

# ARTIFICIAL INTELLIGENCE IN INDIAN BUSINESSES: ADOPTION RATE, IMPACT, AND CHALLENGES

Pasunuri Amaraveni <sup>1</sup>, K. Chandana <sup>\*2</sup>

<sup>1</sup> Head & Principal, <sup>2</sup> Research Scholar

<sup>1,2</sup> Department of Commerce & Business Management,  
Kakatiya University, Warangal, Telangana, India

**ABSTRACT:** *Artificial intelligence (AI) is transforming the Indian business with increasing efficiency, innovation, and competitiveness across industries. From manufacturing, banking to healthcare and retail, AI-powered solutions are improving decision-making abilities, optimizing operational activities, and redefining business models. The article has focused on adoption rate of AI on Indian business and assesses the impact of AI on employment and productivity, challenges and future scope on Indian business. At present AI is integrating with business tasks, supply chain optimisation, customer relationship management, predictive analysis, automation, AI-powered chat bots, and machine learning to improve productivity and enhance customer experience. AI in India has increased ethical and social problems like job displacement, privacy threat. The study concludes as AI adoption is challenging in India it provides a lot of opportunities for businesses to innovate, improve efficiency and also helps in creating new job roles required for AI-driven economy. By studying AI adoption rate, employment and productivity, challenges and future prospect of the business corporate research article provides information how Indian businesses leverage AI effectively.*

**KEYWORDS:** *Artificial Intelligence, Indian Business, Productivity, Employment, Adoption Rate*

## PAPER CITATION:

Amaraveni, P. & Chandana, K. (2025) : "Artificial Intelligence in Indian Businesses: Adoption Rate, Impact, and Challenges", *International Journal of Informative & Futuristic Research (IJIFR)*, Vol.(13) (1), September 2025, pp. 164 – 174



DOI: <https://doi.org/10.64672/IJIFR/25.09.13.01.017>

## 1. INTRODUCTION

Artificial Intelligence is entering into all sectors and it has the ability to change societies and economies at large. AI is pervasive in almost all the industries like banking, insurance, finance, education, healthcare, retail, government, manufacturing, telecom, media, automobile, agriculture, public sector, transport and logistics and consumer goods, hospitals, travel and tourism enterprises and smart city infrastructure. According to NASSCOM, India was in 6<sup>th</sup> position and in Stanford's Global AI vibrancy ranking the inclusion parameter where 5,00,000 workers were employed in artificial intelligence and machine learning and in analytics. India was in 8<sup>th</sup> position in AI related patent filing and bagged 4<sup>th</sup> in AI related scholarly paper. 45% of organizations have increased adoption of AI and more than 50% of Indian startup's are using AI.

AI is a game changer which provides sneak peek into the rapidly increasing Indian AI ecosystem and many companies are occupying the AI space and the importance for AI powered solutions is growing very fast. Organisations and governments need to focus on investing and developing a skilled talent people. According to NASSCOM report, there is high demand for qualified, experienced and technically talented people in AI field. Government and industries should focus on enhancing skills through proper training initiatives to fill the gap. All business are integrating with AI to advance their business activities, customer experiences and efficiency where AI is being main pathway for growth of economy and competitiveness.

AI is also playing main role in employment and productivity level in the business as adoption of AI is increasing new jobs and enhancing productivity in organisation. The study explores how AI is transforming the Indian business and its influence on employment and productivity and challenges. Even government of India initiative also has created a supportive environment to increase the usage of AI and b using algorithms Indian businesses are undergoing digital transformation.

