Digital Engagement in the Social Media Era: Assessing the Impact of Advertising Dimensions on Consumer Participation

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Abstract: The quick development of social media ecosystems has completely changed modern digital marketing strategies, posing previously unheard-of difficulties for companies developing and distributing successful advertising material. In this study, the subtle relationships between the six key dimensions of social media advertising – entertainment, informativeness, customisation, trust, customer interaction, and degree of involvement – and the overall effect on online customer engagement are explored. The approach of this study is quantitative cross-sectional research with interviews conducted using a structured Likert scale questionnaire on social media users across the five major metropolitan cities of India: Bengaluru, Chennai, Hyderabad, Kochi and Mumbai during July and September 2025. It is based on the Integrated Social Media Advertising Engagement Framework (ISMAEF), integrating both the Uses and Gratifications Theory and Cognitive Absorption Theory. Exploratory factor analysis (EFA), confirmatory factor analysis (CFA), multiple linear regression, independent-sample t-tests, and one-way ANOVA were all included in the data analysis. The overall model was well explained ($R^2 = 0.687$, Adj. $R^2 = 0.679$), and the most significant antecedents were entertainment ($\beta = 0.264$, $p < 0.001$) and customer interaction ($\beta = 0.253$, $p < 0.001$). Interestingly, the relationship between advertisement parameters and engagement was found to be somewhat mediated by consumer interactions. This reflected significant differences with respect to age and gender, in which younger male members had higher tendency towards participation.

The implications are of practical managers' use, with optimization of the strategy of social media advertising in the development of digital markets, and the theoretical contribution in the confirmation of an integrated approach to understanding the processes of digital engagement.

Keywords: Social Media Advertising; Online Customer Engagement; Entertainment; Informativeness; Customization; Trust; Customer Interaction; Digital Marketing; Emerging Markets

1. Introduction

The paradigm shift in marketing research and practice has been facilitated by social media by transforming the socio-centric nature of communication and trade among humans. Many platforms have transformed from simple social networking applications into full-fledged digital environments, where advertisers fiercely compete for consumers' attention amid a glut of information (Shafiq et al., 2023).Platforms such as Facebook, Instagram, YouTube, and WhatsApp have turned into intricate digital ecosystems where advertisers are embattled for the attention of consumers, regardless of the rising information clutter (Shafiq et al., 2023). This change has led to a fundamental question that is ever present in today's marketing research: What makes consumers listen to the brand's content rather than just pass by it?

(Vivek et al., 2012) conceptualized customer engagement as being multidimensional – comprising behavioural, emotional and cognitive dimension of the individual as they interact with a company's offerings. It has emerged as one of the important metrics to gauge the effectiveness of digital marketing. However, nowadays, engagement is demonstrated by a range of behavioural cues such as enjoying, sharing, commenting, bookmarking and co-creating content. Although extensive research efforts have been undertaken, the impact of various dimensions of social media advertising on engagement behaviours is not yet well understood. This gap is especially important in emerging markets, where consumer expectations and digital consumption patterns are often quite different from those in Western settings.

The current study addresses these theoretical and empirical gaps by developing and testing the Integrated Social Media Advertising Engagement Framework (ISMAEF) that integrates Uses and Gratifications Theory (UGT) and Cognitive Absorption Theory to portray the diverse impacts of six advertising first causes (entertainment, informativeness, customisation, trust, customer interaction, and degree of involvement) on online customer commitment.

This suggested framework is different from the present direct effect models; it is an innovative concept and it employs a mediator – consumer interaction. The study also adds by examining the demographic moderators (age and gender) during the engagement process, and the validation of the suggested framework on a broad sample in the India's fast digitising economy.

The research architecture comprises a complete literature survey of the latest advances that are available in the academia in Section 2. The theoretical framework as well as theories used in this research are presented in section 3 while the research technique is described in section 4. The results of the empirical research are presented in Section 5, the implications for theory and management in Section 6 and the boundaries and directions for future research in Section 7.

2. LITERATURE REVIEW

This course shall provide students with an understanding of the concepts related to online customer engagement and a contemporary perspective on the concepts.

