

The influence of sensory stimuli and perceived affective factors in Instagram posts on customer engagement in coffee chains

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Abstract

Purpose: This study aims to investigate the impact of sensory marketing (audio-visual stimuli) and information adoption on consumer engagement on social media platforms Instagram.

Design/methodology/approach: The research primarily focuses on Generation Z in Indonesia, who are active Instagram users, and specifically targets this demographic. Generation Z costumers were selected for this study as they are a relevant and representative population for engagement on Instagram. Two most popular official Instagram accounts of start-up coffee chains in Indonesia: @kopikenangan and @kopijanjiwi were analysed in this study. Therefore, this study utilize a purposive sampling technique.

Findings: Firstly, this research discovered that visual and auditory stimuli serve as evidence that influence how the market perceives the physical and emotional characteristics of advertising, brands, and products on Instagram. Secondly: the results indicated that audio stimuli significantly impact consumer engagement Thirdly, there is a huge relationship between perceived affect and consumer engagement, suggesting that the public is more presumably to develop a stronger emotional connection prior experiencing visual and audio content from Instagram brands of start-up coffee chains.

Research limitations/implications: This study is limited to focusing solely on Instagram and Generation Z, this study was carried out at a specific point in time.

Practical implications: The study's findings have significant academic implications concerning the increasing significance of marketing through Instagram's social media platform. This study stands out as one of similar research that examines the elements influencing customer behavior in relation to sensory marketing as a marketing strategy on social media. The outcomes offer valuable insights into consumer behavior when viewing Instagram reel advertisements.

Originality/value: The impact of Instagram's content reels on consumer engagement with brands in social media. Therefore, it is essential to investigate consumer engagement toward reel Instagram ads brand start-up coffee chains on social media to gain more understanding of the success of the app marketers in Indonesia.

Keywords: Audio-visual stimuli, consumer engagement, Instagram, perceived affective, coffee chains, Generation Z

Introduction

Since its launch in 2010, Instagram has experienced rapid growth and has become a popular platform for top brands and businesses. This is due to its impressive user base, with one billion month-to-month dynamic clients and 500 million day-to-day dynamic clients (Auxier & Anderson, 2021). Over 90% of Instagram users have also reported following a business account. Previous research has primarily centred on topics related to YouTube (T. Huang et al., 2022). According to Majeed et al. (2022), Facebook and Twitter are the most popular social media platforms but do not specifically cater to businesses.

Additionally, research by Chen et al. (2021), Frutos et al. (2021), and Erkan and Evans (2016) have shown that using Instagram can increase brand awareness and improve customer engagement. Instagram allows users to share images and videos that others can view, comment on, and like (Fitriani et al., 2020). The platform's focus on visual content, such as photographs and videos, appeals to clients inclined toward a more vivid encounter. Besides, Instagram has presented different highlights that improve client commitment and association, contributing to its huge development and prominence as of late.

The current market situation in Indonesia is becoming more competitive. The number of startup coffee shops in Indonesia has sharply increased since 2016, with 1000 outlets growing by 300% to 3000 outlets in 2019. However, this growth in coffee shops has not been matched by an increase in coffee consumption, which only rose by 13.9%. This case indicates a low agreement between coffee consumption and the number of coffee shops, causing concern for producers. With more startup coffee chains entering the market, consumers have more choices. As a result, traditional coffee chains established before the rise of startups struggle to compete for market share. Successful startup coffee chains will continue to grow, while those that cannot compete will go out of business. This challenges startup coffee chain marketers to create business plans that attract potential customers.

Additionally, the abundance of brand posts via online entertainment, particularly Instagram, makes it difficult to capture consumers' attention and persuade them to engage with the content. Many brands, including startup coffee chains, heavily invest in marketing on social media platforms. However, they have not completely used the open doors presented by web-based entertainment. Restricted research in the space explicit area of online entertainment content for startup coffee chains has hindered digital marketing managers from effectively utilizing these tools. Furthermore, consumers have a limited attention span for information on social media. When they receive excessive information, they may make poorer decisions and become less attentive to advertisements. To address this, Instagram reels and sensory marketing techniques are used to capture attention.

From a marketing strategy perspective, social media is currently the best strategy for showcasing. Web-based entertainment stages are online intelligent locales where clients can make, share, and talk about data and thoughts (Liu, 2023; Kaplan and Haenlein, 2010). These platforms facilitate numerous online social activities (Chen and Lin, 2019). As digital spending increases, there is a growing abundance of social media content targeted at consumers. Consequently, web-based entertainment stages have become urgent apparatuses for promoting correspondence, permitting organizations to comprehend and lay out associations with customers, upgrade items and administrations, and support purchaser commitment and sales (Algharabat et al., 2018).

Nevertheless, the success of these marketing endeavors is contingent upon marketers' ability to craft their content in order to promote customer engagement skilfully (Lee et al., 2013).

