INTERNATIONAL JOURNAL OF APPLIED BUSINESS RESEARCH
2025, VOL. 7, NO. 2, PP. 220-234
https://ijabr.polban.ac.id/ijabr/

Virtual Vortex: The Marketing Mix and Its Effect on Digital Consumer Behavior for Non-Durable Goods

Chandralekha Venkatesan[a*], P.S. Rajeswari[b]

[a,b] School of Management, SRM Institute of Science and Technology, India

Received 06 September 2024; revised 22 October 2024 ; accepted 06 May 2025

ABSTRACT

This research aims to delve into the influence of the marketing mix, including the 4Ps (product, price, place, and promotion), along with supplementary elements such as visual representation and aesthetics, on consumer purchase intentions in an online environment. Additionally, it investigates which components of the marketing mix and which mediating factors play the most pivotal roles in shaping consumer behavior toward the online purchase of non-durable goods. The research framework was designed by incorporating the theory of the marketing mix. This study employed a descriptive analysis approach on a sample of 249 respondents, selected through convenience sampling. Data analysis was performed using IBM AMOS software, utilizing PLS-SEM to investigate the relationships between the marketing mix components, visual representation, aesthetics, and purchase intentions for non-durable goods. The study also identified consumer attitudes towards online purchasing behavior. The results reveal that visual representation and aesthetics exert the most significant influence on purchase intentions among online consumers.

KEYWORDS

Virtual vortex
Marketing mix
Non-durable goods
Digital consumer behavior
Visual representation

INTRODUCTION

The non-durable goods sector significantly impacts the Indian economic system, as individuals rely on these products and services for their daily needs. With the advent of COVID-19, consumer purchasing behavior shifted dramatically from offline to online platforms. This transition was facilitated by increased awareness and familiarity with online shopping, social media usage, and internet access. Before the pandemic, there was limited awareness of online shopping among the Indian populace. However, the pandemic accelerated the adoption of online purchasing, leading to a rapid increase in mobile phone and internet users, which in turn significantly impacted the mobile phone and telecommunication services industry.

The product, pricing, place, and promotion components of the marketing mix are critical to the success of any organization. Effective marketing is omnipresent, whether executed formally or informally, as both individuals and organizations engage in numerous marketing activities. Strong marketing has become an essential component of business success, profoundly affecting our daily lives (Kotler and Keller, 2016).

*Corresponding Author: cv3426@srmist.edu.in; doi: 10.35313/ijabr.v7i02.464
©2025 Politeknik Negeri Bandung

Consumers are increasingly discerning when purchasing products and services, with a growing emphasis on value and utility. Online buyers, in particular, exhibit heightened caution compared to offline buyers. Beyond the traditional marketing mix, online consumers consider factors such as visual representation, aesthetics, reliability, reviews, ratings, time, safety, and security. The evolution of virtual purchasing has brought drastic changes to the Indian online market. Numerous non-durable products have been introduced online, transitioning consumer buying knowledge and experiences from offline to online shopping. In response, companies have adapted to the e-commerce landscape, leveraging its facilities to achieve business success.

Understanding the process of online consumer behavior is crucial. Consumers make online purchasing decisions based on clear information and informative guidelines. These decisions are influenced by customer needs, product availability, visual representation, aesthetics, price, quality, convenience, payment options, and fast delivery. For busy individuals, online shopping offers a practical alternative to in-store purchases, reflecting a significant change in buying behavior after the COVID-19 pandemic. Many consumers now favor the convenience of online shopping, valuing the time savings it provides (Rahman et al., 2018). By 2022, India had over 932.22 million internet users, with projections indicating this figure could exceed 1.5 billion by 2040. This growth highlights the substantial development potential for internet service providers in South Asia. Indeed, India's internet market is expected to develop at the fastest global rate this year, second only to China. The rapid expansion of internet availability in both urban and rural areas underscores the increasing penetration and influence of online services (Statista, 2022).

This paper investigates the impact of the marketing mix on online purchases of non-durable goods, with a particular focus on the mediating effect of visual representation and aesthetics—an area that remains underexplored. Specifically, the study aims to fulfill the following objectives:

1. To investigate how the core elements of the marketing mix influence online purchases of non-durable goods.
2. To explore how visual representation and aesthetic appeal mediate the relationship between the marketing mix and purchasing decisions for non-durable goods in an online context.

THEORETICAL FRAMEWORK

The theoretical framework provides the groundwork for comprehending how aesthetics and visual representation, through the marketing mix, impact online purchases of non-durable products. To clarify the relationships between these variables, the framework combines well-established marketing theories with concepts from consumer behavior.

Components of the Independent Variable: Marketing Mix

Product refers to the quality, features, and variety of non-durable goods available online. The product element of the marketing mix encompasses the physical good or service offered to consumers, including its design, quality, features, brand name, and packaging. According to the Product Life Cycle Theory (Levitt, 1965), products go through stages of introduction, growth, maturity, and decline—each influencing consumer demand and shaping marketing strategies. Price pertains to the cost of non-durable goods and the perceived value for money. Pricing strategies, as discussed in Pricing Theory (Nagle & Müller, 2017), influence consumer perception and purchase decisions. Place involves the online platforms and the ease of access to non-durable goods. Distribution channels and accessibility are central to this component, as outlined in Channel Theory (Stern & El-Ansary, 1992).

Promotion refers to the marketing communication strategies used to promote non-durable goods in the online space. Integrated Marketing Communications (IMC) Theory (Schultz & Schultz, 1998) highlights the importance of a cohesive promotional strategy.