## 2. REVIEW OF LITERATURE

Article "Artificial Intelligence Challenges and Role for Sustainable Education in India: Problems and Prospects" "focus mainly on the role of AI in education which help in personalised learning, administrative process and improve accessibility. They focused on challenges related to digital infrastructure, data privacy needed for skilled educators. The study provides road map for the policy makers and educators to overcome challenges and supports India growth digitally.<sup>1</sup>

According to the article "Impact of artificial intelligence on Indian economy", has studied the AI impact on growth of GDP, employment prospects, productivity and on the economic aspects of the Indian economy. And in the results the study has highlighted how AI is boosting the economy and recognized the talent gaps, ethical issues<sup>2</sup>. Article is ensuring a 'Responsible' AI future in India: RRI as an approach for identifying the ethical challenges from an Indian perspective has covered the area of ethical, societal changes and challenges that India is facing and also analyzed the principles and practices responsible for research and innovation. The study says RRI offer scope for outlook in education, policy and governance, legislation, innovation and industry practice and has suggested the hybrid approach method that is mix of human and AI<sup>3</sup>.

According to Rebooting employees: up skilling for artificial intelligence in multinational corporations as AI changed the scenario where machines are performing same like humans, fear of job losses and study has focused on to determine skills required for up skilling of employees and finally in the conclusion it was revealed that five critical skills are required for up skilling skills of employees in the area of data analysis, digital, complex cognitive, decision making and continuous learning skills<sup>4</sup>. Article "Employee Engagement in the New Normal: Artificial Intelligence as a Buzzword or a Game Changer?" study has focused on conceptual framework of employee engagement in AI area and its impact on organisation. Findings are organizations are investing in AI

for boosting employee engagement as several qualities like quality of work life, diversity and inclusion and communication are facilitated by AI<sup>5</sup>.

According to the article “Investor’s perceptions on artificial intelligence (AI) technology adoption in investment services in India” focus on perception of investor towards AI and study has considered factors from TAM theory and adding important factors, norms and service provider and the respondents of study were investors. The study results that many variables affect AI based investment and the contribution in the technology adoption were many factors affect robo advisory adoption in investment service.<sup>6</sup> The article Application of artificial intelligence: benefits and limitations for human potential and labor-intensive economy – is an empirical investigation aims to study AI impact on the economy of the country with reference to job market. The study has done in qualitative approach where information is collected through by using purposive sampling. The study results were AI adoption in India was still in embryonic phase on one side organizations were dreaming of adopting AI and other side change in skill set and decrease in manpower is causing fear among people<sup>7</sup>.

AI in retail: applications and value creation logics result is to answer (1) What are the main strategies for retailers to improve their AI-related data management? (2) How do retailers use AI to provide solutions in business processes? (3) What are the value creation logics of AI applications in retail? Finally identified 28 AI- Powered solutions, 14 business processes, five management areas via four logics they are automation, hyper-Personalisation, complementarily and innovation<sup>8</sup>. According to the article “Challenges of Applying AI in Healthcare in India” AI has been implemented in health care sector for managing various cognitive functions. It is used in the area of patient management, clinical decision support, patient tracking, and health care services. The study says that there is much scope for AI in healthcare they need to focus more on AI development ethically. For the development government need to focus on providing funding and opportunities to enhance public and private sector.<sup>9</sup>

According to the article “AI strategy of India: policy framework, adoption challenges and actions for government” study was focused on AI related policies in India. Article has focused on National Strategy for AI and improvements need to be done in framing AI policies and considered privacy and governance issues.<sup>10</sup> In the article Transforming Indian Industries through Artificial Intelligence and Robotics in Industry 4.0., AI is changing the personal and working life of people. Study has covered AI contributes to all sectors in the Indian economy. Even though several countries adopted AI they did not formulate effective strategies<sup>11</sup>.

AI plays a major role in future in the development of the Indian economy where AI acts as source for the development and helps to overcome problems related to poor infrastructure and bureaucracy. The article has focused on opportunities and challenges for Ai in India as they focused on the challenges related to social conditions as we believe in robust development of India in AI era.<sup>12</sup>Article “Artificial intelligence policy in India: a framework for engaging the limits of data-driven decision-making” AI is the emerging trend in India where we need to focus on development of policy related to AI. The study mainly focused on technical limitations in the development of AI policy and here societal and ethical values need to be considered.<sup>13</sup>

### 3. OBJECTIVES OF THE STUDY

1. To understand Artificial Intelligence (AI) adoption rate in Indian Business.
2. To assess the impact of AI on employment and productivity in Indian Business.
3. To identify challenges in AI adoption and future business growth in Indian Business.

