RESEARCH PAPER

# Digital Marketing Strategies and Consumer Buying Behaviour: The Mediating Role of Consumer Engagement Among Retail Consumers in Palakkad District – India

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**Abstract**

The rapid growth of digital technologies has significantly transformed the retail sector by enabling businesses to adopt integrated digital marketing strategies that enhance customer interactions and influence purchasing decisions. Despite the increasing adoption of digital marketing practices, empirical evidence regarding the mechanisms through which these strategies affect consumer buying behaviour remains limited, particularly in regional retail markets. This study examined the influence of digital marketing strategies on consumer buying behaviour by investigating the mediating role of consumer engagement among retail consumers in Palakkad District, Kerala, India. Guided by the Stimulus–Organism–Response (SOR) theory, digital marketing strategies were conceptualized as a higher-order construct comprising social media marketing, email marketing, mobile marketing, online advertising, online reviews, and personalized digital communication. A quantitative research approach was employed using a cross-sectional survey design, and primary data were collected from retail consumers through a structured questionnaire. The proposed research model was analysed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to assess the measurement model, structural relationships, and mediation effects. The findings revealed that digital marketing strategies significantly and positively influenced consumer engagement and consumer buying behaviour. Consumer engagement also exhibited a significant positive effect on consumer buying behaviour and partially mediated the relationship between digital marketing strategies and consumer buying behaviour. The study extends the application of the Stimulus–Organism–Response theory by demonstrating the mediating role of consumer engagement in digital retail environments. The findings provide practical insights for retailers and marketing practitioners by emphasizing the importance of integrated digital marketing strategies in strengthening consumer engagement and improving purchasing behaviour. The study contributes to the growing literature on digital marketing and consumer behaviour by providing empirical evidence from an emerging regional retail market in India.

**Keywords:** Digital Marketing Strategies; Consumer Engagement; Consumer Buying Behaviour; Retail Consumers; Stimulus–Organism–Response (SOR) Theory.

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## 1. Introduction

The rapid advancement of digital technologies has significantly transformed the global business landscape, compelling organizations to redefine their marketing strategies to meet the evolving expectations of digitally connected consumers. The widespread adoption of the Internet, smartphones, social media platforms, Artificial Intelligence (AI), cloud computing, big data analytics, and mobile applications has accelerated the transition from conventional marketing approaches to integrated digital marketing practices that facilitate interactive, personalized, and real-time communication between organizations and consumers [1]. Unlike traditional marketing, which primarily focuses on one-way promotional communication through television, newspapers, radio, and print media, digital marketing enables organizations to establish continuous engagement with consumers across multiple digital platforms, thereby enhancing customer experience, organizational responsiveness, and long-term relationship building [2].

Digital marketing has evolved from being merely an online promotional tool to becoming a comprehensive strategic business function that supports customer acquisition, customer retention, brand development, and organizational competitiveness. Modern organizations increasingly employ digital marketing strategies through social media platforms, email communication, mobile applications, online advertising, customer review platforms, influencer collaborations, and personalized digital communication to create value for consumers and strengthen market positioning [3]. These strategies enable organizations to understand consumer preferences, monitor behavioural patterns, deliver customized promotional messages, and evaluate marketing performance using real-time analytical tools. Consequently, digital marketing has become one of the most influential determinants of organizational success in an increasingly competitive and technology-driven marketplace [3].

The retail industry has experienced one of the most profound transformations resulting from digitalization. Increasing internet penetration, widespread smartphone adoption, rapid expansion of e-commerce platforms, digital payment systems, and omnichannel retailing have significantly altered the manner in which retailers communicate with consumers and deliver products and services [4]. Contemporary retail organizations integrate physical stores with digital platforms to provide seamless shopping experiences across multiple customer touchpoints. Consumers can now discover products through social media, compare alternatives using online marketplaces, evaluate customer reviews, communicate directly with retailers, and complete transactions using mobile applications and digital payment systems. Such technological advancements have transformed traditional retailing into an integrated digital ecosystem that emphasizes customer convenience, personalization, and continuous engagement [4-5].

The transformation of retailing has simultaneously changed consumer buying behaviour. Contemporary consumers are more informed, technologically empowered, and actively involved in purchasing decisions than ever before. Instead of relying solely on traditional promotional activities or in-store experiences, consumers increasingly search for product information online, compare product features and prices across multiple platforms, evaluate customer reviews, seek recommendations through social media communities, and interact directly with organizations before making purchasing decisions [5]. This shift has made consumer buying behaviour more dynamic, information-intensive, and experience-driven, requiring retailers to understand not only purchasing outcomes but also the behavioural mechanisms that influence consumer decision-making throughout the purchasing journey [6].

Among the various factors influencing consumer behaviour, consumer engagement has emerged as a critical construct within contemporary marketing literature. Consumer engagement reflects the cognitive, emotional, and behavioural interactions that consumers establish with organizations, brands, products, and digital platforms. Unlike transactional marketing, which primarily emphasizes product purchases, engagement-oriented marketing encourages consumers to actively participate in organizational activities through social media interactions, online reviews, product recommendations, brand communities, and digital communication [7]. Such engagement strengthens consumers' emotional attachment, trust, satisfaction, and commitment toward organizations, ultimately contributing to favourable purchasing decisions and long-term customer relationships [8].

The growing significance of consumer engagement has encouraged organizations to shift their strategic focus from product promotion toward relationship development. Retailers increasingly recognize that sustained organizational success depends not only on attracting new consumers but also on maintaining meaningful interactions with existing customers throughout the customer lifecycle. Digital marketing strategies facilitate this objective by enabling organizations to deliver personalized communication, respond promptly to customer inquiries, encourage customer participation, and create interactive experiences across multiple digital platforms. Consequently, consumer engagement has become an important behavioural mechanism explaining how digital marketing activities translate into favourable consumer buying behaviour [7].

The relationship between digital marketing strategies, consumer engagement, and consumer buying behaviour can be effectively explained through the Stimulus–Organism–Response (SOR) Theory. According to the SOR framework, external environmental stimuli influence individuals by first affecting their internal cognitive and emotional states, which subsequently determine behavioural responses [8]. Within the context of digital marketing, digital marketing strategies represent the external stimuli that expose consumers to personalized communication, online advertising, mobile marketing, social media interactions, customer reviews, and digital promotional campaigns. These stimuli influence consumers' internal psychological responses, represented by consumer engagement, which subsequently shape behavioural outcomes such as purchasing decisions, customer loyalty, and repurchase intentions. The SOR theory therefore provides an appropriate theoretical foundation for understanding the behavioural processes through which digital marketing strategies influence consumer buying behaviour.

Although previous studies have extensively examined digital marketing and consumer buying behaviour, several important issues remain unresolved. Existing research has largely concentrated on individual dimensions of digital marketing, such as social media marketing, mobile marketing, email marketing, or online advertising, rather than examining digital marketing strategies as an integrated multidimensional construct [8]. Furthermore, previous investigations have predominantly focused on direct relationships between digital marketing activities and purchasing behaviour while providing comparatively limited attention to the mediating role of consumer engagement. Existing empirical findings also remain inconsistent across different geographical regions, industrial sectors, and consumer groups, indicating the need for further context-specific investigations [9].

The need for such investigations is particularly important within regional retail markets of emerging economies such as India. Over the past decade, India has witnessed remarkable growth in internet accessibility, smartphone penetration, digital payment adoption, and online retailing. Consumers increasingly depend on digital platforms to obtain product information, evaluate alternatives, compare prices, and interact with retailers before making purchasing decisions [9]. Simultaneously, retail organizations continue investing substantially in digital marketing initiatives to improve customer experiences and strengthen market competitiveness. However, empirical evidence explaining how integrated digital marketing strategies influence consumer buying behaviour through consumer engagement remains comparatively limited within regional retail environments.

Palakkad District, located in the state of Kerala, represents a rapidly developing regional retail market characterized by increasing digital adoption while maintaining strong traditional retail practices. Consumers within the district increasingly utilize digital technologies during various stages of the purchasing process, whereas retailers progressively integrate digital marketing strategies into their business operations to improve customer interaction and organizational performance [10]. Despite these developments, limited empirical evidence exists regarding the effectiveness of digital marketing strategies within this regional context. Understanding these relationships is therefore essential for both academic advancement and managerial decision-making.

Against this background, the present study investigates the influence of digital marketing strategies on consumer buying behaviour through the mediating role of consumer engagement among retail consumers in Palakkad District, Kerala, India. The study conceptualizes digital marketing strategies as a higher-order construct comprising social media marketing, email marketing, mobile marketing, online advertising, online customer reviews, and personalized digital communication. By integrating these dimensions within the Stimulus–Organism–Response theoretical framework, the study seeks to contribute to the growing body of knowledge on digital marketing and consumer behaviour while providing practical insights for retailers aiming to strengthen customer engagement and improve purchasing outcomes.