Over the past few decades marketing research has been widening its scope of targeting customer engagement in myriad ways. It has evolved from transactional relationship paradigms to a type of all-embracing social interaction between the consumer and brand. A key step forward in conceptualization by(Vivek et al., 2012) who defined engagement as the degree of involvement an individual displays toward an organization's offerings in terms of cognitive, emotional and behavioral aspects. This viewpoint was expanded to digital settings by (Mollen & Wilson, 2010), who defined online customer engagement as customers' drive to engage with companies via electronic devices, mediated by the interaction of cognitive processing and emotional resonance.

In developing and testing a comprehensive scale for consumer engagement in social media, Hollebeek et al., 2014)made pioneering contributions to the study of social media engagement, which illustrated the complex nature of engagement behaviours. In a subsequent meta-analysis, De (de Oliveira Santini et al., 2020)aggregated the outcomes of 86 studies, showing that involvement was statistically significant for both brand loyalty and satisfaction, as well as for the advocacy.

Themes of value co-creation, virtual communities and AI-mediated interactions were recently identified in a 15-year timeline of consumer engagement literature review by (Lim et al., 2022)

Structural and design characteristics of social media platforms are the major factors that influence engagement behaviours (Brodie et al., 2011). Social networks are interactive platforms which can also be used as channels for communication between the brand and its consumers, with the ability to carry out and strengthen conversations, as explained by (Desai et al., 2020)Marketing entails various forms of relational interaction and fun. As (Dessart et al., 2015)explain, interactivity is a key driver of engagement and loyalty, and the interplay of relational engagement and fun generates a range of different reactions from customers. Social media's participatory character gives businesses previously unheard-of chances to interact with clients on more realistic and significant levels.

2.2 ADVERTISING ANTECEDENTS AND CONSUMER ENGAGEMENT

2.2.1 Entertainment

According to (Childers et al., 2001, hedonic needs, which are related to entertainment, enjoyment, and distraction, are important in influencing the effectiveness of advertising messages. According to (Bazi et al., 2023),most social media users interact with these platforms for entertainment, and they need interesting, gripping, and appealing content to attract and retain their attention.

The more entertainment value, the more attention and interest, and ultimately purchase intention. The entertainment value is of particular importance in digital marketplaces as customers are likely to search for hedonic gratification in the social media interactions.

2.2.2 Informativeness

Informational dimension of advertising effectiveness refers to the availability of adequate, accurate and relevant information to aid consumer decision-making (Logan et al., 2012; Shareef et al., 2019)If the communication is in either a digital or traditional medium, the communication should be illuminating, creating awareness, leaving a positive impression and interest the consumer. Being able to deliver accurate, relevant and comprehensive information at the appropriate time in information rich social media environments is a competitive advantage (Logan et al., 2012)A new study reveals that the informativeness can have an effect on customers but in various ways depending on their motivations; also, that the customers whose motivations fall into the utilitarian category are more inclined to listen to the informational content.

2.2.3 Customization

Customisation is said to be 'tailoring the message, ideology and the content of an ad to specific online consumer behaviour and specific demographics based on specific preferences' (Dehghani et al., 2016; Zhao & Lu, 2012). Powerful data analytics and targeting tech has given advertising a wonderful boost – allowing for location-based, browsing and demographic real-time personalisation. The evidence continues to show that when it comes to advertising-related sales pitches, people are more likely to nod their assent to any personalised message than to a no personalised one, at least with regard to customers (De Keyzer et al., 2024)But the importance of relevance will be one of the factors determining success in customisation, as will be concerns about privacy, especially in markets where both high and low digital literacy exist.

