Determinants of Consumers' Attitudes Towards AI-Enabled Advertising Over Social Media in Indian Context: Applying and Extending the Technology Acceptance Model

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Abstract- The current research endeavours to explore the perspectives of social media users regarding the utilisation of Artificial Intelligence (AI) for advertising over social media platforms to cultivate a positive disposition towards advertising content showcased on these platforms. The study specifically focuses on the Indian context and employs the Technology Acceptance Model (TAM) as a framework for analysis. Additionally, this investigation introduces an extra construct, *"Perceived Trustworthiness"*, into the TAM framework and assesses its relevance. Data for this study were gathered from a sample size of 258 participants, including both undergraduate and postgraduate students, utilising a convenience sampling approach. Structural Equation Modeling, implemented through AMOS 21, was employed to analyse the collected data comprehensively. The results indicate that the TAM framework strongly supports the relationship between attitude towards social media usage, attitude towards AI-enabled social media advertising, and the consequential impact on purchase intention.

Furthermore, the study reveals that the incorporation of an additional construct, Perceived Trustworthiness, positively influences the attitude towards AI-enabled social media advertisements. In conclusion, the findings are discussed, and managerial implications are presented, providing valuable insights into the dynamics of AI-enabled social media advertising in the Indian context.

Keywords: Social Networking Sites, AI-enabled Social media Advertising, Perceived Trustworthiness, Technology Acceptance Model

 1. Introduction- Businesses and companies use advertising as a promotional tool to communicate with customers. Advertising is widely acknowledged as a prominent aspect of contemporary existence, omnipresent and pervasive in nature. Given the recent boom in digital platforms, many businesses and companies are increasingly viewing social media as a place to engage with suppliers, consumers, stakeholders, and potential employees. Social media platforms such as Facebook, Instagram, Twitter, LinkedIn and many others have been conceptualized as web 2.0 internet-based applications that are designed to create and exchange user-generated content (Kaplan & Haenlein, 2010). Social media refers to electronic communication channels that allow users to share and exchange information, ideas, photographs, and other content. It acts as a platform for people to form communities for the purpose of sharing and sending personal messages. Social media is an essential and well-recognized element in contemporary discourse, particularly among Millennials.

The conceptualization of advertising on social media involves internet-based promotions that bring together the connections chosen by users for display and sharing, as outlined by the Interactive Advertising Bureau (2009). The

essential elements of promotional content on social networking sites include customization, emphasis, and social interaction. Social media advertising prompts firms, organisations, and sponsors to recognise focal points as a form of segment information users provide on social media platforms.

As per Kaplan & Haenlein (Haenlein & Kaplan, 2019), Artificial Intelligence (henceforth AI) refers to a system's capability to accurately interpret data, comprehend patterns within the data, and utilise these patterns to accomplish predefined goals and tasks. The emergence of the first internet banner ad in the mid-1990s marked the initiation of digital advertising, evolving into a distinct field of academic research over the past two and a half decades. Research indicates three phases in the evolution of Digital Advertising: Interactive Advertising, followed by Programmatic Advertising, and presently, the ongoing third wave, Intelligent Advertising (Li, 2019). In its early years since 1994, Digital advertising was termed Interactive advertising due to its high level of consumer engagement, contrasting with Conventional advertising, which was predominantly one-way. Advertisers directed relevant ads to their target audience until the advent of social media platforms in the early 2000s. With the introduction of various social media platforms like Facebook (2004) and YouTube (2005), internet advertising experienced substantial growth in the first decade of the new millennium.

According to Hairong Li, AI-enabled advertising is "consumer-centered, data-driven, and algorithm-mediated brand communication" (Li, 2019). Discovering consumer insights from all possible digital touchpoints, automating the creation of advertisements, planning and buying media, and finally evaluating the impact on consumers are all part of publishing AI-induced advertisements. It takes advantage of the per-impression context and targets ads to specific people based entirely on data about them, increasing the effectiveness of displayed advertising.

The Technology Acceptance Model (TAM) is an important theoretical framework for understanding information technology use and acceptance behaviour. Davis proposed TAM in 1989, which is based on Ajzen's Theory of Reasoned Action (TRA), which outlines a well-established chain of beliefs, attitudes, intentions, and behaviour. TAM investigates the prediction of information technology adoption based on user acceptance and use of technologies.