Specifically, the study aims to examine the influence of digital marketing strategies on consumer engagement, evaluate the effect of consumer engagement on consumer buying behaviour, investigate the direct influence of digital marketing strategies on consumer buying behaviour, and assess the mediating role of consumer engagement in this relationship. The findings are expected to contribute theoretically by extending the application of the Stimulus–Organism–Response theory within digital retailing, methodologically by validating a higher-order digital marketing construct using Partial Least Squares Structural Equation Modeling (PLS-SEM), and practically by providing evidence-based recommendations that assist retailers in developing effective digital marketing strategies capable of improving customer engagement and consumer buying behaviour.

The remainder of this paper is organized as follows. Section 2 reviews the literature on digital marketing strategies, consumer engagement, and consumer buying behaviour. Section 3 presents the theoretical framework and develops the research hypotheses. Section 4 describes the research methodology adopted in the study. Section 5 presents the empirical results and hypothesis testing. Section 6 discusses the findings and highlights their theoretical and managerial implications. Finally, Section 7 concludes the study by summarizing the key findings, outlining the study limitations, and suggesting directions for future research.

## 2. Literature Review

### 2.1 Digital Marketing Strategies

Digital marketing has emerged as one of the most influential developments in contemporary marketing, fundamentally transforming the manner in which organizations communicate with consumers, promote products, and establish long-term customer relationships [10]. The rapid advancement of internet technologies, mobile computing, artificial intelligence, cloud services, and social networking platforms has accelerated the transition from traditional marketing practices to digitally enabled marketing ecosystems. Unlike conventional marketing, which primarily depends on one-way communication through television, newspapers, radio, and print advertisements, digital marketing facilitates interactive, personalized, measurable, and real-time communication between organizations and consumers [11]. Consequently, organizations increasingly regard digital marketing as a strategic capability rather than merely a promotional tool.

The concept of digital marketing extends beyond online advertising and encompasses the planning, implementation, and management of integrated marketing activities conducted through digital platforms to achieve organizational objectives. It combines technological innovation with customer-oriented marketing principles to deliver personalized experiences, strengthen customer relationships, and improve organizational performance [12]. Digital marketing enables organizations to collect consumer data, analyse behavioural patterns, evaluate marketing effectiveness, and continuously optimize marketing campaigns based on consumer responses. The availability of analytical tools has therefore transformed marketing from intuition-driven decision-making into evidence-based strategic management.

The evolution of digital marketing has been closely associated with the rapid development of internet technologies and changing consumer behaviour. During the initial stages of internet commercialization, organizations primarily used websites as electronic brochures providing static information about products and services. However, the emergence of Web 2.0 technologies fundamentally changed digital communication by enabling user participation, social networking, interactive content, and consumer-generated information [12]. The subsequent growth of smartphones, mobile internet, artificial intelligence, and cloud computing further expanded the capabilities of digital marketing, enabling organizations to provide personalized communication, location-based services, automated customer interactions, and real-time consumer engagement.

Modern digital marketing emphasizes relationship development rather than transactional promotion. Organizations increasingly focus on understanding consumer needs, preferences, and behavioural patterns to deliver customized marketing communications throughout the customer journey [13]. This relationship-oriented approach enables organizations to maintain continuous interactions with consumers before, during, and after purchasing decisions. Consequently, digital marketing contributes not only to customer acquisition but also to customer retention, loyalty, advocacy, and lifetime value.

One of the distinguishing characteristics of digital marketing is its ability to integrate multiple communication channels into a unified marketing strategy. Consumers rarely rely on a single information source when making purchasing decisions; instead, they simultaneously interact with social media platforms, websites, search engines, mobile applications, online communities, digital advertisements, customer reviews, and personalized recommendations [13]. Therefore, organizations increasingly implement integrated digital marketing strategies that coordinate multiple digital channels to deliver consistent messages and seamless customer experiences across different touchpoints.

The effectiveness of digital marketing largely depends on its ability to deliver relevant, timely, informative, and personalized communication. Advances in artificial intelligence, predictive analytics, customer relationship management systems, and big data technologies enable organizations to analyse consumer behaviour and provide individualized product recommendations based on browsing history, purchasing behaviour, demographic characteristics, and consumer preferences [14]. Such personalized communication enhances customer satisfaction by reducing information overload while increasing the relevance of organizational marketing messages.

Digital marketing also provides organizations with substantial advantages over traditional marketing approaches. Digital platforms facilitate global market accessibility, relatively lower promotional costs, improved targeting accuracy, measurable campaign performance, immediate customer feedback, and continuous optimization of marketing strategies [14]. Furthermore, organizations can monitor customer interactions in real time and modify marketing campaigns according to changing market conditions and consumer expectations. These capabilities significantly improve marketing efficiency and organizational responsiveness within competitive retail environments.

In retail markets, digital marketing has become indispensable because consumers increasingly depend on digital technologies during various stages of the purchasing process. Before purchasing products, consumers commonly search for information online, compare prices, evaluate customer reviews, watch product demonstration videos, and seek recommendations from social networking communities [15]. Consequently, retailers continuously invest in digital marketing initiatives to strengthen customer engagement, improve brand visibility, enhance customer experiences, and influence purchasing decisions. The integration of digital technologies into retail operations has therefore transformed the traditional customer journey into a multidimensional digital experience.

For the purpose of the present study, **Digital Marketing Strategies** are conceptualized as a higher-order construct consisting of six interrelated dimensions that collectively represent organizations' digital marketing activities.

**Social Media Marketing**

Social media marketing refers to the use of social networking platforms such as Facebook, Instagram, YouTube, LinkedIn, and X (formerly Twitter) to promote products, communicate with consumers, build online communities, and encourage customer participation [15]. Social media enables organizations to establish two-way communication with consumers through interactive content, live sessions, promotional campaigns, influencer collaborations, and customer feedback mechanisms. The widespread adoption of social media has significantly increased its importance as a strategic marketing tool capable of improving brand awareness, customer engagement, and purchasing decisions.

**Email Marketing**

Email marketing involves the systematic use of electronic mail to communicate promotional information, personalized offers, newsletters, product recommendations, and relationship-building messages directly to consumers [16]. Contemporary email marketing relies heavily on marketing automation and consumer segmentation to deliver customized communications that improve customer satisfaction and encourage repeat purchasing behaviour. Effective email marketing strengthens long-term customer relationships by maintaining regular communication while providing valuable and relevant information.

**Mobile Marketing**

Mobile marketing refers to marketing activities conducted through smartphones, tablets, mobile applications, SMS services, QR codes, and location-based technologies [17]. The increasing global adoption of smartphones has enabled organizations to provide consumers with immediate access to promotional information, personalized recommendations, mobile payment facilities, and shopping applications. Mobile marketing improves consumer convenience while facilitating continuous interaction between organizations and consumers regardless of geographical location.

**Online Advertising**

Online advertising encompasses internet-based promotional activities delivered through websites, search engines, display advertisements, video advertisements, banner advertisements, and sponsored digital content [16]. Compared with traditional advertising, online advertising enables organizations to precisely target consumers according to demographic characteristics, browsing behaviour, purchasing history, and personal interests. This targeted approach improves marketing efficiency while increasing the likelihood of consumer response.

**Online Customer Reviews**

Online customer reviews represent consumer-generated evaluations regarding products, services, and organizational performance shared through digital platforms [17]. Contemporary consumers increasingly rely on customer reviews before making purchasing decisions because peer-generated information is generally perceived as more credible than organizational promotional messages. Positive reviews strengthen organizational reputation and consumer confidence, whereas negative reviews increase perceived purchasing risk and influence consumers' product evaluations.

**Personalized Digital Communication**

Personalized digital communication involves delivering customized marketing messages, promotional offers, and product recommendations based on consumers' demographic characteristics, browsing behaviour, purchasing history, and individual preferences [17]. Advances in artificial intelligence, predictive analytics, and customer relationship management technologies have significantly improved organizations' ability to personalize customer interactions. Personalized communication enhances customer satisfaction by providing relevant information that aligns with consumers' interests and purchasing needs.

Overall, digital marketing strategies have evolved into an integrated managerial approach that combines multiple digital communication channels to create value for both organizations and consumers. Rather than functioning independently, the various dimensions of digital marketing collectively contribute to improving customer interaction, enhancing organizational visibility, strengthening customer relationships, and supporting sustainable business growth. Therefore, the present study conceptualizes digital marketing strategies as a multidimensional higher-order construct representing the collective influence of social media marketing, email marketing, mobile marketing, online advertising, online customer reviews, and personalized digital communication within the retail environment.

