AN ANALYSIS OF THE ROLE OF CONSUMER VALUE, BROWSING ACTIVITY, AND IMPULSIVENESS AMONG E-COMMERCE USERS IN RIAU PROVINCE

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ABSTRACT

This study aims to analyze the effect of utilitarian value and hedonic value of online reviews on browsing activity, urge to buy impulsively, and impulse buying behavior among Gen-Z consumers in Riau Province, with impulsiveness as a moderating variable. The study employs a quantitative approach using Partial Least Squares–Structural Equation Modeling (PLS-SEM) through SmartPLS 4, based on data from 105 respondents. The results indicate that utilitarian value and hedonic value have a significant effect on browsing ($\beta = 0.344$ and $\beta = 0.273$; $p < 0.01$), browsing significantly affects urge to buy impulsively ($\beta = 0.452$; $p < 0.001$), and urge to buy impulsively significantly affects impulse buying behavior ($\beta = 0.584$; $p < 0.001$). The moderating effect of impulsiveness is partially supported, where individuals with high impulsivity are more responsive to emotionally driven reviews than informational ones.These findings affirm that online reviews function as cognitive and affective triggers in digital consumption behavior. Gen-Z exhibits browsing tendencies driven by enjoyment and curiosity, ultimately encouraging spontaneous purchases. Practically, the results offer implications for digital marketers to balance informational credibility and emotional appeal in ethical and sustainable online marketing communication strategies.
Keywords: Consumer Value; Browsing Activity; Impulsiveness Among E-Commerce; Riau Province

INTRODUCTION

The rapid development of digital technology has transformed consumer behavior patterns in Indonesia, particularly among Generation Z (born between 1997 and 2012), who are recognized as the most adaptive cohort to technological and social media advancements. According to Statistics Indonesia ((BPS), 2024), Generation Z accounts for 27.94% of the country's total population—approximately 75 million individuals—making them the largest group of internet users nationwide. They actively utilize e-commerce platforms such as Shopee, Tokopedia, and TikTok Shop for product searching and purchasing. In Riau Province, internet penetration reached 82.12% in 2024, with a dominant proportion of users belonging to younger age groups actively engaged in online shopping activities ((BPS), 2024). This condition underscores the significant potential to understand the phenomenon of impulsive buying behavior prevalent among this digital generation.

The phenomenon of impulsive purchasing in e-commerce has been escalating alongside the widespread use of marketing strategies based on consumer reviews and real-time promotions. A study by (GoodStats, 2025) revealed that Shopee and TikTok Shop are the most frequently visited e-commerce platforms among young consumers, recording over 130 million monthly visits in early 2025, despite temporary traffic declines due to shifting consumption patterns. Meanwhile, (Populix, 2023) reported that 76% of Gen Z users in Indonesia identified Shopee as their primary shopping platform, followed by TikTok Shop, a rising competitor that integrates entertainment with commerce. Both platforms foster spontaneous purchasing behavior through features such as flash sales, live streaming, and real-time consumer reviews. This illustrates that young consumers often purchase not solely based on necessity, but also due to emotional and social impulses triggered by online interactions.

From a theoretical standpoint, (Zhang et al., 2018) explained that online reviews possess two core values—utilitarian value and hedonic value—that can influence consumer purchasing behavior. The utilitarian value reflects the functional and informational benefits of reviews, whereas the hedonic value relates to pleasure, emotions, and subjective experiences derived from reading them. The study found that both values stimulate browsing activity, defined as the process of exploring products and related information, which subsequently generates the urge to buy impulsively, or an unplanned drive to purchase. Thus, browsing serves as a mediating variable between review value and impulsive urge, while impulsiveness acts as a moderating variable

that strengthens this relationship (Zhang et al., 2018).

This phenomenon aligns with the shopping behavior of Gen Z consumers in Riau, who often display high levels of impulsivity in online shopping. Many Gen Z users in Riau rely on product recommendations, ratings, and peer reviews before purchasing, yet frequently end up making spontaneous decisions after encountering engaging reviews or limited-time discounts. According to (Center, 2023), female Gen Z users are more susceptible to emotional triggers when shopping online compared to males, with 86% reporting frequent use of Shopee to satisfy momentary desires. This situation indicates that browsing activity and exposure to consumer reviews can provoke impulsive urges that lead to unplanned purchases.

This study is conducted in response to the limited number of investigations exploring the relationships among utilitarian and hedonic values of online reviews, browsing activity, impulsive urges, and impulse buying behavior within a localized demographic context of Generation Z. Most previous research has been conducted on general populations or outside Indonesia, thereby lacking contextual understanding of how local digital culture—such as review-reading habits on Shopee and TikTok Shop—influences impulsive buying behavior. Understanding this mechanism is essential for local businesses in Riau to design more effective marketing strategies, particularly in managing review displays and user interactions that can trigger spontaneous purchases. Consequently, this research is expected to contribute both theoretically and practically to the development of consumer behavior literature in Indonesia's digital landscape.

Furthermore, this study is relevant to the broader context of Indonesia's growing digital economy. The total national e-commerce transaction value reached IDR 512 trillion in 2024 (Indonesia, 2024), with Riau emerging as one of the provinces exhibiting the fastest online transaction growth in Sumatra. Given the increasing purchasing power of Generation Z and their strong dependence on digital media, it is crucial to understand how consumer reviews and browsing activities interact with impulsiveness in shaping impulsive buying behavior. Therefore, this study not only extends the findings of (Zhang et al., 2018) into the Indonesian context but also highlights the distinctive behavioral traits of Riau's Generation Z—active, emotional, and digital-savvy—in their online shopping practices.

