

Comparative Analysis of Consumer Responses to Social Media, Video, and Display Advertising Formats

Vijayalakshmi. N and Dr. S. Shobana

Research Scholar, Department of Commerce

Associate Professor and Director, Department of Commerce and Management

Kamalam College of Arts and Science, Affiliated to Bharathiar University, Udumalpet

ravijiammu1417@gmail.com and sshobanamib@gmail.com

<https://orcid.org/0009-0008-5582-7693>

Abstract: *The article discuss the comparative analysis of consumer responses to different digital advertising formats, specifically social media ads, video ads, and display ads. Using a structured questionnaire and a sample size of 261 respondents, the study analyzes key factors such as attention, engagement, memory, and purchase intention. Statistical tools including ANOVA, correlation, and regression analysis were employed to evaluate differences and relationships among variables.*

The findings indicate that video advertising is the most effective format, followed by social media advertising, while display advertising shows comparatively lower effectiveness. Regression results reveal that video ads have the strongest influence on purchase intention, with a significant beta value of 0.41. The ANOVA test confirms a statistically significant difference in consumer responses across advertising formats ($p < 0.05$).

The study concludes that interactive and visually rich formats such as video and social media ads play a crucial role in shaping consumer behavior. These findings provide valuable insights for marketers to optimize digital advertising strategies and improve consumer engagement...

Keywords: Digital Advertising, Social Media Advertising, Video Advertising, Display Advertising, Consumer Response, Purchase Intention

I. INTRODUCTION

Digital advertising has become a central component of modern marketing strategies, driven by rapid technological advancements and increasing internet penetration. Businesses are increasingly relying on digital platforms to reach and engage consumers effectively. Among various formats, social media ads, video ads, and display ads are widely used to influence consumer behavior.

Social media platforms provide personalized and interactive advertising experiences, enabling marketers to target specific audiences. Video advertising, on the other hand, leverages audiovisual elements to create engaging and memorable content. Display advertising, including banners and pop-ups, is commonly used for brand visibility but often faces challenges such as ad fatigue and user avoidance.

Understanding how consumers respond to these different formats is crucial for optimizing advertising effectiveness. This study aims to compare consumer responses across these three major digital advertising formats and evaluate their impact on engagement, perception, and purchase intention.

II. LITERATURE REVIEW

Several studies have examined the effectiveness of digital advertising formats in influencing consumer behavior. Kotler and Keller (2016) emphasized that digital marketing enables personalized communication, which enhances customer



engagement and strengthens brand relationships. By tailoring messages to specific audiences, brands can create meaningful interactions that improve consumer loyalty. Personalized approaches are now considered essential for digital marketing success.

Dave Chaffey (2020) highlighted that social media advertising significantly improves consumer interaction due to its interactive features. Platforms such as Facebook, Instagram, and TikTok allow users to like, comment, share, and engage directly with content. This two-way interaction fosters stronger engagement and increases the effectiveness of marketing campaigns. Social media ads, therefore, can significantly influence consumer attitudes and behavior.

Stephen P. Robbins et al. (2019) and Smith (2021) noted that visual and interactive content, such as video advertisements, has a stronger psychological impact on attention and memory. Video ads are more immersive than static display ads and enhance brand recall by combining visual and auditory stimuli. Consumers are more likely to remember and respond to brands presented in engaging video formats. Video advertising has thus become a crucial tool for marketers aiming to maximize recall and impact.

Kumar (2022) found that personalized and interactive advertising formats, especially on social media, lead to higher consumer engagement. Conversely, Lee (2020) observed that display ads often suffer from banner blindness, reducing their effectiveness despite high visibility. Overall, prior studies indicate that consumer responses vary across advertising formats. However, research comparing social media, video, and display ads within a single analytical framework remains limited.

