

Strategic Economic and Ethical Implications of Artificial Intelligence in Indian Business

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Abstract: *Artificial Intelligence (AI) is changing the business scene by giving new chances for development, efficiency, and inventiveness. The study explores how AI impacts business operations through observational and descriptive analyses, emphasizing factors such as innovation, benefit optimization, and administration to comprehend impacts. Businesses are progressively using AI to improve efficiency and empower inventiveness. In any case, the usage of AI also raises significant concerns, especially concerning work relocation, pay to lessen, and workforce change. Ethical issues, counting partiality in AI algorithms, and defending information, pose significant challenges. The essential issue was understanding the degree of AI's effect on business procedures, especially its part in improving decision-making forms and operational productivity. Here we show that consistent alteration and skill enhancement are basic for effectively utilizing AI in business. It shows that AI can upgrade business operations and promote strategies. Contrary to past beliefs that AI solely drives effectiveness, the discoveries highlight the significance of human versatility and moral transparency in maximizing AI's benefits. The research shows that AI's capacity to bring about alter goes past fair technological progress, expanding to business exercises' moral and social viewpoints. This detailed comprehension illustrates the dual requirement for innovative progression and moral vigilance. The discoveries highlight the significance of companies finding an adjustment between AI progressions, moral standards, and workforce development. By giving significance to reasonableness and transparency, companies can completely utilize the potential of AI while diminishing related risks. This comprehensive approach ensures that progress in AI benefits both the long-term success of businesses and the well-being of society. Integrating AI into business procedures boosts productivity and client satisfaction and advances nonstop development and adjustment. Businesses now have superior devices to adjust quickly to changes within the market and buyer demands, making a difference in keeping up their competitive advantage.*

Keywords: Artificial Intelligence, Small Business, Large Business, India, Marketing

1. Introduction

The business landscape has evolved through various reforms and government initiatives over the past decade [1]. The AI market in India is predicted to reach \$8 million by 2025, growing at a rate of 40% between 2020 and 2025 with a spike in AI startups throughout different geographical domains of India; from the Silicon Valley of India- Bengaluru leading AI entrepreneurship and widespread AI adoption across different industrial sectors to Chennai owning up to industrial automation, while the National Capital Region, Mumbai, and Pune are showcasing the potential for fostering AI research and inclusion in business [2]. Additionally, micro small, and medium enterprises (MSME) are a major source of socioeconomic development in developing countries like India [x3]. In recent years, researchers have become interested in AI with business and its pros and cons. While large businesses are fully decked up for AI adoption benefits, small and medium businesses though hesitant, can also embrace AI for strategic edge and new opportunities to create a sustainable outlook in businesses [4]. However, apart from a handful of studies about aspects concerning business automation, and AI's impact on society in countries like Slovenia and the USA, few have dived into the financial, strategic, and ethical influence of AI on small and large businesses in India.

AI in businesses brings both challenges and opportunities. With enhanced productivity, customer agility, cost management, and optimizing supply chains come the risk of data breaches, cyberattacks, and job displacement alongside AI reinforcing bias and discrimination based on several factors of gender, race, and ethnicity when not implemented consciously. Through the McKinsey & Company survey it was realized that presently one of the most prominent barriers to AI adoption is the need for more technical know-how and skills. Although there is a low-medium acceptance rate of AI in business, the implementation of AI in the gas turbine manufacturing process by General Electric has resulted in gains through increased productivity and decreased downtime. Furthermore, AI-powered tool implementation by JPMorgan Chase led to legal contracts being reviewed within seconds saving time and finances [5].

Businesses in India are multi-faced from catering with specific recommendations and managing finances to targeting strategic marketing campaigns. The purpose of this investigation is to discuss the ethical, strategic, and economic implications of AI on small and large-scale business ventures across India and assess the shift in the mindset of consumers from a psychological standpoint. Thus, this study sets out to answer the following questions in this research:

How does AI impact business strategies?

How can the marketing sector be transformed through AI?

How does AI impact the stakeholder relationship?

How is the retail industry influenced by AI?

How is AI implemented differently in large and small businesses?

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How are business ethics and social sustainability connected to AI?

How does AI impact the relationships of customers with businesses?

This paper is structured as follows. In the first section, the methodology is described with the self-reported data, followed by the major findings of the study and the discussion that includes the limitations and future research scope. Finally, the conclusion wraps up a brief overview.

2. Discussion

2.1 Growing Role of AI in Business

Artificial Intelligence (AI) is the mechanical ability to perform cognitive tasks. It is broadly accepted across various domains and applications. Incorporation of AI across aspects related to business, healthcare, education, and leisure is deep-rooted. AI is accessible to experts and end-users. While the pros are accountable the reliability of AI-based tools for automation and decision-making poses threats of plagiarism, bias, and fake information spread [6]. The AI expenditure in India is projected to spike by 39% from 2019-2025. The AI mission of PM-STIAC is underway addressing societal needs while engaging in extensive academia-industry [7].

