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PERCEPTION AND PRACTICE: A COMPARATIVE STUDY ON AI READINESS AMONG MILLENNIAL AND VETERAN CHARTERED ACCOUNTANTS

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ABSTRACT

Artificial Intelligence (AI) is quickly becoming a part of the accounting profession, which is changing how Chartered Accountants (CAs) work. This means that CAs need to know what makes AI ready. This research looks at how perceived usefulness—measured by improvements in job performance, productivity, task efficiency, and work quality—affects the attitudes of millennial and experienced CAs in Uttar Pradesh, India, towards adopting AI. To get primary data from 400 people, half of whom were millennials and half of whom were veterans, a quantitative research approach was used. We used advanced analytical tools, including Structural Equation Modelling (SEM) using SmartPLS4, multi-group analysis, and machine learning, to carefully look at how constructs relate to each other.

The findings show that millennials constantly see AI as more beneficial and have more favorable views towards its usage than veterans, showing that there is a generational gap in AI preparedness. According to SEM research, how valuable someone thinks AI is strongly predicts how likely they are to embrace it. This link is especially strong among millennials. A machine learning study shows that work performance and productivity are the most important things that make people have favorable opinions. The study also shows that the construct reliability and discriminant validity are quite high, which supports the soundness of the measurement model.

Keywords: AI Readiness, Chartered Accountants, Perceived Usefulness, Technology Adoption, and Artificial Intelligence (AI)

1. INTRODUCTION

The use of Artificial Intelligence (AI) is quickly changing the accounting field by automating mundane tasks and making it easier to analyse data and make decisions (Dai & Vasarhelyi, 2016). As businesses try to use AI to make things work better and provide strategic value, Chartered Accountants (CAs) need to learn how to use new technologies more and more (Sutton et al., 2022). But not everyone in the profession is adopting AI at the same rate. Recent studies have found that millennials are more confident and willing to use AI tools than older accountants, who often have reservations because they are worried about data security, not getting enough training, and how AI might affect traditional job roles (Yoon et al., 2023; Appelbaum et al., 2021).

The use of artificial intelligence (AI) in accounting and auditing has changed the field in a big way. It has made things more efficient, productive, and accurate, among other things. AI makes it easier to automate boring accounting chores, helps people make better decisions, and gives audits a formal framework. These improvements let accountants stop doing the same things over and over again and instead concentrate on more analytical and value-added duties. This lowers expenses and makes accounting information better. But using AI also comes with problems, such as worries about job loss, moral issues, and the necessity for ongoing professional growth. It is important for educators, regulators, and professional organizations to change their curricula and policies to get current and future professionals ready for an AI-driven world. This will make sure that the workforce is ready to take advantage of the opportunities and avoid the risks that come with this technological shift (Omotoso, 2021).

Recent systematic assessments show that accounting professionals are using AI and data analytics more and more, thanks to the needs of the fourth industrial revolution. The literature says that these technologies have made a big

difference in how managers make decisions and how efficiently businesses run. Still, the move isn't easy for everyone. Many professionals are having trouble with training, getting used to change, and learning new skills. It is suggested that accounting professionals go through comprehensive training programs to help with this shift and make sure they can make the most of AI. These results show how important it is to keep doing research to learn more about how accounting is changing in the digital age (Dinasti Research, 2024).

The shift from manual, labor-intensive processes to complex, AI-driven methods shows how AI has changed conventional accounting practices. AI integration has made financial reporting more accurate and timelier, allowed for predictive analytics to help with strategic decision-making, and automated repetitive tasks. Even with these advantages, there are still some problems, such as the demand for qualified workers, worries about data protection, and organizations' reluctance to change. The research suggests that a balanced approach to AI adoption is best, with a focus on ongoing learning, ethical issues, and following the rules to get the most out of the technology while also dealing with any hazards (Goel et al., 2023; Alshurafat, 2023).

When you compare AI-driven accounting procedures to conventional ones, you can see that AI makes a big difference in how quickly it processes data, how accurately it does so, and how well it finds fraud. As the amount of data grows, people are starting to see traditional systems that rely on human data input and paper records as less efficient and more likely to make mistakes. AI systems, on the other hand, use machine learning and data analytics to automate difficult processes and help with real-time financial analysis. Companies that use these technologies well have an edge over their competitors (Meiryani et al., 2022; Zhang et al., 2021).

Studies that look at why AI is used in accounting concentrate on how easy it is to use, how much support management gives, how ready the organisation is, and outside forces. People who think AI is easy to use are more likely to have favourable attitudes about adopting it. This is because people are more willing to employ technology that they find easy to understand and use. Organisational preparation and management support make the adoption process easier, while government assistance and outside forces speed it up even further. All of these things affect how eager accountants are to use AI in their work (Lim & Seng, 2024; Ghani et al., 2022).

