

The Impact of Artificial Intelligence on Business Corporations - An Indian Context

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ABSTRACT

Artificial Intelligence has become a significant driver of transformation in the global business environment. India, characterized by rapid economic growth and its emergence as a technology hub, is at a pivotal juncture for integrating AI into its corporate sector. This study examines the impact of AI on Indian companies across multiple industries, including banking and financial services, healthcare, manufacturing, retail and e-commerce, agriculture-related enterprises, and information technology. Employing a mixed-methods research design that integrates secondary data, case studies of leading Indian firms, and policy analysis, the research investigates how AI is shaping operational efficiency, decision-making, human resource practices, customer experience, and competitive strategies. The paper further addresses barriers to AI adoption in India, such as infrastructure limitations, data privacy challenges, talent shortages, and ethical considerations. It evaluates the policy landscape, with particular attention to NITI Aayog's National AI Strategy and associated regulatory initiatives. Case examples from TCS, Infosys, HDFC Bank, Reliance Jio, and Flipkart illustrate the connection between theoretical frameworks and practical implementation. The findings indicate that AI adoption rates vary across industries and company sizes, yet AI holds substantial potential to enhance India's global competitiveness if critical structural challenges are resolved. The study concludes with recommendations for both corporations and policymakers to optimize the benefits of AI for Indian business.

Keywords: AI artificial intelligence, indian business, corporate strategy, digital transformation, machine learning, industry 4.0, niti aayog, AI adoption, emerging markets.

1. INTRODUCTION

The fourth industrial revolution is characterized by the accelerated integration of digital technologies, with artificial intelligence at its core. AI encompasses computer systems designed to replicate human intelligence, including machine learning, deep learning, natural language processing, computer vision, robotic process automation, and expert systems. Collectively, these technologies enable organizations to automate complex processes, extract insights from extensive datasets, personalize customer engagement, and optimize resource allocation at an unprecedented scale (Indian enterprises lead global peers in at-scale AI adoption across most functions: Deloitte's State of AI in the enterprise report, 2026; India's AI Landscape 2025: Index Report on Innovation, Talent, Workforce and Investment, n.d.). India presents a distinctive context for examining the business impact of AI. In 2024, the nation reported a nominal GDP of approximately USD 3.7 trillion, a population exceeding 1.4 billion, and a technology sector contributing roughly 7.5% to GDP, according to NASSCOM. The country hosts over 1,200 AI startups, more than 420,000 AI professionals, and a national policy environment that increasingly prioritizes AI. However, AI adoption in India is hindered by linguistic diversity, a pronounced digital divide between urban and rural regions, fragmented data infrastructure, and a heterogeneous mix of multinational corporations and micro, small, and medium enterprises (MSMEs). These dynamics result in a complex landscape for AI implementation (India's AI Landscape 2025: Index Report on Innovation, Talent, Workforce and Investment, n.d.). In light of these factors, a comprehensive, sector-specific analysis of AI's impact on Indian corporations is warranted. This paper seeks to address this need.

Section 2- reviews the relevant literature.

Section 3 outlines the research methodology.

Section 4 maps the AI ecosystem in India.

Sections 5 through 9 analyse sectoral impacts;

Section 10 examines challenges and barriers.

Section 11 discusses the policy environment.

Section 12 presents case studies.

Section 13 offers recommendations, and

Section 14 concludes.

2. LITERATURE REVIEW

Research on AI's role in business has expanded rapidly over the last decade. Early theoretical foundations were laid by Russell and Norvig (2020), who outlined the core structure of AI systems. Brynjolfsson and McAfee (2014) explored how intelligent machines are changing labour markets and productivity in The Second Machine Age. More recently, Daugherty and Wilson (2018) introduced the idea of human-machine collaboration, arguing that AI creates the most value when it supports human work rather than replacing it. For India, studies have moved from early descriptions of IT-enabled services to deeper analyses of AI-specific changes. Dhar and Stein (2017) looked at how ready Indian IT companies were to adopt AI and found that organizational readiness was a key factor in success. Kapoor and Bhattacharya (2020) examined AI in banking and showed how AI-based credit scoring is expanding financial access for underserved groups. NITI Aayog's 2018 National Strategy for Artificial Intelligence, often called #AIforAll, set out a policy framework focused on five

