

Study of Challenges and Opportunities that SMES Encounter in Integrating Ai-Driven Approaches into their Marketing Strategies in the Indian Context

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Abstract: *This research explores the complex world of small and medium-sized enterprises (SMEs) in India, looking at the potential and problems they have when trying to use AI-driven methods in their marketing campaigns. AI technologies provide SMEs with the opportunity to transform their marketing strategies as the business environment continues to change at a fast pace. The study intends to highlight the opportunities that these technologies bring as well as fully comprehend the obstacles preventing the smooth integration of AI tools into marketing operations. We will carefully look at the obstacles that Indian SMEs face when implementing AI-driven strategies. These obstacles include lack of funds, inadequate technology infrastructure, and a lack of knowledge and comprehension of AI applications. Concurrently, the research will highlight prospects that arise from using AI, delving into improved consumer targeting, tailored marketing strategies, and data-centric decision-making. It will also examine how AI affects marketing efficacy, providing insight into performance indicators and return on investment for small and medium-sized enterprises.*

Keywords: SMEs, Artificial Intelligence (AI), Marketing Strategies, Challenges, Opportunities, Integration, Indian Context, Technology Adoption.

I. INTRODUCTION

Small and Medium Enterprises (SMEs) are essential for promoting innovation and economic development in the quickly changing business and technological environment. The incorporation of Artificial Intelligence (AI) into many aspects of these businesses' operations has become a revolutionary force as these companies traverse the digital age. Marketing is one important area where AI-driven methods have the ability to completely change tactics and results. This research explores the complex world of possibilities and problems faced by Indian SMEs trying to integrate AI-driven tactics into their marketing plans. With the growing use of AI technology, the diverse and dynamic Indian corporate environment is undergoing a paradigm change. As vibrant members of the economy, SMEs are realising how important it is to use AI to their advantage in the marketplace. This shift is not without its challenges, however. SMEs have a variety of difficulties when using AI-driven techniques into their marketing plans. These difficulties include a lack of knowledge about the possible advantages of artificial intelligence (AI) in marketing, budgetary limitations, and a lack of technical skills. In order to overcome these challenges, one must have a sophisticated awareness of the Indian environment, accounting for the particular traits and limitations that small and medium-sized enterprises encounter. For many SMEs, financial restrictions are a daunting hurdle to adopting AI, especially in the Indian context where resource allocation often requires striking a precise balance. Small and medium-sized enterprises' limited budgets may be strained by the expenses of deploying AI-driven marketing solutions, which include infrastructure, software, and qualified staff. Investigating affordable AI technologies and developing an ecosystem that aids SMEs in obtaining the required resources are two ways to address these financial obstacles.



Figure 1. Several Segments for AI applications in Marketing Domain

Another obstacle that SMEs face when integrating AI into marketing is technical knowledge. The complexity of implementing AI requires a certain degree of technical expertise, which the SME sector may not have. To close this gap, focused efforts must be made to upskill the personnel of SMEs or provide them access to outside knowledge via partnerships or consulting. Furthermore, in order for SMEs to fully benefit from AI-driven marketing, it is imperative that they cultivate a culture of ongoing learning and adaptability. One of the biggest issues facing SMEs in India is a lack of knowledge about the advantages and viability of AI-driven marketing techniques. AI adoption may be impeded by SMEs' perceptions of the technology as being difficult to use and sophisticated. To debunk misconceptions, raise awareness, and provide SMEs with the information they need to make well-informed choices about integrating AI into their marketing initiatives, it is essential to launch educational campaigns, host industry events, and create knowledge-sharing platforms. In the middle of these difficulties, Indian SMEs have a wealth of opportunity to reinvent their marketing plans using AI-driven techniques. There is a window of opportunity to get past budgetary limitations thanks to the increasing availability of inexpensive AI solutions designed specifically for SMEs. Scalable platforms, collaborative models, and cloud-based AI services may enable SMEs to implement AI at a rate that corresponds with their available resources. AI also gives SMEs the chance to improve the efficacy and efficiency of their marketing. AI-driven strategies may provide quantifiable returns on investment, optimise marketing efforts, and increase targeting accuracy in addition to providing personalised consumer experiences and data-driven insights. The goal of the research is to thoroughly examine these prospects, illuminating real-world uses and success tales that might encourage and mentor SMEs on their AI integration path.