## **4. METHODOLOGY OF THE STUDY**

This study uses a qualitative research approach to assess Artificial intelligence in Indian businesses adoption rate, impact on employment and productivity and challenges and future prospects.

### **4.1. Research Design**

A descriptive and exploratory research design is used to know AI businesses adoption rate, benefits, challenges, and future prospects of AI in Indian business.

### **4.2. Data Collection**

It is done by using secondary data sources like industry reports, academic literature, case studies, and government policy documents.

### **4.3. Data Analysis**

A thematic analysis is done to assess the collected data. The research helps to identify trends in AI adoption, evaluates how AI is integrating with Indian business and how it is going to influence Indian business.

### **4.4. Scope of the study**

The article is focusing on the role of AI and its influence on Indian business. It analyses the adoption rate of AI in Indian Business, influence on employment and productivity and challenges and future prospects of AI integration with Indian business. Article helps in identifying the transforming potential of the Indian business and its growing impact.

## **5. ARTIFICIAL INTELLIGENCE (AI) ADOPTION RATE IN INDIAN BUSINESS**

AI plays an important role on Indian business and AI tools can potentially help decision makers save time, conserve energy and free up time to focus on the issues and generate executive summaries, instant insights, intelligent recommendations and best practice improvements. Anomaly detection for fraud payments, predictive and prescriptive analytics can detect fraud from multiple sources. A unique approach which facilitates real time fraud detection, thereby driving fast decision making and responses to emerging fraud threats is the need of the hour.

India is a country with a diverse language and socio economic demographics; there are a multitude of challenges to overcome. The financial service sector is also on the way to major transformation and also a force is driving behind it is AI. Innovative applications related to AI have been seen in various areas like credit scoring, regulatory compliance, and customer experience and portfolio management. As a task by employees has taken many hours to complete manually, now it is done within seconds. Banks and financial institutions are able to automate the customer behavioural pattern automatically and also any signs of abnormality and also gives ability to identify and flag fraudulent activity in reality.

AI gives solutions to the problems in business, improves customer experience, optimising work and automates repetitive tasks, generates information quickly and helps to process vast amounts of data sets quickly and extracts meaningful insights and predicts future outcomes based on data analytics. In manufacturing & production, inventory management, research & development, IT, product design, sales & marketing , finance, HR, legal and procurement activities business automation, enterprise automation and process automation helps to reduce human error. AI rely on business customer data, identify trends and spending patterns. AI tools help in processing big data sets and help in forecasting future spending trends and also help in competitor analysis.

AI changed the environment of the business world in areas of cost reduction, cyber security, and also enhanced management decision making. Real time analytics is a source of processing huge data and also interpreting in real time. According to the economic survey 2024-25 AI in service sector such as banking, finance, healthcare, telecom, retail and transport. AI in financial institutions is increasing customer experience and operational efficiency. As State Bank of India (SBI) is using

chatbot, SBI Intelligent Assistant to assist customer and banks were using AI powered source for fraud detection and risk management system. In telecom sector AI-driven platforms were used to manage networks, leveraging machine learning to identify irregular network and solve issues that impact operations. In retailers sector AI is in personalised marketing, smart inventory management and better shopping experience. In logistics sector AI is improving delivery accuracy, improving customer satisfaction where sector is adopting AI algorithms to ensure on time delivery.

Table: 1 AI adoption rate in Indian corporate sector

Category	Metric	2023	2024	2025
<b>Growth of GenAI Startups</b>	No of startups	66+	240+	890+
<b>Funding by Focus Area(CY2024)</b> Distribution of Funding in Indian GenAI Startups	Application	-	88%	-
	Services	-	8%	-
	Infrastructure	-	4%	-
<b>Funding by State (CY2024)</b> Distribution of Funding in Indian GenAI Startups by Focus Area	Karnataka	-	39%	-
	Maharashtra	-	14%	-
	Delhi	-	9%	-
	Telangana	-	7%	-
	Haryana	-	6%	-
	Tamil Nadu	-	5%	-
	Uttar Pradesh	-	5%	-
	Others	-	15%	-