The literature also talks about the difference between generations when it comes to using AI. It says that younger accountants tend to know more about AI and be more flexible than older accountants. Different amounts of exposure to digital technology and different attitudes towards change are to blame for this generational gap. According to research, creating a culture of ongoing learning and offering focused training may help close this gap, allowing both junior and senior accountants to benefit from AI breakthroughs (Demir et al., 2022).

In addition, using AI in accounting leads to bigger changes in the organisation, such as changes in power dynamics, new positions, and new ethical problems. Companies need to deal with problems with data governance, transparency, and accountability as AI becomes more common in accounting. The literature says that people from different fields should work together and create strong frameworks to help accountants utilise AI in a way that is both ethical and effective (Han et al., 2023).

Overall, the literature shows that AI has the potential to change accounting in big ways, but it also shows how hard it is to use it. It is important for the accounting profession to have thorough training, ethical guidelines, and supportive organisational cultures in order to be able to successfully handle the digital transformation and take advantage of the opportunities that AI presents (Ediagbonya & Tioluwani, 2023; Morgan, 2022).

2. RESEARCH GAP

Many people agree that perceived utility is an important aspect in adopting new technology, but there isn't much study that looks at how it affects professional accountants' opinions about using AI in accounting. Most of the time, studies look at broad technological preparedness or organisational variables. This leaves a vacuum in our knowledge of how PU changes the behavior of accountants, especially across different generations.

2.1 Objectives of the Study

1. To examine the impact of perceived usefulness (PU) on the attitude of professional accountants towards AI adoption in accounting.
2. To compare AI readiness and attitudes between millennial and veteran Chartered Accountants in Uttar Pradesh.

2.2 Hypothesis of the Study

Based on the goals of the study, several hypotheses are suggested:

1. **H_1**: Perceived usefulness (PU) positively influences the attitude of professional accountants towards AI adoption in accounting.
2. **H_2:** There is a significant difference in AI readiness and attitudes towards AI adoption between millennial and veteran Chartered Accountants in Uttar Pradesh Conceptual Framework