1.1 Various AI-based transformations for marketing sectors

The marketing industry has seen a number of AI-based changes that have increased its effect and stature. The several AI systems utilised to achieve the various intended roles for addressing the marketing difficulties in today's competitive and sophisticated level public relations are shown in Fig. 2. Additional inputs for using AI to handle market-level tactics include data collecting, in-depth market analysis, digitalization via AI methods, careful consumer knowledge, study and need finalization in the market domain, etc. AI technology may be used by marketers to recognise patterns and project them into the future. They may then choose who to target and how to divide their money based on these factors. Companies may focus more of their time on high-value tasks and spend less on digital advertising. AI is essential to the success of every marketing effort, from the planning stage to the conversion and customer loyalty stages. Consequently, businesses who completely use AI will have a competitive edge. It is now possible for machines to replicate cognitive processes linked to the human mind, including learning and problem-solving. AI helps marketers in understanding the dynamic world of content marketing by studying user data and helping them make sense of user intent. AI may be used by marketers to create content for straightforward topics like sports news and financial updates.



Figure 2. AI transformations for marketing sectors.

The process of looking for software security may potentially be automated using AI. Software developers may employ AI to examine their products for security vulnerabilities in the same way that hackers search operating systems for unknown weaknesses. When choosing a tool, it's critical to take into account the degree of transparency needed to comprehend the reasoning behind an AI platform's conclusion. Marketing teams may get an easy-to-read report detailing the facts that drove a particular choice and its reasoning, based on the algorithm. On the other hand, systems that use deeper learning may not be able to provide conclusive reasoning. Artificial intelligence (AI) algorithms may be trained on data to provide useful new prediction tools. The AI output can be distinguished from the original training data. As a consequence, all assets must be under control in order to properly manage the data and its worth. Similar to any other sector, the infrastructure that makes it possible for big data to be gathered, stored, and analysed should be seen as an asset. Furthermore, because of third-party linkages, some industries like banking have systemic implications and are far more important to protect. AI systems are continuously operating in the background of well-known businesses and products like Google, Netflix, Amazon, and so on. But recently, artificial intelligence (AI) has entered the marketing space, helping businesses enhance the customer experience at every turn. Furthermore, medium- and small-sized enterprises may now purchase and access resources that were previously only available to large corporations. Neural networks are creating dynamic tools that help marketers better analyse customer behaviour, generate and comprehend more complicated buyer categories, automate marketing tasks, produce content, and anticipate sales. These tools enable the processing of enormous data sets that provide more meaningful insights. Using trends from past initiatives, marketers may utilise predictive analytics to anticipate how a campaign will turn out. Although neural networks have been around for a while, systems are becoming considerably more dynamic and sophisticated as a consequence of the increased need to analyse Big Data.

1.2 Objective of the study

- Evaluate AI integration challenges faced by Indian SMEs in marketing.
- Identify opportunities for SMEs leveraging AI in their marketing strategies.
- Analyze the impact of AI-driven approaches on SME marketing effectiveness.
- Explore factors hindering successful AI adoption in SME marketing.

II. LITRATURE REVIEW

Ruiqi Wei et.al (2022) Business strategies and procedures have undergone a profound transformation because to digital technology. Nonetheless, many small and medium-sized businesses (SMEs) still use these outdated technologies. SMEs continue to embrace digital technologies at a fairly low rate, despite the fact that some technologies, like cloud computing, would appear to be particularly useful to them. "SMEs's small size limits their capacity to learn by doing, develop, and optimise their output. It also limits their ability to take use of the advantages offered by the digital

economy. Businesses' business operations are being further transformed by new digital technologies like artificial intelligence, but there's a chance that SMEs could fall farther behind in this new digital trend. The ability of artificial intelligence (AI) systems to learn, connect, and adapt sets them apart from previous information technologies. AI has a number of advantages for businesses. AI gives businesses the ability to learn from data and adapt to their surroundings, equipping them with new capabilities. This is made possible by the power of data analytics. Depending on 'which' artificial intelligence is taken into consideration, it can 1) help standardise tasks and so increase a company's efficiency (for example, when AI is used in Chatbots applications) or 2) enable customisation (for example, when AI is used for image generation applications) and so enhance a company's flexibility. since of this specificity, AI prevents the SME from being forced to make an expensive technical shift since it does not lock it into a technology that may eventually prove inappropriate. Because of its versatility, AI is especially intriguing to SMEs.