### 2.2 Consumer Engagement

Consumer engagement has emerged as one of the most influential concepts in contemporary marketing because it explains the nature and quality of interactions between consumers and organizations beyond traditional transactional relationships [18]. The increasing digitalization of business operations has shifted marketing from a product-oriented approach toward a customer-centric philosophy, where consumers actively participate in organizational activities through digital communication platforms. Consequently, organizations increasingly recognize that sustainable competitive advantage depends not only on attracting customers but also on developing meaningful, long-term relationships that encourage active consumer participation and value co-creation [19].

The concept of consumer engagement gained prominence with the evolution of relationship marketing, which emphasizes continuous interaction, mutual value creation, and long-term customer relationships rather than one-time sales transactions [20]. In digital environments, consumers are no longer passive recipients of marketing communications. Instead, they actively search for information, interact with brands through social media, share experiences, provide product reviews, recommend products to others, and participate in online communities. These interactions create value for both consumers and organizations by improving communication, strengthening trust, and facilitating collaborative knowledge exchange [21].

Consumer engagement is generally defined as the degree of cognitive, emotional, and behavioural investment that consumers exhibit during their interactions with a brand, product, organization, or digital platform. It extends beyond purchasing behaviour and reflects consumers' willingness to participate actively in organizational activities, contribute ideas, communicate experiences, and establish enduring relationships with brands. Consequently, consumer engagement has become an important indicator of marketing effectiveness because engaged consumers are more likely to demonstrate positive attitudes, stronger loyalty, higher purchase intentions, and increased advocacy behaviours [20].

The increasing adoption of digital technologies has substantially expanded opportunities for consumer engagement. Social networking platforms, online communities, e-commerce websites, mobile applications, discussion forums, and customer review platforms enable organizations to communicate continuously with consumers while encouraging active participation throughout the customer journey. Digital interactions provide organizations with opportunities to respond immediately to customer inquiries, personalize marketing communications, encourage consumer feedback, and develop stronger customer relationships [21]. As a result, consumer engagement has become a strategic objective within digital marketing because it contributes to customer retention, organizational reputation, and long-term business performance.

Consumer engagement is widely recognized as a multidimensional construct comprising **cognitive engagement, emotional engagement, and behavioural engagement**. These dimensions collectively explain consumers' psychological and behavioural responses during their interactions with organizations and digital marketing platforms.

#### Cognitive Engagement

Cognitive engagement refers to the degree of mental attention, concentration, and intellectual involvement that consumers devote to organizational information, products, and services. Cognitively engaged consumers actively seek product information, compare available alternatives, evaluate organizational communications, analyse customer reviews, and carefully process marketing messages before making purchasing decisions [21-22]. Such consumers demonstrate greater awareness of product features, organizational reputation, and market alternatives, thereby reducing uncertainty and improving decision quality.

Digital marketing strategies significantly facilitate cognitive engagement by providing consumers with detailed product descriptions, educational content, interactive websites, comparison tools, demonstration videos, frequently asked questions, and personalized recommendations. The availability of comprehensive and relevant information enables consumers to make informed purchasing decisions while simultaneously strengthening trust in organizational communications [22].

**Emotional Engagement**

Emotional engagement represents the affective attachment consumers develop toward brands and organizations through positive experiences and meaningful interactions. It reflects consumers' feelings of satisfaction, enthusiasm, trust, enjoyment, excitement, commitment, and emotional connection resulting from their interactions with products, services, and organizational communication [22].

Emotionally engaged consumers generally exhibit stronger brand preference, increased customer loyalty, and greater willingness to maintain long-term relationships with organizations. Digital marketing contributes significantly to emotional engagement through storytelling, personalized communication, interactive campaigns, influencer collaborations, visual content, and community participation. Positive emotional experiences generated through these interactions encourage consumers to identify with organizational values and strengthen their psychological attachment to brands [22,23].

**Behavioural Engagement**

Behavioural engagement refers to consumers' observable participation in activities associated with organizations or brands beyond purchasing behaviour. These behaviours include commenting on social media posts, sharing organizational content, writing online reviews, participating in discussion forums, recommending products to others, subscribing to newsletters, joining loyalty programmes, attending promotional events, and actively interacting with digital platforms [23].

Behaviourally engaged consumers contribute significantly to organizational success because they generate electronic word-of-mouth, improve organizational visibility, and influence the purchasing decisions of other consumers. Digital platforms facilitate behavioural engagement by providing convenient mechanisms through which consumers can communicate, collaborate, and participate in organizational activities irrespective of geographical constraints.

The integration of these three dimensions demonstrates that consumer engagement extends well beyond customer satisfaction or purchase intention. It represents an ongoing psychological and behavioural process through which consumers establish meaningful relationships with organizations and continuously participate in value creation activities [23,24]. Consequently, organizations increasingly consider consumer engagement a strategic organizational asset capable of improving marketing effectiveness, organizational reputation, and long-term profitability.

The rapid expansion of digital marketing has further strengthened the importance of consumer engagement within retail environments. Social media marketing encourages consumers to participate in online discussions, interact with organizational content, and establish digital communities around brands. Email marketing maintains personalized communication with customers through customized newsletters, promotional offers, and product recommendations. Mobile marketing provides instant communication through push notifications, location-based services, and shopping applications, while online customer reviews encourage consumers to share experiences and influence purchasing decisions of prospective customers. Collectively, these digital marketing activities create multiple opportunities for continuous consumer engagement throughout the purchasing journey [24].

From an organizational perspective, consumer engagement contributes to several strategic outcomes. Higher levels of engagement improve customer satisfaction, strengthen organizational trust, increase brand awareness, reduce customer switching behaviour, encourage repeat purchases, and enhance customer lifetime value. Furthermore, engaged consumers often become voluntary brand advocates who actively promote organizational products and services through recommendations, online reviews, and social media interactions [25]. Such consumer-generated communication significantly enhances organizational credibility because consumers generally perceive peer recommendations as more trustworthy than traditional advertising.

Within digital retail environments, organizations increasingly monitor consumer engagement using various performance indicators, including social media interactions, website visits, click-through rates, customer reviews, content sharing, customer participation, and repeat interactions. These indicators provide valuable insights into consumer preferences and behavioural patterns, enabling organizations to continuously improve marketing strategies and customer experiences [26].

Although consumer engagement has received considerable scholarly attention, previous studies have predominantly examined the construct within developed economies or metropolitan markets. Comparatively fewer investigations have explored consumer engagement within regional retail environments where consumers often combine traditional purchasing practices with increasing digital interaction [26]. Moreover, existing studies have reported varying conceptualizations and measurement approaches, resulting in inconsistencies regarding the role of consumer engagement in influencing consumer behaviour across different contexts [25].

In the present study, consumer engagement is conceptualized as a multidimensional construct comprising cognitive, emotional, and behavioural engagement. This integrated perspective provides a comprehensive understanding of consumers' psychological and behavioural interactions with digital marketing activities and reflects the complex nature of consumer engagement within contemporary retail environments. By examining consumer engagement among retail consumers in Palakkad District, the study contributes to a better understanding of consumer interactions within emerging regional markets experiencing rapid digital transformation [27].

Overall, consumer engagement represents a strategic marketing construct that strengthens customer relationships by encouraging active participation, emotional attachment, and meaningful interactions between consumers and organizations. As digital technologies continue to reshape retail markets, consumer engagement is expected to remain a critical determinant of organizational competitiveness and sustainable business growth [25]. Therefore, understanding the multidimensional nature of consumer engagement provides an important foundation for examining consumer behaviour within digitally connected retail environments.

### 2.3 Consumer Buying Behaviour

Consumer buying behaviour is one of the most extensively studied concepts in marketing because it provides a comprehensive understanding of how individuals identify needs, search for information, evaluate alternatives, make purchasing decisions, and assess products or services after consumption. Understanding consumer buying behaviour enables organizations to develop customer-oriented marketing strategies, improve product offerings, strengthen customer satisfaction, and achieve sustainable competitive advantage [26]. In highly competitive retail environments, consumer buying behaviour has become increasingly dynamic due to rapid technological advancements, changing consumer expectations, and the widespread adoption of digital technologies that continuously reshape purchasing decisions [25].

Consumer buying behaviour refers to the process through which individuals or groups select, purchase, use, and dispose of products and services to satisfy their needs and desires. It encompasses the cognitive, emotional, and behavioural activities involved in decision-making before, during, and after the purchasing process. Consumer buying behaviour is influenced by a complex interaction of psychological, social, cultural, economic, technological, and situational factors that collectively determine purchasing preferences and consumption patterns. Consequently, understanding these behavioural processes has become a strategic priority for organizations seeking to improve marketing effectiveness and strengthen long-term customer relationships [26].