Scholars in the field of marketing have extensively examined customer engagement, including its definition, obstacles, catalysts, and precursors (Harmeling et al., 2017; Kumar & Pansari, 2016; Roberts & Alpert, 2010). Recently, experimental exploration of the idea of commitment concerning web-based entertainment has started (Dolan et al., 2019; Izogo et al., 2021). In the marketing industry, consumer engagement refers to the interaction, experiences, and actions that consumers have with companies (Dessart, 2017; Dessart et al., 2015; Eslami et al., 2022b; Harmeling et al., 2017; Hollebeek et al., 2019; Maslowska et al., 2016). According to Kumar & Pansari (2015), customer engagement is described as the degree of association between a firm and its clients, with a more elevated level of commitment leading to increased competitiveness for the firm. In the marketing literature, customer engagement is contingent upon a company's ability to connect with its customers through the content shared on social media platforms (Ma & Gu, 2022). With the rise of social media platforms enabling users to give recommendations, the emphasis of customer engagement studies has shifted towards examining the interaction of customer behavior through online consumer reviews (So et al., 2021). According to Pansari and Kumar (2016), when a company interacts with customers on social media, it can cultivate greater customer loyalty, enhance performance, boost sales, and generate referrals. Additionally, engaging in consumer engagement activities has the potential to foster positive relationships between consumers and the brand (Pelletier et al., 2020).

The motivations behind consumer consumption of social media have been examined in recent studies on shopper decisions on the web and virtual entertainment stages (Whiting & Williams, 2013; Cvijikj and Michahelles, 2013; Muntinga et al., 2011; Dolan, 2019). Consumers utilize social media for social interaction, diversion, data chasing, sharing, and the desire for rewards or compensation. In order to capture consumer interest and effectively convey persuasive information, Instagram posts should provide valuable and entertaining content (Dolan, 2019). In this manner, it is significant to prioritize understanding what motivates consumers to engage with Instagram reels on social media platforms. Current research on the effect of tangible signs, for example, sound and visuals, via virtual entertainment advertising is still in its beginning phases (scholarly journals, 2023). Since a long time ago, sensory perception has been known as a significant factor in driving human emotional responses (Kim et al., 2021), with previous studies supporting the connection between tactile insight and emotional reactions (Kim et al., 2021; Lyu et al., 2020). For example, sensory perceptions have been found to have a positive association with customer anticipatory emotions (Kim et al., 2021). Regarding sound-related research, music perception refers to how audiences perceive auditory traits and components, like beat, musicality, tone, and style (Lyu et al., 2020). Music-induced emotions are considered the audience's genuine emotional state, triggered by certain musical stimuli (Juslin & Västfj, 2008). Music serves as a tool and source that can evoke positive emotional experiences, and its discernment has been perceived as a significant component impacting delight and excitement feelings in the travel industry (Lyu et al., 2020). Furthermore, different scientists have observed that auditory traits and attributes are frequently connected to feelings (Schubert, 2013).

Most research on consumer engagement has focused on the social and psychological aspects, exploring how social media content influences behaviors. It raises the question of how visual and audio elements are related to engagement behaviors. The impact of brand post content/design on consumer engagement on social media has not been extensively studied compared to the abovementioned elements. Several broad factors have been identified that influence consumer engagement with social media posts. Visually, the content should be vibrant and interactive (De Vries et al., 2012; Cvijikj & Michahelles, 2013; Luarn et al., 2015; Lei et al., 2017) and exhibit media richness (Sabate et al., 2014). Other elements that have been examined include the effect of image characteristics (Li & Xie, 2020), gaze and product salience (Valentini et al., 2018), and contrast and symmetry (Kostyk & Huhmann, 2021).

Additional studies have explored the impact of visual elements on engagement. In a 2018 experimental study, researchers specifically investigated how a digital image can "attract, involve, and engage with the viewer" (Valentini et al., 2018, p. 365).

The effect of Instagram's content on shopper commitment with brands in virtual entertainment. Restricted research has been led around here (Huang et al., 2022). Therefore, it is essential to investigate consumer engagement toward reel Instagram ads and brand startup coffee chains on social media to understand app marketers' success in Indonesia better. Audio-visual stimulation in social media content can shape consumer perceptions of positive brands, thereby increasing consumer engagement. Sensory perception is characterized as the mindfulness and comprehension of tactile data (Kim, 2021; Khrisna, 2013). As Krishna (2013) indicated, tangible insights impact shoppers' perspectives, memory, and conduct by influencing feelings and comprehension.

