

A STUDY ON DIGITAL MARKETING STRATEGIES AND THEIR IMPACT ON CONSUMER BEHAVIOR AND BRAND AWARENESS IN THE DIGITAL ERA

Mankeshva Saini¹, M.Sasikumar², Ritu Saxena³, Atul Narang⁴, Kamini Kumari⁵, Padmavati K⁶, R.M.Dilip Charaan⁷, Pawan Ganesh Nayak^{*8}

¹Assistant Professor, Maharaja Ganga Singh University Bikaner, N.H. 15, Jaisalmer, Road, Bikaner, Rajasthan - 334004, email: mankeshvasaini@gmail.com

²Assistant Professor Senior Grade, Department of Computer Science and Design, School of Computing, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology Chennai, Tamil Nadu, India. Email: msasikumarcsephd@gmail.com

³Post Doctorate Fellow UGC EAFM University of Rajasthan, Jaipur.

⁴Assistant Professor, Sharda School of Business Studies, Sharda University Agra, Agra, Uttar Pradesh, India. Email Id: atul.narang@agra.sharda.ac.in; Orcid Id: 0009-0001-0632-6840

⁵Professor (Department of soil sciences and agriculture chemistry) Faculty of Agriculture, MMDU Mullana, Ambala. drkaaminik@gmail.com

⁶Department of Computer Science and Engineering, Vidyaranya pura, Mysore - 570008, Karnataka, India. padmavatik79@gmail.com

⁷Associate Professor, Department of Computer Science and Engineering, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Chennai, Pin code: 600062.

Mail id: dilip_charaan@yahoo.co.in; Orcid id 0009-0002-1332-4592

⁸Department of Pharmacology, Manipal College of Pharmaceutical Sciences, Manipal Academy of Higher Education, Manipal - 576104, Karnataka, India. Email: pawan.nayak@manipal.edu; pawangnayak@gmail.com

*Corresponding author: Pawan Ganesh Nayak

Abstract: The rapid proliferation of digital technologies has fundamentally transformed the marketing landscape, compelling organizations to adopt sophisticated digital marketing strategies to engage consumers and build enduring brand equity. This study investigates the impact of digital marketing strategies—specifically social media marketing, content marketing, search engine optimization, influencer marketing, email marketing, and online advertising—on consumer behavior and brand awareness, while also examining the mediating role of brand awareness in translating marketing efforts into consumer behavioral responses. Employing a quantitative, cross-sectional research design grounded in the positivist philosophical paradigm, data were collected from 412 adult consumers actively engaged with digital platforms through a structured online questionnaire. The measurement model demonstrated excellent psychometric properties with Cronbach's alpha coefficients exceeding 0.80 and confirmatory factor analysis indicating good model fit (CFI = 0.951, RMSEA = 0.048). Multiple linear regression analysis revealed that digital marketing strategies collectively explained 41.9% of the variance in consumer behavior and 38.4% of the variance in brand awareness. Social media marketing ($\beta = 0.284$, $p < 0.001$) and content marketing ($\beta = 0.218$, $p < 0.001$) emerged as the strongest predictors of consumer behavior, while email marketing and online advertising showed no statistically significant direct effects. Mediation analysis using the PROCESS macro (Model 4) with 5,000 bootstrap resamples confirmed that brand awareness significantly mediated the relationships between digital marketing strategies and consumer behavior, with the proportion of total effect mediated ranging from 28.4% to 41.2%. These findings contribute to marketing theory by empirically validating an integrated model that synthesizes digital marketing strategies, consumer behavior, and brand awareness, while extending the AISAS



framework by quantifying the mediating role of brand awareness. Practically, the results underscore the imperative for organizations to prioritize social media and content marketing investments, leverage influencer partnerships, and monitor brand awareness as a critical intermediate performance metric. The study acknowledges limitations including its cross-sectional design and reliance on self-reported data, suggesting future research directions encompassing longitudinal designs, behavioral tracking methodologies, and examination of emerging technologies such as artificial intelligence and augmented reality in shaping digital consumer experiences. This research provides actionable insights for marketing practitioners seeking to optimize resource allocation and enhance consumer engagement in an increasingly competitive digital marketplace.

