Evaluating The Perceived Economic and Cost-Saving Benefits of Artificial Intelligence Among Accounting Professionals in Greater Mumbai

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***Abstract*—Artificial Intelligence (AI) is transforming the accounting profession by streamlining processes, enhancing analytical capabilities, and improving financial decision-making. This study examines the perceptions of accountants in Greater Mumbai regarding AI adoption and its impact on economic efficiency and cost reduction. It explores how technologies such as machine learning, robotic process automation, and data analytics contribute to productivity and operational savings. The research is based on both primary and secondary data, with primary data collected from 80 practicing accountants using a structured five-point Likert scale questionnaire. Data were analyzed using frequency, percentage, and weighted average methods. The findings reveal a generally positive perception of AI, emphasizing its role in operational efficiency and professional growth. The study concludes that AI tools significantly benefit the accounting profession by simplifying tasks and saving time in the evolving financial environment.**

***Index Terms*—AI, Accountants, Perception, Cost Savings, Economical and Profession**

I. INTRODUCTION

1.1 Artificial Intelligence (AI) has become a powerful driver of transformation in modern economies, significantly influencing the accounting profession. The increasing adoption of digital technologies has shifted accounting from traditional manual practices to automated and data-driven systems. AI-based tools such as machine learning, robotic process automation (RPA), and advanced analytics are enabling accountants to perform tasks with greater accuracy, speed, and efficiency. Routine activities like bookkeeping, auditing, tax computation, and financial reporting are increasingly being automated, allowing professionals to focus on strategic and analytical functions.

1.2 In India, particularly in Greater Mumbai—the financial and commercial hub of the country—the integration of AI into accounting practices is gaining momentum. With a high concentration of accounting firms, financial institutions, and corporate organizations, the region presents a suitable environment to study the adoption of AI and its economic implications. The use of AI has the potential to reduce operational costs,

II. PROBLEM OF THE STUDY

A review of the existing literature indicates that the impact of Artificial Intelligence (AI) in India is perceived differently among various stakeholders, with opinions divided on its overall benefits and challenges. Although numerous studies have explored the influence of AI on businesses and diverse professions, limited research has specifically examined the perceptions of individual professional groups, particularly accountants in Mumbai. This highlights a significant research gap in understanding how accounting professionals view AI in terms of its economic advantages and cost-saving potential. Accordingly, the present study is an academic attempt to review relevant literature on stakeholders' perceptions of AI and to analyze the perceptions of accountants in Mumbai regarding AI as an economical and cost-efficient tool for financial reporting and professional practice.

III. OBJECTIVES OF THE STUDY

- To study the profile of professional accountants in Greater Mumbai
- To Study the perception of accountants towards their profession with the use of Artificial intelligence regarding economic implications and cost saving.

IV. RESEARCH METHODOLOGY

For the present study, data has been collected through primary and secondary data. Primary data has been collected through well-structured questionnaire which were filled by sample size of 80 respondents from Mumbai who are working as accountant and professional accountants like chartered accountants and cost accountants which were selected on Random Convenient Non-Probability Sampling Method. Secondary data were collected through review of articles, research papers, government documents, online blogs, dissertations, thesis and working papers.

V. REVIEW OF LITERATURE

Beryl Odonkor (2024) examined the transformative impact of Artificial Intelligence on traditional accounting practices. The study highlighted that AI enhances financial reporting accuracy, automates auditing procedures, and improves decision-making efficiency. It concluded that AI significantly reduces operational costs and shifts accountants' roles toward strategic advisory functions.

Davenport, T. H. & Ronanki, R. (2018) analyzed how AI technologies influence business processes and professional roles. Their findings suggested that AI improves productivity and cost efficiency but requires organizational readiness and skill development. The study emphasized that professionals' perception plays a crucial role in successful AI adoption.

Sutton, S. G., Holt, M. & Arnold, V. (2016) explored the implications of AI in auditing and accounting. The research indicated that AI tools enhance fraud detection, risk assessment, and data analysis, leading to improved efficiency and reduced compliance costs. However, it also pointed out concerns regarding skill gaps and ethical issues.

McKinsey & Company (2017) reported that automation and AI technologies could significantly reduce administrative and financial processing costs across industries. The study estimated that nearly 40–45% of accounting activities could be automated, resulting in improved economic productivity and cost savings.

PwC (2018) examined AI adoption in the accounting and finance sector. The findings revealed that AI enhances operational efficiency, reduces manual errors, and supports data-driven decision-making. It also highlighted that professionals who adopt AI tools experience better performance outcomes and competitive advantage.

