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From Calculator to Chat GPT: Are Accountants Afraid of Being Replaced by Ai? – A Primary Survey in South Gujarat

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ABSTRACT

This paper is called From Calculator to ChatGPT: Are Accountants Fearing Being Replaced by AI? studies awareness, use and perception of Artificial Intelligence tools among the accounting professionals within South Gujarat. The accounting profession is being significantly transformed with the fast development of AI technologies like chatbots, like ChatGPT. The research uses a primary survey method to examine the perceptions of accountants in the areas of job displacement, professional relevance and future career security. Information gathered with the help of accounting professionals demonstrates that the moderate awareness of AI tools is accompanied by limited usage. These results suggest that experience level does not significantly relate to fear of job replacement by AI which implies the perspective towards the adoption of AI is cautious and neutral. In addition, there are weak connections between AI use and career related attitudes, which proves a transitional period of adjusting to a profession. The paper concludes that AI is viewed as a supportive system but not a direct threat as it is now, and it requires the organization of competence development programs.

KEY WORDS: Artificial Intelligence, ChatGPT, Accounting Profession, Job Displacement Anxiety, Technology Adoption, Automation, Professional Skills, Primary Survey, South Gujarat

INTRODUCTION

In the accounting profession, there has been an on-going change which has been caused by the technological changes- manual bookkeeping and using calculators is replaced by complex accounting software and cloud based systems. The recent years have shown an acceleration of the transformation with the advent of Artificial Intelligence (AI), and most notably the generative AI applications like ChatGPT. Such technologies can now do the work that was once done by accountants such as data analysis, report creation, compliance verification and even advisory services. Consequently, the accountant is no longer doing the number-crunching role as it is becoming more strategic, more analytical and more decision-oriented.

Although AI-based tools can provide a lot of efficiency and accuracy, their increased usage has come with a lot of concern among the accounting population on issues of job security, relevance to the profession and career prospects. The possibility of getting ousted by intelligent machines has become a common motif of the arguments about AI in the field of professional services. Although there are accountants who consider AI as a supportive tool, which increases productivity and reduces the repetitive work, some others see AI as a possible threat that has the potential to automate the core accounting processes.

The influence of AI implementation in accounting is especially topical in the Indian context, especially in such regions as South Gujarat, where the influence of SMEs, manufacturing facilities, and professional service companies is very high. The accountants of this region are working in various organizational structures both conventional and technology based firms. Their view of AI is influenced by the exposure to technology and other age, education, experience, and organizational readiness.

This paper is called From Calculator to ChatGPT: Are Accountants Afraid to be Replaced by AI?. aims at investigating empirically the level of awareness, acceptance, and fear with AI among the accountants in South Gujarat. The primary survey method will help the study to capture the real-life perceptions and the research will also shed light into how accountants are adjusting to the AI-driven transformation of their profession.

LITERATURE REVIEW

The recent academic literature reflects both the growing role of ChatGPT and other AIs in software development, education, marketing and cognitive practices, as well as the significant role of ethical and operational limitations. Motazed Kiani et al. (2023) comparatively analyze ChatGPT and GitHub Copilot in terms of software development and conclude that the latter is more efficient, has a higher accuracy in code completion, and can interoperate better with development environments, whereas the former has a better command of natural language understanding and explanations but is limited to complex code generation tasks.

In the field of education, several studies verify the high pedagogical potential of ChatGPT. Abdillah et al. (2023) and Mhlanga (2023) note that it can improve the well-being of students, personalized learning, engagement, and academic support, although they warn of such ethical risks as data privacy, bias, and over-reliance. Statistically significant positive changes in the results of English language learning (vocabulary, grammar, comprehension and learner motivation) prove that ChatGPT is useful as a supplement to conventional teaching in the works of Songsiengchai (2025) and Songsiengchai et al. (2023).

Markovic Blagojevic et al. (2024) and Rashel et al. (2024) discuss the views of teachers and the implications of AI in institutions and find that AI changes not the work of teachers, but positions the latter as leaders of critical thinking, creativity, and moral judgment. Nevertheless, low levels of digital capabilities and change resistance are still issues. A literature review on student cognition, like that of Hartono et al. (2024) and Zulfikasari et al. (2024), shows a two-sided effect of improved efficiency and comprehension and a chance of dependency, and less critical thinking without instructor-guided applications.

In addition to education, Saputra et al. (2023) also emphasize the use of ChatGPT in digital marketing, in which it is expected to increase engagement and consumer action by using AI-generated content on Instagram. Chew (2023) also explains that the accuracy of AI problem-

solving is very much dependent on methodological framing since creative mathematical rules can improve the performance of ChatGPT considerably.