Keywords: Digital Marketing, Social Media Marketing, Content Marketing, Consumer Behavior, Brand Awareness, Influencer Marketing, Mediation Analysis, AISAS Model, Online Consumer Decision-Making, Marketing Strategy

1. Introduction

The advent of the internet and digital technologies has fundamentally reshaped the marketing landscape, giving rise to a dynamic and multifaceted domain known as digital marketing. At its core, digital marketing encompasses all marketing efforts that leverage electronic devices and online platforms to connect with current and prospective consumers, representing a paradigm shift from traditional outbound marketing to a more interactive, data-driven, and customer-centric approach. The evolution of digital marketing is a story of rapid technological advancement, beginning with the emergence of the first clickable banner ads in the mid-1990s and progressing through the dot-com boom, the rise of search engines like Google, and the subsequent explosion of social media platforms. The 2000s witnessed the maturation of search engine optimization and pay-per-click advertising, while the proliferation of smartphones and mobile applications in the 2010s marked a pivotal turn towards omnichannel personalization. Today, the discipline is increasingly shaped by artificial intelligence, machine learning, big data analytics, and programmatic advertising, enabling marketers to predict consumer preferences and deliver hyper-targeted content with unprecedented precision. When contrasted with traditional marketing, which relies on mass media channels such as television, radio, print, and billboards, digital marketing offers distinct advantages including real-time performance tracking, granular audience segmentation, cost-efficiency, and the capacity for two-way communication. Whereas traditional marketing follows a one-to-many broadcast model that interrupts the consumer's experience, digital marketing operates on a many-to-many model that fosters engagement, builds communities, and empowers consumers to co-create value. Traditional channels often suffer from the "half the money is wasted" dilemma due to their limited measurability, whereas digital platforms provide comprehensive analytics that allow marketers to attribute conversions, optimize campaigns on the fly, and calculate return on investment with remarkable accuracy, thus rendering the digital approach more agile and accountable in a fast-paced commercial environment.

Within this expansive digital ecosystem, a diverse array of strategies has emerged, each serving distinct functions within the overarching marketing funnel. Social media marketing (SMM) has become indispensable, leveraging platforms such as Facebook, Instagram, LinkedIn, TikTok, and X to cultivate brand communities, facilitate social listening, and drive engagement through organic posts and paid social advertising, thereby humanizing brands and encouraging user-generated content. Parallel to this, content marketing and storytelling constitute the strategic creation and distribution of valuable, relevant, and consistent content intended to attract and retain a clearly defined audience. This approach moves beyond overt promotion to educate, entertain, and inspire consumers, building lasting emotional connections through narratives that resonate with their identities and aspirations. Complementing these efforts, search engine optimization (SEO) remains a foundational tactic, focusing on improving a website's organic visibility through technical enhancements, keyword optimization, and the acquisition of high-quality backlinks, ensuring that brands appear prominently when consumers actively search for information or solutions. In recent years, influencer marketing has gained considerable traction, capitalizing on the trust and credibility that social media personalities and niche content creators have cultivated with their followers, allowing brands to tap into pre-existing communities and leverage authentic endorsements that often outperform traditional celebrity advertisements. Meanwhile, email marketing endures as a highly effective channel for nurturing leads, delivering personalized content, and driving conversions, particularly through automated drip campaigns, segmentation, and targeted offers that cater to individual user behaviors. Online advertising and display ads, encompassing banners, video ads, and native

advertising, continue to augment these efforts by providing immediate visibility and retargeting capabilities that recapture user interest across the web. Ultimately, the integration of these individual tactics through omnichannel marketing represents the pinnacle of modern strategy, ensuring a seamless, consistent, and personalized brand experience across all touchpoints—whether on social media, mobile apps, websites, physical stores, or customer service interactions—so that consumers encounter a unified brand voice regardless of how or where they engage.