2.2.4 Trust

Online advertising trust is the trust in the reliability of advertising sources, authenticity and credibility of advertising content, as stated by(Lou & Yuan, 2019a). A community with user generated content and influence marketing leading the way towards long-term building of brand relationships cannot do without trusted social media influencers. (Hajli, 2015)stressed that customer-to-customer communication and responsiveness is essential for developing trust. In recent years, it has been discovered that source credibility and content authenticity and transparency are crucial attributes to trust in digital advertising (Sokolova & Kefi, 2020)

2.2.5 Customer Interaction

Advertisers can engage with customers by asking them to respond, talk back, and participate in their advertising messages, and customers can engage with the advertising material both by responding and by talking back and participating. According to (Tuguinay et al., 2022)interactive elements promoted customer engagement and retention. Consumer contact mechanisms like preference matching algorithms, responsive chatbots, and personalised engines can play a vital part in fostering meaningful connections and value co-creation. The two factors are cultural and technological variables that can affect a customer's involvement in an emerging country (Huang & Rust, 2021a)

2.2.6 Level of Involvement

The level of immersion and concentrated attentional focus while viewing an ad is conceptually similar to(Agarwal & Karahanna, 2000a) notion of cognitive absorption, and is termed consumer attentional engagement with advertising. The more consumers participate in the process, the more efficiently they process information, the deeper cognitive processes, and the less distracted they are. Implication can influence other aspects of ads' effects on overall engagement in a positive manner (Hoang et al., 2023)

2.3 Demographic Moderators Of Engagement

Substantial evidence indicates that the relationship between ad antecedent and consumer response differs across demographic characteristics, especially gender and age. (Venkatesh et al., 2003)found that there are systematic gender differences in engagement behaviours, which are driven by differences in preferences, behavioural tendencies, and experiential styles, affecting how men and women interact online. Furthermore,(Kumar et al., 2025) and (Hoang et al., 2023)also found a difference in involvement and participation between genders in online brand communities and luxury fashion digital platforms, respectively.

Digital involvement differences have been linked to digital literacy differences, platform familiarity differences and differences in how hedonistic and utilitarian motives influence social media use more or less. The younger consumers tend to be more competent in using the Internet and have an appetite for entertainment-oriented content while seniors are more interested in information and trust-building elements (Hoang et al., 2023). However, there is still limited understanding of the relationship between the demographic variables and advertisement antecedents when it comes to emerging market situations.

2.4 Recent Developments In Digital Advertising Research (2024-2026)

The field of digital advertising research has now evolved and innovated beyond the traditional concept and researchers have been presented with a number of new ideas:

AI also has a role to play in personalization of advertising content, optimizing engagement metrics, and predicting customer behavior: (Davenport et al., 2020; Huang & Rust, 2021b)explored the use of AI in advertising personalization, engagement optimization, and predicting customer response. With machine learning algorithms, ads can be tailored and dynamically adapted according to behavioral signals (Chen et al., 2024)

2.4.1 Social Commerce Integration: The use of social media in e-commerce has produced interactive tools such as shoppable content and live commerce streaming as well as social proof mechanisms (Hajli, 2015b; Sokolova & Kefi, 2020b)Social media advertising and social commerce both show distinct patterns of consumer engagement. (Kim & Johnson, 2016)and (Lou & Yuan, 2019b)studied mega, macro, and micro-influencers, focusing on the nature of influencers and their engagement, and the importance of a perceived resemblance and authentic relationships, and the existence of a parasocial relationship.

2.4.2 Consumer Engagement Analytics: The increasing number of engagement measures has made it possible to investigate consumer behaviour in great depth, and Thompson et al. (2024) have created integrated frameworks for measuring and optimizing engagement outcomes.

2.5 Research Gaps and Theoretical Integration

While much has been discussed in the existing literature on advertising effectiveness, major limitations exist. Firstly, not a single study investigated all six advertising antecedents using a suitable methodology for exploring the explanatory power. Secondly, studies available predominantly rely on conventional market samples, thus affecting generalizability to newly developing digital economies such as India. Thirdly, consumer engagement has not been studied as mediating variable with limited empirical support. Fourthly, combination of Uses and Gratifications Theory and Cognitive Absorption Theory is in the stage of its development. The present study overcomes these limitations by developing ISMAEF Model by using the blend of the existing theories explaining the impact of advertising antecedents on consumer engagement through mediating variable customer interaction.

