

UI/UX DESIGN, VISUAL ELEMENTS, CONSUMER TRUST, AND ONLINE PURCHASE DECISIONS IN INDONESIA

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Abstract

This study conducts a comprehensive literature review to examine the influence of UI/UX design and visual elements on online purchase decisions in the Indonesian e-commerce sector, with emotional responses and consumer trust as mediating variables. The study is motivated by the rapid growth of e-commerce in Indonesia, reaching transaction values of IDR 453.75 trillion in 2023, and the increasing importance of user experience in driving consumer loyalty and purchase behavior, yet limited integration of UI/UX design, visual elements, trust, and emotional responses into a comprehensive conceptual model persists. The review synthesizes eighty-five relevant publications spanning the period 2000 to 2026, analyzed through thematic analysis and narrative synthesis to develop a conceptual framework grounded in the Stimulus-Organism-Response model. The results indicate that UI/UX design and visual elements serve as powerful environmental stimuli that positively influence Indonesian consumers' emotional responses and trust, with eighty-four percent of studies finding positive effects on emotional responses, eighty-six percent on visual elements to emotional responses, eighty-three percent on trust, and eighty-five percent on visual elements to trust. Emotional responses and consumer trust jointly mediate the relationship between UI/UX design, visual elements, and online purchase decisions, with eighty-three percent of studies confirming positive mediation effects. The findings suggest that investment in UI/UX design and visual elements is a functional strategy to build trust and evoke positive emotions, with practical recommendations including intuitive navigation, mobile-first design, high-resolution product images, visual trust elements, and design localization for Indonesian consumers.

Keywords: UI/UX Design, Visual Elements, Consumer Trust, Purchase Decisions, E-Commerce

1. Introduction

The digital revolution has driven significant growth in the e-commerce sector in Indonesia. According to the We Are Social report (2024), Indonesia has more than 185 million internet users, seventy-eight percent of whom shop online at least once a month. Platforms such as Shopee, Tokopedia, Lazada, and TikTok Shop have recorded annual increases in user numbers and transaction values (We Are Social, 2024). This phenomenon not only changes transaction mechanisms but also influences how Indonesian consumers form perceptions, evaluate risks, and make purchasing decisions in the digital environment (Kusumawati & Rahayu, 2020). Unlike conventional shopping, online consumers cannot directly interact with physical products. They rely heavily on visual representations and the quality of user experience provided by the platform. In the Indonesian context, additional challenges arise from the high level of online fraud and counterfeit products, making trust a critical commodity (Kusumawati & Rahayu, 2020).

Therefore, UI/UX design becomes a crucial element in creating an intuitive, comfortable, and engaging experience. Norman (2013) asserts that effective design both functional and aesthetic can significantly influence users' emotional perceptions, which in turn shapes their attitudes toward the platform.

Beyond UI/UX, visual elements such as color schemes, typography, product image quality, and page layout play an important role in attracting attention and shaping consumers' first impressions. Research by Kim and Lennon (2013) shows that visual stimuli in e-commerce have a direct impact on users' emotions, which subsequently affect exploration and purchase behavior. In Indonesia, a study by Kusumawati and Rahayu (2020) found that website visual appeal significantly influences repurchase intention through the mediation of trust. Research published in the *International Journal of Accounting, Management, Economics and Social Sciences (IJAMESC)* demonstrates that platform convenience and advanced features drive satisfaction, purchase, and repurchase intentions in the Indonesian omnichannel retail context (Rukiastiandari et al., 2023). The same study revealed that ease of use indirectly influences satisfaction, purchase, and repurchase through engagement and customer type, underscoring the importance of considering customer characteristics when assessing the impact of platform design on behavioral outcomes (Rukiastiandari et al., 2023).

Trust becomes a determining factor in online transactions due to the perceived uncertainty and risk (Gefen et al., 2003). Indonesian consumers tend to transact only on platforms they consider credible, safe, and reliable, especially given the prevalence of online fraud and data breaches. Studies within IJAMESC have highlighted the importance of trust in mediating the relationship between platform design and consumer behavioral intentions, emphasizing that trust serves to reduce perceived risk and uncertainty in online transactions (Arpah & Nabella, 2023). Research has shown that trust, along with perception of risk and security, significantly influences consumer purchase interest in e-commerce platforms (Arpah & Nabella, 2023). Meanwhile, the neuromarketing approach reveals that emotions often unconsciously play a dominant role in consumer decision-making processes (Ariely & Berns, 2010). Research on live-streaming e-commerce in Indonesia has applied the Stimulus-Organism-Response (SOR) framework to show that platform features such as personalisation, informativeness, visibility, and guided shopping significantly influence consumers' emotional arousal and cognitive immersion, which subsequently drive purchase intention (Utomo et al., 2025).

The urgency of this research is driven by several critical factors. First, the rapid growth of e-commerce in Indonesia, with transaction values reaching IDR 453.75 trillion in 2023, has created an increasingly competitive digital marketplace where platform differentiation through superior user experience becomes essential for business sustainability, yet persistent consumer concerns regarding online fraud and data privacy indicate the need for empirical investigation. Second, the glaring disparity in consumer engagement between leading platforms and smaller competitors demonstrates that the digital market provides a highly selective response to user experience quality, suggesting that product variety and pricing alone are no longer sufficient to maintain consumer loyalty (Kusumawati & Rahayu, 2020). Cultural and social factors have also been found to positively and significantly influence online purchase decisions, indicating that consumer behavior in Indonesia is shaped by broader societal influences beyond platform features alone (Pohan & Goenawan, 2024). Third, the limited integration of UI/UX design, visual elements, trust, and emotional responses into a comprehensive conceptual model indicates a significant research gap. While some studies demonstrate that visual

stimuli positively influence consumer behavior through emotional responses (Kim & Lennon, 2013), others reveal that trust serves as a critical mediating mechanism in the relationship between platform design and purchase intention (Kusumawati & Rahayu, 2020; Gefen et al., 2003). Research has also found that website quality and service quality positively influence purchase intention, while reputation does not have a significant effect (Sulastri & Rahayu, 2024). Fourth, the role of emotional responses as a mediating variable in the relationship between UI/UX design, visual elements, and consumer behavioral intentions has not been extensively studied, particularly in the Indonesian e-commerce context, where consumers are predominantly young with high technology adoption rates but also significant concerns about transaction security and data privacy. Research on the millennial generation has shown that attitudes on online shopping and value motives influence online shopping intention, while social motives and escapism motives do not (Lu et al., 2024). Fifth, the gap between theoretical predictions from the SOR framework and empirical findings necessitates renewed investigation with more comprehensive research designs and more recent data.

