Impact of AI-Driven Personalized Social Media Advertising on FMCGs Purchase Intention

Abisha Lalini V[1*], Dr.C.L. Jeba Melvin[2]

[1*]*Ph.D. Full Time Research Scholar, (Reg. No: 241131108003), Research Centre of Management Studies, Nesamony Memorial Christian College, Marthandam, Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli - 627 012, Tamil Nadu, India, Email: abiabishalalini@gmail.com*
[2]*Associate Professor, Department of Management Studies, Nesamony Memorial Christian College, Marthandam, Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli – 627 012, Tamil Nadu, India, Email: jebamelwyn@gmail.com*

Abstract
This study examines the impact of AI-driven personalized social media advertising on purchase intention toward fast-moving consumer goods (FMCG). With the increasing integration of artificial intelligence into digital marketing practices, personalized advertising has emerged as a strategic tool for influencing consumer behavior in highly competitive online environments. The research adopts a descriptive and analytical research design to explore how AI-enabled personalization affects consumers' perceptions of advertisement relevance, engagement, trust, brand awareness, and their subsequent intention to purchase FMCG products. Primary data were collected from 155 social media users through a structured questionnaire administered online. The collected data were analyzed using percentage analysis, descriptive statistics, and the Chi-square test to examine associations between key variables. The findings reveal that AI-driven personalized social media advertisements are perceived as highly relevant and engaging, significantly enhancing brand awareness and positively influencing purchase intention. The results further indicate a meaningful association between exposure to personalized advertisements and consumers' intention to purchase FMCG products, highlighting the behavioral impact of AI-enabled marketing strategies. The study also emphasizes the importance of ethical and transparent use of consumer data, as trust plays a crucial role in determining the effectiveness and sustainability of AI-driven advertising practices. From an entrepreneurial perspective, the findings suggest that AI-driven personalization offers a cost-effective and scalable marketing approach for FMCG firms and small and medium enterprises to optimize marketing resources and strengthen consumer relationships. Overall, the study contributes empirical insights into the role of AI-driven personalized social media advertising in shaping consumer purchase intention and supports its relevance for sustainable and responsible digital marketing practices.

Keywords: Artificial Intelligence; Personalized Advertising; Social Media Marketing; FMCG; Purchase Intention

1. INTRODUCTION

The fast innovation of artificial intelligence (AI) has radically changed the manner in which business develops, executes, and appraises marketing tactics, especially in internet-heavy-intensive settings. By processing large amounts of consumer data, identifying behavioural patterns and providing personalised content in real-time, AI is redefining how a company interacts with its consumer base (Davenport et al., 2020). Strategically, AI has now taken centre stage in the future of marketing, whereby it has integrated data analytics, automation, and decision intelligence as part of the fundamental business operations (Grewal et al., 2020). Over the past years, social media has grown to be among the most powerful platforms of AI-based marketing because of their interactivity and data-generating potential. In companies in fast-moving consumer goods (FMCG) markets, where advertising competition is intense, and consumers often shift their preferences, personalised social media advertising by AI is a compulsory instrument in impacting the purchase intention and maintaining the competitive edge.

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Digital advertising personalization can be defined as a marketing message that is customised according to the preferences of the consumer, their browsing history and other contextual information. Personalization by AI will enable marketers to dynamically adjust the content of their advertisements, the time and method of delivery, and make their messages more relevant and less information-heavy (Kumar et al., 2021). It is believed that through personalization, consumer engagement is enhanced, as the brand communication correlates with the instant needs and expectations of the consumers and results in more positive behavioural reactions. These are reinforced in social media settings through algorithmic learning processes that keep adapting the content through the interaction of the users. These features are especially applicable to the FMCG market, where a purchase decision may be habitual

and guided by subtle digital indicators instead of being based on massive information processing.