Mediating Variables

Visual Representation refers to how non-durable goods are presented online, including the use of images, videos, and detailed product descriptions. Theories on Visual Perception (Arnheim, 1969) and the ELM (Petty & Cacioppo, 1986) provide insights into how visual cues affect consumer attitudes and behavior. Aesthetics encompasses both the visual appeal of product presentations and the entire design of the online platform. The Aesthetic Theory (Berlyne, 1971) emphasizes the impact of aesthetics in shaping consumer preferences and decision-making processes.

Dependent Variable

Online Purchase of Non-Durable Goods refers to the actual purchasing behavior of consumers buying non-durable goods through online platforms. The Theory of Planned Behavior (Ajzen, 1991) and the Technology Acceptance Model (Davis, 1989) provide valuable insights into the factors influencing online purchasing decisions.

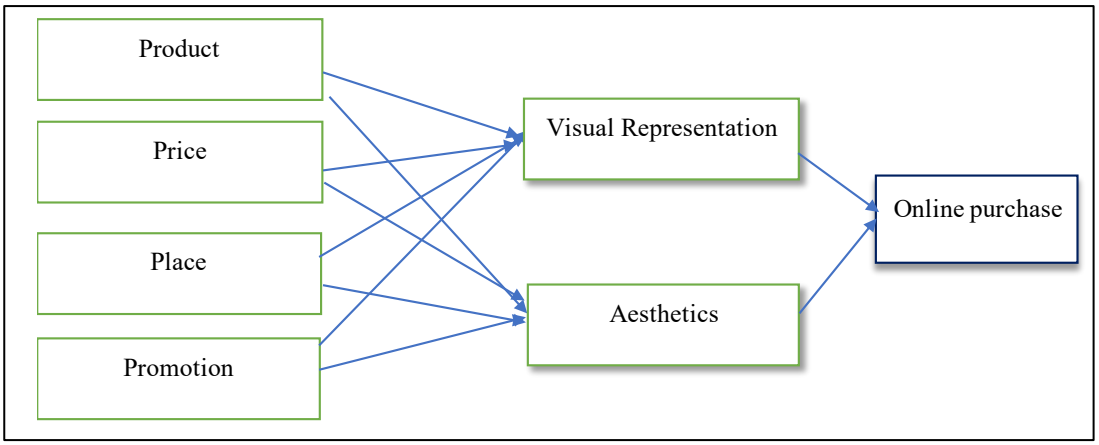


Figure 1. Conceptual framework

LITERATURE REVIEW

Research on the theory of marketing mix has been conducted by many. Fan et al. (2022) observed how store attitude and purchase intention are influenced by the four components of the marketing mix. Simultaneously, the study evaluated the relationship between the 4Ps and store attitude, along with the mediating factors such as sense, feel, and think experiences. It indicated that sense experience, feel experience, and think experience are significantly impacted by the product, environment, and advertising. Another noteworthy discovery is that store mood and purchase intention are significantly influenced by consumer experiences, particularly those related to sense, feel, and think experiences. Also, the analysis of the relationships among the three variables reveals that both the marketing mix and consumer behavior positively and significantly influence purchasing decisions. Furthermore, the relationship between consumer behavior and purchase

decisions is mediated by the marketing mix (Dewi et al., 2022).

Employing electronic customer relationship management as a mediating variable, Mohammadi & Sohrabi (2018) investigated how marketing mix affects customer satisfaction. They discovered that marketing mix elements significantly and favorably impact customer satisfaction through the mediating role of electronic customer relationship management. Another study examined the relationship between consumer engagement and marketing mix in the context of online food delivery services and found that brand equity partially mediates this relationship. Respondents demonstrated high levels of consumer engagement, marketing mix awareness, and brand equity. There are also statistically significant correlations between the consumer engagement and marketing mix, the brand equity and marketing mix, and the brand equity and consumer engagement (Nekoh et al., 2023).

Better visuals raise consumer arousal and processing fluency, which mediate the relationship between visuals and consumer responses. Existing literature has examined how the picturization of products in a virtual shopping environment affects consumer responses, including aesthetic appreciation and brand attitudes. Enhanced product graphics, such as well-designed packaging and sharp images, elevate customer arousal and processing speed. Further, the relationship between product images and customer perceptions of brands and aesthetic appreciation is mediated by arousal and processing fluency. The evaluation of visual aesthetics is independently influenced by both processing fluency and arousal (Sann & Hee, 2021).

Togu et al. (2023) examined the influence of the marketing mix and virtual reviews on purchasing decisions on the Shopee e-commerce platform. The findings show that the marketing mix has a significant positive effect, while online reviews influence purchasing decisions but not at a statistically significant level. However, when combined, the marketing mix and virtual reviews have a significant joint impact. The proposed model explains 41.2% of the variance in purchasing decisions.

Ameer et al. (2024) examined the impact of pricing strategy stimuli and user interface picturization on online impulse buying through empirical research. The results show that affective and cognitive shopping behaviors, along with website visual appeal, significantly influence online impulsive buying. Moreover, affective shopping behavior fully mediates the relationship between pricing strategy stimuli and impulsive buying.

Syahrizal et al., (2021) examined the relationship between consumer trust and pleasure while buying organic food online, as well as the effect of the marketing mix elements—specifically product and place—on repurchase intention. The findings reveal that the product and place components of the marketing mix significantly influence consumer satisfaction with organic food purchases. Although consumer trust does not directly affect repurchase intention, it has a considerable impact on satisfaction. In turn, consumer satisfaction significantly influences repurchase intention for organic food.