Abid Haleem et.al (2022) Marketing stands to benefit greatly from artificial intelligence (AI). It facilitates the development of complex and sophisticated algorithms, the proliferation of information and data sources, and the enhancement of software's data management features. AI is transforming the way consumers and brands communicate with one another. The way this technology is used greatly depends on the kind of company and the kind of website. With a more customer-focused approach, marketers can now promptly address customers' requirements. Because AI generates and collects data using algorithms, they can swiftly decide which channel to use at any given time and what content to target consumers with. When AI is used to tailor user experiences, users feel more at ease and are more likely to purchase what is given. AI techniques may also be used to evaluate the effectiveness of rivals' marketing activities and uncover the expectations of their target audience. A kind of artificial intelligence called machine learning (ML) enables computers to evaluate and understand data without explicit programming. Moreover, machine learning helps people solve difficulties effectively. As more data is given into the algorithm, it learns and becomes more accurate and efficient. Relevant papers on artificial intelligence in marketing have been found for this study on a variety of platforms, including researchGate, Google Scholar, and Scopus. After reading these articles, the paper's subject was established. This essay tries to examine artificial intelligence's place in marketing. Examined are the particular uses of AI in different marketing segments and how they have changed marketing sectors. Lastly, important uses of AI for marketing are identified and examined.

Abdullah M. Baabdullah et.al (2021) In order to achieve economic growth in the Middle East, one important strategy is to support the development of small and medium-sized firms (SMEs), and the success and survival of SMEs depend on the effective deployment of technology. A new wave of technologies that may help businesses gain a competitive edge includes artificial intelligence (AI), yet there isn't much data yet on how AI is being used in B2B SMEs in the Middle East. Thus, the purpose of this research is to empirically investigate the factors that led to and affected B2B SMEs in Saudi Arabia's effective adoption of AI methods. Based on the technology-organization-environment framework, a conceptual model is created that takes into account how relational governance, performance, and SMEs' AI-based business customer interactions are affected by the adoption of AI practices, as well as how AI readiness and enablers affect this acceptance. Structural equation modelling of survey data gathered from B2B SMEs (n = 392) was used to evaluate the conceptual model. The findings demonstrated that, among the AI enablers, mindset and technology road mapping had a considerable impact on the adoption of AI practices, but not professional competence. Out of all the criteria related to AI readiness, infrastructure and awareness rather than technicality had the most effects on the acceptability of AI practices. It was discovered that the adoption of AI techniques had a major impact on SME's business customer AI-based contact as well as relational governance and performance provided by AI. The theoretical and practical knowledge of concerns pertaining to AI practices in SMEs and the B2B sector at large is strengthened by this research.

Assunta Di Vaio et.al (2020) This study examines the body of literature about artificial intelligence's (AI) application to the development of sustainable business models (SBMs). It offers a numerical synopsis of the body of scholarly work that makes up the area. The study examines the connections between artificial intelligence (AI), the rapid advancement of machine learning, and sustainable development (SD). The specific goal is to determine if this area of computer science might affect patterns of production and consumption in order to accomplish sustainable resource management in accordance with the Sustainable Development Goals (SDGs) listed in the UN 2030 Agenda. The article also seeks to draw attention to the part Knowledge Management Systems (KMS) play in the societal shift towards the use of AI for

SBMs. In light of the SDGs, there isn't a thorough analysis of the AI and SBM literature, despite the topic's significance. A bibliometric study is performed on 73 English-language articles with publication dates ranging from 1990 to 2019 based on a database. The results demonstrate that there are ethical, social, legal, and economic dimensions to the innovation dilemma. Our findings also establish the context of the current literature on AI and SDGs, notably SDG#12, including AI's relationship with the cultural drift (CD) in the SBMs. This is because the development potential of AI is tied to the UN 2030 Agenda for SD, especially to SDG#12. The main contributions of the study are highlighted as follows: i) a thorough examination of the fundamental link between AI and SBMs, providing a complete perspective when necessary; ii) the identification of a research gap about KMS via AI; and iii) the implications of AI with respect to SDG #12. The use of AI to fulfil the SDGs may identify the cultural shift that businesses need to make in order to accomplish sustainable objectives, and the academic and managerial ramifications of this can be explored in relation to KMS in the SBMs. Business organisations, practitioners in academic research, and government policy should therefore concentrate on expanding the use of AI in SBMs.