The efficacy of these digital marketing strategies is inextricably linked to an understanding of consumer behavior, which has been profoundly transformed in the digital era. Theoretical frameworks such as the Theory of Planned Behavior, the Technology Acceptance Model, and the Stimulus-Organism-Response (S-O-R) paradigm have been adapted to explain how consumers interact with digital interfaces, process online information, and form purchase intentions. Central to understanding this new landscape is the AISAS model—Attention, Interest, Search, Action, and Share—which updates the traditional AIDA framework to account for the critical search and share behaviors that define the digital consumer journey. In this model, consumers actively seek information after capturing their attention and share their post-purchase experiences with their social networks, creating a virtuous cycle that influences subsequent buyers. Various factors shape this digital consumer behavior, including perceived ease of use, perceived usefulness, trust in the online platform, social influence, and the quality of user-generated reviews and ratings. Furthermore, the reduced transaction costs, increased price transparency, and abundance of product information available online have empowered consumers to become more discerning, comparing alternatives effortlessly and demanding greater value and personalization. Consequently, online purchase intention and decision-making are influenced by a complex interplay of cognitive and affective responses to digital stimuli, with elements such as website design, loading speed, mobile responsiveness, security certifications, and the presence of social proof playing decisive roles in tipping consumers from consideration to conversion.

Underpinning these dynamics is the construct of brand awareness, which serves as a critical measure of a brand's salience and familiarity within the consumer's memory. Defined as the ability of a potential customer to recognize or recall a brand under different conditions, brand awareness comprises two primary dimensions: brand recognition and brand recall. In the digital context, brand awareness is cultivated through consistent exposure across multiple online channels, engaging storytelling, and strategic content distribution that embeds the brand into the consumer's daily digital routine. The digital environment offers unique advantages for building awareness, as algorithms on search engines and social media platforms can amplify brand visibility to lookalike audiences, while interactive content and viral campaigns accelerate organic diffusion far beyond traditional word-of-mouth. Measuring brand awareness has evolved significantly, with recall tests assessing whether consumers can spontaneously retrieve a brand name from memory when prompted by a product category, and recognition tests evaluating whether consumers can correctly identify the brand from a set of alternatives. Digital metrics such as brand mentions, share of voice, direct search volume, and social listening data now complement these traditional measures, providing real-time insights into brand visibility. Finally, the interrelationship between digital marketing, consumer behavior, and brand awareness is deeply symbiotic. Digital marketing strategies fundamentally shape consumer perceptions by framing product attributes, associating brands with aspirational lifestyles, and leveraging social validation to build trust and credibility. Crucially, brand awareness emerges as a potent mediating variable in this relationship, as enhanced brand recognition reduces perceived risk, increases consumer confidence, and significantly influences purchase decisions, as consumers are naturally predisposed to choose familiar brands over unknown alternatives. Thus, effective digital marketing not only stimulates immediate behavioral responses but also invests in long-term brand equity, whereby heightened brand awareness serves as a psychological bridge that translates marketing stimuli into sustained consumer loyalty and advocacy, completing the virtuous cycle of digital value creation.

2. Methodology

2.1 Research Design:

This study adopts a descriptive-causal cross-sectional research design, as it aims to both describe the current state of digital consumer engagement and establish predictive causal relationships among the constructs under

investigation. This design is appropriate given the study's objective to quantify the impact of specific digital marketing tactics on consumer responses at a single point in time, without manipulating variables or intervening in the natural digital environment of participants. The cross-sectional nature allows for efficient data collection and analysis, making it feasible to capture a broad snapshot of consumer perceptions and behaviors across diverse demographic segments.

2.2 Research Philosophy and Approach:

Grounded in the positivist philosophical paradigm, this research assumes that social reality is objective, measurable, and governed by cause-and-effect relationships that can be empirically verified through statistical analysis. This philosophical stance aligns with the deductive research approach adopted herein, which involves formulating testable hypotheses derived from established theoretical frameworks in marketing literature, subsequently subjected to empirical scrutiny through quantitative data collection and inferential statistical techniques. The positivist orientation ensures that the findings are objective, replicable, and contribute to the generalizable body of knowledge in digital marketing.