(Source: Nasscom Report 2025)

According to the data in table 1 growth of genAI startup's has been increasing year on year when we observe in the year 2023 there were only 66 startup's and by 2025 it was increased to 890 plus startup's in this area. Funding was high in application area with 88 percent, in service area it was 8 percent and in infrastructure area it was only 4 percent. State wise when we observe funding Karnataka with 39 percent, Maharastra with 14 percent, Delhi with 9 percent, Telangana was with 7 percent and was in fourth position, for Haryana they were providing 6 percent, Tamil Nadu with 5 percent, Uttar Pradesh with 5percent and to other states funding of about 15 percent was provided.

Table: 2 Investment methods in India's AI for startups

Year	Stage	Funding Value (\$ Mn)	Number of Rounds	Average Deal Size (\$ Mn)
2023	Seed	70.9	65	1.1
	Early	134.0	11	12.2
	Late	115.0	2	57.5
	<b>Total</b>	<b>319.9</b>	<b>78</b>	<b>70.8</b>
2024	Seed	51.1	49	1.0
	Early	139.0	16	8.7
	Late	0	0	0
	<b>Total</b>	<b>190.1</b>	<b>65</b>	<b>9.7</b>
2025	Seed	16.0	13	1.2
	Early	106.0	5	21.2
	Late	0	0	0
	<b>Total</b>	<b>\$122.0</b>	<b>18</b>	<b>22.4</b>

(Source: Nasscom Reports)



When we observe table:2 investment methodology in India's GenAI has been changed from the year 2023 to 2025 as in the seed stage and early stage companies use to provide information related to capital, flow of funds and in the late stage they contracted. When seed stage was observed in Indian AI ecosystem there is decrease in funding from 2023-25 where investors are giving priority to invest in the area where profits are high. In the early stage total funding value has been increased slightly and the numbers of rounds are also decreased. Late stage funding of Indian GenAI startup's have been completely changed from 2023-2025 to avoid risk as most GenAI startup's were using foundational model.

## 6. INDIA NEXT PHASE OF INNOVATION IN AI

In the present era India is moving from Artificial Intelligence phase to Generative AI phase as the adoption of AI has been increased more importance for specialized languages has been increased. For the support of AI Large Language Models (LLM) like GPT-3 were dominating along with priority for Small Language Models (SLM) has been increased as it requires low computation it acts as a good source for Indian start-ups. Multi modal AI is also the other technology which can integrate data of text, images, audio and videos. Agentic AI is a new technology which works without human guidance as it can take its own decisions and solve problems.

### 6.1. Health Care

According to report of Deloitte Global 2025 predictions 25 percent of companies were using GenAI and the adoption may increase to 50 percent by 2027. Agentic AI was adopted in various sectors like healthcare where they were providing AI-powered solutions, smart ICU by using Cloud Vision to observe vital signs, analyse images and lab reports, by using thermal imaging and medical data they can identify breast cancer in rural areas and a free multimodal health assistant is helping in interpreting results in various languages.

### 6.2. Banks, Education and Retail

In banks AI was used to identify fraud and approving loans by assessing customer profiles and risk and adjust portfolio based on market trends. In the field of education there are two platforms as AI-driven content in regional language and other is vernacular AI for the students in regional and rural India which are used to grade assignments, provide learning support, and improves productivity and student engagement. In the field of retail or e-commerce AI supports customers based on customer actions and preferences, it helps marketing team in conversion of natural language segmentation to SQL queries and AI- driven virtual images were supporting fashion retail in mapping apparel of men and women images.

### 6.3. Agriculture, Tech companies and Marketing

In agriculture also AI adoption has been increased where they were using satellite images, weather data to provide support for precision farming for optimum utilization of resource and media was also using agentic AI is providing entertainment options based on the priority of the customer. Global tech companies were coming with many initiatives like AI agents which can assess environment and provide solutions, developing AI- driven language models to assess regional languages where it is providing support speech for better access and is also developing multi agent AI where it was focusing on three sectors like consumer, discrete manufacturing energy and natural resources. AI sales agent can book 10x meetings effectively which leads, development of AI-backed Quality Assurance agents.