The research gap in this study lies in the limited understanding of how UI/UX design and visual elements jointly influence consumer behavioral intentions through the mediation of trust and emotional responses in the Indonesian e-commerce sector. While individual studies have examined the direct effects of UI/UX on consumer satisfaction or trust, the integrated mediating mechanisms through which these variables operate remain underexplored. Additionally, most previous studies have been conducted in developed market contexts, leaving a significant gap in knowledge regarding the dynamics of consumer behavior in emerging digital markets such as Indonesia, where unique cultural, economic, and technological characteristics create distinct consumer expectations and behaviors. Furthermore, empirical evidence from the Indonesian e-commerce sector remains limited, particularly in the context of post-pandemic digital acceleration where consumer behavior has undergone significant transformation and platforms are increasingly competing on user experience quality. IJAMESC research has contributed to understanding platform features and consumer behavior in Indonesia, yet the integration of UI/UX design, visual elements, trust, and emotional responses into a single comprehensive model remains underexplored (Rukiastindari et al., 2023; Arpah & Nabella, 2023). Furthermore, while the SOR framework has been applied to understand impulsive buying behavior in live-streaming e-commerce in Indonesia (Utomo et al., 2025), its application to the relationship between UI/UX design, visual elements, trust, emotional responses, and purchase decisions in the broader e-commerce context remains limited.

The novelty of this research lies in several aspects. First, this study focuses on the Indonesian e-commerce sector during the 2022–2024 period, which represents a unique context characterized by digital acceleration, increasing platform competition, and evolving consumer expectations regarding user experience and security. Second, this study develops an integrative model that simultaneously examines the influence of UI/UX design and visual elements on consumer behavioral intentions with trust and emotional responses as mediating variables, providing a more comprehensive understanding of the determinants of consumer behavior in the e-commerce context. Third, this study positions emotional responses as a critical mediating mechanism, enabling the examination of whether the emotional dimension serves as the primary pathway through which visual stimuli influence consumer behavior. Fourth, this study contributes to the limited empirical evidence on consumer behavior in the Indonesian e-commerce market,

providing insights into whether UI/UX design and visual elements are perceived as value-creating factors that positively influence consumer behavioral intentions. Fifth, this study extends the application of the Stimulus-Organism-Response (SOR) framework to the context of UI/UX design and consumer behavior, validating the theoretical model in the Indonesian digital market characterized by distinct consumer characteristics.

The purpose of this study is to analyze the influence of UI/UX design and visual elements on consumer behavioral intentions in the Indonesian e-commerce sector. In addition, this study aims to evaluate the mediating roles of trust and emotional responses in the relationship between UI/UX design, visual elements, and consumer behavioral intentions. The choice of this goal was driven by the fragmented nature of previous research findings and the limited understanding of the integrated mechanisms through which UI/UX and visual elements influence consumer behavior. With a comprehensive examination of the mediating mechanisms, this study aims to provide a deeper understanding of how platform design and visual stimuli can be strategically optimized to enhance consumer trust, positive emotional responses, and ultimately, purchase behavior and platform loyalty in the Indonesian digital market.

The contribution of this research is multifaceted. From a theoretical perspective, this research contributes to the enrichment of literature on consumer behavior in e-commerce by proposing and testing an integrative model that links UI/UX design and visual elements with consumer behavioral intentions through the mediating roles of trust and emotional responses, extending the application of the SOR framework to the context of digital consumer behavior. The findings contribute to the understanding of how specific UI/UX dimensions and visual elements influence consumer emotions and trust, providing a more nuanced theoretical framework for analyzing consumer behavior in highly competitive digital marketplaces. From a practical perspective, this study provides actionable insights for e-commerce platform developers, UX designers, and marketing strategists in designing and managing user experiences that effectively build consumer trust and generate positive emotional responses. For e-commerce platform developers, the findings provide guidance on which UI/UX features and visual elements are most effective in enhancing consumer trust and emotional engagement. For marketers, the results offer insights into the importance of emotional and trust-building strategies in driving purchase behavior and platform loyalty. For policymakers and consumer protection agencies, this study provides empirical evidence to support the development of regulations that promote transparency, security, and consumer trust in the digital marketplace, in order to maintain the stability of the national digital economy system.

2. Theoretical Background

2.1 Stimulus-Organism-Response (SOR) Theory

The Stimulus-Organism-Response (SOR) model was first developed by Mehrabian and Russell (1974) in environmental psychology to explain how individuals respond to physical environments. The model states that environmental stimuli (S) affect an individual's internal state (organism), which then produces behavioral responses (R). In this conceptualization, the organism encompasses both affective (emotional) and cognitive (perceptions, beliefs) processes, while the response can take the form of approach or avoidance behavior (Mehrabian & Russell, 1974).

The SOR model has been widely adopted in e-commerce research due to its ability to explain how the online store environment (digital atmosphere) influences consumer emotions and perceptions, which in turn affect purchase intentions. Eroglu, Machleit, and

Davis (2001) were among the pioneers who applied the SOR model to online store atmospherics. They divided stimuli into two categories: high-task-relevant cues (e.g., product descriptions, prices, reviews) and low-task-relevant cues (e.g., background music, background colors, decorative animations). In this study, UI/UX design and visual elements fall into both categories, with UI/UX being closer to high-task-relevant (as it affects usability) and purely visual elements being more low-task-relevant.

Floh and Madlberger (2013) also used the SOR model to explain online impulse purchasing, where website atmosphere stimuli trigger positive emotions that then produce impulsive behavior. In Indonesia, the phenomenon of impulse purchasing through live shopping on TikTok and Shopee is very common, demonstrating the relevance of this model. This study extends the SOR model by incorporating trust as a cognitive dimension of the organism, in addition to the affective emotional response. Thus, we propose an SOR model with two parallel mediation pathways: an affective pathway (emotion) and a cognitive pathway (trust). These two pathways are expected to complement each other in explaining how UI/UX design and visual elements drive purchase decisions in Indonesia.

2.2 UI/UX Design in the Digital Environment

User Interface (UI) refers to the visual aspects and interactive layout of a digital system, including elements such as buttons, icons, spacing, typography, color schemes, and responsiveness to various screen sizes (Garrett, 2011). Meanwhile, User Experience (UX) encompasses the user's overall perceptions and responses during and after interacting with the system, covering aspects such as usability, accessibility, efficiency, and subjective satisfaction (Garrett, 2011). Garrett (2011) emphasizes that good UI/UX not only makes tasks easy to complete but also creates a pleasant and meaningful experience for users.

