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ANALYSIS OF DIGITAL MARKETING IN INDIA AND THE IMPACT OF AI ON E-COMMERCE

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ABSTRACT

In today's busy world, almost every person uses their smartphones and digital payment systems, which enables businesses to transform into digital modes. It allows digital marketing and is further geared up with the adaptation of artificial intelligence. A pilot study was carried out in Tamil Nadu, India. A structured questionnaire has been prepared after analyzing the gaps in the earlier studies. 150 respondents were selected through the random sampling method, and out of 150 respondents, we received 134 responses from the respondents. The purpose of the study is to identify the facts and figures that influence the e-commerce and AI impacts on digital marketing through simple percentage analysis. Further to identify the relationship between the usage of AI digital marketing tools and online e-commerce business sales correlation and simple linear regression Analysis of variance methods deployed and appropriate interpretation have been used to reveal the insights. There is a very strong direct relationship between the usage of AI digital marketing tools and boosting online e-commerce business sales. It means that when you increase the usage of AI digital marketing tools by 1, the value of boosting online e-commerce business sales increases by 1.0113. The scope for future research on this topic may be exploring the difference of AI digital marketing impacts in various countries to fine-tune how it differs according to the country's citizens' mindset.

Key Words: Digital Marketing, Artificial Intelligence, E-Commerce, Sales, Impacts.

1. INTRODUCTION

In today's busy world, almost every person uses their smart phones and digital payment systems, which enables businesses to transform into digital modes. It allows digital marketing and is further geared up with the adaptation of artificial intelligence. Another study's goal is to use Hofstede's multicultural framework and Hall's cultural categories to examine how national culture affects the spread of business-to-consumer (B2C) e-commerce. The study's findings indicate that cultures with a high contextual and polychronic background are better suited for the uptake and spread of online retailing. Evidence of the substantial positive impact of uncertainty avoidance on B2C e-commerce adoption is an unexpected conclusion. Additionally, the study examines one of the only extensive empirical studies that aim to demonstrate the significance of comprehending cultural impacts on customers' international online buying behaviour (Gong, W., 2009). An agent-based e-commerce system that suggests products to customers based on their interests was examined in a different article. First, the buyer's preferences are gathered by the agent using imprecise or linguistically defined phrases, and then the agent offers an ordered set of products to the consumer. The seller's agent contacts the buyer's agent after getting feedback from the buyers when they see the products. Then, the seller's representative updates the products' preferred order and suggests either a new set of similar products or the same set of products in the revised order. The customer's updated preferences are considered here as a response to their interaction with the actual products (offered products). Here, fuzzy logic and fuzzy linear programming concepts are utilized to determine the buyer's input (Mohanty, B. K., & Passi, K., 2010).Another study looks at the development of e-commerce in China and India, with the variables that promote and hinder its expansion noted. Comparing the two nations' Internet development shows that, despite China's much later Internet connection than India's, it is currently far ahead of its Asian rival thanks to the execution of several brilliant "Golden Projects" and the quick development of Chinese Internet infrastructure. However, other common sociocultural elements have an equal impact on e-commerce's growth. E-commerce appears to have a promising future in both countries, despite numerous obstacles (Bansal, R., 2011). Some information about the use of Internet advertising by Iranian small and medium-sized businesses may be found in another study. Studying the different aspects influencing this field of marketing is essential given the current negative trends that are causing small firms to lack a competitive advantage and the benefits of online advertising. Examined were seven latent variables related to the adoption of internet advertising: user kinds, e-commerce development, government role, small and medium-sized businesses, internet publishers, and advertising agencies. The preparedness and globalization stages that these theories incorporate help to explain the uptake of online advertising, according to the report. The adoption of Internet advertising was shown to be most significantly explained by small and medium-sized firms (Hanafizadeh, P., Behboudi, M., Ahadi, F., & Ghaderi Varkani, F., 2012). The phrase "mobile commerce" refers to a variety of activities including mobile banking, mobile coupons, mobile ticketing, and mobile product and service purchases. Given the widespread use of mobile devices and the evolving lifestyles of Indians, it holds immense promise. Examining the elements impacting the intention to adopt mobile commerce is the goal of a different article. Technology adoption preparedness to utilize mobile commerce is found to be significantly

