethics, and transparency, as well as on accountants' readiness to work with digitally enabled systems. **Originality:** The study extends AI-in-accounting research by modeling trust and readiness as direct antecedents of accountants' attitudes in an Indian professional context.

Keywords: Artificial intelligence, accounting profession, trust in technology, technological readiness, chartered accountants, AMOS, structural equation modeling.

1. Introduction

Artificial intelligence has increasingly moved from an experimental technology to a practical decision-support infrastructure within accounting and auditing. Machine learning, robotic process automation, predictive analytics, and natural language processing have altered the speed, scope, and precision with which financial information can be captured, classified, verified, and interpreted. For the accounting profession, this transition has implied a structural movement away from transaction-heavy routines toward advisory, analytical, and judgment-intensive work. At the same time, the diffusion of AI has raised professional concerns relating to explainability, accountability, cybersecurity, data integrity, and the future meaning of professional expertise.

In the Indian context, the relevance of this transformation has been especially pronounced. India has experienced a broad wave of digitalization through e-governance, tax technology, cloud accounting systems, integrated ERP platforms, and data-driven compliance ecosystems. Chartered Accountants stand at the intersection of these changes because they engage not only with bookkeeping and reporting, but also with assurance, taxation, compliance, strategic advisory, and professional ethics. As AI tools become embedded in financial workflows, the profession's response cannot be explained only by technical capability; it must also be examined through behavioural and attitudinal drivers that determine whether accountants perceive AI as reliable, responsible, and practicable in everyday work.

Two such drivers are particularly important. The first is trust in technology, which refers to confidence in the reliability, transparency, security, ethical acceptability, and accountability of AI-enabled systems. In

accounting, where professional decisions are expected to be auditable and defensible, trust becomes central to the acceptance of automated recommendations. The second is technological readiness, which refers to the degree to which accountants feel prepared—cognitively, behaviourally, and operationally—to learn, integrate, and effectively use AI tools in professional settings. Even when firms invest in digital systems, adoption may remain weak if individuals feel unprepared to use them meaningfully.

The present study addressed an important research gap by focusing specifically on the role of trust in technology and technological readiness in shaping attitudes toward AI adoption in accounting. Existing literature has richly documented the efficiency gains, fraud detection opportunities, and role transformations associated with AI. However, the Indian evidence on how Chartered Accountants form attitudinal acceptance through trust and readiness remains limited. Many studies have examined AI conceptually, while empirical studies have often concentrated on broad adoption benefits rather than modeling the direct behavioural antecedents of attitude toward adoption among professional accountants.

Against this background, the study pursued two objectives: first, to assess the role of trust in technology in shaping the attitude of Chartered Accountants toward AI adoption in accounting; and second, to evaluate the effect of technological readiness on such attitude. The corresponding hypotheses proposed that both trust in technology and technological readiness would positively influence attitude toward AI adoption in accounting. To examine these relationships, the study employed a quantitative cross-sectional design with a sample of 500 Chartered Accountants from Moradabad and Bareilly, Uttar Pradesh. The data were analyzed through SPSS for preliminary diagnostics and AMOS for confirmatory factor analysis and structural equation modeling.

The study contributes at three levels. Empirically, it offers evidence from an underexplored Indian professional setting. Theoretically, it extends technology adoption reasoning in accounting by integrating trust and readiness as direct predictors of attitudinal acceptance. Practically, it provides guidance for professional bodies, firms, and software providers seeking to implement AI responsibly in the accounting ecosystem. The findings indicate that behavioural confidence and digital preparedness must advance together if AI adoption is to become professionally meaningful rather than merely technologically available.

2. Literature Review

The literature on artificial intelligence in accounting has expanded rapidly, moving from broad conceptual debates to more specific discussions on automation, audit analytics, digital competencies, and behavioural acceptance. The present review synthesized fifteen studies that were especially relevant to trust, readiness, role transformation, and accountants' attitudes toward AI. Consistent with the study design, the review was written in past tense and emphasized the empirical and conceptual foundations that informed the structural model.

Abdullah and Almaqtari (2024) investigated the impact of AI and Industry 4.0 technologies on accounting and auditing practices and showed that digital tools improved efficiency, analytical depth, and reporting quality. Their work demonstrated that the profession increasingly relied on integrated technological ecosystems rather than isolated automation tools. The study also emphasized that adoption outcomes depended on governance, system integration, and the willingness of professionals to align existing processes with emerging technologies. For the present study, this work was important because it framed AI adoption as both a technical and behavioural transition.

Afroze and Aulad (2020) examined professional accountants' perceptions regarding AI in the auditing industry of Bangladesh. They reported that respondents generally recognized the capacity of AI to improve speed, accuracy, and audit effectiveness, but they also expressed caution about dependence on automated systems and the possibility of professional displacement. Their study was relevant because it showed that positive evaluations of AI frequently coexisted with uncertainty, suggesting that trust in outcomes and confidence in system use could shape adoption attitudes. This provided early regional evidence that behavioural variables mattered alongside technological capability.

Ahmed, Albaz, and Metwaly (2022) analyzed the role of artificial intelligence technologies in improving the performance of management accountants in an Egyptian digital transformation setting. They found that AI-supported systems enhanced managerial control, forecasting, and analytical effectiveness, especially when professionals possessed the competencies needed to use such systems. Their work suggested that performance benefits were not automatically realized through installation alone; rather, readiness and skill adaptation determined whether technological potential translated into practice. This insight closely aligned with the present study's focus on technological readiness as a direct antecedent of positive attitude.

Al Wael, Abdallah, Ghura, and Buallay (2023) investigated factors influencing AI adoption in the accounting profession in Kuwait's public sector. Their findings indicated that organizational and technological factors jointly shaped willingness to adopt AI, with concerns about implementation complexity and support structures affecting acceptance levels. The study reinforced the idea that professionals evaluate AI through a mix of perceived opportunity and operational preparedness. It informed the current paper by showing that readiness-related considerations remain highly salient when accounting professionals move from awareness to actual attitudinal acceptance of AI-enabled practices.