Another study explored the relationship between self-esteem, marketing mix elements, and online shopping decisions. The results reveal that self-esteem affects the marketing mix, which in turn indirectly affects purchasing decisions. The study concludes that both the marketing mix and consumer's self-esteem are linked to their purchase decisions. While self-esteem has a direct effect on the marketing mix—and the marketing mix directly influences purchasing decisions—it does not have a direct impact on purchasing decisions themselves (T. Elida et al., 2021).

Sakineh et al. (2013) compared traditional and online marketing strategies for cultural products highlighting that online marketing can effectively apply the conventional marketing mix (4Ps). The study reveals that 72% of Internet users search for products online at least once a month,

emphasizing the growing influence of the Internet on consumer purchasing decisions. Similarly, Bozorgkhou and Rokni (2022) found that among all components of the marketing mix—product, price, place, and promotion—the product element has the most significant impact on consumers' intentions to make online purchases via smartphones.

Masoud & Sajjad (2020) assessed how various aspects of consumer behavior in online shopping—such as satisfaction, arousal, perceived service quality, trust, and actions like buying, comparing, and revisiting—are impacted by website visual aesthetics. The study reveals that website aesthetics has the strongest direct impact on consumers' perceptions of online service quality, trust, satisfaction, and arousal. These perceptions, in turn, indirectly influence consumers' likelihood of making purchases, revisiting the website, and comparing products across different platforms. Among the elements of the Visual Aesthetics of Websites Inventory (VisAWI), craftsmanship is identified as the most important factor in conveying a website's overall aesthetic appeal.

Another study by Laila &Noraina (2022) discovered that the most significant factors influencing consumers' purchasing decisions on the Indonesian Shopee marketplace are e-process, which includes processing speed and payment methods, and e-price, particularly lower prices. In contrast, other factors such as e-promotion, e-product, security, and trust do not have a statistically significant effect on consumers' decisions to buy.

Anindita and Perdana (2022) examined the impact of website aesthetics on customer satisfaction and impulse buying among millennial consumers using B2C marketplace applications, with electronic word of mouth serving as a moderating factor. Their findings reveal that website aesthetics significantly influence consumer satisfaction, highlighting the importance of visual appeal as a key element in shaping the online shopping experience.

Arunkumar et al. (2023) investigated an online retail context for electronic products, focusing on the effects of virtual visual merchandising cues on customer delight and arousal. The study provides valuable insights for marketers on how to utilize these cues to influence consumer behavior and boost sales.

Omkar (2020) examined the influence of digital marketing on online purchase intentions, with customer relationship management (CRM) acting as a mediating factor. The results indicate that digital marketing positively affects customers' online purchase intentions through the effective use of CRM.

Pei-Yu and Su-Fang (2019) found that web visual aesthetics—such as color and imagery—positively influence users' pleasant emotions, satisfaction with the aesthetic experience, and desire to purchase. Similarly, Chaang et al. (2022) examined how the 7Ps of the marketing mix affect customers' purchase intentions and willingness to watch live streaming. They found that promotion, placement (distribution), and physical evidence (environment) on live-streaming platforms positively influence purchase intentions. Moreover, the relationship between the 7Ps and buyer intention is fully mediated by customers' desire to watch, which in turn positively impacts their purchase intention.

Shu-Hao et al. (2014) investigated the influence of web aesthetics on consumers' emotional states and buying behaviors. They found that web aesthetics, including both aesthetic formality and appeal, significantly affect purchasing behavior through an emotional model. Specifically, web aesthetics positively impact the "control" element of the emotional model, which indirectly influences pleasure through arousal. Additionally, enjoyment and exploration while browsing different websites have a favorable effect on consumers' buying decisions.

Wenjie Yi et al. (2018) examined the relationship between price sensitivity and customer engagement, attraction, and purchase intention in the context of various online product displays,

particularly comparing interactive versus non-interactive formats. Their findings indicate that interactive product presentation designs significantly enhance consumer engagement and attraction, which are positively correlated with purchase intention. Additionally, price sensitivity is found to mediate the relationship between engagement and attraction. In a related study, Arief et al. (2023) investigated the effects of online consumer reviews, influencer marketing, and advertisement appeal on consumer purchase decisions. The results show that both online reviews and influencer marketing have a significant positive influence on purchase decisions. However, the visual appeal of advertisements does not significantly impact consumers' choices. Despite this, the use of physical attractiveness in marketing is still considered an effective strategy to influence buying behavior.

Based on the findings from these studies, the following hypotheses are proposed to examine the impact of marketing mix and visual aesthetics on online purchase decisions.

H_1: The marketing mix has a positive impact on online purchases of non-durable goods.
H_2: Visual representation and aesthetics have a positive impact on online purchases of non-durable goods.

RESEARCH METHOD

An online structured questionnaire was employed to collect primary data. The method was selected for its convenience and extensive reach to online shoppers across different regions. The sampling frame focused on online consumers in Tamil Nadu, specifically within the Tiruvallur district, due to its socio-cultural diversity and representation of a wide range of online retail markets. This approach facilitated a thorough comprehension of the relation between the marketing mix and online purchases of non-durable goods, with the mediating effect of visual representation and aesthetics.