influenced by perceived usefulness, perceived simplicity of use, and social influence; facilitating conditions were not found to be much impacted. The findings also show that behavioural intention is highly correlated negatively with perceived credibility risk, as measured by security and privacy risks. This suggests that security and privacy concerns play a significant role in discouraging customers from utilizing mobile commerce. Through an understanding of the variables influencing consumers' attitudes towards mobile commerce and the connections among them, banks, retailers, and mobile service providers may design their marketing campaigns to encourage consumers to take advantage of this new offering. This will therefore have an impact on behavioural intentions, which will then transform into real use of this new technology (Thakur, R., & Srivastava, M., 2013).

2. LITERATURE REVIEW

The tales of Kirana stores are currently relegated to legend as the Indian subcontinent has seen the rise of digital retail. An abundance of e-retail platforms has emerged to take advantage of this expansion. An additional study aims to comprehend the dynamics of the key elements that buyers consider when selecting any of these online retailers and pinpoints the key element that facilitates the connection between customers and these portals. The top 5 e-retail portals have been chosen in order to achieve this goal, taking into account many factors about a website's traffic and significance. Flipkart, Ebay, SnapDeal, Jabong, and Myntra are these websites. These websites have since been assessed using the SERVQUAL dimensions that were expanded upon (Kalelkar, G. R., Kumbhare, G., Mehta, V., & Kar, A. K., 2014).

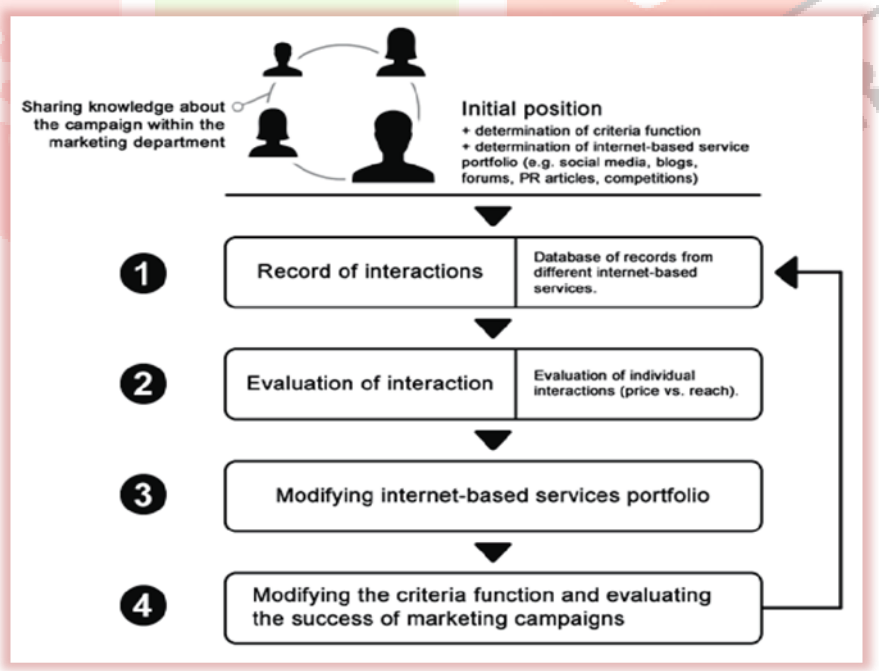

Figure 1. Digital Marketing Strategies

Source: Smutny, Z., & Vojir, S. et al. (2015)

It is quite challenging to manage a business's marketing efforts in an Internet environment effectively. The primary causes of this are the intricacy of the surrounding environment and the interplay between artificial and human actors in internet-based services. Another article offers a methodological model that would help with managing marketing efforts in the online service environment while accounting for these concerns and the Internet's current socioeconomic effects. The application displays interactions as well-organized mind maps. Additionally, it offers the possibility of continuously evaluating campaigns using time differences and suggested concepts like free alternatives to more costly methods based on big data or data mining (Smutny, Z., & Vojir, S., 2015). To evaluate people's opinions, sentiment analysis, also known as opinion mining, is one of the most researched areas of research at the moment. E-commerce websites provide consumers the opportunity to express their thoughts about a product or service by combining numerical ratings with written evaluations. Future customer purchase decisions are significantly influenced by these opinions. An inventive computational intelligence methodology for accurately forecasting customer review ratings is presented in a different study. Based on the traditional artificial neural network, fuzzy C-means, and support vector machine techniques, other state-of-the-art rating predictors provide lower prediction performance than the suggested methodology, according to the experiment results. Furthermore, the suggested structure may be used for alternative classification and prediction assignments, and its neuro-fuzzy predictor module can be substituted with alternative classifiers (Briones, A. G., Chamoso, P., & Barriuso, A., 2016).