TAM's primary goal is to identify the factors influencing people's behavioural intentions about adopting various media and computing technologies. TAM, like other extended models, aims to discover the basic characteristics that influence end-users' effective adoption of information and communication technology. The purpose of this article is to explore further the crucial variables that significantly influence attitudes and behavioural intentions about consumers' acceptance and utilisation of social media advertising. By examining these characteristics, the study hopes to improve our understanding of the complex interplay between users and technology, revealing light on the factors that influence people's decisions to utilise social media advertising. The insights produced from this extended TAM model have the potential to contribute significantly to the field by providing a detailed knowledge of the mechanisms that drive user acceptance and engagement with increased usage of AI-enabled advertisements over different social media platforms.

2. Literature Review and Development of Model

This is an empirical paper wherein *the Technology Acceptance Model (TAM) was used, and perceived trustworthiness was* adopted as a variable to study the relationship between the critical variables of acceptance towards AI-enabled social media advertising among end users. The relationship among these variables that affect the attitude towards AI-based social media ads and the behavioural intention of social media advertisements by end users provides our conceptual framework.

Davis (1989) proposed the TAM and explained why consumers accept or do not accept a particular technology while performing any task. There are two central beliefs in TAM:" Perceived "Usefulness (PU) and Perceived Ease of Usage (PEOU). The other two variables of TAM are *attitude* and *behavioural intention to use,* now commonly referred to as acceptance. Later, the Technology Acceptance model was extended after the inclusion of perceived attractiveness and perceived enjoyment, which affect attitude towards and thus the intention to use (Heijden, 2003). In the domain of web-based advertisements, TAM was also extended by several other research studies. Prior examination work rotating the matter of social media user acceptance and adoption of the web-based networks has effectively used the technology acceptance model and demonstrated the robustness of the model in predicting social media users' intention of adopting a web-based technology, i.e. social network sites (Lorenzo-Romero et al., 2011; Pinho & Soares, 2011). Findings show

that web-based media users find these social media platforms simple to utilize, adaptable to associate with and henceforth get themselves skillful at utilizing the web-based platforms. A similar study further inferred that web-based media users find this networking channel fun to utilise and subsequently appreciate operating them. Likewise, the TAM factors- PEOU and PU positively affect attitudes towards utilizing web-based media. The positive attitude towards web-based media thus formed and subsequently impacts the behavioural intention to utilize social networking sites. Despite being a widely used and widely acknowledged model for predicting information technology adoption, the technology acceptance model is not without flaws. It has also been reprimanded for including only the impression of ease and handiness as factors driving the use of information technology, ignoring other related variables impacting the use of information technology (Lai and Zainal, 2015; Lee and Jun, 2007; Laurn and Lin, 2005). Because of its impediments in explanatory power (R2), several studies, namely Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003), TAM2 (Venkatesh and Davis, 2000) and TAM3 (Venkatesh and Bala, 2008), have suggested and investigated numerous expansions of TAM. The intervening role" of attitude was absent in all extensions of the TAM model, unlike the original TAM model. Consequently, this constitutes a direct limitation.