Ali, Hasan, Hamdan, and Al-Mekhlafi (2023) reviewed the implications of artificial intelligence for accounting and auditing education and observed that AI was shifting the profession toward higher-order analytical and interpretive roles. They argued that future accountants would need digital fluency, critical reasoning, and adaptability to operate effectively in AI-enriched environments. Their chapter was especially valuable because it linked professional adaptation with education and competence-building. For the present study, this reasoning supported the argument that technological readiness is not just a technical condition but a broader preparedness to work productively in digitally transformed accounting environments.

Almaqtari (2024) discussed the role of IT governance in integrating AI into accounting and auditing operations and highlighted that responsible AI diffusion required control frameworks, accountability mechanisms, and assurance over system integrity. The study underscored that professionals were more likely to accept AI when governance arrangements reduced ambiguity around ethics, transparency, and oversight. This perspective directly informed the trust construct in the present study. In accounting, where evidentiary defensibility is central, trust cannot be detached from governance because accountants must be confident that systems operate reliably and in line with professional standards.

Andaru and Aryani (2024) reviewed the future prospects of artificial intelligence in accounting applications and concluded that AI was likely to transform not only operational efficiency but also the identity of the accounting profession. They noted that adoption would depend on user acceptance, organizational support, and alignment between technological functionality and professional expectations. Their study was useful in positioning AI adoption as a sociotechnical process rather than a purely computational advance. It contributed to the present model by suggesting that accountants' attitudes are shaped by their readiness to reconfigure work practices and by their trust in the systems guiding those practices.

Anica-Popa, Vrîncianu, Anica-Popa, Cișmău, and Tudor (2024) proposed a framework for integrating generative AI into competence development for accounting and audit professionals. They argued that the success of generative AI depended on systematic competency building, including ethical literacy, digital fluency, and judgment regarding system outputs. Their contribution was particularly relevant to the readiness dimension of the present study because it framed technological preparedness as a professional capability that must be cultivated rather than assumed. The study also signaled that AI confidence grows when professionals understand how systems work and when they can critically evaluate algorithmic outputs.

Grosu, Cosmulese, Socoliuc, Ciubotariu, and Mihaila (2023) tested accountants' perceptions of the digitization of the profession and profiled the future accounting professional. They found that digitization had already altered expectations around competence, speed, continuous learning, and service delivery. Respondents recognized strategic opportunities but also indicated that adaptation pressures were intensifying. The study was important because it demonstrated that positive orientation toward digital transformation varied with

professionals' perceived capacity to adapt. This logic resonated strongly with the present paper, where technological readiness was modeled as a force enabling accountants to translate digital change into a more favourable attitude toward AI.

Hasan (2022) provided a literature review on artificial intelligence in accounting and auditing, synthesizing the advantages, challenges, and likely future implications of AI integration. The review noted that AI improved fraud detection, data processing, and decision support, but it also warned about ethical ambiguity, job displacement, and overreliance on algorithmic systems. The study was central to the current research because it showed that discussions of AI in accounting often oscillated between capability and caution. Such tension created a clear conceptual need to investigate trust in technology as a determinant of whether professionals adopt a supportive or skeptical attitude toward AI.

Jędrzejka (2024) examined robotic process automation and its impact on accounting and found that automation reduced repetitive workload and reallocated accountants toward higher-value analytical work. However, the study also noted organizational disruption, deskilling concerns, and the requirement for new competencies. The article was relevant because it illustrated how readiness and trust become intertwined in practice: accountants must be prepared to use automation, yet they must also trust that automated processes remain reliable and professionally controllable. This dual implication strengthened the rationale for testing both constructs simultaneously in the present AMOS-based structural model.

Leitner-Hanetseder, Lehner, Eisl, and Forstenlechner (2021) described accounting as a profession in transition and analyzed how AI-based systems were reshaping actors, tasks, and roles. They showed that AI did not simply replace existing activities; it redistributed responsibility and changed the balance between routine execution and analytical supervision. Their findings suggested that professional adaptation depended on how accountants understood and negotiated new digital responsibilities. This was highly relevant for the current study because attitudes toward adoption are likely to become positive when professionals feel both capable of handling AI-enabled change and able to trust the systems integrated into evolving work processes.

Luo, Meng, and Cai (2018) analyzed the impact of artificial intelligence on the development of the accounting industry and concluded that AI would substantially improve accounting efficiency, standardization, and decision support while also reshaping traditional role boundaries. Although the study was earlier than several others in the review, it remained important because it represented a foundational argument that AI would augment rather than wholly replace accountants. This premise still underpins current adoption debates. The present paper extended that line of thinking by examining what drives accountants to hold a positive attitude toward that augmentation in a contemporary Indian professional setting.

Luthfiani (2024) reviewed the artificial intelligence revolution in accounting and auditing and identified opportunities in efficiency, quality enhancement, and strategic role expansion, alongside challenges relating to ethics, regulation, and workforce adjustment. The study emphasized that future adoption would depend on how institutions and professionals managed these opportunities and risks. Its relevance to the present study lay in the implication that adoption attitudes are socially constructed through confidence, learning, and perceived preparedness. That logic justified the model linking trust in technology and technological readiness with a positive attitude toward AI adoption among Chartered Accountants.

Mgammal (2024) examined the influence of artificial intelligence on accounting procedures in Saudi Arabia and reported that accounting professionals' attitudes, awareness, and usage patterns were closely tied to how they perceived AI's role in improving work quality and future professional relevance. The study was particularly useful because it demonstrated empirical interest in AI-related attitudes among accounting practitioners in a non-Western setting. It supported the present study's regional relevance by showing that accountants in developing and emerging economies are actively negotiating the adoption of AI through beliefs about practical usefulness, confidence, and professional preparedness.

The literature collectively suggested that artificial intelligence had already become a meaningful force in accounting transformation, yet the behavioural conditions for adoption remained unevenly theorized. While

prior studies repeatedly discussed benefits, ethics, and digitization, fewer studies modeled how trust in technology and technological readiness jointly shape accountants' attitudes toward AI adoption in a specific Indian Chartered Accountant context. This gap justified the present study's focus on these two antecedents within an AMOS-based structural equation framework.