Salman Bahoo et.al (2022) Corporates are being forced to redesign their innovation process by artificial intelligence (AI). Corporate managers are using artificial intelligence (AI) in innovation more and more as a result of industrialization, synchronization of information systems, and fast technical advancement. As a consequence, academics have been very interested in developing and charting the convergence of AI and business innovation, which has produced a vast body of work over the last several decades. In order to analyse AI in business innovation critically, we carried out a hybrid review of published literature covering the previous 56 years (1996 to July 2022). The total number of publications reviewed was 364. We introduce taxonomy, describe the stages of AI, define its broad reach, and make a connection to innovation. The intersection of artificial intelligence (AI) and corporate innovation is highlighted by eight focal fields, including AI and business models (BM), AI and product innovation, AI and open innovation, AI and innovation process, AI and the innovation structure of the firm, AI and the knowledge and innovation of the firm, AI and innovation and firm market performance, and AI and supply chain management innovativeness. We provide a paradigm that takes into account AI's contribution to business innovation. In summary, we highlight key components of the literature and provide directions for future research as we wrap up our study.

MdAfnan Hossain et.al (2022) Artificial intelligence (AI) and data-driven analytics are becoming the most important components of modern industrial marketing management. Academic progress in line with the use of analytics and AI methods by several corporations has been sluggish. This study looks at how producers of industrial products maintain their competitive edge in export markets by persuading consumers in a market where competition and abundant data are key factors in company decisions. The ready-made clothing (RMG) sector, which is among the biggest manufacturing sectors with a strong connection to export markets, provides the proof. The study used a multi-phase research methodology to uncover the significance of organisations' marketing analytics competence in identifying, capturing, and reshaping the market, ultimately resulting in a long-term competitive advantage. When a company uses AI, its ability to sense, seize, and reconfigure improves due to the platform's power in marketing analytics. These results demonstrate the most recent line of inquiry within the academic research paradigm of AI and marketing analytics. Furthermore, in this particular industrial setting, managers will be aware of the realities that foster resilience.

Patrick Mikalef et.al (2023) Over the last several years, the use of artificial intelligence (AI) has accelerated in a number of disciplines, with a lot of attention being paid to its potential in business-to-business (B2B) marketing. According to early assessments, artificial intelligence (AI) in B2B marketing has great promise for reducing operational inefficiencies, gaining crucial market insights, and providing valuable insights into client behaviour. Still, there is a dearth of knowledge on how businesses should set up their AI capabilities for B2B marketing and how they affect overall business success. This study creates a conceptual research model that investigates the relationship between AI competences and B2B marketing capabilities, and ultimately, how these factors affect organisational success. It does this by drawing on literature on B2B marketing and AI competencies. 155 survey answers from European businesses are used to evaluate the suggested research model, and partial least squares structural equation modelling is used for analysis. The findings demonstrate how AI competences affect B2B marketing capabilities and how those capabilities affect organisational success.

Surajit Bag et.al (2006) In order to better comprehend artificial intelligence's impact on B2B marketing rational decision making to affect company performance, this research looks at how big data powers it in terms of customer,

user, and external market information production. Knowledge Management Theory (KMT) forms the basis of the theoretical model, and B2B businesses involved in the mining sector in South Africa provided the main data. Results highlight the importance of artificial intelligence driven by big data and the establishment of consumer knowledge. Second, artificial intelligence driven by big data and the route of user knowledge generation are important. Thirdly, artificial intelligence driven by big data and the external knowledge generation route are important. Research has shown that the generation of user, customer, and external information significantly influences B2B marketers' ability to make logical decisions. Ultimately, a firm's success is greatly impacted by the logical decision-making process used in B2B marketing.