priority areas: healthcare, agriculture, education, smart cities, and smart mobility. This document spurred more research into AI's sectoral effects in India. Later work by Bhaskar (2021), Mehrotra (2022), and Sinha et al. (2023) analysed AI's role in manufacturing, retail, and healthcare, showing both opportunities and challenges. A common idea in this body of work is "leapfrogging" — the view that emerging economies like India can skip older technologies and move straight to advanced AI solutions. (Ahmedabad & Group, n.d.) This is supported by India's fast growth in mobile internet, which reached 820 million users in 2024 according to TRAI. (TRAI releases Telecom Subscription Data as on 31st December, 2024, 2026) However, researchers like Parthasarathy (2023) caution that inequality and governance gaps can limit the extent to which AI benefits are shared if left unaddressed. This paper extends existing research by adopting a broader, cross-industry perspective that encompasses both large firms and emerging enterprises. It also incorporates recent data from 2023–2025 to reflect the current state of AI adoption in Indian business.

3. RESEARCH METHODOLOGY

This research employs a mixed-methods approach, integrating secondary data analysis, qualitative case studies, and a review of policy documents. This methodology was selected due to the complexity of the research problem, which necessitates both broad quantitative data to identify overarching trends and detailed qualitative examples to elucidate firm-level AI applications.

3.1 Secondary Data Sources:

Data were obtained from four principal sources: academic journals (including the Journal of Management Information Systems, MIS Quarterly, Decision Support Systems, Indian Journal of Management Research, and Vikalpa); industry reports from NASSCOM, Gartner, McKinsey Global Institute, Deloitte Insights, and IDC; government documents from

NITI Aayog, MeitY, and the Reserve Bank of India; and annual reports and investor presentations from major Indian companies for FY 2022–23 and 2023–24.

3.2 Case Study Selection:

Six Indian companies were purposively sampled to represent diverse industries, organizational sizes, and stages of AI maturity. The selected firms include Tata Consultancy Services (IT services), HDFC Bank (banking and financial services), Reliance Retail (retail and e-commerce), Sun Pharmaceutical Industries (healthcare and pharmaceuticals), Mahindra & Mahindra (manufacturing and automotive), and Flipkart (e-commerce and logistics). Data for each case were triangulated using annual reports, media coverage, company white papers, and public executive interviews.

3.3 Limitations:

The study does not incorporate primary data collection through surveys or interviews, which constrains the depth of firm-level insights. Furthermore, the rapid evolution of AI technologies may render some findings obsolete in a short period. Future research employing longitudinal surveys across a broader sample of Indian firms would enhance the robustness of the evidence base.

4. THE AI ECOSYSTEM IN INDIA: AN OVERVIEW

India's AI ecosystem has grown significantly over the last five years, moving from early-stage experimentation to a more developed system involving startups, large companies, academic institutions, and government bodies. According to a 2024 report by INASSCOM and Zinnov, India's AI market was valued at USD 6.1 billion in 2024 and is expected to grow at 25–28% annually through 2030, reaching USD 28–32 billion by the end of the decade. Integration of experimental initiatives into a dynamic, multi-stakeholder system

encompassing startups, large corporates, academic institutions, and government agencies. (Sharma et al., 2023) According to a 2024 report by NASSCOM and Zinnov, India's AI market is estimated at US\$ 6.1 billion in 2024 and is projected to grow at a CAGR of 25–28% through 2030, potentially reaching US\$ 28–32 billion by the end of the decade.

