International Journal for Novel Research in Economics , Finance and Management
www.ijnrefm.com
ISSN:
3048-7722
Volume 4, Issue 2, Mar-Apr-Aug-2026, PP: 01-4

A Study on the Impact of Artificial Intelligence Tools in Documentation with Special Reference to Coimbatore City

Assistant Professor Dr. G. Arutgeeviha,
Ms. Indhira
Department of Commerce, Rathinam College of Arts and Science

Abstract **– This study examines the impact of Artificial Intelligence (AI) tools on documentation processes, with special reference to Coimbatore city. In today's rapidly evolving digital landscape, organizations generate and manage enormous volumes of data daily, making efficient documentation systems increasingly critical. Traditional manual documentation methods are prone to errors, delays, and inefficiencies, creating an urgent need for intelligent automation. AI-powered technologies such as Optical Character Recognition (OCR), Natural Language Processing (NLP), and Machine Learning (ML) have emerged as powerful solutions to automate, organize, and enhance documentation workflows. This study investigates the awareness, usage patterns, perceived benefits, and challenges associated with AI tools in documentation among employees, business professionals, and students in Coimbatore city. Based on primary data collected from 100 respondents through structured questionnaires and analyzed using Chi-Square and Kruskal-Wallis tests, the study finds that while AI tools are gradually being adopted, awareness remains moderate and adoption is not yet fully mainstream. Key benefits identified include cost reduction, improved accuracy, and enhanced productivity. Major challenges include technical issues and data security concerns. The study concludes that organizations must invest in awareness programs, training, and robust data security frameworks to realize the full potential of AI-driven documentation systems.**

Keywords: **Artificial Intelligence, Documentation, OCR, NLP, Machine Learning, Data Management, Coimbatore City**

I. INTRODUCTION OF THE STUDY

In the present era of rapid technological advancement, organizations across the world are increasingly adopting digital solutions to enhance efficiency, accuracy, and productivity. Artificial Intelligence (AI), which refers to the simulation of human intelligence by machines, has evolved from a theoretical concept into a practical tool widely deployed across business operations, healthcare, education, finance, and administration. Among its many applications, the role of AI in documentation processes has gained considerable strategic importance.

Documentation is a fundamental organizational activity involving the recording, storage, organization, and retrieval of information in structured forms — ranging from reports and invoices to contracts, emails, and administrative records. Traditionally handled through manual processes, documentation was time-consuming, error-prone, and resource-intensive. The shift to digital formats improved storage and accessibility, but organizations still faced challenges managing unstructured data and ensuring accuracy at scale.

AI-powered tools have transformed this landscape by automating repetitive documentation tasks, improving data accuracy, and enabling faster information processing. Technologies such as Optical Character Recognition (OCR) convert physical or handwritten documents into machine-readable digital formats, dramatically reducing manual data entry. Natural Language Processing (NLP) enables systems to understand, classify, and summarize human language in documents. Machine Learning (ML) algorithms learn from historical data patterns to categorize documents, detect anomalies, and predict user needs over time.

The benefits of AI in documentation extend beyond automation. AI-driven systems enhance data security through advanced encryption and access controls, support real-time decision-making through instant data retrieval, and reduce operational costs by minimizing dependency on human labor for routine tasks. Despite these advantages, challenges including high implementation costs, lack of technical skills, resistance to change, and data privacy concerns continue to limit widespread adoption.

This study titled 'A Study on the Impact of Artificial Intelligence Tools in Documentation with Special Reference to Coimbatore City' aims to systematically examine how AI technologies are reshaping documentation practices. It explores the level of awareness, adoption patterns, perceived benefits, and key challenges faced by organizations and professionals in the region, offering actionable insights for technology adoption decisions.

Objectives of the Study

- To study the level of awareness and usage of Artificial Intelligence tools in documentation processes among respondents in Coimbatore city.
- To analyse the impact of AI on accuracy, efficiency, and speed in documentation.
- To evaluate the benefits of AI tools in managing large volumes of organizational data.
- To identify the major challenges faced in implementing AI tools in documentation systems.

International Journal for Novel Research in Economics , Finance and Management
www.ijnrefm.com
ISSN:
3048-7722
Volume 4, Issue 2, Mar-Apr-Aug-2026, PP: 01-4

II. STATEMENT OF THE PROBLEM

In today's data-driven organizational environment, the volume and complexity of documents generated daily have grown exponentially. Managing this data effectively using traditional manual methods has become increasingly unsustainable. Manual documentation systems are slow, error-prone, and costly, leading to data loss, duplication, and inefficiencies that adversely affect organizational decision-making and performance.

While digital documentation systems have improved storage and accessibility, they still lack the intelligence to handle unstructured data, manage large datasets, and ensure accuracy without advanced tools. AI technologies such as OCR, NLP, and Machine Learning offer potential solutions to these challenges. However, adoption of AI in documentation remains limited in many organizations in Coimbatore city due to high implementation costs, inadequate technical knowledge, security concerns, and insufficient awareness of AI capabilities.