The present study connected the stimulus-organism-response (SOR) model to understand better how sensory marketing audio-visual stimuli on Reels Instagram impact consumers' emotional functioning, demonstrated through their engagement as consumers in a social media setting. The idea of sensory marketing, introduced by Krishna (2012) as marketing based on consumer senses, affects how individuals perceive, judge, and behave. As a result, the sensory experience becomes the first step for consumers in making decisions, and marketers need to enhance their capability to integrate sensory inputs into their online ecosystem.

Literature Review

SOR theory

The structure of S-O-R (Mehrabian & Russell, 1974) The S-O-R framework, proposed by Mehrabian and Russell (1974), suggests that a stimulus detected in the environment is interpreted by the organism, generating either positive or negative reactions. According to this theory, individuals' responses to the actual climate include three stages: natural improvements, profound state, and social reaction. The expression "boost" alludes to the actual climate, "creature" addresses shoppers' inward personal circumstances, and "response" makes sense as conduct with regards to approach or evasion. The S-O-R model makes sense that environmental stimuli are external factors, including various elements of the physical atmosphere, which influence consumers' emotional states. The organism, which encompasses internal processes and structures, mediates the relationship between external stimuli and behaviour towards the environment. Mehrabian and Russell (1974) proposed that environmental stimuli impact an individual's emotional state, thereby influencing approach or avoidance responses. Since Kotler, (1973), coined the term atmosphere, marketing practitioners and scholars have remained consistently intrigued by the impact of physical stimuli on consumer behavior. (Bitner, 1992). Using the identical reasoning and logic as the SOR framework, numerous research and models in sensory marketing also adhere to a similar sequence of events where stimuli are perceived, interpreted, judged, and experienced, ultimately influencing behavioral or situational outcomes within the context of service (Helmefalk & Hultén, 2017; Mari & Poggesi, 2013). The extension of SOR has included previous occurrences of sensory marketing of audio-visual stimuli (Pei et al., 2022), such as visual and auditory cues. Their study (2023) utilized sensory marketing that emerged on YouTube to investigate how customers behave while watching product reviews on YouTube in the context of social commerce. The study revealed that environmental factors, such as audio and visual stimuli on Instagram reels (S), have an impact on individuals' internal states (O), which in turn affect the responses of consumers (R). Although the model of SOR was originally developed for the environmental psychology realm, it has been further refined, developed, and applied in social commerce

(Eslami et al., 2022; Buslamin et al., 2021). This study is devoted to the integration of the model of SOR in terms of social commerce by engaging the visual and audio stimuli on Instagram content for coffee chains to enhance consumer engagement. Marketers can adopt this concept as an experimental way to deal with gaining knowledge about customers' ways of behaving in the social trade climate.

Sensory Marketing through Audio and Visual Content on Instagram Reels

The idea of sensory marketing, introduced by Krishna, (2013) as marketing based on consumer senses, impacts how individuals perceive, judge, and act. As a result, the sensory experience is the first step for consumers in making decisions (Hung., 2017). Traditionally, consumers gathered sensory data concerning products from their environment (Biswas et al., 2019). Sensory marketing applies knowledge of sensation and customer discernment, perception, feeling, learning, inclination, decision, or assessment. Figure 1 presents a conceptual model for the sensory marketing realm. It is known that sensation and discernment are stages in handling the faculties. Sensation happens when the improvement influences the receptor of cells of tangible organs. In this case, it is known as a biochemical and neurological cycle. Insight is known as the mindfulness of tangible data.

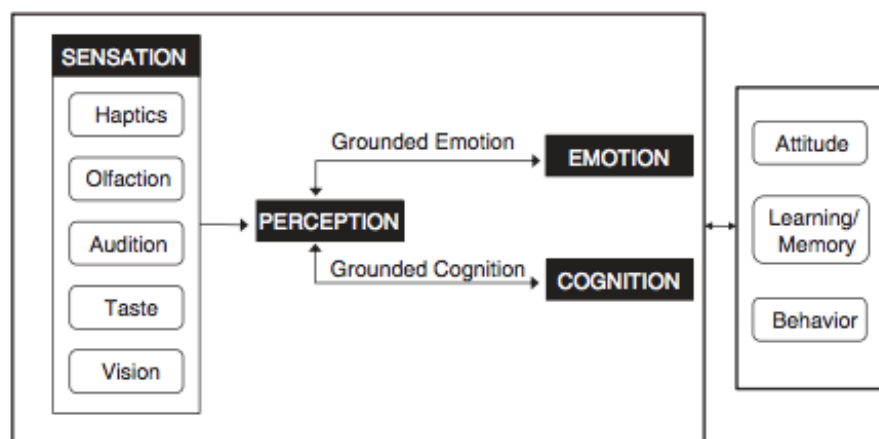


Figure 1. Conceptual Framework of Sensory Marketing (Source: Krishna, 2012)