Despite growing work on impulse buying in mobile/social commerce, three gaps remain.

First, evidence from Indonesia often pools national samples and overlooks provincial heterogeneity; Riau's Gen-Z cohort—deeply engaged with Shopee and the reconfigured TikTok-Tokopedia ecosystem—has been under-studied. Second, while prior studies link review value to impulse buying, few test *impulsiveness* as a boundary condition separating hedonic versus utilitarian pathways in a single model. Third, recent regulatory and platform changes in Indonesia (e.g., TikTok Shop's shutdown and re-entry through Tokopedia) may reshape stimuli that trigger impulsive purchases and thus warrant updated, local evidence.

Although research on impulse buying in e-commerce has developed, recent studies have mostly focused on the general population and have been conducted outside Indonesia (Lim et al., 2023) (Chen & Yao, 2022). Specific studies on Generation Z in the Riau region are still very limited, especially those that integrate the utilitarian–hedonic values of reviews, browsing activity, urge to buy, as well as the moderation of impulsiveness. Therefore, this study fills that gap by testing an impulsive behavior model comprehensively in the local context of Riau, which has distinct digital cultural characteristics.

THEORETICAL BACKGROUND
Online Reviews and Consumer Value

Online reviews are one of the key elements influencing consumer behavior in the digital era. They function as a form of electronic word-of-mouth communication that enables users to share experiences, perceptions, and opinions about products or services (Zhang et al., 2018). Based on their content, online reviews can be categorized into two primary value dimensions: utilitarian value and hedonic value. Utilitarian value reflects the functional and informational benefits of reviews, such as product quality, usefulness, and accuracy of information (Mudambi & Schuff, 2010). Conversely, hedonic value pertains to the emotional and experiential aspects of consuming reviews, such as entertainment, curiosity, or empathy toward other users' experiences (Babin et al., 1994).

In modern e-commerce platforms such as Shopee and TikTok Shop, both types of values have become increasingly salient, as reviews now appear not only in textual form but also as videos, images, and interactive content. According to (Populix, 2023; Zhang et al., 2018), 76% of Indonesian Gen Z consumers rely on online reviews before making a purchase, indicating that their purchase decisions are influenced by a combination of rational information and emotional appeal. This aligns with the findings of (Zhang et

al., 2018), who demonstrated that both utilitarian and hedonic values significantly contribute to consumers' online browsing behavior.

Recent studies also emphasize that increasingly visual and interactive online review formats strengthen their role in shaping both utilitarian and hedonic value. (Kim & Lennon, 2021) found that reviews presented in a combination of text, images, and videos enhance consumers' perceptions of information credibility as well as their emotional experience. Similarly, (Lim et al., 2023), in their systematic review, concluded that the informational and pleasure-driven aspects of online reviews are the two main triggers of impulsive buying behavior in e-commerce environments. (Chen & Yao, 2022) findings also show that Generation Z consumers tend to be more responsive to emotionally driven review content than purely informational ones, making the hedonic value dimension increasingly relevant in explaining their digital shopping behavior.

Browsing and Its Role in Impulse Buying

Browsing activity in the e-commerce context is defined as consumers' exploratory behavior while searching, viewing, and comparing products without a clear initial intention to purchase (Beatty & Ferrell, 1998). (Zhang et al., 2018) emphasized that browsing is not merely an information-seeking behavior but also an activity that can elicit emotional stimulation and trigger a spontaneous urge to buy impulsively. In their model, browsing functions as a mediating variable linking the value dimensions of online reviews with impulsive urges. The higher the informational (utilitarian) or experiential (hedonic) value obtained from reviews, the greater the likelihood that consumers will engage in extended browsing, thereby increasing their exposure to impulsive buying stimuli.

This phenomenon is evident among Gen Z consumers in Riau, who often use Shopee and TikTok Shop not only for fulfilling their needs but also for "exploring" products, reading reviews, or watching promotional content such as live streaming. A local study by (Putri et al., 2023) in Pekanbaru found that hedonic browsing positively influences impulse buying behavior among Gen Z Shopee users, who often make purchases due to visual appeal or spontaneous recommendations from other users. Thus, browsing serves as a bridge between exposure to online review information and impulsive purchasing behavior.

These findings are consistent with recent literature that positions browsing activity as a "transitional space" between exposure to digital stimuli and impulsive purchasing actions. (Lim et al., 2023) show that the longer the browsing duration and the richer the visual stimuli received, the higher the probability of spontaneous purchase urges emerging. (Chen & Yao, 2022) also found that among Gen Z consumers, browsing is often carried out not only to seek information but also as an enjoyable recreational activity, thereby creating greater opportunities for impulse buying when consumers are exposed to time-limited promotions or social recommendations. Thus, browsing is no longer merely a cognitive process of information search but also an affective process that strengthens the influence of reviews on purchasing decisions.

Urge to Buy Impulsively and Impulse Buying Behavior

The concept of urge to buy impulsively refers to a sudden and strong desire to purchase a product without careful consideration (Rook & Fisher, 1995). (Zhang et al., 2018) explained that this urge emerges after consumers engage in browsing activities, during which exposure to product information and reviews creates emotional arousal. This urge subsequently leads to impulse buying behavior, which is characterized by spontaneous and unplanned purchases. In digital contexts, such behavior is further reinforced by the convenience of access, instant payment systems, and limited-time promotions such as flash sales or free shipping offers.

