Available in online @ www.iaraindia.com
RESEARCH EXPLORER-International Journal on Economic and Business Management
ISSN: 2250-1940 (P) 2349-1647 (O)
Impact Factor: 3.655(CIF), 2.78(IRJIF), 2.77(NAAS)
Volume XIV, Issue 48
July - September 2025
Formally UGC Approved Journal (63185), © Author

A STUDY ON IMPACT OF ARTIFICIAL INTELLIGENCE IN TIDAL SOFTWARE SOLUTIONS, AT CHENNAI

KARTHICK.S
II-MBA
Department of Management Studies
Srinivasan College of Arts and Science, Perambalur

BANU PRIYA.V
Assistant Professor
Department of Management Studies
Srinivasan College of Arts and Science, Perambalur

ABSTRACT

Artificial Intelligence (AI) is transforming the software industry, revolutionizing business operations, software development, and employee productivity. This study examines the Impact of Artificial Intelligence on Tidal Software Solutions, Chennai, focusing on AI-driven automation, decision-making, efficiency, and workforce adaptation. The research explores how AI integration influences productivity, job satisfaction, and operational effectiveness within the company. The study is based on data collected through structured questionnaires and interviews with employees at Tidal Software Solutions. Various AI applications, including machine learning, natural language processing, and automation tools, are analyzed to assess their impact on workflow optimization and innovation. The findings highlight AI's role in reducing manual effort, enhancing accuracy, and improving project turnaround time. Additionally, the research examines employee perspectives on AI training programs and their effectiveness in adapting to new technologies. The results suggest that AI adoption has significantly improved efficiency and decision-making at Tidal Software Solutions. However, challenges such as skill gaps, data security concerns, and employee resistance to AI adoption need to be addressed. The study provides recommendations for enhancing AI implementation strategies, ensuring workforce readiness, and maximizing the benefits of AI in the software industry.

INTRODUCTION

Artificial Intelligence (AI) has emerged as a transformative force across industries, reshaping the way business function and make data-driven decisions. AI encompasses various subfields, including machine learning (ML), deep learning, natural language processing (NLP), computer vision, robotics, and expert systems, each contributing to automation, predictive analytics, and intelligent decision-making. With the rapid advancement of AI, companies worldwide are leveraging its potential to enhance efficiency, optimize operations, and create innovative solutions. One of the most significant contributions of AI is automation, which enables businesses to streamline repetitive and time-consuming tasks. AI-powered Robotic Process Automation (RPA) is widely used in industries such as finance, healthcare, and IT to automate workflows, reduce manual errors, and increase operational efficiency. Similarly, AI-

driven automated software testing accelerates the software development lifecycle by identifying and resolving bugs in real-time, leading to faster product delivery.

SCOPE OF THE STUDY

The scope of this study explores the profound impact of Artificial Intelligence (AI) across various sectors, emphasizing its role in business transformation, automation, and technological advancements. AI has become an integral part of modern industries, reshaping processes, decision-making, and customer interactions. This research aims to analyze the key areas where AI is driving innovation and efficiency while addressing its challenges and ethical considerations.

OBJECTIVES OF THE STUDY

Primary objectives:

A study on the impact of artificial intelligence in tidal software solution

Secondary objectives:

1. Analyze how AI enhances business efficiency, automation, and decision-making.
2. Assess AI's influence on workforce transformation, job roles, and productivity.
3. Examine AI-driven advancements in software development and IT infrastructure.

RESEARCH METHODOLOGY

The research methodology outlines the systematic approach used to analyze the impact of Artificial Intelligence (AI). It includes the research design, techniques, tools for data collection, statistical methods, and limitations of the study.

RESEARCH DESIGN

This study follows a descriptive research design, which aims to analyze and interpret the impact of AI on businesses, workforce productivity, and industry advancements. The research is based on quantitative methods, using structured data collection and statistical analysis to derive meaningful insights.

DATA COLLECTION

The data for this study on the impact of artificial intelligence (AI) at Tidal Software Solutions, Chennai, was collected through a structured questionnaire. The questionnaire included both closed-ended and open-ended questions to capture quantitative and qualitative insights from employees. The data collection process involved both online and offline surveys to ensure a higher response rate and accurate representation of employee perspectives.

1.Primary Data Collection

- **Sampling Method**: Simple random sampling to ensure unbiased representation.
- **Sample Size**: 50 respondents selected from a total universe of 320 employees.

2. Secondary Data Collection

- Research papers, journals, and books on AI applications in business.
- Industry reports, whitepapers, and market analysis studies.

SAMPLING TECHNIQUE

The study adopted a stratified random sampling technique to ensure a balanced representation of employees across various demographics, including education level, gender, and age group. Employees were categorized based on their job roles, experience levels, and departments. The sample size was determined based on the total workforce, and responses were gathered from different strata to ensure comprehensive findings

TOOLS USED IN THIS STUDY

To analyze the collected data, various statistical tools were employed:

1. Chi-Square Test

2. Correlation Analysis

PERIOD OF THE STUDY

The study is conducted over a period of three months, ensuring sufficient time for data collection, analysis, and interpretation.