The proliferation of e-commerce has made it possible for the notion to become commonplace. To ensure that their offers and consumers' demands are perfectly aligned, businesses still lack sufficient understanding of their clientele and the best practices to use. E-commerce and business intelligence should be combined to solve this issue, as doing so would make it possible to learn more about the users of e-commerce platforms, analyze their behaviour, identify patterns in their purchases, enhance customer relationship management, improve stock management, assist in the creation of marketing campaigns, and improve financial performance, among other benefits. An architecture to integrate e-commerce with business intelligence is proposed in a different study that also reviews the literature and makes recommendations for future research areas (Ferreira, T., Pedrosa, I., & Bernardino, J., 2017).

To prevent payment default, there is an increasing amount of risk management due to the growing quantity of e-commerce purchases. A client is in default when they don't pay a bill within ninety days after receiving it. Credit scoring (CS) is often used to determine the likelihood that a customer will default. CS has been extensively researched, and several computational techniques have been put forth. The main goal of other work is to create a CS model that will take the position of Risk Solution Services' (RSS) pre-risk check, which is one of the most popular methods for estimating consumers' default chance in e-commerce risk management. The pre-risk assessment incorporates a general CS model, exclusion rules, and data from the order process (Vanneschi, L., Horn, D. M., Castelli, M., & Popovič, A., 2018).

The purpose of another research is to determine how artificial intelligence has affected the growth of e-commerce and how it has affected both the domestic and international markets. E-commerce firms are now more competitive than ever before, not just in terms of what they create but also in terms of attracting and keeping customers. The number of brands, consumers, and other things has increased dramatically; therefore, the e-commerce players are in fierce competition to win the tournament. Revenue forecasting is one extremely important application of AI. Businesses need to be reachable by customers at all hours of the morning as we still live in a profit-driven, global society where transactions happen 24/7 (Girdher, S., 2019).

The emergence and integration of technology in enterprises have transformed operations throughout several sectors. Notably, significant technological advancements in e-commerce are intended to sway consumer behaviour in favour of particular businesses and items. The use of artificial intelligence (AI) as a cutting-edge instrument for personalizing and tailoring products to satisfy particular needs is welcomed. Another study discovers that although AI systems have aided e-commerce, there is disagreement about whether or not they are morally sound, particularly when it comes to the explainability idea. Word cloud analysis, voyance analysis, and concordance analysis were used in a study to fully grasp the concept of explainability as it has been applied by scholars in the domain of artificial intelligence (Khrais, L. T., 2020).

Over the past ten years, there has been a significant increase in the use of AI in the e-commerce sector. Artificial intelligence (AI) is being used by the e-commerce sector to handle a sizable database of progressive customers, engage with them via chatbots, and assist in the search, sorting, and discovery of a pertinent product. Large-scale data collection, processing, and inference are made feasible by AI, and the results are more accurate and efficient. AI is being used by e-commerce rivals to develop customer-centric search, retarget prospective buyers, enhance consumer recommendations, streamline sales, address bogus reviews, and other features. An additional article clarifies the application of AI in the e-commerce sector and its effects on e-commerce websites (Srivastava, A., 2021).

With more personalized content, AI in web development will completely transform the user experience. The learning machine will put its improved Web app experience into practice. According to research, AI computers will replace human labour. Artificial intelligence (AI) refers to smart computers that can do manual activities like dynamic pricing, effective delivery, virtual agents, and many more in the future. AI was successfully implemented early on by businesses like Amazon and Netflix. Demand for artificial intelligence is significant in the online services sector, particularly in the e-commerce sector. To satisfy the expectations of the modern industry, e-commerce companies are conducting extensive research on enhancing their artificial intelligence tools. Businesses that use AI to develop their web applications have been found to get more benefits (Thandekkattu, S. G., & Kalaiarasi, M., 2022).