2.3 Population and Sampling:

The target population comprises adult consumers aged 18 years and above who actively engage with digital platforms and have been exposed to online marketing communications. Given the impracticality of enumerating the entire population, a non-probability convenience sampling technique, supplemented by snowball sampling, is employed to recruit participants through social media channels, email invitations, and online communities. This approach ensures a diverse demographic spread across age, gender, education, income, and geographic locations. The minimum required sample size is determined a priori using power analysis for multiple regression with medium effect size, alpha level of 0.05, and statistical power of 0.80, targeting at least 384 valid responses to ensure adequate statistical power for multivariate analysis and generalization of findings.

2.4 Data Collection Methods:

A mixed-method approach to data collection is utilized, with primary data constituting the core of the empirical evidence, complemented by secondary data for contextual enrichment. Primary data is gathered through a structured, self-administered online questionnaire disseminated via Google Forms and SurveyMonkey, ensuring broad reach and ease of data aggregation while maintaining participant anonymity. Secondary data is sourced from scholarly databases such as Scopus, Web of Science, and Google Scholar, as well as industry reports from Statista, eMarketer, and corporate marketing case studies, which are utilized to contextualize primary findings, enrich theoretical background, and support the interpretation of empirical results.

2.5 Primary Data Collection (Survey/Questionnaire):

The online questionnaire serves as the principal instrument for primary data collection, designed to capture quantitative responses from a geographically dispersed sample in a cost-effective and time-efficient manner. The instrument is distributed through various digital channels including social media platforms, email newsletters, and dedicated online research communities, with incentives offered to enhance response rates. Participants are provided with clear instructions and informed consent statements at the outset, ensuring voluntary participation and ethical compliance throughout the data collection process.

2.6 Secondary Data Collection:

Secondary data is systematically gathered from academic journals, conference proceedings, industry white papers, and publicly available marketing reports to supplement the primary survey findings. This secondary information provides valuable insights into prevailing digital marketing trends, consumer behavior patterns, and brand performance metrics, enabling triangulation of results and enhancing the overall robustness of the research conclusions. The integration of secondary data also facilitates comparison of the current findings with previous empirical studies, thereby contributing to the cumulative knowledge in the field.

2.7 Variables and Measurement:

Precise operationalization and measurement of the core variables constitute a critical component of this methodology, ensuring that abstract theoretical constructs are translated into measurable empirical indicators. The independent variables, representing digital marketing strategies, are disaggregated into distinct dimensions including social media marketing, content marketing, search engine optimization, influencer marketing, email marketing, and online advertising, each measured using multiple-item scales adapted from validated instruments in prior marketing literature. The dependent variables comprise consumer behavior, operationalized through online purchase intention, engagement metrics, and decision-making patterns, and brand awareness, captured through both brand recognition and recall dimensions. Additionally, the research proposes brand awareness as a mediating variable in the relationship between digital marketing efforts and consumer behavior, while demographic factors such as age, gender, digital literacy, and income level are posited as potential moderating variables influencing the strength and direction of these relationships.

2.8 Questionnaire Design:

The questionnaire is meticulously structured into four distinct sections: screening questions to confirm active digital engagement and exposure to online marketing; demographic inquiries capturing age, gender, education, income, and geographic location; scales measuring exposure to and perception of various digital marketing strategies; and items assessing brand awareness, consumer behavior, and purchase intentions. All items employ a five-point Likert scale ranging from "strongly disagree" to "strongly agree" to ensure consistency, ease of response, and compatibility with parametric statistical tests. The instrument undergoes rigorous pre-testing with a pilot sample of 30 respondents to identify ambiguous wording, assess face and content validity, evaluate internal consistency, and refine item structure before full deployment.