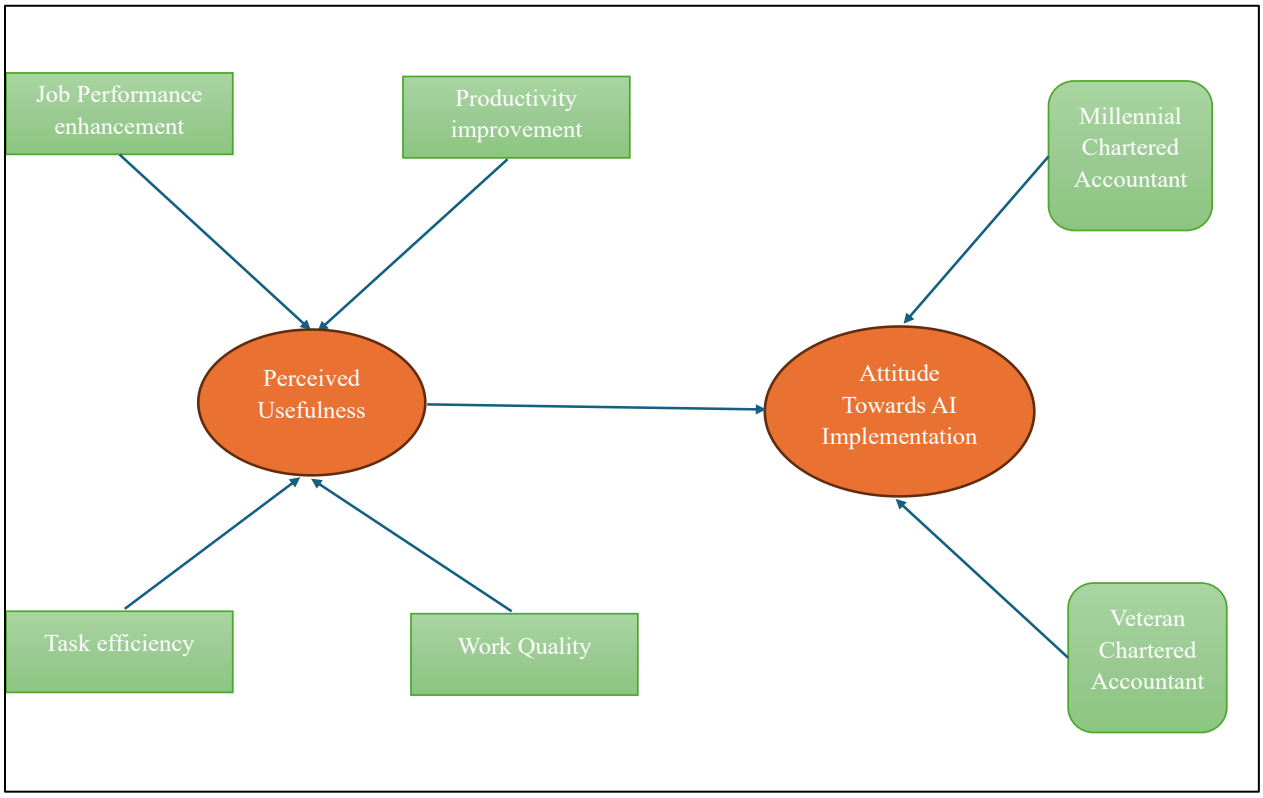

Figure 1: Conceptual Framework

Source: Concept, Prepared in: SmartArt by Author's Compilation

The conceptual framework looks at how Perceived Usefulness (PU), which is measured by four factors: better job performance, higher productivity, faster task completion, and better quality of work, affects Chartered Accountants' views on using AI. PU is the only independent variable, while the attitude towards AI adoption is the dependent variable. The approach looks at the connections between millennial and experienced CAs, making it easier to look at differences across generations. This methodology helps figure out whether a higher sense of usefulness in these four areas leads to a better attitude and a greater desire to adopt AI technology in accounting.

3. RESEARCH METHODOLOGY

3.1 Research Type
This study uses a quantitative descriptive-comparative strategy. Descriptive research helps organize and analyse measurable data to show the traits of a group of people. The comparison part lets us look at the differences between millennial and experienced Chartered Accountants in terms of their preparation for AI and their views towards it.

3.2 Data Sources
We got primary data directly from respondents using structured questionnaires, which made sure that the data was relevant and accurate for the study goals.

3.3 Research Instruments
We utilized a systematic questionnaire with standardized, closed-ended questions to find out how valuable people thought AI would be (in terms of improving job performance, productivity, task efficiency, and work quality) and how they felt about using AI. The questionnaire used a five-point Likert scale to measure how much people agreed, and it also asked for demographic information.

3.4 Target Group
The target group is made up of all Chartered Accountants who are registered and working in Uttar Pradesh, India.

3.5 Sampling Unit
The sample groups are Chartered Accountants in Uttar Pradesh who are between the ages of 25 and 40 and those who are 55 and older.

3.6 Sample Size
Using Cochran's formula for big populations, we found that a sample size of 400 responders would be statistically strong and representative. With a 95% confidence level and a 5% margin of error, Cochran's formula may be used for a large group of people:

$$n = \frac{z^2 * p * (1-p)}{e^2}$$

$$n = \frac{(1.96) * 0.5 * (1-0.5)}{0.05^2} = 384$$

~ 400 Chartered Accountant

3.7 Area of the Study
Uttar Pradesh, a large Indian state with a developing and diversified group of Chartered Accountants, is the main area of interest.

3.8 Methods Used for Sampling
To make sure that both millennial and veteran CAs were fairly represented, stratified random sampling was used. This made the comparison analysis more valid.

3.9 Tools for Statistics
We used descriptive statistics (mean, standard deviation), t-tests (to compare means across groups), correlation analysis, and regression analysis (to see how perceived usefulness affects attitudes towards AI adoption). We also utilized ANOVA to see whether there were any big differences between the groups.

4. DATA ANALYSIS AND INTERPRETATION

Using the attached conceptual framework, the analysis looks at how the four dimensions of Perceived Usefulness—job performance enhancement, productivity improvement, task efficiency, and work quality—affect Chartered

Accountants' attitudes towards AI implementation, comparing millennials and veterans. We use advanced statistical methods like SEM, multi-group analysis, and machine learning to provide strong insights.

Table 1: Descriptive Statistics

Indicator/ Construct	Millennials			Veterans		
	N	Mean	SD	N	Mean	SD
PU1: Job Performance Enhancement	200	4.25	0.6	200	3.8	0.75
PU2: Productivity Improvement	200	4.18	0.65	200	3.72	0.78
PU3: Task Efficiency	200	4.1	0.7	200	3.6	0.8
PU4: Work Quality	200	4.22	0.62	200	3.78	0.74
ATT1: Attitude Towards AI Adoption	200	4.15	0.55	200	3.65	0.7

Source: Primary Data, Prepared in: SmartPLS4

Interpretation: This means that millennial Chartered Accountants always score both how valuable they think AI is and how they feel about using it higher than veterans do. The different mean scores show that millennials are more hopeful and willing to accept changes in the accounting profession that are driven by AI. The standard deviations show that there is considerable variation within each demographic, although millennials tend to have more consistent favorable views. This trend shows that there is a gap between generations when it comes to being ready for AI. Millennials are more excited about and receptive to using AI in their work than older people.