The questionnaire gathered data on the 4Ps of marketing mix, visual representation, aesthetics, and online purchase behavior of non-durable goods. Individual online shoppers were identified as the sampling units. A total of 249 respondents actively participated in the research, providing an adequate sample size for statistical analysis. To assess the influence of the marketing mix on purchases—considering the mediating effects of visual representation and aesthetics—a five-point Likert scale was employed. The reliability of the scale items was evaluated using standard measures such as Cronbach's Alpha to ensure internal consistency.

Demographic information—such as age, gender, education, employability, income level, and online purchase expenses—was collected to gain a thorough understanding of the sample. The data collected were analyzed using IBM SPSS 25.0 and IBM AMOS 23.0 software packages. Structural Equation Modeling (SEM) was employed to evaluate the relationships between the marketing mix, online purchase behavior, and the visual representation and aesthetics of the products.

RESULTS

The study employed Cronbach's Alpha to measure the internal consistency of the questionnaire. Hair et al. (2014) proposed 0.70 as the lower limit for Cronbach's Alpha, while Sekaran and Bougie (2016) stated that a value above 0.80 indicates a good level of reliability. In this study, the overall scale coefficient value is 0.93, which exceeds 0.80, thereby confirming that the reliability scale is acceptable at a good level.

Table 1. Respondents' demographics

Demographic Profile		Frequency	Percent
Gender	Male	142	57.0
	Female	107	43.0
	Total	249	100.0
Educational qualification	Secondary	55	22.1
	Higher Secondary	88	35.3
	Graduate	106	42.6
	Total	249	100.0
Employment status	Govt Employee	52	20.9
	Private Employee	105	42.2
	Business	92	36.9
	Total	249	100.0
Income	Below 20,000	170	68.3
	20,001-30,000	22	8.8
	30,001-40,000	21	8.4
	40,001 and above	36	14.5
	Total	249	100.0
Expenses on online purchases in a month	1,0000- 3,000	200	80.3
	3,001- 5,000	16	6.4
	5,001- 8,000	10	4.0
	8,001- 10,000	18	7.2
	100,001 above	5	2.0
	Total	249	100.0

Among the surveyed individuals, 57% are male, and 43% are female, indicating a relatively balanced gender representation in the sample. The majority of respondents (42.6%) are graduates, followed by those with higher secondary (35.3%) and secondary (22.1%) education levels, suggesting a fairly even distribution of educational attainment. Private employees constitute the largest group (42.2%), followed closely by business owners (36.9%), while government employees make up the smallest portion (20.9%), reflecting a diverse workforce representation. A significant proportion (68.3%) falls into the income bracket below 20,000. Only a small percentage (8.8%) earn between 20,001 and 30,000, while 14.5% report higher incomes (40,001 and above). The majority (80.3%) of the respondents spend between 1,000 and 3,000 on online purchases. Fewer allocates higher amounts, with only 2.0% spending more than 100,000, suggesting that most individuals prefer budget-friendly online shopping.

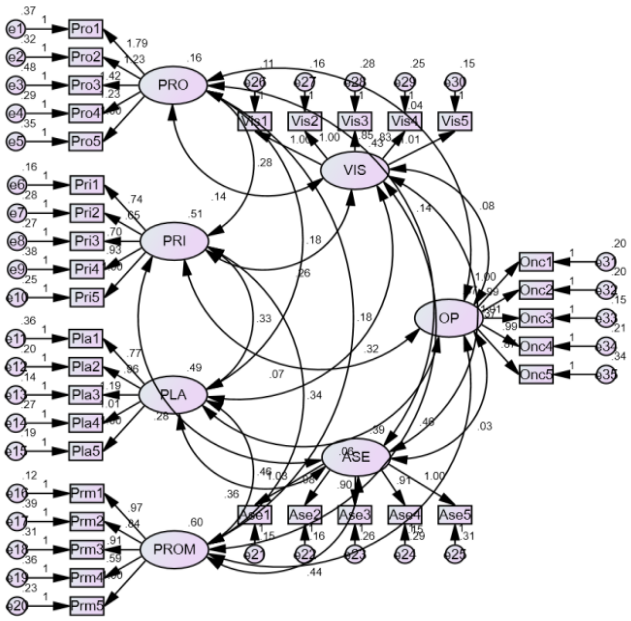


Figure 2. SEM for marketing mix on non-durable goods purchases made online

A thorough examination of the links between the 4Ps of the marketing mix and their impact on online purchases (OP), visual representation (VIS), and aesthetic appeal (ASE) is provided by the structural equation model (SEM) shown in Figure 2. This model helps in understanding how different marketing strategies influence customer behavior in the context of online purchases of non-durable goods.

In this analysis, product, price, place, and promotion were treated as latent variables. Each latent variable is linked to a set of observed variables, which are measurable indicators used to assess the underlying constructs. In Figure 2, single-headed arrows represent direct effects—for example, between visual representation and aesthetics—while double-headed arrows indicate correlations between variables. The standardized path coefficients shown by the arrows reflect the strength and direction of these relationships: values closer to one indicate stronger relationships, whereas those closer to zero suggest weaker ones. The paths from latent to observed variables denote factor loadings, illustrating how well the observed variables represent their respective latent constructs. Circles labeled e1 to e35 denote error terms, capturing measurement errors associated with the observed variables.