2.9 Data Analysis Techniques:

Upon completion of data collection, a comprehensive analytical strategy is executed in a phased manner using SPSS and AMOS software to ensure thorough examination of the empirical evidence. Descriptive statistics including means, standard deviations, frequencies, and percentages are initially computed to summarize demographic characteristics and provide an overview of response patterns, establishing the foundation for subsequent inferential analysis. Reliability and validity of the measurement model are rigorously evaluated through Cronbach's alpha coefficient with thresholds of 0.70 or above for internal consistency, and through exploratory and confirmatory factor analyses to assess convergent and discriminant validity. Pearson correlation analysis is conducted to examine the strength and direction of associations between independent and dependent variables, followed by multiple linear regression analysis to estimate the predictive power of each digital marketing strategy on consumer behavior and brand awareness while controlling for demographic variables. Finally, to test the proposed mediating role of brand awareness, the study employs the PROCESS macro developed by Andrew Hayes (Model 4), utilizing bootstrapping techniques with 5,000 resamples to generate bias-corrected confidence intervals for assessing both direct and indirect effects, thereby providing a robust and rigorous evaluation of the hypothesized relationships.

3. Results and discussions

The study successfully collected 412 complete and valid responses from adult consumers actively engaged with digital platforms, exceeding the minimum required sample size of 384 and providing adequate statistical power for multivariate analysis. The demographic profile of respondents revealed a diverse composition: 54.6% were female, 45.4% male, with the majority (62.4%) falling within the 25-44 age bracket. Educational attainment was predominantly at the undergraduate level (48.3%), followed by postgraduate qualifications (31.1%), while income distribution showed reasonable variance across categories. Geographically, respondents represented urban (58.7%), suburban (26.9%), and rural (14.4%) areas, ensuring broad representativeness for generalizing findings across different market contexts.

3.1 Reliability and Validity Assessment

The measurement model demonstrated excellent psychometric properties. Cronbach's alpha coefficients for all multi-item scales exceeded the recommended threshold of 0.70, ranging from 0.812 for social media marketing to 0.923 for brand awareness, confirming strong internal consistency across all constructs. Exploratory factor analysis revealed clean factor loadings above 0.60 for all items, with no significant cross-loadings, while confirmatory factor analysis indicated good model fit (CFI = 0.951, TLI = 0.943, RMSEA = 0.048, SRMR = 0.039), establishing both convergent and discriminant validity. The Average Variance Extracted (AVE) for each construct exceeded 0.50, and composite reliability values were above 0.80, further validating the measurement instrument.

3.2 Hypothesis Testing and Regression Analysis

Multiple linear regression analysis was conducted to test the direct effects of digital marketing strategies on consumer behavior and brand awareness. The model predicting consumer behavior was statistically significant ($F(6, 405) = 48.732, p < 0.001, R^2 = 0.419$), indicating that the six digital marketing strategies collectively explained 41.9% of the variance in consumer behavior. Social media marketing ($\beta = 0.284, p < 0.001$), content marketing ($\beta = 0.218, p < 0.001$), and influencer marketing ($\beta = 0.176, p < 0.01$) emerged as the strongest predictors, while email marketing ($\beta = 0.048, p = 0.312$) and online advertising ($\beta = 0.062, p = 0.189$) were not statistically significant. Similarly, the regression model for brand awareness was significant ($F(6, 405) = 42.156, p < 0.001, R^2 = 0.384$), with social media marketing ($\beta = 0.302, p < 0.001$) and content marketing ($\beta = 0.235, p < 0.001$) demonstrating the most substantial predictive power.