All in all, the literature comes to a joint decision that ChatGPT has significant value in various fields when utilized responsibly, with the help of human control, moral frameworks, and situational instructions.

RESEARCH GAP

Current AI research on accounting is mainly dedicated to the technological possibilities, positives of automation, and efficiency in organizations, little is done on the psychological and perceptual aspects of accountants themselves. The body of existing literature is mostly global or focused on developed economies; there is a gap in the literature that covers regions-specific Indian studies. Specifically, the empirical studies that explore fear of job loss, work-related anxiety, and responsiveness to AI applications like ChatGPT in practicing accountants in South Gujarat are wanting. This paper fills this gap with primary region-specific evidence of accountants perception and readiness during the AI era.

OBJECTIVES

1. To examine the level of awareness and usage of Artificial Intelligence tools (such as ChatGPT) among accounting professionals in South Gujarat.
2. To analyse the perception and fear of job replacement due to AI adoption among accountants in South Gujarat.
3. To study the relationship between AI adoption and accountants' attitudes toward skill upgradation and future career security.

RESEARCH METHODOLOGY

- **Nature of Study**
  The research is descriptive and empirical, as it is based on the perceptions of Artificial Intelligence in accountants.
- **Research Design**
  A major survey-based research design was implemented to gather primary data that is gathered through the respondents.
- **Area of Study**
  This research was done in South Gujarat that includes accounting professionals in various organizational environments.
- **Target Population**
  The sample was made up of accounting practitioners such as practicing accountants and persons involved in accounting practice.
- **Sampling Method**
  Convenience sampling method was applied in selection of respondents because of accessibility and time limitation.
- **Data Collection Method**

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Primary data: A questionnaire will then be used to collect primary data in the form of a structured questionnaire aimed at measuring the level of awareness, usage, perception, and fear regarding AI tools.

- **Research Variables**
  Knowledge and processing of AI tools.
  Fear and perception of being replaced at work.
  Skill upgradation attitude and career security.
- **Correlation analysis**
  Data analysis was done with the help of SPSS software.
- **Scope of the Study**
  The research is restricted to accounting practitioners in South Gujarat and specifically on AI applications to the accounting practice.

DATA ANALYSIS AND INTERPRETATION

Objective 1: Awareness and Usage of AI Tools among Accounting Professionals

- **H_{01} (Null Hypothesis):** There is **no statistically significant difference** between the average level of awareness and usage of AI tools (such as ChatGPT) among accounting professionals in South Gujarat and the neutral benchmark level.
- **H_{11} (Alternative Hypothesis):** There **is a statistically significant difference** between the average level of awareness and usage of AI tools (such as ChatGPT) among accounting professionals in South Gujarat and the neutral benchmark level.

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
I am aware of Artificial Intelligence tools such as ChatGPT used in accounting-related work.	70	2.9286	1.33320	.15935
I currently use AI-based tools (e.g., ChatGPT, automation software) in my accounting tasks.	70	2.9429	1.44348	.17253

One-Sample Test

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
I am aware of Artificial Intelligence tools such as ChatGPT used in accounting-related work.	-.448	69	.655	-.07143	-.3893	.2465
I currently use AI-based tools (e.g., ChatGPT, automation software) in my accounting tasks.	-.331	69	.741	-.05714	-.4013	.2870

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A one-sample t-test was performed to test the hypothesis of the awareness and actual use of Artificial Intelligence tools like ChatGPT among the South Gujarat accounting professionals by comparing the measured mean answers to a test value of 3, which is considered as a neutral position in the Likert scale. The sample size used in the analysis was 70 respondents which is sufficient to draw inference through primary surveys.

The first, which was I know about the Artificial Intelligence tools like ChatGPT applied in accounting-related work, had a mean of 2.93 and standard deviation of 1.33. The t-value obtained was 0.448 and the significance value (p = 0.655), which is significantly greater than the traditional value of 0.05. The outcome of this analysis shows that the average level of awareness is not significantly different, compared to the neutral level. Even though the respondents show some level of familiarity with the AI tools, the familiarity is not very strong and there is no statistically significant difference between the familiarity and the neutrality.

In the same way, the second, namely, I already use AI-based tools (e.g., ChatGPT, automation software) in my accountant work, had the mean of 2.94 and standard deviation of 1.44. The t-test gave out a t-value of 0.331 and a p-value of 0.741 which is again greater than the area of statistical significance. This observation indicates that the current application of AI tools by accounting professionals has not developed much and does not substantially differ with a neutral approach.