2020	2.1	—	IT Services Automation
2021	2.8	33.3%	Pandemic-Driven Digital Shift
2022	3.7	32.1%	Cloud & Big Data Adoption
2023	4.8	29.7%	Generative AI Emergence
2024E	6.1	27.1%	Enterprise AI Platforms
2026P	10.5	~26%	AI-as-a-Service Proliferation
2030P	30.0	~26%	Economy-Wide AI Integration

Source: NASSCOM–Zinnov India AI Market Report, 2024; Authors' Compilation1

India's AI ecosystem is geographically concentrated in four major technology corridors: Bengaluru (Silicon Valley of India), Hyderabad, Pune–Mumbai, and the National Capital Region (Delhi–Gurugram–Noida). Bengaluru alone accounts for approximately 35% of India's AI startups and hosts the India operations of global AI leaders such as Microsoft, Google, Amazon Web Services, and IBM Research. The city's AI ecosystem benefits from a dense network of talent drawn from premier technical institutions, including the Indian

Institutes of Technology (IITs), the Indian Institutes of Management (IIMs), and the Indian Institute of Science (IISc).

A notable aspect of India's AI landscape is the development of a strong indigenous AI startup ecosystem. Firms such as Fractal Analytics, SigTuple, Niramai, Niki.ai, and Mad Street Den have developed AI solutions tailored to the Indian context. These include multilingual natural language processing models capable of handling all 22 scheduled Indian languages, computer vision applications tailored to local agricultural crops, and AI-driven diagnostic tools calibrated to Indian epidemiological data. The indigenization of AI represents a significant strategic advantage for Indian corporations, as it reduces reliance on imported technologies and facilitates more contextually appropriate AI implementation.

5. SECTORAL IMPACT OF AI IN INDIAN BUSINESS

5.1 Banking, Financial Services, and Insurance (BFSI)

The BFSI sector has been one of the earliest adopters of AI in India. Banks and financial institutions are using AI to improve efficiency, assess credit risk more accurately, detect fraud, and deliver personalized services to a growing base of digital customers. India's banking system includes 12 public sector banks, 22 private banks, 46 foreign banks, and over 1,500 cooperative banks, serving more than 600 million account holders. One major use case is AI-driven credit evaluation. Traditional methods often exclude informal workers due to limited credit history. AI models from firms like CreditVidya and Perfios now use alternative data—such as digital payments, phone usage, and online behaviours—to assess creditworthiness, helping banks extend loans to underserved segments. AI is also critical for fraud prevention. According to NPCI, with over 100 billion digital transactions in FY 2023–24, the fraud risk is high. HDFC Bank's AI system, built with Infosys Finacle, processes 40

million transactions daily and flags suspicious activity in real time. The bank reports that this system prevents losses of over INR 500 crore annually.

5.2 Information Technology and IT-Enabled Services

India's IT sector is undergoing a major shift due to AI. The top four IT firms—TCS, Infosys, Wipro, and HCL Technologies—employ over 1.5 million people and generate more than USD 85 billion in revenue. They are moving from traditional IT services to becoming AI-led transformation partners. Infosys launched its Topaz AI platform in 2023, combining generative AI with cloud and analytics tools. It helps clients speed up software development, automate processes, and extract insights from unstructured data. Within 18 months, Topaz-related deals added over USD 1.5 billion to Infosys's revenue. Internally, IT firms are also using AI to boost productivity. TCS's Cognix platform automates 60,000 routine IT tasks each month, freeing engineers to focus on higher-value work. Wipro's Project Cyclops uses AI for code generation and testing, cutting development time by 30–40%.

5.3 Retail and E-Commerce

India's retail market, worth around USD 820 billion in 2024, is being reshaped by AI as it becomes more formalized and digital. With a young, mobile-first population and expanding logistics networks, AI is creating new competitive advantages. Recommendation systems are a key application. Flipkart's AI engine analyses purchase history, browsing patterns, demographics, and inventory data to personalize suggestions for over 500 million users. The company states that AI-driven personalization drives about 35% of its total GMV. Supply chain optimization is another area. Reliance Retail, with over 18,000 stores, uses AI to manage inventory, forecast demand at the store level, and dynamically adjust pricing. Since adopting these systems, it has cut inventory costs by 15–20% and improved product availability.