### 6.4. Defence and Manufacturing

In defence area ISRO's Pragyan uses agentic AI for assessing data in space sector and in energy sector also AI adaption was done which helps innovations in renewable energy and monitors solar and wind energy and it was using NLP and GenAI-powered metadata for solving problems it has resulted in 30% cost reduction. In manufacturing Sector AI helps in planning routes and schedules even government and public services were adopting AI for making information access to

public related to schemes and services in various languages. AI powered chatbots and virtual assistance is used to solve problems of public and even public safety and disaster response was using drones and robots for locating survivors and assesses damage.

### 6.5. Government Initiatives

Government initiatives for AI hardware development are National Programme on AI for AI chips and hardware, National Supercomputing Mission (NSM) focus on developing high performance computing infrastructure, Chip to Startup (C2S) is developing AI-specific chips and accelerators and is supporting Indian semiconductor system, Atal Innovation Mission (AIM) provides funding support for AI hardware development, India Semiconductor Mission (ISM) is providing \$ 10 billion for developing semiconductor, India AI mission motive is to develop India as global hub for AI development and Digital India Programme works on AI integration with IOT devices in the healthcare, education and agriculture sector and the market size of AI in government and public services was 19.2 USD Bn in 2023 it may reach to 59.6 USD bn by 2030.

**Table: 3 Adoption rate of AI in India in various sectors**

Industry	Percentage
Banking, financial Services and Insurance (BFSI)	68%
Tech Companies	60-65%
Pharmaceutical and healthcare	52%
Fast Moving Consumerable goods and retail	43%
Manufacturing	28%
Infrastructure and Transport	20-22%

(Source: Timesgroup.com)

According to the Datawise Teamlease report AI adoption in table: 3 various sectors in India was nearly 48% and by end of 2025 it were expected to be 75% of industries in India was trying to integrate AI. It was observed that in 2023 AI market value is \$6 billion and it was expected to reach \$20 billion by 2028 with a compound annual growth rate of 26%. According to Nasscom it was expected that AI adoption rate gross value added (GVA) in India will \$500 bn dollars by 2026. Even Government of India has taken initiative to provide 10,000 crores to India AI Mission to “bolster India’s global leadership in AI” and also supported to compute capacity, AI skills and Innovation.

## 7. IMPACT OF AI ON EMPLOYMENT AND PRODUCTIVITY IN INDIAN BUSINESS

### 7.1. Impact on Employment

In the economy of India artificial intelligence (AI) is bringing many changes and according to the study of McKinsey Global Institute AI will bring change in Indian economy to \$15.7 trillion by 2035 and according to industry association Nasscom in India by 2025 4,00,000 new jobs will be available because of AI. According to PWC analysis by 2035 9 million new jobs will be available in India which shows the importance AI in the economy.

AI is being adopted in various sectors in India which was giving advantage of advancement in technology adoption and job growth when IT industry was considered according to NASSCOM survey in IT sector nearly 1 million jobs were expected by end of 2025 and also companies were focusing in hiring AI talent. In manufacturing sector according to MCKinsey Global Institute AI in India may create 9,50,000 new jobs by 2030 and government of India has launched a programme to train 1 million people in the area of AI. In healthcare industry according to World Economic Forum by 2030 new employment opportunities of 1 million will be created and government of India has committed to spend \$1 billion on AI research and development as one example if we consider Apollo hospitals has launched AI-powered cancer diagnostic tool which indicates a new job growth in AI-powered medical imaging and diagnosis.

As per the study of KPMG's analysis in education industry nearly 5 million new jobs will be available by 2030 in the area of AI-powered educational technology. In customer service area in India according to Gartner's nearly 4 million new jobs will be available by 2025 and according to KPMG poll 70% of companies were going to use AI-powered customer care chat bots by 2026. Even other sectors like agriculture, banking, retail and transportation are advancing in AI as in if we observe in agriculture sector they have adopted precision irrigation and crop monitoring system and in banking sector AI was used in loan processing and fraud detection etc.