Within the lens of entrepreneurship and innovation, AI-based personalised advertising can be viewed as a strategic possibility of companies, particularly SMEs, to compete successfully in a highly saturated market. Online platforms make the barrier to entry lower because advanced AI-based advertising tools are available and can be used by large corporations only in the past (Nambisan et al., 2019). Personalization made with the assistance of AI allows the entrepreneurial companies to address the targeted consumer categories more precisely, optimise marketing investments, and enhance customer relationships. AI-enabled marketing innovation is especially relevant to supporting inclusive growth and market access in emerging Asian economies, where the digital adoption rate is picking up, and the entrepreneurial ecosystems are in the process of growing.

The FMCG industry is one of the most appropriate areas where the impact of the AI-powered one-on-one social media advertising can be studied. Because of the low involvement, short-cycle buying processes, and intense brand rivalry, FMCG products are low involvement, and consumer attention is a limited resource (Grewal et al., 2020). Social media platforms have also been adopted as a part of the marketing strategies of the FMCG as they allow constant interaction between the brand and the consumer and speedy spread of promotional information. Research suggests that individualised online advertising has the potential to affect impulse purchase and repeat purchase patterns in a strong manner because of the perceived convenience and value. In addition, immersive and technology-based experiences, including augmented and AI-powered interfaces, have demonstrated the ability to improve consumer perception and interaction in digital spaces, increasing the strategic effectiveness of digital marketing programmes (Hilken et al., 2017).

Although AI-driven personalization has significant performance advantages, there are also significant ethical and sustainability issues brought about. The growing importance of consumer data usage in personalization has raised the issue of privacy, transparency, and accountability of algorithms (Floridi et al., 2018). The consumer can interpret most personalised advertisements as invasive which can cause discomfort and opposition. The author of this article, Kaplan and Haenlein (2019), point out that AI marketing is not only effective depending on the level of technological sophistication, but the manner in which it is undertaken is also a point of concern. To keep the consumer trust and make AI-driven marketing an activity that contributes to long-term value generation and not immediate benefits, ethical AI practises, including transparent data use, informed consent, and fairness are crucial.

These are especially relevant in the Asian context, where digitalization is happening fast and is colliding with the dissimilar cultural norms, income inequality, and changing regulatory policies. The effectiveness of the social media advertising tactics may also be affected by consumer reaction to the AI-based personalization of the methodology depending on demographics and cultural groups. It is thus important that researchers study the effects of AI-enabled personalised social media advertising on FMCG purchase intention in this context and support sustainable and inclusive economic development by entrepreneurs, marketers, and policymakers.

Although the literature base on AI in marketing and social media advertisement continues to expand, little empirical research has been conducted on the specific topic of FMCG purchase intention, especially in emerging economies. The literature tends to focus on technological abilities or overall perceptions of personalization without much focus on the behavioural consequences (purchase intention). Researchworks combining strategic, entrepreneurial, and ethical viewpoints are also necessary in the analysis of the AI-mediated marketing practises. The gap points are crucial to fill in knowledge gaps in the field of intersection of entrepreneurship, innovation, and sustainability.

The current research addresses the abovementioned gaps by examining the effect of AI-based personalised social media advertising on the purchase intention of the FMCG. The research gives empirical information on the impact of AI-enabled personalization on purchase-related behaviour by investigating the relevance, engagement, and trust perceptions of consumers. The conclusions have a beneficial implication to the FMCG companies, SMEs and digital entrepreneurs aiming to implement AI-based advertising in a responsible and efficient manner.

2. METHODOLOGY
Research Design
The research design utilised in the study will be descriptive and analytical research design to investigate the effect of AI-based individualised social media advertisement on FMCG purchase intention. The design can be used in the analysis of consumer perceptions, attitudes, and behavioural intentions based on the sophisticated digital marketing technologies. The descriptive methodology will help to systematically profile the respondents and the exposure to AI-based advertising, whereas the analytical part will allow exploring the connexions between the significant variables. Considering the entrepreneurship and innovation, this design promotes the perception of how AI-based personalization serves as a strategic marketing instrument that helps to gain a

competitive edge and provides sustainable development in FMCG markets.