Research Gap

Although numerous studies have examined individual digital advertising formats, there remains a lack of comprehensive research that compares social media ads, video ads, and display ads within a single framework. Most prior studies have focused on only one specific format, such as social media or video, and have often considered a limited set of variables, like engagement or brand recall. Moreover, there is insufficient research that simultaneously compares all three formats while examining multiple consumer response factors, including attention, engagement, memory, and purchase intention. Few studies provide empirical evidence using rigorous statistical tools such as ANOVA and regression analysis. This study aims to address these gaps by offering a comparative and analytical perspective on consumer responses across major digital advertising formats.

Statement of the Problem

Despite the widespread use of digital advertising, marketers face challenges in determining which advertising format is most effective in influencing consumer behavior. The lack of clarity regarding consumer preferences and responses across different ad formats leads to inefficient allocation of marketing resources.

Therefore, it is essential to analyze and compare consumer responses to social media, video, and display advertising formats to identify the most effective strategy.

Research Questions

- How do consumers respond to social media, video, and display advertising formats?
- Which advertising format is most effective in capturing consumer attention and engagement?
- Is there a significant difference in consumer responses across different ad formats?
- How do these advertising formats influence purchase intention?
- What is the relationship between consumer response and buying behavior?

Research Objectives

- To analyze consumer responses to social media, video, and display advertising formats.
- To compare the effectiveness of different digital advertising formats.
- To examine the impact of advertising formats on consumer engagement and memory.



- To evaluate the influence of digital advertising on purchase intention.
- To identify the most effective advertising format for marketers.

Hypotheses Development (H1–H6)

- H1:** Social media advertising has a significant positive effect on consumer response.
- H2:** Video advertising has a significant positive effect on consumer response.
- H3:** Display advertising has a significant effect on consumer response.
- H4:** Consumer response to video ads is significantly higher than social media and display ads.
- H5:** There is a significant relationship between consumer response and purchase intention.
- H6:** Personalized advertising positively influences consumer engagement.

III. RESEARCH METHODOLOGY

Research Design

This study employs a descriptive and quantitative research design to examine consumer responses to digital advertising formats. Data were collected using a structured questionnaire to ensure consistency and reliability. The approach allows for systematic measurement of variables such as attention, engagement, memory, and purchase intention. The design facilitates a clear and empirical analysis of consumer behavior across different ad formats.

Sampling Technique

The study employed a convenience sampling method to select participants who were readily accessible and willing to respond. The target population consisted of online users who are regularly exposed to digital advertisements across various platforms. A total of 261 respondents participated in the study, providing sufficient data for meaningful statistical analysis of consumer responses to social media, video, and display advertising formats.

Data Collection

Primary data for the study were collected using a structured questionnaire designed to capture consumer responses to digital advertising formats. A 5-point Likert scale was employed, where 1 represented “Strongly Disagree” and 5 represented “Strongly Agree,” to quantify participants’ perceptions consistently. The questionnaire was administered through an online survey using Google Forms, allowing convenient and efficient data collection. This approach ensured reliable and standardized measurement of variables such as attention, engagement, memory, and purchase intention.

Data Analysis Tools

The collected data were analyzed using a variety of statistical tools to ensure comprehensive evaluation of consumer responses. Descriptive statistics, including mean and standard deviation, were used to summarize the data, while ANOVA (Analysis of Variance) was applied to compare responses across different advertising formats. Correlation analysis was conducted to examine relationships between variables, and regression analysis was employed to measure the impact of advertising formats on purchase intention. All analyses were performed using software tools such as SPSS and Excel to ensure accuracy and reliability of the results.

IV. RESULTS AND DISCUSSION

Table: 1 Analysis of consumer responses to social media, video, and display advertising formats.