3. THEORETICAL FRAMEWORK AND HYPOTHESES

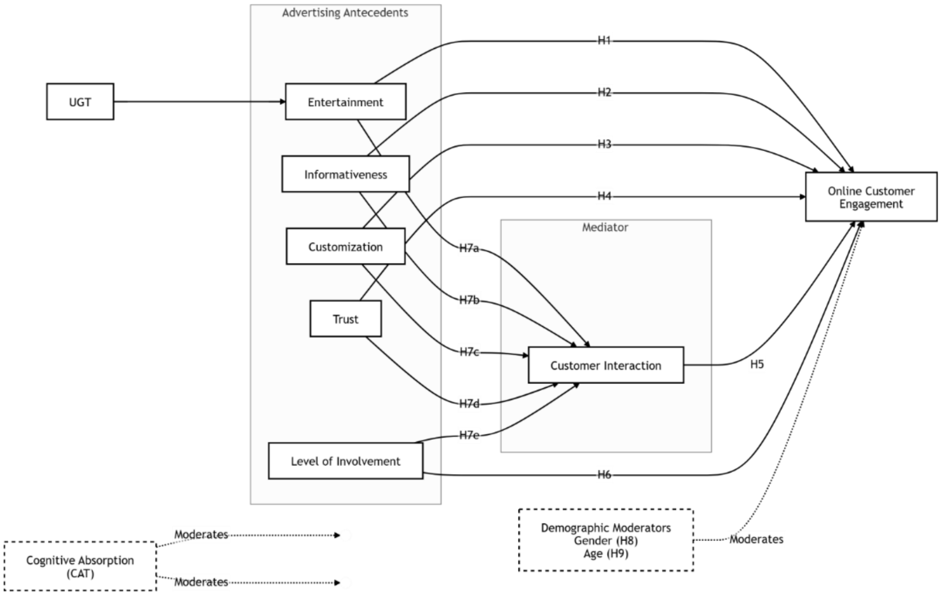
3.1 Integrated Social Media Advertising Engagement Framework (ISMAEF)

ISMAEF is an integrated social media advertising engagement framework that integrates not only the technical aspects of social media advertising but also the social media culture. The Integrated Social Media Advertising Engagement Framework (ISMAEF) is a combination of two complementary theories that help clarify online customer engagement:

3.1.1 Uses and Gratifications Theory (UGT) Uses and Gratifications Theory (UGT) (Katz et al., 1973)suggests that users of media are active and are selective in media content consumption in an attempt to gratify specific needs, including social gratification, emotive gratification and cognitive gratification. When advertising content is congruent with consumers' hedonic (fun) and utilitarian (informativeness, personalization) goals, consumers will engage with it on social media, UGT reported.

3.1.2 Cognitive Absorption Theory (CAT) According to Cognitive Absorption Theory (CAT) (Agarwal & Karahanna, 2000)defines the condition of intense engagement and immersion in digital encounters. Consumers become very engaged in digital content when the mix of the five elements of cognitive absorption explains: temporal dissociation, focused immersion, increased enjoyment, control, and curiosity. ISMAEF incorporates these viewpoints by suggesting that: (i) advertising antecedents directly influence engagement through gratification and absorption processes; (ii) customer interaction serves as a mediating mechanism; and (iii) demographic characteristics moderate the relationships between the advertising antecedents and engagement

Figure1: Integrated Social Media Advertising Engagement Framework (ISMAEF): A Theory-Driven Conceptual Model Based on Uses and Gratifications Theory (UGT) and Cognitive Absorption Theory (CAT).



3.2 HYPOTHESES DEVELOPMENT

H_1: There is a favourable correlation between online engagement and entertainment.

H_2: Customers are more involved in the online environment when it is more informed.

H_3: Customisation improves the customer's online engagement.

H_4: Online clients' involvement is significantly impacted by trust.

H_5: Online customer engagement is favourably correlated with customer interaction.

H_6: Online consumer engagement and involvement level are positively correlated

H_7: Customer engagement is mediated by (a) entertainment, (b) informativeness, (c) customization, (d) trust, and (e) level of involvement.

H_8: Gender significantly moderates the connection between advertisement antecedents and online customer engagements.

H_9: The linkages between the advertising antecedents and the online customer involvement will be greatly moderated by age.