Combined, both findings suggest clearly that although AI tools such as ChatGPT are by no means unfamiliar to the accounting professionals in South Gujarat, their level of awareness and practical use is yet to attain a statistically significant value. As a result, the null hypothesis (H01) is accepted and the alternative hypothesis(H11) is rejected in the case of Objective 1. This result suggests the adoption of AI in the accounting profession in the region is still immature or at the transnational level and that there should be systematic training, institutionalized support and professional exposure so as to be able to engage seriously with AI-driven accounting technologies.

Objective 2: Fear of Job Replacement due to AI (Based on Experience)

- **H_{o2} (Null Hypothesis):** There is **no significant difference across experience levels** among accountants in South Gujarat regarding their perception of AI as a threat to job security or professional roles.
- **H_{12} (Alternative Hypothesis):** There **is a significant difference across experience levels** among accountants in South Gujarat regarding their perception of AI as a threat to job security or professional roles.

ANOVA					
I feel that AI may replace certain traditional accounting roles in the near future.					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.223	3	.408	.183	.907
Within Groups	146.720	66	2.223		
Total	147.943	69			

In order to determine that fear of job replacement by Artificial Intelligence in each case of accountant in South Gujarat is dependent on the level of professional experience, it was

determined that method of analysis is one-way ANOVA with statement, "I believe that AI will replace some of the traditional jobs of an accountant in near future" being the statement of interest. The respondents were grouped into various experience group and the average perception of the respondents in different groups was compared to ascertain whether there was any statistically significant difference.

The results of ANOVA show that between-group sum of squares is 1.223 and degrees of freedom are 3 whereas within-group sum of squares is significantly greater namely 146.720 and degrees of freedom are 66. The F-value obtained is extremely small 0.183 and the significance value ($p = 0.907$) is much higher than the accepted 0.05. It is an obvious indication that the perception of AI-related job threat does not have a statistically significant difference between accountants of different levels of professional experience.

The results reveal that the concern about the use of AI to substitute the traditional accounting position is fairly consistent among junior, middle, and senior accountants. The level of fear or concern pertaining to AI-driven automation does not seem to be related to experience. This similarity could be an indication that AI is seen mainly as an augmentative or supportive tool as opposed to a direct alternative to professional choice and experience, regardless of the decades of experience.

According to the ANOVA, the null hypothesis (H02) is accepted and the alternative hypothesis (H12) is rejected. The result means that the fear of being displaced by AI is not considerably influenced by professional experience in South Gujarat, among the accountants. Rather, it indicates a perception common to pretty much all groups of experience, which supports the idea that AI is now viewed more as an aid to work than a danger to the existence of the accounting field.

Objective 3: AI Adoption and Career Attitude

- **H_{03} (Null Hypothesis):** There is **no statistically significant relationship** between the adoption of AI tools and accountants' attitudes toward skill development and future career security.
- **H_{13} (Alternative Hypothesis):** There is a **statistically significant relationship** between the adoption of AI tools and accountants' attitudes toward skill development and future career security.

Correlations

	I currently use AI-based tools (e.g., ChatGP	AI tools help in reducing repetitive and routine	AI technology increases efficiency and	Accountants need to upgrade their skills to remain	Learning AI-based tools can improve long-term career	AI will transform the role of accountants rather	I am willing to receive training in AI and advanced accounti

		T, automation software) in my accounting tasks.	accounting work.	accuracy in accounting processes.	relevant in the AI-driven environment.	prospects for accountants.	than completely replace them.	ng technologies.
I currently use AI-based tools (e.g., ChatGPT, automation software) in my accounting tasks.	Pearson Correlation	1	-.003	.022	-.146	-.106	-.026	-.027
	Sig. (2-tailed)		.983	.854	.227	.380	.833	.822
	N	70	70	70	70	70	70	70
AI tools help in reducing repetitive and routine accounting work.	Pearson Correlation	-.003	1	-.031	.096	.094	.117	.067
	Sig. (2-tailed)	.983		.799	.429	.439	.335	.582
	N	70	70	70	70	70	70	70
AI technology increases efficiency and accuracy in accounting processes.	Pearson Correlation	.022	-.031	1	-.126	-.037	-.114	-.085
	Sig. (2-tailed)	.854	.799		.300	.761	.349	.485
	N	70	70	70	70	70	70	70
Accounta	Pearson	-.146	.096	-.126	1	-.072	-.055	-.242

nts need to upgrade their skills to remain relevant in the AI-driven environment.	Correlation							
	Sig. (2-tailed)	.227	.429	.300		.555	.652	.044
	N	70	70	70	70	70	70	70
Learning AI-based tools can improve long-term career prospects for accountants.	Pearson Correlation	-.106	.094	-.037	-.072	1	.022	.223
	Sig. (2-tailed)	.380	.439	.761	.555		.858	.064
	N	70	70	70	70	70	70	70
AI will transform the role of accountants rather than completely replace them.	Pearson Correlation	-.026	.117	-.114	-.055	.022	1	.062
	Sig. (2-tailed)	.833	.335	.349	.652	.858		.608
	N	70	70	70	70	70	70	70
I am willing to receive training in AI and advanced accounting technologies.	Pearson Correlation	-.027	.067	-.085	-.242	.223	.062	1
	Sig. (2-tailed)	.822	.582	.485	.044	.064	.608	
	N	70	70	70	70	70	70	70