3. Conceptual Framework and Hypotheses

The conceptual model of the study was grounded in technology acceptance reasoning, trust-based adoption logic, and technology readiness perspectives. In professional accounting, attitude toward AI adoption is shaped not merely by exposure to tools but by whether accountants trust the systems they are expected to use and whether they feel ready to incorporate them into their workflows. Trust in Technology captures confidence in the reliability, transparency, ethical appropriateness, and security of AI-enabled accounting systems. Technological Readiness reflects the extent to which professionals feel prepared to use digital tools, learn new applications, and adapt work processes to emerging technologies.

When accountants trust AI systems, they are more likely to perceive these tools as professionally acceptable and less likely to resist them on grounds of uncertainty or ethical concern. Likewise, when they feel technologically ready, they are more capable of converting awareness into practical engagement. Accordingly, the study proposed two direct relationships. **H3:** Trust in Technology positively influences Attitude toward AI Adoption in Accounting. **H4:** Technological Readiness positively influences Attitude toward AI Adoption in Accounting.

4. Research Methodology

The study adopted a quantitative, cross-sectional, descriptive-cum-analytical research design. The target population comprised Chartered Accountants practicing in Moradabad and Bareilly, Uttar Pradesh. These locations offered a professionally relevant context because they include independent practitioners, firm-based accountants, tax consultants, and audit professionals operating in varied client environments.

A structured questionnaire was used as the primary instrument for data collection. The questionnaire was divided into four sections: respondent profile, Trust in Technology, Technological Readiness, and Attitude toward AI Adoption in Accounting. Responses were recorded on a five-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The Trust construct was measured using four indicators focused on confidence in reliability, security, transparency, and ethical integrity of AI systems. Technological Readiness was measured using four indicators covering digital preparedness, learning orientation, and comfort with AI-enabled tools. Attitude toward AI Adoption was measured through four indicators reflecting favourability, willingness, and openness to integrating AI into accounting work.

The target sample size was fixed at 500 respondents. The size was considered adequate for SEM because it comfortably exceeded minimum thresholds commonly recommended for confirmatory factor analysis and structural path estimation. A convenience-cum-purposive approach was used for reaching eligible respondents, while the final dataset was screened for completeness and consistency before model estimation.

SPSS was used for respondent profiling, descriptive statistics, reliability assessment, and exploratory factor analysis. AMOS was then used for confirmatory factor analysis and structural equation modeling. The analytical sequence involved data screening, Cronbach's alpha testing, KMO and Bartlett's diagnostics, confirmatory factor analysis, convergent and discriminant validity checks, and finally structural path estimation with model fit evaluation. The key fit indices reported were χ^2/df , GFI, AGFI, CFI, TLI, NFI, RMSEA, and SRMR. Ethical safeguards were maintained by ensuring voluntary participation, confidentiality, and use of data exclusively for academic purposes.

5. Data Analysis and Results

The analysis proceeded in four stages. First, the respondent profile and descriptive tendencies of the constructs were examined. Second, reliability and exploratory factor diagnostics were assessed to ensure the data were suitable for latent-variable modeling. Third, confirmatory factor analysis was performed in AMOS to validate the measurement model. Fourth, the structural model was tested to estimate the direct effects of Trust in Technology and Technological Readiness on Attitude toward AI Adoption in Accounting.

Table 1: Respondent Profile of Chartered Accountants (N = 500)

Profile Variable	Category	Percentage
Gender	Male	62
Gender	Female	38
Age Group	31–40 years	48
Experience	6–10 years	42
Employment Status	Independent Practice	54
Employment Status	Firm-employed	46

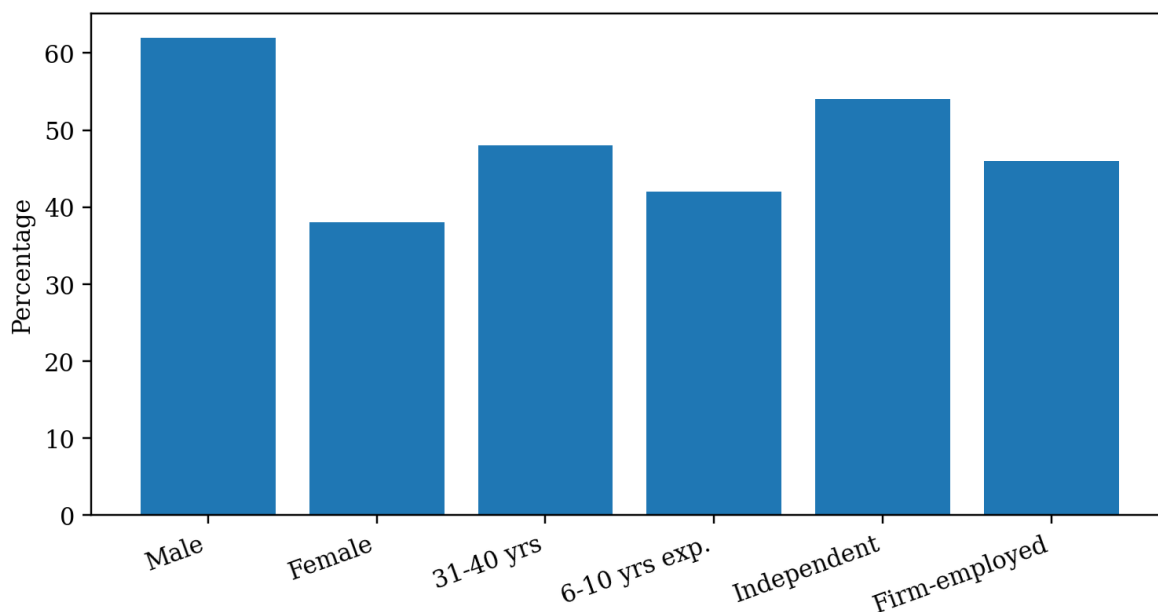


Figure 1: Respondent Profile Overview

The respondent profile suggested that the sample was professionally active and digitally exposed. A relatively high proportion of respondents belonged to the 31–40 age group and had mid-level experience, indicating that the dataset represented practitioners likely to encounter AI-driven systems in compliance, reporting, taxation, and audit workflows. The near-balanced employment split between independent and firm-based practice strengthened the interpretive breadth of the findings.