In Figure 2, the key factors are identified—product, price, place, promotion, visual representation, and aesthetics—all of which influence online purchase behavior. Product influences visual representation with a path coefficient of 0.16, indicating a positive effect of product features on visual perception. Its path coefficient to online purchase is 0.11, suggesting a weak but positive impact. Price has a path coefficient of 0.14 to visual representation, reflecting a favorable influence of pricing on how products are visually perceived. The path coefficient between price and online purchase is 0.18, indicating a relatively strong positive effect of pricing strategies on online purchase decisions. Place influences visual representation with a path coefficient of 0.26, showing a significant positive impact of distribution strategies on product presentation. Its path coefficient to online purchase is 0.32, demonstrating a substantial positive influence. Additionally, place affects aesthetics with a coefficient of 0.33, indicating a notable positive effect on the aesthetic appeal of products. Promotion shows strong positive effects across all three domains: visual representation (0.32), aesthetics (0.39), and online purchase (0.34). Visual representation itself significantly impacts both aesthetics and online

purchases, with path coefficients of 0.44 and 0.32, respectively. Lastly, aesthetics influences online purchases with a path coefficient of 0.39, highlighting its strong positive effect on consumer behavior.

Table 2. Measurement of goodness fit

Chi-Square	5619.782
χ^2/df	539
RMSEA	0.050
NFI	0.919
CFI	0.937
GFI	0.947
AGFI	0.932

Table 2 reveals the chi-square value of 5619.782. The chi-square test evaluates the difference between the observed and model-implied covariance matrices. Although this value indicates a deviation from a perfect fit, it should be noted that χ^2 is highly sensitive to sample size, often resulting in significant values for large samples. The χ^2/df value is 539. The ratio of <3 is often considered an acceptable fit. From the table, the ratio is approximately 10.43 which suggests a poor fit, so it is not sufficient to judge model fit, especially large samples. The RMSEA value of 0.050, which is less than 0.06, indicates a good fit for the model. The normed fit index (NFI) is 0.919, within the acceptable range of 0 to 1, suggesting a good model fit. The value of CFI is 0.937, exceeding the typical cutoff and indicating a very good fit. The value of GFI is 0.947, which satisfies the threshold (range from 0 to 1) and suggests a very good fit. Finally, the value of AGFI is 0.932, indicating a very good fit.

Table 3. Determinants of marketing mix on online purchases of non-durable goods

			Estimate	S.E.	C.R.	P
Product	<-->	Online Purchase	.036	.019	1.901	.057
Product	<-->	Aesthetic	.140	.026	5.457	***
Product	<-->	Visual Representation	.139	.025	5.520	***
Price	<-->	Online Purchase	.068	.032	2.127	.033
Price	<-->	Aesthetic	.278	.041	6.732	***
Price	<-->	Visual Representation	.263	.039	6.687	***
Place	<-->	Online Purchase	.065	.030	2.152	.031
Place	<-->	Aesthetic	.357	.045	7.989	***
Place	<-->	Visual Representation	.316	.040	7.894	***
Promotion	<-->	Online Purchase	.148	.036	4.155	***
Promotion	<-->	Aesthetic	.444	.053	8.392	***
Promotion	<-->	Visual Representation	.456	.050	9.118	***
Online Purchase	<-->	Aesthetic	.031	.027	1.138	.255
Online Purchase	<-->	Visual Representation	.084	.029	2.924	.003
Aesthetic	<-->	Visual Representation	.375	.044	8.568	***

Table 3 presents the determinants of the marketing mix for non-durable goods in online purchases. The findings reveal that product does not have a significant positive relationship with online purchase behavior. However, price, place, and promotion exhibit significant positive relationships with online purchase behavior. Additionally, all four components—product, price,

place, and promotion—are significantly positively related to both aesthetics and visual representation. Visual representation shows a significantly positive relationship with online purchases, indicating its important role in influencing consumer behavior. In contrast, aesthetics does not demonstrate a significant positive relationship with online purchases. Hence, it is concluded that within the marketing mix, price, place, promotion, and visual representation have a significant positive impact on online purchases of non-durable goods. The table reflects estimated values from a Structural Equation Modeling (SEM) analysis, which assesses the influence of the 4Ps on online purchasing and examines the mediating roles of aesthetic appeal and visual representation.

Relationship Analysis

Table 3 is explained in the following section. The association between product and online purchases is explained by the path coefficient, which indicates the strength and direction of the relationship. The table shows that the estimated coefficient value for the association between product and online purchase is 0.036, with a standard error of 0.019 and a critical ratio of 1.901. The significance value is 0.057, which exceeds the 5% threshold ($p > 0.05$), indicating that the association is not statistically significant at the 5% level.

The relationship between product and aesthetics is explained by the coefficient, which reflects the strength and direction of the association. The estimated value for the relationship between product and aesthetics is 0.140, with a standard error of 0.026 and a critical ratio of 5.457. The significance value is 0.000, indicating that the relationship is highly significant at the 5% level ($p < 0.05$). This result suggests that the product element of the marketing mix has a strong influence on aesthetic appeal.

The association between product and visual representation is explained by the coefficient, which indicates the strength and direction of the relationship. The estimated value for the relationship between product and visual representation is 0.139, with a standard error of 0.025 and a critical ratio of 5.520. The significance value is 0.000, showing that the relationship is highly significant at the 5% level ($p < 0.05$). Hence, the product element of the marketing mix significantly affects visual representation.

The relationship between price and online purchases is explained by the coefficient, which indicates the strength and direction of the association. The estimated value for the relationship between price and online purchases is 0.068, with a standard error of 0.032 and a critical ratio of 2.127. The significance value is 0.033, indicating that the relationship is statistically significant at the 5% level ($p < 0.05$). This demonstrates that price has a significant impact on online purchases of non-durable goods.