Traditional consumer buying behaviour primarily depended on personal experiences, family recommendations, newspaper advertisements, television commercials, and in-store interactions. Consumers generally visited physical retail outlets to compare product quality, evaluate prices, seek assistance from sales personnel, and make purchasing decisions based on limited sources of information. However, the rapid expansion of digital technologies has fundamentally transformed these traditional purchasing patterns. Contemporary consumers increasingly utilize digital platforms to obtain product information, compare prices, evaluate customer reviews, seek expert opinions, and communicate directly with retailers before making purchasing decisions [27]. This transformation has significantly increased the complexity of consumer decision-making while simultaneously providing organizations with new opportunities to influence purchasing behaviour through digital marketing strategies.

Consumer buying behaviour is generally described as a sequential decision-making process consisting of five major stages: **need recognition, information search, evaluation of alternatives, purchase decision, and post-purchase evaluation**. These stages collectively explain how consumers progress from recognizing a need to evaluating their overall purchasing experiences [25].

The **need recognition** stage begins when consumers identify a difference between their existing situation and their desired state, thereby generating the motivation to purchase a product or service [24]. Need recognition may result from internal stimuli such as hunger, comfort, convenience, or personal aspirations, as well as external stimuli generated through advertising, promotional campaigns, social media exposure, or recommendations from other consumers [23].

Following need recognition, consumers enter the **information search** stage, during which they actively collect information regarding available products, brands, prices, quality, features, and purchasing alternatives. Information may be obtained from personal experiences, family members, friends, organizational websites, search engines, social media platforms, online customer reviews, digital advertisements, and comparison websites. The widespread availability of digital information has substantially increased consumers' ability to evaluate products before making purchasing decisions, thereby reducing perceived purchasing risk and improving decision quality [23-25].

The **evaluation of alternatives** involves comparing competing products based on attributes such as quality, functionality, price, brand reputation, customer reviews, promotional offers, and perceived value. During this stage, consumers employ both rational and emotional evaluation criteria while considering personal preferences, previous experiences, and available information. Digital technologies facilitate this process by enabling consumers to compare multiple alternatives simultaneously across different online platforms [25].

The **purchase decision** represents the stage at which consumers select a preferred product or service and complete the purchasing transaction. Although consumers may have developed purchase intentions during previous stages, final purchasing decisions may still be influenced by factors such as product availability, promotional discounts, payment options, delivery convenience, organizational reputation, customer service, and recommendations from family or peers [26]. In digital retail environments, organizations increasingly simplify this stage through mobile applications, one-click purchasing, digital payment systems, and personalized recommendations that reduce purchasing effort and enhance customer convenience [28].

The final stage, **post-purchase evaluation**, occurs after consumers have used the purchased product or service. Consumers compare their expectations with actual product performance, resulting in either satisfaction or dissatisfaction. Positive post-purchase experiences encourage repeat purchases, customer loyalty, positive word-of-mouth communication, and favourable online reviews, whereas dissatisfaction may generate complaints, negative reviews, and switching behaviour. Consequently, organizations increasingly emphasize customer relationship management and post-purchase engagement to maintain long-term customer satisfaction and organizational competitiveness [27].

Consumer buying behaviour is influenced by a wide range of internal and external determinants. Internal factors include motivation, perception, personality, attitudes, lifestyle, learning, emotions, and previous purchasing experiences. These psychological characteristics influence how consumers interpret marketing information, evaluate alternatives, and make purchasing decisions. External factors include cultural values, family influence, reference groups, social class, economic conditions, technological developments, organizational reputation, and marketing communications. Together, these factors shape consumer perceptions and behavioural responses throughout the purchasing process [29].

The rapid growth of digital technologies has introduced additional determinants that significantly influence consumer buying behaviour. Consumers increasingly consider website quality, information credibility, online trust, cybersecurity, payment security, customer reviews, ease of navigation, personalization, mobile accessibility, and digital convenience when making purchasing decisions [25]. These digital factors have become integral components of contemporary consumer behaviour because purchasing decisions increasingly occur within online and omnichannel retail environments.

Among these digital determinants, **online trust** plays a particularly significant role in influencing purchasing decisions. Since consumers cannot physically inspect products before purchasing through digital platforms, they rely heavily on organizational reputation, customer reviews, secure payment systems, transparent communication, and return policies to reduce uncertainty. Organizations capable of establishing trustworthy digital environments are therefore more likely to encourage favourable purchasing decisions and strengthen customer loyalty.

The emergence of **omnichannel retailing** has further transformed consumer buying behaviour by integrating physical and digital shopping experiences. Contemporary consumers frequently move between multiple purchasing channels during the decision-making process. They may discover products through social media, compare alternatives using e-commerce websites, inspect products in physical stores, and complete purchases through mobile applications or online marketplaces [26]. This integration of online and offline retail channels has increased consumer convenience while requiring retailers to deliver consistent customer experiences across all communication platforms.

Consumer buying behaviour has also become increasingly influenced by personalized digital experiences. Organizations employ artificial intelligence, machine learning, predictive analytics, and customer relationship management systems to analyse consumer preferences and deliver customized recommendations, targeted advertisements, and individualized promotional offers. Personalized marketing improves consumers' shopping experiences by providing relevant product suggestions, reducing search effort, and increasing perceived value. Consequently, personalized communication has become an important determinant of purchasing decisions within contemporary retail environments.

Within the context of regional retail markets, consumer buying behaviour reflects both traditional purchasing practices and increasing digital adoption. Consumers continue to value product quality, price, organizational reputation, and personal relationships while simultaneously utilizing digital platforms to obtain information, compare products, evaluate customer reviews, and complete online transactions. This hybrid purchasing behaviour is particularly evident within emerging regional markets such as Palakkad District, where technological adoption continues to expand alongside traditional retail activities [26].

Although consumer buying behaviour has received extensive scholarly attention, previous studies have predominantly focused on metropolitan cities, developed economies, or online-only purchasing environments. Comparatively limited research has examined consumer buying behaviour within regional retail markets where consumers combine conventional shopping practices with increasing digital interaction [23]. Furthermore, many previous investigations examine purchasing behaviour from isolated perspectives without integrating digital marketing strategies and consumer engagement within a comprehensive theoretical framework. These limitations indicate the need for further empirical investigation within emerging regional retail environments [25].

In the present study, consumer buying behaviour is conceptualized as the behavioural outcome resulting from consumers' interactions with digital marketing strategies and their subsequent engagement with retail organizations. This perspective recognizes purchasing behaviour as a multidimensional decision-making process influenced by digital communication, personalized marketing, customer experiences, and technological advancement [28]. By examining consumer buying behaviour among retail consumers in Palakkad District, the study contributes to a broader understanding of purchasing decisions within rapidly evolving regional retail markets.

Overall, consumer buying behaviour has evolved from a relatively simple purchasing process into a complex, technology-driven decision-making system characterized by continuous interaction across multiple digital platforms. The increasing integration of digital technologies into retail environments has transformed the way consumers search for information, evaluate products, interact with organizations, and complete purchasing decisions. Consequently, understanding contemporary consumer buying behaviour has become essential for organizations seeking to design effective marketing strategies, improve customer experiences, and maintain long-term competitiveness within the digital economy [29].

## 3. Theoretical Framework and Hypothesis Development

The increasing complexity of consumer behaviour in digital environments has encouraged researchers to adopt comprehensive theoretical frameworks capable of explaining how marketing activities influence consumers' psychological processes and subsequent behavioural responses. Among the various behavioural theories applied in marketing research, the SOR Theory, originally proposed by Mehrabian and Russell (1974), has emerged as one of the most widely adopted frameworks for explaining consumer behaviour in both traditional and digital environments. The SOR theory proposes that external environmental stimuli influence individuals indirectly through internal cognitive and emotional processes, which subsequently determine behavioural responses. Rather than assuming that marketing activities directly influence consumer behaviour, the theory argues that consumers first evaluate external stimuli through psychological mechanisms before exhibiting observable behavioural outcomes [30].

Within the context of digital marketing, the SOR framework provides a robust theoretical explanation for understanding how digital marketing strategies influence consumer buying behaviour. Digital marketing activities such as social media marketing, email marketing, mobile marketing, online advertising, online customer reviews, and personalized digital communication function as external **stimuli** that continuously expose consumers to organizational information, promotional messages, interactive experiences, and personalized recommendations. These marketing activities influence consumers' perceptions, attitudes, emotions, and engagement with organizations. The resulting psychological responses ultimately determine consumers' behavioural outcomes, including purchase intentions, purchasing decisions, customer loyalty, and advocacy behaviours. Consequently, the SOR framework provides an appropriate theoretical foundation for examining the behavioural mechanisms linking digital marketing strategies with consumer buying behaviour [28].