According to Hollebeek, Glynn, & Brodie (2014), while there has been extensive research on consumer engagement, very few studies examine the aspects that manipulate continuance objectives from a sensory marketing perspective, especially in the context of social media. According to Kumar and Pansari (2016) and (Romero, 2017), previous researchers have concentrated on the best approach and indication for developing consumer engagement in investigating online consumer behavior. (2013) express that viable client commitment networks are currently significant in creating a positive brand insight. Nonetheless, advertisers must improve their capacity to integrate tangible contributions to their internet-based biological system because of shopper inclinations for the web-based climate (Petit et al., 2019). Technological advancements have led to the emergence of digital sensory marketing in online commerce, resulting in increased research on sensory marketing in the digital environment (Petit et al., 2019). Krishna et al (2013) led a concentrate on the viability of computerized tactile information sources and tracked down that the five detects (vision, taste, contact, smell, and hearing) have various approaches to catching buyer consideration. Applying tangible

promoting ideas on Instagram can help create sensory perceptions grounded in emotion and cognition, influencing consumer behaviors, memory, and product learning (Khrisna., 2012). Previous research has uncovered various aspects of visual and auditory signals in YouTube item surveys, such as those pertaining to product aesthetics, design, color, YouTuber actions, ambient sound, and expressive language (Lopez., 2021; Gibson., 2020; Chen., 2021). As a result, by utilizing sensory cues in social media reels on Instagram, startup coffee chains can promote their brand and allow consumers to familiarize themselves with the product. It, in turn, leads to the evaluation and development of a virtual sensory experience for the products, ultimately converting sensory information into consumer engagement.

Consumer Engagement in Social-Media

Consumer engagement involves specific interactive experiences between consumers and the brand. It is a multidimensional concept comprising cognitive, emotional, and/or behavioural dimensions, and plays a central role in the process of relational exchange where other relational concepts are engagement antecedents and/or consequences in iterative engagement processes within the brand (Brodie., 2013). Following the new thousand years, there has been a shift from value-based to relationship-promoting. Clients presently expect brands to engage with them and provide more than just a product for sale (Coviello et al., 2002; De Chernatony & Dall'Olmo Riley, 2000; Islam et al., 2019; Rosenbaum et al., 2017; Vivek et al., 2012). Customer engagement (CE) holds significant importance in relationship marketing. It is widely acknowledged as a crucial objective that advertisers should effectively take a stab at to lay out persevering through client cooperation and connections and to reinforce client unwaveringness towards their brands (Lim, Ahmed, et al., 2022; Kumar, 2020, Rosenbaum et al., 2017). Hence, managers must promote the engagement of customers in voluntary, discretionary, and supportive actions toward the brand and other customers, as indicated by numerous studies (Bozkurt et al., 2021; Carlson et al., 2018; Hamzah et al., 2021; Pezzuti et al., 2021; Verleye et al., 2014) have made efforts to comprehend consumer engagement, especially in social media, which adds to the growing competitiveness of businesses. Social media platforms have facilitated the creation of interactive "engagement platforms" where consumers can share resources and collaborate in value creation. (Breidbach, Kolb & Srinivasan, 2014; Ramaswamy, V. & Gouillart, 2010). People frequently go to news sources to address their issues, satisfy their longing for social connections, track down diversion, loosen up, involve themselves, or obtain data (Whiting & Williams, 2013; Katz, Gurevith, and Haas 1973). Consequently, social media customer engagement is essentially a process of satisfying customers and ultimately generating value for them as well (Herr, Kardes, & Kim 1991; Vries et al., 2017).

Hypothesis Development

Consumers on Instagram Perceive Visual and Audio Stimuli on Reels

As introduced by Krishna (2013), the concept of sensory marketing focuses on how consumer senses influence their perceptions, judgments, and behaviors. As a result, the sensory experience plays a critical role in consumers' decision-making process (Carlson, 2018). Traditionally, consumers relied on their physical surroundings to gather sensory information about products (Biswas et al., 2021). However, with the growing preference for online shopping (Petit et al., 2021), marketers need to improve their capacity to integrate tangible contributions to the web-based environment. Late investigations have featured computerized

tangible advertising as an emerging field driven by technological advancements that enable sensory experiences in online commerce (Petit et al., 2021).

Consequently, there has been increased research on applying sensory marketing to the digital environment. Krishna et al. (2013) conducted a study to examine the viability of computerized tangible information sources. They tracked down that the five detects (vision, taste, contact, smell, and hearing) have unmistakable approaches to catching purchaser consideration. The implementation of sensory marketing principles in Reels Instagram has the potential to shape sensory perceptions based on emotions and thoughts that influence behaviors, memory, and product understanding (Khrisna., 2012). Coffee chains that are newly established brands utilize Reels Instagram to convey information. Be that as it may, this review zeroed in on breaking down the visual and hearable prompts found in item survey recordings. Previous research has provided extensive insights into the visual and auditory cues present in Reels Instagram, including aspects such as product appearance, design, color, Barista actions while making coffee, background music, and the overall atmosphere of the coffee shop (Lopez., 2012; Gibson., 2020; Chen et al., 2021).