KwabenaAbrokwah-Larbi et.al (2022) Using the resource-based view (RBV) approach, this research conducts a thorough analysis of the link between Artificial Intelligence in Marketing (AIM) and corporate success. Data was gathered from 225 Small and Medium Enterprises (SMEs) registered with the Ghana Enterprise Agency in the Eastern Region of Ghana using a survey approach. Through the use of route analysis and structural equation modelling, the research explores how AIM affects many aspects of SME performance. The study's conclusions show that AIM significantly improves a number of aspects of SME performance in Ghana. More precisely, AIM helps improve internal company process performance, learning and growth performance, customer performance, and financial performance. This demonstrates how important AIM is to SMEs' overall business performance. The Internet of Things (IoT), collaborative decision-making systems (CDMS), virtual and augmented reality (VAR), and personalization are identified in the research as critical AIM drivers that impact the reported performance increases. The research admits several limitations despite its contributions. The fact that the sample size is limited to SMEs in Ghana's Eastern Region is noteworthy and may indicate that future study may cover a larger geographic area. Furthermore, the report identifies areas for further investigation and recommends that future research concentrate on how AIM might evaluate customer communications and social media interactions to improve consumer engagement.

Emmanuel Quansah et.al (2022) This study explores the strategies that small and medium-sized businesses (SMEs) use to adapt to the difficulties presented by global phenomena such as supply chain disruptions, pandemics, and technology breakthroughs. The study identifies three critical organisational practices: continuous learning and process improvement, leveraging reciprocal relationships, and effective communication that contribute to dynamic capabilities for successful adaptation. It does this by using a comparative case study approach that involves three American firms and one Canadian firm. The study highlights how crucial these adaptive strategies are to improving SMEs' capacity to recognise, seize, and adjust to changing conditions. The research provides useful insights for SME leaders to improve the dynamic capacities and agility of their organisations, even if it admits the limits of its qualitative, inductive methodology. The ramifications for society include favourable consequences on several fronts, such as economical and affective aspects, which assist individuals, families, and community members. All things considered, this research adds to the body of knowledge on organisational practices and dynamic capacities while providing SMEs with insightful advice on how to become more resilient and adaptable.

Emil Blixt Hansen et.al (2021) Industry 4.0's hot issues include artificial intelligence (AI) and the internet of things (IoT). Although a lot of writing has been done on these subjects, much of it focuses on bigger businesses. But as small and medium-sized businesses (SMEs) are regarded as the backbone of many nations' economies, it is becoming more and more crucial that smaller businesses be able to easily access and utilise these technologies. This paper addresses the existing barriers and potential to allowing predictive analytics, as well as providing a thorough survey and analysis of the adoption of AI and IoT among manufacturing SMEs. First, the four analytics capabilities are presented together with an overview of the factors that enable AI and IoT. After then, a thorough examination of the literature is done, and the results are presented. The last section summarizes new research and development themes, how SMEs might use AI and IoT, and related difficulties and future trends.

WaelBasri et.al (2020) to investigate the effects of artificial intelligence-assisted social media marketing (AISMM) on Saudi Arabian small and medium companies' (SMEs) startup performance. Design, procedure, and strategy: Primary and secondary data were gathered, examined, and interpreted using a survey approach. Participants were entrepreneurs or staff members of SMEs and start-ups operating in Saudi Arabia. Partial least squares structural equation modelling (PLS-SEM) was used to analyse the data. Findings: AISMM explains a general rise in the number of customers and customer bases—as well as an extra tertiary impact of higher profitability. It also shows a growing tendency among

start-up enterprises and SMEs in Saudi Arabia. AISMM improves the performance of SMEs and efficient business management (SMEP). Additionally, proficient administration of the organisation raises the SMEP. Originality and worth: This research is particularly special since it looks at how AISMM techniques may improve SMEP, with good business management acting as a mediating factor. Implications: By using AISMM to reduce a variety of marketing-related issues, practitioners may benefit from this study's assistance in improving performance.

VishveshSoni et.al (2023) For small firms looking to stay ahead of the competition, generative artificial intelligence (AI) technology integration has become essential. The research aims to objectively evaluate the impact of generative AI adoption on SME revenue development, taking into account the moderating effects of market rivalry, technical infrastructure, and human capital, even though the advantages of these technologies for SMEs are well known. Utilising regularization regression techniques such as Lasso, Elastic Net Regression, and Ridge to analyse data from 331 SMEs, the research finds that the adoption of generative AI has a favourable impact on revenue growth. The moderating effects highlight the significance of talented workers in optimising benefits and show that highly educated human capital increases the advantages of generative AI. Furthermore, these advantages are enhanced by sophisticated technology infrastructure, highlighting the need of a strong technological basis. The report emphasises the necessity for a comprehensive approach that takes into account market dynamics, qualified human capital, and enhanced technology infrastructure in addition to the deployment of generative AI, noting a declining advantage in fiercely competitive sectors.