The association between price and aesthetics is explained by the coefficient, which indicates the strength and direction of the relationship. The estimated value for the relationship between price and aesthetics is 0.278, with a standard error of 0.041 and a critical ratio of 6.732. The significance value is 0.000, indicating that the relationship is highly significant at the 5% level ($p < 0.05$). Therefore, price significantly influences aesthetic appeal.

The relationship between price and visual representation is explained by the coefficient, which indicates the strength and direction of the association. The estimated value for the relationship is 0.263, with a standard error of 0.039 and a critical ratio of 6.687. The significance value is 0.000, indicating that the relationship is highly significant at the 5% level ($p < 0.05$). This signifies that price significantly impacts visual representation.

The association between place and online purchases is explained by the coefficient, which indicates the strength and direction of the relationship. The estimated value for the association is 0.065, the standard error is 0.030, the critical ratio is 2.152, and the significance value is 0.031. This

shows that the relationship is statistically significant at the 5% level ($p < 0.05$), signifying that the place (distribution) element of the marketing mix influences online purchases.

The relationship between place and aesthetics is explained by the coefficient, which indicates the strength and direction of the association. The estimated value for the relationship is 0.357, the standard error is 0.045, the critical ratio is 7.989, and the significance value is 0.000. This indicates that the relationship is highly significant at the 5% level ($p < 0.05$), showing that the place element of the marketing mix strongly influences aesthetic appeal.

The relationship between place and visual representation is explained by the coefficient, which indicates the strength and direction of the association. The estimated value is 0.316, the standard error is 0.040, the critical ratio is 7.894, and the significance value is 0.000. This indicates that the relationship is highly significant at the 5% level ($p < 0.05$), suggesting that the place element of the marketing mix significantly affects visual representation.

The relationships between promotion and online purchases, aesthetics, and visual representation are explained by the corresponding coefficients, which indicate the strength and direction of the associations. The estimated values for these relationships are 0.148, 0.444, and 0.456, respectively. The standard errors are 0.036, 0.053, and 0.050, and the critical ratios are 4.155, 8.392, and 9.118. The significance values for all three relationships are 0.000, indicating that each is highly significant at the 5% level ($p < 0.05$). These results demonstrate that promotion has a strong and statistically significant impact on online purchases, aesthetic appeal, and visual representation in the context of non-durable goods.

The relationship between online purchases and aesthetics is explained by the coefficient, which indicates the strength and direction of the association. The estimated value for the relationship is 0.031, with a standard error of 0.027, a critical ratio of 1.138, and a significance value of 0.255. Since the p-value is greater than 0.05, the association is not statistically significant at the 5% level, indicating that aesthetic appeal does not significantly influence online purchases.

The relationship between online purchases and visual representation is also measured by the coefficient. The estimated value is 0.084, with a standard error of 0.029, a critical ratio of 2.924, and a significance value of 0.003. Since the p-value is less than 0.05, this relationship is statistically significant, suggesting that visual representation has a meaningful positive influence on online purchases.

The relationship between aesthetic appeal and visual representation is explained by the coefficient, which indicates the strength and direction of the association. The estimated value is 0.375, with a standard error of 0.044, a critical ratio of 8.568, and a significance value of 0.000. Since the p-value is less than 0.05, the relationship is highly significant at the 5% level, indicating a strong and positive association between aesthetic appeal and visual representation.

In the final analysis, it can be concluded that the elements of the marketing mix—product, price, place, and promotion—significantly influence both aesthetic appeal and visual representation. Among these, price and promotion demonstrate a stronger direct impact on online purchases compared to product and place. Additionally, visual representation plays a crucial role in shaping online purchasing behavior. There is also a strong positive correlation between aesthetic appeal and visual representation, suggesting that these two factors jointly mediate the influence of the marketing mix on consumers' online purchasing decisions.

DISCUSSION

The research indicates that most consumers are highly aware of online shopping, with younger individuals showing especially strong awareness. However, before making an online purchase,

consumers carefully consider several factors such as product quality, price, virtual presence, promotional activities, customer reviews and ratings, security, delivery time, and return policies. The study also emphasizes the important mediating role of visual representation and aesthetics, which significantly influence customers' purchase intentions in the online shopping context.

Despite the increasing emphasis on online shopping, many customers continue to prefer retail stores because of the tangible experience they offer and the assurances provided, even though prices in physical stores are often higher than online. Retail environments deliver a sensory, hands-on experience that online shopping cannot fully replicate; however, online platforms compensate for this by using visual representation and aesthetics to create a more comfortable and engaging virtual shopping experience.

Promotional activities are more prominent in online shopping than in direct marketing. The study highlights that factors such as product quality, aesthetics, and visual representation enhance the convenience, time efficiency, and cost-effectiveness of online purchases. Additionally, other elements of the marketing mix—price, place, and promotion—are significantly impacted by mediating variables like visual representation and aesthetics.

In conclusion, the study indicates that while online shopping is increasingly popular due to its convenience and cost-effectiveness, retail shops still hold an advantage in terms of product tangibility and customer trust. Visual representation and aesthetics are crucial in bridging this gap, making online shopping a more appealing and viable option for consumers.