Population of the Study
The research sample will include social media users who saw advertisements of FMCGs on online platforms. The population is pertinent because of the growing dependence of the FMCG companies, small and medium-sized enterprises, and online entrepreneurs on the use of social media as a marketing communication tool. The use of AI-based personalised advertising has become one of the salient aspects of digital marketing campaigns, so social media users are a suitable sample to study purchase intention. The population will represent the modern consumer markets with digital interaction, data-oriented decision-making, and custom-made communication.

Sample Size and Sampling Technique
The convenience sampling method was used to select the sample including 155 respondents. This non-probability approach has been selected as it is feasible to reach the active social media users who see personalised advertisements regularly. Convenience sampling is a common way of sampling in digital marketing and consumer behaviour studies when the population to be targeted is very large, and when the population is scattered. The sample size is deemed sufficient to conduct descriptive and association-based statistical analysis and the respondents were selected with a wide range of demographic characteristics, which provides a wide outlook of consumer behaviour.

Data Collection Method
A structured questionnaire conducted online had been used to collect primary data. Data was collected online as the context of the research is digital and the social media platforms are used widely. The questionnaire was set in a way to get the exposure of the respondents to AI-based personalised social media advertisement and their perceptions regarding the relevance of the advertisement, consumer engagement, trust, and intention to purchase. The responses were measured on the Likert scale of five points which included strongly disagree, strongly agree, strongly disagree, strongly agree, and indifferent. The systematic format made clarity, consistency and reliance of responses clear. Before the questionnaire was distributed, it was checked to make sure that the content in the questionnaire was relevant and easy to comprehend.

Variables of the Study
The independent variable was AI-generated personalised social media advertising, whereas the dependent variable was the FMCG purchase intention. Personalization was investigated in terms of relevancy of the advertisement, consumer interest, and trust in AI-based advertisement. Intention to purchase is an indicator of how consumers are likely to purchase FMCG products upon exposure to personalised advertisement. These variables are core in grasping how AI-powered marketing practises will determine the consumer decision-making processes and will contribute to a sustainable entrepreneurial process.

Tools for Data Analysis
The obtained data were coded and processed with the help of the relevant statistical tools. The demographic characters and distributions of responses were summarised using percentages. To evaluate the perception of the respondents with regard to the key variables, descriptive statistics like mean and standard deviation were used. Moreover, the Chi-square test was used to identify the relationship between the exposure to AI-generated personalised advertisements and the purchase intention of the FMCG. This method allows the significant interpretation of the relationships amongst variables without applying the measures of variance techniques.

Ethical Considerations
Ethical principles during the study were adhered to. The responses were voluntary and all the respondents were made aware of the purpose of the research and confidentiality of the responses was guaranteed. There was no collection of any personal identifying information. The paper focuses on the responsible utilisation of consumer information, which is in line with ethical AI and sustainable digital marketing.

3. RESULTS
Demographic Profile of Respondents
The review of demographic factors of respondents offers crucial background to the analysis of the impact of the AI-based personalised social media advertising on the purchase intention of FMCG. Male and female respondents were used as a sample though the female respondents slightly outnumbered the males. This reasonably equal gender representation shows that the results are not too one-sided about one type of gender and can be deemed representative of a larger consumer group. The diversity in gender among the samples increases the generalizability of the findings, especially when it comes to the FMCG products, which are used by people of different gender groups. The respondents had age distribution indicating that a significant percentage were of the younger and early working-age. This observation can be considered important because younger consumers are more digital and more often exposed to social

media advertising. They are more susceptible to AI-oriented personalised content as they are more involved in the use of digital platforms. Simultaneously, the fact that the sampling of respondents includes representatives of older age groups, gives more insights and indicates that the power of AI-promoted advertising is not confined to younger consumers only. This age diversity shows the potential of AI-based personalization to reach consumers at various life stages and thus inclusive market strategies will be achieved, in terms of entrepreneurship and sustainability.

The level of education of the respondents shows that most of them had undergraduate and postgraduate degrees. The comparatively large educational level is also an indication that the respondents should be more familiar with digital technologies and data-driven advertising practises. Educated customers could also be more critical in their assurance to personalised advertisements, especially on the topics of relevance, credibility, and ethics. The given demographic trait contributes to the analysis since it will be able to make a more valuable judgement concerning consumer attitudes to the AI-based personalization in advertising.