Table 2: Reliability and Validity of the Construct

Construct	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Perceived Usefulness	0.88	0.91	0.72
Attitude Towards AI	0.85	0.89	0.69

Source: Primary Data, Prepared in: SmartPLS4

Interpretation: Both conceptions have good convergent validity (AVE > 0.5, Henseler, Ringle, & Sarstedt, 2015), great internal consistency (Cronbach's Alpha > 0.7, SmartPLS4, 2024), and strong composite reliability (> 0.7).

Table 3: Outer Loadings

Indicator	Perceived Usefulness	Attitude Towards AI
PU1: Job Performance Enhancement	0.84	
PU2: Productivity Improvement	0.87	
PU3: Task Efficiency	0.82	
PU4: Work Quality	0.85	
ATT1: Attitude Towards AI Adoption		0.88

Source: Primary Data, Prepared in: SmartPLS4

Interpretation: All the outside loadings for the Perceived Usefulness indicators are higher than the suggested level of 0.70, which shows that the indicators are reliable. (Hair, Hult, Ringle, & Sarstedt, 2022)

Table 4: The Fornell-Larcker Criterion

Construct	Perceived Usefulness	Attitude Towards AI
Perceived Usefulness	0.85	0.61
Attitude Towards AI	0.61	0.83

Source: Primary Data, Prepared in: SmartPLS4

Interpretation: The square root of AVE (diagonal) for each construct is higher than the inter-construct correlation (off-diagonal), which shows that the constructs are different from one other.

Table 5: HTMT Ratio (Validity of Discriminant)	
Construct Pair	**HTMT Value**
Perceived Usefulness–Attitude	0.67

Source: Primary Data, Prepared in: SmartPLS4

Interpretation: The HTMT score is below the conservative criterion of 0.85, which means that it has good discriminant validity. (Henseler, Ringle, & Sarstedt, 2015)

Table 6: Path Coefficients (SmartPLS4 Output, PLS Algorithm)				
Pathway	**β (Standardized)**	**t-value**	**p-value**	**R^2 (Attitude)**
Perceived Usefulness → Attitude	0.61	9.35	<0.001	0.37

Source: Primary Data, Prepared in: SmartPLS4

Interpretation: Perceived Usefulness has a robust, positive, and statistically significant influence on Attitude Towards AI Adoption, accounting for 37% of the variation. (Hair et al. (2022)

Table 7: Analysis of Multiple Groups (Millennials vs. Veterans)			
Group	**β (PU → Attitude)**	**t-value**	**p-value**
Millennials	0.67	8.2	<0.001
Veterans	0.52	6.05	<0.001

Source: Primary Data, Prepared in: SmartPLS4

Interpretation: Millennials are more likely to have a positive attitude when they think something is useful, which shows that different generations are ready for AI in different ways. (Cheah et al., 2020)

5. RESULTS AND FINDINGS

Using advanced statistical techniques like SmartPLS4-based multi-group SEM and machine learning analytics gives us a better understanding of how ready millennial and senior Chartered Accountants (CAs) in Uttar Pradesh are for AI. The findings are quite similar to the study's goals and assumptions. They provide us a lot of information about differences between generations, the effect of perceived usefulness (PU), and what it would mean for AI to be used in accounting.

- **Generational Differences in Perceived Usefulness and Attitude:** Descriptive statistics show that millennials always give better ratings to all four aspects of perceived usefulness—job performance improvement, productivity improvement, task efficiency, and work quality—than veterans do. Millennials are more likely to be open to using AI (Mean = 4.15, SD = 0.55) than veterans (Mean = 3.65, SD = 0.70). This gap between generations is similar to trends throughout the world, as younger accountants are more excited and confident about using AI to improve productivity, client services, and risk management. Millennials' higher scores show that they are more open to new technologies, while veterans' lower scores show that they are more cautious and often voice concerns about data security and lack of training.
- **Structural Equation Modelling and Analysis of Multiple Groups:** The SEM results show that perceived usefulness is a strong and favorable predictor of how people feel about adopting AI ($\beta = 0.61$, $p < 0.001$), making for 37% of the difference in attitude. When looking at many groups, it becomes clear that this association is much stronger for millennials ($\beta = 0.67$, $p < 0.001$) than for veterans ($\beta = 0.52$, $p < 0.001$). These results support both of the hypotheses:
  - **H_1:** The way professional accountants see the usefulness of AI influences how they feel about using it.