**Table: 4 AI related Jobs by location and industry**

AI jobs by location		AI jobs by Industry	
Location	Percentage of jobs	Industry	Percentage of jobs
Bengaluru	31.55%	Information Technology	32%
Noida	11.97%	Consulting	20%
Mumbai	11.48%	Manufacturing	13%
Pune	9.32%	Media	13%
Chennai	7.35%	Banking, financial and services	5%
Hyderabad	6.10%	Services	3%
Delhi	5.06%	Others	14%
Gurgoan	4.32%		
Mohali	4.13%		
others	9.05%		

(Source: Brij Centre for Data Science and Artificial Intelligence survey- a study on Labour-Force Perception about AI: A Study on Indian White-Collar Workers)

According to data in table:4 jobs related to AI were available nearly 31.55 percent in Bengaluru where it stood first in the country and in the next position Noida was there with 11.97 percent. Even in Mumbai also nearly 11.48 percent jobs were available in AI are. Pune with 9.32 percent, Chennai with 7.35 percent and Hyderabad was in 6<sup>th</sup> position in offering AI related jobs and then Delhi with 5.06 percent, Gurgoan with 4.32 percent, Mohali with 4.13 percent and in other localities of India with 9.05 percent. Adoption of AI was high in information technology with 32 percent, in consulting sector the adoption rate was 20 percent, in manufacturing sector 13 percent, media 13 percent, banking and financial services it was 5percent in service sector it was 3 percent and in the remaining it was about 14 percent adoption rate.

## 7.2. Productivity and Efficiency Gains

By applying AI in India productivity has been increased in various industries as task automation has been increased for better decision making and process optimization which results in growth of economy. In retailing sector when we see customer assistance process they were using AI as client waiting time has been reduced. Even in manufacturing sector AI has been applied as it enhances productivity and reduces cost. According to McKinsey Global Institute report it was predicted that by 2030 AI adoption helps in growth of Indian GDP to \$957 billion with improved productivity. According to EY India survey report "How much productivity can GenAI unlock in India? The Idea of India: 2025" that by 2030 AI adoption will be transforming 38 million jobs which leads to 2.61% enhancement in the productivity in Indian economy.

**Table: 5 Productivity gains by adoption of AI in various industries**

Industry	Percentage change in productivity
Call Center Management	80%
Software Development	61%
Content Development and Distribution	45%
Customer Service	44%
Sales and Marketing	41%



IT/ITES	19%
Healthcare	13%
Banking and Insurance	9%

(Source: EY India)

Based on the data in table:5 productivity gains by adoption of AI was high in call center management with 80 percent, in software development it was 61 percent, the usage level of AI was high in content development and distribution with 45 percent, in customer service area it was 44 percent, in sales and marketing it was 41 percent and in IT/ ITES, health care and banking and insurance it was 19 percent, 13 percent and 9 percent respectively.

## 8. CHALLENGES AND FUTURE OF AI ADOPTION IN INDIAN BUSINESS

### 8.1. Challenges in AI adoption

The fund requirement is very high to start and implement AI as not everyone could invest in it. Data handling and data storage in computers is also a biggest challenge; organising scaling, extensibility and security for enterprises is a critical component. Data breach is a problem as flawed algorithm always makes incorrect predictions. Data breach can be a result of poor data governance. If the data goes into the hands of hackers the organization has to face legal challenges.

Due to limited budget AI adoption for small and medium enterprise is a struggle and also lack expertise people and skilled manpower for effective AI adoption and investment on training and recruitment increases. Identifying data gaps and data integrity are the important steps in leveraging AI for business activities. Deploying AI requirements, robot technical infrastructure such as hardware, software and networking and developing such infrastructure can be time consuming and costly. Regulatory and ethical issues are the biggest challenge. Data privacy and bias in decision making, algorithms and transparency in the area of AI- driven process is challenging task for organizations adopting AI. The government and universities should adopt AI in their curriculum design and support with training courses for the students.