The distribution of income among the respondents suggests that there are all the income categories which are represented and that there are also significant levels of middle-income brackets. This balanced form of income representation plays a crucial role in the FMCG scenario where affordability and value are considered factors when it comes to making purchases. The fact that the respondents represent lower, middle- and high-income groups indicates that AI-based personalised advertising can be applicable to diverse economic groups. In the case of FMCG companies and SMEs, this diversity will support the significance of advertising to suit the needs of consumers with varying purchasing power, thus promoting the sustainable and inclusive development. Table 1 demonstrates the demographic features of the respondents. The table 1 presents a description of the gender, age, educational level, and income distribution of the sample and it is a necessary background to understand consumer reactions to AI-based customised social media advertisements.

Table 1. Demographic Profile of the Respondents (N = 155)

Demographic Variable	Category	Frequency	Percentage (%)
Gender	Male	72	46.5
	Female	83	53.5
Age	Below 20 years	28	18.1
	21–30 years	64	41.3
	31–40 years	42	27.1
	Above 40 years	21	13.5
Educational Qualification	Undergraduate	46	29.7
	Postgraduate	71	45.8
	Others	38	24.5
Monthly Income	Below ₹20,000	49	31.6
	₹20,001–₹40,000	58	37.4
	Above ₹40,000	48	31.0

The demographic composition of the respondents in terms of gender and age is visually presented in Figure 1, with A depicting gender distribution and B illustrating age group distribution.
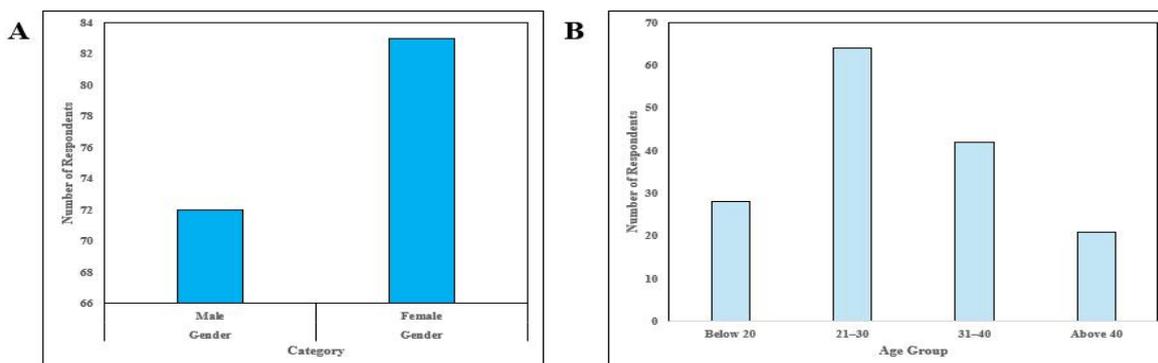

Figure 1. Demographic Profile of Respondents: (A) illustrates the gender distribution of the respondents, while (B) presents the age-wise distribution of the sample.

Descriptive Analysis of AI-Driven Personalized Advertising

Table 2 provides the summary of the descriptive statistics of the key variables used in association with the AI-based personalised social media advertising and FMCG purchase intention. The descriptive analysis was carried out to investigate the perception of the respondents concerning AI-driven personalised social media advertising in major dimensions, such as the advertisement relevance, the engagement of the consumer with it, the trust towards AI-based advertising, brand awareness, and perception of buying the product. It has been determined that AI-personalised advertisements are perceived as highly relevant by the respondents overall. The values of the mean score of the relevance of advertisements are high, which means that the participants believe that the content they view in the frame of the use of AI-based personalization is much closer to their interests, needs, and preferences. Such relevance is a crucial perception because it would increase the chances of consumers not ignoring or avoiding advertisements.