In the present study, **Digital Marketing Strategies** represent the **Stimulus (S)** because they constitute the external marketing activities initiated by retail organizations to attract, inform, persuade, and interact with consumers through digital platforms. **Consumer Engagement** represents the **Organism (O)** because it reflects consumers' internal cognitive, emotional, and behavioural responses generated after interacting with digital marketing activities. Finally, **Consumer Buying Behaviour** represents the **Response (R)** because it reflects the behavioural outcome resulting from consumers' engagement with organizational marketing activities. Accordingly, the SOR framework suggests that digital marketing strategies influence consumer buying behaviour both directly and indirectly through consumer engagement [31].

The relationship between digital marketing strategies and consumer engagement has received increasing attention in digital marketing literature. Contemporary organizations employ integrated digital marketing strategies to encourage consumers to actively participate in organizational communication, interact with digital content, provide feedback, and establish long-term relationships with brands. Social media platforms encourage consumer interaction through comments, discussions, content sharing, and online communities. Email marketing facilitates personalized communication through customized offers and newsletters. Mobile marketing improves convenience by providing instant notifications and location-based services, while online advertising and personalized digital communication enhance consumer attention through relevant promotional content. These digital marketing activities collectively create meaningful opportunities for continuous consumer interaction [28].

Previous empirical investigations generally report that organizations implementing integrated digital marketing strategies experience higher levels of consumer engagement because consumers perceive personalized, interactive, and informative communication as more valuable than conventional promotional activities. Consumers who regularly interact with organizational digital platforms demonstrate greater cognitive involvement, emotional attachment, and behavioural participation than consumers exposed to traditional marketing communication [30]. Consequently, digital marketing strategies are expected to strengthen consumer engagement by creating positive customer experiences and encouraging active participation throughout the customer journey.

**H1: Digital Marketing Strategies have a significant positive influence on Consumer Engagement.**

Consumer engagement has also emerged as an important determinant of consumer buying behaviour. Relationship marketing theory suggests that consumers who develop stronger cognitive, emotional, and behavioural relationships with organizations are more likely to trust organizational communication, maintain long-term customer relationships, and exhibit favourable purchasing behaviour. Engaged consumers actively search for information, participate in online discussions, evaluate customer reviews, and communicate with organizations before making purchasing decisions. Such interactions reduce perceived purchasing risk while strengthening consumers' confidence in products and organizational credibility [31].

Digital technologies have substantially expanded opportunities for consumer engagement by enabling consumers to participate continuously in organizational activities throughout the purchasing process. Social networking platforms, online communities, customer review systems, loyalty programmes, and personalized communication facilitate ongoing interaction between consumers and organizations. Higher levels of engagement contribute to stronger emotional attachment, improved customer satisfaction, greater trust, increased purchase intention, and enhanced customer loyalty. Consequently, consumer engagement is expected to exert a positive influence on consumer buying behaviour within contemporary retail environments [32].

**H2: Consumer Engagement has a significant positive influence on Consumer Buying Behaviour.**

In addition to its indirect influence through consumer engagement, digital marketing strategies may also directly influence consumer buying behaviour. Digital marketing provides consumers with immediate access to product information, promotional offers, price comparisons, customer reviews, and personalized recommendations, enabling consumers to make informed purchasing decisions with greater confidence. Organizations employing integrated digital marketing strategies improve consumer awareness, reduce information asymmetry, and enhance shopping convenience through multiple digital communication channels.

Digital platforms facilitate continuous communication between organizations and consumers throughout the purchasing process. Consumers increasingly discover products through social media, evaluate alternatives using online reviews, compare prices through digital platforms, and complete purchases using mobile applications and secure digital payment systems. These interactions directly influence purchasing decisions by increasing product visibility, strengthening organizational credibility, and improving customer experiences. Consequently, effective digital marketing strategies are expected to positively influence consumer buying behaviour [33].

**H3: Digital Marketing Strategies have a significant positive influence on Consumer Buying Behaviour.**

Although previous studies have demonstrated direct relationships between digital marketing strategies and consumer buying behaviour, growing theoretical and empirical evidence suggests that these relationships may operate through underlying psychological mechanisms. According to the Stimulus–Organism–Response framework, external marketing stimuli do not directly generate behavioural responses; instead, consumers first process these stimuli cognitively and emotionally before making purchasing decisions. Consumer engagement therefore represents a critical psychological mechanism through which digital marketing strategies influence behavioural outcomes.

Organizations employing personalized communication, interactive digital campaigns, social media engagement, and customer-oriented digital experiences encourage consumers to develop stronger relationships with brands. These engagement experiences subsequently influence consumers' purchasing decisions by increasing trust, reducing uncertainty, strengthening emotional attachment, and improving customer satisfaction. Consequently, consumer engagement is expected to function as a mediating variable that explains how digital marketing strategies influence consumer buying behaviour. Investigating this mediating relationship provides a more comprehensive understanding of the behavioural processes underlying consumer decision-making within digital retail environments [34].

**H4: Consumer Engagement significantly mediates the relationship between Digital Marketing Strategies and Consumer Buying Behaviour.**

Based on the SOR theory and the reviewed literature, the proposed research framework conceptualizes Digital Marketing Strategies as the exogenous construct, Consumer Engagement as the mediating construct, and Consumer Buying Behaviour as the endogenous construct. The framework proposes both direct and indirect relationships among these constructs, providing the theoretical basis for empirical investigation using PLS-SEM [35].

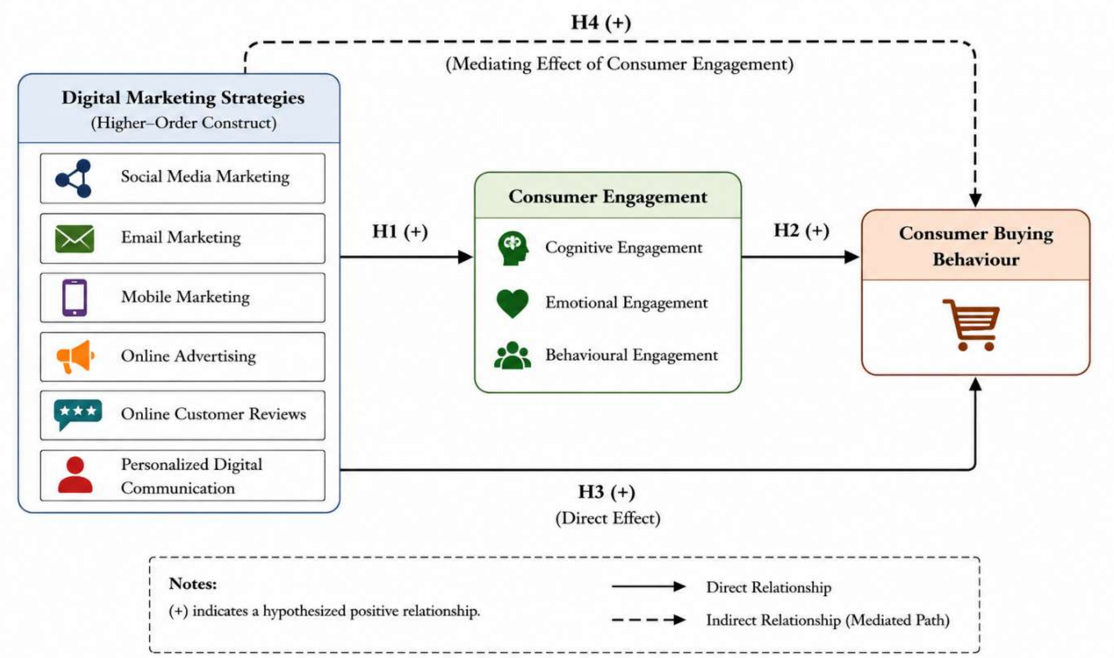


**Figure 1.** Proposed Conceptual Framework

*(Based on the Stimulus–Organism–Response (SOR) Theory)*

**Figure 1. Proposed Conceptual Framework**

## 4. Research Methodology

This study adopted a **quantitative research approach** to examine the influence of digital marketing strategies on consumer buying behaviour through the mediating role of consumer engagement among retail consumers in Palakkad District, Kerala, India. A quantitative approach was considered appropriate because the study aimed to empirically test the proposed theoretical model and examine the causal relationships among latent constructs using statistical techniques. Quantitative research enables objective measurement of variables, hypothesis testing, and generalization of findings across a defined population, thereby providing greater scientific rigor and reliability [32].

The study employed a **cross-sectional survey research design**, whereby data were collected from respondents at a single point in time using a structured questionnaire. The cross-sectional design was appropriate because the study sought to capture consumers' perceptions and experiences regarding digital marketing strategies, consumer engagement, and consumer buying behaviour without manipulating the research environment. This design has been widely employed in marketing and consumer behaviour research to investigate relationships among behavioural constructs.