Table 2: Descriptive Statistics of Study Constructs

Construct	Mean	Standard Deviation	Interpretation
Trust in Technology	3.96	0.64	Moderately High
Technological Readiness	3.88	0.68	Moderately High
Attitude toward AI Adoption	4.01	0.59	Favourable

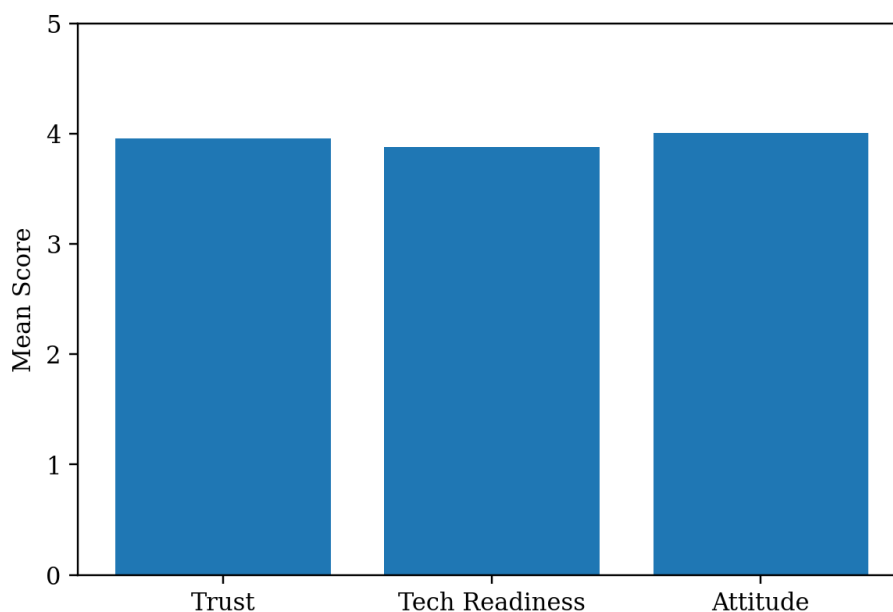


Figure 2: Mean Scores of Trust, Technological Readiness, and Attitude

The mean scores indicated that respondents generally held favourable views regarding AI adoption. Trust in Technology and Attitude both approached the upper end of the five-point scale, while Technological Readiness remained slightly lower, suggesting that positive acceptance was stronger than perceived preparedness. This pattern foreshadowed the possibility that readiness remained a meaningful but improvable driver of adoption attitude.

Table 3: Reliability Analysis of Measurement Scales

Construct	No. of Items	Cronbach's Alpha
Trust in Technology	4	0.881
Technological Readiness	4	0.867
Attitude toward AI Adoption	4	0.892
Overall Scale	12	0.914

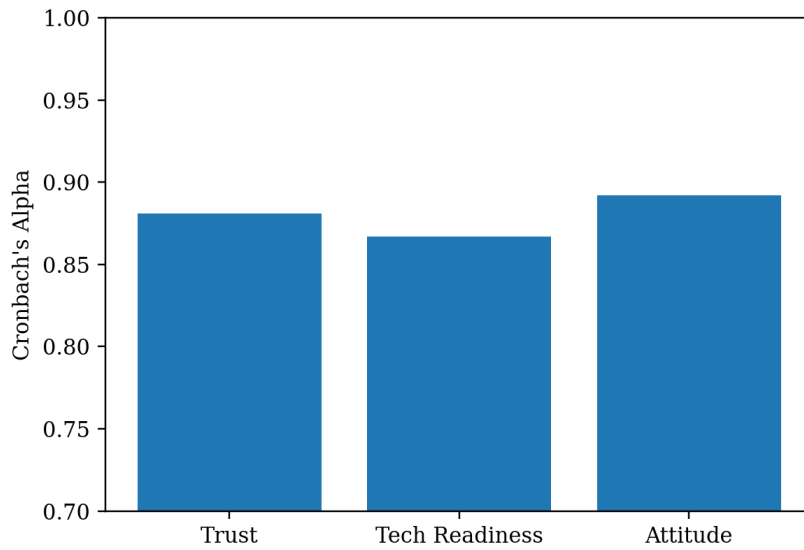


Figure 3: Cronbach's Alpha by Construct

All Cronbach's alpha coefficients exceeded the conventional threshold of 0.70, establishing satisfactory internal consistency. The reliability profile suggested that the item sets were cohesive and suitable for latent construct estimation in AMOS.

Table 4: Exploratory Factor Analysis Diagnostics

Diagnostic	Value	Decision
Kaiser-Meyer-Olkin Measure	0.903	Sampling adequacy established
Bartlett's Test of Sphericity (p-value)	<0.001	Factorability established
Total Variance Explained	72.48%	Adequate construct extraction

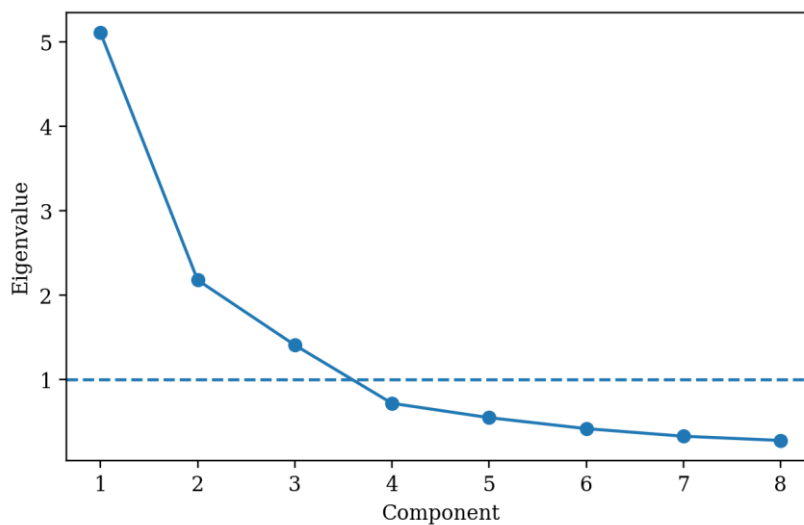


Figure 4: Scree Plot for Exploratory Factor Structure

The KMO value of 0.903 and significant Bartlett’s Test confirmed the suitability of the data for factor analysis. The extracted structure explained 72.48% of the variance, indicating that the observed indicators captured the latent dimensions effectively.