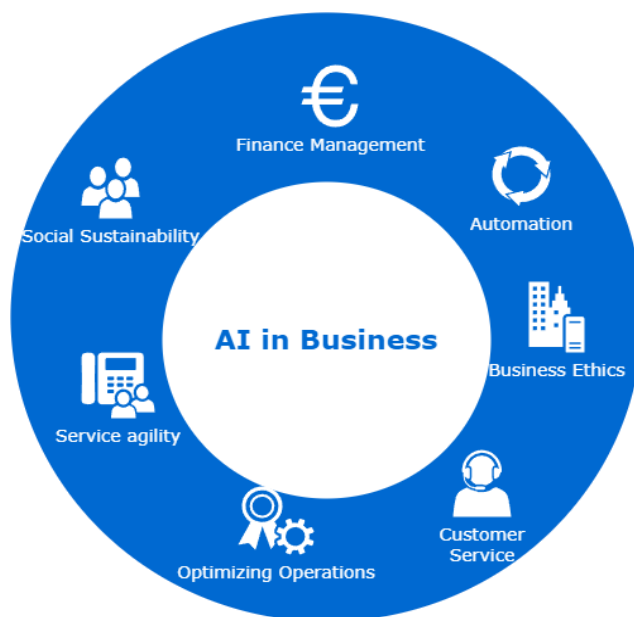


Figure 1: AI in business scope.

AI has emerged as a transforming technology evolving business operations. It has established itself as an integral part of the business. The data consisted of an extensive literature review that provided comprehension regarding AI's role in business assimilating various perspectives from qualified scholars. The study, an in-depth systematic analysis, was conducted through an online poll about respondents' views on AI's impact on society. Furthermore, a thematic analysis of corporation and consumer perceptions related to significance and expectations from AI across various industries was conducted to evaluate the role of AI [8].

It uses technology to perform recurring tasks in business operations. AI uses algorithms and Machine Learning (ML) techniques to automate customer service tasks by responding to frequently asked queries, freeing customer service representatives to focus on more complex issues [5]. The automation of jobs is one of the crucial effects of AI, providing the owner and employees with a period to focus on ingenuity and analytical thinking [9]. Business automation also known as Business Process Automation (BPA) is the use of advanced technology to accomplish tasks accurately with the least human involvement in a corporation.

Analyzing vast amounts of data accurately predicts cognizance for progressive decision-making by identifying patterns and trends to carry out targeted campaigns to increase sales.

AI-based algorithms recognize consumer proclivity and turn in suitable recommendations. Additionally, analyze customer feedback to generate preferred futures of the developing products.

Per the Deloitte Pole, more than 50% of the Chief Executive Officers (CEOs) have experimented with generative AI and over 80% favored the efficiency of AI in running businesses [9]. The research methodology used was qualitative. The primary component was the exploratory research which was modified to digest viewpoints and motivations addressed to the question - "How is AI influencing business strategies?" This study was based on a secondary source of data. It represented enhanced risk assessment choices and optimized supply chain management. Operational efficiencies gave businesses a competitive edge within the marketplace. Interfaces like chatbots tended to customers with agility and responded to queries on the spot leading

to increased customer satisfaction, building a worthy brand base as a result of increased efficiency and productivity of businesses while sending in targeted recommendations to the customers.

The data used was empirical and descriptive. Empirical analysis, a form of quantitative methodology was used to elucidate the connection among various factors- intelligence, technology, profit maximization, and business management. Primary and secondary data were used and the convenience sampling method was applied to refine candidates. The data gathered was studied through parameters of reliance; that were inspected by Cronbach's Alpha Reliability coefficient and validity. The questionnaire computing 10 questions regarding AI in business was gathered from 150 candidates and was studied and marked on a 5-point Linkert scale. Adaptation and Continuous Learning were meant to adapt to unforeseen events to help businesses keep up-to-date and prophetic, for corporate success without a significant change in the mechanism. This was recognized as the sole key to success and innovation in business. The benefits of AI in business were undeniable but there were certain concerns about job displacement, downfall in pay, and workforce transfiguration. It could be dealt with by upskilling employees and ensuring a smooth AI-augmented workflow [10]. Additionally, ethical considerations of bias in AI algorithms based on race or gender and Data Privacy that involves data breaches and unauthorized access to personal information require careful consciousness.

The data is based on several research articles and systematic literature reviews (SLRs) on AI regarding marketing. The authors then critically analyzed the published articles and reviewed them in the context of transfiguration regarding the marketing sector based on AI. This study puts forth conceptual details following the study, laying out a precise discussion. It has recorded consumer data and tracked how users interact with them. AI-aided marketers recognize consumer actions and indicators to predict the outcomes. This resulted in the success of companies that have integrated AI into their corporations and gained an edge over other businesses around. AI has made resources that were only available to MNCs once affordable and accessible to medium and small businesses [11]. Furthermore, the AI Algorithm analyzed certain user aspects like age, gender, demographics, and interests to determine the most suited candidate to be presented with its advertisement as a prospective customer. Marketers operate on AI solutions to meet customer's demands. With this insight of data, modification was introduced to conquer maximum effectiveness on the audiences. Thus, businesses have evolved from awareness and promotion to connection through intelligence. A theoretical approach was held in this literature review. Here, AI's role in marketing was accompanied by the cognizance of 40 marketing professionals functioning in middle and senior management roles. Six key marketing strategies were identified from this binary proposition [12]. Future scope of marketing area are:

1) Analytical Marketing Capabilities:

- AI-driven Customer Insights
- Measuring Marketing Performance

2) Technological Marketing Capabilities:

- Automated Marketing Strategy
- Ethical Implications

3) Strategic Efficiency Capabilities:

- Enhancing Customer Experience
- Growth Opportunities with AI Implications

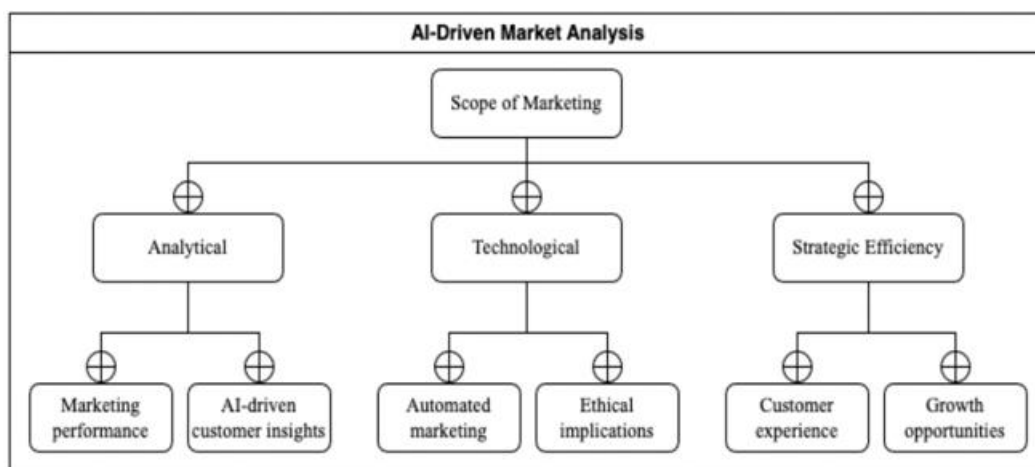


Figure 2: AI-driven Market Analysis

2.2 AI Machine Learning Methods in Business

A logistic model based on production and consumer cost was created through the use of the association rule, determining data value to allot to the ML training process seeking decision-making outcomes. The decision-making system only lacked the ML method for iteration staking the 85% effectiveness. The two essential steps in the ML process were ML training and ML validation. ML training through association rule teaches AI models the connection between items in a transaction with the use

of high-quality simulated data representative of the real-world problem. Whereas, ML validation ensures the accuracy of the model and reliability in predictions. To test the accuracy of the model a separate unknown dataset that was unknown is used and the model's predictions are compared to the actual outcome. The model after training and revalidation is used in decision systems in business. The ML methods used were:

2.2.1 Decision tree

Decision trees in AI determine suitable acts to tackle complex situations systematically. They were flowcharts with branches representing the possible decisions and results. Each branch carried the probability of carrying out the desired result.

2.2.2 Logistic regression

It was an ML algorithm forecasting customers' preference for investing in a product. It presented a statistical relationship between independent and dependent variables. The dependent variable generally resulted in a binary 'yes' or 'no'.

2.2.3 Nearest neighbors

It was the classification of data points in ML, comparing data, and assigning categories based on similarities. Its effectiveness was based on distance metrics, Euclidean and Manhattan distances were metrics widely used in this algorithm [13].

2.3 AI's Impact on Businesses

AI is transforming the Indian sector by promoting innovation, allowing data-driven decision-making, and increasing efficiency. It is transforming retail, healthcare, and finance industries and boosting competitiveness and economic growth [14].

2.3.1 The Economic Impact of AI on Indian Businesses

The information for the study [15] was gathered through statistical data analysis, case studies of prominent Indian companies, and literature reviews. The literature review included a detailed examination of academic publications, business analyses, and official government publications regarding the impact of artificial intelligence on the Indian economy. Case studies were also conducted to examine specific instances of artificial intelligence implementation in Indian businesses and understand their financial implications. The statistical analysis was done to assess macroeconomic indicators and trends.

Qualitative data analysis techniques were used to analyze the collected information. Thematic analysis was utilized to identify recurring themes and patterns regarding AI's impact on various economic aspects such as GDP growth, industry sectors, employment, and government initiatives. The analysis involved iterative reading, coding, and theme development to ensure a comprehensive understanding of the data and extract meaningful insights. The qualitative method was considered appropriate for examining the complex and varied impacts of artificial intelligence on the Indian economy. This approach made it possible to examine the intricate dynamics surrounding the adoption of AI and its effects on productivity, economic growth, and industry change. Although AI has the potential to boost economic growth and productivity, it also brings up worries about job loss and the necessity of training workers in new skills. Smaller businesses may face difficulties due to the substantial upfront cost of implementing AI technologies. Furthermore, ethical concerns, like safeguarding data privacy and addressing algorithmic bias, require proper handling. The study incorporated data sources, such as statistical analysis, case studies, and literature reviews, to give a thorough grasp of AI's economic effects in the Indian context. By using this methodology, the researchers were able to gather important insights about the potential advantages and difficulties of adopting AI and how it is changing the Indian economy. It provided a solid framework for investigating AI's economic implications, as well as a better understanding of the role of technology in driving economic development in India.