The level of consumer interaction with personalised advertisements was also relatively high, which was facilitated by artificial intelligence. The respondents indicated higher degrees of engagement with personally targeted content, including the increased attention to the advertisements, clicking the promotional messages, or a desire to learn more about advertised FMCG products. The higher involvement implies that AI-based personalization works well in consumer attraction in the online world where there is a lot of competition. This observation has important implications to entrepreneurial marketing in that the increased level of engagement may be converted into increased brand visibility and more effective consumer relationship, both of which are vital in ensuring the sustainability of the business in the long term.

Reliance on AI-based customised advertisement proved to be a quite moderate but subtle aspect. Although the respondents expressed their trust in the use of AI-based advertisements in general, the range in the answers shows that the trust is determined by other factors, which include transparency, data usage behaviour, and perceived ethical conduct of companies. This finding indicates that even though the use of AI as a method of personalization can increase advertising performance, it should be done with proper responsibility, not to compromise consumer confidence. Trust is also an important factor, in a sustainability and ethics perspective, to measure whether AI-driven marketing strategies will build brand credibility and customer loyalty in the long term.

The brand awareness related to AI-influenced individualised social media advertising was also determined to be high. The respondents believed that the personalised ads made it easier to recognise and remember the brands of the FMCGs. Brand awareness is especially a necessity in the FMCG industry where consumers have been introduced to a broad assortment of competing brands. The support of strategic differentiation seems to be seen through AI-motivated personalization, whereby individual consumers receive personalised messages that appeal to them. This is a positive result to both the already established FMCG companies and the new companies that are trying to consolidate their market.

One of the highest mean values of variables studied included purchase intention in respect to FMCG products. This observation points to the fact that the exposure to AI-based personalised advertisement in social media has a positive effect on the readiness to buy the FMCG products among consumers. The respondents indicated that they were more likely to think of buying and buy products on which personalised digital content was advertised. The high buy decision is an indicator of the synergistic influence of relevance, engagement, trust, and brand awareness created through AI-enhanced personalization. In entrepreneurial companies, this underscores the place of AI-driven advertising as a tool to create consumer demand and sustainability in revenue generation. Table 2 demonstrates that the mean values of all variables were relatively high, which is a factor that points to the positive attitude of consumers towards the idea of AI-driven personalised advertising.

Table 2. Descriptive Statistics of AI-Driven Personalized Advertising Variables

Variables	Mean	Standard Deviation
Relevance of AI-Personalized Advertisements	4.12	0.68
Consumer Engagement	4.05	0.71
Trust in AI-Based Advertising	3.94	0.76
Brand Awareness	4.08	0.69
FMCG Purchase Intention	4.18	0.65

Figure 2 represents the comparative mean score of AI-based personalised advertising variables in a visual form to present the respondents with a clear picture of the perception of key constructs. The number shows that the highest values of the mean were obtained in purchase intention and advertisement relevance, which could be attributed to positive customer reactions to AI-based

personalised social media advertising. Consumer engagement and brand awareness also have strong

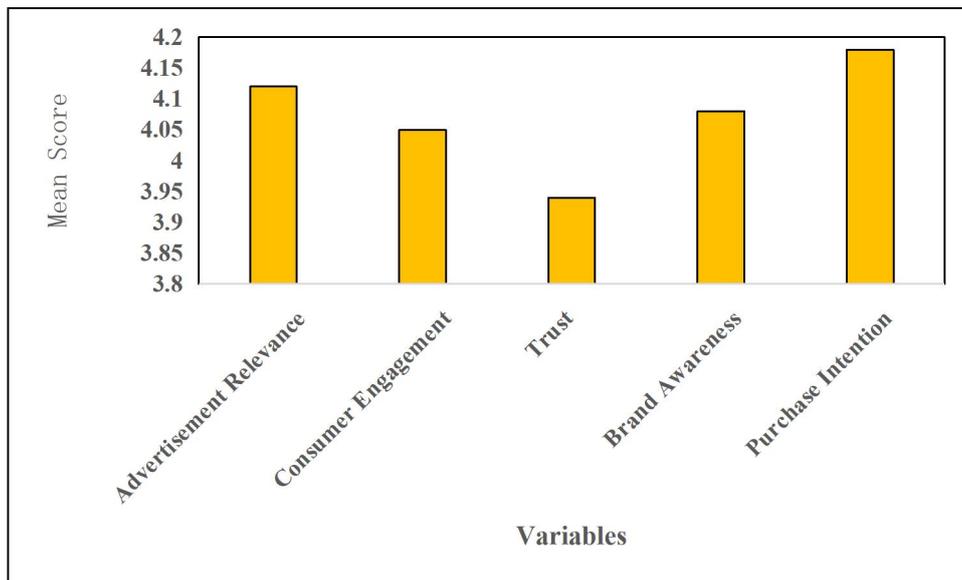mean scores, whereas the trust, though a little bit lower, is still perceived positively.

