ARTIFICAL INTELLIGENCE ROLE IN GROWING ECONOMY OF INDIA

Kavita R. Kirdak
S.P.M.Science and Gilani Art, Comm.College,Ghatanji Dist.Yavatmal

Abstract
India as one of the fasted growing economies in the world. Recognize the importance of AI in fostering economic sustainability and addressing societal challenges. This research paper explates the role of artificial Intelligence in promoting economic sustainability in India. The stud focus on five key factor where AI can contribute to improving the Indian economy and sustainability employment generation, agricultural development, research and innovation, basic education, structural development, and health sector improvement. The IT industry in India has been major employer providing over 5.4 million jobs and creating numerous opportunities for fresh engineering graduates. However the rise of AI poses challenges to this landscape.
Keywords : Indian Economy, Artificial Intelligent Economic sustainability in India, transforming Sector.

Introduction :

Artificial Intelligence (AI) significantly impacts various domains, even in its early stages. With applications ranging from virtual assistants and predictive analytics to genetative AI. It is digital transformation acting, as a catalyst for growth across different sectors. The Economy of Billion connected Indians which states India is reaching $1trillion by 2030. However, AI has to be the flag bearer of this rapid growth. The role of AI has potential to change the landscape radically and supercharge the growth curve. Lets have a detail discussion about the role of AI in shaping India's Digital Economy.

In the Indian context, the impact of AI can already be seen in a wide range of organization and industries. Businesses are using AI to improve operations across all industries, including the financial industry, retail , and manufacturing. Indian banks are using AI, for instance, to strength then fraud detection systems and improve customer service, delivering a more secure and seamless experience. Similar to this, Indian retailers are using AI to improve supply chains. Personalize recommendation and ensure maximum efficiency. AI is being used by Indian manufactures to raise quality control standards and promote cost effectiveness, demonstrating the many benefits that AI can provide. AI is transforming economies and industries worldwide, and present an opportunity for India to achieve inclusive growth. With a potential to contribute $500 billion to the economy. AI could revolutionize sectors like agriculture, healthcare and urban planning.

Objective of Study :

The study covers the following objectives.

1. To study the Role of Artificial Intelligence in growing economy of India.
2. To study the AI and various sectors of India.

Hypothesis :

The study has been taken up for the hypothesis is.
The Artificial Intelligence has positive impact on growing economy of India.

Research Methodology :

This study is based on secondary data. The required data have been collected from Internate, Reference material, Newspapers, Magazine articles etc.
AI Applications in different Sectors.:
AI has the potential to significantly impact various sectors in India contributing to economics sustainability and growth. Some no able applications of AI in different sectors include.

1. Agriculture : AI is revolutionizing the agricultural sector by optimizing crop yields, reducing resource consumption, and improving farming practices. AI algorithms analyse environmental data, Soil conditions, and weather patterns to provide farmers with insights on optimal planting times, irrigation, schedules and pest control measures. AI powered drones and robots can monitor crops, identify disease outbreaks, and automate labour intensive tasks. This technology helps increase productivity, reduce costs, and promote sustainable farming practices.

2. Education : AI is transforming the education industry by personalizing learning experience automating administrative tasks and facilitating adaptive assessments. AI powered learning platforms can adopt content based on individual student needs, provide tailored feedback and support to students. AI enabled chat bots are automating administrative tasks. Such as answering student inquiries and managing schedules, freeing up educators time fore more meaningful interaction.

3. Health Care : AI can enhance disease diagnosis, drug discovery and treatment planning machine learning algorithms can analyze medical images for early disease detection, while AI – powered chat boats provide personalized healthcare advise and support AI also enables remote patient monitoring and predictive analytics for healthcare resource management.

4. Finance : AI is transforming the finance industry by automating repetitive tasks. Improving fraud detection and enhancing customer experiences. AI algorithms can analyze vast amount of financial data identify patterns, and make real time predictions for investment decisions. Robo advisors are using AI, to provide personalized financial advice to investors. AI powered chat bots and virtual asset are steam lining customers services addressing inquiries and simplifying banking processes. Morever AI based algorithms can detect fraudulent transactions and prevent financial crimes more effectively.

5. Manufacturing – AI is driving the concept of smart manufacturing by optimizing production processes reducing downtime and improving product quality. AI powered robots and automation systems are taking over repetitive task leading to increased efficiency and productivity machine learning algorithms are used to predict maintenance needs and schedule proactive repairs minimizing unplanned downtime. AI enabled quality control systems can detect defects in real time ensuring products meet the highest standards.

Role of AI in Improving Economic sustainability in India :

Artifical Intelligence plays a pirotal role in driving economic sustainability in India with its transformative capabilities. AI has the potential to revolutionize various sectors, eostering innovation and enhancing productivity. This section delves into the specific ways AI contributes to improving economic sustainability in India. Focusing on employment generation and fostering innovation and entrepreneurship.

Various Factors to improve economic growth.

- Employment Generation
- Environment protection.
- Strengthening the healthcare system.
- Reduction in Regional disparities.
- Investment in infrastructure.

- Promoting innovation and research and development.

AI and Employment in India.

The IT industry in India has been a major employer providing over 5.4 million jobs and creating numerous opportunities for fresh engineering graduates However rise of AI poses challenges to this landscape.

As companies work to become "AI ready" through employee reskilling technologists worth of a potential white collar recession in India by 2027. AI will also affect blue collar jobs in India. Impacting about 300 million workers in sectors like manufacturing and healthcare while advanced robotics may automate some tasks, mass job losses are unlikely, as AI is expected to enhance productivity rather than replace workers entirely. The adoption of AI by TCS has greatly aided India's employment creation and skill development while also improving productivity and efficiency within the organization, Employees may now concentrate on higher value work because AI automates everyday chores, which encourages innovation and creativity. A strong AI talent pool has grown in the nation as a result of the increase in demand for qualified AI workers.

Conclusion:

Artificial Intelligence is having a impact on various industries transforming the way businesses operate and delivering significant advancement from health care and finance to manufacturing and transportation. AI is driving innovation, improving efficiency and enhancing customer experiences.

AI is reshaping the Indian job market by creating new opportunities according to estimates made by the national council of applied economic Research Indian GDP increased by 7.4% between 2022 and 2023, as demand for AI specialists and skilled professionals grows India must prioritize investment in skill development and establish a robust AI research ecosystem by addressing ethical consideration and adopting a strategic approach to AI integration. Indian can emerge as a global leader in the AI driven digital economy fostering inclusive and sustainable economic growth for its workforce.

References:

- Artificial Intelligence – by Dr.Chopr, S. Chand and Company limited.
- www.imra.in
- www.nasscom.in