The traditional accounting method is no longer applicable to the customized development of the e-commerce industry due to the advancement of artificial intelligence technology in various fields. As a result, it is crucial to enhance the accounting method and create a customized recommendation model for e-commerce. According to research, the recommendation model suggested performs better in forecasting consumers' particular preferences than both the standard recommendation model and the recommendation model under a collaborative filtering algorithm. The anticipated value of the recommendation model is also closer to the actual scenario. In conclusion, the personalized recommendation model for e-commerce and the accounting approach suggested in that study both have the potential to provide superior application outcomes, offering a fresh concept for the growth of the e-commerce sector (Cao, P., 2023).

In the present day, artificial intelligence (AI) is becoming increasingly important. Although the idea is not novel in and of itself, ongoing developments in AI are greatly expanding its potential. These clever systems streamline human labour, increasing productivity and reducing the effort and time spent on it. Another article examines the possibilities of AI technology and gives an outline of the present stage of e-commerce development. With an emphasis on topics like AI assistants (chat bots), intelligent logistics, recommendation engines, warehouse automation, visual search, and optimal pricing, it examines how AI is used in e-commerce. The study explores these areas in order to demonstrate how AI is revolutionizing e-commerce operations (Haidar, I., 2024).

3. RESEARCH GAPS

It is visible that the earlier study studied digital marketing from 2009 to 2024; however, adopting the AI digital marketing tools helped to increase e-commerce and boost the sales employing how and the magnitude of its impacts has been analyzed through a very small number of studies. To sensitize and bridge the gap, this study has been carried out in a detailed manner.

4. OBJECTIVES OF THE STUDY

i) To identify the facts and figures that influence e-commerce and AI impacts on digital marketing.
ii) To identify the relationship between the usage of AI digital marketing tools and online e-commerce business sales.

5. RESEARCH METHODOLOGY

A pilot study was carried out in Tamil Nadu, India. A structured questionnaire has been prepared after analyzing the gaps in the earlier studies. 150 respondents were selected through the random sampling method, and out of 150 respondents, we received 134 responses from the respondents. The purpose of the study is to identify the facts and figures that influence the e-commerce and AI impacts on digital marketing through simple percentage analysis. Further to identify the relationship between the usage of AI digital marketing tools and online e-commerce business sales correlation and simple linear

regression Analysis of variance methods deployed and appropriate interpretation has been used to reveal the insights.

6. RESULTS SUMMARY

6.1 PERCENTAGE AND INSIDE-OUT ANALYSIS

Table 1 indicates the demographic profile of the respondents and Table 2 indicates their opinions along with facts and figures through simple percentage analysis.

Table 1. Demographic Profile of Respondents

Gender Profile	**Respondent (N = 134)**	**Percentage**
Male	80	59.7%
Female	54	40.3%
Total	**134**	**100.0%**
Business Profile	**Respondent (N = 134)**	**Percentage**
Retail shop owners	17	12.7%
Supermarket employees	26	19.4%
Sales representatives	27	20.1%
Delivery staff's	19	14.2%
Consumers	28	20.9%
Merchants using online apps	7	5.2%
Packaging staff's	10	7.5%
Total	**134**	**100.0%**
Educational experience	**Respondent (N = 134)**	**Percentage**
Business management / Diploma	61	45.5%
Basic Degree	46	34.3%
Uneducated	8	6.0%
Secondary School Level	19	14.2%
Total	**134**	**100.0%**
Age	**Respondent (N = 134)**	**Percentage**
18-24 years	61	45.5%
25-34 years	46	34.3%
35-60 years	8	6.0%
Above 60 years	19	14.2%
Total	**134**	**100.0%**