Figure 2. Mean Scores of AI-Driven Personalized Advertising Variables

Association Between AI-Driven Personalized Advertising and Purchase Intention

The Chi-square test was used to further analyse the connexion between AI-based personalised social media advertising and the FMCG purchase intention. The Chi-square statistics show that there is a statistically significant relationship between the exposure to the AI-driven personalised advertisements and the purchase intention of consumers. The presence of such a significant association is a proven fact that consumers with more exposure to AI-personalised advertising tend to have a stronger intention to purchase FMCG products.

Having such a substantial correlation indicates that AI-dependent personalization cannot be taken as an aesthetic or technological improvement but an important predictor of consumer purchasing activity. Customised advertisements are seen to affect consumers in terms of timely, relevant, and contextual messages that resonate with the needs of the consumers. The strategic importance of AI-enabled marketing in the context of competitive markets of FMCG companies, SMEs, and digital entrepreneurs is highlighted by this relationship.

The findings of the association also focus on the need to exercise responsible application of AI-driven advertising strategies. Although purchase intention may be increased depending on the increased exposure to personalised advertisements, the viability of such effects is subject to consumer trust and concerns about privacy invasion. To the entrepreneur, the findings suggest that more companies that invest in ethical and transparent AI practises will have a higher chance of success in consumer reaction and longevity of the business. The Chi-square test Results are shown in Table 3.

Table 3. Chi-Square Test Results: AI-Driven Personalized Advertising and FMCG Purchase Intention

Variables	χ^2 Value	Degrees of Freedom	Significance (p-value)	Result
Exposure to AI-Driven Personalized Ads vs Purchase Intention	14.62	4	0.006	Significant

The relationship between the exposure to AI-based individualised social media advertising and the buying intention of FMCGs is also shown in Figure 3. The figure indicates that respondents who are more exposed to personalised advertisements have a

stronger purchase intention than respondents who are less exposed to the advertisement. Such a visual form justifies the statistically significant relationship revealed in the chi-square test.
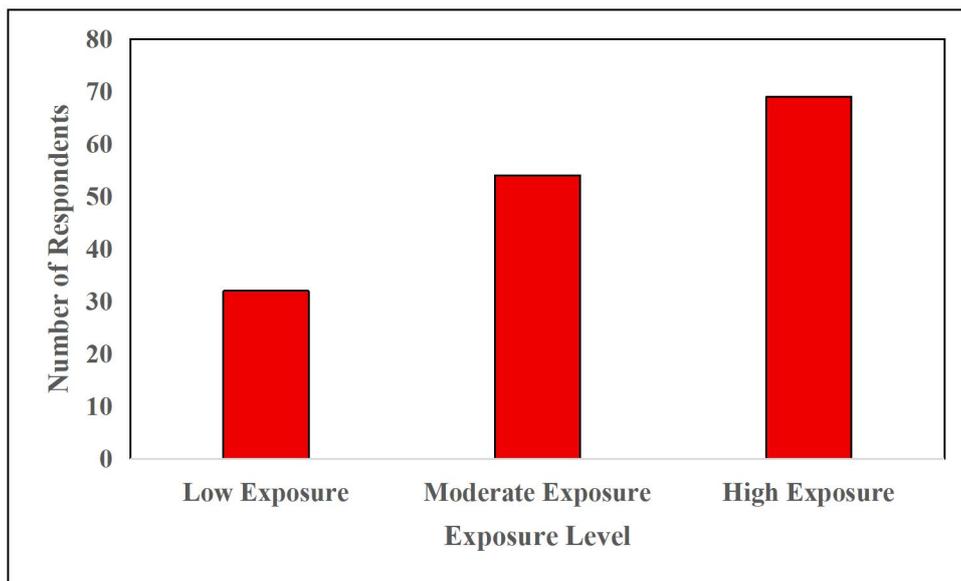
Figure 3. Exposure to AI-Driven Personalized Advertising and FMCG Purchase Intention