In the context of e-commerce in Indonesia, UI/UX design plays a crucial role because consumers often access platforms via mobile phones with varying internet connections (3G to 5G). Platforms such as Shopee and Tokopedia adopt very simple designs with tab-based navigation and large icons to accommodate users with diverse digital literacy levels. Research published in the *International Journal of Accounting, Management, Economics and Social Sciences* (IJAMESC) demonstrates that platform convenience and advanced features drive satisfaction, purchase, and repurchase intentions in the Indonesian omnichannel retail context (Rukiastiandari et al., 2023). Cyr, Head, and Ivanov (2010) found that the aesthetic quality of site design positively influences user loyalty in mobile commerce, both directly and through the mediation of satisfaction. In Indonesia, research by Rahayu and Day (2017) shows that perceived ease of use is the main factor driving e-commerce adoption by MSMEs and consumers.

Poor UI/UX design, such as broken links, convoluted payment flows, or lack of visual feedback when buttons are pressed, can trigger frustration, confusion, and perceptions of platform incompetence. In human-computer interaction literature, this phenomenon is referred to as cognitive friction (Norman, 2013). Norman (2013) asserts that effective design, both functional and aesthetic, can significantly influence users' emotional perceptions, which in turn shapes their attitudes toward the platform. Therefore, in this study, UI/UX design is positioned as the first external stimulus that influences the internal condition of Indonesian consumers.

2.3 Visual Elements from a Neuromarketing Perspective

Visual elements are non-interactive components of a digital interface that include color schemes, typography, layout, page composition, product image quality, the use of white space, as well as dynamic elements such as animations and videos. These elements serve as the primary sensory stimuli processed by the human visual system quickly and often outside of conscious awareness (pre-attentive processing) (Lindgaard et al., 2006). In neuromarketing, it is understood that affective responses to visual stimuli occur earlier than slower, conscious cognitive processes (Hubert & Kenning, 2008).

Hubert and Kenning (2008) explain that visual stimuli can trigger affective responses that directly influence preferences and behavior without going through lengthy rational reasoning. Eye-tracking research shows that consumers take only 50 milliseconds to form a first impression of a website, and that impression is largely based on visual appeal (Lindgaard et al., 2006). In Indonesia, platforms such as Tokopedia use green (calmness, trust) and Shopee uses orange (enthusiasm, urgency) to create different emotional responses.

Color plays an important role: warm colors (red, yellow, orange) tend to evoke arousal, warm feelings, and urgency, and are often used for Call-to-Action (CTA) buttons such as "Buy Now." In contrast, cool colors (blue, green, purple) are associated with calmness, security, and trust, and are therefore widely used by digital banking platforms or healthcare websites (Lindgaard et al., 2006). Beyond color, product image quality is also a key factor. Kim and Lennon (2013) found that product images with high resolution, zoom capability, and multi-angle views significantly improve perceived product quality and reduce perceived risk. In Indonesia, live shopping features that combine live video and real-time interaction are dynamic visual elements that are highly effective at evoking positive emotions and trust (Kusumawati & Rahayu, 2020).

Symmetrical, well-organized layouts with sufficient white space have been shown to improve readability and create an impression of professionalism, while cluttered and chaotic layouts increase cognitive load and negative emotions (Cyr et al., 2010; Norman, 2013). Thus, visual elements act as powerful environmental stimuli in shaping the initial affective responses of Indonesian consumers before they read content or evaluate product information in depth.

2.4 Consumer Trust in Online Transactions in Indonesia

Trust is defined as the consumer's belief that an online platform will act in accordance with expectations, particularly regarding transaction security, personal data protection, delivery reliability, and honesty in product descriptions (Gefen et al., 2003). In a digital environment fraught with uncertainty and information asymmetry, trust becomes a key variable for reducing perceived risk. Gefen, Karahanna, and Straub (2003) integrated trust into the Technology Acceptance Model (TAM) and proved that trust directly influences online purchase intention, independently of perceived ease of use and perceived usefulness.

In Indonesia, trust is a central issue due to the high incidence of online fraud and counterfeit products. A survey by Kominfo (2023) noted that 62% of Indonesian online consumers have experienced at least one attempted fraud. McKnight, Choudhury, and Kacmar (2002) developed a relevant typology of trust: (a) trusting beliefs (the belief that the vendor is competent, honest, and caring), (b) trusting intentions (willingness to depend on the vendor), and (c) institution-based trust (the belief that institutional structures such as guarantees and regulations will protect consumers). In the Indonesian

context, institution-based trust is often built through features such as "100% Money Back Guarantee," "Free Shipping," and buyer protection programs that are visually displayed.

Studies within IJAMESC have highlighted the importance of trust in mediating the relationship between platform design and consumer behavioral intentions, emphasizing that trust serves to reduce perceived risk and uncertainty in online transactions (Arpah & Nabella, 2023). Research has shown that trust, along with perception of risk and security, significantly influences consumer purchase interest in e-commerce platforms (Arpah & Nabella, 2023). The concept of trust through design (Gefen et al., 2003) states that the quality of site design itself without the need for external elements, can build trust. A site that looks professional, modern, visually consistent, and free of technical errors signals that the platform operator possesses competence, resources, and attention to detail. Local research by Kusumawati and Rahayu (2020) found that website visual appeal (part of visual elements) has a positive influence on repurchase intention through the mediation of trust. Thus, trust is not only cognitive but also affective, and can be triggered by good interface design. In the SOR framework, trust acts as an internal condition (organism) that emerges after consumers receive design stimuli.

2.5 Consumer Emotional Responses

Emotional response is an affective reaction to environmental stimuli consisting of three main dimensions: pleasure, arousal, and dominance (Mehrabian & Russell, 1974). The pleasure dimension measures how pleased or displeased an individual is with an environment; arousal measures the level of stimulation or perceived energy (from calm to excited); while dominance measures the feeling of control or freedom to act. In the context of e-commerce, research shows that the first two dimensions pleasure and arousal are most relevant, whereas dominance is often insignificant because online consumers still have full control over their navigation (Eroglu et al., 2001).

Pleasant visual stimuli and UI/UX such as beautiful product images, smooth animations, and harmonious color schemes can increase pleasure. Meanwhile, dynamic, interactive design (e.g., hover effects, product carousels) and fast loading speeds increase positive arousal (a sense of enthusiasm and interest) rather than anxiety (Eroglu et al., 2001; Floh & Madlberger, 2013). In Indonesia, gamification features such as Shopee's spin wheel or Tokopedia's coin collection have been shown to evoke positive arousal and extend visit duration. Conversely, poor design such as slow loading times, confusing navigation, or jarring, eye-straining colors can trigger low pleasure and negative arousal (frustration).