Nick Drydakakis et.al (2022) To ascertain if Artificial Intelligence (AI) applications are linked to lower business risks for SMEs, the research makes use of the International Labour Organization's COVID-19 pandemic business risks scale for SMEs. To measure the utilisation of AI applications in fundamental services including pricing, cash flow, and marketing and sales, a new 10-item scale was created. Between April and June 2020, 317 SMEs provided data, and between October and December 2020, follow-up data was acquired in London, England. The COVID-19 epidemic has resulted in less business risks for small and medium-sized businesses when it comes to AI apps that target customers online, provide cash flow predictions, and streamline HR processes. According to the report, AI helps SMEs become more agile by using technology to quickly adapt to changing market conditions, fulfil new kinds of customer demands, increase productivity, and lower risk to their operations.

Arachie Augustine Ebuka et.al (2023) This research examines how artificial intelligence (AI) functions in small company operations, with particular attention on deployment areas, obstacles, current AI technologies, and the degree of AI acceptance among SMEs. With a sample size of 379 established by applying Krejcie and Morgan's method, the study focused on 27,546 small enterprises registered with the Corporate Affairs Commission (CAC) and used a descriptive design. Structured questionnaires and interviews were used for primary data collection, which guaranteed the instrument's validity and reliability. For data analysis, descriptive statistics such as percentages and frequencies were used. According to the research, a sizable fraction of SMEs in Nigeria still conduct their operations manually, which prevents them from taking full use of AI's potential and restricts their capacity to expand. The research highlights the critical significance of AI for SMEs in Nigeria amid the growing reliance on technology, despite limits in drawing conclusions due to the descriptive nature of the investigation. This study adds to the body of knowledge emphasising the value of AI for SMEs in Nigerian business, as well as for big businesses and their development.

Muhammad RaihanSatrio Putra Pamungkas et.al (2023) Artificial intelligence has advanced quickly to the point that it is now seen as a personal assistant that helps people with their everyday duties. Artificial intelligence has the potential to be noticed in almost every area of life, including business. Progress is sometimes hampered by a lack of resources and talent, particularly for micro, small, and medium-sized businesses. But given artificial intelligence's present state of advancement, it has shown itself to be a creative and affordable way to assist business actors. The possible applications of artificial intelligence in the business sector are methodically examined and discussed in this study using reliable, scientific sources. For this research, a methodical literature review approach is used. The evaluation includes extra open-access papers in addition to journals with Scopus index that were published between 2019 and 2023. 106 studies were located based on the study results; however, after the filtering procedure, only 13 publications remained. Management of customer turnover turned out to be the most common use of artificial intelligence. However, in terms of technology, optimisation approach turned out to be the most often discussed subject in the research that were looked at.

Trevor Cadden et.al (2023) The era of digitalization has led to a surge of research studies examining the advantages of Big Data Analytics (BDA) as a strategy to improve an organization's competitive edge. The optimal method for using BDA is still up for debate, however. Furthermore, there is a dearth of research on the use of big data and marketing analytics by SMEs, who are acknowledged to possess a strong entrepreneurial mindset, to foster innovation and competitive advantage in fast-paced settings. The investigation of the complex interactions is done via the prism of dynamic capacities in this work. Using 194 UK SMEs and a partial least squares (PLS) path modelling approach, this study discovers that knowledge integration mechanisms which convert EO and BDA into organizational-wide capabilities in support of innovation and competitive advantage are especially important value creation enablers. Researchers and practitioners may both benefit from these fresh and complex findings.

Gerda zigiene et.al (2019) One of the most crucial steps influencing small and medium-sized businesses' (SMEs') ability to compete, be creative, and potentially contribute to the global sustainable development goals (SDGs) is risk management in commercial operations. The ecosystem of business procedures is necessary to control the risk that SMEs encounter. Artificial intelligence, big data, and machine learning components might be used to establish and maintain commercial risk assessment and management as outside services for a group of SMEs, enabling them to split expenses and benefits. The purpose of this study is to provide a conceptual framework for artificial intelligence-based commercial risk assessment and management solutions. Standards for risk management, policy papers, and scientific literature serve as the foundation for this conception. The article presents the main components of the framework in terms of process stages, data sources, and commercial risk categories. The suggestions for the framework's further development and use, centred on business enterprises, governmental policy, and scholarly study, are developed.