Interpretation of Consumer Behavioral Patterns

A general analysis of the findings shows that there are predictable trends in consumer behaviour as related to AI-based personalised social media advertising. The respondents were found to have a positive attitude towards personalised advertisements especially when the advertisements were seen to be applicable and useful. High engagement and high purchase intention turn out to be the indicators of the high performance of AI-based personalization, which helps to cover the gap between the marketing exposure and the real decision to buy.

The results also reveal that AI-oriented personalised advertising is not reduced by demographic diversity. Rather, personalization helps companies to meet heterogeneous consumer demands in a single online platform. This feature is particularly important in the case of the FMCG companies and SMEs that have scarce marketing resources. With the help of personalization through AI, entrepreneurial companies can maximize the efficiency of marketing and attract a wide range of consumers in a sustainable way.

Also, the findings indicate that AI-based customised advertisement helps in building relationships instead of a single transaction. Trust and involvement become the mediators between the advertising exposure and purchase intention, and it is important to note the relational nature of contemporary digital marketing. These relationship results are consistent with the sustainability-based business model in which the value creation is not based on short-term sales.

4. DISCUSSION

The study findings will have a solid empirical foundation in the increasing applicability of AI-based personalised social media advertising on the formation of FMCG purchase intention. The overall consumer reaction that was recorded in terms of relevance, engagement, trust, and purchase intent suggests that AI-based personalization is no longer a technological innovation, but rather a strategic asset in digital marketing. In earlier studies, personalization was proposed to increase the effectiveness of advertising since it makes marketing messages more relevant to the preferences of individual consumers, thus making marketing messages more useful and more attention-grabbing (Bleier & Eisenbeiss, 2015; Wedel &Kannan, 2016). In FMCG markets, where people often experience the messages of competing brands, AI-based personalization seems to act as a philtre mechanism, filtering messages and making decisions more efficient, which will contribute to enhanced purchasing intentions.

The positive interaction results, which were discovered during the study, can be compared to previous data, according to which interactive and personalised content of social media platforms promotes greater consumer engagement and brand attachment (Ashley &Tuten, 2015; Pansari&Kumar, 2017). Interaction is especially important in social media, where the visibility of the algorithm is affected by the interaction of the user. The personalization provided by AI not only heightens the chances of consumer engagement but also makes the engagement better by providing consumer-relevant content at the right time. This once again supports the argument that AI personalization is part of value co-creation between the company and its customers, a process that is becoming the central feature of sustainable and entrepreneurial marketing efforts (Vargo &Lusch, 2017).

Another key sensitive aspect in its findings was the emergence of trust. Although the respondents were in general confident about the AI-based advertisements, the discrepancy in trust rates implies that the effectiveness of personalization may depend on the ethical use of data. The current state of literature emphasises the fact that an overabundance or obscure personalization may provoke the sense of being monitored and invaded (Martin &Murphy, 2017; Aguirre et al., 2016). On the other hand, in the situation when consumers believe that brands use information in a responsible and open manner, personalised advertising may reinforce the trust and brand reputation (Lwin et al., 2007). The current results support the thesis that ethical AI implementation is critical to the creation of sustainable business operation instead of limited-term returns only.