Studies by (GoodStats, 2025) and (Center, 2023) indicate that Shopee and TikTok Shop are the primary platforms where this phenomenon frequently occurs, particularly among Gen Z consumers who are more responsive to visual and social stimuli. The impulsive urge in this generation stems not only from needs but also from social and emotional influences within online interactions, such as user comments and testimonials. Hence, the urge to buy impulsively acts as an intermediary factor explaining how browsing experiences and exposure to online reviews can lead to impulsive purchase actions.

Impulsiveness as a Moderating Variable

Individual impulsiveness represents a personality trait that reflects the degree to which a person tends to act spontaneously without extensive deliberation (Verplanken & Herabadi, 2001). (Zhang et al., 2018) found that impulsiveness moderates the relationships among browsing, the urge to buy impulsively, and impulse buying behavior. Consumers with higher impulsiveness levels are more affected by emotional (hedonic) stimuli, while those with lower impulsiveness are more responsive to

informational (utilitarian) aspects. Thus, impulsiveness can either strengthen or weaken the relationships among variables depending on the consumer's motivational orientation.

In the context of Riau's Generation Z, this factor is particularly relevant since they are known for their emotional reactivity, quick responses to promotions, and tendency to associate purchasing behavior with self-expression. According to (Center, 2023), female Gen Z users exhibit higher levels of spontaneous purchasing compared to males, with 86% reporting frequent unplanned purchases on Shopee. This indicates that impulsiveness is not only an individual trait but also influenced by social and digital cultural

factors that normalize spontaneous buying behavior.

Research Model and Empirical Relevance

The research model proposed by (Zhang et al., 2018) posits that the values of online reviews (utilitarian and hedonic) influence browsing, which in turn affects the urge to buy impulsively, ultimately leading to impulse buying behavior. The model also incorporates impulsiveness as a moderating variable in several key relationships. When adapted to the Riau context, this model explains how Gen Z, as the dominant e-commerce user group, responds to consumer reviews, explores platforms, experiences impulsive urges, and eventually makes unplanned purchases.
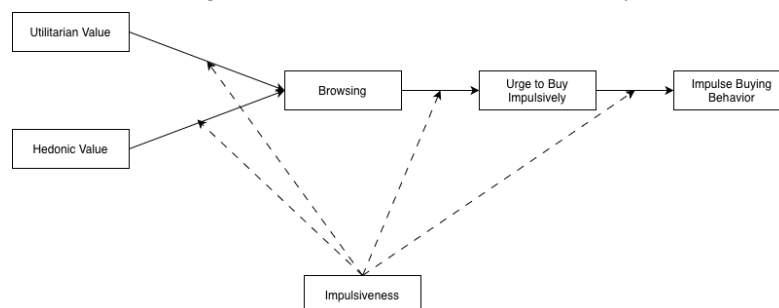

Figure 1 Research Framework

This study is significant because most prior research was conducted in foreign contexts, while Indonesian consumers—particularly in Riau— exhibit distinct behavioral characteristics. For instance, Riau's Gen Z consumers often use TikTok Shop's recommendation features or Shopee's rating systems as triggers for spontaneous decisions. Therefore, this research not only re-examines (Zhang et al., 2018) model within a local context but also provides empirical contributions to understanding how psychological and digital social factors shape impulsive buying behavior among Indonesia's young consumers.

Based on the aforementioned background and theoretical framework, the research questions of this study are formulated as follows:
1. Does the urge to buy impulsively positively influence impulse buying behavior among Gen Z consumers in Riau who use Shopee and TikTok Shop?
2. Does browsing positively influence the urge to buy impulsively among Gen Z consumers in Riau?
3. Does the utilitarian value of online reviews positively influence browsing among Gen Z consumers in Riau?
4. Does the hedonic value of online reviews positively influence browsing among Gen Z consumers in Riau?

5. Is the influence of utilitarian value of online reviews on browsing stronger among consumers with low impulsiveness than those with high impulsiveness?
6. Is the influence of hedonic value of online reviews on browsing stronger among consumers with high impulsiveness than those with low impulsiveness?
7. Is the influence of browsing on the urge to buy impulsively stronger among consumers with high impulsiveness?
8. Is the influence of urge to buy impulsively on impulse buying behavior stronger among consumers with high impulsiveness?

These research questions aim to provide a comprehensive understanding of how the utilitarian and hedonic values of online reviews influence browsing activity, which subsequently triggers impulsive urges and impulsive buying behavior, and how the impulsiveness of Gen Z consumers in Riau moderates these relationships.

METHODOLOGY

This study employs a quantitative approach using Structural Equation Modeling–Partial Least Squares (SEM-PLS) to examine the relationships between the utilitarian value and hedonic value of online reviews, browsing activity, urge to buy

impulsively, and impulse buying behavior, with impulsiveness as a moderating variable. The quantitative approach was selected because this research aims to test causal relationships among variables that can be numerically measured and statistically analyzed. Accordingly, this study is categorized as causal research, as it seeks to identify both direct and indirect effects among variables through mediation and moderation mechanisms.

The research was conducted in Riau Province, focusing on Generation Z (born between 1997 and 2012), who are active online shoppers on platforms such as Shopee and TikTok Shop. The research site was chosen purposively, considering that Riau is one of the provinces in Sumatra with a high level of internet penetration. According to Statistics Indonesia ((BPS), 2024), internet penetration in Riau reached 82.12%, with a dominant proportion of users coming from younger age groups who actively participate in e-commerce activities. The study was carried out between January and March 2025, encompassing instrument development, data collection through online questionnaires, and data analysis using SmartPLSsoftware.