2.3.2 Reshaping Stakeholder Relationships

The primary research question addressed in this study is: "How does AI adoption impact stakeholder relationships in India?" [16] Qualitative data from structured surveys were utilized. The data collection process involved administering structured surveys to organizational leaders and employees across various sectors in India.

Multiple-choice and Likert scale items were included in a structured survey questionnaire that was created. The purpose of the questionnaire was to gather information on the adoption of AI. Technology, finance, healthcare, manufacturing, and other industries were among the sectors from which participants were chosen using a stratified sampling approach. Furthermore, an attempt was made to incorporate companies of different sizes, from small and medium-sized businesses to major multinational corporations. The recruitment efforts were directed towards frontline employees who were directly involved in AI adoption initiatives, as well as individuals holding leadership positions, such as managers, team leaders, and CEOs. The sampling strategy aimed to ensure representation from various sectors and organizational sizes, enhancing the generalizability of the findings to the broader Indian organizational landscape. By including participants from different levels of the organizational hierarchy, the study captured diverse viewpoints and ensured a holistic understanding of the research topic.

Content analysis was applied to qualitative data and open-ended survey responses to find persistent themes, patterns, and insights. Qualitative analysis techniques allowed for a deeper understanding of participants' perceptions, attitudes, and experiences related to AI adoption.

Despite the strengths of the survey-based approach, several challenges were encountered during the research process. These challenges included ensuring adequate response rates, minimizing response bias, and interpreting qualitative responses accurately. To address these challenges, efforts were made to incentivize participation, use validated survey instruments, and triangulate findings across multiple data sources. Additionally, robust data analysis techniques were employed to mitigate potential biases and enhance the validity of the findings.

2.3.3 Supply Chain

The research [17] aims to explore the impact of Artificial Intelligence (AI) on the performance of Supply Chain Management (SCM) in Indian businesses. The study relies on secondary data sourced from peer-reviewed articles indexed in the SCOPUS database. Secondary data was chosen as it allows for a comprehensive review of existing literature on AI's impact on SCM performance. The keywords "Artificial Intelligence" and "Artificial Intelligence in Supply Chain Management Performance" were used in the document search. Publications between 2012 and 2023 were considered to capture recent developments.

The search results were screened based on relevance to the research question. Only peer-reviewed scholarly articles focusing on the impact of AI on SCM performance were included. Extracted data was analyzed to identify common themes, patterns, and trends related to the impact of AI on SCM performance in Indian businesses. This analysis involved comparing and synthesizing information across different articles to draw meaningful conclusions. The use of existing data sets from peer-reviewed articles in the SCOPUS database enabled a rigorous and systematic examination of the impact of AI on SCM performance in Indian businesses, ensuring the reliability and validity of the study findings.

The findings and key points extracted from the articles were interpreted in the context of the research question, focusing on understanding the impact of AI on supply chain management (SCM) performance in Indian businesses. This involved identifying recurring themes, trends, and insights across the literature. By rapidly tracking client expectations, sensing the market, utilizing failure modes, optimizing internal and external supply chains, and encouraging a more creative workforce through the automation of routine tasks, AI has the potential to help businesses build the best possible goods [18]. The application of AI in supply chain management (SCM) has led to increased efficiency and cost reduction. AI-powered solutions enable businesses to optimize inventory levels, logistics operations, and production schedules, resulting in lower operational costs and improved resource utilization [17]. The significant initial investment in AI technologies can be a hurdle for small and medium-sized enterprises (SMEs). In addition to the AI software and hardware, the costs also cover training employees and incorporating AI into current systems. Integrating AI technologies into established supply chain processes can be complicated. Significant alterations to existing processes and platforms are needed, resulting in potential temporary interruptions and a steep learning curve for staff. Automation of repetitive manual tasks through AI can result in job loss, especially for positions with routine responsibilities. This requires the introduction of training and skill improvement programs to lessen the effects on the workforce.

2.3.4 Impact of Artificial Intelligence in the Retail Industry

Determining the impact of artificial intelligence (AI) on India's retail industry is the primary research issue of this study [19]. The research specifically attempts to measure the range of AI technologies employed by retail establishments, examine consumer attitudes on AI in retail, assess the challenges retailers have when implementing AI, and gauge the degree of AI adoption in retail. The utilization of qualitative data allows a comprehensive investigation and comprehension of the complexities surrounding artificial intelligence implementation in the retail industry. It sheds light on how retailers and consumers view AI technologies in terms of attitudes, actions, and perceptions. Observations and semi-structured interviews were used to collect qualitative data. In-depth notes were made during the interviews to record the participants' answers, viewpoints, and ideas about the application of AI in the retail sector. These notes were supplemented with audio recordings to ensure accuracy in transcribing the interviews later. Observations were conducted in retail settings to understand the practical implementation of AI technologies. Using AI systems, customer interactions with AI tools, and general operational dynamics in AI-enabled retail environments were all noted during these investigations. Conceptual analysis is a method of finding, examining, and summarizing patterns in qualitative data.

There were several steps involved in this:

- a) Open Coding: To generate the initial codes, the data was split into relevant parts about the use of AI in retail.
- b) Axial Coding: After that, codes were categorized into more general groups according to connections and commonalities.
- c) Selective Coding: Lastly, by combining categories and examining links between them, overarching themes were discovered.