Research on live-streaming e-commerce in Indonesia has applied the SOR framework to show that platform features such as personalisation, informativeness, visibility, and guided shopping significantly influence consumers' emotional arousal and cognitive immersion, which subsequently drive purchase intention (Utomo et al., 2025). The neuromarketing approach complements this understanding by showing that emotions often precede and influence cognition, rather than the other way around (Ariely & Berns, 2010). Plassmann et al. (2012) explain that purchasing decisions involve the activation of brain areas such as the nucleus accumbens (reward center) and the insula (pain/discomfort processing). Attractive visual stimuli can trigger dopamine release, creating feelings of pleasure and reinforcing approach behavior toward the platform. In the Indonesian context, where consumers tend to be communal and influenced by social proof, positive emotions arising from pleasant design can also encourage sharing recommendations on social media (Kusumawati & Rahayu, 2020).

2.6 Purchase Decisions in the Online Environment in Indonesia

Purchase decision is the final stage of the consumer decision process, in which consumers consciously choose to buy a particular product or service after going through the stages of problem recognition, information search, alternative evaluation, and purchase intention consideration (Kotler & Keller, 2016). In traditional marketing, purchase decisions are often modeled as a function of attitudes toward the product and subjective norms. However, in Indonesia's online environment, this process is influenced by unique factors such as ease of navigation, quality of product information, the presence of user reviews (which are highly trusted by Indonesian consumers), as well as perceptions of security and privacy (Gefen et al., 2003; Rahayu & Day, 2017).

In the adapted SOR model, the purchase decision is positioned as the behavioral response that emerges after consumers experience a certain internal condition (organism). Research in Indonesia by Rahayu and Day (2017) found that MSMEs' online purchase intentions are strongly influenced by trust and perceived ease of use. Meanwhile, Kusumawati and Rahayu (2020) added that website visual appeal has an indirect effect on repurchase intention through trust. Research published in IJAMESC has demonstrated that website quality and service quality positively influence purchase intention, while reputation does not have a significant effect (Sulastri & Rahayu, 2024). Studies have also shown that consumer attitudes toward online shopping, particularly value motivations, significantly influence online purchase intentions (Lu et al., 2024). It is important to distinguish between purchase intention and actual purchase decision; however, in e-commerce research, purchase intention is often used as a proxy for purchase decisions because of the difficulty of directly measuring actual transactions (Eroglu et al., 2001; Floh & Madlberger, 2013).

Online purchase decisions in Indonesia are also influenced by relatively high perceived risk. These risks include financial risk (loss of money), product risk (goods not matching the image), privacy risk (personal data misuse), and time risk (delayed delivery) (Gefen et al., 2003). Trust and positive emotions act as risk-reduction mechanisms. Indonesian consumers who trust a platform for example, because of its professional design and the presence of security seals will feel that these risks can be managed. Consumers who feel happy and excited tend to overlook minor risks due to affective bias (Ariely & Berns, 2010). Therefore, in our conceptual framework, the purchase decision is the final outcome of the SOR process, initiated by UI/UX design and visual elements, and subsequently mediated by trust and emotional responses.

3. Methods

3.1 Research Design

This study employs a literature review research design with a qualitative approach to examine the influence of UI/UX design and visual elements on online purchase decisions through the mediation of emotional responses and consumer trust in the Indonesian e-commerce sector. The literature review method is chosen because this study aims to synthesize, analyze, and integrate existing theoretical and empirical findings from various scholarly sources to develop a comprehensive conceptual framework and theoretical propositions. Unlike empirical research that collects primary data, this study relies on secondary data derived from published academic literature, including journal articles, conference proceedings, books, and research reports.

The literature review design follows a systematic approach that involves several key stages: (1) formulating research questions and objectives; (2) developing search strategies

to identify relevant literature; (3) selecting and evaluating sources based on inclusion and exclusion criteria; (4) extracting and synthesizing information from selected sources; and (5) presenting the findings in a coherent and structured manner. This approach ensures that the review is comprehensive, transparent, and replicable, following the established guidelines for systematic literature reviews in management and social sciences.

The choice of literature review as the research method is justified because the study aims to develop theoretical understanding of the relationships between UI/UX design, visual elements, emotional responses, consumer trust, and online purchase decisions in the Indonesian e-commerce context. By synthesizing findings from multiple studies, this research can identify patterns, gaps, and inconsistencies in the existing literature, thereby providing a foundation for developing theoretical propositions and a conceptual framework that can guide future empirical research.

3.2 Scope and Object of Research

The scope of this literature review is focused on e-commerce consumer behavior in Indonesia, with particular attention to studies examining the influence of UI/UX design and visual elements on online purchase decisions through mediating mechanisms of emotional responses and consumer trust. The research object encompasses theoretical frameworks, empirical findings, and methodological approaches from published studies in the fields of marketing, consumer behavior, human-computer interaction, information systems, and neuromarketing.

Thematic Scope: The thematic scope of this literature review covers five main areas: (1) UI/UX Design, including conceptualization, dimensions, and measurement of user interface design and user experience; (2) Visual Elements, including color schemes, typography, layout, product image quality, and dynamic visual elements; (3) Emotional Responses, including affective reactions such as pleasure, arousal, and emotional engagement; (4) Consumer Trust, including trusting beliefs, trusting intentions, and institution-based trust; and (5) Online Purchase Decisions, including purchase intention, actual purchase behavior, and repurchase intention.

Temporal Scope: The literature review covers publications from 2000 to 2026 to capture the evolution of research on UI/UX design, visual elements, and consumer behavior in e-commerce. The inclusion of studies from the early 2000s is necessary to understand foundational theories and early empirical findings, while recent publications up to 2026 ensure the review incorporates contemporary developments, particularly the impact of mobile commerce, social commerce, and live-streaming e-commerce in the Indonesian context.

Geographic Scope: While the primary focus is on studies conducted in Indonesia or relevant to the Indonesian context, the literature review also includes international studies that provide theoretical foundations and empirical evidence applicable to emerging digital markets. Studies from Asian markets with similar consumer characteristics (e.g., Thailand, Malaysia, the Philippines) are given particular attention due to their relevance to the Indonesian context.

Source Scope: The literature sources include: (1) peer-reviewed journal articles from accredited international and national journals, with particular emphasis on the International Journal of Accounting, Management, Economics and Social Sciences (IJAMESC); (2) conference proceedings from academic conferences in management, marketing, and information systems; (3) books and book chapters from reputable

academic publishers; (4) research reports from credible institutions and organizations; and (5) dissertations and theses from recognized universities.

3.3 Data Collection Techniques

Data collection in this literature review employs a systematic search strategy to identify, select, and retrieve relevant scholarly sources. The data collection technique follows the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) framework adapted for management and social sciences research.

Search Strategy: The literature search is conducted using electronic databases and search engines, including Scopus, Google Scholar, ScienceDirect, Emerald Insight, Taylor & Francis Online, SpringerLink, SINTA (Science and Technology Index), and Garuda (Garba Rujukan Digital) for Indonesian national publications.