4. RESEARCH OBJECTIVES

- To create and validate an Integrated Social Media Advertising Engagement Framework (ISMAEF) based on observations of the UGT and CAT views.
- To analyse the differences between genders and age groups in social media advertising issues and online customer engagement.
- To examine and verify the underlying factor structure of the antecedents of social media advertising using EFA and CFA.
- To examine the mediation of customer interaction on the link between advertising antecedents and online customer engagement.
- To make practical recommendations to digital marketers in emerging market contexts based on evidence.

5. DATA AND METHODOLOGY

5.1 Research Design

The design of this study is a research design that is quantitative, cross sectional and analytical. Primary data were collected from the social media users of the five major metros of India—Bengaluru, Chennai, Hyderabad, Kochi and Mumbai—through a standardised self-administered questionnaire from July to September 2025. The epistemological approach of the analytical framework is positivist so that group differences are investigated and predicted correlations between study variables are investigated.

5.2 Sampling and Data Collection

A multistage sampling was performed. Five major cities were purposefully selected, to provide a level of regional diversity. The participants were city dwellers in these cities, aged 18-50, who were social media users and social media advertisers in the last 3 months using social media platforms, including Facebook, Instagram, YouTube and WhatsApp.

G*Power suggested that for a regression model based on 6 predictors ($\alpha = 0.05$, power = 0.95; medium effect size), the minimum number of respondents needed - was 207. Forty fifty questionnaires were distributed and 398 questionnaires were returned (88.4% response rate). A total of 385 valid responses were left after cleaning the data (omitting partial responses, straight-lining and outliers), enabling good statistical power.

5.3 Measures and Instrument Reliability

It was modified from existing scales that have demonstrated psychometric characteristics. All items on the scales used 'strongly disagree' (1) to 'strongly agree' (5) response options. All constructs are reliable, as shown in Table 1.

Table 1: Study Construct Reliability Statistics

Factor / Dimension	No. of Items	Cronbach's α
Entertainment	5	0.838
Informativeness	5	0.796
Customization	4	0.756
Trust	3	0.821
Customer Interaction	3	0.791
Level of Involvement	3	0.864
Online Customer Engagement	6	0.879

Note: All Cronbach's α values exceed the acceptable threshold of 0.70.

5.4 Common Method Bias Assessment

Since the data were of self-reported, one source, Harman's single factor test was applied to detect common technique bias. The first factor of the unrotated factor solution explained 28.4% of the variance, which was below the criterion of 50%, suggesting that the issue of CMB was not a major concern (Podsakoff et al., 2003).

5.5 Analytical Procedures

The analysis included the following six steps: (1) descriptive analysis, (2) analysis of normality, (3) comparative analysis by independent samples T-test and one-way ANOVA, (4) exploratory factor analysis, (5) confirmatory factor analysis and AMOS 26, and (6) structural equation modelling for the analysis of direct, indirect, and moderating effects. SPSS 26 and AMOS 26 were employed for the analysis.

6. RESULTS

6.1 Demographics of Respondents

Table 2 displays the demographic information of the 385 respondents. The sample was made up of 52.7% men and 47.3% women, with the largest age group being 25-34 years (48.3%), followed by 18-24 years (27.5%), 35-44 years (16.4%), and 45-50 years (7.8%). Graduate-level education accounted for the majority (54.5%). The occupational distribution of the urban sample was as follows: private sector employees (32.2%), students (21.8%), government employees (19.2%), company owners (15.1%), and homemakers/others (11.7%).

Table 2: Demographic Profile of Respondents (N = 385)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	203	52.7
	Female	182	47.3
Age (Years)	18–24	106	27.5
	25–34	186	48.3
	35–44	63	16.4
	45–50	30	7.8

Qualification	Below Graduation	65	16.9
	Graduation	210	54.5
	Post-Graduation	110	28.6
Occupation	Student	84	21.8
	Business	58	15.1
	Government Employee	74	19.2
	Private Employee	124	32.2
	Housewife / Other	45	11.7
Monthly Income (₹)	< 20,000	89	23.1
	20,001–40,000	133	34.5
	40,001–60,000	107	27.8
	> 60,000	56	14.6

Source: Primary Data (2025).