Suddin Lada et.al (2023) The study's goal is to investigate the connections between SME operations in Sabah, Malaysia, and Competitive Pressure (CP), Top Management Commitment (TMC), Employee Adaptability (EA), External Support (ES), Organisation Readiness (OR), and Artificial Intelligence Adoption (AIA). A total of 196 respondents that is, owners or managers were active in a variety of SME sectors, including services, manufacturing, construction, agriculture, and mining and quarrying. This was achieved via the use of judgmental sampling. Smart PLS 4 was used to evaluate the data collected from a survey questionnaire. The findings showed a strong correlation between the deployment of AI and organisation preparedness and top management commitment. The adoption of AI is, however, largely unaffected by external assistance, employee flexibility, and competitive pressure. This implies that in order to enhance AI results, SMEs might find it advantageous to concentrate on and strengthen TMC and OR processes. All things considered, these results might help direct resource allocation and decision-making by indicating regions where efforts might not have a major impact and underlining the significance of OR and TMC in achieving desired objectives linked to AI. Future research paths and practical ramifications are also addressed, based on current technology needs.

Table 1. Literature Survey

Author(s) and Year	Title	Main Parameter Investigated	Research Methodology	Key Findings/Results
Ruiqi Wei et.al (2022)	Transformation of Business Strategies due to Digital Technology	Adoption of AI by SMEs	Literature Review	SMEs, despite facing technological advancements, still lag in adopting digital technologies like AI. AI, especially its versatility, is highlighted as intriguing to SMEs.
Abid Haleem et.al (2022)	Impact of AI on Marketing	Integration of AI in marketing strategies for SMEs	Literature Review	AI facilitates sophisticated algorithms, data management, and customer-focused approaches, significantly transforming consumer-brand interactions.

Abdullah M. Baabdullah et.al (2021)	AI Adoption in B2B SMEs in Saudi Arabia	Factors affecting AI adoption in B2B SMEs	Structural Equation Modeling	Mindset and technology road mapping significantly impact AI adoption. Infrastructure and awareness are crucial AI readiness criteria. AI adoption positively affects B2B SMEs' customer interactions and performance.
Assunta Di Vaio et.al (2020)	AI's Role in Sustainable Business Models	Link between AI, Machine Learning, and Sustainable Development Goals	Bibliometric Study	Ethical, social, legal, and economic dimensions of AI in sustainable business models are explored. AI's connection with UN SDG #12 is emphasized.
Salman Bahoo et.al (2022)	Convergence of AI and Business Innovation	AI's impact on business innovation	Hybrid Literature Review	AI intersects with business models, product innovation, open innovation, and other facets of corporate innovation, influencing firm market performance.
MdAfnan Hossain et.al (2022)	AI and Data-Driven Analytics in Industrial Marketing	Role of AI and analytics in industrial marketing	Multi-phase Research	AI enhances industrial marketing by improving adaptive capabilities through data-driven analytics.
Patrick Mikalef et.al (2023)	AI Competences in B2B Marketing	Relationship between AI competences and B2B marketing capabilities	Conceptual Research Model	AI competences significantly affect B2B marketing capabilities, influencing organizational success.
Surajit Bag et.al (2006)	Big Data-Driven AI Impact on B2B Marketing	Influence of big data-driven AI on B2B marketing decision-making	Knowledge Management Theory	AI-driven big data impacts customer, user, and external market information, significantly influencing B2B marketing decisions.
KwabenaAbrokwah-Larbi et.al (2022)	AI in Marketing and SME Performance	Impact of AIM on SME performance	Survey Approach, Structural Equation Modelling	AIM significantly improves SME performance in internal processes, learning, customer engagement, and financial aspects. IoT, CDMS, VAR, and personalization are identified as critical AIM drivers.

