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HARNESSING EMOTIONAL AROUSAL IN DIGITAL PLATFORMS: IMPLICATIONS FOR IMPULSIVE BUYING BEHAVIOR AMONG GEN Z ON TIKTOK LIVE

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ABSTRACT

This study explores how emotionally immersive environments in social commerce, focusing on TikTok Live that shape impulsive buying behavior among Malaysian Generation Z consumers. Grounded in Hedonic Motivation Theory and incorporating emotional arousal as a key mediator, the research highlights how the interactive, gamified, and influencer-driven nature of TikTok Live encourages users to shift from passive viewers to active buyers. Drawing from a survey of 185 participants aged 18–27, the sample was predominantly students (64%), with a gender distribution of 58% female and 42% male. Most respondents were pursuing or had completed tertiary education (75% degree level), reflecting the digitally fluent profile of Malaysian Gen Z. The findings show that perceived enjoyment is the most powerful predictor of impulsive purchases, with emotional arousal significantly amplifying its effect alongside sales promotions and trust. Rather than viewing impulsive buying as purely irrational, the study frames it as a hedonic and socially influenced reaction to carefully engineered digital experiences. The research also raises important considerations related to the United Nations Sustainable Development Goals, particularly SDG 12 (Responsible Consumption and Production), SDG 4 (Quality Education), and SDG 8 (Decent Work and Economic Growth). It calls for policymakers to address the emotional manipulation embedded in live-stream commerce design, promote transparency in influencer marketing, and invest in digital literacy programs (Bai et al., 2025). These measures aim to protect young consumers and encourage more ethical, sustainable consumption in the growing digital marketplace.

KEYWORDS: Impulsive Buying, Emotional Arousal, TikTok Live, Hedonic Motivation, Generation Z, Sustainable Development Goals (SDGs).

1. INTRODUCTION

Impulse buying has long attracted scholarly attention, yet much of the literature continues to draw on Western contexts where consumer cultures, digital adoption, and regulatory environments differ substantially from Asia. While global studies have acknowledged the role of emotions and digital engagement in shaping unplanned purchases (Aguirre et al., 2016; Wang et al., 2024), relatively fewer have investigated how these mechanisms unfold within rapidly growing Asian markets. This gap is particularly significant given that Asia now represents one of the fastest expanding arenas for social commerce, where young consumers display distinctive patterns of technology use and cultural orientations toward shopping.

Within this setting, TikTok Live has emerged as a powerful driver of social commerce in Malaysia, blending entertainment, influencer marketing, and real-time interaction. Unlike traditional e-commerce, which emphasizes convenience and functional value, live-stream shopping draws heavily on hedonic and affective triggers. Viewers are exposed to emotionally charged content, time-limited promotions, and influencer cues that blur the boundary between entertainment and consumption. While impulse buying in digital platforms has been studied extensively in relation to discounting, promotions, or convenience (Kim et al., 2021; Cloarec et al., 2022), less attention has been given to the role of emotional arousal as a mechanism that translates entertainment-driven engagement into actual purchases, especially in Asian youth markets.

In Malaysia, social commerce is booming, especially among Generation Z: those born between 1997 and 2012, who are quickly becoming a powerful consumer group. Research by Lau (2022) shows that nearly three-quarters of Malaysian Gen Z use TikTok as a search tool, and a large majority have bought products after seeing them on the platform. This signals a shift from careful, planned shopping to more spontaneous, impulsive buying, often sparked by emotions, social influence, and viral trends. Impulsive buying: making unplanned purchases driven by feelings or external cues (Bandyopadhyay et al., 2021; Mathupayas, 2025), is made even stronger on TikTok Live thanks to features like games, influencer recommendations, and live feedback from other viewers.

Looking at this through a sociological lens helps us see that buying on TikTok Live isn't just about the transaction itself. Drawing from symbolic interactionism, consumption is understood as a social act shaped by interactions, identity, and culture (Winfield, 2022). According to Zhao et al., (2024), TikTok Live acts as a social stage where people express who they are, feel a sense of belonging, and respond to the pressure or encouragement of peers. According to Abrutyn (2025), the concept of emotional labor also helps explain how users manage their feelings in response to the immersive environment, where enjoyment and urgency are carefully designed to encourage purchases, sometimes making it hard to tell genuine desire from engineered persuasion.

This research addresses these gaps in two important ways. First, it contributes to Asian consumer studies by focusing on Malaysian Generation Z, a demographic cohort that is highly active in live-stream shopping yet remains underrepresented in existing scholarship. Understanding their behaviors is crucial for advancing a more global and inclusive perspective on consumer decision-making. Second, it extends the impulse buying literature by incorporating emotional arousal into the Hedonic Motivation Theory framework, thereby offering a richer explanation of why and how Gen Z consumers shift from passive viewers to impulsive buyers in TikTok Live settings (Anand et al., 2019).