Be it as it may, as the current study was designed to understand the impact of the attitude of social media consumers towards web-based media use on attitude creation towards web-based media particularly AI based social media ads, important insights were derived from the first TAM model. Social networking sites or web-based media sites give an incredible stage to the web-based marketers for promoting their items and administrations in different structures such as brand fan page, banner ad, video ads and so forth; through the usage of many free and paid tools and platforms. Brand fan pages in the social networking sites are sufficiently adaptable to help different kinds of media such as videos, pictures, animations etc. (Ashley and Tuten, 2015; Kim et al., 2015). Various researches have explored the different dimension of marketing ability of these social networking sites in digital platform (Stilinski and Dabrowsky, 2015; Smith et al., 2012; De Vries et al., 2012; Hutter et al., 2013). The extant literature additionally has significant numbers of different experiments that have circulated around the effect of multiple variables on the attitude of customers towards online ads (Wang et al., 2002; Tsang et al., 2004). Taking the various inputs from extant literature, a few investigations have likewise been led to contemplate about web-based media users' and, even more explicitly, social networking sites users' attitudes towards AI-enabled advertising displayed over these sites (Jung et al., 2015; Taylor et al., 2011; Akar and Topcu, 2011,Chen et al., 2019; Coffin, 2022; Wu & Wen, 2021). (Taylor et al., 2011)demonstrated several negative and positive characteristics of advertising such as peer influence, entertainment, structure time, self-brand congruity, information, invasiveness and privacy concerns, quality of time as the predictors of making favourable attitude towards advertising contents displayed on social media. Advertising on social media platform exists in different form. Jung et al. (2015) focused their analysis on variables influencing attitude and behavioural intentions against three forms of ads on Facebook – social impression advertising, home page advertising, organic impression advertising. On the different point of view, the effect of "consumer attitude towards website" on "attitude towards advertisement displayed on site" has also been explored in previous research. Bruner and Kumar (2000) suggested that there is positive influence of attitude towards website on attitude towards advertisement displayed on site. The same result from the Stevenson et al. (2000) related to web-based advertisement has been found. Earlier investigation about media setting and its effect on commercial viability regarding magazine advertisement uncovered that an individual's involvement in a specific magazine can influence his response to advertisement displayed in the same magazine platform (Malthouse et al., 2007). In earlier research, the link between the attitudes towards advertisement in general and across numerous web-based media channels to shape a positive attitude towards social media advertising and the desire to buy has been widely examined. Lutz (1985) conceptualized attitudes as "a learned predisposition to respond in a consistently favourable or unfavourable manner to advertising in general." Regarding web media advertising, Mahmoud (2015) depicted attitude as a predisposition to like or aversion towards social media advertising content. Purchase intention works as psychological variable between consumers' attitudes formation and actual behavior of consumers (Miniard et al., 1983). Previous experiments have demonstrated that the favourable attitude of buyers can be translated into behavioural purpose or desire to buy and request for a willingness to pay the commodity's price (Folse et al., 2012; Keller and Lehmann, 2003). Lutz et al. (1983) demonstrated the same dimensions as mentioned above. They showed convincing facts in terms of a positive correlation between a positive attitude to ads and the desire to buy. In recent studies, when looking at the adequacy" of traditional advertisement and web-based media ads, the researchers claimed that web-based media advertising plays an excellent role in developing a favourable attitude and encouraging purchasing behavior relative to conventional ads (Abzari et al., 2014). There is limited research on social media advertisement using the Technology Acceptance Model in India. Our

research includes Perceived trustworthiness to the TAM based on past literature (Bauer et al., 2005; Kaasinen, 2005; Dao et al., 2014). The trustworthiness of advertisements can be known as believability, truthfulness, and honesty of the given substance of advertising (McKenzie & Lutz, 1989). As per Jin & Villegas (2007), Credible content of advertising categorically influences customers' attitudes and behaviour. Having gone through the various researches, following hypotheses were formulated in context of AI-enabled social media advertising.

H1. PEOU positively impacts on PU.

H2. PU has significant impact on attitude towards social network sites use.

H3. PEOU positively impacts on attitude towards social network sites use.

H4. PE has a significant impact on attitude towards social network sites use.

H5. PT positively impacts on attitude towards AIeSNA (AI-enabled social network advertisements)

H6. Attitude towards social network sites use positively impacts attitude towards AIeSNA.

H7. Attitude towards AIeSNA positively impacts to PI (purchase intention).