2.1 Research Gap

There are significant research gaps that need to be addressed even though the body of current literature offers insightful information on the use of artificial intelligence (AI) in many business contexts. A notable deficiency is the little investigation of artificial intelligence (AI) adoption and its effects on small and medium-sized businesses (SMEs) in particular geographic settings, such the Middle East and Africa. Most research has concentrated on bigger

organisations, therefore there aren't many in-depth studies that look at how AI adoption plays out within the particular possibilities and constraints that SMEs in these areas confront. Furthermore, although the literature often highlights the advantages of adopting AI, it is unclear what particular obstacles and difficulties SMEs have when incorporating AI-driven strategies into their daily operations. The inadequate investigation of the relationship between the adoption of AI and sustainable business models (SBMs) is another research gap. Although a few studies discuss the connection between artificial intelligence (AI) and the sustainable development goals (SDGs), a thorough examination of how AI may help with the formulation and execution of SBMs is lacking. There is still much to learn about the ethical, social, legal, and economic aspects of the AI innovation conundrum in relation to the SDGs. Additionally, although corporate innovation has benefited greatly from AI, there is still a study deficit in understanding the complex relationships between AI, innovation processes, and firm structure as a whole, especially in B2B SMEs. A thorough grasp of the complex link between AI and innovation in SMEs is hampered by the lack of focus on the subtleties of how AI effects various aspects of innovation, such as business models, product innovation, and open innovation. In addition to advancing academic knowledge of AI in various business contexts, filling these research gaps would help policymakers, business executives, and researchers gain practical insights into how best to integrate AI technologies into SMEs, promote sustainable business practices, and streamline innovation processes. Future studies should focus on closing these gaps in order to improve our understanding and direct real-world AI applications in the quickly changing corporate environment.

III. FUTURE SCOPE

Future research on the potential and difficulties Small and Medium-Sized Enterprises (SMEs) have when using AI-driven techniques into their marketing plans in the Indian setting seems quite promising. First, as AI technologies improve, more research must be done to determine how to create more specialised and industry-specific AI solutions for SMEs in India. In order to ensure a realistic and successful integration, future research might concentrate on developing adaptable AI tools that are in line with the many marketing landscapes and cultural quirks that are common in India. Furthermore, a noteworthy path to explore is the scalability of AI solutions for SMEs. Studies may explore the ways in which AI-driven marketing tactics might be tailored for different SME sizes, taking into account the operational variances and resource limitations specific to this industry. For broad adoption, scalable solutions that may be tailored to meet the particular needs of various SMEs are essential. Future research on the ethical implications of AI in marketing for SMEs should be conducted with great care. Research should examine the ethical issues, privacy problems, and legal frameworks required to protect consumer rights as AI becomes increasingly integrated into marketing efforts. Ensuring responsible and transparent use of these technologies will depend critically on the establishment of best practices and standards for the implementation of ethical AI. There is tremendous potential for revolutionary advancements in the field of artificial intelligence (AI) and its commercial applications in the future scope of study. Investigating AI-driven solutions designed especially for small and medium-sized businesses (SMEs) is one interesting direction. In order to promote a more inclusive and accessible adoption of AI in a variety of business contexts, academics may focus on developing customised frameworks and tools that meet the particular issues encountered by SMEs as AI technologies continue to advance.

IV. CONCLUSION

In conclusion, the research illuminates the changing landscape of technology adoption in the business sector by examining the potential and problems encountered by Small and Medium-sized Enterprises (SMEs) in the Indian context when incorporating AI-driven techniques into their marketing plans. The results highlight how complex this connection is, giving SMEs challenges to solve as well as exciting opportunities to investigate. The obstacles that have been found highlight the need of focused interventions and support systems for SMEs experimenting with AI-driven marketing. These obstacles range from budgetary limitations to a lack of knowledge and qualified staff. In order for SMEs to implement AI widely and maintain their competitiveness and innovation in the fast changing market, it is imperative that these problems be addressed. Conversely, the prospects indicated demonstrate the revolutionary capacity of AI in augmenting marketing tactics for small and medium-sized enterprises. Artificial intelligence (AI) provides SMEs with the capabilities to maximise their marketing efforts, more effectively reach target audiences, and

maintain an advantage over competitors via data-driven decision-making and personalised consumer experiences. Taking into account the various market dynamics and India's expanding status as a centre for technical developments, the Indian context lends a distinctive perspective to these results. Policymakers, industry stakeholders, and support groups can be crucial in helping SMEs get the infrastructure, training, and incentives they need to move towards a future where AI is a crucial component of their marketing initiatives as they navigate the challenges of incorporating AI into their plans. All things considered, this study offers insightful guidance for SMEs and the larger ecosystem on how to fully use AI in the Indian business environment.

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