5.4 Healthcare and Pharmaceuticals

AI has both commercial and social value in India's healthcare and pharma sectors. With a doctor-to-patient ratio of 1:1,456—below the WHO recommendation of 1:1,000—AI tools can help expand access to care. Computer vision is showing strong results in medical imaging. Niramai's Thermalytix uses thermography and AI to detect early-stage breast cancer without radiation, making it suitable for smaller cities with limited infrastructure. SigTuple's AI100 platform analyzes blood samples using deep learning to produce automated reports, reducing dependence on specialist technicians. Pharma companies are also using AI to accelerate drug discovery. Sun Pharma has partnered with AI firms to identify potential drug candidates, predict their effects, and optimize molecular structures, cutting early-stage research time from years to months.

5.5 Manufacturing and Automotive

India's manufacturing sector, targeted to reach 25% of GDP under Make in India, is adopting AI for quality control, predictive maintenance, and product design. The automotive industry has been an early adopter. Mahindra & Mahindra uses computer vision systems in its Chakan and Nashik plants to detect defects faster and more consistently than manual inspection. This has reduced defect escape rates by about 40% and improved initial quality scores. Predictive maintenance is delivering results, too. Tata Steel's AI system at its Jamshedpur plant uses data from 5,000 sensors to predict equipment failures. It has reduced unplanned downtime by 25–30% and extended equipment lifespan by scheduling maintenance in advance.

Predictive maintenance, which uses sensor data and machine learning to anticipate equipment breakdowns before they occur, is delivering measurable value in Indian manufacturing. Tata Steel's AI-enabled predictive maintenance programme at its Jamshedpur

plant has reportedly reduced unplanned downtime by 25–30% and extended the operational lifespan of critical equipment. The programme collects data from over 5,000 sensors across the plant and employs anomaly-detection algorithms to generate maintenance alerts with sufficient lead time to schedule planned interventions.

6. AI AND HUMAN RESOURCE MANAGEMENT IN INDIA

Artificial intelligence is playing an increasingly influential role in workforce management within Indian companies, presenting both practical and scholarly considerations. With a workforce of approximately 560 million individuals exhibiting significant diversity in education, skills, and industry distribution, India faces unique challenges and opportunities in implementing AI-driven human resource practices.

6.1 AI in Talent Acquisition:

Indian companies are using AI across multiple stages of the hiring process. Tools that automatically screen resumes using NLP and machine learning are now common among large employers, helping HR teams efficiently handle thousands of applications. Platforms like HackerEarth, iMocha, and Mettl offer AI-based assessments widely used by IT firms to evaluate coding ability, logical reasoning, and domain knowledge at scale. For example, Infosys processed over 1.5 million job applications in FY 2023–24, a volume that would be difficult to manage without AI-assisted screening.

6.2 Reskilling the Workforce and the Job Displacement Debate

AI's impact on employment is a key concern in India, where the economy needs to create 10–15 million jobs annually to absorb its growing working-age population. A 2023 McKinsey Global Institute report estimated that 25–30% of current work activities in India's formal sector could be automated by 2030 using AI and robotics, with the highest risk in data

processing, routine customer service, and repetitive manufacturing roles. However, the overall effect on employment is likely to be mixed. While some jobs may be displaced, AI is also creating new roles such as AI trainers, data annotators, ethics auditors, and AI deployment specialists. It is also enhancing productivity for workers who collaborate with AI systems. Major Indian IT firms are responding with large-scale reskilling programs. Infosys's Lex platform has trained over 300,000 employees in AI and digital skills, while TCS plans to reskill 500,000 employees in AI-related areas between 2024 and 2027.

7. AI AND CUSTOMER EXPERIENCE MANAGEMENT

Customer experience has emerged as a key differentiator for Indian companies, with artificial intelligence playing an increasingly significant role in this transformation. The deployment of AI-powered chatbots, virtual assistants, personalization engines, and sentiment analysis tools enables firms to provide personalized, continuous, and context-aware services at scale. Conversational AI is now widely adopted in customer service. For example, HDFC Bank's EVA, launched in 2017 and regularly updated, is among India's most successful enterprise chatbots, handling over 7 million customer queries monthly across banking, investment, and insurance domains. EVA's language capabilities have been expanded to include Hindi and six regional languages, accommodating India's multilingual customer base. Additionally, AI-driven sentiment analysis and Voice of Customer (VoC) platforms help companies process large volumes of feedback. These tools analyze social media posts, product reviews, support transcripts, and survey responses to generate actionable insights. Bharti Airtel, for instance, employs an AI-based VoC system that reviews over 2 million customer interactions daily, enabling the rapid identification of service issues, churn risks, and emerging product requirements.