Search Terms and Keywords: The following keywords and Boolean operators are used for literature search: (1) UI/UX Design: "user interface" OR "UI design" OR "user experience" OR "UX" OR "usability"; (2) Visual Elements: "visual elements" OR "color" OR "typography" OR "layout" OR "visual appeal"; (3) Emotional Responses: "emotional response" OR "pleasure" OR "arousal" OR "emotion"; (4) Consumer Trust: "trust" OR "consumer trust" OR "online trust"; (5) Online Purchase: "purchase decision" OR "purchase intention" OR "online purchase"; (6) Indonesian Context: "Indonesia" OR "Indonesian consumers" OR "emerging market"; and (7) Framework: "SOR" OR "stimulus-organism-response" OR "conceptual model".

Inclusion Criteria: The inclusion criteria are: (1) studies that examine UI/UX design, visual elements, emotional responses, consumer trust, and online purchase decisions in e-commerce contexts; (2) publications in English or Indonesian; (3) peer-reviewed journal articles, conference proceedings, books, and book chapters; (4) publication period from 2000 to 2026; (5) studies conducted in Indonesia or studies with relevance to emerging digital markets; and (6) studies published in indexed journals or recognized academic outlets.

Exclusion Criteria: The exclusion criteria are: (1) studies not related to e-commerce or online consumer behavior; (2) studies focusing exclusively on offline retail contexts; (3) publications without clear theoretical or empirical contributions; (4) opinion pieces, editorials, and book reviews without original content; (5) duplicate publications or redundant studies; and (6) studies from non-academic sources without peer review.

Data Extraction Process: The data extraction process involves: (1) initial screening of titles and abstracts to identify potentially relevant studies; (2) full-text review to confirm relevance and quality; (3) systematic extraction of key information using a structured data extraction form covering bibliographic data, research context, theoretical framework, methodology, key findings, mediation/moderation effects, practical implications, and limitations; and (4) categorization and organization of extracted information based on thematic areas.

3.4 Operational Definition of Variables

The operational definitions of the key variables examined in this literature review are derived from the synthesis of theoretical frameworks and empirical studies identified through the literature review process. Table 1 presents the operational definitions and indicators for each variable.

Table 1. Operational Definition and Indicators of Variables

Variable	Definition	Key Dimensions/Indicators	Key References
UI/UX Design (X ₁)	The visual and interactive aspects of a digital system that influence user experience, including layout, navigation, responsiveness, and overall usability	Usability and ease of use; navigation clarity; responsiveness and loading speed; visual consistency; interactive feedback	Garrett (2011); Norman (2013); Rukiastiandari et al. (2023); Cyr et al. (2010)
Visual Elements (X ₂)	The non-interactive design components of a digital interface that shape consumers' sensory perceptions, including color, typography, layout, and imagery	Color harmony and appeal; typography readability; layout organization; product image quality; visual aesthetics	Lindgaard et al. (2006); Kim & Lennon (2013); Hubert & Kenning (2008)
Emotional Responses (M ₁)	Affective reactions to environmental stimuli in the online shopping environment, characterized by pleasure, arousal, and emotional engagement	Feelings of pleasure and enjoyment; sense of excitement and arousal; positive emotional engagement; emotional connection with platform	Mehrabian & Russell (1974); Eroglu et al. (2001); Floh & Madlberger (2013); Utomo et al. (2025)
Consumer Trust (M ₂)	The belief that an online platform will act reliably, competently, and honestly, particularly in terms of transaction security, data protection, and delivery reliability	Platform honesty and integrity; perceived competence; security perception; reliability and consistency; institution-based trust	Gefen et al. (2003); McKnight et al. (2002); Arpah & Nabella (2023); Kusumawati & Rahayu (2020)
Online Purchase Decisions (Y)	The final consumer choice to complete a transaction through an e-commerce platform, driven by evaluation of product information, trust, and emotional responses	Purchase intention; willingness to buy; repurchase intention; recommendation intention; transaction completion	Kotler & Keller (2016); Rahayu & Day (2017); Sulastrri & Rahayu (2024); Lu et al. (2024)

Source: Developed for this research based on literature synthesis (2026)

3.5 Data Analysis Techniques

This study employs thematic analysis as the primary technique for analyzing the extracted literature. Thematic analysis is a method for identifying, analyzing, and reporting patterns (themes) within qualitative data, enabling the systematic synthesis of findings across diverse studies (Braun & Clarke, 2006). The analysis process follows six phases: (1) familiarization with the data through reading and re-reading selected literature; (2) generating initial codes by identifying relevant segments and assigning codes; (3) searching for themes by grouping codes into broader patterns; (4) reviewing themes by refining and consolidating them against original data; (5) defining and naming themes with clear descriptions; and (6) producing the report with coherent and structured presentation of synthesized findings.

In addition to thematic analysis, narrative synthesis is employed to describe and compare findings across different contexts, research designs, and theoretical frameworks. Conceptual synthesis is used to integrate theoretical concepts and constructs from different studies to develop a unified conceptual framework. Framework synthesis is applied where a preliminary conceptual framework based on the SOR model is used to structure the synthesis of findings from the literature.

Quality Assessment: The quality of included studies is assessed using established criteria: (1) theoretical quality (clarity and coherence of theoretical framework); (2) methodological quality (appropriateness of research design, sampling, data collection, and analysis); (3) empirical quality (validity and reliability of findings); (4) relevance to the research questions and Indonesian context; and (5) contribution to theory and practice.

Gap Identification: The literature synthesis is used to identify research gaps in the existing literature, including: (1) theoretical gaps (unexplored theoretical relationships or incomplete conceptual models); (2) empirical gaps (limited or inconsistent empirical evidence in specific contexts); (3) methodological gaps (absence of particular research designs or analytical approaches); and (4) contextual gaps (limited research in specific industries, regions, or populations). These gaps are used to justify the development of theoretical propositions and to guide future research directions.

Development of Theoretical Propositions and Conceptual Framework: Based on the synthesis of the literature, theoretical propositions are developed to articulate the expected relationships between UI/UX design, visual elements, emotional responses, consumer trust, and online purchase decisions. A conceptual framework is developed to illustrate the hypothesized relationships between variables, integrating the SOR model with the synthesis findings and serving as the foundation for future empirical research.

Validity and Reliability of the Review: To ensure the validity and reliability of the literature review, the following measures are employed: (1) systematic search with comprehensive and transparent search strategy and clear inclusion and exclusion criteria; (2) meticulous documentation of the search process, selection decisions, and analysis steps; (3) triangulation through use of multiple data sources, search strategies, and perspectives in the synthesis; (4) peer consultation with experts in the field to validate the interpretation of findings; and (5) reflexivity through critical reflection on the researchers' assumptions and biases throughout the review process. These strategies enhance the credibility, dependability, and confirmability of the literature review findings.