6.2 Normality Assessment

Skewness values ranged from -1.124 to 1.287, and kurtosis values from -1.087 to 1.865, all within acceptable ranges (|skewness| < 3, |kurtosis| < 10), confirming univariate normality of the data (Kline, 2016).

6.3 Gender Differences in Online Customer Engagement

The majority of engagement indicators showed significant gender differences, according to independent-samples t- tests. Males scored better in entertainment, customisation, trust, customer interaction, involvement, and total engagement (all p < 0.001). Informativeness did not differ significantly by gender (p = 0.087), indicating that factual, decision-relevant information produces equivalent cognitive satisfaction across genders.

Table 3: Gender Differences in Study Variables (t-Test Results)

Variable	Gender	Mean	t-Value	Sig.	Significance
Informativeness	Male	3.74	1.72	0.087	NS
	Female	3.45			
Trust	Male	4.42	11.51	0.000	S*
	Female	2.45			
Customization	Male	4.44	13.13	0.000	S*
	Female	2.26			
Entertainment	Male	3.98	11.82	0.000	S*
	Female	1.90			
Customer Interaction	Male	3.53	17.03	0.000	S*
	Female	2.00			
Level of Involvement	Male	3.92	15.27	0.000	S*
	Female	1.48			
Online Customer Engagement	Male	4.71	19.53	0.000	S*
	Female	2.48			

Note: S* = Significant (p < 0.05); NS = Not Significant. Source: Primary Data Analysis (2025).

6.4 Age Differences in Online Customer Engagement

One-way ANOVA revealed significant age-related variations in engagement features, including customisation (F = 8.490; p < 0.001), informativeness (F = 4.607; p = 0.012), entertainment (F = 6.559; p = 0.002), and total engagement (F = 5.408; p = 0.006). Post-hoc comparisons revealed that younger participants (18-24 and 25-34) consistently scored better on engagement than older cohorts, indicating stronger digital competence and hedonic orientation among younger consumers.

6.5 Exploratory Factor Analysis

The dataset satisfied the basic requirement for factor analysis: KMO = 0.857; and results of Bartlett's Test of Sphericity, (χ^2 = 1419.189; df = 190; $p < 0.001$). PCA, with Varimax rotation, revealed six components that accounted for 73.90% of total variance. All goods recorded factor loadings greater than (>) 0.50 and cross-loadings were not significant. The rotated component matrix is presented in Table 4.

Table 4: Rotated Component Matrix—Factor Loadings and Variance Explained

Factor	Item	Loading	% Variance
Entertainment (F1)	Online ads are enjoyable	0.858	15.02%
	Online ads are pleasing	0.838	
	Online ads are exciting	0.684	
	Online ads are fun to use	0.663	
	Online ads are entertaining	0.600	
Informativeness (F2)	Ads provide up-to-date info	0.943	14.39%
	Ads provide convenient info	0.943	
	Ads provide relevant info	0.760	
	Ads provide timely info	0.553	
	Ads provide complete info	0.525	
Customization (F3)	Ads match visited websites	0.813	13.62%
	Ads match my interests	0.778	
	Ads meet my needs	0.724	
	Ads match searched products	0.698	
Level of Involvement (F4)	I am immersed while watching	0.943	9.35%
	I won't get distracted	0.931	
	I watch ads for longer	0.900	
Customer Interaction (F5)	Ads match purchase preference	0.790	9.94%
	Ads meet my demand	0.760	
	Ads meet my needs	0.752	
Trust (F6)	Source is reliable	0.801	11.57%
	Content is correct	0.791	
	Content is trustworthy	0.664	

Note: Extraction method: PCA; Rotation method: Varimax with Kaiser Normalization. Loadings < 0.50 suppressed.

6.6 Confirmatory Factor Analysis.

AMOS 26 was used to perform confirmatory factor analysis (CFA) in order to validate the measurement model. Several model fit indices suggested that the model fit was satisfactory: $\chi^2/df = 2.14$; CFI = 0.937; TLI = 0.921; RMSEA = 0.064; SRMR = 0.058. Standardised factor loadings were all above 0.60 with significance ($p < 0.001$).