World Economic Forum (2020) discussed the future of jobs in the era of automation and AI. The report suggested that while certain routine accounting tasks may decline, new opportunities in analytical and advisory roles will emerge, thereby contributing to economic development and long-term cost efficiency.

VI. SCOPE OF THE STUDY

The present study covers the profile of employed accountants and professional accountants in Mumbai and to analyse their Perception towards Artificial Intelligence and their perceived effect on their profession.

VII. SIGNIFICANCE OF THE STUDY

The present study has its significance with respect to benefits of Artificial Intelligence towards the profession of accountants as they contribute towards tax compliances and helping government for fulfilling various mandatory regulations. This academic research study highlights the perception of accountants from Mumbai for Artificial Intelligence being enhance importance, bring more opportunities and the scope of their profession towards reporting of financial statement and fulfilling statutory compliances.

VIII. LIMITATION OF THE STUDY:

The present study has limitation with respect to number of respondents 80 with respect to place which is only in Greater Mumbai and with respect to

perception of respondents towards economic implications, cost savings and productivity towards their professional work.

IX. FINDINGS AND DISCUSSIONS

9.1. DESCRIPTIVE ANALYSIS:

Table No. 9.1.1: Gender wise classification of Respondents

Gender	Frequency	Percent (%)
Male	49	61.25
Female	31	38.75
Total	80	100.00

Source: Compiled from primary data

In our analysis we have collected responses from 80 accountants includes employed, self-employed and professional accountants from various fields and specialization. It is evident from the table that number of male accountants are 49 and whereas as number of female accountants are 31 i.e., out of total respondents 61.25 percentage are male, whereas 38.75 percentage are females. It is clear that male respondents are more than female respondents.

Table No. 9.1.2: Classification of respondents according to age group

Category		Frequency	Percent
	21- 40 years	51	63.7
	41- 60 years	28	35
	61- 80 and above 80 years	1	1.3
	Total	80	100.00

Source: Compiled from primary data

The above table represents the age of the respondents of sampled data. It is noted that out of total of 80 respondents 51 fall in the age group of 21-40 years which is substantial amongst all i.e., 63.7 percentages. Out of total of 80 respondents 31 fall in the age group of 41-60 years which is 28 percentages. 1 respondent fall in the age group of 61-80 and above 80 years which is 1.3 percentages.

Table no.9.1.3 Accountant's perception on Economy and cost savings in their profession through AI

	SDA	DA	N	A	SA	Total	Mean
Statement 1	5	5	25	35	10	80	3.5
Statement 2	6	4	8	47	15	80	3.51
Statement 3	5	4	18	42	11	80	3.63
Statement 4	3	8	22	37	10	80	3.54
Statement 5	4	5	15	43	13	80	3.7
Overall Mean Score							3.58

Source: Compiled from primary data

SDA=Strongly Disagree, DA=Disagree, N=Neutral, A=Agree, SA=Strongly Agree

Questionnaire Statement

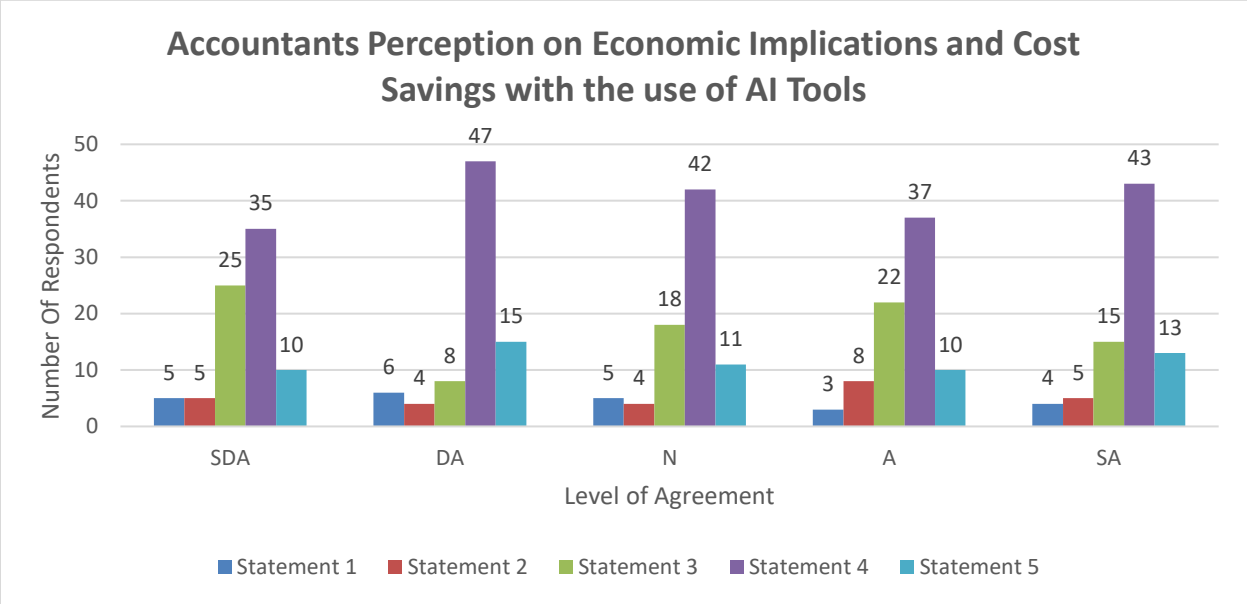
Economy and cost savings to Accountants through Artificial Intelligence (AI) Tools