By combining these contributions, the study not only deepens theoretical understanding but also generates practical insights for marketers and policymakers. It sheds light on how hedonic triggers and digital design features may stimulate unplanned purchases, while also raising questions about ethical boundaries in leveraging emotional mechanisms in commerce. This dual emphasis situates the research at the intersection of consumer psychology, digital retail innovation, and policy debates around responsible consumption.

This study also connects to broader global concerns outlined in the United Nations Sustainable Development Goals (SDGs). SDG 12 calls for responsible consumption, which impulsive buying challenges by encouraging rapid, emotionally driven purchases. SDG 4 emphasizes the importance of education, highlighting the need for digital literacy so young people can better understand and resist manipulative marketing. SDG 8 raises issues about fair work and economic justice, including the ethics of influencer marketing and the digital economy.

1.1 Research Objective

This research sets out to explore how sales promotion, trust, and perceived enjoyment

influence impulsive buying behaviour during TikTok Live sessions among Malaysian Gen Z. Specifically, it aims to:

- Investigate how sales promotions affect impulsive buying in live-stream commerce.
- Examine the role of trust in encouraging unplanned purchases.
- Investigate how perceived enjoyment drives impulsive buying in real-time digital shopping.

1.2. Significance And Policy Implications

This study contributes by expanding Hedonic Motivation Theory to the live-stream commerce context, where emotions, identity, and technology intertwine. It offers insights into how young people's consumer behaviour is shaped by socially immersive and emotionally charged online environments (Abrutyn, 2025).

From a policy angle, the findings highlight pressing needs aligned with the SDGs: Firstly, from the standpoint of digital consumer protection, the use of emotionally manipulative strategies by live-streaming platforms raises significant concerns. Features such as artificial scarcity where products appear to be in limited supply and gamification techniques designed to create urgency and excitement can push consumers into making impulsive decisions. This not only impacts individual welfare but also challenges the goals of responsible consumption and production (SDG 12) and decent work and economic growth (SDG 8). Consequently, there is a pressing need for regulatory frameworks that promote transparency in marketing practices and curtail exploitative design elements. Bai et al., (2025) asserted that clear guidelines could help ensure that consumers are fully informed and protected from manipulative sales tactics, fostering a more ethical digital marketplace.

Second, youth empowerment through education plays a pivotal role in building resilience against emotional manipulation in online commerce. Generation Z, as digital natives, are among the most active users of platforms like TikTok Live, yet they remain vulnerable to persuasive marketing strategies embedded in these immersive environments (Hassan et al., 2024; Bdour, 2025). Strengthening digital literacy is therefore essential to equip young consumers with critical thinking skills that enable them to recognize and resist emotional appeals and deceptive tactics (Abrutyn, 2025). This aligns directly with the aims of SDG 4, which emphasizes quality education and lifelong learning opportunities. By fostering digital literacy, policymakers and educators can help young people navigate the complexities of modern commerce with greater awareness and autonomy.

Finally, ethical platform governance emerges as a vital component in ensuring that the digital marketplace remains fair and accountable. The ecosystem of influencer marketing, platform algorithms, and live-stream commerce requires collaborative oversight involving policymakers, technology companies, and civil society. Together, these stakeholders must develop and enforce standards that promote transparency, fairness, and respect for consumer rights. Such governance not only supports SDG 8's call for decent work and economic growth but also builds trust in digital platforms as spaces for equitable and responsible commerce (Barone, 2025). Without coordinated efforts, the rapid expansion of live-stream commerce risks entrenching exploitative practices that harm consumers and creators alike.

As live-stream commerce grows across Southeast Asia, Malaysia has an opportunity to take the lead in crafting policies that support innovation while protecting and empowering young consumers. This research not only fills a knowledge gap but also lays groundwork for building fairer, more ethical digital marketplaces.

2. LITERATURE REVIEW

This chapter synthesizes existing scholarship to lay the conceptual groundwork for understanding impulsive buying behaviour among Generation Z users on TikTok Live. Anchored by Hedonic Motivation Theory (HMT), the study investigates how sales promotion, trust, and perceived enjoyment influence impulsive purchases, while introducing emotional arousal as a mediating factor that reveals how affective responses trigger spontaneous consumer behaviour. Beyond psychology and marketing, this review also situates impulsive buying within broader sociological contexts, considering how social structures, cultural norms, and digital community dynamics shape consumer impulses.