Considering the literature as mentioned above and hypotheses formulated, following conceptual model was established (See Figure 1).
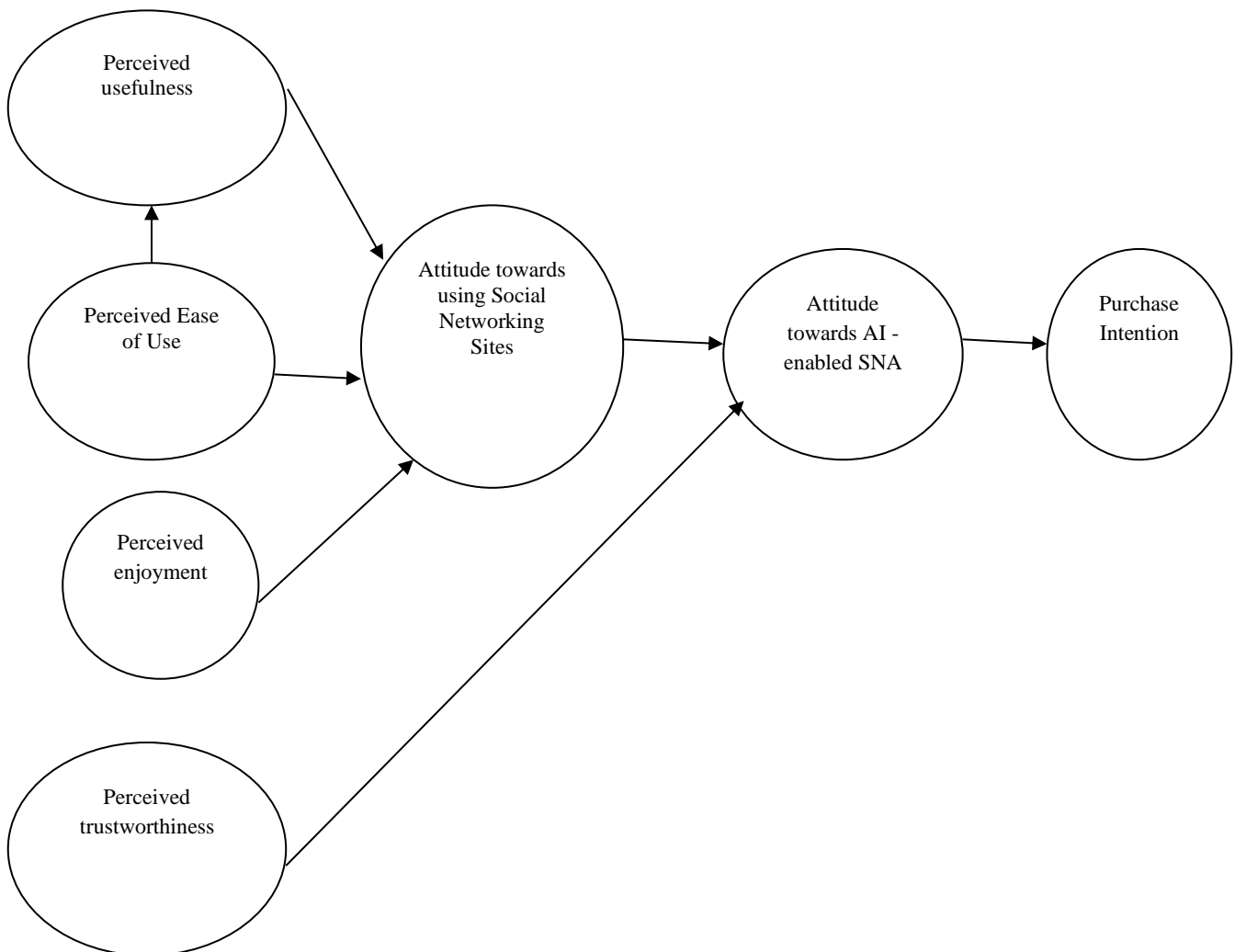

Figure 1: Proposed Conceptual Model

3. Research Methodology

3.1 *Questionnaire Development*

Questionnaire was developed utilizing the references from several web-based media advertisement literature. Likert scale was adapted for rating of all the items ranging from 1 to 5 where 1 depicts strongly disagree and 5 specifies strongly agree. Items measuring PEOU, attitude towards using social network sites (SNS) and PU were adapted from established scale by Pinho and Soares (2011). Items measuring attitude towards social network advertisements were taken from established scale by Taylor et al. (2011) and has been adopted in the present context to understand the attitude towards AI-enabled Social Network Advertisements (AIeSNA), as no such validated scale pre-exist for measuring impact of AI enabled ads. Items measuring purchase intention were adopted from Mukherjee and Banerjee (2019). Items measuring Perceived enjoyment were adopted from Heijden, (2003). Items measuring Perceived trustworthiness were taken from Dao.et al. (2014).

All the items measuring the various constructs discussed in this research are displayed in table 1.