There is also a noticeable gap in empirical research examining the actual impact of AI tools on documentation at the regional level. This study therefore aims to address this gap by analyzing the extent to which AI tools improve documentation processes, identifying the barriers to adoption, and evaluating their overall impact on organizational efficiency.

III. RESEARCH METHODOLOGY

1. Research Design
The study is descriptive and analytical in nature, focusing on understanding the awareness, usage, and impact of Artificial Intelligence tools in documentation processes among respondents in Coimbatore city.

2. Data Collection
Primary Data: Collected through structured questionnaires distributed to students, employees, and business professionals in Coimbatore city. The questionnaire included close-ended questions and Likert scale statements measuring awareness, usage frequency, perceived benefits, and challenges of AI tools in documentation.

Secondary Data: Gathered from textbooks, academic journals, research articles, and online publications related to Artificial Intelligence, documentation systems, and digital transformation.

3. Sample Size
100 respondents from various backgrounds including students, employees, and business professionals in Coimbatore city.

4. Sampling Technique
Convenience sampling method was used to select respondents.

5. Tools for Analysis
- Percentage Analysis
- Chi-Square Test

6. Limitations
- The sample size of 100 respondents may not fully represent the entire population of Coimbatore city.
- Convenience sampling may introduce selection bias in the data.
- Some respondents may lack complete knowledge about AI tools, potentially affecting reliability of responses.
- The study focuses on user perception and does not cover technical programming or system design aspects of AI.

IV. REVIEW OF LITERATURE

Davenport & Ronanki (2018): Examined how AI is transforming business processes and highlighted that AI tools help in automating routine tasks and improving efficiency. In the context of documentation, AI enables faster data processing, reduces manual work, and improves accuracy in managing records.

Russell & Norvig (2021): Provided a comprehensive understanding of AI concepts such as Machine Learning and Natural Language Processing, forming the foundation for AI applications in document classification, text analysis, and automated processing systems.

Gandomi & Haider (2015): Focused on big data analytics and explained how AI tools are used to handle large volumes of data efficiently. In documentation systems, AI helps in organizing, storing, and retrieving information quickly and accurately.

Marr (2018): Highlighted practical applications of AI in business operations, explaining that AI tools are widely used in document automation, data entry, and information management, reducing human errors and improving efficiency.

Kumar & Sharma (2020): Analyzed the role of AI in digital systems and concluded that automation in data entry, document classification, and report generation significantly increases productivity and organizational efficiency.

Dwivedi et al. (2021): Examined challenges and opportunities of AI, highlighting issues such as data privacy, security, and ethical concerns that are particularly relevant in documentation systems handling sensitive organizational data.

Brynjolfsson & McAfee (2017): Explained how digital technologies, especially AI, improve productivity and organizational efficiency, with AI tools automating documentation tasks and enhancing data management systems.

International Journal for Novel Research in Economics , Finance and Management
www.ijnrefm.com
ISSN:
3048-7722
Volume 4, Issue 2, Mar-Apr-Aug-2026, PP: 01-4

Jordan & Mitchell (2015): Discussed the evolution of Machine Learning and its applications in document processing, classification, and data analysis, highlighting how these techniques enhance automation and accuracy in documentation systems.

V. DATA ANALYSIS AND INTERPRETATION

Table 1: Age-wise Classification of Respondents

Particulars	Number of Respondents	Percentage
Below 20	20	20%
21 – 25	33	33%
26 – 30	34	34%
Above 30	13	13%
Total	100	100%

Interpretation: The majority of respondents (34%) belong to the 26–30 age group, followed by 21–25 (33%), indicating that most participants are young adults actively engaged in the workforce and familiar with digital tools.

Result: The survey is dominated by respondents aged 21–30, indicating that younger individuals are more actively involved in AI-related documentation practices.

Table 2: Awareness of AI Tools Used in Documentation

Particulars	Number of Respondents	Percentage
Yes	27	26.5%
No	48	48.0%
Maybe	25	25.5%
Total	100	100%

Interpretation: A significant portion of respondents (48%) are not aware of AI tools used in documentation. Meanwhile, 26.5% are aware and 25.5% are uncertain, indicating that awareness of AI tools in documentation is relatively low among the sample population.

Result: The majority of respondents lack awareness about AI tools in documentation, highlighting a critical gap that demands targeted education and outreach.

Table 3: Familiarity with Different AI Documentation Tools

Particulars	Number of Respondents	Percentage	
Google Docs	16	16.3%	
Grammarly	21	21.4%	
ChatGPT	35	34.7%	
Microsoft Word	22	22.4%	
Other	5	5.1%	
Total	100	100%	

Interpretation: ChatGPT is the most familiar tool to respondents (34.7%), followed by Microsoft Word (22.4%) and Grammarly (21.4%). Google Docs is recognized by 16.3%, while only 5.1% are familiar with other AI tools, reflecting a growing shift toward generative AI platforms.

Result: ChatGPT is the most widely recognized AI documentation tool, indicating growing awareness of generative AI platforms among respondents.