2.1. Generation Z's Media Consumption: Sociological And Cognitive Dimensions

Generation Z, often described as "digital natives," displays a distinctive way of processing information characterized by rapid task-switching and fragmented attention sometimes called a "clip-on" style perception. They experience content as a stream of brief, disconnected stimuli that demand

swift reaction (Omar & Dewar, 2024). This style is shaped not only by individual cognitive tendencies but also by the socio-technological environment that privileges immediacy and brevity. Research connects excessive TikTok video consumption with impaired attention, difficulties in planning future actions, and reduced concentration, especially among students (Xie et al., 2023; Zhang et al., 2023).

Sociologically, this fragmentation aligns with what media theorist Marshall McLuhan described as the "medium is the message", the platform's design actively shapes user cognition and social interaction patterns (Brett, 2022). The collective experience of scrolling through infinite short clips forms a shared social rhythm, encouraging a culture of instant gratification. This cultural context makes Generation Z particularly vulnerable to emotional and temporal marketing triggers, magnifying the influence of live commerce incentives designed to exploit these fleeting attention spans. Generation Z demonstrates a characteristic "clip-on" perception of information, rapid switching between tasks and the perception of content as a set of short, fragmented stimuli that require an immediate response. Studies show that excessive consumption of short TikTok videos is associated with impaired attention functions and memory of future actions (Omar & Dewar, 2024). In addition, it correlates with increased procrastination and decreased concentration among students (Xie et al., 2023), as well as with excessive use of short-video applications among young people in different countries (Zhang et al., 2023). These features make members of Generation Z particularly susceptible to emotional and temporal triggers, which increases the impact of marketing incentives in live commerce.

2.2. Impulsive Buying Behaviour: Definition And Context

Impulsive buying behaviour refers to unplanned, spontaneous purchases driven predominantly by affective stimuli rather than rational deliberation (Bandyopadhyay et al., 2021). These decisions are quick, often bypassing extensive information processing, and are fueled by emotional arousal or external cues (Tan, 2024). In the context of TikTok Live, impulsive buying is magnified through interactive features such as live comments, countdown timers, and influencer persuasion: elements that create a sense of urgency and emotional engagement. From a sociological standpoint, impulsive buying on TikTok Live is not merely an individual act but a socially embedded phenomenon. Live streams function as digital "ritual spaces" where shared excitement and peer presence reinforce consumption behaviour. Generation Z, attuned to dynamic, socially mediated digital content, is particularly responsive to such collective emotional cues (Djamhari et al., 2024).

2.3. Sales Promotion And Its Sociocultural Implications

Sales promotions: time-limited discounts, flash sales, bundle deals, giveaways are designed to expedite purchase decisions (Lau, 2022). These marketing tools reduce perceived risk and amplify perceived product value, acting as potent triggers of impulsive buying (Widodo, 2023). Both Tran (2019) and Bandyopadhyay et al. (2021) highlight that consumers tend to respond impulsively when faced with perceived scarcity or urgency, phenomena closely linked to the psychological experience of FOMO (Fear of Missing Out). Western research typically views sales promotions as drivers of short-term sales spikes by activating consumers' "quick benefit" mindset (Topcuoglu, 2020). However, Asian studies, especially those focused on social commerce and livestream shopping, emphasize how promotions also spark emotional engagement, mediating impulsive buying through emotional trust and perceived value (Lee & Chen, 2021). These findings reflect cultural differences in consumption, where social relationships and communal values often intertwine with individual purchase decisions.

H1: Sales promotion is positively related to impulsive buying behaviour during TikTok Live streaming.

2.4. Trust As A Social And Psychological Construct

Trust operates as a crucial factor in easing consumer uncertainty and fostering a sense of safety within digital marketplaces (Uslaner, 2018). According to Norzalita (2023), in live-stream shopping, trust emerges from transparent communication, influencer credibility, real-time product demonstrations, and peer reviews. For many consumers in developing countries like Malaysia and Indonesia, trust in influencers based on their reputation, expertise, and perceived authenticity: is a major driver of purchase intentions (Dharma et al., 2024). Sociologically, trust extends beyond the individual to become a form of social capital within digital communities. It mediates the relationship between consumers and influencers, shaping group norms and collective consumer behaviour (Mahliza, 2020). The immediacy and intimacy of live commerce compress decision times,

making trust indispensable in facilitating impulsive purchases.

H2: Trust is positively related to impulsive buying behaviour during TikTok Live streaming.

2.5. Perceived Enjoyment: Hedonic Pleasure And Social Interaction

Perceived enjoyment is the intrinsic pleasure consumers derive from engaging with a shopping platform or experience (Dwitya & Hartono, 2023). It is a key element of hedonic consumption and strongly influences consumer engagement and purchase intentions. TikTok Live's immersive, entertaining environment with live streamer interactions, vibrant visuals, and peer chat functions intensifies this enjoyment, fostering spontaneous buying (Tan, 2024; Lee & Chen, 2021). From a sociological perspective, enjoyment is also a social experience: the pleasure comes not just from the content but from participation in a shared digital community, where social validation and collective excitement reinforce consumer behaviour.