2.4 AI Adoption: Small vs Large Businesses

To study AI adoption in small and large businesses, the data was based on SLRs on AI adoption in small businesses conducted and resulted in 23-factor identification but none of the factors was based on ML. SLRs on AI adoption in companies showcased the gap in understanding the factors affecting AI adoption. This led to the recognition of 72 factors affecting AI adoption in small and large businesses. The identified factors were integrated into 10 higher-level factor abstractions (compatibility, environmental, facilitating conditions, organizational, performance, quality, sociocultural, strategic & leadership, subjective, and usability aspects) and were joined with the Technology Acceptance Model (TAM) proposing a theoretical AI-based model for corporations. SLRs on AI adoption in companies showcased the gap in understanding the

factors affecting AI adoption.

The limitation here arose due to the theoretical approach. Thus, more research containing multiple data analysis approaches would aid in the testimony of this model, validating its power [20].

2.4.1 Resource Constraints

A poll was conducted by the Bipartisan Policy Center and the outcomes came out as: Finances are one of the major restraints for small businesses. Data privacy, required skills, and little knowledge of technical know-how become barriers to small businesses' adoption of AI. Large businesses have cash reserves ready to invest in AI adoption. Therefore, no major restraints in comparison to the former [21].

2.4.2 Agility in Implementation

Agility is vital and when combined with AI in business boosts corporate gains. Agility is the ability to swiftly respond to evolving markets, customer demands, and rising opportunities. The data for this study was gathered through 275 random enterprises in Slovenia. In this, companies recruiting 50 or less than 50 employees, sales expenses to a certain limit, and the value of assets were categorized as small businesses and made up 43.3% of the sample. Whereas companies that were recruiting more than 250 employees, hefty sales revenue and value assets were categorized as big businesses [22].

The study participants consisted of business owners and senior managers. The survey covered sectors of information and communication activities, financial and insurance activities, professional, scientific, and technical activities, etc. The data for the study was collected through a questionnaire designed to indulge into statements relating to specific concepts and put forth their acceptance that was marked on the 5-point Likert scale.

To statistically analyze the differences between small and big businesses, descriptive statistics and non-parametric Mann-Whitney U Test were employed. The Mann-Whitney U test compares differences between two independent groups when the dependent variable is ordinal or continuous but not normally distributed. The results declared the big enterprises more in agreement with the statements of factors influencing agility. Small businesses were in partial agreement in regards to agility. Thus, large companies are more likely to indulge in agility in their operations than small enterprises.

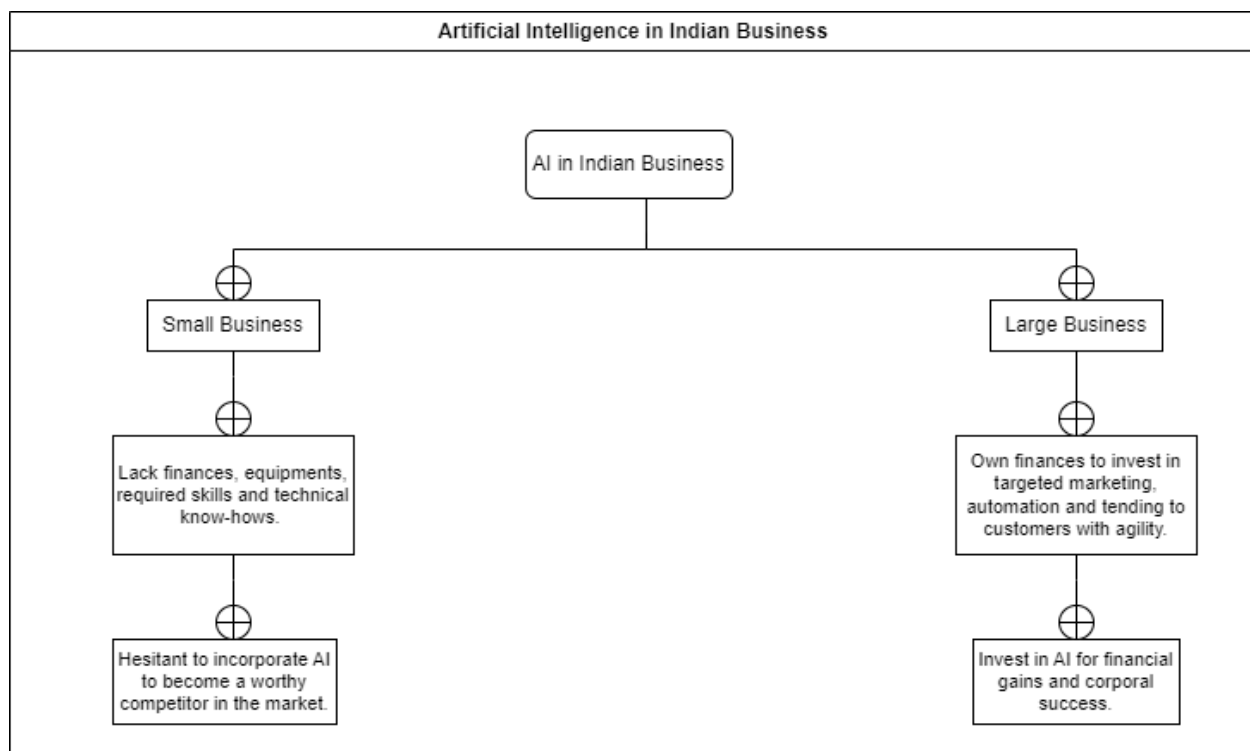


Figure 3: AI in Indian Business

2.5 Social Factors in AI Application in Business and Management

The research question for this study is: "What are the social factors influencing the adoption of Artificial Intelligence (AI) in the business and management domain (B&M) ?" [23] This study uses SLR methodology. SLRs follow specific protocols and quality procedures to select relevant primary studies and