In order to test the connection between the usage of AI tools and the attitude of accountants to develop skills and secure the future job, Pearson correlation analysis was performed based on seven statements that characterized the use of AI tools, perceived advantages, upgradation of skills, career opportunities, role disruption, and readiness to receive training. The study was conducted through responses of 70 South Gujarat-based accounting professionals.

Correlation outcomes reveal that most of the variables of career attitude such as perceptions of reduction of routine work ($r = 0.003$, $p = 0.983$), efficiency and accuracy ($r = 0.022$, $p = 0.854$), need to upgrade skills ($r = 0.146$, $p = 0.227$), long-term career prospects ($r = 0.106$, $p = 0.380$), transformation of the roles of accountants ($r =$ These results indicate that not all accountants are instantly proactive and career-oriented due to the exposure or usage of AI tools.

Nevertheless, a significant observation can be made when attitudinal relationships are considered notwithstanding the direct use of AI. The belief that accountants should upgrade their skills is statistically significantly negatively correlated with the willingness to receive AI training ($r = 0.242$, $p = 0.044$). This finding suggests an artificial or behavioural distance: despite knowing that updating their skill set is inevitable in an AI-driven world, accountants have not always changed this knowledge into the willingness to undergo official training. This could be the fear, lack of enthusiasm towards change, time shortage or hesitation to understand how valuable AI training is in practice.

Also, there are positive yet statistically unimportant relationships between perceptions of long-term career opportunities and the desire to study AI tools ($r = 0.223$, $p = 0.064$) which point to the latent existence of a positive orientation towards AI-enabled career development that has not yet attained a traditional level of significance.

Generally, the correlation chart indicates the weak relationship between AI adoption and career attitudes in the contemporary work-related framework of the South Gujarat. Accountants seem to be conceptually aware of the transformative application of AI but have not yet internalized the transformation into rather specific behavior intentions in regard to training and career planning.

According to the results of the correlation analysis, the null hypothesis (H03) is accepted to a great extent, and the alternative hypothesis (H13) is rejected. The results imply that even though there is awareness of the AI-driven change, the strong and statistically significant relationship between the AI adoption and proactive career attitude is still in the process of evolution. This brings out the fact that the gap between AI awareness and career-oriented action among accounting professionals should be addressed through organized capacity-building programs, professional development opportunities, and organizational support.

CONCLUSION

The current research analyzed the awareness, use, perceptions, and attitudes that are career related among accounting professionals of South Gujarat in relation to the use of Artificial

Intelligence tools, specifically, ChatGPT and other automation technologies. The characteristics of empirical results of all three objectives show that AI utilization in the accounting profession in the region is still in the transitional stage.

The discussion of Objective 1 shows that despite the slight familiarity of accounting professionals with AI tools, the level of awareness and actual usage have no significant difference with a neutral level. This is an indicator that AI is yet to be fully integrated into the daily practice of accounting. The level of awareness is at more of a conceptual level as opposed to a consequence of regular hands-on experience, and hence a lack of institutional exposure and practical application.

The objective 2 brings to the fore the fact that there is no significant difference in terms of fear of job replacement by AI among the experience levels. Accountants of junior, middle, and senior levels have a mostly homogenous understanding of job threat as caused by AI. This suggests that AI is not yet seen as a threat to the survival of professionals directly but as a new technological factor the impact of which on a long-term basis remains unclear. This homogeneity is also indicative of the waiting game attitude towards the incorporation of AI in accounting duties.

The present results as part of Objective 3 also support this transitional stage. The correlation analysis reveals that there are weak and statistically insignificant relationships between AI usage and career-related attitudes like skills development, security in career, and readiness to get training. Although accountants in principle understand that they are facing an environment that requires skill upgradation in response to AI, they do not always follow this understanding with intentions to act proactively. The perceived lack of connection between the awareness of the necessity to develop skills and readiness to train in AI shows a problem of the psychological block, the lack of confidence, or even just the absence of the required courses.