Measuring items of constructs	Sources
Perceived Usefulness (PU) 1. Utilizing social networks empowers me to socially interact with my friends quicker. 2. Utilizing social networks improves the performance of my social life. 3. Overall, I find utilizing SNS useful in my social life.	Pinho and Soares (2011)
Perceived Ease of Use (PEOU) 1. I find that SNS is flexible to interact with others. 2. Usage of social networks is more accessible and skilful. 3. Overall, I find that SNS is easy to use.	Pinho and soares (2011)
Perceived Enjoyment (PE) 1. I find SNS is an entertaining site. 2. Using SNS is a best way of passing time. 3. I use SNS for pleasure.	Heijden, (2003)
Perceived Trustworthiness (PT) 1. AI-enabled Advertisements displayed on Social Networking Sites are trustworthy. 2. AI-enabled Advertising content showed on Social Networking Sites gives accurate information about product/service. 3. AI-enabled Advertising content displayed on Social Networking Sites is more trustworthy than other media context.	Dao et al. (2014)
Attitude towards using SNS 1. I like utilizing social networks. 2. Using social network is fun to me. 3. Using social media impress to other people.	Pinho and Soares (2011)
Attitude towards AIeSNA 1. I like those AI-enabled ads on social network sites that my friends like. 2. I like those AI-enabled ads that shows up on the side flag /newsfeed of Facebook. 3. I think that AI-enabled advertising on social media is good thing.	Taylor et al., (2011)
Purchase intention (PI) 1. I would buy products that are advertised on social media. 2. I would like to recommend that others purchase products. 3. I plan to purchase the products in the future that are advertised on social media.	Mukherjee and Banerjee (2019)

3.2 *Data collection procedure and response*

The current study adopted a quantitative research approach, employing a survey method for data collection. A convenience sampling technique, precisely a non-probability sampling method, was employed. The sample consisted of

college students enrolled in technical institutions in Bihar, India. Selecting college students as the sample was motivated by two primary reasons. Firstly, the college student population tends to be more homogenous in terms of socio-economic background, demographics, and education (Peterson, 2001). Secondly, college students are known to spend a significant amount of time on web-based social media platforms, making them more likely to be exposed to advertising messages displayed by social networking sites (Dwyer et al., 2007; Subramanyam et al., 2008; Pempek et al., 2009). The demographic profile of the respondents (N=258) is presented in Table 2.

Variable	Class	Frequency	% frequency
Gender	Male	140	54.26%
	Female	118	45.73%
Age Group	18-22	153	59.3%
	23-30	92	35.65%
	Above 30	13	5.03%

Table 2: The demographic profile of respondents

A systematic survey instrument was distributed among young students in technical institutions in Bihar, India. The study incorporated both undergraduate and postgraduate students as part of the sample, and responses were collected from a total of 400 participants. However, due to incomplete questionnaires, 142 responses were excluded from further analysis. Subsequently, for the purpose of analysis, only the remaining 258 responses were taken into consideration.

3.3 Data Analysis

For this research, structural equation modelling (SEM) technique is deployed. Structural equation modelling technique is the dependence technique of multivariate analysis and estimation technique which provides a juncture where a series of interconnected and interrelated relationships is considered simultaneously (Singh, 2009). The observed and latent variables are manipulated simultaneously in Structural equation modelling (SEM) technique (Byrne, 2013). Structural equation modelling technique comprises of measurement model and structural model. For assessing and estimating the measurement and structural model and their path analysis, Analysis of moment structure (AMOS) version-21 was utilized in the current research.

4. **Results**

4.1 Measurement model

Confirmatory Factor Analysis was used to measure this research's reliability and validity. Confirmatory Factor Analysis Fit indices indicate that model was adequately fit (CMIN/DF= 1.426, GFI = 0.920, NFI = 0.940, TLI = 0.976, CFI = 0.981, IFI = 0.981, RMSEA = 0.041).

To measure the internal reliability among the items of each construct, Cronback's α was used in this research. The Cronback's α value ranges from 0.6 to 0.926 which is higher than accepted value of 0.7 (Hair et al., 1988). Convergent and Discriminant validity were checked for validity of this research. AVE and MSV are used to achieve validity of research. Table 3 indicates the reliability and validity of this research. Table 4 indicates the validity, correlations between the construct and descriptive statistics.

4.2 *Structural model: goodness of fit indices*

After meeting the fit indices in measurement model and assessment of reliability and validity of this research, Structural model was assessed. Structural model establishes and considers multiple relationships simultaneously and creates a link among various hypothesized constructs of the conceptual model.