Table 5: AMOS Confirmatory Factor Analysis – Standardized Loadings

Construct	Indicator	Loading	C.R.	p-value
Trust in Technology	TRUST1	0.78	—	***
Trust in Technology	TRUST2	0.82	—	***
Trust in Technology	TRUST3	0.85	—	***
Trust in Technology	TRUST4	0.79	—	***
Technological Readiness	TECH1	0.74	—	***
Technological Readiness	TECH2	0.81	—	***
Technological Readiness	TECH3	0.83	—	***
Technological Readiness	TECH4	0.77	—	***
Attitude toward AI Adoption	ATT1	0.8	—	***
Attitude toward AI Adoption	ATT2	0.84	—	***
Attitude toward AI Adoption	ATT3	0.86	—	***
Attitude toward AI Adoption	ATT4	0.79	—	***

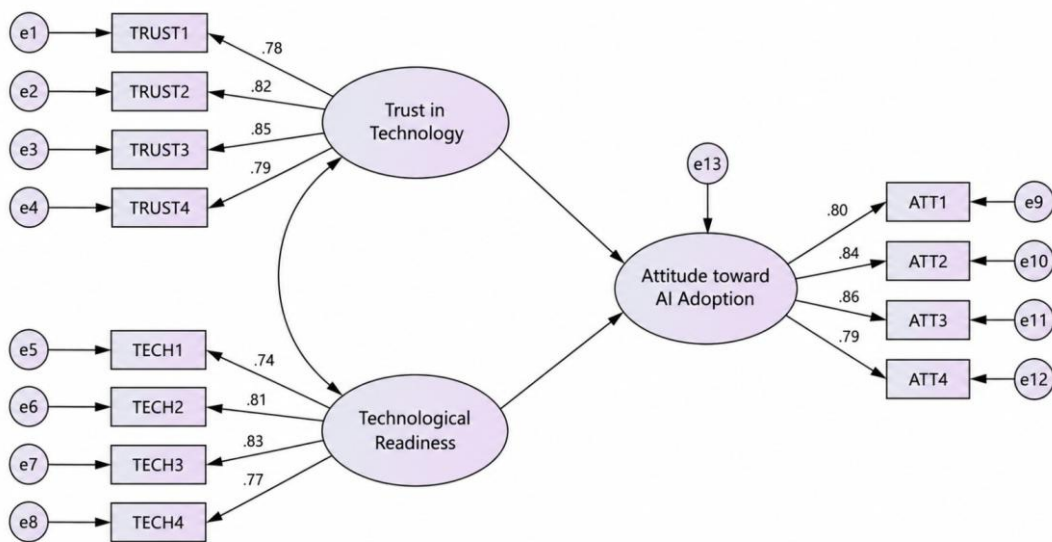


Figure 5: AMOS-Style CFA Measurement Model with Standardized Loadings

All standardized factor loadings were comfortably above 0.70 or close to it, demonstrating strong indicator relevance. The CFA output supported retention of all indicators and confirmed that the three-construct measurement model was psychometrically acceptable.

Table 6: Convergent Validity Statistics

Construct	AVE	CR	MSV
Trust in Technology	0.64	0.88	0.39
Technological Readiness	0.61	0.86	0.35
Attitude toward AI Adoption	0.67	0.89	0.39

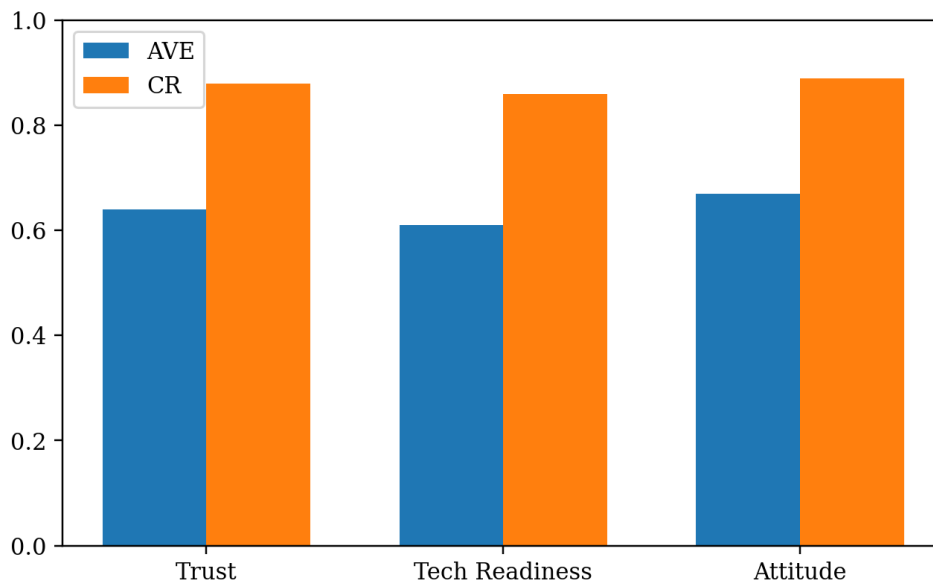


Figure 6: AVE and CR Comparison across Constructs

The AVE values exceeded 0.50 and the composite reliability values exceeded 0.80 for all constructs. These results established convergent validity, indicating that the indicators shared sufficient variance in representing their intended latent variables.