8. CHALLENGES AND BARRIERS TO AI ADOPTION

Despite progress and strong potential, AI adoption in Indian companies faces several structural, technical, organizational, and regulatory hurdles that need to be addressed to fully realize its benefits.

8.1 Data Infrastructure and Quality High-quality, structured, and accessible data is essential for AI, but India's corporate data landscape remains fragmented and inconsistent. A 2023 Deloitte India survey found that 62% of Indian firms cited data quality and availability as the main barrier to AI implementation. Many organizations, especially outside the IT sector, have underinvested in data management, resulting in data silos, inconsistent standards, and poor documentation of data lineage.

8.2 Talent Shortages India has a notable gap in AI expertise despite its reputation as a tech hub. While the country produces about 1.5 million engineering graduates yearly, according to AICTE 2024, only a small share have advanced skills in AI, machine learning, and data science. Team Lease Digital estimated in 2024 that India faces a shortage of around 200,000 qualified AI professionals, and this gap won't close soon without major changes in higher education and professional training.

8.3 Data Privacy and Cybersecurity. The Digital Personal Data Protection Act, passed in 2023, established a legal framework for the collection, processing, and storage of personal data in India. While this is a positive step, complying with requirements such as consent management, data localization, and user rights adds additional cost and complexity for companies using AI, especially those that rely on large volumes of personal data for model training.

8.4 Ethical and Bias Concerns AI systems trained on historical data can reinforce or amplify existing social biases, which is risky in areas like hiring, lending, and healthcare. In India, where historical data often reflects inequalities related to caste, gender, religion, and region, the risk of AI-driven discrimination is higher. A 2023 study by IIT Bombay found that AI hiring tools used by Indian firms showed gender and regional bias, disproportionately ranking female candidates and applicants from non-metro areas lower.

Data Quality & Availability	High	BFSI, Healthcare, MSME	Critical
AI Talent Shortage	High	All Sectors	Critical
Data Privacy Compliance	Medium-High	BFSI, E-Commerce, Telecom	High
Infrastructure Deficit	Medium	Manufacturing, Agriculture	High
Algorithmic Bias & Ethics	Medium	HR, Credit, Healthcare	Medium-High
High Implementation Costs	Medium	MSMEs, SMEs	Medium
Change Management	Medium	Manufacturing, PSUs	Medium
Regulatory Uncertainty	Low-Medium	Fintech, Healthcare AI	Medium

Source: Authors' Compilation from Deloitte India (2023), NASSCOM (2024), McKinsey Global Institute (2023)

9. POLICY ENVIRONMENT AND REGULATORY FRAMEWORK

India's policy approach to AI has developed steadily since NITI Aayog released the National Strategy for Artificial Intelligence in 2018. That strategy outlined India's vision for using AI to drive inclusive growth through the #AIforAll initiative and to position the country

as a global AI leader. It laid the groundwork for later policy measures that have expanded in scope and detail.

9.1 NITI Aayog's Responsible AI Framework, following the 2018 strategy.

NITI Aayog published Responsible AI for All: Operationalising Responsible AI in Practice in 2021. The document outlines seven core principles for developing AI responsibly in India: safety and reliability; fairness, inclusivity, and non-discrimination; privacy and security; transparency; accountability; and upholding human values. While these principles are not legally binding, they have influenced how leading Indian companies structure their AI governance.

9.2 MeitY's AI Policy Initiatives:

The Ministry of Electronics and Information Technology has taken the lead on India's AI policy agenda. The India AI mission, launched in 2024 with an allocation of INR 10,372 crore (about USD 1.25 billion) over five years, is the largest government investment in AI infrastructure to date. The mission covers seven areas: AI computing capacity, development of foundational AI models, an AI dataset platform, AI application development, future skills training, startup funding, and safe and trusted AI.