### 8.2. AI for future business growth in India

NITI Aayog on September 2025 has released a report indicating that AI led to increase in efficiency of industries where AI was contributing of annual gross domestic product growth of 8 percent annually. According to report Indian GDP increases to \$500-600 by 2035 by adoption of AI which boost the productivity and efficiency of the firm.

AI is increasing benefits for many industries such as retail, manufacturing, transport, logistics and health care. AI enables business operations to complete fast, smart and helps in improving productivity and performance, reduce human error and also helps in enhancing efficiency of the business where it helps to increase productivity, reduced operating cost, improving speed of transactions, quality of decision making, transforming the business, improving bottom line growth and humanizing customer engagement. As there is no option that AI implementation is not stopping any way, hence all the sectors need to adopt AI for decision making.

AI support in fast collaborations between man and machine. Real world applications are important as AI helps in assisting towards investment decisions for a venture capital firms. Indian law did not clearly address whether directors can assign decision making rights to AI. India is poised to become a global AI leader by 2030. The future will see: AI adoption high across all industries, more startups and innovation in AI, increase in usage of robotics and automation and advancements in AI ethics and regulation and in future AI-powered smart cities and urban development will be.

**Table: 6 Future Prospects of AI in India**

1) Category	2) 2024-2025	3) 2030 & Beyond
4) Size of AI Market	5) \$8.3 billion	6) \$28.36 billion
7) Growth Rate of AI Market (CAGR %)	8) 27.86%	
9) AI Contribution towards GDP	10) \$450–500 billion	11) \$1 trillion
12) Adoption of AI in Businesses	13) 23%	14) 85%
15) Productivity Gains due to AI Adoption	16) 2.61%	17) 5-7%

18) (Source: Multiple sources are Statista, Analytics Insight, Economics Times, EY India)

In India many research facilities related to AI are available for future developments where Accenture has started AI innovation hub as works on providing solutions for security, automation and block chain domains. SiMa.ai which helps to work on critical embedded A-based applications like robotic, autonomous vehicle and medical. In IIT Madras data science research centre is available and AI Robert Bosch Centre, DRDO young Scientist lab etc.

## 9. CONCLUSION

AI is a futuristic concept where it has been a significant factor in transforming Indian industries; corporate sectors are experiencing the change where adoption of AI is increasing efficiency and innovation. In all sectors AI advancement was high like when we see corporate sector AI-powered automation, machine learning algorithms and predictive analytics have been used in decision making, for reducing operational cost, and increasing customer engagement. In banking AI was used to identify frauds and risk assessment. In health care AI driven diagnosis and surgeries and it was focusing on improving patient care and treatment outcome. In education AI is helping in gaining personalised experience. In agriculture AI is used for precision farming, source optimisation.

For a business adoption of AI helps in gaining competitive advantage, as government need to focus on AI regulation, ethics and data security. Employees need to concentrate on developing skills to stay in this dominant world. Finally AI is not a technology change but it is a game changer where it continues to change industries and shows impact on everyday life. AI adoption in India will guarantees certain benefits like making business smarter and society connected. By leveraging AI responsibility India can grab new opportunities, drive towards economic growth and sustainable development across the sectors.