Items	Item Loading	Cronbach α	AVE	MSV
Perceived Usefulness (PU)		0.928	0.814	0.106
PU1	0.920			
PU2	0.892			
PU3	0.895			
Perceived ease of use (PEOU)		0.780	0.552	0.304
PEOU1	0.767			
PEOU2	0.787			
PEOU3	0.669			
Perceived Entertainment (PE)		0.917	0.787	0.193
PE1	0.911			
PE2	0.899			
PE3	0.851			
Perceived Trustworthiness (PT)		0.917	0.789	0.021
PT1	0.920			
PT2	0.902			
PT3	0.841			
Attitude towards SNS (ATTSNS)		0.912	0.778	0.244
ATTSNS1	0.877			
ATTSNS2	0.898			
ATTSNS3	0.871			
Attitude towards AIeSNA (ATTAIeSNA)		0.925	0.812	0.304
ATTAIeSNA1	0.855			
ATTAIeSNA2	0.945			
ATTAIeSNA3	0.901			
Purchase Intention (PI)		0.846	0.661	0.165
PI1	0.908			
PI2	0.808			
PI3	0.711			

Structural model Fit indices indicate that model was adequately fit (CMIN/DF= 1.754, GFI = 0.899, TLI = 0.958, CFI = 0.964, NFI = 0.920, RMSEA = 0.054, IFI = 0.964). All the values of fit indices (IFI- Incremental Fit Index, RMSEA- Root Mean Square Error Approximation, CFI- Comparative Fit Index, GFI- Goodness of Fit Index, TLI- Tucker-Lewis Index) are above the recommended value of 0.9 (Brown and Cudeck, 1992; Bagozzi and Yi, 1988).

Table 3: Reliability and Validity

	PU	ATTSNA	PEOU	PE	ATTSNS	PT	PI
PU	**0.902**						
ATTAIeSNA	0.326***	**0.901**					
PEOU	0.245**	0.551	**0.743**				
PE	0.048	0.069	0.073	**0.887**			
ATTSNS	0.238***	0.494***	0.317***	0.439***	**0.882**		
PT	0.059	0.144	0.134	0.063	0.026	**0.883**	
PI	0.211**	0.406***	0.392***	0.201**	0.036	0.087	**0.813**

Mean (SD)	3.326(1.09)	3.37(1.1)	2.75(0.88)	2.77(0.92)	3.09(1.09)	3.17(1.19)	3.2(1.1)

Table 4:   Correlation between the Constructs and Descriptive Statistics

4.3 *Hypotheses testing*

All the β values of path analysis are mentioned in the Table 5. Table 5 indicates the path, their β value and their t statistics and lastly hypothesis supported or not supported. To know the impact of independent variable on dependent variable, β is used. The result indicated that all the relationships supported the hypotheses.

Path		β value	t-statistics	Supported or Not Supported
PU ← PEOU (H1)		0.245	3.374	Supported
ATTSNS ← PU (H2)		0.167	2.708	Supported
ATTSNS ← PEOU (H3)		0.273	3.955	Supported
ATTSNS ← PE (H4)		0.411	6.652	Supported
ATTAIeSNA ← PT (H5)		0.134	2.270	Supported
ATTAIeSNA ← ATTSNS(H6)		0.495	7.832	Supported
PI ← ATTAIeSNA (H7)		0.404	6.210	Supported

Table 5: Testing of Hypotheses.

