

A STUDY ON PERCEPTION OF AI AMONG YOUNG GENERATION AND ITS IMPACT ON EMPLOYMENT IN THOOTHUKUDI DISTRICT

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Abstract: Artificial Intelligence (AI) is one of the most significant technological advancements in the modern world. It refers to the capability of machines and computer systems to carry out tasks that typically require human intelligence, including learning, reasoning, problem-solving, decision-making, and understanding language. The idea of Artificial Intelligence was first introduced by John McCarthy in 1956. Since that time, AI has grown rapidly because of improvements in computer technology, the availability of large amounts of data, and the development of powerful algorithms. In recent years, Artificial Intelligence has become a key part of daily life. Many industries and organizations are now increasingly using AI technologies to boost efficiency and productivity. AI systems can process large volumes of data quickly and accurately, helping organizations make more informed decisions. Examples of AI applications in modern society include voice assistants, recommendation systems, self-driving cars, and intelligent robots. AI is widely applied across various sectors like healthcare, education, banking, manufacturing, transportation, and e-commerce. In healthcare, AI helps doctors make more accurate diagnoses and deliver better treatments. In banking and finance, it is used to identify fraudulent activities, manage risks, and enhance customer service. In education, AI tools support personalized learning and assist teachers in improving their teaching methods. Likewise, in manufacturing, AI-powered machines and robots help automate production, minimize human errors, and increase overall efficiency.

Keywords: Social Media Algorithms; Consumer Behaviour; Personalized Content; Targeted Advertising; Product Recommendations; Purchase Decisions; Social Media Marketing; Brand Engagement; Consumer Trust; Digital Marketing.

1. Introduction

With the increasing adoption of Artificial Intelligence, it is transforming the way people work and live. AI technologies can perform repetitive and routine tasks more efficiently than humans. As a result, many organizations are using AI to automate certain types of work. While this automation can increase productivity and reduce operational costs, it also raises concerns about its impact on employment and the future of jobs. The rapid development of AI has created both opportunities and challenges in the job market. On one hand, AI is expected to create new types of jobs related to technology, data analysis, programming, and AI system management. On the other hand, certain traditional jobs that involve repetitive tasks may be replaced or reduced due to automation. Therefore, workers need to develop new skills to adapt to the changing technological environment.



Young people, especially students, play an important role in the future workforce. Their awareness, perception, and understanding of Artificial Intelligence will influence how they prepare for future career opportunities. Many students are already exposed to AI technologies through smartphones, social media, online learning platforms, and digital assistants. However, their level of knowledge and perception about AI and its impact on employment may vary. Understanding the perception of AI among the young generation is important for several reasons. First, it helps to identify their level of awareness and knowledge about AI technology. Second, it helps to understand whether young people view AI as an opportunity for career development or as a threat to employment. Third, it provides insights into the types of skills that students believe are necessary to succeed in an AI-driven society. Education institutions and policymakers need to understand how students perceive Artificial Intelligence so that they can design appropriate educational programs and skill development initiatives. If students are aware of the opportunities and challenges associated with AI, they will be better prepared to adapt to technological changes and develop relevant skills for the future job market. In this context, the present study focuses on examining the perception of Artificial Intelligence among the young generation and analyzing its impact on employment opportunities. The study aims to explore how students view AI technology, what skills they believe are necessary in an AI-driven world, and how they think AI will influence future jobs.

2. OBJECTIVE OF THE STUDY

- To evaluate the level of awareness about Artificial Intelligence among the younger generation.
- To examine how Artificial Intelligence will affect employment in the future and the skills that will be required.
- To identify the influence of Artificial Intelligence on education and society as a whole.
- To gain insight into the expectations of youth concerning new job opportunities that AI may create.

2.1 SCOPE OF THE STUDY :

This study focuses on understanding the perception of the young generation about Artificial Intelligence (AI) and its impact on employment opportunities. The study is limited to students and young individuals in Thoothukudi District.

The research examines the level of awareness, knowledge, and attitudes of young people toward AI technology.

3. HYPOTHESIS OF THE STUDY

Ho: There is no significant difference in the frequency of using various types of Artificial Intelligence (Machine Learning, Natural Language Processing, and Robotics) between experienced and less experienced respondents.

3.1 SIGNIFICANCE OF THE STUDY

The study on Artificial Intelligence (AI) is important because AI is rapidly transforming various sectors and influencing employment opportunities. Understanding how the young generation perceives AI helps identify their awareness, attitudes, and expectations regarding technological changes.

3.2 DATA COLLECTION:

1. Rio-Chanona et al. (2025) reviewed AI's impact on productivity and jobs. The study showed AI increases productivity significantly. However, entry-level jobs are declining. Young workers are most affected. AI replaces repetitive tasks but creates skilled jobs. The study suggests skill development for future employment. (Source: arXiv)
2. Dominski & Lee (2025) analyzed labor market outcomes. The study found reduced work hours in AI-exposed jobs. Youth face more employment challenges compared to experienced workers. AI changes job structures. Continuous learning is necessary. The study highlights adaptability as key to survival. (Source: arXiv)

KEY TECHNOLOGIES OF ARTIFICIAL INTELLIGENCE:

Artificial Intelligence includes several advanced technologies that enable machines to perform intelligent tasks. Some of the major AI technologies are:

1. Machine Learning

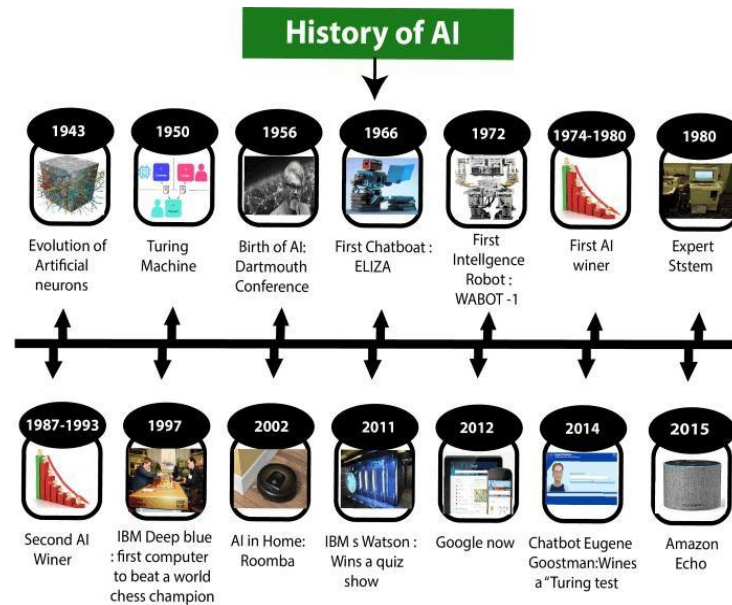
Machine Learning is a branch of AI that allows computers to learn from data and improve their performance over time without being explicitly programmed. Machine learning algorithms analyze large datasets, identify patterns, and make predictions or decisions based on that information.

2. Natural Language Processing (NLP)

Natural Language Processing enables machines to understand and interpret human language. This technology is used in chatbots, voice assistants, and language translation applications.

3. Robotics

Robotics combines AI with mechanical engineering to create intelligent machines capable of performing physical tasks. Robots are widely used in manufacturing, healthcare, and space exploration.



Types of AI Tools Used in Work Life:

1. Grammarly:

This is an AI-powered writing assistant that helps check and correct grammar, spelling, and style in written content.

It can also be used to create outlines for project briefs or to identify areas that need improvement in articles. Companies around the world use Grammarly to enhance the quality of their written communications, saving time for teams and improving both internal and external engagement.

2. Whale:

Whale had to be included on this list not just because it's our product, but because teams across the globe are using it. It is an AI-based tool used for documentation and training, enabling teams to create new procedures and policies almost instantly. All you need to do is input a few basic details, and it takes care of the rest. Recently, Whale also introduced an AI quiz generator that creates multiple-choice questions based on the content stored in your account. This helps teams learn new processes in a fun and engaging way, all in very little time.

3. Otter.ai:

Otter.ai is an AI-powered tool for transcription and note-taking.

It converts spoken words into written text in real-time, making it very helpful for meetings, interviews, and lectures.

It handles all the note-taking, ensuring no important details are missed. This reduces a lot of administrative work, allowing teams to share knowledge from conversations quickly and stay up to date.

4.DALL•E Open AI:

It specializes in generating images based on text descriptions, showcasing the creative potential of AI. If your business produces a lot of written content, this tool is excellent for finding the right images to complement blogs or articles, making them more engaging than standard stock photos.

5.Crystal Knows:

One issue that many marketers face is the lack of human-centered communication that AI can sometimes enable. Crystal is a powerful tool that provides insights into personality traits and communication preferences. It analyzes publicly available data, such as online profiles and communication habits, to offer guidance on how to communicate effectively with individuals based on their unique styles.

4. FRAMEWORK AND ANALYSIS

There is no significant difference in the frequency of using various types of Artificial Intelligence (Machine Learning, Natural Language Processing, and Robotics) between experienced and less experienced respondents.

Frequency of using various types of AI

Sl. No.	Machine type	Experienced	Less experienced	Total	F-Statistics	Accepted /Rejected
1	Machine Learning	2.27	2.23	2.24	0.065019	Accepted
2	Natural Language Processing (NLP)	2.45	2.69	2.58	1.703219	Accepted
3	Robotics	2.65	2.44	2.53	0.779233	Accepted

Source: Primary data

Inference:

The table compares the frequency of using various types of AI between experienced and less experienced respondents. The results indicate that there is no statistically significant difference in the usage of Machine Learning ($F = 0.065$), Natural Language Processing (NLP) ($F = 1.703$), and Robotics ($F = 0.779$) between the two groups, as all the hypotheses are accepted. Although the mean scores show slight variations—less experienced respondents reported marginally higher usage of NLP (2.69), while experienced respondents reported slightly higher usage of Robotics (2.65) and Machine Learning (2.27)—these differences are not statistically significant. Therefore, it can be inferred that the level of experience does not have a significant influence on the frequency of using these AI technologies among the respondents.

5. Conclusion:

Artificial intelligence refers to the ability of machines to think and behave in ways that mimic humans. However, unlike humans, machines lack natural intelligence, which includes awareness and emotional responses. Fast advancements in technology across the globe are leading to the rise of artificial intelligence. This growth in AI has a negative impact on the job market. Today and in the future, the employment sector will need more workers with technical skills. Therefore, education systems should include proper training to prepare students for these high-tech jobs. There is an increasing demand for skilled positions, and there could be a short-term lack of qualified workers. But if education and retraining programs continue to develop at their current rate, this issue will be resolved quickly. With the ongoing emphasis on improving and updating workforce skills, the transition period will be smoother, resulting in less disruption to employment and people's livelihoods. In summary, the key takeaway is the need for forward-thinking actions to help the younger generation take advantage of AI opportunities while dealing with the changes it brings to traditional jobs. By encouraging a mindset of continuous learning and adaptability, we can effectively manage the changing world of work and create a successful future for everyone.

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