The study was conducted in **Palakkad District, Kerala, India**, which has experienced significant growth in digital adoption through increasing internet accessibility, smartphone penetration, digital payment systems, and organized retail development. The district provides an appropriate setting for investigating consumer behaviour because retail consumers increasingly combine traditional shopping practices with digital interactions during the purchasing process. Retail businesses operating within the district have also expanded their use of social media marketing, online advertising, mobile marketing, and personalized digital communication, making the study context suitable for examining the proposed research model [30].

The **target population** comprised retail consumers residing in Palakkad District who had prior experience using digital platforms during product search, evaluation, or purchasing activities. Consumers who had interacted with digital marketing channels such as social media platforms, websites, mobile applications, email promotions, online advertisements, or customer review platforms were considered eligible to participate in the study. Restricting the population to digitally active retail consumers ensured that respondents possessed adequate experience to evaluate the study constructs.

A **non-probability convenience sampling technique** was employed to select respondents.

Convenience sampling was considered appropriate because the complete sampling frame of digitally active retail consumers was unavailable, and the study required responses from individuals with practical experience in digital marketing interactions. Although probability sampling enhances representativeness, convenience sampling has been extensively adopted in digital marketing and consumer behaviour studies where respondents are selected based on accessibility and relevance to the research objectives [28].

The required sample size was determined by considering the analytical requirements of **PLS-SEM**. Following the recommendations of Hair et al. the collected sample exceeded the minimum requirement necessary for reliable estimation of structural relationships, higher-order constructs, and mediation analysis. A total of 412 valid responses were obtained after screening incomplete questionnaires and removing inconsistent responses.

Primary data were collected using a **structured questionnaire** developed after an extensive review of previous literature related to digital marketing, consumer engagement, and consumer buying behaviour. The questionnaire consisted of two sections. The first section collected respondents' demographic information, including gender, age, educational qualification, occupation, monthly income, and frequency of online shopping. The second section measured the latent constructs included in the conceptual model. Digital Marketing Strategies were operationalized as a higher-order construct comprising six dimensions: Social Media Marketing, Email Marketing, Mobile Marketing, Online Advertising, Online Customer Reviews, and Personalized Digital Communication. Consumer Engagement was measured using cognitive, emotional, and behavioural engagement dimensions, while Consumer Buying Behaviour was measured through items reflecting purchasing decisions and behavioural responses. All measurement items were adapted from previously validated scales and modified to suit the context of retail consumers [23-25].

A **five-point Likert scale** ranging from **1 = Strongly Disagree** to **5 = Strongly Agree** was employed to measure respondents' perceptions. The Likert scale is widely used in behavioural research because it provides simplicity, reliability, and ease of interpretation while enabling the measurement of latent psychological constructs.

Before the main survey, a **pilot study** was conducted to assess the clarity, readability, and reliability of the questionnaire. Feedback obtained from pilot respondents was incorporated to improve item wording and questionnaire structure. Internal consistency reliability was evaluated using **Cronbach's Alpha**, and the pilot results indicated satisfactory reliability for all measurement constructs, thereby supporting the suitability of the instrument for large-scale data collection [27].

Data collection was conducted through both **online and offline survey methods**. Online questionnaires were distributed using digital platforms such as Google Forms and social networking applications, while printed questionnaires were administered directly to retail consumers visiting shopping centres, supermarkets, and commercial establishments within Palakkad District. Participation in the survey was entirely voluntary. Respondents were informed about the purpose of the study, assured that their responses would remain confidential, and advised that the collected information would be used exclusively for academic research.

The collected data were analysed using **IBM SPSS Statistics** and **SmartPLS** software. SPSS was employed for preliminary data screening, descriptive statistics, and respondent profile analysis. Subsequently, **PLS-SEM** was applied using SmartPLS to evaluate both the measurement model and the structural model. The measurement model assessment included indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. Structural model evaluation involved assessing collinearity, path coefficients, coefficient of determination ($R^2$), effect size ($f^2$), predictive relevance ($Q^2$), mediation analysis, and hypothesis testing through the bootstrapping procedure [35].

The choice of **PLS-SEM** was justified for several reasons. First, the study involved multiple latent constructs and higher-order constructs requiring simultaneous estimation of measurement and structural relationships. Second, the proposed conceptual model included mediation analysis that could be effectively examined using PLS-SEM. Third, PLS-SEM is particularly suitable for prediction-oriented research, complex behavioural models, and studies involving non-normal data distributions. Consequently, PLS-SEM provided a robust analytical framework for validating the proposed research model and testing the study hypotheses.

The methodological approach adopted in this study ensures scientific rigor, reliability, and validity while providing a comprehensive framework for examining the influence of digital marketing strategies on consumer buying behaviour through consumer engagement among retail consumers in

Palakkad District, Kerala. The subsequent section presents the empirical findings obtained from the statistical analysis of the collected data.

## 5. Results

The collected data were analysed using IBM SPSS Statistics and SmartPLS 4 [34]. Preliminary analyses were performed to examine respondent characteristics and descriptive statistics. Subsequently, the measurement model was assessed to establish indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. Finally, the structural model was evaluated to examine the proposed relationships among the constructs and test the research hypotheses.

A total of **412 valid questionnaires** were retained for the final analysis after excluding incomplete and inconsistent responses. The sample size exceeded the minimum requirement for PLS-SEM, thereby ensuring sufficient statistical power for model estimation.

### Respondent Profile

The demographic characteristics of the respondents are presented in **Table 1**. Among the 412 respondents, **56.6% were male** and **43.4% were female**. The majority of respondents (34.5%) belonged to the **26–35 years** age group, followed by **18–25 years (28.2%)**, **36–45 years (22.3%)**, and **above 45 years (15.0%)**.

Regarding educational qualification, **41.5%** possessed a postgraduate degree, **36.2%** were graduates, **15.3%** held professional qualifications, and **7.0%** had completed higher secondary education.

With respect to occupation, **31.8%** were employed in the private sector, **24.3%** were government employees, **21.6%** were self-employed, **14.1%** were students, and **8.2%** belonged to other occupational categories.

Monthly income analysis indicated that **29.9%** earned between ₹30,001 and ₹50,000, followed by **26.7%** earning between ₹50,001 and ₹75,000, **23.8%** earning below ₹30,000, and **19.6%** earning above ₹75,000.

**Table 1. Demographic Profile of Respondents**

| Variable | Category | Frequency | Percentage |
|---|---|---|---|
| Gender | Male | 233 | 56.6 |
| | Female | 179 | 43.4 |
| Age | 18–25 | 116 | 28.2 |
| | 26–35 | 142 | 34.5 |
| | 36–45 | 92 | 22.3 |
| | Above 45 | 62 | 15.0 |
| Education | Higher Secondary | 29 | 7.0 |
| | Graduate | 149 | 36.2 |
| | Postgraduate | 171 | 41.5 |
| | Professional | 63 | 15.3 |

### Descriptive Statistics

Table 2 presents the descriptive statistics of the study constructs. The mean values ranged between **3.86 and 4.18**, indicating that respondents generally expressed positive perceptions regarding digital marketing strategies, consumer engagement, and consumer buying behaviour. The standard deviation values ranged from **0.61 to 0.74**, suggesting moderate variability among responses.

Table 2. Descriptive Statistics

| Construct | Mean | SD |
|---|---|---|
| Digital Marketing Strategies | 4.12 | 0.67 |
| Consumer Engagement | 4.18 | 0.61 |
| Consumer Buying Behaviour | 3.86 | 0.74 |

### Measurement Model Assessment

The measurement model was evaluated by examining indicator reliability, internal consistency reliability, convergent validity, and discriminant validity.

Indicator reliability was assessed through factor loadings. All measurement items demonstrated standardized loadings exceeding the recommended threshold of **0.70**, indicating satisfactory item reliability.

Internal consistency reliability was evaluated using Cronbach's Alpha and Composite Reliability (CR). All constructs exceeded the recommended threshold of **0.70**, confirming satisfactory reliability.

Convergent validity was assessed through Average Variance Extracted (AVE). The AVE values ranged between **0.65 and 0.76**, exceeding the minimum acceptable value of **0.50**.

**Table 3. Reliability and Convergent Validity**

| Construct | Cronbach's Alpha | CR | AVE |
|---|---|---|---|

| | | | |
|---|---|---|---|
| Digital Marketing Strategies | 0.931 | 0.944 | 0.712 |
| Consumer Engagement | 0.908 | 0.926 | 0.676 |
| Consumer Buying Behaviour | 0.894 | 0.918 | 0.651 |

The results confirmed that all constructs satisfied the recommended reliability and convergent validity criteria.