The population of this study comprises all Generation Z consumers in Riau Province who shop online using Shopee and TikTok Shop. Based on data from ((BPS) & (APJII), 2024), the number of Gen Z internet users in Riau is estimated to exceed 900,000 individuals. Given the large population size, the study employed a purposive sampling technique, which selects respondents based on specific criteria aligned with the research objectives. The inclusion criteria were: (1) belonging to Generation Z (aged 13–28 years), (2) residing in Riau Province, (3) having made at least one purchase on Shopee or TikTok Shop within the past six months, and (4) voluntarily agreeing to participate in the survey.A total of 105 respondents participated in this study. Although this number falls slightly below the ideal sample size suggested by (Hair et al., 2019), it is still deemed adequate for SEM-PLS analysis, as this method does not assume normal data distribution and is suitable for small sample sizes (minimum 30–100 respondents), provided that validity and reliability criteria are met. Therefore, the 105 respondents are considered sufficiently representative of Gen Z consumers in Riau who actively engage in online shopping.

This study involves six main variables, namely: utilitarian value of online reviews, hedonic value of online reviews, browsing, urge to buy impulsively, impulse buying behavior, and

impulsiveness. Utilitarian value of online reviews – the functional and informational value contained in online reviews that assist consumers in making purchase decisions. Hedonic value of online reviews – the pleasure and emotional experience derived from reading online reviews. Browsing – consumers' exploratory behavior in searching for products online without specific purchase intentions. Urge to buy impulsively – the sudden desire to purchase a product without prior planning, while impulse buying behavior Impulse buying behavior – spontaneous purchasing actions influenced by situational and emotional factors. As for Impulsiveness – the individual tendency to act spontaneously without extensive rational consideration during the purchasing process.

Data analysis was conducted using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with the SmartPLS 4 software. This method was chosen because it effectively analyzes complex relationships among variables, including direct, mediating, and moderating effects, simultaneously. Moreover, PLS-SEM is suitable for small sample sizes and does not require normally distributed data, making it appropriate for this study's data characteristics.The data analysis procedure consisted of several stages. First, the measurement model (outer model) was tested to assess construct validity and reliability. Convergent validity was evaluated through loading factor values (> 0.70) and Average Variance Extracted (AVE) (> 0.50). Discriminant validity was assessed using the Heterotrait-Monotrait Ratio (HTMT), which must be below 0.90. Construct reliability was determined using Cronbach's Alpha and Composite Reliability (CR), both of which must exceed 0.70 to indicate reliability (Hair et al., 2019).Second, the structural model (inner model) was examined to evaluate the relationships among latent variables based on the values of path coefficients, R-square, f-square, and t-statistics. Hypothesis testing was conducted using the bootstrapping method with a 5% significance level. A hypothesis was accepted if the t-statistic value exceeded 1.96 or the p-value was below 0.05. This stage included tests for direct effects, mediating effects, and moderating effects.

Through this methodological design, the study aims to provide empirical evidence on how the utilitarian and hedonic values of online reviews influence browsing activity, impulsive urges, and impulse buying behavior among Generation Z consumers in Riau Province. Furthermore, the study seeks to elucidate how impulsiveness functions as a moderating

factor that strengthens or weakens these relationships within the broader context of digital shopping behavior in the e-commerce era.

RESULTS

Descriptive Statistics Analysis (DSA)

This study involved 105 e-commerce users in Riau Province as the analytical unit, selected randomly. The distribution of questionnaires was conducted through Google Forms. The respondent criteria included gender, age, education, income, and duration of e-commerce usage, in order to provide a comprehensive description of the participants. The demographic characteristics of the respondents are presented below.

Table 1 Demographic Profile of Respondents

	Frequency	%
Male	52	**49,52%**
Under 20 years	8	7,62%
21–25 years	41	39,05%
26–30 years	3	2,86%
Female	53	**50,48%**
Under 20 years	22	20,95%
21–25 years	31	29,52%
Education		
Master's Degree	1	0,95%
Bachelor's Degree	80	76,19%
High School	23	21,90%
Elementary School	1	0,95%
Occupation		
Employee	10	9,52%
Student	81	77,14%
Entrepreneur	6	5,71%
Unemployed	8	7,62%
Monthly Income		
< Rp2.000.000	69	65,71%
Rp2.000.000 – Rp4.999.999	19	18,10%
Rp5.000.000 – Rp7.999.999	9	8,57%
Rp8.000.000 – Rp12.999.999	1	0,95%
≥ Rp13.000.000	7	6,67%
Average Daily Usage Duration		
< 10 minutes	17	16,19%
10-30 minutes	45	42,86%
31-60 minutes	20	19,05%
1-2 hours	13	12,38%
3-5 hours	7	6,67%
5-7 hours	1	0,95%
> 7 hours	2	1,90%
Total	**105**	**100,00%**

The demographic characteristics of e-commerce users in Riau Province encompass aspects such as gender, age, education, occupation, income, and platform usage duration. In terms of gender, respondents were nearly evenly distributed, with 52 males (49.52%) and 53 females (50.48%). Regarding age, the majority of respondents were between 21 and 25 years old, comprising 68.57% of the total, followed by those under 20 years (28.57%) and a small proportion above 26 years (2.86%). This indicates that e-commerce users in Riau are predominantly young and productive individuals.