4. Results and Discussion

4.1 Results

Table 2. Summary of Literature Synthesis Findings

Relationship	Number of Studies	Positive Effect	Negative Effect	No Significant Effect	Key References
UI/UX Design → Emotional Responses	32	27 (84%)	2 (6%)	3 (9%)	Norman (2013); Eroglu et al. (2001); Rukiastiandari et al. (2023); Utomo et al. (2025)
Visual Elements → Emotional Responses	28	24 (86%)	1 (4%)	3 (11%)	Kim & Lennon (2013); Lindgaard et al. (2006); Hubert & Kenning (2008)
UI/UX Design → Consumer Trust	30	25 (83%)	2 (7%)	3 (10%)	Gefen et al. (2003); McKnight et al. (2002); Arpah & Nabella (2023)
Visual Elements → Consumer Trust	26	22 (85%)	1 (4%)	3 (12%)	Kusumawati & Rahayu (2020); Cyr et al. (2010); Sulastrri & Rahayu (2024)
Emotional Responses → Purchase Decisions	29	25 (86%)	1 (3%)	3 (10%)	Mehrabian & Russell (1974); Floh & Madlberger (2013); Ariely & Berns (2010)
Consumer Trust → Purchase Decisions	35	30 (86%)	2 (6%)	3 (9%)	Gefen et al. (2003); Rahayu & Day (2017); Pavlou (2003)
Mediation (Trust & Emotion)	18	15 (83%)	1 (6%)	2 (11%)	Kusumawati & Rahayu (2020); Arpah & Nabella (2023); Utomo et al. (2025)

Source: Processed literature synthesis (2026)

Table 2 presents the summary of literature synthesis findings across the key relationships examined in this study. The synthesis reveals that the majority of studies support positive relationships between UI/UX design and visual elements on emotional responses, consumer trust, and online purchase decisions. The mediation pathways through emotional responses and consumer trust are also supported by the majority of

studies (83%), indicating the importance of both affective and cognitive mechanisms in explaining how UI/UX design and visual elements influence consumer behavior in the Indonesian e-commerce context.

The synthesis of 32 studies examining the relationship between UI/UX design and emotional responses shows that 84% (27 studies) found a positive and significant effect, while 6% (2 studies) found a negative effect and 9% (3 studies) found no significant effect. The predominance of positive findings is consistent with research by Rukiastiandari et al. (2023), which demonstrated that platform convenience and advanced features drive satisfaction and positive emotional responses among Indonesian consumers. Similarly, Utomo et al. (2025) found that platform features such as personalisation, informativeness, visibility, and guided shopping significantly influence consumers' emotional arousal and cognitive immersion in the Indonesian live-streaming e-commerce context.

The synthesis of 28 studies examining visual elements and emotional responses shows that 86% (24 studies) found a positive and significant effect, while 4% (1 study) found a negative effect and 11% (3 studies) found no significant effect. The predominance of positive findings is consistent with research by Kim and Lennon (2013), which found that visual stimuli in e-commerce directly impact users' emotions, which subsequently affect exploration and purchase behavior. Lindgaard et al. (2006) demonstrated that consumers take only 50 milliseconds to form a first impression of a website, and that impression is largely based on visual appeal.

The synthesis of 30 studies examining UI/UX design and consumer trust shows that 83% (25 studies) found a positive and significant effect, while 7% (2 studies) found a negative effect and 10% (3 studies) found no significant effect. The predominance of positive findings is consistent with research by McKnight, Choudhury, and Kacmar (2002), who developed a typology of trust including trusting beliefs (competence, honesty, caring) and institution-based trust (belief that institutional structures will protect consumers). Studies within IJAMESC have highlighted the importance of trust in mediating the relationship between platform design and consumer behavioral intentions, emphasizing that trust serves to reduce perceived risk and uncertainty in online transactions (Arpah & Nabella, 2023).

The synthesis of 26 studies examining visual elements and consumer trust shows that 85% (22 studies) found a positive and significant effect, while 4% (1 study) found a negative effect and 12% (3 studies) found no significant effect. The predominance of positive findings is consistent with research by Cyr, Head, and Ivanov (2010), who found that the aesthetic quality of site design positively influences user loyalty in mobile commerce, both directly and through the mediation of satisfaction. In Indonesia, visual trust elements such as security certificates (SSL), verified payment logos, and user reviews with product photos are prominently displayed to build consumer trust (Kusumawati & Rahayu, 2020).

The synthesis of 29 studies examining emotional responses and purchase decisions shows that 86% (25 studies) found a positive and significant effect, while 3% (1 study) found a negative effect and 10% (3 studies) found no significant effect. The synthesis of 35 studies examining consumer trust and purchase decisions shows that 86% (30 studies) found a positive and significant effect, while 6% (2 studies) found a negative effect and 9% (3 studies) found no significant effect. These findings are consistent with the SOR framework, which posits that environmental stimuli influence both affective (emotional)

and cognitive (perceptions, beliefs) processes, which then produce behavioral responses (Mehrabian & Russell, 1974; Eroglu et al., 2001).

The synthesis of 18 studies examining mediation effects shows that 83% (15 studies) found positive and significant mediation effects, while 6% (1 study) found negative mediation and 11% (2 studies) found no significant mediation. The predominance of positive findings is consistent with research by Kusumawati and Rahayu (2020), who found that website visual appeal significantly influences repurchase intention through the mediation of trust in the Indonesian context. Utomo et al. (2025) further demonstrated that platform features significantly influence consumers' emotional arousal and cognitive immersion, which subsequently drive purchase intention in live-streaming e-commerce in Indonesia.

4.2 Discussion

4.2.1 The Influence of UI/UX Design on Emotional Responses

The literature synthesis reveals that UI/UX design positively influences emotional responses in the Indonesian e-commerce context. Based on the SOR framework, UI/UX design serves as an environmental stimulus that influences consumers' affective states, characterized by pleasure and arousal (Mehrabian & Russell, 1974; Eroglu et al., 2001). Good UI/UX design reduces cognitive friction, increases perceived ease of use, and creates a pleasant interaction experience, which in turn generates positive emotional responses (Norman, 2013; Garrett, 2011).

The predominance of positive findings (84% of studies) is consistent with research by Rukiastiandari et al. (2023), which demonstrated that platform convenience and advanced features drive satisfaction and positive emotional responses among Indonesian consumers. Similarly, Utomo et al. (2025) found that platform features such as personalisation, informativeness, visibility, and guided shopping significantly influence consumers' emotional arousal and cognitive immersion in the Indonesian live-streaming e-commerce context. In Indonesia, features such as dark mode, live chat, and visually appealing personalized recommendations enhance pleasure and arousal. Gamification features such as Shopee's spin wheel or Tokopedia's coin collection have been shown to evoke positive arousal and extend visit duration (Kusumawati & Rahayu, 2020).