Consequently, consumers gain experience with a product by observing the sensory cues demonstrated by audiences. This experience leads them to evaluate and develop the virtual sensory experience of the product and convert sensory information into decision-making stages. Interacting with and feeling a product through sensory experience is crucial for consumers. Therefore, the primary purpose of sensory marketing integrated into Reels Instagram is to help consumers evaluate and engage in an online environment. Consumers access Reels Instagram posts by brands, particularly startup coffee chains, through auditory and visual inputs (Adami., 2009).

Audience reviews rely on sensory cues. In the recordings, Reels Instagram utilizes audio effects and ambient sound to capture the watchers' attention, which can be viewed as hear-able prompts. Also, the crowd's visual info comes from different sources, for example, the item's appearance, the foundation, the presence of media figures, and enlivened pictures (Zhang and President., 2015). In addition, the idea of para-social communication, which depends on the illusionary relationship framed through posted recordings, proposes that tangible data sources (i.e., visual and hearable) impact buyer discernments and mentalities towards the crowd and content posted on Reels Instagram. At the point when customers draw in with content through correspondence, show, and item utilization, they can foster para-social collaborations. Thus, this study proposes the accompanying speculation:

H1. (a) Visual stimuli on the Reels Instagram brands startup coffee chains influence Perceived affective.

H1. (b) Audio stimuli on the Reels Instagram brands startup coffee chains influence Perceived affective.

The Impact of Visual and Audio Stimuli on Consumer Engagement

Being involved in audio and visual data handling might empower people to get to and see more data and lead to pleasurable shopping (emotional reaction). Message request configuration has been generally viewed as in customary media settings, with various examinations recommending that publicizing and imaginative message requests can be coordinated as one or the other sane (additionally alluded to as enlightening or utilitarian) or close to home (likewise alluded to as full of feeling or groundbreaking) (Wu & Wang, 2011). Levelheaded messages are believed to be handled mentally, while groundbreaking messages appeal to the mental attributes of the main interest group (Laskey et al., 1989). While many creators contend that profound message requests are more compelling in drawing in purchasers than normal requests,

the discoveries are conflicting and clashing and have been founded on static conventional media settings (Aaker & Norris, 1982; Batra & Ray, 1985).

H2. (a) Visual stimuli on Reels Instagram influence consumer engagement

H2. (b) Audio stimuli on Reels Instagram influence consumer engagement

Perceived Affective on Consumer Engagement

Sensory perceptions through the five senses impact human emotional responses, which in turn affect attitudes and behaviors (Augustin et al., 2009; Biswas, 2019). Gavilanes et al. (2018) propose a model that explores digital consumer engagement with advertising and its connection to the effects of advertising processing. This model builds upon previous research on engagement and links it to the hierarchy of impact, providing a theoretical framework for understanding how Reel Instagram metrics can be used to analyse digital consumer engagement in social networks. For example, consumers who act as potential brand advocates can be significantly influenced by actively sharing company content (Hollebeek, 2011).

Consumer engagement is turning out to be all the more as often as possible recorded as a promoting objective (Shahbaznezhad & Rashidirad, 2021; Lee et al., 2018), reasonable because of its capacity to assist advertisers with understanding how customers cooperate, answer, and take care of promoting (Thompkins et al., 2020). Different media factors analyze Commitment results in the writing (Kim et al., 2021; Gavilanes et al., 2018; Barger et al., 2016). The actual medium (for example, the stage) is a fundamental element driving promoting reaction (Voorveld et al., 2018; Calder et al., 2009). Media commitment appears across various encounters (Calder et al., 2009); however, it is a decent exhibit for anticipating promoting viability (Davis Mersey et al., 2010). The earliest investigations of commitment considered commitment along a scope of results on a low-to-high continuum. As the writing stream developed, comparable continuums were imagined yet were then portioned by utilization (clicks), commitment (remarketing), and cocreation (Muntinga et al., 2011; Shao, 2009).

From the hypothetical audit, the authors can bring up that the feelings of people and how they see and feel the environment are animated by what Daucé & Rieunier (2002) called the "air factors." The collaboration between discernment and sensation is, in one way, what can characterize the field of tactile promotion (Krishna, 2009). After the tangible organs are invigorated, the singular's cerebrum will make an inside reaction. This inner reaction is portrayed by close-to-home responses that create a positive or negative situation for the person toward the brand or item (Krishna, 2012). This situation is significant because it characterizes the positive or negative response following the singular's evasion or non-engagement and approaching reaction or engagement with content on Instagram Reels (Mehrabian & Russel, 1974).