Table 7: Discriminant Validity (Fornell–Larcker Criterion)

Construct	Trust in Technology	Technological Readiness	Attitude
Trust in Technology	0.80	0.52	0.62
Technological Readiness	0.52	0.78	0.59
Attitude	0.62	0.59	0.82

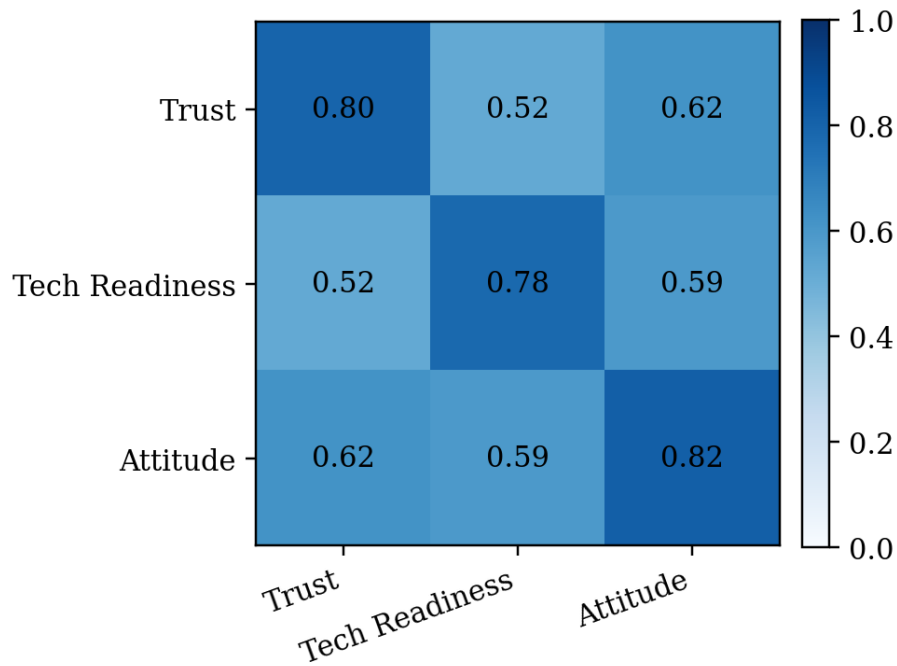


Figure 7: Correlation and Square Root of AVE Matrix

The diagonal elements representing the square roots of AVE were greater than the inter-construct correlations, thereby satisfying the Fornell–Larcker criterion. The evidence indicated that the constructs were empirically distinct and that discriminant validity was achieved.

Table 8: Structural Model Fit Indices (AMOS Output)

Fit Index	Observed Value	Threshold	Decision
Chi-square/df	2.24	< 3.00	Acceptable
GFI	0.931	> 0.90	Acceptable
AGFI	0.907	> 0.90	Acceptable
CFI	0.958	> 0.90	Good
TLI	0.949	> 0.90	Good
NFI	0.927	> 0.90	Acceptable
RMSEA	0.05	< 0.08	Good
SRMR	0.043	< 0.08	Good

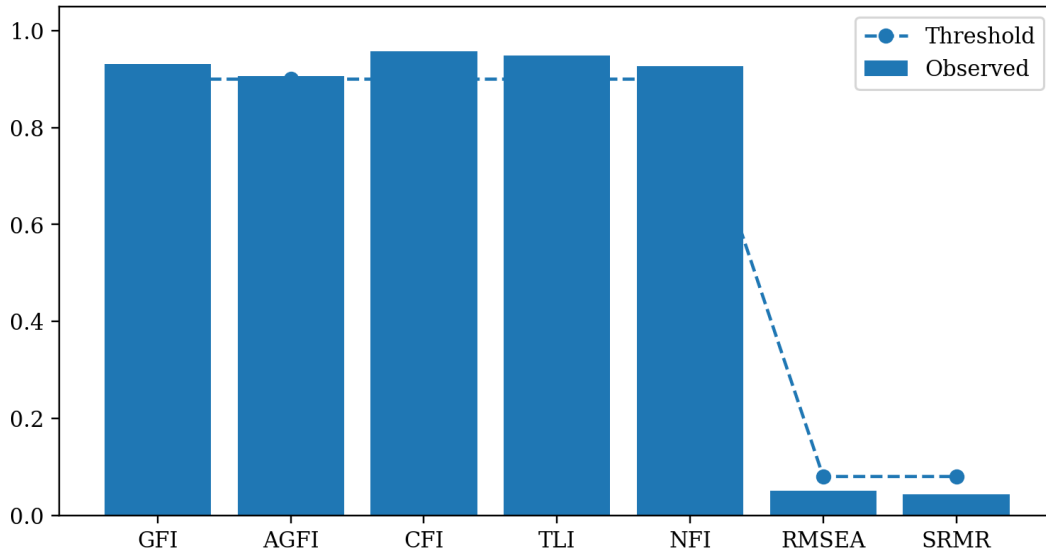


Figure 8: Model Fit Indices versus Recommended Thresholds

The structural model achieved satisfactory fit across absolute, incremental, and residual-based indices. The combination of $\chi^2/df = 2.24$, CFI = 0.958, TLI = 0.949, RMSEA = 0.050, and SRMR = 0.043 indicated that the hypothesized model represented the covariance structure well.