5. Discussions

The   results of this analysis are manifold. The platforms of the Social Network are the most well-known subset of web-based media that many people around the world regularly access. On various electronic devices, such as smart television sets, tablets, smart watches, and mobile phones, these sites can be viewed. Concerning TAM model, perceived ease of use (PEOU) and perceived usage (PU) variables, the respondents of current examination accepted that SNS are simple and advantageous to utilize, along these lines bearing simultaneousness with comparative prior discoveries (Pinho and Soares, 2011). Marketers have consistently strived to leverage diverse communication platforms to showcase their offerings to the public and foster brand awareness. Traditionally, in conventional advertising channels like television and print media, the flow of information is unidirectional-from the advertiser to the consumer. These platforms primarily serve as a means for advertisers to convey their messages directly to the audience, with limited opportunities for gathering collective opinions or feedback about a product or service through advertisements in traditional media. Unlike the interactive nature of digital and social media, traditional media often lacks real-time engagement and two-way communication mechanisms. The audience tends to be passive recipients of information rather than active participants in shaping public perceptions. This unidimensional approach limits advertisers' ability to gauge and incorporate public sentiment effectively. As the advertising landscape evolves, the shift towards interactive and participatory mediums becomes increasingly evident, providing marketers with new opportunities to engage and understand their audience on a deeper level. In the realm of social networks, the exchange of information is bidirectional, encompassing a dynamic flow from marketers to consumers and vice versa. Marketers employ various channels such as video ads, brand fan accounts, and banner advertisements to convey their offerings to consumers. Conversely, consumers engage in the information flow by providing feedback, opinions, and ratings all in real time. From the advertiser's perspective, this contemporary mode of communication has significantly streamlined the process of disseminating data. Similarly, from the consumers' standpoint, the process of gathering information before making a purchase has been considerably facilitated. The broad access to diverse forms of information, including the organization's communication through banner ads, posts, brand fan pages, and user-generated content such as reviews, ratings, and comments, has made the task of product/brand selection less cumbersome. Utilizing Social Networking Sites (SNS) and engaging in market communications by targeting and monitoring user interactions create a mutually beneficial scenario for both advertisers and the consumers. By leveraging social networking sites (SNS) for advertising and actively participating in product/service-related discussions with individual users, a positive attitude is cultivated in social media users' minds towards using AI-enabled social network advertising (AIeSNA). This relationship, empirically validated in this study, stands as a noteworthy discovery in the research domain. Furthermore, this research substantiates its findings by validating the proposed research model through

a thorough examination of existing literature and empirical surveys on Technology Acceptance Model (TAM), contributing to the understanding of how end-users accept social media advertising. The research aligns with Mukherjee & Banerjee's work (Mukherjee & Banerjee, 2019), affirming that attitudes towards social network usage directly impact attitudes towards social network advertising, subsequently influencing attitudes towards purchase intention.

In essence, this study delves into the intricate dynamics of information flow within social networks, shedding light on the symbiotic relationship between marketers and consumers. By exploring and validating the proposed research model, the findings contribute to the existing body of knowledge, emphasizing the influential role of attitudes in shaping users' acceptance of social media advertising.

Limitations and Scope for future research

While this research was meticulously conducted following strict and systematic methodologies, it is imperative to acknowledge its inherent limitations. The study focused exclusively on Indian social networks and social media users within the young age demography. Additionally, the analysis concentrated solely on the most prevalent social networking site, namely Facebook. These limitations prompt the need for caution in generalizing the findings, highlighting the importance of replicating the research in diverse countries and among different demographic segments to ascertain the robustness of the conclusions drawn.

The geographical and demographic specificity of the study's sample population, limited to Indian social networks and young users, implies that the outcomes may not be universally applicable. Cultural nuances, user behaviours, and preferences in other regions and age groups may significantly differ, warranting the need for broader investigations.

Moreover, the exclusive consideration of Facebook in the analysis may restrict the comprehensive understanding of social media dynamics. Different platforms have distinct user bases, features, and functionalities that can impact user attitudes differently. To attain a more nuanced understanding of the broader landscape, future research endeavours should incorporate a variety of social networking sites.

In addition to the foundational Technology Acceptance Model (TAM), this research incorporated perceived entertainment and perceived trustworthiness as variables to measure attitudes towards Social Networking Sites (SNS) usage and attitudes towards social media advertising. This extension of the TAM framework contributes to a more comprehensive evaluation of user perceptions. However, it is essential to recognize that these additional variables may not encompass the full spectrum of factors influencing user attitudes. Future studies could explore additional variables to capture the complexity of user experiences on social media platforms.

To enhance the applicability and reliability of the findings, it is recommended to replicate this research on a broader scale, encompassing diverse populations and social media platforms. This approach would not only validate the robustness of the conclusions but also offer a more nuanced understanding of the intricate dynamics influencing user attitudes towards SNS usage and social media advertising. In conclusion, while the research provides valuable insights within its specified context, the acknowledgment of its limitations emphasizes the necessity for broader investigations to advance the understanding of social media phenomena on a global scale.