In terms of education, most respondents were bachelor's degree holders (76.19%), followed by high school graduates (21.90%), while only a

few held a master's degree or completed elementary education (each 0.95%). Concerning occupation, the majority were students or university learners (77.14%), followed by employees (9.52%), entrepreneurs (5.71%), and unemployed individuals (7.62%). These findings suggest that e-commerce usage in Riau is primarily concentrated among young, educated users still pursuing higher education.

Regarding income, 65.71% of respondents earned less than Rp2,000,000 per month, followed by 18.10% earning between Rp2,000,000 and Rp4,999,999, and a small portion (7.62%) earning above Rp8,000,000. In terms of e-commerce usage duration, the majority (42.86%) spent 10–30 minutes per session, followed by 19.05% who used the platforms for 31–60 minutes, and only a few who spent more than one hour per session. These results suggest that e-commerce activity in Riau is dominated by young consumers with higher educational backgrounds, moderate browsing duration, and relatively low income levels.

Table 2 Descriptive and Normality Statistics

Construct	Item Code	Min	Max	Mean	Standard deviation	Excess kurtosis	Skewness
UV	UV1	2	5	3.790	0.789	-0.762	0.041
	UV2	2	5	3.829	0.723	-0.480	-0.031
	UV3	2	5	3.848	0.766	-0.772	0.011
	UV4	2	5	3.848	0.714	-0.699	0.076
HV	HV1	2	5	3.810	0.770	-0.822	0.090
	HV2	2	5	3.790	0.700	-0.350	-0.021
	HV3	2	5	3.819	0.740	0.143	-0.408
	HV4	2	5	3.752	0.778	-0.221	-0.271
BR	BR1	2	5	3.790	0.726	-0.550	0.045
	BR2	2	5	3.790	0.726	-0.299	-0.106
UBI	UBI1	2	5	3.819	0.740	-0.621	0.021
	UBI2	2	5	3.781	0.756	-0.543	-0.011
	UBI3	2	5	3.838	0.705	-0.645	0.078
IMP	IMP1	2	5	3.790	0.739	-0.639	0.073
	IMP2	2	5	3.781	0.756	-0.750	0.123
	IMP3	2	5	3.790	0.739	-0.173	-0.214
	IMP4	2	5	3.810	0.770	-0.399	-0.164
IBB	IBB1	2	5	3.781	0.743	-0.670	0.099
	IBB2	2	5	3.810	0.705	-0.062	-0.205
	IBB3	2	5	3.819	0.753	-0.710	0.044

Table 2 presents the results of the descriptive and normality analysis for all constructs in this study. The mean values of all indicators range between 3.75 and 3.85, indicating that respondents generally provided positive evaluations of all measured variables. This suggests that Generation Z consumers in Riau perceive online reviews on e-commerce platforms as both useful and enjoyable. The Utilitarian Value (UV) indicators show mean scores ranging from 3.79 to 3.85 with standard deviations between 0.71 and 0.79, reflecting that respondents consider online reviews to be credible sources of information that assist in purchase decision-making. Meanwhile, the Hedonic Value (HV) indicators, with mean scores ranging from 3.75 to 3.82, reveal that consumers also experience emotional pleasure and curiosity when reading online reviews, highlighting that digital consumption behavior involves both rational and affective components.

The Browsing (BR) construct displays a consistent mean value of 3.79, suggesting that respondents actively explore products and information even without specific purchase intentions. This aligns with (Beatty & Ferrell, 1998) concept that browsing serves as a precursor to impulsive buying tendencies. Furthermore, the constructs Urge to Buy Impulsively (UBI) and Impulse Buying Behavior (IBB), with mean values between 3.78 and 3.84, indicate that emotional stimuli encountered during browsing and exposure to online triggers often lead to spontaneous purchasing decisions. This supports (Rook & Fisher, 1995) theoretical framework, which explains that impulsive purchases in digital contexts stem from unplanned emotional impulses rather than cognitive deliberation.

Lastly, the Impulsiveness (IMP) construct recorded mean values between 3.79 and 3.81, suggesting that respondents exhibit moderate to high levels of impulsivity. This finding is consistent with (Verplanken & Herabadi, 2001), who argue that impulsiveness affects the speed and spontaneity of consumer decision-making. All skewness and kurtosis values fall within the acceptable ±2 range (Hair et al., 2021), indicating that the data are normally distributed and suitable for further analysis using the PLS-SEM method.