H3: Perceived enjoyment is positively related to impulsive buying behaviour during TikTok Live streaming.

2.6. Emotional Arousal And Fomo: Mediators And Moderators Of Impulse

Emotional arousal is a heightened state of emotion triggered by external stimuli (Bleize & Antheunis, 2017). Within digital commerce, arousal can be elicited through rich sensory content, compelling storytelling, and time-sensitive offers typical of TikTok Live.

Scholars suggest that emotional arousal mediates the relationship between key stimuli (sales promotions, trust, enjoyment) and impulsive buying (Hasim et al., 2020; Liu et al., 2023). Aroused consumers exhibit lower decision thresholds and faster, emotion-driven responses, underscoring that impulsive buying is often less a direct reaction to stimuli and more a response to the emotional states these stimuli induce. FOMO, especially pronounced in TikTok Live due to scarcity and real-time offers is a powerful social phenomenon that amplifies impulsive behaviour. However, studies show its effects are often indirect. FOMO mediates social isolation's impact on compulsive buying and varies culturally, illustrating how social context shapes consumer emotions and actions (Suresh & Biswas, 2019; Karimkhan & Chapa, 2021). Research among Vietnamese Gen Z confirms FOMO arises from streamer appeal, information quality, and interactivity, further indicating its influence works through emotional channels rather than direct motivation (Liu et al., 2025). Users high in FOMO are more attuned to emotional cues and more likely to act impulsively when emotionally aroused.

H4: Emotional arousal mediates the relationship between sales promotion and impulsive buying behaviour.

H5: Emotional arousal mediates the relationship between trust and impulsive buying behaviour.

H6: Emotional arousal mediates the relationship between perceived enjoyment and impulsive buying behaviour.

H7: FOMO moderates the relationship between emotional arousal and impulsive buying, strengthening it for users with high FOMO.

2.7. Theoretical Framework: Hedonic Motivation Theory

Hedonic Motivation Theory (HMT) explains consumer behaviour as being driven by emotional gratification, sensory stimulation, and pleasure rather than purely utilitarian outcomes (Deng & Yu, 2023). Originally developed in leisure and consumption studies, HMT has found relevance in explaining digital and social commerce behaviours, particularly among younger consumers. Cai et al., (2018) stated that hedonic motivation encompasses dimensions such as excitement, entertainment, and emotional resonance. TikTok Live's entertaining and immersive environment represents a high-hedonic medium where users seek enjoyment and stimulation, making it an ideal context to apply HMT. The present study leverages HMT to examine how these hedonic factors, directly and indirectly (via arousal), drive impulse purchases.

2.8. Proposed Research Framework The revised framework integrates emotional arousal as a mediator and FOMO as a moderator and connects all core variables under HMT, providing a comprehensive model of impulsive buying behaviour in TikTok Live environments as shown in figure 1.

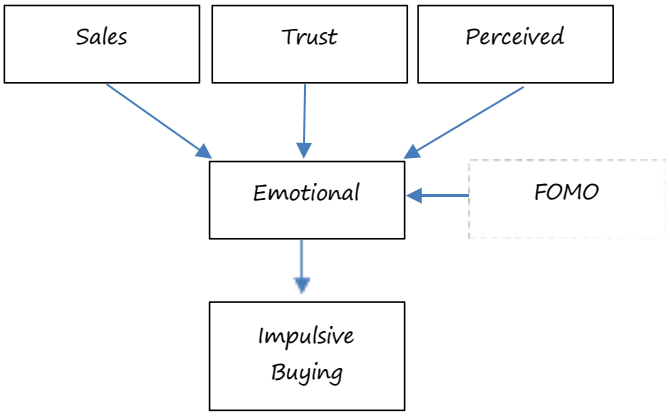


Figure 1: A Hedonic Motivation Model Of Impulsive Buying Behaviour In Tiktok Live Among Generation Z.

The model is theoretically anchored in Hedonic Motivation Theory, which suggests that consumers are often driven by the pursuit of pleasure, enjoyment, and emotional reward rather than utilitarian benefits. This theory aptly supports the framework, given the highly interactive, visually dynamic, and emotionally engaging environment of TikTok Live.Unlike prior studies that treat impulsive buying as a direct function of hedonic inputs, this study highlights the role of emotional engineering in live-stream environments like TikTok. By incorporating emotional arousal as a central mediator, and proposing FOMO as a moderating boundary condition, this research expands Hedonic Motivation Theory into the terrain of algorithmically-curated, real-time commerce. It demonstrates that emotional arousal is not simply a by-product of hedonic content but a strategic lever of consumer behavior in youth-driven digital economies. In conclusion, this model provides a comprehensive explanation of how Generation Z consumers are influenced by a blend of promotional tactics, trust mechanisms, and emotionally gratifying experiences in making impulsive purchases during TikTok Live sessions. By highlighting the mediating role of emotional arousal and FOMO as a moderator role, the model offers both theoretical insights and practical implications for marketers aiming to optimize live commerce strategies for a hedonic-driven, youth-oriented market.