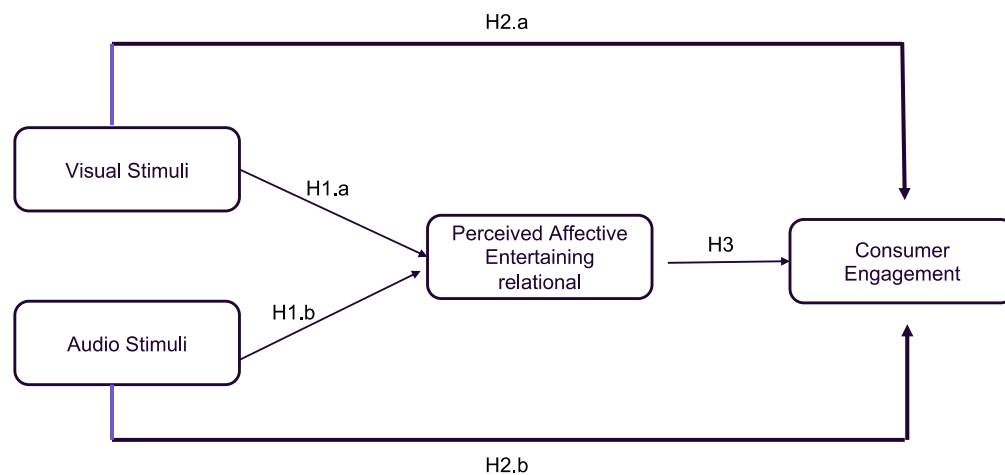
They discussed how combining audio and visual stimuli plays a role in the sensory marketing process. Yoo, Park, & MacInnis, (1998) defined stimulating the tactile organs. The sensations (what the consumer experiences through their sensory organs) and the perceptions (the brain's processing and interpretation of these sensations) resulting from this stimulation are sent to the brain for analysis. These stimuli can impact judgment, behavior, attitude, and the overall pleasure customers derive from their experience. Building on the existing literature, it is advanced to follow speculation.

H3. Perceived Affective Influence Consumer Engagement on Instagram Reels

Methods

Instrument Development

Scales deriving out of current writing under satisfactory dependability and legitimacy were adjusted to fit the setting of this review. Visual tactile insights were estimated utilizing four things adjusted from (Huang et al., 2022). Audio stimuli were tested through the model (4 items) adopted by (Huang et al., 2022). Perceived affective was measured with four items developed by (Chen & Lee, 2008). On the other hand, consumer engagement was tested by applying the model (five items) that were coined by (Davids et al, 2019). Every one of the things utilized a 5-point rating scale design.



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Figure 2. Conceptual Model

Procedure

The research primarily focuses on Generation Z, active Instagram users, and specifically targets this demographic. It was discovered that Generation Z individuals are actively engaging with the Instagram accounts of startup coffee chains. Generation Z customers were selected for this study as they are a relevant and representative population for engagement on Instagram. The two most popular official Instagram accounts of startup coffee chains in Indonesia: @kopikenangan and @kopijanjiwi were analysed in this study.

An accurate estimation of the Generation Z market's engagement on Instagram's social media platform cannot be determined. Therefore, this study will utilize a purposive sampling technique. The respondents will consist of individuals who meet the following criteria: (1) Indonesian Generation Z, (2) have been following the Instagram-authorized account of startup coffee chain brands for at least one year, and (3) have engaged with the content by liking, sharing, and commenting while being a follower. This approach allows for the analysis of individuals as the unit of analysis, similar to previous studies conducted by Wong et al. (2019), Malik et al. (2016), and de Vries et al. (2017), who employed purposive sampling.

Findings

Validity and Reliability Test

The authors conducted data testing applying Smart PLS 4.0 software, employing partial least squares (PLS) analysis. The data testing consisted of two stages. In the first stage, the authors assessed the assessment model's convergent and discriminant validity. The authors used a basic model to test the hypotheses in the second phase. After conducting a validity test, two items were excluded from the analysis: "The content containing sensory stimuli on Instagram is visual."

In contrast, "the sensory stimuli of content on Instagram are audio." After removing these items, the factor loadings for each development surpassed the suggested edge of 0.70 (Hair et al., 2017), and the average extracted value (AVE) was greater than the recommended value of 0.5 (Hair et al., 2017), demonstrating this research met the union legitimacy rules. The creators additionally led unwavering quality tests using Cronbach's alpha and composite dependability rules. The consequences of building legitimacy and uncompromising quality are introduced in Table 3.1. The outcomes recommended that each development in this study had a Cronbach alpha worth that was higher than the suggested worth of 0.70 (Hair et al., 2017), and the composite unwavering quality worth was more prominent than the suggested worth of 0.70 (Hair et al., 2017), meaning this study met the dependability necessity. This study evaluated the discriminant validity of applying the heterotrait-monotrait (HTMT) model. The findings demonstrated that the value of each construct was below 0.85 (Henseler & Ringle, 2015), revealing that the HTMT standard had satisfactory discriminant validity.