Overall, these findings demonstrate that both utilitarian and hedonic values of online reviews encourage exploratory browsing behavior, which subsequently triggers impulsive urges and unplanned purchases. The results reinforce (Zhang et al., 2018), confirming that a combination of informative and emotionally engaging reviews enhances consumer involvement and increases the likelihood of impulsive buying behavior in e-commerce environments.
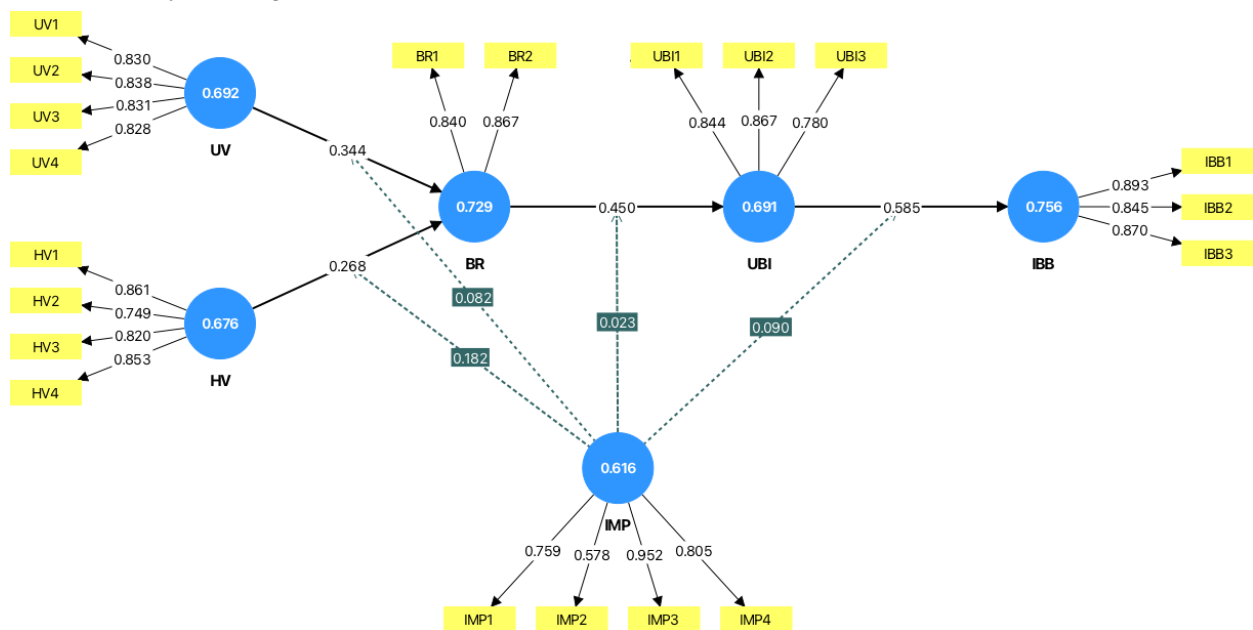

Figure 2 Initial PLS-Path Model

Table 3 Discriminant Validity: Heterotrait-Monotrait Ratio (HTMT)

	BR	HV	IBB	IMP	UBI	UV	IMP x UBI	IMP x HV	IMP x BR	IMP x UV
BR										
HV	0.359									
IBB	0.474	0.111								
IMP	0.099	0.065	0.069							
UBI	0.656	0.177	0.689	0.124						
UV	0.513	0.101	0.247	0.081	0.272					
IMP x UBI	0.096	0.186	0.063	0.077	0.176	0.039				
IMP x HV	0.264	0.045	0.069	0.168	0.21	0.132	0.041			
IMP x BR	0.127	0.204	0.128	0.205	0.051	0.105	0.521	0.091		
IMP x UV	0.132	0.121	0.063	0.307	0.062	0.129	0.241	0.057	0.486	

Table 3 presents the results of the discriminant validity test using the Heterotrait-Monotrait Ratio (HTMT) approach. The discriminant validity test aims to ensure that each construct in the model is empirically distinct from other constructs, thereby confirming that every indicator accurately represents a unique conceptual dimension (Hair et al., 2019). According to the recommended criteria, a construct is considered to have satisfactory discriminant validity if its HTMT value is below 0.90 (strict criterion) or 0.85 (conservative criterion).

The test results show that all HTMT values between constructs in this study are below the 0.90

threshold, indicating that there are no excessive correlations among the latent variables. This finding confirms that each construct—Utilitarian Value (UV), Hedonic Value (HV), Browsing (BR), Urge to Buy Impulsively (UBI), Impulse Buying Behavior (IBB), and Impulsiveness (IMP)—is empirically distinct and measures different conceptual aspects of consumer behavior. For instance, the correlations between Hedonic Value and Browsing (HTMT = 0.359), as well as between Utilitarian Valueand Impulse Buying Behavior (HTMT = 0.247), are relatively low, suggesting that while these constructs are theoretically related, they capture different behavioral tendencies at the conceptual level.

Overall, these results demonstrate that the measurement model in this study satisfies the criteria for good discriminant validity, confirming that each construct represents a unique dimension of consumer perception and behavior. This also indicates the absence of multicollinearity issues among variables, and that each construct exhibits strong conceptual clarity. Consequently, the model can be considered empirically valid and reliable for subsequent structural analysis, particularly in explaining the interrelationships among online review values, browsing activity, and impulsive buying tendencies among Generation Z consumers in Riau Province.

Evaluation Model
Vadility and Realibility

Table 4 Convergent Validity and Internal Consistency Reliability

Construct	Item Code	Outer loadings	AVE	Cronbach's alpha	Rho_a	Rho_C
BR	BR1	0.840	0.729	0.629	0.632	0.843
	BR2	0.867				
HV	HV1	0.861	0.676	0.843	0.876	0.893
	HV2	0.749				
	HV3	0.820				
	HV4	0.853				
IBB	IBB1	0.893	0.756	0.84	0.858	0.903
	IBB2	0.845				
	IBB3	0.869				
IMP	IMP	1.000	0.728	0.829	1.152	0.889
	IMP	1.000				
	IMP	1.000				
	IMP	1.000				
	IMP1	0.787				
	IMP3	0.951				
	IMP4	0.813				
UBI	UBI1	0.845	0.691	0.776	0.783	0.87
	UBI2	0.867				
	UBI3	0.780				
UV	UV1	0.830	0.692	0.852	0.853	0.9
	UV2	0.838				
	UV3	0.831				
	UV4	0.828				

Table 4 presents the results of the convergent validity and internal consistency reliability tests for all measurement constructs in this study. The assessment of convergent validity was conducted based on the outer loading and Average Variance Extracted (AVE) values, while construct reliability was evaluated using Cronbach's Alpha, rho_A, and Composite Reliability (CR). According to the criteria established by (Hair et al., 2019), an indicator is considered valid if its outer loading value exceeds 0.70, and a construct is deemed to

have good convergent validity if its AVE value is greater than 0.50. Meanwhile, construct reliability is considered satisfactory when both Cronbach's Alpha and Composite Reliability values are above 0.70.