Statement No.	Statements
1	AI will reduce administration cost
2	AI will reduce manpower requirement
3	AI allows focus on higher value tasks by handling repetitive accounting processes.
4	AI helps in saving money by preventing overspending bad investments or liquidity issues.
5	AI will help in facilitating faster processing of Audit trail (prevention & detection of frauds)

In statement 1, out of 80 total respondents 5 respondents fully disagreed, 5 respondents are disagreed, 25 respondents are neutral, 35 respondents are agreed and 10 respondents are strongly agreed. Mean score of statement 1 is 3.5. In statement 2, out of 80 total respondents 6 respondents are fully disagreed, 4 respondents are disagreed, 8 respondents are neutral, 47 respondents are agreed and 15 respondents are strongly agreed. Mean score of statement 2 is 3.51. In statement 3 out of 80 total respondents 5 respondents are strongly disagreed, 4 respondents are disagreed, 18 respondents are neutral, 42 respondents are agreed and 11 respondents are strongly agreed. Mean score of statement 3 is 3.63. In statement 4, out of 80 total respondents 3 respondents are strongly disagree, 8 respondents are disagreed, 22 respondents are neutral,

37 respondents are agreed and 10 respondents are strongly agreed. Mean score of statement 4 is 3.54. In statement 5, out of 80 total respondents 4 respondents are strongly disagreed, 5 respondents are disagreed, 15 respondents are neutral, 43 respondents are agreed and 13 respondents are strongly agreed. Mean score of statement 5 is 3.7. The overall mean score of all statement is above 3 which means respondents are agreed that AI brings economy and cost savings for using AI tools.

Chart-1



Source: Compiled from primary data

9.2. INFERENTIAL ANALYSIS:

H0: Artificial Intelligence does not bring economy to accountants as per the perception of Accountants in Mumbai. (Weightage average score is not less than 3)

H1: Artificial Intelligence bring economy to accountants as per the perception of Accountants in Mumbai. (Weightage average score is more than 3)

In order to test the above hypothesis, as per one sample and one variable under study i.e., perception, weighted average method is used. With respect to Table No. 9.1.1 weightage average score has been calculated to draw inferential conclusion towards the perception of respondents (accountants from Mumbai) towards Artificial Intelligence being create more professional opportunities to accountants. Overall weightage average score for all the parameters under study was 3.58 which supports alternative hypothesis and failed to accept null hypothesis. Thus, Artificial Intelligence brings economy and cost effectiveness to accountants as per the perception of Accountants in Greater Mumbai.

X. CONCLUSION OF THE STUDY

Based on the analysis of respondents' perceptions, it can be concluded that accountants in Mumbai hold a predominantly positive view toward the adoption of Artificial Intelligence (AI) in their profession. The findings indicate that AI has introduced substantial innovation in the fields of accounting and finance, thereby enhancing the credibility and professional value of accountants within the corporate sector. Respondents believe that AI contributes to more effective, accurate, and reliable financial reporting.

Furthermore, AI is perceived as an economical and efficient tool for managing repetitive and routine accounting tasks. By automating such functions, AI minimizes human error and reduces the risk of material misstatements in financial statements. This not only improves operational efficiency but also supports better compliance and transparency.

Overall, the study concludes that accountants in Mumbai recognize AI as a beneficial technological advancement that strengthens financial reporting

practices and positively contributes to the long-term growth and development of the accounting profession.

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