## 10. REFERENCE

- [1] Sandeep Lopez, Vani Sarada, RVS Praveen, Anita Pandey, Monalisa Khuntia, Bhadrappa Haralayya (2024) Artificial Intelligence Challenges and Role for Sustainable Education in India: Problems and Prospects. *Library Progress International*, 44(3), 18261-18271
- [2] Ashok Panigrahi, S. C. (2024). Impact of artificial intelligence on Indian economy. *Journal of Management Research and Analysis* , 33-40.
- [3] [Nitika Bhalla, L. B. (2024). Ensuring a ‘Responsible’ AI future in India: RRI as an approach for identifying the ethical challenges from an Indian perspective. *AI and Ethics* , 1409-1422.
- [4] [Akanksha Jaiswal, C. J. (2023). Rebooting employees: upskilling for artificial intelligence in multinational corporations. In C. J. Akanksha Jaiswal, *Artificial Intelligence and International HRM* (p. 30). Taylor and Francis Group.
- [5] Akansha Mer, A. S. (2023). Employee Engagement in the NewNormal: Artificial Intelligence as a Buzzword or a Game Changer? In *The Adoption and Effect of Artificial Intelligence on Human Resources Management*. Emerald Publishing Limited.
- [6] Mukherjee, A.N. (2022), "Application of artificial intelligence: benefits and limitations for human potential and labor-intensive economy – an empirical investigation into pandemic ridden Indian industry", *Management Matters*, Vol. 19 No. 2, pp. 149-166.
- [7] Shi Manrai, K. P. (2022). Investor's perceptions on artificial intelligence (AI) technology adoption in investment services in India. *Journal of Financial Services Marketing* , 1-14.
- [8] Cao, L. (2021). Artificial intelligence in retail: applications and value creation logics. *International Journal of Retail and Distribution Management* , 958-976.

- [9] Nizam, V. a. (2021). Challenges of Applying AI in Healthcare in India. *Journal of Pharmaceutical Research International* , 203-209.
- [10] Chatterjee, S. (2020). AI strategy of India: policy framework, adoption challenges and actions for government Available to Purchase. *Transforming Government: People, Process and Policy (2020)* , 757–775.
- [11] T. Dhanabalan, A. S. (2018). TRANSFORMING INDIAN INDUSTRIES THROUGH ARTIFICIAL INTELLIGENCE AND ROBOTICS IN INDUSTRY 4.0. *International Journal of Mechanical Engineering and Technology (IJMET)* , 835–845.
- [12] Shivaram Kalyanakrishnan, R. A. (2018). Opportunities and Challenges for Artificial Intelligence in India. *Association for Computing Machinery* , 164-170.
- [13] Marda, V. (2018). Artificial intelligence policy in India: a framework for engaging the limits of data-driven decision-making. *Philosophical Transactions of the Royal Society A Mathematical, Physical and Engineering Sciences* .
- [14] Deep, A. (2025, September 16). AI-led efficiencies can contribute to 8% GDP growth target: NITI Aayog. *The Hindu* .
- [15] Increased adoption of AI can add \$500-600 billion to GDP by 2035: NITI report. (2025, September 15) *The Economic Times* .
- [16] (2025). Tech Trends 2025 – India perspective. Deloitte.
- [17] (2025). India Generative AI startup Landscape. Nasscom.
- [18] Roy, A. (2025). AI adoption in key Indian sectors touches 48% in FY24. *Times Group* .
- [19] Unlocking productivity gains, GenAI to transform 38 million jobs by 2030: EY India. (2025, Jan 14). *EY India*
- [20] Saurabh Dayal, A. B. (2025, January). RMSI Cropalytics Live Crop Map at Village Level: A Game Changer in Agricultural Data. *RMSI Cropalytics*.
- [21] AI takes the wheel in driving innovation across India's services sector, highlights Economic Survey. (2025, January 31). *The Economic Times* .
- [22] AI, B. D. (2024). Labour-force Perception about AI: A Study on Indian White-collar Workers. Ahmedabad: *Indian Institute of Management*.
- [23] Foundation, I. S. (2024, November 7). The Impact of Artificial Intelligence on everyday Life. *India STEM Foundation* .
- [24] Chakravarti, A. (2024, July 17). LG ThinQ UP app can make refrigerators change colours, alert users about excess detergent in washing machines. *India Today* .
- [25] Verma, D. (2023, February 28). AI inventions – the ethical and societal implications. *Managing IP* .
- [26] EDISON, N. (2023, August 25). Brillio and Capital Quant Solutions Partner to Deliver Advanced Financial and Unstructured Data Analysis. *Brillio* .
- [27] Balaji, S. (2020, July 11). Providing AI-driven solutions for agriculture and food commodity value chains. *INDIAAI* .
- [28] India's AI journey: The story so far. (2020, May 11). *INDIA AI* .
- [29] Arelli, M. (2019). Jotter.AI:Ushering in a New Frontier in Fashion Technology. *CIO Review India* .