CONCLUSION

This study provides a comprehensive examination of the marketing mix and the mediating roles of visual representation and aesthetics in influencing online purchases. The structural equation model employed demonstrates that the components of the marketing mix exert a highly significant impact on online consumer buying behavior for non-durable goods. The findings highlight strong and significant relationships between the 4Ps of marketing and both visual representation and aesthetics. Moreover, price, place, and promotion show significant positive correlations with online purchases. Visual representation emerges as a key mediating factor, bridging the marketing mix elements and online buying behavior, thereby enhancing the overall online shopping experience and contributing to time savings for consumers. The goodness-of-fit indices (RMSEA, NFI, CFI, GFI, and AGFI) confirm that the proposed model fits the data well, supporting the validity of the hypothesized relationships. This study underscores the crucial role of visual representation and aesthetics in boosting online purchase intentions among customers.

MANAGERIAL IMPLICATION

This study offers valuable insights for managers and online marketers aiming to enhance their effectiveness in the digital marketplace. By understanding the critical factors that influence consumer purchase decisions, businesses can refine their marketing strategies to better align with customer preferences and behaviors.

The research underscores the significance of the marketing mix, particularly the 4Ps—product, price, place, and promotion—in shaping online consumer behavior. Managers are encouraged to optimize each element of the marketing mix thoughtfully to attract and retain online shoppers. Balancing these components effectively ensures a cohesive strategy that resonates with target audiences and maximizes engagement.

Moreover, the findings highlight the pivotal role of visual representation and aesthetics in influencing purchase intentions. Investing in high-quality visuals and appealing design elements is essential for creating an engaging and comfortable online shopping environment. Such focus not only enhances the consumer experience but also strengthens the likelihood of purchase.

Furthermore, the data-driven evidence from this research equips managers with a robust foundation for informed decision-making. By analyzing consumer behavior trends and patterns, managers can adapt their marketing approaches and operational strategies to stay ahead of the competition and meet evolving customer demands.

Lastly, a deeper understanding of the factors driving online purchase intentions empowers managers to develop effective consumer retention strategies. Addressing these factors can significantly improve customer satisfaction and loyalty, fostering repeat purchases and building long-term relationships with consumers in the digital marketplace.

LIMITATIONS AND FUTURE RESEARCH

This study faces several limitations that should be acknowledged. First, ensuring the collection of high-quality and comprehensive data on online purchases remains a significant challenge. In particular, accurately attributing sales to specific marketing activities is complex within the multi-channel environment of online shopping. This complexity can sometimes lead to incorrect conclusions about the true effectiveness of individual marketing mix elements. Additionally, online consumer behavior is highly variable and influenced by numerous external factors, making it difficult to isolate and measure the precise impact of each marketing component. Moreover, the online market for non-durable goods is dynamic and constantly evolving, with frequent shifts in consumer preferences and competitive actions, which makes it challenging to maintain models that are consistently up-to-date and fully reflective of current realities.

Future research should focus on addressing these limitations by developing more sophisticated attribution models that can better account for the multi-channel nature of online shopping. Such models would provide more accurate and nuanced insights into the effectiveness of diverse marketing activities. Furthermore, leveraging advancements in artificial intelligence and machine learning to analyze large and complex datasets offers promising potential to uncover hidden patterns and improve the predictive power of marketing mix models beyond what traditional methods can achieve. Real-time data analysis techniques should also be explored to ensure that marketing mix models remain current with rapidly changing market trends and consumer behaviors. Lastly, further investigation into how different marketing channels interact and influence one another would be valuable, as understanding these synergies can help optimize overall marketing effectiveness in a more integrated and holistic way.

REFERENCES

Abdelkhair, F.Y., Babekir, M.Y., Mudawi, S.S. and Al. Abiad, Al.B.Al. (2023). Sales Promotion and Impulse Buying Behavior towards Consumer Goods : The Mediating Role of Purchase Intention. *Indian Journal of Marketing*, 53(2). 26. https://doi.org/10.17010/ijom/2023/v53/i2/172631

Ajzen, I. (1991). *The Theory of Planned Behavior. Organizational Behavior and Human Decision Processes*, [online] 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

A. Ameer Hussain, Bhuvanesh Kumar Sharma, H, C.V. and Kazim, S. (2024). Cognitive and Affective Components Induced Impulsive Purchase: An Empirical Analysis. *Journal of promotion management*, 1–28. https://doi.org/10.1080/10496491.2024.2318666

Anindita, R. and Perdana, D.P. (2022). Website Aesthetic in Millenial's Customer Experience on Satisfaction and Impulse Buying: EWOM as Moderator. *Media Ekonomi dan Manajemen*, 37(2), 210. https://doi.org/10.24856/mem.v37i2.2829

Arief, M., Mustikowati, R.I. and Chrismardani, Y. (2023). Why customers buy an online product? The effects of advertising attractiveness, influencer marketing and online customer reviews. *LBS Journal of Management & Research*, 21(1), 81–99. https://doi.org/10.1108/lbsjmr-09-2022-0052

Boris, B., Donald, C. and Schindler Pamela Blumberg (2014). *Business research methods.* S.L.: Mcgraw-Hill Education E.