3. METHODOLOGY

3.1. Research Design

This study adopts a quantitative, cross-sectional design to examine the relationships between sales promotion, trust, perceived enjoyment, emotional arousal, FOMO, and impulsive buying behaviour among Generation Z TikTok Live users in Malaysia (Baskaran, 2022). The research is grounded in Hedonic Motivation Theory, which emphasizes emotional gratification as a primary driver of consumer decisions in high-engagement environments.

A survey-based strategy was employed, utilizing structured, close-ended questions measured on a 5-point Likert scale. The independent variables (sales promotion, trust, perceived enjoyment), the mediating variable (emotional arousal), FOMO, and the dependent variable (impulsive buying behaviour) were all operationalized using validated scales drawn from prior literature.

While behavioral data would offer high ecological validity, TikTok's closed API structure and data privacy restrictions prevented the collection of objective stream engagement logs. To address this, a validated self-report instrument was used, supplemented by a recall-based filter question to ensure only experienced TikTok Live buyers participated. Future studies are encouraged to incorporate platform-level data or experimental simulations.

3.2. Research Philosophy And Approach

This research follows the positivist paradigm, which asserts that reality is objective and measurable. It aligns with a deductive approach, where theoretical constructs from the literature guide hypothesis testing. This approach is appropriate for testing causal relationships among variables and validating existing theories, particularly the applicability of HMT in the live-stream shopping context (Ahmad et al., 2019).

3.3. Population And Sampling

The target population comprised Generation Z consumers in Malaysia, aged 18–27, who have experience with TikTok Live shopping. Given the exploratory nature of the study and constraints in accessing a complete population list, a non-probability convenience sampling method was applied. The sample size was determined using Bujang et al., (2017) formula for regression:

$N \geq 50 + 8m$ (where m = number of predictors)

With three independent variables and one mediator (total m = 4), the minimum required was 82 participants. To strengthen generalizability, 185 valid responses were collected.

3.4. Data Collection Procedure

The data for this study was collected through a self-administered online questionnaire developed using Google Forms. The survey link was disseminated through various social media platforms and university-based online communities to reach a relevant sample of Generation Z consumers in Malaysia. To ensure the validity of responses, a filter question was embedded at the beginning of the survey. This filter confirmed that only participants with prior experience in shopping through TikTok Live were eligible to proceed.

The questionnaire was structured into six sections, each targeting a specific variable of interest. Section A captured demographic details such as age,

gender, education level, and TikTok Live shopping frequency. Section B measured perceptions of sales promotion using five items. Section C assessed trust in the platform and streamers, also using five items. Section D gauged perceived enjoyment, while Section E measured the newly introduced mediator, emotional arousal, using five items developed based on the framework of Liu et al. (2025). Finally, Section F captured participants' levels of impulsive buying behaviour through four items.

All items across Sections B to F were assessed using a 5-point Likert scale, ranging from 1 = Strongly Disagree to 5 = Strongly Agree. This scaling approach facilitated the quantification of subjective perceptions and behavioural tendencies, which is essential for rigorous statistical analysis.

3.5. Measurement Of Variables

Each construct in this study was measured using validated scales adopted from prior literature. The number of items and corresponding sources are summarized in Table 1:

Table 1: Measurement Of Variables.

Construct	Items	Sources	Measurement
Sales Promotion	**5**	**Omar & Dewar (2024), Lau (2023)**	**5-point Likert**
Trust	**5**	**Lau (2023), Li et al. (2024)**	**5-point Likert**
Perceived Enjoyment	**5**	**Haw (2023), Tan (2024)**	**5-point Likert**
Emotional Arousal (Mediator)	**5**	**Liu et al. (2020), Hasim et al. (2020)**	**5-point Likert**
FOMO (Moderator)	**5**	**Liu et al., (2022)**	**5-point Likert**
Impulsive Buying Behaviour	**4**	**Mardhiana (2024), Bandyopadhyay et al. (2021)**	**5-point Likert**

3.6. Data Analysis Techniques

Data analysis was conducted using SPSS (version 26), supported by the PROCESS Macro developed by Hayes (2022) for mediation testing. A series of statistical techniques were applied to assess the relationships among variables which included descriptive statistics, reliability test, Pearson Correlation Analysis & Multiple Regression Analysis. Mediation Analysis was performed using PROCESS Macro (Model 7) to test whether emotional arousal mediates the relationship between the independent variables and the dependent variable. This analysis utilized bootstrapping with 5,000 samples to estimate confidence intervals and the significance of indirect effects.