Table 2. Facts & Figures

PURPOSE OF USING E-COMMERCE	Respondent (N = 134)	Percentage
For saving time	43	32.1%
Discount and comparatively low price	21	15.7%
Ease selection of products from home	27	20.1%
Tracking the expenses along with Accounts	13	9.7%
Home delivery and support	10	7.5%
Collection of product variety	7	5.2%
Opting to options / choice of selections	13	9.7%
Total	**134**	**100.0%**
INVESTMENT FREQUENCY	**Respondent (N = 134)**	**Percentage**
Monthly	12	9.0%
Quarterly	82	61.2%
Yearly	16	11.9%
Occasionally	24	17.9%
Total	**134**	**100.0%**
SPENDING MAGNITUDE IN E-COMMERCE	**Respondent (N = 134)**	**Percentage**
INR 5000 to INR 10000	79	59.0%
INR 10000 to INR 25000	26	19.4%
INR 25000 to INR 50000	19	14.2%
INR 50000 to INR 100000	10	7.5%
Total	**134**	**100.0%**
AI IMPACTS IN DIGITAL MARKETING	**Respondent (N = 134)**	**Percentage**
Content Generator for advertisement	20	14.9%
Collecting customer info using forms	38	28.4%
Chat bot to guide the customer	26	19.4%
Sending automated mails / messages to the customers	38	28.4%
Sensitize the customer expectations to set demands	12	9.0%
Total	**134**	**100.0%**

6.2 REGRESSION ANOVA ANALYSIS AND INTERPRETATION

Regression line equation $\hat{Y} = 0.009779 + 1.0113X$, Usage of AI digital marketing tools predicted Boosting online e-commerce business sales, $R2 = .99$, $F(1,132) = 8824.06$, $p < .001$., $\beta = 1.01$, $p < .001$, $\alpha = 0.0098$, $p = .881$. Table 3 indicates the regression ANOVA results.

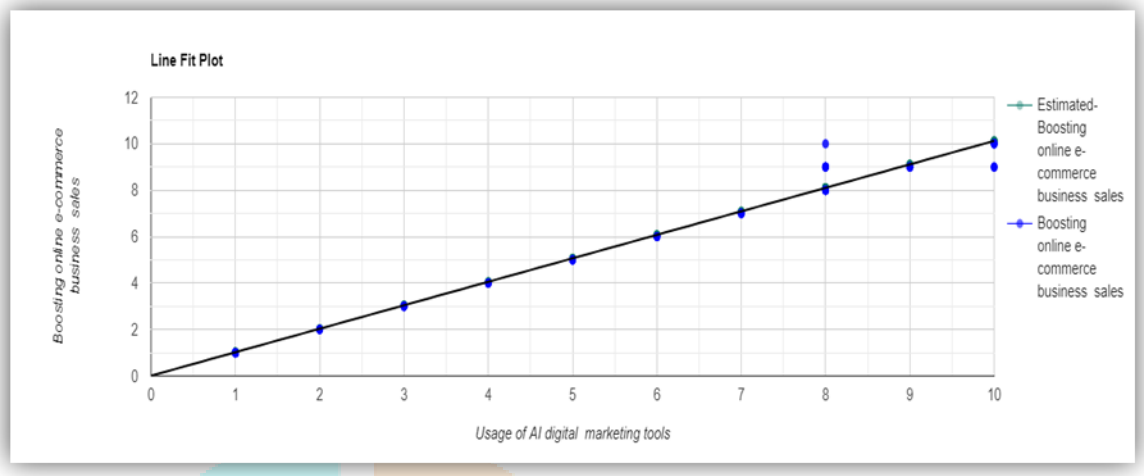

Figure 2. Regression Line Fit Plot

Boosting online e-commerce business sales and Usage of AI digital marketing tools relationship: R-Squared (R2) equals 0.9853. This means that 98.5% of the variability of Boosting online e-commerce business sales is explained by the Usage of AI digital marketing tools. Correlation (R) equals 0.9926. This means that there is a very strong direct relationship between Usage of AI digital marketing tools and Boosting online e-commerce business sales. The Standard deviation of the residuals (SRES) equals 0.4102. The slope: b_1=1.0113 CI[0.9832, 1.0395] means that when you increase Usage of AI digital marketing tools by 1, the value of Boosting online e-commerce business sales increases by 1.0113. The y-intercept: b_0=0.009779 CI[-0.1601, 0.1796] means that when the Usage of AI digital marketing tools equals 0, the prediction of Boosting online e-commerce business sales's value is 0.009779. The x-intercept equals -0.009669. Figure 2 shows Regression Line fit plot