Bozorgkhou, H. and Alimohammadi Rokni, M. (2022). Studying and investigating the impact of marketing mix factors on e-purchase via smart phones (case study: Digikala corporation). *NexoRevistaCientífica*,35(04),992–1003. https://doi.org/10.5377/nexo.v35i04.15540

Chang, S.-H., Chih, W.-H., Liou, D.-K. and Hwang, L.-R. (2014). The influence of web aesthetics on customers' PAD. *Computers in Human Behavior*, 36,168–178. doi:https://doi.org/10.1016/j.chb.2014.03.050

Das, P. and Bhuwandeep (2023). Linking Online Procrastination to Online Shopping Cart Abandonment : A Multi-Group Analysis from India and Ethiopia. *Indian Journal of Marketing*, 53(10), 24–24. https://doi.org/10.17010/ijom/2023/v53/i10/170197

Dastane, O. (2020). Impact of Digital Marketing on Online Purchase Intention: Mediation Effectof Customer Relationship Management. *Journal of Asian Business Strategy*, [online] 10(1), 142–158. https://doi.org/10.18488/journal.1006.2020.101.142.158

Dela, C. and Stilo Floyd Schneider (2023). The Mediating Effect Of Brand Equity On The Relationship Between Marketing Mix And Customer Engagement For Online Food Delivery Services. *International journal of research publications*, 132(1). https://doi.org/10.47119/ijrp1001321920235456

Dewi, F.M., Sulivyo, L. and Listiawati (2022). Influence of Consumer Behavior and Marketing mix on Product Purchasing Decisions. *APTISI Transactions on Management (ATM)*, [online] 6(2), 151–157. https://doi.org/10.33050/atm.v6i2.1737

Elida, T., Rahardjo, W. and Raharjo, A. (2021). Online Shop Consumer Purchasing Decision: A Study on The Significance of Self-Esteem and Marketing Mix. *Jurnal Manajemen Indonesia*, 21(2), 161. https://doi.org/10.25124/jmi.v21i2.2751

Fan, Q.-J., Kim, W.-K. and Cui, G. (2010). Influence of Marketing Mix on Customer's Attitude and Purchase Intention -Mediating Effects of Customer Experiences-. *The Journal of the Korea Contents Association*, 10(8), 292–300. https://doi.org/10.5392/jkca.2010.10.8.292

Ho, C.-I., Liu, Y. and Chen, M.-C. (2022). Factors Influencing Watching and Purchase Intentions on Live Streaming Platforms: From a 7Ps Marketing Mix Perspective. *Information*, [online] 13(5), 239. doi:https://doi.org/10.3390/info13050239

Kotler, P. and Keller, K.L. (2016). *A Framework for Marketing Management*. 6th ed. Boston: Pearson.

Maulana, S., Najib, M. and Sarma, M. (2021). Analysis Of The Effect Of Marketing Mix On Consumer Trust And Satisfaction On Online Purchasing Of Organic Food During The Outbreak Of The Covid-19. *JurnalAplikasiManajemen*, 19(2), 257–271. https://doi.org/10.21776/ub.jam.2021.019.02.03

Mohammadi, M. and Sohrabi, T. (2018). Examining the Effect of Marketing Mix Elements on Customer Satisfaction with Mediating Role of Electronic Customer Relationship Management. *Industrial Engineering & Management Systems*, 17(4), 653–661. https://doi.org/10.7232/iems.2018.17.4.653

Nargesi, S.B., Jamali, S. and Babaei, S. (2013). Comparative Study of Traditional and Online Marketing Mix Willingness to Purchase the Cultural Products. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 2(11), 33–47. https://doi.org/10.12816/0001257

Raja, E.A.L., Ria, M.A.D., Raja, T.H.L., Silaen, K. and Zebua, A. (2024). The Influence Of Marketing Mix And Online Reviews On Purchasing Decisions Through Shopee E-Commerce In Medan Perjuangan Subdistrict. *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi dan Bisnis*, [online] 12(1), 29–36. https://doi.org/10.37676/ekombis.v12i1.4922

Ramezani Nia, M. and Shokouhyar, S. (2020). Analyzing the effects of visual aesthetic of Web pages on users' responses in online retailing using the VisAWI method. *Journal of Research in Interactive Marketing*, 14(4), 57–389. https://doi.org/10.1108/jrim-11-2018-0147

Ryu, S. and Ryu, S. (2021). Feeling excited and fluent: how consumers respond to the visual appeals of products in an online shopping environment. *Behaviour & Information Technology*, 40(11), 1–15. https://doi.org/10.1080/0144929x.2021.1942989

Said, L.R. and Noraina, N. (2022). effectiveness and efficiency in a hurried world: online customers know what they WANT. *BISMA: Jurnal Bisnis dan Manajemen*, 16(1),56. doi:https://doi.org/10.19184/bisma.v16i1.27817.

Sivakumar, A., Jayasingh, S. and Johnson, E. (2023). *Online Visual Merchandising Cues Impacting Consumer Pleasure and Arousal: An Empirical Study*. [online] www.atlantis-press.com. https://doi.org/10.2991/978-94-6463-162-3_3

Scherer, R., Siddiq, F. and Tondeur, J. (2019). The technology acceptance model (TAM): a meta-analytic structural equation modeling approach to explaining teachers' adoption of digital technology in education. *Computers & Education*, [online] 128(1), 35. https://doi.org/10.1016/j.compedu.2018.09.009

Tseng, P.-Y. and Lee, S.-F. (2019). *The Impact of Web Visual Aesthetics on Purchase Intention*. [online] IEEE Xplore. https://doi.org/10.1109/ECICE47484.2019.8942664

Yi, W., Chen, C., Chen, J. and Liu, H. (2018). The Effects of Online Product Presentations on Purchase Intention. doi:https://doi.org/10.1109/icsssm.2018.8465116