The strong correlation between AI-based personalised advertising and FMCG purchase intention proves the behavioural effects of the customization of digital media. This can be explained by the findings of empirical research proving that the perceived relevance and usefulness of customised advertisements have a positive impact on the purchase intention and probability to make a purchase (Arora et al., 2020; Li, 2019). Being purchase decisions prone to habitual and time-constrained decision-making, AI-personalised cues might serve as decision facilitators, guiding consumers towards the brands that seem to be more familiar and aligned with their requirements. To entrepreneurs and SMEs, it implies that AI-based personalization could be a strategic leveller, as smaller companies can compete with bigger brands with a higher level of meaningful personalization, which is delivered to customers at scale (Huang & Rust, 2021).

Regarding sustainability and entrepreneurship, the results indicate that AI-based personalization can be used to facilitate the more effective allocation of marketing resources. Targeting consumers that are most responsive to the promotion facilitates firms to cut down on wasteful advertising and enhance the returns on investment, which is particularly significant in the case of SMEs that must act on limited resources (Ritter&Pedersen, 2020). But sustainability here is more than efficiency to the responsible innovation. The studies of sustainable digital transformation explain that value generation in the long term is based on the balance of technological progress and ethical responsibility and trust to stakeholders (Bocken et al., 2014). The findings of the study confirm this argument as they show that trust mediates the connexion between personalization and purchase intention, and governance mechanisms should be introduced around the use of AI.

There are also significant implications of the demographic diversity represented in the results. The efficiency of AI-based personalization in diverse age, education, and income groups suggests that these technologies can be utilised to enable an inclusive market presence in case of thoughtful application. According to the previous research, personalization can alleviate the problem of exclusion by customising content to a heterogeneous consumer base, although the electronic bias of the algorithm should be actively prevented (Edelman et al., 2017; Mehrabi et al., 2021). In the case of emerging markets in Asia, where digital does not take off uniformly, the idea of inclusive personalization can be used to target underserved groups, with the entrepreneurial company being fair and accessible to everyone.

Overall, the discussion shows that AI-based personalised social media advertising has a significant impact on the intention to purchase FMCGs based on the increased relevance, engagement, and trust. The results are beyond the available literature as they support the importance of ethical and strategic AI implementation in the field of entrepreneurial marketing. Instead of focusing on personalization as a performance-improving tool, companies ought to consider it as a relational capability, which is sustainable in the long term, provides a competitive advantage, and builds consumer trust. Through making AI-based marketing practises sustainable, responsible, and compliant with ethical principles, FMCG companies and online entrepreneurs can utilise personalization to not only control the purchase behaviour but also create robust and responsible business models in the more data-driven market.

5. CONCLUSION

The present study concludes that AI-driven personalized social media advertising plays a crucial role in shaping FMCG purchase intention by significantly enhancing advertisement relevance, consumer engagement, brand awareness, and trust. The findings indicate that personalization enabled through artificial intelligence goes beyond a mere technological enhancement and functions as a strategic marketing capability that strengthens effective consumer targeting and long-term relationship building in highly competitive FMCG markets. By delivering customized advertising content that aligns closely with individual consumer preferences and behavioral patterns, AI-driven personalization reduces information overload, improves message clarity, and increases the likelihood of favorable purchase decisions. The significant association between exposure to personalized social media advertisements and purchase intention highlights the strong behavioral influence of AI-enabled marketing strategies,

particularly in digital environments where consumer attention is fragmented and competition among brands is intense. From an entrepreneurial and sustainability-oriented perspective, the study emphasizes that AI-driven personalization serves as a cost-effective and scalable marketing approach that enables FMCG firms and small and medium enterprises to optimize marketing resources, strengthen customer engagement, and support sustainable business growth. At the same time, the results underline the importance of ethical and transparent use of consumer data, as trust emerges as a critical factor influencing both the effectiveness and long-term viability of AI-driven advertising practices. Responsible implementation of AI technologies is therefore essential for maintaining consumer confidence and fostering enduring brand relationships. Overall, the study offers valuable insights into how AI-driven personalized social media advertising can influence consumer behavior while supporting innovation, ethical responsibility, and sustainable value creation in the digital marketplace.

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