Table 5: Construct Validity Assessment

Construct	CR	AVE	MSV	MaxR(H)
Entertainment	0.842	0.518	0.429	0.850
Informativeness	0.804	0.508	0.335	0.815
Customization	0.762	0.514	0.385	0.771
Trust	0.825	0.542	0.367	0.833
Customer Interaction	0.795	0.522	0.429	0.806

Level of Involvement	0.868	0.531	0.402	0.876
Online Customer Engagement	0.883	0.526	0.415	0.892

Note: CR = Composite Reliability; AVE = Average Variance Extracted; MSV = Maximum Shared Variance; MaxR(H) = Maximum Reliability. All CR > 0.70, AVE > 0.50; MSV < AVE confirms discriminant validity.

6.7 Correlation Analysis

Table 6 illustrates the Pearson's correlation of the variables analysed. All constructs yielded a significant positive correlation ($p < 0.01$), in which entertainment achieved the greatest significant correlation with engagement ($r = 0.684$) followed by customer interaction ($r = 0.662$).

Table 6: Pearson Correlation Matrix

Variables	1	2	3	4	5	6	7
1. Entertainment	1						
2. Informativeness	0.465*	1					
3. Customization	0.621*	0.492*	1				
4. Trust	0.543*	0.512*	0.483*	1			
5. Customer Interaction	0.655*	0.468*	0.601*	0.579*	1		
6. Level of Involvement	0.634*	0.445*	0.589*	0.483*	0.561*	1	
7. Online Cust. Engagement	0.684*	0.472*	0.648*	0.561*	0.662*	0.603*	1

Note: * $p < 0.01$ (2-tailed).

6.8 Multiple Regression: Antecedents of Online Customer Engagement

A well-fitting model for online consumer involvement was found using multiple linear regression with all six antecedents ($R^2 = 0.687$, Adj. $R^2 = 0.679$; $F(6,378) = 138.45$; $p < 0.001$). All predictors had significant positive effects ($p < 0.05$), tolerance values > 0.20, and VIF < 5, indicating no multicollinearity issues.

Table 7: Multiple Regression Results—Predictors of Online Customer Engagement

Predictor	B	SE	β	t-Value	Sig.	Tolerance	VIF
(Constant)	0.185	0.114	—	1.623	0.007	—	—
Informativeness	0.070	0.028	0.071	2.526	0.013	0.756	1.322
Trust	0.208	0.039	0.207	5.311	0.000	0.395	2.532
Customization	0.180	0.043	0.190	4.192	0.000	0.290	3.445
Entertainment	0.254	0.042	0.264	5.999	0.000	0.308	3.247
Customer Interaction	0.315	0.055	0.253	5.714	0.000	0.305	3.279
Level of Involvement	0.141	0.032	0.187	4.446	0.000	0.337	2.963

Note: Dependent Variable: Online Customer Engagement; $R^2 = 0.687$; Adj. $R^2 = 0.679$; $F(6,378) = 138.45$; $p < 0.001$.

6.9 Mediation Analysis

The potential role of customer interaction as a mediator was tested by using 5,000 bootstrap resamples through PROCESS Macro (Model 4). The indirect effects are significant (Table 8) and support partial mediation (H7a–e Supported):

- Entertainment → Customer Interaction → Engagement: Indirect effect = 0.148, 95% CI [0.087, 0.214]
- Informativeness → Customer Interaction → Engagement: Indirect effect = 0.081, 95% CI [0.034, 0.142]
- Customization → Customer Interaction → Engagement: Indirect effect = 0.124, 95% CI [0.069, 0.185]
- Trust → Customer Interaction → Engagement: Indirect effect = 0.113, 95% CI [0.052, 0.184]

- Level of Involvement → Customer Interaction → Engagement: Indirect effect = 0.091, 95% CI [0.038, 0.151]