Table 3. ANOVA RESULTS

Source	DF	Sum of Square	Mean Square	F Statistic (df_1, df_2)	P-Value
Regression (between $\hat{y}_i$ and $\bar{y}$)	1	1484.6345	1484.6345	8824.0553 (1,132)	0
Residual (between y_i and $\hat{y}_i$)	132	22.2088	0.1682		
Total (between y_i and $\bar{y}$)	133	1506.8433	11.3296	--	--

** at 1% significance level

Goodness of fit: Overall regression: right-tailed, F(1,132) = 8824.0553, p-value = 0. Since p-value < α (0.01), we reject H0. The linear regression model, Y = b0+ b1X + ε, provides a better fit than the model without the independent variable resulting in Y = b0 + ε. The slope (b_1): two-tailed, T(132)=93.9364, p-value = 0. For one predictor it is the same as the p-value for the overall model. The y-intercept (b_0): two-tailed, T(132) = 0.1505, p-value = 0.8806. Hence, b_0 is not significantly different from zero. It is still most likely recommended not to force b_0 to be zero. Figure 3 shows the Prediction interval plot.

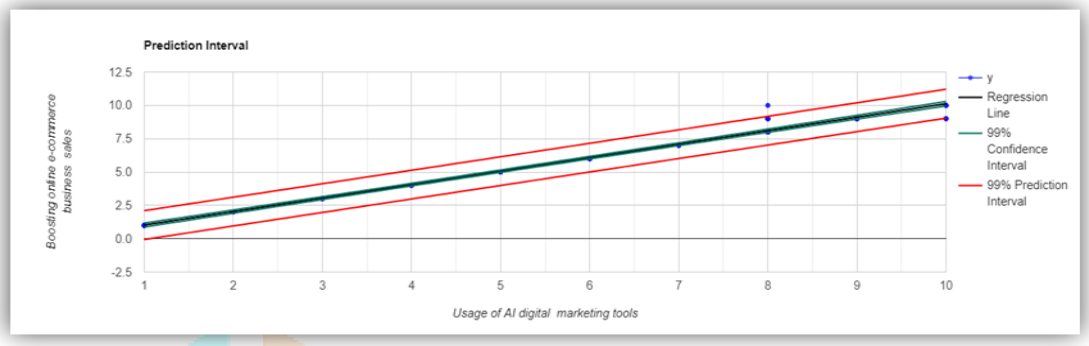

Figure 3. Prediction interval plot

Residual normality: The linear regression model assumes normality for residual errors. The Shapiro-Wilk p-value equals 0. It is assumed that the data is not normally distributed, but since the sample size is large, it should not adversely affect the regression model. Outliers: Outliers may affect the regression line. Figure 4 Indicates Residual plot and normality.

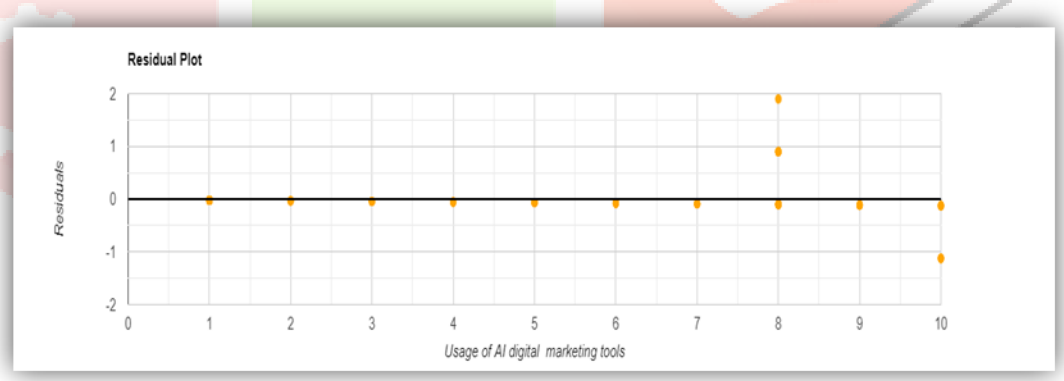

Figure 4. Residual Plot

7. DISCUSSION

Another research aims to investigate the diverse applications of artificial intelligence (AI) for digital advertising companies and social media experts. The objective is to achieve a higher level of specialization while preserving teamwork and innovation, ultimately leading to increased return on investment. Some digital marketers are still unaware of the potential benefits of applying AI, while others are just unsure of how to go about doing so. Globally, AI is now causing a huge upheaval in social media and digital marketing (Nair, K., & Gupta, R., 2021).