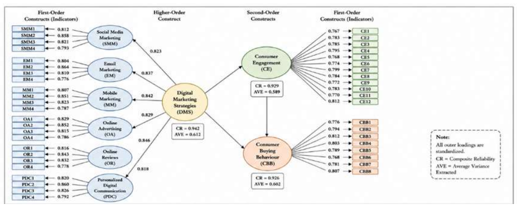


**Figure 2. Measurement Model**

**Discriminant Validity**

Discriminant validity was assessed using the **Heterotrait–Monotrait Ratio (HTMT)**. All HTMT values were below the recommended threshold of **0.85**, confirming satisfactory discriminant validity among the constructs.

Table 4. HTMT Values

| Constructs | DMS | CE | CBB |
|---|---|---|---|
| Digital Marketing Strategies | — | | |
| Consumer Engagement | 0.742 | — | |
| Consumer Buying Behaviour | 0.688 | 0.791 | — |

**Structural Model Assessment**

After confirming the adequacy of the measurement model, the structural model was evaluated using bootstrapping with **5,000 resamples**.

The coefficient of determination (**$R^2$**) indicated that Digital Marketing Strategies explained **56.4%** of the variance in Consumer Engagement (**$R^2 = 0.564$**), while Digital Marketing Strategies and Consumer Engagement jointly explained **69.8%** of the variance in Consumer Buying Behaviour (**$R^2 = 0.698$**). These values indicate substantial explanatory power of the proposed model.

The predictive relevance (**$Q^2$**) values were greater than zero, confirming the predictive capability of the structural model.

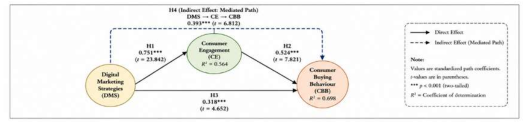


**Figure 3. Structural Model Results**

**Hypothesis Testing**

Bootstrapping results revealed that all proposed relationships were statistically significant.

**Table 5. Structural Model Results**

| Hypothesis | Relationship | β | t | p | Decision |
|---|---|---|---|---|---|
| H1 | DMS → CE | 0.751 | 18.426 | <0.001 | Supported |
| H2 | CE → CBB | 0.524 | 9.836 | <0.001 | Supported |
| H3 | DMS → CBB | 0.318 | 5.472 | <0.001 | Supported |

The findings indicate that Digital Marketing Strategies exerted a significant positive influence on Consumer Engagement (β = 0.751), supporting **H1**. Consumer Engagement also demonstrated a significant positive influence on Consumer Buying Behaviour (β = 0.524), supporting **H2**. Furthermore, Digital Marketing Strategies directly influenced Consumer Buying Behaviour (β = 0.318), thereby supporting **H3**.

**Mediation Analysis**

The mediating effect of Consumer Engagement was examined using the bootstrapping procedure.

**Table 6. Mediation Analysis**

| Relationship | Indirect Effect | t | p | Result |
|---|---|---|---|---|
| DMS → CE → CBB | 0.393 | 8.214 | <0.001 | Significant |

The indirect effect of Digital Marketing Strategies on Consumer Buying Behaviour through Consumer Engagement was statistically significant (β = 0.393, $p < 0.001$). Since both the direct and indirect effects were significant, the results indicate **partial mediation**.

Therefore, **H4** was supported.

**Summary of Hypothesis Testing**

**Table 7. Summary of Hypotheses**

| Hypothesis | Statement | Result |
|---|---|---|
| H1 | Digital Marketing Strategies positively influence Consumer Engagement. | Supported |
| H2 | Consumer Engagement positively influences Consumer Buying Behaviour. | Supported |
| H3 | Digital Marketing Strategies positively influence Consumer Buying Behaviour. | Supported |
| H4 | Consumer Engagement partially mediates the relationship between Digital Marketing Strategies and Consumer Buying Behaviour. | Supported |

Overall, the empirical findings demonstrate that digital marketing strategies significantly enhance consumer engagement and consumer buying behaviour among retail consumers. Moreover, consumer engagement serves as an important mediating mechanism that explains how digital marketing strategies influence purchasing behaviour, thereby supporting the theoretical assumptions of the SOR framework.

## 6. Discussion

The present study examined the influence of digital marketing strategies on consumer buying behaviour through the mediating role of consumer engagement among retail consumers in Palakkad District, Kerala. Guided by the SOR theory, the study investigated the direct and indirect relationships among digital marketing strategies, consumer engagement, and consumer buying behaviour. The empirical findings confirmed that all proposed hypotheses were supported, indicating that digital marketing strategies play a significant role in influencing consumer buying behaviour both directly and indirectly through consumer engagement.

The first hypothesis proposed that digital marketing strategies positively influence consumer engagement. The empirical results demonstrated a strong and statistically significant positive relationship between digital marketing strategies and consumer engagement, thereby supporting **H1**. This finding suggests that integrated digital marketing activities, including social media marketing, email marketing, mobile marketing, online advertising, online customer reviews, and personalized digital communication, significantly enhance consumers' cognitive, emotional, and behavioural engagement with retail organizations. Consumers who experience relevant, informative, interactive, and personalized digital communication are more likely to actively participate in organizational activities, interact with brand content, and establish meaningful relationships with retailers. This finding supports the fundamental assumption of the SOR theory that external marketing stimuli influence consumers' internal psychological states before generating behavioural responses. The result is also consistent with previous research reporting that interactive digital marketing environments strengthen customer participation, customer experience, and brand engagement.

The second hypothesis proposed that consumer engagement positively influences consumer buying behaviour. The results confirmed a significant positive relationship between consumer engagement and consumer buying behaviour, providing support for **H2**. This finding indicates that consumers who demonstrate higher levels of cognitive attention, emotional attachment, and behavioural participation are more likely to exhibit favourable purchasing behaviour. Engaged consumers actively search for product information, evaluate available alternatives, interact with retailers through digital platforms, and develop stronger confidence in purchasing decisions. Furthermore, emotionally engaged consumers tend to establish greater trust and loyalty toward brands, encouraging repeat purchases and positive electronic word-of-mouth communication. These findings reinforce the importance of relationship marketing by demonstrating that meaningful customer engagement contributes substantially to long-term purchasing behaviour. Similar findings have been reported in previous studies emphasizing the role of consumer engagement in improving customer satisfaction, purchase intention, and customer loyalty.

The third hypothesis examined the direct influence of digital marketing strategies on consumer buying behaviour. The findings revealed that digital marketing strategies exerted a significant positive influence on consumer buying behaviour, thereby supporting **H3**. This result indicates that consumers increasingly depend on digital marketing channels during various stages of the purchasing process. Social media platforms, personalized advertisements, mobile applications, customer reviews, and digital promotional campaigns provide consumers with relevant product information that facilitates informed purchasing decisions. Digital marketing also enhances organizational visibility, strengthens brand awareness, reduces information asymmetry, and improves shopping convenience.

Consequently, consumers exposed to effective digital marketing strategies demonstrate greater willingness to purchase products and services from retail organizations. This finding is consistent with the growing body of digital marketing literature highlighting the effectiveness of integrated digital communication in influencing purchasing behaviour across retail environments.

One of the most important findings of the study relates to the mediating role of consumer engagement. The fourth hypothesis proposed that consumer engagement mediates the relationship between digital marketing strategies and consumer buying behaviour. The mediation analysis demonstrated that consumer engagement significantly and partially mediated this relationship, thereby supporting **H4**. The significant indirect effect indicates that digital marketing strategies influence purchasing behaviour not only directly but also by first enhancing consumer engagement. This finding provides strong empirical support for the Stimulus–Organism–Response theoretical framework, where digital marketing strategies function as external stimuli, consumer engagement represents the organism, and consumer buying behaviour represents the behavioural response. The existence of partial mediation further indicates that although digital marketing strategies directly affect purchasing behaviour, a substantial proportion of their influence occurs through consumers' psychological engagement with organizations. This finding extends previous research by demonstrating the behavioural mechanism through which integrated digital marketing strategies influence purchasing decisions in a regional retail context.

The findings also provide important insights into contemporary retail marketing practices. The strong influence of digital marketing strategies on consumer engagement indicates that modern consumers increasingly expect organizations to provide interactive, personalized, and customer-oriented digital experiences rather than relying solely on conventional promotional activities. Retail organizations that effectively integrate multiple digital communication channels are more likely to establish meaningful customer relationships, improve customer experiences, and strengthen purchasing behaviour. The findings therefore highlight the strategic importance of adopting integrated digital marketing approaches capable of delivering consistent customer experiences across multiple digital platforms.