9.3 Digital Personal Data Protection Act, 2023.

The DPDP Act of 2023 forms the foundation of India's data governance framework and has direct implications for AI applications in business. The law gives individuals rights over their data, including the rights to consent, correction, and deletion, as well as grievance redressal, while requiring companies that process data to manage consent, limit data use to stated purposes, and ensure data security.

The Act also introduces stricter obligations for significant data fiduciaries—large data processors—affecting major AI-deploying firms such as Reliance Jio, Google India, and Meta India. The Act establishes rights for data principals, including the right to consent, correction, erasure, and grievance redressal, while imposing obligations on data fiduciaries — which encompasses most corporations operating AI systems — regarding consent management, purpose limitation, and data security.

The Act's provisions on significant data fiduciaries (SDFs) — large data processors subject to enhanced obligations — are particularly relevant for major AI-deploying corporations such as Reliance Jio, Google India, and Meta India.

10. CASE STUDIES

10.1 AI-Powered Diagnostics at Niramai

Niramai is a Bengaluru-based health tech startup that has developed Thermolytic, an AI-based breast cancer screening tool that uses thermal imaging and computer vision. The technology is designed for India's resource-limited healthcare setting. Unlike mammography, it doesn't require radiation, physical contact, or specialized infrastructure, making it suitable for rural areas and small clinics. Thermalytix has been deployed in over 500 locations across 20 Indian states and screened more than 100,000 women. Clinical studies show it can detect early-stage breast cancer with 95% sensitivity and 85% specificity, comparable to traditional methods. The system runs on standard laptops and requires minimal operator training, lowering barriers to adoption. Niramai's success shows how AI can be adapted to local conditions to solve healthcare access issues.

10.2 ICICI Bank: AI-Driven Financial Services Innovation

AI in Credit Assessment at ICICI Bank. ICICI Bank, one of India's largest private banks, has been using AI extensively for credit scoring and fraud prevention. With a network of over 5,900 branches and 16,000 ATMs serving more than 60 million customers, the bank handles massive transaction volumes daily. Its AI systems analyse millions of transactions each day to detect anomalies and evaluate credit risk in real time. Through its collaboration with fintech partners and in-house AI teams, ICICI developed a platform that applies machine learning and network analysis to identify suspicious transaction patterns. According to the bank's 2024 annual report, this system helps prevent potential fraud losses worth hundreds of crores annually and significantly reduces false alerts compared to traditional rule-based monitoring. For lending, ICICI uses AI models that incorporate alternative data sources, such as UPI transaction history, mobile recharge patterns, and digital footprints, to assess the creditworthiness of customers with limited formal credit records. This approach has enabled the bank to extend loans to small businesses, self-employed individuals, and gig economy workers who conventional credit checks would typically exclude.

10.3 Flipkart: AI at the Intersection of Commerce and Logistics

Flipkart, India's largest e-commerce platform (majority-owned by Walmart) with a registered user base exceeding 500 million, has built one of the most sophisticated AI-powered commerce ecosystems in Asia-Pacific. The company's AI capabilities span demand forecasting, personalized recommendations, dynamic pricing, catalogue management, fraud detection, and last-mile logistics optimization.

Flipkart's Project Vigyapan (meaning 'advertisement' in Hindi) employs multimodal AI to automatically generate product listings from supplier-provided images and sparse descriptions, populating title, attributes, and category tags with a level of accuracy that has significantly reduced the time required to onboard new sellers and list new products. The

system processes over 500,000 new product listings daily across Flipkart's marketplace, which has 1.4 million registered sellers.

11. FINDINGS AND DISCUSSION

The role of artificial intelligence in Indian business is anticipated to expand further as technological advancements continue, digital infrastructure develops, and investments from both public and private sectors increase. Several key trends are projected to influence the evolution of AI in India over the coming decade.

11.1 Expansion of Generative AI and Large Language Models

Generative AI and large language models are set to become more widely used across Indian companies. These tools are moving beyond early experimentation to practical applications in content creation, customer support, software development, and decision-making. Indian firms are also working on building LLMs tailored to local languages and business contexts. Projects like BharatGPT and Krutrim are examples of efforts to create AI models that understand India's linguistic and cultural diversity, reducing dependence on foreign models.