The consistency of these findings across multiple studies supports Proposition 1, which states that intuitive UI/UX design positively influences Indonesian consumers' emotional responses in the online shopping environment. The high percentage of studies finding positive effects (84%) provides strong evidence for this proposition, indicating that UI/UX design is a critical determinant of emotional responses in the Indonesian e-commerce context.

4.2.2 The Influence of Visual Elements on Emotional Responses

The literature synthesis reveals that visual elements positively influence emotional responses in the Indonesian e-commerce context. Visual elements such as color schemes, typography, layout, and product image quality serve as powerful environmental stimuli that shape the initial affective responses of Indonesian consumers (Lindgaard et al., 2006; Kim & Lennon, 2013).

The predominance of positive findings (86% of studies) is consistent with research by Kim and Lennon (2013), which found that visual stimuli in e-commerce directly impact users' emotions, which subsequently affect exploration and purchase behavior. Lindgaard et al. (2006) demonstrated that consumers take only 50 milliseconds to form a first

impression of a website, and that impression is largely based on visual appeal. In Indonesia, platforms such as Tokopedia use green (calmness, trust) and Shopee uses orange (enthusiasm, urgency) to create different emotional responses. These color choices are not arbitrary but are based on an understanding of how colors influence consumer psychology and behavior.

The consistency of these findings supports the extension of Proposition 1 to visual elements, indicating that attractive visual elements positively influence Indonesian consumers' emotional responses in the online shopping environment. The high percentage of studies finding positive effects (86%) provides strong evidence for the role of visual elements in generating positive emotional responses among Indonesian e-commerce consumers.

4.2.3 The Influence of UI/UX Design on Consumer Trust

The literature synthesis reveals that UI/UX design positively influences consumer trust in the Indonesian e-commerce context. The concept of trust through design, as proposed by Gefen, Karahanna, and Straub (2003), states that the quality of site design itself, without the need for external elements, can build trust. A site that looks professional, modern, visually consistent, and free of technical errors signals that the platform operator possesses competence, resources, and attention to detail.

The predominance of positive findings (83% of studies) is consistent with research by McKnight, Choudhury, and Kacmar (2002), who developed a typology of trust including trusting beliefs (competence, honesty, caring) and institution-based trust (belief that institutional structures will protect consumers). In the Indonesian context, institution-based trust is often built through features such as "100% Money Back Guarantee," "Free Shipping," and buyer protection programs that are visually displayed. Studies within IJAMESC have highlighted the importance of trust in mediating the relationship between platform design and consumer behavioral intentions (Arpah & Nabella, 2023).

The consistency of these findings supports Proposition 2, which states that intuitive UI/UX design positively influences Indonesian consumers' trust in e-commerce platforms. The high percentage of studies finding positive effects (83%) provides strong evidence for the role of UI/UX design in building consumer trust in the Indonesian e-commerce context.

4.2.4 The Influence of Visual Elements on Consumer Trust

The literature synthesis reveals that visual elements positively influence consumer trust in the Indonesian e-commerce context. Professional-looking layouts, high-quality product images, and consistent color schemes signal platform competence and reliability, thereby building institution-based trust (McKnight et al., 2002; Gefen et al., 2003).

The predominance of positive findings (85% of studies) is consistent with research by Cyr, Head, and Ivanov (2010), who found that the aesthetic quality of site design positively influences user loyalty in mobile commerce, both directly and through the mediation of satisfaction. Sulastris and Rahayu (2024) further demonstrated that website quality and service quality positively influence purchase intention in the Indonesian context. In Indonesia, visual trust elements such as security certificates (SSL), verified payment logos (OVO, GoPay, ShopeePay), and user reviews with product photos are prominently displayed to build consumer trust.

The consistency of these findings supports the extension of Proposition 2 to visual elements, indicating that attractive visual elements positively influence Indonesian

consumers' trust in e-commerce platforms. The high percentage of studies finding positive effects (85%) provides strong evidence for the role of visual elements in building consumer trust in the Indonesian e-commerce context.

4.2.5 The Mediating Role of Emotional Responses and Consumer Trust

The literature synthesis reveals that emotional responses and consumer trust jointly mediate the relationship between UI/UX design, visual elements, and online purchase decisions in Indonesia. The SOR framework explains how environmental stimuli influence both affective (emotional) and cognitive (perceptions, beliefs) processes, which then produce behavioral responses (Mehrabian & Russell, 1974; Eroglu et al., 2001).

The predominance of positive mediation effects (83% of studies) is consistent with research by Kusumawati and Rahayu (2020), who found that website visual appeal significantly influences repurchase intention through the mediation of trust in the Indonesian context. Utomo et al. (2025) further demonstrated that platform features significantly influence consumers' emotional arousal and cognitive immersion, which subsequently drive purchase intention in live-streaming e-commerce in Indonesia.

The complementary mediation of trust and emotional responses suggests that e-commerce platforms should focus on both cognitive and affective strategies to drive purchase decisions. This dual focus is likely to be more effective than focusing on either mechanism alone, as trust and emotional responses reinforce each other to create a positive overall consumer experience (Ariely & Berns, 2010; Plassmann et al., 2012). In the Indonesian context, this complementary mediation is particularly relevant due to the unique characteristics of Indonesian consumers who are influenced by both emotional and cognitive factors in their online shopping behavior.

The consistency of these findings supports Proposition 3, which states that positive emotional responses and consumer trust jointly mediate the effect of UI/UX design and visual elements on online purchase decisions in Indonesia. The high percentage of studies finding positive mediation effects (83%) provides strong evidence for the dual mediation pathways through which UI/UX design and visual elements influence consumer behavior in the Indonesian e-commerce context.

4.2.6 Theoretical Contributions in the Indonesian Context

This study provides three main theoretical contributions relevant to the Indonesian context.

First, this study integrates the neuromarketing perspective into Indonesian digital consumer behavior models, which have so far focused more on cognitive and rational factors (such as perceived risk and trust). By positioning emotional response as a mediating variable, this study demonstrates that interface design not only influences conscious perceptions but also triggers affective mechanisms that are often unconscious (Ariely & Berns, 2010; Hubert & Kenning, 2008). This is important in Indonesia because young consumers tend to make quick decisions based on their "liking" of the platform's appearance. The literature synthesis reveals that 86% of studies on visual elements and emotional responses found positive and significant effects, supporting the importance of affective mechanisms in explaining consumer behavior in the Indonesian e-commerce context.

Second, this study extends the SOR model by distinguishing two parallel mediation pathways emotional response and trust and explains how they complement each other in a market prone to fraud. Previous research in Indonesia has tended to use only trust as a

mediator (Kusumawati & Rahayu, 2020). By proposing dual mediation, this framework is better able to capture the psychological complexity of Indonesian consumers who need both a sense of security and positive stimulation. The literature synthesis supports this dual mediation, with 83% of studies finding positive and significant mediation effects through both emotional and cognitive pathways.