Structural Model and Hypothesis Testing

The goodness of fit for the structural model was validated using Smart PLS 4.0 software. The results of the structural path analysis can be seen in Figure 3 and Table 3. To assess the model's overall predictive capability, this study utilized the R² value to determine the percentage of variation in the endogenous variables explained by the exogenous variables. Previous research has shown that models with R² values exceeding 0.10 are considered statistically viable (Falk, R. F., & Miller, 1992). Figure 3 illustrates the path coefficient between the constructs and the R² coefficients. The explained variance for audio stimuli was 61%, for visual stimuli was 14%, for perceived affective was 11%, and for consumer engagement was 14%, as shown in Figure 2. Consequently, all constructs in this study surpassed the recommended R² value of 0.10 (Falk & Miller, 1992).

Table 3 and Figure 3 indicate that visual cues did not significantly influence perceived affection. Thus, H1a was supported ($\beta = 0.143$ and $t = 0.130$). Audio stimuli significantly affected the perceived effect, supporting H1b ($\beta = 0.617$ and $t = 5.975$). Visual stimuli did not substantially impact consumer engagement, thus supporting H2a ($\beta = 0.112$ and $t = 0.537$). The effect of audio stimuli significantly affected consumer engagement, supporting H2b ($\beta = 0.218$ and $t = 1.237$). The perceived effect did not possess a meaningful impact on consumer engagement; therefore, H3 ($\beta = -0.144$ and $t = 0.826$).

Table 1: Validity and Reliability Construct

Construct	Factor loadings	CA	CR	AVE
Visual Stimuli (VS)	0.947 - 0.944	0.958	1.029	0.885
Audio Stimuli (AS)	0.965 - 0.942	0.967	0.975	0.909
Perceived Affective (PA)	0.972 - 0.894	0.964	0.974	0.904

Consumer engagement (CE)	0.856 - 0.823	0.898	0.921	0.700
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Table 2: Discriminant Validity

Construct	heterotrait - monotrait (HTMT)
CE <--> AS	0.165
PA <--> AS	0.573
PA <--> CE	0.105
VS <--> AS	0.392
VS <--> CE	0.147
VS <--> PA	0.099

Table 3: Hypothesis Testing Summary

Hypothesis	Path Coefficient	T-value	Conclusion
H1. (a) Visual Stimuli → Perceived Affective	0.143	0.130	unsupported
H1. (b) Audio Stimuli → Perceived Affective	0.617	5.975	supported
H2. (a) Visual Stimuli → Consumer Engagement	-0.112	0.537	unsupported
H2. (b) Audio Stimuli → Consumer Engagement	0.218	1.237	supported
H3. Perceived Affective → Consumer Engagement	-0.144	0.826	unsupported

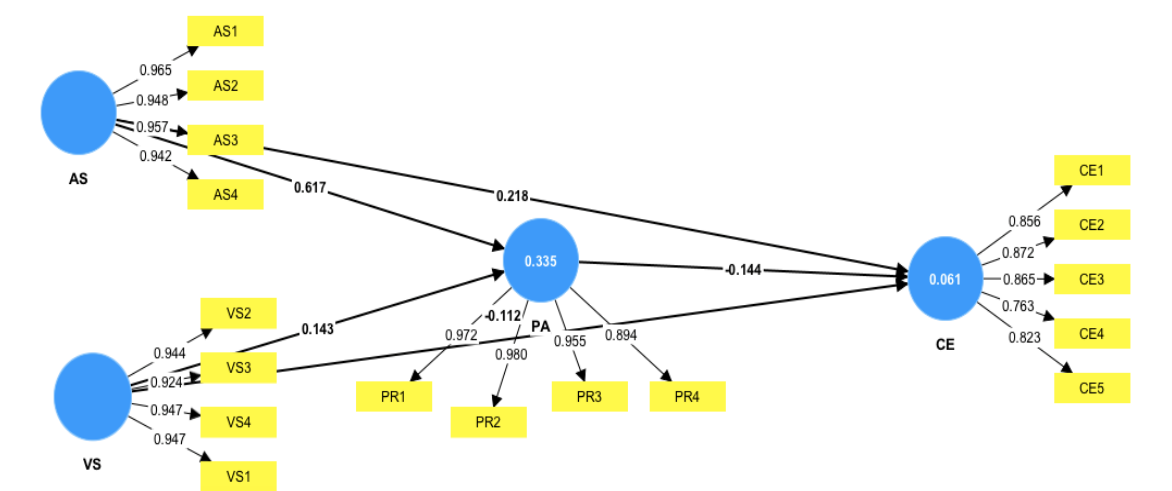


Figure 3. Hypothesis Testing Results.