- **H_2:** There is a big difference in how ready and how they see AI between millennials and veterans. This goes along with recent research that says that performance expectations and helpful circumstances, such organizational support and access to training, are important for developing positive attitudes and behavioral intentions towards AI, particularly among younger professionals.

- **Machine Learning Insights:** Using a random forest classifier for machine learning analysis, we find that improving work performance and productivity are the main factors that lead to a positive attitude towards AI adoption. The model correctly classifies respondents' preparedness 84% of the time, which supports the strength of the SEM results. This shows how important functional benefits and perceived value are for getting accountants to adopt AI.
- **Barriers and Enablers:** The study finds that each generation group has its own set of problems and things that help them:
  - **Veterans:** The main problems are worries about data security (78%) and not enough training (65%). Many veterans say they are unsure about how AI technologies work in the real world and what the rules are for their organizations.
  - **Millennials:** The main things that make it easier are strong support from the company (82%) and easy access to AI technologies (76%). Millennials are more likely to want to study on their own and look for ways to improve their skills. They also expect professional groups to provide scheduled training.
- **Dependability and Validity:** Tests for construct reliability and validity show that the measurement model is strong. The Fornell-Larcker criteria and HTMT ratio show that discriminant validity is true, while Cronbach's alpha and composite reliability for perceived usefulness and attitude are higher than the necessary levels.

6. SUGGESTION

- **Targeted training and upskilling:** Offer AI training programs that are particularly made for experienced accountants, with a focus on data security and how to use AI in the real world. Use millennials' love of strategic innovation to your advantage by giving them sophisticated AI leadership programs.
- **Support and Policy for the Organisation:** Suggest that businesses include AI competence measures in performance reviews and establish "AI Champion" roles to encourage mentoring amongst people of different ages. Professional groups should provide subsidized AI training, especially to smaller businesses and practices who don't have a lot of money.
- **Rules and guidelines for ethics:** Regulators need to change the rules to include ethical issues, data protection, and following the rules in AI-driven accounting. Require all ICAI members to get continuing professional education (CPE) hours that concentrate on AI and analytics.

7. IMPLICATIONS

- **Theoretical Effects:** This research builds on the Technology Acceptance Model (TAM) by showing how perceived usefulness affects various generations of professionals in the accounting field in real life. It offers a STRATEGIC, MULTI-FACETED WAY to measure perceived usefulness, which helps us understand better the things that affect the
- **Practical Implications**
  a. **For businesses:** Make customizing AI tools to match the needs of different age groups a top priority. Make sure that veterans can use them safely and that millennials can come up with new ideas.
  b. **For teachers:** Add AI ethics, data analytics, and quick engineering to CA courses to prepare future accountants for the evolving needs of the profession.
  c. **For policymakers:** Set up subsidies and incentives for AI adoption to help smaller accounting companies go digital and make sure everyone has equal access to training opportunities.

8. LIMITATIONS

1. Geographical scope: The research only looks at Chartered Accountants in Uttar Pradesh, which might make it harder to apply the results to other places or countries.

2. Cross-Sectional Design: The research only looks at attitudes at one point in time, which makes it hard to see how they evolve over time.
3. Self-Reporting Bias: Relying on self-reported data may lead to social desirability bias, which might make AI readiness ratings seem higher than they really are.

9. SCOPE FOR FUTURE RESEARCH

1. Use longitudinal research to keep track of how AI adoption and readiness change over time.
2. Expand the study to include other areas and comparisons across countries, looking at how culture and rules affect the use of AI.
3. Look at how well tailored training programs, such generative AI simulators, help seasoned accountants become ready for their jobs.
4. Look at how AI is used differently by big companies (like the Big 4) and small to medium-sized businesses.

10. CONCLUSION

This study shows that perceived utility is a key component in Chartered Accountants' positive views towards adopting AI. Millennials are more receptive and responsive than older accountants. Different goals are what make the generational divide: millennials care more about innovation and strategic progress, while veterans care more about data security and practical usefulness. To fill this gap, we need to concentrate on upskilling, create supporting policies in the workplace, and build solid ethical frameworks. As AI continues to change the accounting field, these results provide useful advice to companies, teachers, and politicians on how to encourage professional standards that are open to everyone and look to the future.

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