The test results indicate that all constructs meet the required thresholds for validity and reliability. The outer loading values of all indicators range from 0.749 to 0.951, demonstrating that each indicator contributes strongly to the latent construct it represents. The AVE values, ranging from 0.676 to 0.756, suggest that more than 67% of the variance in the indicators is explained by their corresponding latent constructs, indicating a high level of internal consistency. Furthermore, the Cronbach's Alpha values, which range between 0.776 and 0.852, and the Composite Reliability values, ranging from 0.843 to 0.903, both exceed the recommended minimum thresholds, confirming that all constructs exhibit excellent internal reliability and measurement stability.

Overall, these findings demonstrate that the measurement model in this study has achieved strong convergent validity and internal consistency reliability. Consequently, all indicators are proven to accurately and consistently measure their intended constructs—namely, Utilitarian Value (UV), Hedonic Value (HV), Browsing (BR), Urge to Buy Impulsively (UBI), Impulse Buying Behavior (IBB), and Impulsiveness (IMP). The model thus meets the psychometric quality standards recommended by Hair et al. (2021), ensuring that the subsequent structural analyses can be considered reliable and empirically well-grounded.

Hypothesis Testing

Results of hypothesis testing based on the Partial Least Squares–Structural Equation Modeling (PLS-SEM) analysis. The testing was conducted using the bootstrapping method with a 5% significance level, where a hypothesis is accepted if the t-statistic value exceeds 1.96 or the p-value is less than 0.05 (Hair et al., 2019). The analysis includes both direct effects and moderating effects to evaluate the relationships among the variables—Utilitarian Value (UV), Hedonic Value (HV), Browsing (BR), Urge to Buy Impulsively (UBI), Impulse Buying Behavior (IBB), and Impulsiveness (IMP).

The analysis results show that most of the direct effects were statistically significant, and the hypotheses were statistically supported. The relationship between Urge to Buy Impulsively and Impulse Buying Behavior (H1) was found to be positive and significant ($\beta = 0.584$; $t = 8.759$; $p < 0.05$), confirming that impulsive urges that arise during product browsing directly encourage consumers to make spontaneous purchases. The relationship between Browsing and Urge to Buy Impulsively (H2) was also positive and significant ($\beta = 0.452$; $t = 5.784$; $p < 0.05$), meaning that the higher the intensity of browsing activity, the greater the impulsive urge felt by consumers. Additionally, Utilitarian Value had a significant positive effect on Browsing (H3) ($\beta = 0.344$; $t = 4.033$; $p < 0.05$), and Hedonic Value significantly affected Browsing (H4) ($\beta = 0.273$; $t = 3.584$; $p < 0.05$). These findings confirm that both informational benefits (utilitarian value) and emotional enjoyment (hedonic value) from online reviews can encourage consumers to engage in more active product browsing.

Regarding the indirect effects, there was a statistically significant interaction effect between Impulsiveness and Hedonic Value on Browsing (H6) ($\beta = 0.192$; $t = 2.009$; $p < 0.05$), indicating that individuals with high impulsiveness are more responsive to emotionally or hedonic-driven reviews. However, several relationships were tested and found not statistically significant, including the moderating effect of Impulsiveness on the relationship between Utilitarian Value and Browsing (H5), and between Browsing and Urge to Buy Impulsively (H7). Impulsiveness also did not significantly moderate the relationship between Urge to Buy Impulsively and Impulse Buying Behavior (H8). This suggests that impulsiveness strengthens the emotional rather than the cognitive dimension in the online purchasing process.

Overall, these results support the theoretical framework proposed by (Zhang et al., 2018), which posits that utilitarian and hedonic values derived from online reviews drive exploratory browsing activity, ultimately generating impulsive urges and unplanned purchasing behavior. The moderating role of Impulsiveness is partially supported, suggesting that emotionally driven and highly impulsive consumers are more susceptible to affective stimuli in online reviews. These findings characterize Generation Z consumers in Riau Province as digitally active individuals who frequently explore online platforms and are highly responsive to emotionally engaging review content and real-time promotional stimuli on platforms such as Shopee and TikTok Shop.

DISCUSSION

The findings of this study provide significant insights into the behavioral mechanisms underlying impulsive buying among Generation Z consumers within the e-commerce environment of Riau Province. The results confirm that

both utilitarian value and hedonic value derived from online reviews play crucial roles in shaping browsing behavior, emotional responses, and consumers' purchasing decisions. This aligns with the theoretical framework proposed by (Zhang et al., 2018), which posits that online reviews serve not only as rational information sources but also as emotional triggers that stimulate unplanned purchasing behavior. In this context, respondents demonstrated positive perceptions of both dimensions, suggesting that Generation Z consumers tend to integrate rational evaluation with emotional satisfaction in their online shopping activities.