LIMITATIONS OF THE STUDY

- Limited sample size of 50 respondents, which may not fully represent the entire population.
- Geographical constraints restrict the applicability of findings to other regions or industries.

TABLE 1
DISTRIBUTION OF RESPONDENTS BASED ON THEIR GENDER

S.NO	GENDER	FREQUENCY (n=100)	PERCENTAGE
1	Male	62	62
2	Female	38	38
	Total	100	100

Regarding the above table 4.1, it is observed that the majority of the respondents62% are male and 38% of the respondents are female. This indicates that male respondents outnumber female respondents in the survey.

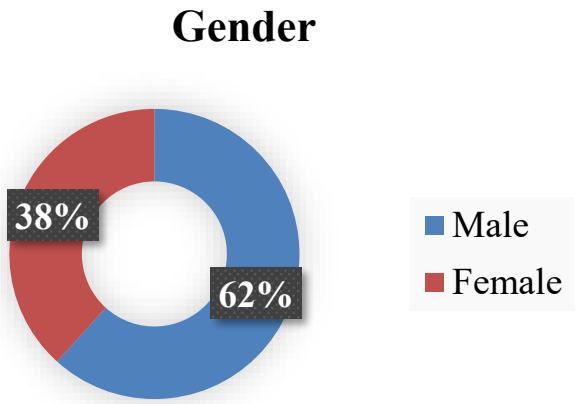
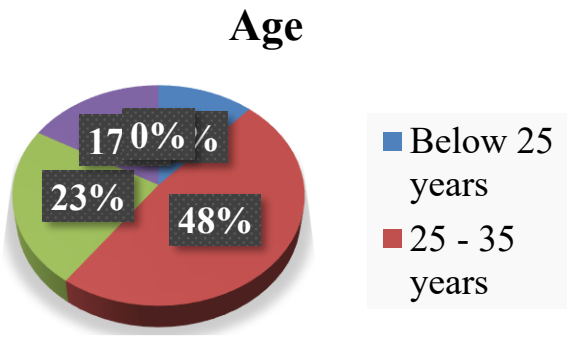


TABLE 2
DISTRUBUTION OF RESPONDENTS BASED ON THEIR AGE

S. No	AGE	FREQUENCY (n=100)	PERCENTAGE
1	Below 25 years	12	12
2	25 - 35 years	45	45
3	35-45 years	23	23
5	Above 45 years	17	17
	Total	100	100

It is inferred from table 4.2 that 45% of the respondents belong to the age group of 25–35 years. 23%of the respondents are aged between 35–45 years, while 17%of the respondents fall under the above years category. A minimum of 12% of the respondents are below 25 years.



FINDINGS

1. Majority (62%) of respondents are male, indicating a higher male participation in the survey.
2. 45% of respondents belong to the 25-35 years age group, making it the dominant category.

SUGGESTIONS

1. Improve AI usability by refining interfaces and ensuring ease of use.
2. Provide real-time support and troubleshooting for AI-related issues.
3. Gather regular employee feedback to customize AI tools based on needs.

CONCLUSION

The study highlights the effectiveness of AI-driven tools in workplace operations, revealing key insights into employee satisfaction, usability, and overall impact. The findings suggest that while AI adoption has provided significant advantages, there remain areas for improvement in usability, training, and alignment with employee needs. A considerable percentage of respondent express satisfaction with AI integration in their workflow, decision-making, and productivity enhancement. However, a notable portion remains neutral, indicating a lack of strong conviction or limited exposure to AI capabilities. Dissatisfaction levels also emphasize the need for refining AI features to ensure better efficiency.

BIBLIOGRAPHY

BOOKS:

1. Davenport, T. H. (2018). The AI advantage: How to put the artificial intelligence revolution to work. MIT Press.
2. Daugherty, P. R., & Wilson, H. J. (2018). Human + machine: Reimagining work in the age of AI. Harvard Business Press.

JOURNALS

1. Journal of Artificial Intelligence Research (JAIR). (n.d.). AI research and applications. https://www.jair.org
2. International Journal of Artificial Intelligence & Machine Learning. (n.d.). Latest advancements in AI and ML. https://www.igi-global.com

WEBSITES

1. https://www.tidalworld.com/fresh/
2. https://hbr.org/topic/subject/employee-motivation
3. Ganeshkumar. V (2013), Overview of Financial Inclusion in India, International Journal of Management And Development Studies, Volume No. 2 (2013), Issue No. 3 (March),pp.45-49
4. Paramasivan. C (2019), Digitalized Finclusion Through PMJDY In India, Think India Journal, Vol-22- Issue-14-December-2019.