The United States has experienced notable advancements in the integration of artificial intelligence (AI) in the e-commerce industry, which have in turn influenced worldwide trends and practices. Another study investigates the most current developments and their wider effects on the state of e-commerce. Artificial intelligence (AI) technologies are becoming essential for improving consumer experiences and streamlining operations in e-commerce platforms in the United States. User purchasing experiences are becoming more customized as a result of the growing usage of machine learning algorithms for personalized suggestions. Natural language processing (NLP) applications streamline customer care procedures and allow for better customer interactions through chatbots and virtual assistants. Moreover, demand forecasting and inventory management have been transformed by AI-driven predictive analytics, enabling e-commerce companies to minimize out-of-stock scenarios, cut expenses, and optimize stock levels (Odeyemi, O., Elufioye, O. A., Mhlongo, N. Z., & Ifesinachi, A., 2024).

This data-driven strategy improves supply chain resilience and sustainability while also increasing operational efficiency. AI's impact in the USA has gone beyond national borders to affect international e-commerce practices. In order to stay competitive in the global market, other countries are looking to follow similar techniques as American e-commerce companies employ cutting-edge AI technology. AI is being adopted more widely in developing e-commerce areas, where technology innovation is critical to outpacing established retail strategies. Notwithstanding these developments, issues like data privacy worries and moral questions about AI systems still exist. Maintaining steady growth and public confidence in e-commerce platforms requires finding a compromise between innovation and ethical AI use (Ilugbusi., 2020).Research also looks for e-commerce solutions that can optimize marketing strategies. The relevant corpus of knowledge has identified managerial and marketing procedures that are amenable to artificial intelligence optimization. It draws attention to the administrative tools that are employed to market things online as well as the business procedures that they want to use artificial intelligence to improve (Micu, A., Micu, A. E., Geru, M., Căpățînă, A., & Muntean, M. C., 2021).

Figure 5. AI Digital Marketing Applications

Source: Guerra, M.J., Silva, F.O. et al. (2022)

The advancement of civilization has been significantly impacted by digital communication. Investing in multimedia to create original content has become essential for business promotion. The development of multimedia content for social media platforms, the presence of a website, and the distribution of information in digital format are all necessary criteria to support a company's goals, mission, and the goods and services it plans to offer to its present and future clients. A digital marketing strategy's definition is essential to increasing the company's visibility and fortifying its bonds with its target market. Another paper's primary goal is to introduce "Alpha" (assumed name), a Portuguese technological firm that specializes in Internet-related services and goods and its digital marketing approach. An investigation was carried out to comprehend and pinpoint the practices, protocols, and resources that businesses employ to market their offerings. Results from both the in-depth interview and the questionnaire showed that most participating organizations had created a digital marketing plan. Additional research supports the notion that a company's performance may be enhanced by combining digital marketing-based market analysis with multimedia content creation (Guerra, M.J., Silva, F.O., 2022).

By streamlining the e-commerce supply chain model's distribution path, another study seeks to increase the effectiveness of logistics distribution in the context of global trade (SCM). The goal of the experiment is to compare the business-to-consumer (B2C) e-commerce business model with the consumer-to-consumer (C2C) business model to better understand sustainable supply chain management. Consequently, the supply chain's logistics distribution efficiency increases with the load of a single vehicle in the logistics management system. The research findings have real-world implications for enhancing logistics distribution efficiency in the contemporary e-commerce environment and advancing the digital and electronic growth of international trade logistics. (Qi, B., Shen, Y., & Xu, T., 2023).