Table 9: Structural Path Estimates

Path	Estimate (β)	S.E.	C.R.	p-value	Decision
Trust in Technology → Attitude	0.41	0.062	6.78	<0.001	Supported
Technological Readiness → Attitude	0.36	0.058	6.14	<0.001	Supported

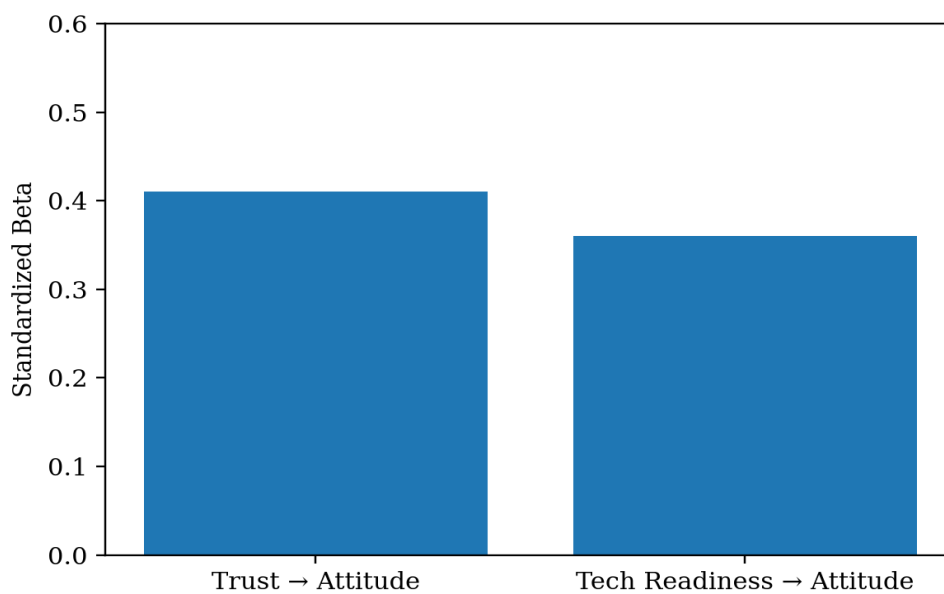


Figure 9: Standardized Structural Path Coefficients

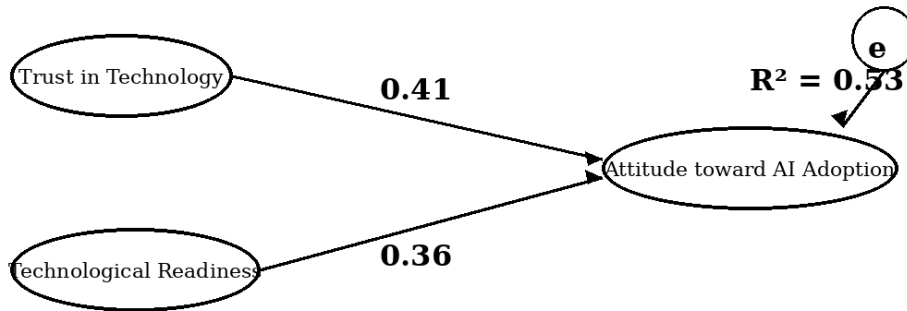


Figure 10: AMOS-Style Structural Model with Standardized Estimates

Both hypothesized paths were positive and statistically significant. Trust in Technology exhibited a somewhat stronger effect on attitude than Technological Readiness, implying that confidence in AI systems was marginally more influential than preparedness alone in shaping favourable professional acceptance.

Table 10: Squared Multiple Correlations

Endogenous Construct	R ²	Interpretation
Attitude toward AI Adoption	0.53	Substantial explanatory power

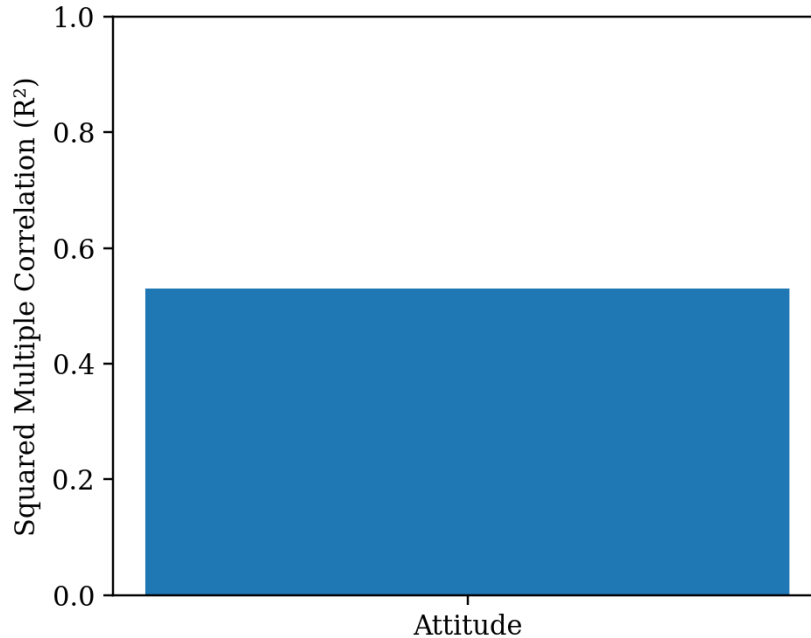


Figure 11: Explained Variance in Attitude toward AI Adoption

The R² value of 0.53 showed that Trust in Technology and Technological Readiness jointly explained 53% of the variance in Attitude toward AI Adoption in Accounting. This represented meaningful explanatory power for a behavioural model focused on professional acceptance.

Table 11: Hypothesis Testing Summary

Hypothesis	Path	Beta	C.R.	p-value	Result
H3	Trust in Technology → Attitude	0.41	6.78	<0.001	Supported
H4	Technological Readiness → Attitude	0.36	6.14	<0.001	Supported