extract and analyze appropriate information to answer specific research questions. Data was extracted from 30 selected studies, An Excel spreadsheet was used to store and categorize the data to simplify statistical analysis. Using a repeated method of reading, interpreting, summarizing, and categorizing the data, themes emerged during an inductive thematic analysis of the qualitative data. The study adheres to established SLR guidelines and provides detailed descriptions

of the search process, data extraction, and analysis methods. This ensures credibility. Once data was collected from the selected systematic literature reviews (SLRs), it underwent a rigorous preparation process to ensure it was ready for analysis. Verification of Data Entries was done by ensuring all data extracted from the SLRs was accurate and complete and Identifying and removing any duplicate entries to avoid redundancy in the analysis. Qualitative Analysis was done by identifying, analyzing, and reporting patterns within the data. NVivo Software was used for more detailed qualitative data analysis, enabling the organization and coding of large amounts of text data efficiently [24]. The qualitative component provided insights into the social factors influencing AI adoption in business and management.

The methodological challenge arose from different data types and levels of abstraction when combining qualitative data with findings from SLRs. Hence to match themes from the qualitative data with the insights from the SLRs, a thematic mapping technique was used. This method made sure of a convincing connection by making it easier to identify recurring themes and patterns. This methodological approach made sure that the social factors supporting the adoption of AI in B&M were well understood. Given that qualitative data can be biased and subjective, it can be difficult to maintain their validity and reliability. Many strategies were used to guarantee accuracy to lessen these difficulties. To reduce potential researcher biases, peer debriefing sessions engaged colleagues and experts in discussing and validating findings, while member checking allowed participants to check interview transcripts and preliminary interpretations for accuracy. Triangulation was also used, using a variety of data sources and methodologies to enhance and verify the accuracy of the results. The fast-paced evolution of AI technologies could render findings outdated quickly so the study focused on identifying fundamental social factors and underlying principles that are likely to remain relevant despite technological advancements. Additionally, recommendations for ongoing research were provided to address future developments. The mixed-methods approach gave researchers an extensive understanding of the social factors influencing the adoption of AI in B&M by combining qualitative data with systematic literature reviews. The research was a significant contribution to the field because of the thorough and open methodology, which provided reliability and validity of the findings. The findings of the study lay the foundation for further research in this quickly developing field and provide practitioners and policymakers with useful insights. The SLRs provided an evidence-based overview of existing research on AI adoption across various business sectors and functions. This ensured that the study was grounded in a robust body of existing knowledge, capturing the wide range of factors influencing AI adoption. The use of recent SLRs ensured that the findings reflected the latest trends and developments in AI technology and its applications in B&M. The systematic nature of the literature reviews ensured an unbiased selection of studies. Detailed protocols for data extraction and analysis enhanced the reliability and validity of the findings [25]. The combination of SLRs with qualitative data allowed a holistic understanding of AI adoption in Business and Management, capturing both the breadth of existing research and the depth of organizational dynamics.

SLRs use systematic approaches to collect and analyze data from a wide range of sources, including academic journals, conference proceedings, and online repositories. Findings were simplified to identify patterns, trends, and gaps in the literature related to social factors. Recommendations for future research were derived from a critical analysis of the existing evidence base, aiming to address identified shortcomings and advance knowledge in the field. The qualitative analysis revealed several key social factors influencing AI adoption in B&M, including organizational culture, leadership support, employee attitudes, and ethical considerations. To conclude, this research provides a significant understanding of the social factors affecting the adoption of AI in B&M domains. The research offers a strong foundation for comprehending and addressing the complexities surrounding AI adoption processes by using an organized and rigorous methodology. The study's conclusions have important consequences for researchers, practitioners, and policymakers alike. The study's insights can be used by practitioners to develop strategies that deal with the primary social factors that impact the adoption of AI. Applying AI technologies successfully can be greatly impacted by factors like creating a better organizational culture, improving employee training and development, and getting management support. These results can be used by policymakers to create frameworks and policies that encourage the fair and efficient adoption of AI across various industries. This study provides new opportunities for researchers to investigate the relationship between social factors and AI adoption. The literature's shortcomings and developments draw focus to certain areas that need more research, including the effects of sociocultural contexts, ethical issues, and the long-term effects of implementing AI into business processes.

2.6 Business Ethics and Social Sustainability

The data has been assembled from the study of sample respondents involving top-level managers, Chief Executive Officers (CEOs), and 400 proprietors of micro, small, and medium enterprises (MSMEs). Sample size evaluation was upheld through the G Power tool with an apriori algorithm. Apriori algorithm is periodic item mining and association rule on databases. Questionnaires were staked with confidentiality to 400 MSMEs resulting in 236 completed samples at a response rate of 59%.