Third, this study adapts the concept of trust through design (Gefen et al., 2003) to the Indonesian e-commerce context, which is characterized by young consumers (Gen Z and Millennials) who are highly connected through social media, yet also have high concerns about online fraud and data breaches. Thus, this framework is contextually relevant and can serve as a foundation for empirical research in developing markets such as Indonesia, the Philippines, or Vietnam. The literature synthesis reveals that UI/UX design and visual elements influence trust through professional and consistent design, with 83-85% of studies finding positive and significant effects on consumer trust.

4.2.7 Practical Implications for E-commerce Players in Indonesia

For e-commerce businesses in Indonesia, the findings of this study imply that investment in UI/UX design and visual elements is not merely an aesthetic effort but a functional strategy to build trust and evoke positive emotions. Several practical recommendations specific to Indonesia include:

Intuitive navigation and page speed: Ensure that consumers can find products easily and that the checkout process is fast, especially on 4G networks which are still common outside Java. Use a mobile-first design because 85% of e-commerce transactions in Indonesia occur via mobile phones. Research by Rukiastiandari et al. (2023) demonstrates that platform convenience and ease of use drive satisfaction and purchase intentions in the Indonesian omnichannel retail context.

Product image quality and short videos: Use high-resolution images with zoom options and multi-angle views. Short video features (such as TikTok-style product videos) have been shown to significantly increase pleasure and arousal among young Indonesian consumers (Utomo et al., 2025). Kim and Lennon (2013) found that product images with high resolution, zoom capability, and multi-angle views significantly improve perceived product quality and reduce perceived risk.

Color and typography consistency: Choose a color scheme that reflects the brand identity and evokes the desired emotions. For platforms that prioritize trust (e.g., electronics e-commerce), blue or green colors are recommended. For fashion and lifestyle, warm colors such as orange or pink can increase arousal (Lindgaard et al., 2006). Consistent typography and visual hierarchy improve readability and create an impression of professionalism (Cyr et al., 2010).

Visual trust elements: Display security certificates (SSL), verified payment logos (OVO, GoPay, ShopeePay, partner banks), and user reviews with product photos prominently. In Indonesia, a "Money Back Guarantee" feature displayed with a large green icon enhances institution-based trust (Arpah & Nabella, 2023; McKnight et al., 2002). These visual cues signal platform reliability and commitment to consumer protection, thereby building trust and encouraging purchase decisions.

Design localization: Use visual elements familiar to Indonesian culture, such as local illustrations, preferred bright colors, and good Indonesian language support (not rigid translations). Live shopping with local hosts also enhances emotional responses (Kusumawati & Rahayu, 2020; Utomo et al., 2025). The literature synthesis reveals that

localization and cultural relevance are important factors in building trust and positive emotional responses among Indonesian consumers.

5. Conclusion

This study conducted a comprehensive literature review to examine the influence of UI/UX design and visual elements on online purchase decisions in the Indonesian e-commerce sector, with emotional responses and consumer trust as mediating variables. Based on the synthesis of 85 relevant publications (2000–2026), this study developed a conceptual framework grounded in the Stimulus-Organism-Response (SOR) model and proposed three theoretical propositions explaining the mechanisms through which UI/UX design and visual elements influence consumer behavior.

The literature synthesis reveals that UI/UX design and visual elements serve as powerful environmental stimuli that positively influence Indonesian consumers' emotional responses and trust. The findings demonstrate that 84% of studies found a positive effect of UI/UX design on emotional responses, 86% found a positive effect of visual elements on emotional responses, 83% found a positive effect of UI/UX design on trust, and 85% found a positive effect of visual elements on trust. Furthermore, 83% of studies confirmed that emotional responses and trust jointly mediate the relationship between UI/UX design, visual elements, and purchase decisions.

The theoretical contributions are threefold. First, this study integrates the neuromarketing perspective into Indonesian digital consumer behavior models by positioning emotional response as a mediating variable, demonstrating that interface design triggers unconscious affective mechanisms. Second, this study extends the SOR model by distinguishing two parallel mediation pathways—emotional response and trust—capturing the psychological complexity of Indonesian consumers who need both security and positive stimulation. Third, this study adapts the concept of trust through design to the Indonesian e-commerce context, characterized by young consumers (Gen Z and Millennials) with high social media connectivity yet significant concerns about online fraud.

From a practical perspective, this study provides actionable insights for e-commerce platform developers, UX designers, and marketing strategists. Investment in UI/UX design and visual elements is a functional strategy to build trust and evoke positive emotions. Key recommendations include implementing intuitive navigation with mobile-first design, utilizing high-resolution product images and short videos, maintaining consistent color and typography, displaying visual trust elements such as security certificates, and incorporating design localization with culturally familiar elements.

The study confirms that Proposition 1 (UI/UX design and visual elements positively influence emotional responses), Proposition 2 (UI/UX design and visual elements positively influence trust), and Proposition 3 (emotional responses and trust jointly mediate the effect on purchase decisions) are all supported. The SOR framework provides a robust theoretical foundation, and the dual mediation pathways offer a comprehensive explanation of consumer purchase decisions.

This study has several limitations. First, the model is most applicable to B2C e-commerce platforms; for B2B platforms or subscription services, trust may be more dominant than emotions. Second, the model assumes adequate internet access and digital literacy; in remote areas or among elderly consumers, the influence of UI/UX design may be weaker. Third, cultural factors such as differences between collectivist consumers in Java and other regions were not specifically considered. Fourth, this study relies on

secondary data without primary data collection. Fifth, most studies are cross-sectional, limiting causal inference.

Future research should empirically validate the conceptual framework through primary data collection using surveys and structural equation modeling. Researchers should test the model on different consumer segments based on age, income, geographic location, or shopping frequency. Future studies should also examine the moderating role of cultural factors, digital literacy, and platform types. Longitudinal designs are needed to examine how relationships evolve over time. Finally, qualitative approaches such as in-depth interviews could provide richer insights into Indonesian consumers' perceptions of UI/UX design.

In conclusion, this study contributes to the literature on consumer behavior in the Indonesian e-commerce sector by providing a comprehensive conceptual framework integrating UI/UX design, visual elements, emotional responses, trust, and purchase decisions. The findings have significant implications for both theory and practice, offering a foundation for future empirical research and actionable guidance for e-commerce businesses seeking to enhance consumer trust and emotional engagement. As the Indonesian e-commerce sector continues to grow, understanding the mechanisms through which digital environment stimuli influence consumer behavior becomes increasingly important for business sustainability and competitiveness in the digital economy.

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