Table 4: Respondents' Perception of AI Improving Accuracy

Particulars	Number of Respondents	Percentage
Strongly Agree	12	11.6%
Agree	33	32.6%
Neutral	31	30.5%
Disagree	18	17.9%
Strongly Disagree	7	7.4%
Total	101	100%

Interpretation: Most respondents (44.2%) agree or strongly agree that AI tools improve accuracy in documentation, while 30.5% are neutral and 25.3% disagree, suggesting a generally positive but moderately cautious perception.

Result: AI tools are perceived to enhance documentation accuracy by the majority of respondents.

Chi-Square Test

- **Objective:** To examine the association between respondents' age group and their awareness of AI tools in documentation.
- **H_0:** There is no significant association between respondents' age group and their awareness of AI tools in documentation.
- **H_1:** There is a significant association between respondents' age group and their awareness of AI tools in documentation.

Chi-Square Tests	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.261	6	0.395

International Journal for Novel Research in Economics , Finance and Management
www.ijnrefm.com
ISSN:
3048-7722
Volume 4, Issue 2, Mar-Apr-Aug-2026, PP: 01-4

Likelihood Ratio	6.140	6	0.408
Linear-by-Linear Association	1.164	1	0.281
N of Valid Cases	98		

Interpretation: The Chi-Square test yields a p-value of 0.395, which is greater than the 0.05 significance level. The null hypothesis is accepted. There is no significant association between respondents' age group and their awareness of AI tools in documentation, indicating that age does not significantly influence awareness levels.

Findings

- The majority of respondents (67%) belong to the 21–30 age group, indicating that young adults are more engaged with digital documentation tools.
- Female respondents form the largest group (50.5%), showing higher participation in the study compared to male respondents.
- Employees constitute the largest occupational group (42.9%), reflecting that the study primarily captures the perspectives of working professionals.
- A significant majority (48%) of respondents are not aware of AI tools used in documentation, indicating a critical gap in awareness.
- Only 21.6% of respondents have actively used AI tools for documentation, reflecting low practical adoption levels.
- ChatGPT is the most familiar AI tool (34.7%), indicating growing recognition of generative AI platforms for documentation tasks.
- 39.2% of respondents never use AI tools in documentation, indicating limited integration into daily workflows.
- 44.2% of respondents agree or strongly agree that AI tools improve accuracy in documentation.
- Cost reduction (31.2%) is the primary perceived benefit of AI in documentation, followed by productivity (26.8%) and accuracy (17.2%).

Suggestions

- Organizations should conduct structured awareness programs and workshops to educate employees about available AI tools and their benefits in documentation.
- Comprehensive training and skill development sessions should be organized to improve technical competency and enable effective utilization of AI tools.
- AI documentation tools should feature intuitive, user-friendly interfaces to encourage adoption among users with varying levels of technical expertise.
- Organizations must implement strong cybersecurity protocols, data encryption standards, and access control mechanisms to address data privacy concerns.
- Regular maintenance schedules and dedicated IT support should be established to promptly resolve

VI. CONCLUSION

This study titled 'A Study on the Impact of Artificial Intelligence Tools in Documentation with Special Reference to Coimbatore City' reveals that AI tools are gradually being introduced into documentation practices, yet their awareness and adoption among respondents remain moderate. While a portion of respondents recognizes the tangible benefits of AI — including cost reduction, improved productivity, and enhanced accuracy — a significant number remain neutral or uncertain, suggesting that AI adoption in documentation is still in its early stages and has not yet been fully integrated into mainstream organizational workflows.

The study identifies technical issues and data security concerns as the primary barriers to AI adoption, followed by high implementation costs and insufficient technical knowledge. These challenges act as significant deterrents, limiting the effective utilization of AI technologies across organizations in Coimbatore city. Notably, the statistical analysis confirms that demographic factors such as age do not significantly influence either awareness of AI tools or perception of their effectiveness, indicating that barriers to adoption are systemic and organizational rather than individual in nature.

In conclusion, Artificial Intelligence holds enormous potential to transform documentation processes by improving efficiency, accuracy, and cost-effectiveness. For organizations in Coimbatore city to fully realize these benefits, concerted efforts must be directed toward increasing awareness, building technical skills, implementing robust data security frameworks, and fostering a culture that embraces digital innovation. With strategic planning, targeted training, and strong institutional support, AI tools can serve as a powerful catalyst for transforming documentation practices and achieving sustainable organizational growth in the digital era.

REFERENCES

1. Davenport, T. H., & Ronanki, R. (2018). Artificial Intelligence for the Real World. Harvard Business Review.
2. Russell, S., & Norvig, P. (2021). Artificial Intelligence: A Modern Approach. Pearson Education.
3. Gandomi, A., & Haider, M. (2015). Beyond the hype: Big data concepts, methods, and analytics. International Journal of Information Management, 35(2), 137–144.
4. Marr, B. (2019). Artificial Intelligence in Practice. Wiley Publications.
5. Kumar, V., & Sharma, A. (2020). Role of Artificial Intelligence in Digital Systems and Documentation. Journal of Information Technology Management.