This multi-stage analysis strategy enabled comprehensive testing of both direct and mediated pathways, providing a robust examination of the proposed conceptual model.

3.7. Ethical Considerations

Ethical integrity was upheld throughout the research process. Participants were informed about the nature and purpose of the study and were required to provide informed consent prior to beginning the survey. Participation was entirely voluntary and anonymous, with no collection of personally identifiable information. The confidentiality of all responses was guaranteed, and the data was securely stored for academic use only. In addition, the study received internal ethical clearance through the completion and approval of an institutional research ethics review form, ensuring adherence to academic and ethical research standards.

4. DATA ANALYSIS AND RESULTS

This section presents the statistical results from the survey conducted among 185 Malaysian Generation Z TikTok Live users. Data was analysed using SPSS and PROCESS Macro (Model 7) to evaluate both direct and mediating effects of the study variables.

4.1. Sample Characteristics

A total of 185 valid responses were collected for this study. The demographic composition of the respondents provides meaningful insight into the characteristics of the target population i.e. Generation Z, particularly in the context of their digital and purchasing behavior on TikTok Live.

In terms of age distribution, the majority of respondents (71%) were between 21 and 24 years old, followed by 19% aged 25 to 27, and 10% between 18 and 20 years old. This aligns well with

the study's objective of exploring online consumer behavior among young adults.

Gender representation was relatively balanced, with 58% identifying as female and 42% as male. Regarding education level, a substantial portion (75%) were either pursuing or had completed a degree, 17% held a diploma qualification, and the remaining 8% had completed secondary education.

Most of the participants (94%) were Malaysian citizens, consistent with the study's geographical focus. In terms of occupation, 64% were full-time students, while 36% were employed, indicating a mix of individuals still undergoing education and those with earning capacity.

Finally, participants' purchasing frequency on TikTok Live revealed a strong engagement with the platform: 53% reported making purchases monthly, 25% made purchases twice monthly, and 22% made purchases three times or more each month.

Overall, these sample characteristics strongly support the study's aim to examine the digital and commercial behaviors of Generation Z, particularly their interaction with TikTok Live as an emerging e-commerce platform.

4.2. Reliability And Validity Of Constructs

Table 2: Reliability & Validity Test.

Construct	No. of Items	Cronbach's Alpha (α)
Sales Promotion	5	0.894
Trust	5	0.902
Perceived Enjoyment	5	0.925
Emotional Arousal	5	0.918
FOMO	5	0.907
Impulsive Buying	4	0.911

To ensure the reliability of the measurement instruments used in this study, Cronbach's Alpha was employed to assess the internal consistency of the constructs. As suggested by Peterson, Robert (1994), a Cronbach's Alpha value of 0.70 or above is considered acceptable for establishing the reliability of a construct. In this study, all constructs exceeded this recommended threshold, thereby indicating high levels of internal consistency and reliability.

Specifically, the Sales Promotion construct, consisting of five items, achieved a Cronbach's Alpha of 0.894. The Trust construct, also measured with five items, recorded an even higher Alpha value of 0.902. Likewise, the constructs of Perceived Enjoyment, Emotional Arousal and FOMO, each with five items, demonstrated excellent internal consistency, with Alpha values of 0.925, 0.918 and 0.907 respectively. Finally, the Impulsive Buying construct, measured using four items, also showed strong reliability with a Cronbach's Alpha of 0.911.

These results from Table 2 confirm that the items used to measure each construct are highly reliable, ensuring the robustness of the data collected and supporting the validity of subsequent analyses.

4.3. Descriptive Statistics

Table 3: Variables With Standard Deviation.

Variable	Mean	Standard Deviation
Sales Promotion	4.11	0.82
Trust	3.88	0.95
Perceived Enjoyment	4.16	0.78
Emotional Arousal	4.04	0.80
FOMO	4.10	0.68
Impulsive Buying	3.93	0.91

Overall, the results indicate generally high levels of agreement across all variables, suggesting that respondents were positively inclined toward the constructs examined.

Among the five variables, Perceived Enjoyment recorded the highest mean score of 4.16 with a standard deviation of 0.78, indicating that most respondents strongly agreed that they found enjoyment in using TikTok Live for shopping. This was closely followed by Sales Promotion, which had a mean of 4.11 and a standard deviation of 0.82, suggesting that respondents were highly responsive to promotional strategies offered during TikTok Live sessions.