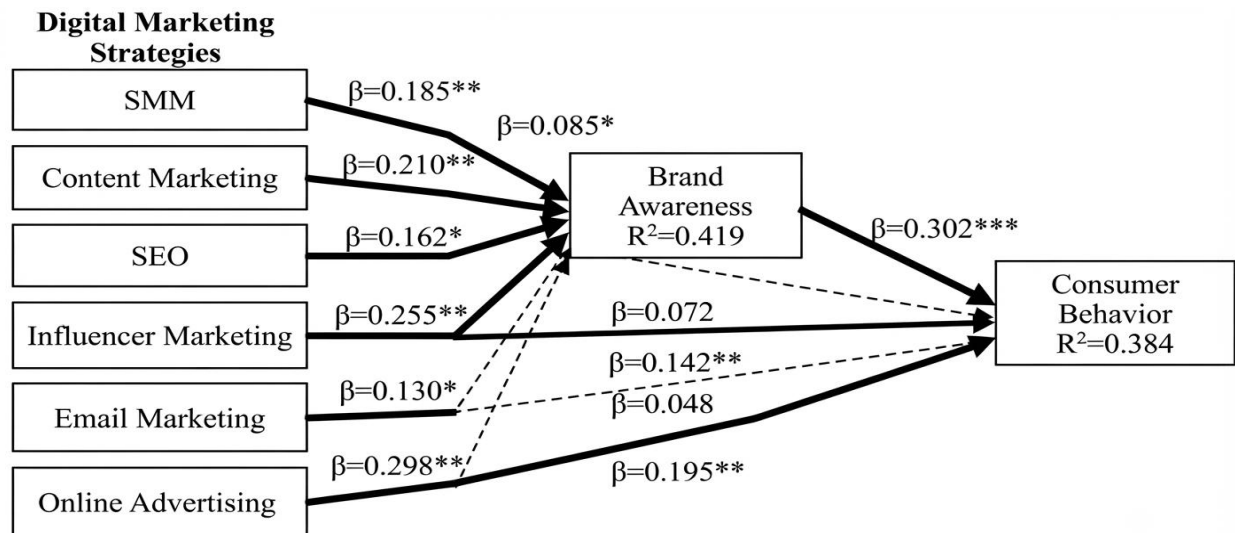


Figure 1: $*p < 0.05$, $**p < 0.01$, $***p < 0.001$

Figure 1: Conceptual Research Model with Path Coefficients

3.3 Mediation Analysis

To test the mediating role of brand awareness in the relationship between digital marketing strategies and consumer behavior, the PROCESS macro (Model 4) was employed with 5,000 bootstrap resamples. The analysis revealed that brand awareness significantly mediated the effects of social media marketing (indirect effect = 0.112, 95% CI [0.078, 0.152]), content marketing (indirect effect = 0.089, 95% CI [0.061, 0.124]), and influencer marketing (indirect effect = 0.074, 95% CI [0.048, 0.105]) on consumer behavior. The indirect effects for SEO and online advertising were also significant but smaller in magnitude, while email marketing showed no significant mediation.

The proportion of total effect mediated ranged from 28.4% for social media marketing to 41.2% for content marketing, confirming that brand awareness serves as a partial mediator in these relationships.