The newest designing and interacting technology utilized to assist organizations in the competitive environment of electronic commerce (E-commerce) is called artificial intelligence (AI). Four main AI-enabled outcomes (thematic areas) were identified by a research study that also looked at the performance traits and relationships between important themes across three consecutive time zones: sentiment analysis, trust and personalized recommendation, optimization and decision support, and AI theories with allied technologies. These results are used to suggest future directions for study and their consequences. Additionally, it offers up-to-date information on how AI may help with the implementation of e-commerce operations and might be a useful resource for those who are new to the scientific community (He, X., & Liu, Y., 2024).

Artificial intelligence (AI) has evolved beyond its conventional automation role in the quickly changing digital world to become a key component in boosting the efficacy of digital marketing and stimulating innovation in management. A different study explores the complex ways that artificial intelligence (AI) affects digital marketing, emphasizing how it may personalize marketing campaigns, maximize customer engagement, and yield useful insights from data analytics. They examine how AI is incorporated into digital marketing ecosystems and provide examples of how it affects programmatic

advertising, predictive analytics, and customer journey mapping. The report also explores AI's potential to support managerial innovation by streamlining processes, facilitating decision-making, and promoting a continuous improvement culture. They show how artificial intelligence (AI) may boost the effectiveness and accuracy of digital marketing efforts while also acting as a spark for creative management techniques, giving businesses a competitive advantage in the digital era. To comprehend AI's revolutionary significance, the study applies the Resource-Based View (RBV), Innovation Diffusion Theory (IDT), and Technology Acceptance Model (TAM) to the junction of artificial intelligence (AI) and digital marketing and management. It looks at how AI technologies are embraced, applied, and strategically managed to boost the effectiveness of digital marketing and spur management innovation. It provides insights into how AI may change the competitive environment. According to the research, implementing AI in digital marketing and management improves output, boosts client happiness, and promotes long-term company success (Singh, P., & Kumar, A., 2024).

The majority of global consumers' daily behaviour patterns and forms of economic activity alter as a result of human activity becoming more digitalized. New items that are highly sought after by modern consumers and are integrated with the Internet are brought to the market as a result of the development of novel information technologies. An atmosphere of intense competition pushes businesses to find the best ways to grow while using cutting-edge strategies to secure prominent positions in the market and create a demand from consumers for their brands that can be justified financially. It takes the application of contemporary marketing techniques in a digital setting to complete the duties given. Achieving a high degree of loyalty among diverse user groups and ensuring long-term connections with the target audience are made possible by the optimization of various digital marketing tools. Using contemporary web analytics solutions enables the creation of data regarding a range of phenomena on the online assets of the business. Large collections of heterogeneous data may be gathered and processed with the help of machine learning algorithms owing to the advancements in server technology. Modern conditions have seen a broad usage of artificial intelligence due to the advancement of data processing technologies made possible by the use of numerous mathematical models and procedures (Buhas, V., Ponomarenko, I., Buhas, N., & Hulak, H., 2024).

8. CONCLUSION

Artificial intelligence (AI) and its effects on digital marketing strategy in modern corporate environments. With digital channels still dominating consumer interactions, marketers have never-before-seen chances to improve their plans and achieve more successful results with the incorporation of AI technology. To obtain a competitive edge in the digital arena, it also looks at the effects of AI-driven tactics on important performance metrics like customer engagement, conversion rates, and return on investment in today's dynamic marketplace. Digital marketing has several benefits over traditional marketing, including the ability to contact people at a lower cost. Digital marketing is essential to the expansion of businesses. Through more sophisticated search engines, chatbots, personalization, programmatic advertising, content creation and generation, web design, email marketing campaigns,

dynamic pricing, and customer behaviour prediction, among other means, artificial intelligence (AI) is also playing a significant role in marketing. By using artificial intelligence, organizations may better understand the demands of their consumers and increase sales and income (Kumari, P., 2024). This study identified that there is a strong relationship between AI digital marketing tools and business sales. Artificial intelligence Digital marketing tools help in different perspectives, mainly in content creation, digital advertisements, sending automated mails, and short message services to the concerned customers to intimate the special offers, and discount sales, and helps the business owners to sensitize the customer expectation to analyze the market demands. Further, it explores the stock requirement based on the selling patterns and provides insights to retail shops and merchants to decide their marketing strategies to increase their profits regularly. The scope for future research on this topic may be exploring the difference of AI digital marketing impacts in various countries to fine-tune how it differs according to the country's citizens' mindset.

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