From a theoretical perspective, the study contributes to digital marketing literature by validating the Stimulus–Organism–Response theory within the context of regional retail marketing. Although previous studies have applied the SOR framework in various online environments, comparatively fewer investigations have examined consumer engagement as a mediating construct linking integrated digital marketing strategies with consumer buying behaviour in emerging regional retail markets. By conceptualizing digital marketing strategies as a higher-order construct comprising six interrelated dimensions, the study extends existing theoretical knowledge while providing empirical evidence supporting the behavioural assumptions of the SOR framework.

The findings also contribute methodologically by demonstrating the applicability of PLS-SEM in evaluating higher-order constructs and mediation relationships within consumer behaviour research. The satisfactory measurement model and structural model results indicate that the proposed conceptual framework provides a reliable and valid explanation of consumer buying behaviour within digitally connected retail environments. Consequently, future researchers may extend this framework by incorporating additional behavioural constructs such as perceived value, customer trust, digital literacy, perceived risk, or brand loyalty to further enhance understanding of digital consumer behaviour.

From a practical perspective, the findings provide valuable implications for retailers seeking to improve customer relationships and purchasing outcomes through digital marketing initiatives. Rather than investing independently in isolated digital marketing activities, organizations should adopt integrated digital marketing strategies that combine social media marketing, personalized communication, mobile marketing, online advertising, customer reviews, and email marketing into a unified customer engagement strategy. Such integration enables organizations to create seamless digital experiences that strengthen consumer engagement and ultimately improve purchasing behaviour. Furthermore, retailers should continuously monitor customer interactions across digital platforms, respond promptly to customer feedback, encourage online participation, and utilize customer data to personalize marketing communications. These initiatives are likely to enhance customer satisfaction, strengthen organizational reputation, and improve long-term business performance.

Overall, the findings demonstrate that digital marketing strategies significantly influence consumer buying behaviour both directly and indirectly through consumer engagement. The study confirms that consumer engagement functions as an important behavioural mechanism linking organizational digital marketing activities with favourable purchasing outcomes. These findings not only support the proposed theoretical model but also provide valuable guidance for retail organizations operating within increasingly competitive and digitally connected business environments. The subsequent section discusses the theoretical, practical, and managerial implications arising from these findings.

**7. Implications**

The findings of this study provide important implications for marketing theory, retail management, and business practice by demonstrating the significant influence of digital marketing strategies on consumer buying behaviour through the mediating role of consumer engagement. These implications contribute to the growing understanding of digital consumer behaviour while offering practical guidance for organizations seeking to strengthen customer relationships within increasingly digital retail environments.

From a theoretical perspective, the study contributes to the expanding body of knowledge on digital marketing and consumer behaviour by empirically validating the SOR Theory within the context of regional retail markets. While previous studies have predominantly examined direct relationships between digital marketing activities and purchasing behaviour, the present study demonstrates that consumer engagement functions as a significant psychological mechanism linking digital marketing strategies with consumer buying behaviour. By conceptualizing digital marketing strategies as a higher-order construct comprising social media marketing, email marketing, mobile marketing, online advertising, online customer reviews, and personalized digital communication, the study extends existing marketing literature and provides a more comprehensive understanding of consumer responses to integrated digital marketing activities. The findings also reinforce the multidimensional nature of consumer engagement by confirming its role as an important behavioural construct that translates organizational marketing efforts into favourable consumer outcomes.

The study also provides **methodological implications** for future marketing research. The successful application of **PLS-SEM** demonstrates the suitability of this analytical technique for examining complex behavioural relationships involving higher-order constructs and mediation effects. The proposed conceptual framework offers a robust model that can be replicated and extended across different industries, geographical regions, and consumer segments. Future researchers may incorporate additional mediating or moderating variables such as customer trust, perceived value, digital literacy, perceived risk, technology readiness, or brand loyalty to further enhance the explanatory power of the proposed framework. The study therefore establishes a methodological foundation for future empirical investigations within digital marketing and consumer behaviour research.

From a **managerial perspective**, the findings provide valuable guidance for retail managers seeking to improve organizational performance through effective digital marketing strategies. The significant influence of digital marketing strategies on consumer engagement indicates that retailers should move beyond isolated promotional activities and adopt integrated digital marketing approaches that deliver consistent and personalized customer experiences across multiple digital platforms. Retail managers should invest strategically in social media marketing, personalized email communication, mobile applications, targeted online advertising, customer review management, and customized digital communication to strengthen consumer interaction and engagement. Such integrated marketing efforts are likely to improve customer satisfaction, enhance organizational reputation, increase purchasing behaviour, and strengthen long-term customer loyalty.

The findings further highlight the strategic importance of **consumer engagement** as a key organizational performance indicator. Rather than focusing exclusively on immediate sales outcomes, retailers should develop marketing initiatives that encourage continuous customer participation through interactive digital content, online communities, personalized recommendations, customer feedback mechanisms, and relationship-building activities. Organizations should regularly monitor customer engagement indicators such as social media interactions, online reviews, website participation, click-through rates, and customer-generated content to evaluate the effectiveness of their digital marketing strategies and continuously improve customer experiences.

The study also provides practical implications for **small and medium-sized retail enterprises (SMEs)**. Many regional retailers operate with limited financial and technological resources, making efficient allocation of marketing investments particularly important. The findings suggest that SMEs can improve marketing effectiveness by prioritizing customer engagement rather than relying solely on conventional advertising or price-based competition. By utilizing cost-effective digital marketing channels such as social media platforms, email marketing, mobile communication, and customer review systems, SMEs can establish stronger customer relationships, improve brand visibility, and compete more effectively with larger retail organizations. Consequently, the study offers evidence-based guidance that supports sustainable business growth within regional retail markets.

The findings are equally relevant for **digital marketing practitioners and consultants** responsible for designing and implementing customer-oriented marketing campaigns. The significant mediating role of consumer engagement demonstrates that the success of digital marketing initiatives depends not only on technological implementation but also on the ability to create meaningful consumer experiences. Marketing professionals should therefore emphasize personalization, interactivity, responsiveness, and customer participation when developing digital marketing strategies. Integrating customer analytics, artificial intelligence, marketing automation, and customer relationship management systems can further improve the relevance and effectiveness of digital communication while strengthening consumer engagement.

From a **policy perspective**, the findings contribute to ongoing initiatives promoting digital transformation within the retail sector. Government agencies, industry associations, and business development organizations may utilize the findings to design training programmes and awareness initiatives that encourage digital marketing adoption among retail businesses, particularly within emerging regional markets. Policies supporting digital literacy, digital infrastructure, and technology adoption can facilitate greater organizational competitiveness while improving consumer access to secure, transparent, and customer-oriented digital retail services. Such initiatives will contribute to the broader objective of strengthening digital commerce and supporting sustainable economic development.

Overall, the study demonstrates that integrated digital marketing strategies, supported by meaningful consumer engagement, provide significant opportunities for improving consumer buying behaviour and organizational performance. The theoretical, methodological, managerial, and policy implications collectively contribute to the advancement of digital marketing research while offering practical guidance for organizations operating within increasingly competitive and digitally connected retail environments. These implications establish a strong foundation for future research and provide actionable recommendations for organizations seeking to enhance customer engagement and long-term business success.

## 8. Conclusion

This study investigated the influence of digital marketing strategies on consumer buying behaviour through the mediating role of consumer engagement among retail consumers in Palakkad District, Kerala, India. Grounded in the SOR theory, the study confirmed that digital marketing strategies significantly influence consumer engagement and consumer buying behaviour. The findings further revealed that consumer engagement partially mediates the relationship between digital marketing strategies and consumer buying behaviour, indicating that consumers' cognitive, emotional, and behavioural interactions play an important role in translating digital marketing efforts into favourable purchasing outcomes. These findings emphasize the importance of adopting integrated digital marketing strategies that combine social media marketing, email marketing, mobile marketing, online advertising, online customer reviews, and personalized digital communication to enhance customer relationships and strengthen purchasing decisions. The study contributes to digital marketing literature by validating the applicability of the SOR framework within a regional retail context and by conceptualizing digital marketing strategies as a higher-order construct. From a managerial perspective, the findings provide practical guidance for retailers to develop customer-centric digital marketing initiatives that improve consumer engagement and long-term business performance.

Despite these contributions, the study is limited to retail consumers in Palakkad District and employs a cross-sectional research design, which may restrict the generalizability of the findings. Future research may validate the proposed model across different geographical regions, retail sectors, and cultural settings using larger and more diverse samples. Further studies may also incorporate additional mediating and moderating variables, such as customer trust, perceived value, digital literacy, artificial intelligence adoption, and brand loyalty, or employ longitudinal and mixed-method research designs to obtain deeper insights into evolving digital consumer behaviour.

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