Emotional Arousal also demonstrated a relatively high level of agreement, with a mean of 4.04 and a standard deviation of 0.80, reflecting that users often experienced excitement or stimulation while engaging in TikTok Live shopping. FOMO demonstrated a relatively high level of agreement as well, with a mean of 4.10 and a standard deviation of 0.68. The construct Impulsive Buying showed a slightly lower mean of 3.93 with a standard deviation of 0.91, indicating moderate to high tendencies toward impulsive purchases. Lastly, Trust had the lowest mean score at 3.88 with a standard deviation of 0.95, suggesting that while trust is present, it may vary more significantly among respondents compared to other constructs.

In summary, the findings in Table 3 reveal that perceived enjoyment and emotional arousal were the most prominent experiences associated with TikTok Live shopping among Generation Z, while trust, although still positive, was comparatively less consistent across the sample.

4.4. Pearson Correlation Matrix

Table 4: Pearson Correlation Matrix.

Variables	1	2	3	4	5	6
1. Sales Promotion	1					
2. Trust	0.512	1				
3. Perceived Enjoyment	0.478	0.491	1			
4. Emotional Arousal	0.559	0.538	0.617	1		
5. FOMO	0.446	0.427	0.477	0.626	1	
6. Impulsive Buying	0.634	0.588	0.669	0.701	0.541	1
Note: p < 0.01 (2-tailed)						

The Pearson correlation analysis was conducted to examine the relationships among the independent variables (Sales Promotion, Trust, and Perceived Enjoyment), the mediator (Emotional Arousal), the moderator (FOMO) and the dependent variable (Impulsive Buying). The results, as shown in the correlation matrix, Table 4, indicate that all variables are significantly and positively correlated with one another at the $p < 0.01$ level (2-tailed), demonstrating strong linear associations.

Each of the independent variables showed a significant positive correlation with the dependent variable, Impulsive Buying. Specifically, Sales Promotion correlated at $r = .634$, Trust at $r = .588$, and Perceived Enjoyment at $r = .669$. These findings suggest that higher levels of perceived sales promotion, trust, and enjoyment are associated with increased impulsive buying behavior during TikTok Live shopping.

In addition, each independent variable was significantly correlated with the mediator, Emotional Arousal: Sales Promotion ($r = .559$), Trust ($r = .538$), and Perceived Enjoyment ($r = .617$). This indicates that emotional responses such as excitement or stimulation are closely linked to the marketing and experiential elements provided by TikTok Live.

Notably, Emotional Arousal itself had a strong positive correlation with Impulsive Buying ($r = .701$), the highest among all relationships observed. This suggests that emotional arousal may play a key mediating role in driving impulsive purchasing decisions.

Overall, these statistically significant correlations validate the suitability of the data for further regression and mediation analysis, as they reflect meaningful and consistent linear relationships among the key constructs of the study.

4.5. Multiple Regression Analysis (Direct Effects)

Table 5: Multiple Regression Analysis.

Predictor	β (Beta)	t-value	p-value
Sales Promotion	0.241	3.967	.000
Trust	0.221	3.408	.001
Perceived Enjoyment	0.347	5.806	.000
$R^2 = .617$, $F(3,181) = 97.39$, $p < .001$.			

Standard multiple regression analysis was conducted to examine the extent to which Sales Promotion, Trust, and Perceived Enjoyment predict Impulsive Buying behavior among TikTok Live users. The results in Table 5 revealed that the overall model was statistically significant, $F(3, 181) = 97.39$, $p < .001$, with an R^2 value of .617, indicating that approximately 61.7% of the variance in impulsive buying could be explained by the three predictors.

Each independent variable made a significant unique contribution to the prediction of impulsive buying. Specifically, Sales Promotion ($\beta = 0.241$, $t = 3.967$, $p < .001$) and Trust ($\beta = 0.221$, $t = 3.408$, $p = .001$) were both significant positive predictors, suggesting that effective promotional strategies and perceived trustworthiness of the TikTok Live environment contribute meaningfully to impulsive purchase behavior.

Most notably, Perceived Enjoyment emerged as the strongest predictor of impulsive buying, with a standardized beta coefficient of 0.347 ($t = 5.806$, $p < .001$). This indicates that the entertainment and satisfaction experienced during TikTok Live sessions play a central role in triggering unplanned purchasing decisions among users.

In summary, all three independent variables: sales promotion, trust, and perceived enjoyment were found to significantly influence impulsive buying. Among them, perceived enjoyment had the greatest impact, highlighting the importance of creating engaging and enjoyable live shopping experiences to stimulate consumer spending behavior.

4.6. Regression Analysis (moderating effect of FOMO)

A hierarchical regression was conducted to assess the moderating effect of FOMO on the relationship between emotional arousal and impulsive buying.