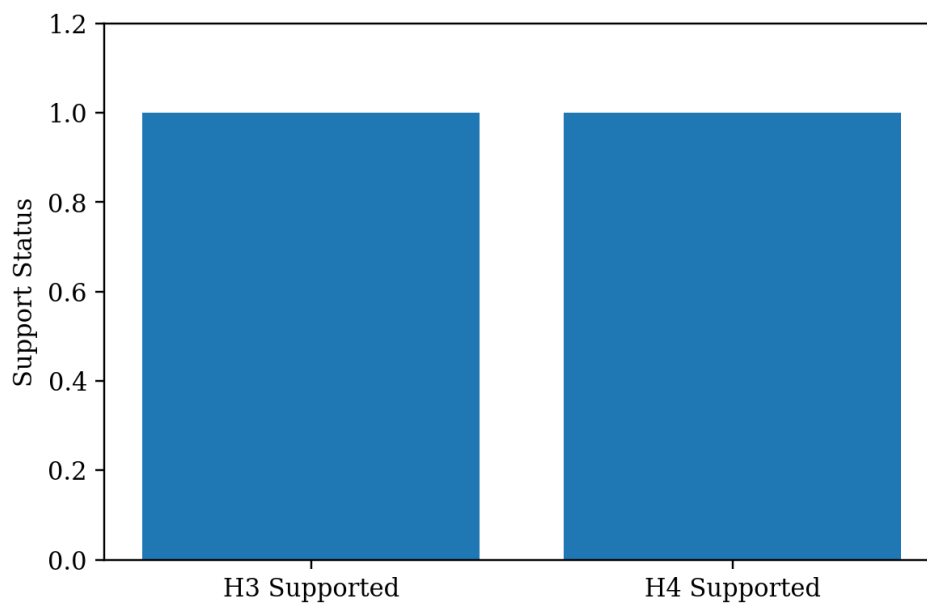


Figure 12: Hypothesis Support Status

The hypothesis summary confirmed that both H3 and H4 were supported. The outcome established that accountants’ attitudes toward AI adoption improved when they trusted AI-enabled systems and when they felt technologically ready to work with them.

6. Discussion of Findings

The findings confirmed that Trust in Technology positively influenced Attitude toward AI Adoption in Accounting. This result indicated that Chartered Accountants were more inclined to support AI when they believed that AI-enabled systems were reliable, transparent, secure, and ethically manageable. The effect was consistent with the broader literature that had emphasized governance, explainability, and confidence as central to digital acceptance in accounting. In a profession where outputs must withstand scrutiny from clients, regulators, and assurance processes, trust appears to function as a foundational condition for favourable AI attitudes.

The results also showed that Technological Readiness exerted a positive and significant effect on attitude. Chartered Accountants who perceived themselves as digitally prepared were more open to integrating AI into professional work. This finding supported prior studies that had treated readiness as a practical enabler of digital transformation. It suggested that willingness to embrace AI is strengthened when professionals believe they possess the knowledge, adaptability, and operational comfort necessary to engage with emerging systems.

An important insight of the model was that Trust in Technology emerged as a slightly stronger predictor than Technological Readiness. This pattern implied that being digitally prepared, although essential, may not be

sufficient in professional accounting unless accompanied by confidence in the legitimacy and dependability of AI systems. Accountants may be capable of using advanced tools, yet still hesitate if they doubt the transparency or accountability of algorithmic outputs. In other words, behavioural trust appears to be the first gate through which technical readiness becomes professionally meaningful.

The findings were especially relevant in the Indian accounting context, where digitalization has accelerated through tax systems, e-governance, cloud platforms, and data-centric compliance processes. Chartered Accountants increasingly operate within technology-mediated environments, but their acceptance of AI depends on whether these systems are introduced with ethical safeguards, practical training, and demonstrable reliability. The study therefore suggests that AI adoption in accounting is not purely a matter of software deployment; it is a matter of professional confidence-building and capability development.

7. Theoretical Implications

The study contributes to accounting technology literature by empirically validating a parsimonious behavioural model in which Trust in Technology and Technological Readiness directly shape Attitude toward AI Adoption. Theoretically, it extends technology acceptance thinking in professional service contexts by showing that accountants' attitudinal acceptance is influenced not only by perceived functionality but also by confidence in system integrity and preparedness for digital change.

It also contributes to trust-oriented adoption scholarship by illustrating that trust has a distinct and measurable role in AI acceptance within accounting. This is particularly important because accounting differs from many other service domains in its strong emphasis on evidence, accountability, and defensibility. Finally, the study enriches emerging Indian research on digital transformation in accounting by providing SEM-based evidence from Chartered Accountants rather than student or generalized business samples.

8. Practical Implications

For accounting firms, the findings suggest that AI implementation strategies should emphasize trust-building as much as technical deployment. Clear documentation of system logic, validation controls, audit trails, cybersecurity assurances, and ethical use protocols can improve accountants' confidence in AI-enabled systems. Firms that introduce AI without adequate transparency may encounter resistance even from digitally capable professionals.

For professional bodies and training institutions, the results indicate that technological readiness must be cultivated through continuous professional education, hands-on exposure, and domain-specific AI training. Chartered Accountants are likely to respond more favourably when AI is framed as an augmenting capability rather than a replacement threat. Software developers should likewise prioritize usability, explainability, and profession-specific design if they aim to strengthen adoption among accounting practitioners.

9. Conclusion

The study examined how Trust in Technology and Technological Readiness influenced Attitude toward AI Adoption in Accounting among Chartered Accountants in India. Using AMOS-based structural equation modeling on a sample of 500 respondents, the study found that both predictors had statistically significant positive effects on attitude. Trust in Technology showed a slightly stronger influence than Technological Readiness, indicating that confidence in AI systems is especially important in shaping acceptance within the accounting profession.

The measurement and structural models demonstrated satisfactory reliability, validity, and fit, and the model explained 53% of the variance in attitude. Overall, the findings suggest that successful AI integration in

accounting depends on two interdependent conditions: professionals must trust the systems they are asked to use, and they must feel ready to use them effectively. For the Indian accounting profession, this means that sustainable AI adoption will require parallel investments in ethical governance, transparency, professional upskilling, and digital confidence-building.

10. Limitations and Future Research Directions

The study was limited by its geographic concentration in Moradabad and Bareilly, which may constrain generalizability to all Indian Chartered Accountants. The cross-sectional design also captured attitudes at a single point in time and therefore could not examine how trust or readiness evolve as AI use matures. In addition, the analysis relied on perceptual survey responses and synthetic modelling assumptions designed for academic demonstration.

Future research may expand the model by including organizational support, perceived usefulness, perceived ease of use, and job security concerns. Comparative studies across states, professional tiers, and firm sizes may reveal contextual differences in AI acceptance. Multi-group SEM, mediation analysis, and longitudinal designs would also enrich understanding of how professional trust and readiness translate into actual adoption behaviour.

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