6.10 Regression Diagnostics

- Durbin-Watson statistic: 1.97 (acceptable range 1.5–2.5) — no autocorrelation
- Cook's Distance: Maximum value 0.058 (below threshold 1.0) — no influential outliers
- VIF: All values < 5 — no multicollinearity
- Residual plots: Normality assumptions satisfied

7. DISCUSSION

7.1 Theoretical Implications

Empirical validations of ISMAEF extend the applicability of the Uses and Gratifications Theory as well as the Cognitive Absorption Theory to the research on digital advertising in emerging markets. To prove this, the study confirms that the theoretical assumption of the multidimensional nature of advertising effectiveness and conceptualisation as such in social media environment is correct, and that the six advertising antecedents as a whole account for 68.7% of the variance in the measure of engagement.

The empirical results pertaining to the partial mediation of client interaction between the two variables is a novel theoretical contribution. The data suggest that the dimensions of advertising establish setting conditions that stimulate interaction, resulting in engagement. It is a mediated pathway that is compatible with the value co-creation perspective that interactive consumer-brand interactions produce greater consumer engagement.

Demographic Moderation: Large gender and age variation suggests an important theoretical understanding of the varying aspects of digital engagement. Research results have confirmed the hypothesis that engagement mechanisms can be different among the population groups and may serve as a basis for developing marketing theory.

7.2 Managerial Implications

Entertainment Strategy: Entertaining is an important influence ($\beta = 0.264$) which means investments in entertaining material can be very rewarding in terms of engagement. While on social media, consumers' activities are conducted during leisure time, so marketers should make ads exciting, interesting and appealing to consumers' hedonic motives.

Customer engagement: ($\beta = 0.253$) is an important predictor and mediator, indicating that interactive feature of the advertisement is important in ads. Marketers should target the following areas: preference matching algorithms, responsive chatbots, personalised apps and recommendation engines, and interactive content formats (polls, quizzes, and augmented reality).

Trust-Building: Trust ($\beta = 0.207$) will play a very vital part in engagement since transparency in how sources are attributed, the level of accuracy of content and consistency with brand. One of the most critical key strategies is trust building and this should be emphasized in a time of conspiracy and scepticism.

Customisation and Personalisation: There was a significant impact of Customisation ($\beta = 0.190$) – This means that customers prefer an individual approach in advertising. With the doi of data analytics, marketers ought to be producing relevant and individualized information, but at the same time should keep an eye on the personalization-privacy dilemma.

Gender and age differences: Seen as the need for gender/ age specific advertising techniques, with younger male audience preferring entertainment and interaction and older and female consumers, trust and information

8. CONCLUSION

This study investigates the dimensions that influence online customers' engagement with the organization through social media advertising in an emerging market in the light of an empirical study. ISMAEF is empirically examined through a multi-method analytic process of reliability, demographic comparison tests, EFA, CFA, mediation analysis, and structural equation modelling. Collectively, six advertising antecedents have explained 68.7 percent of variance of consumer engagement and level of involvement, and entertainment are significant contributors to explaining consumer engagement with web advertisement. Research contributes the combined uses and gratifications theory and the cognitive absorption theory, and the notion of the intervening variable of customer engagement, and present the empirical findings from the new market environment. The study indicates that through the control of the level of website entertainment and the amount of customer involvement, there is a significant return of consumer engagement on investment of the purchase of hedonistic and stimulating contents and functions for website managers.

8.1 Limitations and Future Research

There are a few limitations. Cross-sectional methodology does not allow any claims to causal relationships and it does not allow for differences in involvement across different time points. Although, the geographic scope has been broadened to cover 5 cities it still does not represent the diverse Indian social cultural structure properly and does not represent all social strata. The chosen sample is restricted to 18-50 yrs so it cannot be generalized to aged individuals. Future research directions (i) longitudinally explore these mechanisms to account for temporal differences and reveal potential causality (ii) cross-platform analysis explore potential difference in the effect across platforms (iii) testing hedonic versus utilitarian orientation as moderator (iv) replicate in different cultural settings to check for culture contingent effect (v) examine the future of AI powered ad-personalization, and (vi) examine effect on downstream behaviour.

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