Variable	Category	Mean	Std. Deviation	Rank
Social Media Ads	Overall Response	3.63	1.12	2
Video Ads	Overall Response	3.78	1.05	1
Display Ads	Overall Response	3.21	1.18	3
Comparative Evaluation	Perception	3.69	1.09	
Purchase Intention	Behavior	3.58	1.14	

Source : Primary Table



The analysis of consumer responses across different digital advertising formats computed using Likert weights: 1–5 which indicates that video ads received the highest overall response, with a mean score of 3.78 and a standard deviation of 1.05, ranking first among the three formats. Social media ads followed closely with a mean of 3.63 and a standard deviation of 1.12, securing the second rank. Display ads registered the lowest overall response, with a mean of 3.21 and a standard deviation of 1.18, ranking third. The comparative evaluation of consumer perception across all formats yielded a mean score of 3.69 (SD = 1.09), suggesting a generally positive attitude toward digital ads. Similarly, purchase intention and behavior reflected a favorable outcome, with a mean of 3.58 (SD = 1.14), indicating that online advertising has a notable influence on consumers’ buying decisions.

Table :2 Comparative Analysis of effectiveness in different digital advertising formats

Source of Variation	SS	df	MS	F-value	Significance
Between Groups	18.42	2	9.21	6.87	p < 0.05
Within Groups	345.76	258	1.34		
Total	364.18	260			

Source : Primary Table

The ANOVA results reveal an F-value of 6.87, which is significant at p < 0.05, indicating that there is a statistically significant difference in consumer responses across the three advertising formats social media ads, video ads, and display ads. This finding suggests that the type of digital advertisement has a meaningful impact on how consumers perceive and respond to marketing messages. Consequently, it can be concluded that consumer responses vary significantly depending on the advertising format, highlighting the importance of selecting the most effective format to maximize engagement and influence purchase behavior

Correlation Analysis

Table :3 Impact of advertising formats on consumer engagement and memory

Variables	Social Media Ads	Video Ads	Display Ads	Purchase Intention
Social Media Ads	1.000	0.68	0.52	0.64
Video Ads	0.68	1.000	0.49	0.71
Display Ads	0.52	0.49	1.000	0.58
Purchase Intention	0.64	0.71	0.58	1.000

Source : Primary Table

The correlation analysis indicates that all variables exhibit positive relationships, confirming the consistency of consumer responses across different advertising formats. The strongest relationship was observed between video ads and purchase intention, with a correlation coefficient of 0.71, suggesting that video advertisements have the greatest influence on consumers’ likelihood to make a purchase. Additionally, all correlation values were below 0.80, indicating the absence of multicollinearity and confirming that each variable contributes uniquely to explaining consumer behavior.

Table 4: Influence of digital advertising on purchase intention

Variable	Beta (β)	t-value	Significance
Social Media Ads	0.32	4.85	p < 0.01
Video Ads	0.41	6.12	p < 0.01
Display Ads	0.18	2.97	p < 0.05

Source : Primary Table

R	R ²	Adjusted R ²	Std. Error
0.76	0.58	0.57	0.64



Calculated Coefficient Table

The regression analysis indicates that video ads are the strongest predictor of consumer purchase intention, with a beta coefficient (β) of 0.41, highlighting their significant influence on buying behavior. Social media ads also have a moderate impact, with $\beta = 0.32$, while display ads show a weaker, yet still significant, effect with $\beta = 0.18$. Overall, the model explains 58% of the variance in purchase intention ($R^2 = 0.58$), demonstrating a strong model fit and confirming that different digital advertising formats contribute meaningfully to shaping consumer behavior.

Discussion

Video ads emerged as the most effective format due to their dynamic and immersive nature, enhancing information retention and emotional connection. Social media ads showed moderate effectiveness, driven by personalization and interactivity. Display ads were less impactful, likely due to ad fatigue and banner blindness. These findings suggest that marketers should prioritize video and interactive social media campaigns to maximize consumer engagement and influence purchase decisions.

V. CONCLUSION

This study provides a comprehensive comparison of consumer responses to social media, video, and display advertising formats. The results clearly demonstrate that advertising format significantly influences consumer attention, engagement, and purchase intention.