Research Implications

This research underscores the importance of strategic considerations in enhancing the effectiveness of AI-enabled advertisements in social network advertising. To make these advertisements more appealing to consumers, marketers should carefully design and create ads, considering various aspects. Diverse marketing strategies should be explored during the crafting of social network advertisements, with a focus on customization for specific audience segments. Tailoring video ads to resonate with demographic groups, potentially including prospective customers, proves more effective than generic approaches. Incorporating social proof, such as client testimonials, in both video and banner ads is identified as an effective method to enhance credibility and acceptability among targeted social media users. Encouraging user interaction by providing valuable incentives in response to displayed advertisements on social networks is another successful strategy. In India, where the younger age group heavily dominates the middle age demographic, a significant opportunity exists for online media advertisers to showcase their offerings and capture user attention. The widespread

internet access, coupled with the government's commitment to digitization, provides a favourable environment for engaging with the Indian community. In light of these considerations and the research findings, brand marketers should allocate a substantial portion of their marketing budget specifically for social media-based initiatives in the Indian context. Developing a structured social media marketing strategy and guiding employees towards active user engagement on social networking sites are crucial components of this approach. Furthermore, the research aims to construct an extended TAM model to identify determinants influencing a positive attitude and its impact on purchase intention. A significant contribution of this study is the assessment of the role of perceived trustworthiness in advertising content on social media. Perceived trustworthiness emerges as a crucial factor shaping a positive attitude towards social media advertising. Acknowledging that the primary purpose of social media is online interaction, the study emphasizes the need for credible content in advertising messages on these platforms. Therefore, marketers should prioritize creating credible advertising content to resonate with social media users.

6. **Conclusion**

The study investigates the attitudes of social media users in India toward AI-enabled advertising, focusing on the Technology Acceptance Model (TAM) and introducing the construct of "*Perceived Trustworthiness*." Utilizing a quantitative research approach with a sample of 258 participants, the research employs Structural Equation Modelling (SEM) to analyze the collected data." The investigation aims to understand the intricate dynamics of user acceptance of AI-enabled advertisements on social media platforms, emphasizing the bidirectional flow of information between marketers and consumers. The study significantly contributes to the understanding of user attitudes towards AI-enabled advertising on social media platforms, particularly within the Indian context. Firstly, it provides substantial support for the Technology Acceptance Model (TAM) framework by elucidating the strong relationship between attitudes towards social media usage, AI-enabled social media advertising, and their subsequent impact on purchase intention. This robust validation enhances the credibility of the TAM model in explaining user behavior in the realm of social media advertising. Secondly, the study introduces the novel construct of "Perceived Trustworthiness," expanding the TAM model to offer a more comprehensive understanding of the factors shaping user attitudes. The positive influence of Perceived Trustworthiness on attitudes towards AI-enabled social media advertisements underscores its significance in the acceptance process. Thirdly, the research unveils a symbiotic relationship between marketers and consumers within social networks, highlighting the bidirectional flow of information and real-time engagement. This insight provides a nuanced perspective on the dynamics of user interaction and information exchange in the context of social media advertising. In terms of contributions to the literature, the study extends the TAM model by incorporating Perceived Trustworthiness, offering a valuable addition to the existing theoretical framework. It also provides societal and managerial insights, emphasizing the managerial implications of the findings for enhancing the effectiveness of AI-enabled advertisements on social media platforms. The study's focus on Indian social networks and young users addresses cultural nuances, adding depth to the literature on social media advertising by considering demographic specifics. Looking forward, the research suggests several avenues for future exploration. Caution is advised in generalizing findings, prompting the need for broader and more inclusive investigations across diverse countries and demographic segments. Exploring different social networking sites beyond Facebook is recommended to understand how various platforms impact user attitudes differently. Future studies could explore additional variables beyond those considered in the extended TAM model to capture the complexity of user experiences more comprehensively. Enhancing cultural and demographic diversity in samples is crucial for the applicability and reliability of findings on a global scale. Comparative studies across diverse social media platforms and cultural contexts could offer deeper insights into the factors influencing user attitudes and acceptance of AI-enabled advertisements. Lastly, delving into the analysis of user-generated content on social media platforms is proposed for future research, aiming to understand its impact on attitudes towards advertising in greater detail. Overall, the study's findings and suggestions pave the way for a more nuanced and comprehensive exploration of user attitudes in the dynamic landscape of AI-enabled social media advertising.

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