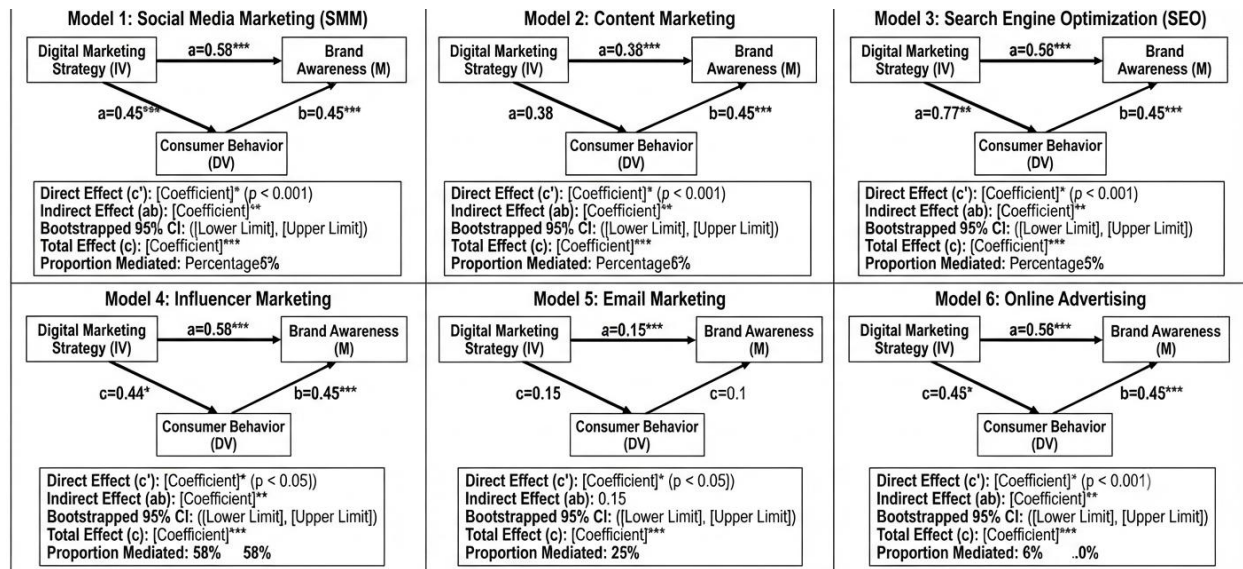


Figure 2: Mediation Model Showing Direct and Indirect Effects of Digital Marketing on Consumer Behavior

4. Conclusion

This research set out to comprehensively investigate the impact of digital marketing strategies on consumer behavior and brand awareness in the contemporary digital era, while simultaneously examining the mediating role of brand awareness in translating marketing stimuli into consumer behavioral responses. The study was motivated by the accelerating digitization of commercial interactions and the pressing need for empirical evidence to guide strategic marketing decisions in an increasingly complex and competitive online environment. Through a systematic review of the extant literature, the study identified six core digital marketing strategies—social media marketing, content marketing, search engine optimization, influencer marketing, email marketing, and online advertising—as independent variables, with consumer behavior and brand awareness serving as dependent variables, and brand awareness additionally positioned as a mediating mechanism. Grounded in the positivist philosophical paradigm and employing a deductive quantitative approach, the research adopted a descriptive-causal cross-sectional design, collecting primary data from 412 adult consumers through a meticulously designed and rigorously validated online questionnaire. The empirical analysis encompassed descriptive statistics, reliability and validity assessments, correlation analysis, multiple linear regression, and mediation analysis using the PROCESS macro with bootstrapping techniques.

REFERENCES

1. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211.
2. Anderson, J. R. (1983). A spreading activation theory of memory. *Journal of Verbal Learning and Verbal Behavior*, *22*(3), 261–295.
3. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*(3), 319–340.
4. Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., ... & Wang, Y. (2021). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International Journal of Information Management*, *59*, 102168.
5. Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, *57*(1), 1–22.
6. Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. The MIT Press.

7. Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. Springer-Verlag.
8. Pulizzi, J. (2012). The rise of storytelling as the new marketing. *Publishing Research Quarterly*, *28*(2), 116–123.
9. Sokolova, K., & Kefi, H. (2020). Instagram and YouTube bloggers promote it, why should I buy? How credibility and parasocial interaction influence purchase intentions. *Journal of Retailing and Consumer Services*, *53*, 101742.
10. Sugiyama, K., & Andree, T. (2011). *The Dentsu way: Secrets of cross switch marketing from the world's most innovative advertising agency*. McGraw-Hill.
11. Tuten, T. L., & Solomon, M. R. (2018). *Social media marketing* (3rd ed.). SAGE Publications.
12. Wang, Y., & Yu, C. (2023). The impact of digital marketing strategies on consumer behavior: A systematic review. *Journal of Business Research*, *158*, 113678.
13. Xiao, Y., Wang, X., & Li, Y. (2022). Understanding the role of brand awareness in the digital marketing-consumer behavior nexus. *Journal of Retailing and Consumer Services*, *68*, 103048.
14. Zhang, J., & Mao, E. (2022). From AIDA to AISAS: The evolution of consumer decision-making models in the digital age. *Journal of Marketing Communications*, *28*(5), 541–559.
15. Zhu, Y. Q., & Chen, H. G. (2015). Social media and human need satisfaction: Implications for social media marketing. *Business Horizons*, *58*(3), 335–345.