Among the formats, video advertising emerged as the most effective due to its ability to deliver dynamic content and enhance user engagement. Social media advertising also showed strong performance, particularly in terms of personalization and interactivity. In contrast, display advertising was found to be less effective, primarily due to issues such as ad fatigue and intrusiveness.

The statistical analyses, including ANOVA and regression, confirm that these differences are significant and meaningful. The study highlights the importance of adopting more engaging and consumer-centric advertising strategies in the digital environment.

Future research can explore additional factors such as cultural influences, platform-specific behavior, and emerging formats like influencer marketing and AI-driven advertising. Overall, this study contributes to the growing body of literature on digital marketing effectiveness and offers practical implications for advertisers and marketers.

REFERENCES

- [1]. Bruhn, M., Schoenmueller, V., & Schäfer, D. B. (2012). Are social media replacing traditional media in terms of brand equity creation? *Management Research Review*, 35(9), 770–790.
- [2]. Calder, B. J., Malthouse, E. C., & Schaedel, U. (2009). An experimental study of the relationship between online engagement and advertising effectiveness. *Journal of Interactive Marketing*, 23(4), 321–331.
- [3]. Ducoffe, R. H. (1996). Advertising value and advertising on the web. *Journal of Advertising Research*, 36(5), 21–35.
- [4]. Giombi, K., Viator, C., Hoover, J., Tzeng, J., Sullivan, H. W., O'Donoghue, A. C., & Southwell, B. G. (2022). The impact of interactive advertising on consumer engagement, recall, and understanding: A scoping systematic review for informing regulatory science. *PLoS ONE*, 17(2), e0263339.
- [5]. Huisman, J., & de Jong, M. D. T. (2021). Exploring digital advertising effectiveness: Engagement, personalization, and advertising format. *Computers in Human Behavior*, 114, 106545.
- [6]. Lamberton, C., & Stephen, A. T. (2016). A thematic exploration of digital, social media, and mobile marketing: Research evolution from 2000 to 2015 and an agenda for future inquiry. *Journal of Marketing*, 80(6), 146–172.
- [7]. Li, H., Daugherty, T., & Biocca, F. (2002). Impact of 3D virtual store technology on consumer learning, attitude, and purchase intention. *Journal of Marketing*, 66(4), 45–59.



- [8]. López-López, V., Sicilia, M., & Ruiz, S. (2021). The effect of interactive advertising formats on cognitive and emotional responses of young consumers. *Journal of Advertising Research*, 61(2), 154–170.
- [9]. Parvathi, B., & Manohar, N. D. (2022). Study on digital advertising and its impact on consumer behavior. *International Journal of Health Sciences*, 6(S2), 7137. <https://doi.org/10.53730/ijhs.v6nS2.7137>
- [10]. Pelet, J.-É., & Ettis, S. A. (2022). Social media advertising effectiveness. *International Journal of Technology and Human Interaction*, 18(1), 1–17. <https://doi.org/10.4018/IJTHI.300286>
- [11]. Sundar, A., & Kim, J. (2019). Advertising format effects in digital media: Click-through rates and engagement patterns. *Journal of Interactive Advertising*, 19(2), 93–108.
- [12]. Sriram, K. V., Namitha, K. P., & Kamath, G. B. (2021). Social media advertisements and their influence on consumer purchase intention. *Cogent Business & Management*, 8(1), Article 2000697.
- [13]. Verma, D., & Sharma, S. (2020). Consumer behaviour towards digital advertising and online purchase decisions. *International Journal of Electronic Marketing and Retailing*, 11(3), 278–296.
- [14]. Yousef, M., Dietrich, T., & Rundle-Thiele, S. (2021). Social advertising effectiveness in driving action: Positive, negative, and coactive appeals. *International Journal of Environmental Research and Public Health*, 18(11), 5954.
- [15]. Zhang, Y., & Liu, X. (2021). Emotional and cognitive responses to digital advertising: Insights from neuromarketing studies. *Journal of Interactive Marketing*, 54, 56–72.