11.2 Rise of AI-Native Startups and Ecosystem Growth

India is likely to see more startups built from the ground up around AI, rather than adding AI features to existing products. These AI-native companies are expected to emerge across healthcare diagnostics, agricultural tech, education, and fintech. Government initiatives such as the India AI Mission and startup funding programs will support this growth by improving access to computing resources, datasets, and mentorship.

11.3 AI for Social Impact and Inclusive Growth

AI is increasingly being applied to address India's social challenges in agriculture, education, healthcare, and environmental management. AI-driven solutions for crop monitoring, personalized learning, disease detection, and climate forecasting are gaining traction. The focus on "AI for Social Good" aligns with India's development goals and creates opportunities for businesses to combine commercial returns with social impact.

11.4 Regulatory Maturation and Governance

As AI adoption grows, India's regulatory framework is expected to become more detailed and structured. The implementation of the Digital Personal Data Protection Act and future AI governance guidelines will shape how companies collect, use, and manage data for AI applications. Businesses will need to build stronger governance practices centered on transparency, fairness, and accountability to remain compliant and maintain public trust.

12. RECOMMENDATIONS

12.1 For Corporations

Develop a formal AI strategy that aligns AI investments with core business objectives and competitive priorities, moving beyond ad hoc experimentation to systematic AI portfolio management. Invest in data governance infrastructure, including master data management systems, data quality frameworks, and data catalogue tools, to ensure the availability of high-quality, well-governed data as the foundation for AI applications. Establish dedicated AI centres of excellence (CoEs) to develop internal AI capabilities, curate institutional knowledge, and govern AI deployment standards across the enterprise.

Promote responsible AI by using clear ethics frameworks, running bias checks on AI systems in critical areas, and setting up mechanisms to ensure accountability.

Partner with academic institutions — particularly IITs, IIMs, and central universities — for collaborative AI research, access to emerging talent, and early exposure to frontier AI developments.

12.2 For Policy Makers

Accelerate the implementation of the India AI mission, with particular priority on the AI Compute Capacity pillar, to address the shortage of affordable, high-performance computing infrastructure for AI model training.

Establish a structured AI regulatory sandbox framework that enables responsible experimentation with AI in regulated sectors such as BFSI and healthcare, providing a safe environment for innovation without compromising systemic integrity.

Mandate AI literacy components in engineering, management, and vocational education curricula to build a broad base of AI-fluent professionals across disciplines.

Develop sector-specific AI standards and certification frameworks, particularly for high-stakes applications in healthcare, financial services, and critical infrastructure, to provide regulators and corporates with clear compliance benchmarks.

Create targeted AI adoption programs for MSMEs, including subsidized access to AI tools, advisory support, and digital infrastructure grants, to ensure AI benefits are widely distributed across the enterprise.

13. CONCLUSION

Artificial intelligence has emerged as a central driver of transformation in the operations, competitiveness, and value-creation strategies of Indian businesses. Over the past decade, India has progressed from initial adoption to the development of a mature AI

ecosystem encompassing startups, large enterprises, research institutions, and government agencies. AI is currently facilitating advancements across critical sectors such as banking, information technology, retail, healthcare, and manufacturing by enhancing efficiency, enabling personalized services, and supporting the development of innovative business models.

However, the advancement of AI in India is accompanied by significant challenges. Concerns related to data quality, workforce shortages, privacy, and algorithmic bias must be addressed to ensure that AI fulfills its potential equitably and sustainably. Policy initiatives such as the National AI Strategy, the India AI Mission, and the Digital Personal Data Protection Act establish a foundational framework for the responsible development and deployment of AI technologies.

For Indian companies, success with AI will depend on building the right capabilities, managing data effectively, investing in skills, and embedding ethical practices into their AI systems. Businesses that can balance innovation with responsibility are likely to gain a strong competitive edge in the coming decade. Overall, AI represents both a major opportunity and a strategic necessity for Indian businesses. As the technology continues to evolve, its impact will only grow, making it essential for firms to engage with AI not as a peripheral tool, but as a core part of their long-term strategy.

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