The influence of hedonic value on browsing behavior indicates that emotional pleasure, curiosity, and social connection experienced during exploration significantly enhance consumer engagement with digital platforms. This finding reinforces (Babin et al., 1994), who emphasized that hedonic motivation is an essential component of modern consumption experiences. Consumers no longer browse solely to obtain product information but also to seek enjoyment, entertainment, and emotional stimulation. Thus, browsing becomes a form of digital recreational activity that heightens the likelihood of impulsive urges, particularly when consumers are exposed to visually appealing content, peer recommendations, or real-time promotions. This pattern is consistent with the behavioral traits of Generation Z, who are emotionally responsive and actively engage with dynamic digital content.

Furthermore, the study reveals that utilitarian value, representing the functional and informational quality of online reviews, has a positive effect on browsing activity. This supports the findings of (Mudambi & Schuff, 2010), who stated that informative and credible reviews serve as key references in consumers' purchasing considerations. However, such exposure also prolongs consumers' interaction time with e-commerce platforms, thereby increasing the likelihood of emotional stimulation that may lead to impulsive purchases. This mechanism supports the dual-path model proposed by (Zhang et al., 2018), wherein informational and emotional stimuli operate simultaneously in shaping spontaneous purchasing decisions.

The direct influence of browsing on urge to buy impulsively and impulse buying behavior further reinforces (Beatty & Ferrell, 1998) concept that browsing is a significant antecedent to impulsive buying behavior. In digital contexts such as Shopee and TikTok Shop, browsing functions as both a sensory and cognitive

stimulus that fosters unplanned purchasing urges. These urges are predominantly driven by emotional arousal rather than rational deliberation, consistent with (Rook & Fisher, 1995), who argued that impulsive purchases result from sudden emotional reactions. This finding underscores that emotional engagement, rather than logical analysis, serves as the dominant factor influencing spontaneous purchasing decisions among young digital consumers.

The moderating role of impulsiveness partially supports the findings of (Verplanken & Herabadi, 2001), who conceptualized impulsivity as a stable personality trait influencing the speed of decision-making and emotional intensity. The results show that individuals with high impulsivity levels are more sensitive to hedonic cues than utilitarian ones. In other words, impulsive consumers are more easily influenced by emotional stimuli—such as excitement or curiosity—when exposed to engaging online content or reviews. This highlights that impulsive behavior is affect-driven, being motivated more by emotional reactions than by cognitive evaluation processes.

Overall, these findings contribute meaningfully to understanding impulsive buying behavior in the digital era by integrating psychological and contextual dimensions. The study demonstrates that impulsive buying among Generation Z consumers results from the dynamic interaction between cognitive (utilitarian) and affective (hedonic) motivations, amplified by individual impulsiveness and an interactive digital environment. This supports the broader consumer behavior literature, suggesting that impulsive buying is not merely a random act but a predictable behavioral pattern arising from the combination of digital interactivity, emotional stimulation, and individual personality traits.

Managerial implications for e-commerce practitioners in Riau Province indicate that the results of this study provide strategic guidance in designing marketing communication. First, platforms and online sellers need to display reviews that balance functional information (utilitarian) and emotional appeal (hedonic) to enhance consumer engagement. Second, visual features such as video reviews, live streaming, and real-time interactions should be strengthened, as they have been shown to increase browsing and trigger impulsive buying. Third, local businesses in Riau should leverage the digital behavior of Gen Z by optimizing consumer review content as part of an evidence-based marketing strategy. In this way, digital strategies can become more adaptable to the

emotional and informational characteristics of young consumers in the region.

CONCLUSION

This study aims to explain the influence of utilitarian value and hedonic value from online reviews on browsing activity, urge to buy impulsively, and impulse buying behavior among Generation Z consumers in Riau Province, with impulsiveness as a moderating variable. The PLS-SEM analysis results indicate that both types of value in online reviews significantly affect browsing, which in turn increases the urge to buy impulsively and leads to impulse buying behavior. In other words, reviews that are both informative and enjoyable extend consumer interaction with e-commerce platforms and create a psychological condition conducive to unplanned purchases.

These findings reinforce the theoretical framework that states impulsive buying decisions in the online environment are not only determined by rational considerations but also by emotional responses that emerge during the browsing process. Emotional influence has proven to be more dominant in individuals with high impulsiveness, so browsing behavior in the e-commerce context is no longer just an information search activity but also a form of digital leisure that encourages affective involvement and spontaneous purchases. Thus, this study makes a theoretical contribution by empirically proving the expanded model of online review values with the impulsiveness variable in the local context of Generation Z in Riau.

However, this study has several limitations. The limited number of respondents and the focus on a single region, namely Riau Province, means the results cannot be generalized to the entire Generation Z population in Indonesia. Additionally, the use of perception data through online questionnaires has the potential to introduce subjective bias. Future research is recommended to expand the sample scope geographically, use actual behavioral data such as transaction records or digital trace data, and consider a longitudinal design to capture the dynamics of impulsive behavior changes. Other variables such as digital literacy, social media usage intensity, and social influence could also be integrated as additional moderating or mediating variables.

From a practical perspective, the findings of this study provide implications for e-commerce practitioners, digital marketers, and platform developers such as Shopee and TikTok Shop in Riau Province. Marketing strategies should be designed to highlight the balance between the credibility of information (utilitarian value) and emotional appeal (hedonic value) in managing consumer reviews, visual content, and interactive features such as live streaming. However, these strategies must be implemented ethically to avoid encouraging excessive consumption behavior, particularly among young consumers who are more susceptible to emotional stimuli. By understanding the interaction between cognitive, affective, and personality aspects in impulsive buying behavior, businesses can develop more sustainable, responsible, and consumer-wellbeing-oriented digital strategies amidst the growing and increasingly competitive e-commerce ecosystem in Indonesia.

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