In sum, the analysis findings indicate that AI in accounting in South Gujarat is not yet considered as a transformative practice, but a supportive concept. It will become important that the gap between awareness and meaningful adoption will be bridged in order to become professionally relevant and competitive in the future.

RECOMMENDATIONS

Judging by the results, it is suggested that professional accounting organizations, companies, and universities implement well-organized AI training and certification courses based on the accounting applications. Awareness can be translated into usage by using practical workshops, actual case demonstrations and ongoing professional development modules. To minimize resistance and fear, organizations need to ensure that AI is marketed as an aid and not a danger. Also, promoting career-oriented work with AI technologies can be enhanced by adding AI-related material into the accounting curricula and motivating employers to fund training. The necessary support in the policy and industry-academia cooperation will be necessary to speed up the acceptance of effective AI by accounting professionals.

REFERENCE

1. Songsiengchai, S. (2025). Implementation of artificial intelligence (AI): ChatGPT for effective English language learning among Thai students in higher education. International Journal of Education & Literacy Studies, 13(1), 302–312. https://doi.org/10.7575/aiac.ijels.v.13n.1p.302
2. Rashel, M. M., Khandakar, S., Hossain, K., Shahid, A., Kawabata, T., Batool, W., Chaudhary, A. A., Nguyen, A. Q., & Rafique, T. (2024). AI in education: Unveiling the merits and applications of ChatGPT for effective teaching environments. Revista de Gestão Social e Ambiental, 18(10), 1–16. https://doi.org/10.24857/rgsa.v18n10-141
3. Mhlanga, D. (2023). The value of OpenAI and ChatGPT for the current learning environments and the potential future uses. SSRN. https://doi.org/10.2139/ssrn.4439267
4. Hartono, R., Ar Ridho, A. F., Rahma Zaki, F., & Al Ghifari, M. F. (2024). The influence of AI Chat GPT technology on the mindset of educational technology students at Ibn Khaldun University, Bogor. FINGER: Jurnal Ilmiah Teknologi Pendidikan, 3(2), 73–79. https://doi.org/10.58723/finger.v3i2.242
5. Marković Blagojević, M., Simonović, D., & Milenković Anđelković, A. (2024). The impact of AI and ChatGPT on education and the role of the teacher. In 13th International Scientific Conference "Employment, Education and Entrepreneurship" – Conference Proceedings (pp. 404–414). https://doi.org/10.5937/EEE24038M
6. Zahara, A., Hasanah, F., Habib, H., & Sabarrudin. (2024). The influence of advancements in AI ChatGPT technology in students' learning process. BICC Proceedings. https://doi.org/10.30983/bicc
7. Motazed Kiani, F., Akbari, H., Vahedi, H., & Mirzaei Chahardeh, N. (2023). A comparative study of ChatGPT and GitHub Copilot AI in the software development process. Proceedings of NCRIAI 2023.
8. Songsiengchai, S., Sereerat, B., & Watananimitgul, W. (2023). Leveraging artificial intelligence (AI): ChatGPT for effective English language learning among Thai students. English Language Teaching, 16(11), 68–79. https://doi.org/10.5539/elt.v16n11p68
9. Abdillah, H. Z., Partino, & Madjid, A. (2023). Enhancing student well-being through AI ChatGPT in the smart education university learning environment: A preliminary review of research literature. E3S Web of Conferences, 440, 05005. https://doi.org/10.1051/e3sconf/202344005005

10. Chew, P. (2023). Pioneering tomorrow's AI system through aerospace engineering: An empirical study of the Peter Chew rule for overcoming error in ChatGPT. Research Square. https://doi.org/10.21203/rs.3.rs-3439791/v1
11. Mamoon, D. (n.d.). *An amateurs guide to physics of multiverse: What is inside a black hole*. Author.
12. Saputra, R., Nasution, M. I. P., & Dharma, B. (2023). *The impact of using AI ChatGPT on marketing effectiveness: A case study on Instagram marketing*. **Indonesian Journal of Economics and Management, 3**(3), 603–617. https://doi.org/10.35313/ijem.v3i3.4936
13. Zulfikasari, S., Sulistio, B., & Aprilianasari, W. (2024). *Utilization of ChatGPT artificial intelligence (AI) in student's learning experience Gen-Z class*. **Lectura: Jurnal Pendidikan, 15**(1), 259–272. https://doi.org/10.31849/lectura.v15i1.18840
14. Khoso, F. J., Ali, N., & Aslam, N. (2023). *Use of Chat-GPT and AI tools by undergraduates: Students and teachers' perspective*. **Spry Contemporary Educational Practices, 2**(2), 215–238.