The research instrument was generated through an extensive literature review on a multi-item measurement scale to minimize errors. The academicians and industry experts assessed the scale to develop an unidirectional construct. The study was derived on the 7-point Likert scale. Data analysis was conducted through Smart PLS 3.0 software inculcating multiple regressions to evaluate the measurement model. Method bias was tested with Harman's one-factor test emanating no Common Method Bias (CBM) risk. Reliability and validity were checked through Cronbach's Alpha Coefficient. The construct of Business Ethics and Social Sustainability was put to examination through various inflation factors [26].

In the research, it was evident that in a developing country like India where 96% of all industries were in the MSMEs category AI and ML played a pivotal role in ensuring social

sustainability (SS). AI in the corporate sector positively impacted ethics. Business ethics concerning AI has been a topic of constant debate. The analysis concluded business ethics influence the relationship between AI and social sustainability. At last, AI though persuasive and technology-driven puts a cost restraint on MSMEs who don't own huge cash reserves.

2.6.1 Business Automation and Stakeholder Theory

This model is solely based on the theoretics of primary data and literature reviews on the proportionality of business automation with stakeholders. A stakeholder is the component of a corporation without whom it couldn't operate. Key stakeholders in the automation of business are laborers, governments, customers, society, and firms. At this point of globalization, disruptive AI in businesses enhances productivity and efficiency. Risk originates due to businesses' concentration on short-term automation for financial gains disregarding the macro effects [27].

2.6.2 Effects on different companies and affordability issues due to loss of wages

In various articles [28,29] researchers predict joblessness due to automation replacing manual work and high-end posts-journalists, medical lab technicians, attorneys, etc. However, the researchers approving automation foresee more job creation after the temporary displacement transpires. Polarization effects as the consequence of disruption in professions related to routine, skill, and sociality. The stagnant economy in developed countries is the result of polarization leading to depressed wages for the less-educated and routine-based employees and hefty earnings for the more-educated and less-routined employees.

Through the analysis, it is evident that large companies will benefit from automation and have the finances to invest in it. Whereas, ill-equipped companies might find it hard to settle with and lack resources to invest. The study showcases the benefits of the developed countries like the U.K. and the USA whereas developing countries like India might face hardships as a consequence of automation since they rely upon providing cheap labor to the developed nations.

2.6.3 Weak bonds with Customers due to isolation

According to the reviews [30], the current scenario favors the customers economically, lowering production costs as a consequence of automation. The repercussion is isolation faced by lack of human interaction with staff like cashiers and baristas, weakening bonds.

The analysis supports the theory of broad acceptance of AI in various domains of business, healthcare, education, and leisure. However, the threat of bias, plagiarism, and fake information spread originates from the reliability of AI in decision-making and automation [6]. A systematic analysis of the online poll about AI in society followed by a thematic analysis of consumer and corporate perceptions of AI across industries was utilized to evaluate the role of AI. The key factors were the automation process, data analysis, and optimizing operations [8]. More than 50% of the CEOs have experimented with AI and 80% favored it in business efficiency]. AI influencing business strategies through adaptation and continuous learning was incorporated as better

risk management and optimizing supply chain management. Furthermore, operational efficiency led to an upper hand in business [9]. An empirical analysis was conducted to decipher the connection between factors to keep businesses updated for corporal gains. Nevertheless, ethical and social considerations pose the negativity of AI's impact [10]. AI is leading businesses through marketing, strategic planning, and domain expansion to bring in sales.

A systematic literature review of AI in marketing showcased that the companies that incorporated AI were superior to the ones that didn't. Moreover, certain aspects were utilized to find suitable prospective customers [11]. It can be concluded that AI has transfigured business from awareness and promotion to connection through intelligence. A logistic model was generated through ML Learning and ML Validation, and after re-validation, it was put to use to ensure the accuracy and reliability of predictions of AI in business through ML methods- decision tree, logistic regression, and nearest neighbors.

AI is shaping the future of the Indian sector by encouraging innovation and improving data analysis and productivity. Everything from retail to healthcare and finance is being transformed and the competitive environment and economic growth are being enhanced as a result. The study [15] also included literature reviews and case studies to analyze the transformative potential of AI for Indian enterprises. It also showed how AI is making positive changes across industries and as a result, improving productivity and creativity.

Understanding the economic implications of AI adoption is crucial for driving sustainable economic growth and enhancing competitiveness in the global market. The study was able to add significant value to the understanding of the economic benefits of AI on Indian business, especially because it highlighted how AI can help organizations innovate, make better decisions, and work smarter. Analyzing the case, the study provided a qualitative and quantitative picture of new changes contributed by AI technology in different sectors of the retail, health, and financial sectors. Structured questionnaires and qualitative analyses were used to understand the impact of AI on changing the nature of stakeholder engagement in organizations operating in India. There needed to be more clarity among the organizational leaders and the workforce in various fields [16].