Discussion and Conclusion

This study seeks to comprehend consumer behaviors on Instagram's social media platform by integrating sensory marketing (visual and audio stimuli), perceived affective, and consumer engagement. Previous research on human behaviors and emerging technologies have advanced and been analyzed from different angles (Yonkers, 2020). Specifically, the SOR model has been employed to elucidate the impact of the Instagram environment on consumer engagement. The data was gathered from individuals who had followed and reviewed the Instagram accounts @kopijanjiwi and @kopikenangan. Our findings have sparked several discussions.

Firstly, this study examined the use of audio and visual stimuli in sensory marketing. The study discovered that visual and auditory stimuli serve as data that influence how the public perceives the physical and emotional characteristics of advertising, brands, and products on Instagram. The findings revealed that visual stimuli (H1a) do not significantly impact perceived affective, while audio stimuli (H1b) significantly affect perceived affective. Therefore, customers are more presumably perceived as affective when exposed to auditory stimuli on products posted via Instagram reels or content. For instance, Instagram content such as Reels and video ads often incorporate audio stimuli, such as product sounds or reviews. Coffee shops, for example, can use clear sounds, resonant sounds, melodic background music, and other auditory stimuli in their Instagram video posts to enhance consumer perception of affective. By appealing to the sense of hearing, audio stimuli can evoke emotions and establish a connection with the brand. The use of audio stimuli can also captivate viewers and encourage them to watch the content in its entirety. According to Hwang & Oh's (2020) study, it was discovered that consumers who experienced interactive music were more emotionally engaged in the shopping aspect. This emotional engagement resulted in a stronger intention to act and a more favorable perception of the website and its brand.

Based on the study conducted by Hwang & Oh (2020), it was found that individuals who had an interactive music experience exhibited higher emotional involvement in the shopping process. Consequently, this emotional involvement led to a greater inclination to take action and a more positive perception of the website and its brand (Violante et al., 2019). Visualization as a tactic for the sense of sight entails creating a visual depiction and enhancing the customer's sensory experiences to generate awareness and promote a product or brand. Additionally, the authors examined the correlation between audio stimuli and consumer engagement, and the results indicated that audio stimuli significantly impact consumer engagement (H2b). These findings demonstrate that audio stimuli significantly influence consumer engagement on Instagram, which aligns with previous research. As a result, the audience is more likely to focus on audio stimuli when making Instagram posts. Prior research has found that auditory stimuli, especially in the context of therapy of music, are more adequate than visual stimuli in improving consideration and emotions. (Haslbeck, 2014; Schwartz et al., 2017). However, there has been limited discussion on using interactive music in a business context, and its impact on consumer behavior remains unclear. Furthermore, the authors recognize the potential of incorporating audio stimuli into Instagram content for brand startup coffee chains (Huang et al., 2022).

Thirdly, this study showed that there is a significant association between perceived affect and consumer engagement (H3), suggesting that the public is more likely to form a deeper emotional chain after engaging with visual and audio content on Instagram accounts of emerging coffee brands. Therefore, this result contradicts the previous research, which indicated that perceived effect significantly influences consumer engagement (Huang et al., 2022; Ha et al., 2016).

Theoretical Implications

The study's findings have significant academic implications concerning the increasing significance of marketing through Instagram's social media platform. Initially, utilizing the SOR model, the authors distinguished two types of stimuli (S): sensory marketing (visual and audio) that impacts perceived affective processes (O) directed towards individual responses (R) in consumer engagement. This study stands out as one of the few that examines the factors influencing consumer behavior concerning sensory marketing as a marketing strategy on social media. The outcomes offer valuable insights into consumer behavior when viewing Instagram reel advertisements.

Practical and Social Implications

The study's findings have significant academic implications concerning the increasing significance of marketing through Instagram's social media platform. Initially, utilizing the SOR model, the authors distinguished two types of stimuli (S): sensory marketing (visual and audio) that impacts perceived affective processes (O) directed towards individual responses (R) in consumer engagement. This study stands out as one of the few that examines the factors influencing consumer behavior concerning sensory marketing as a marketing strategy on social media. The outcomes offer valuable insights into consumer behavior when viewing Instagram reel advertisements.

Limitations and Suggestions for Future Research

Based on these research findings, future studies have identified several new possibilities. However, it is important to note that this research is limited to focusing solely on Instagram and Generation Z. To provide a more comprehensive analysis, exploring other platforms like TikTok, which is currently experiencing significant growth, is recommended. Additionally, this research examines sensory marketing as a predictor of consumer engagement. Nevertheless, it is important to take into account other psychological factors that could impact audience reactions, including visual and auditory cues, cognitive processes, and emotions. Additionally, since this research was conducted at a single time extent, the findings may vary over a longer term. As a result, a longitudinal study would be the most relevant method for forthcoming research.

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