The research [17] examined how AI affects the performance of supply chain management (SCM) in Indian companies, using an analysis of secondary data. Discoveries showed the capacity of AI to enhance inventory management, logistics processes, and production planning. Moreover, another research [19] centered on evaluating how artificial intelligence affects India's retail sector, intends to examine the level of AI technology usage, consumer perceptions of AI in retail, obstacles encountered by retailers during implementation, and the extent of AI integration in the industry.

Systematic literature reviews were studied to understand the gaps in AI adoption in small and large businesses [20]. Resource constraints were one of them, affecting small businesses significantly as presented by the bipartisan poll

[21]. Followed by agility in implementation which was studied through 275 random enterprises in Slovenia, resulting in big enterprises favoring to indulge in agility majorly as compared to small enterprises which were hesitant [22]. Lastly, direct interviews with managers of MSMEs were conducted to identify gaps in AI strategic adoption and bridge them through the AI operational model [31].

This study [25] significantly improves our understanding of the social factors that influence AI adoption in B&M fields. Its careful and organized approach offers a strong foundation to support further research and practical applications. The results lay the groundwork for future research and innovation in the area of AI adoption. To make the most of AI and make sure it has a positive impact on businesses and society at large, it will be essential to understand these social factors as AI advances and alters the business landscape.

The data was gathered [26] through the questionnaire to 400 MSMEs resulting in 236 completed samples. Through the data analysis, business ethics, and SS were examined through various inflation factors, representing AI and ML playing a pivotal role in SS and AI positively impacting ethics in business. However, business ethics has been a topic of constant debate. Nonetheless, It was derived that business ethics influences the relationship between AI and SS. Through the theoretics of a model, it was understood that risk occurs when business owners focus on short-term automation to gain finances disregarding the macro-effects. Some researchers predict joblessness as the outcome of automation whereas some believe in more job creation after temporary displacement [27]. It was concluded that large companies and developed countries would benefit from automation whereas ill-equipped companies and developing countries would face hurdles. Moreover, the current scenario favors customers economically but lacks an emotional relationship between consumers and human staff, leading to isolation and distress [27].

The findings of the study may be useful for businesses to properly allocate their resources through the right acquisition of AI technologies that would fulfill their company needs and market tendencies. Through the application of AI for innovation and efficiency improvement, firms and companies can make improvements and gain competitive advantage in their chosen fields towards firm growth, and productivity-enhanced resource utilization towards achieving improved and sustained results. Moreover, companies can use this to strategically invest in AI to enhance inventory control and simplify logistics procedures while understanding different relationships of varied factors affecting one another to ensure prominent successful ventures.

The potential limitations faced are small participation in the survey, lower coverage of industrial sectors, and the applicability of the findings in other industries and regions within the country. Little to no prior findings or research on AI and Business is another restraint due to ineffective research about business with AI throughout varied landscapes of a developing country- India. On top of that, limited control of data and expansion of the conclusion could have compromised the comprehensiveness of the research. It could also be limited because it is difficult to capture all the latest

trends that are growing in the Indian business environment, as they might be growing in certain sectors that are not covered in the study. Response rates in questionnaires in terms of qualitative findings could also have influenced the overall findings. Moreover, the prospective observational studies might subject the research to unintended biases while time also plays the constrain, being limited to 2 months. Additionally, the self-reported data design can be influenced due to selective memory, telescoping, and attribution. Thus, an in-depth analysis of a structured questionnaire of diverse perspectives of different regions and urban and rural places would be recommended to attain the well-rounded desired goals. We propose the following avenues for future research- AI implementation to safeguard data privacy, working on marketing consisting of analytical marketing capabilities, technological marketing capabilities, and strategic efficiency capabilities, longitudinal studies to track the long-term economic impact of AI adoption in India, exploring strategies for enhancing stakeholder engagement and communication, practical applications of AI in SCM, and examining sector-specific challenges and opportunities. Furthermore, affordability and awareness can be explored in AI to cater to small businesses and in-depth research can be conducted to determine the reliability of joblessness due to automation or more job creation as a result projected by different researchers.

3. Conclusion

The research aimed to understand AI's ethical, strategic, and economic implications in small and large businesses in India while accessing consumer mindsets from a psychological standpoint. Although the study analyzes exhaustive literature reviews, questionnaires, direct interviews, and more regarding AI and business, the qualitative approach might have influenced the overall outcomes due to the interpretational accuracy of the data. The adoption of AI presents both opportunities and challenges. Here the benefits are enhanced productivity, decision-making, customer agility, and cost management leaving data privacy, potential job displacement, and security concerns as the challenges that need to be cautiously managed. It is evident through the study that AI is an inevitable aspect of business today, from automation to marketing. Though large enterprises are up for investing, the smaller ones are hesitant.

Nonetheless, AI is on the pivot to ensure social sustainability as part of ethics and more than 80% of CEOs favor AI's efficiency in running businesses. Inclusively, this review showcases topics for in-depth research to overcome the challenges companies face to ensure a better framework to aid enterprises with lesser atrocities in the future. Future research should focus on the potential job displacement to categorize it as positive or negative since there is constant debate- for instance, more jobs after the temporary displacement.

Supplementary Material

Not applicable

Author contributions

T.R. and T.S. drafted the original, and reviewed and edited it. T.R. created the figures.

Competing financial interests

The authors declare no competing financial interests.

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