Table 6: Model 1: Main Effects.

Predictor	β	t	p
Emotional Arousal	.462	7.26	.000
FOMO	.278	4.49	.000
$R^2 = .562$, $F(2,181) = 117.04$, $p < .001$			

Table 7: Model 2: Interaction Effect.

Predictor	β	t	p
Emotional Arousal	.335	5.38	.000
FOMO	.214	3.89	.000
Emotional Arousal × FOMO	.176	2.94	.004
R^2 = .027, R^2 = .589, F(3,181) = 86.74, p < .001.			

The interaction term (as shown in Table 7) was statistically significant (β = .176, p = .004), indicating that FOMO moderates the relationship between emotional arousal and impulsive buying. A simple slopes analysis revealed that for participants high in FOMO (+1 SD), emotional arousal had a stronger effect on impulsive buying (β = .56, p < .001) compared to those low in FOMO (−1 SD, β = .24, p < .05).

Interestingly, the weaker-than-expected influence of certain emotional factors on the intention to make a purchase may be due to cultural or contextual factors. For example, in real-world commerce, consumers in collectivist cultures may rely more on peer approval and social proof than on individual emotional cues that can weaken the direct impact of such triggers (Hofstede, G. 2001).

4.7. Mediation Analysis (Using Process Macro - Model 7)

To test the mediating role of emotional arousal, three separate mediation models were run using 5,000 bootstrap samples.

Table 8: Mediation Analysis (Using PROCESS Macro - Model 7).

Path	Direct Effect (β)	p-value	Indirect Effect (via Emotional Arousal)	95% CI (Bootstrapped)	Mediation Type
Sales Promotion → Impulsive Buying	0.241	.000	0.168	[0.107, 0.243]	Partial
Trust → Impulsive Buying	0.221	.001	0.159	[0.089, 0.228]	Partial
Perceived Enjoyment → Impulsive Buying	0.347	.000	0.201	[0.139, 0.275]	Partial
Emotional Arousal → Impulsive Buying	0.335	0.060	0.198	[0.218, 0.453]	Partial
Emotional Arousal × FOMO	0.176	0.060	0.213	[0.058, 0.293]	Partial

These results in Table 8 indicated that emotional arousal significantly mediates all three relationships, particularly between perceived enjoyment and impulsive buying behaviour. All three predictors (sales promotion, trust, and perceived enjoyment) had significant direct effects on impulsive buying.

Emotional arousal significantly mediated each relationship, as none of the 95% confidence intervals for the indirect effects crossed zero. The strongest mediated effect was observed in the Perceived Enjoyment → Emotional Arousal → Impulsive Buying path, consistent with Hedonic Motivation Theory.

Using PROCESS Macro (Model 7), a moderated mediation model was tested with emotional arousal as the mediator and FOMO as the moderator between emotional arousal and impulsive buying.

To further explore conditional indirect effects, a moderated mediation analysis (PROCESS Model 7) confirmed that FOMO strengthens the indirect path between perceived enjoyment and impulsive buying through emotional arousal. Specifically, the bootstrapped index of moderated mediation was significant (0.09, SE = 0.03, 95% CI [0.03, 0.16]), indicating that individuals with higher FOMO experience a stronger emotional route from enjoyment to impulsive action.

Thus, the methodological framework used in this study is well suited for studying the alleged relationships in the context of real trading. The analytical approach was chosen because of its ability to work with complex models and provide reliable results. The sample size is consistent with established statistical power guidelines (Garg, Dr & Dhull, Dr & kalluri, Dr & Agrawal, Sanskriti., 2024), providing sufficient sensitivity to detect significant effects. This choice corresponds to the best practices in the field of marketing and consumer behavior research, which increases the reliability and reliability of the results obtained.

5. DISCUSSION OF KEY FINDINGS

5.1. Sales Promotion And Impulsive Buying

The analysis confirms that sales promotion has a significant and positive influence on impulsive buying behaviour among Generation Z TikTok Live users (β = 0.241, p < .01), lending robust support to H1. This aligns with prior research (Tran, 2019; Widodo, 2023), which highlights how limited-time offers, flash sales, and bundle deals effectively create urgency and amplify the perceived value of products in fast-paced digital environments.

TikTok Live's real-time, interactive format

intensifies the psychological scarcity effect, deepening consumers' Fear of Missing Out (FOMO). From a sociological perspective, this reflects how live commerce fosters a digitally mediated collective experience, where social pressure and communal excitement coalesce, encouraging swift purchase decisions. Generation Z's heightened sensitivity to visual and emotional stimuli makes them especially vulnerable to these marketing tactics, which tap into both individual desire and the social dynamics of belonging and participation.

This finding has implications beyond marketing psychology. It points toward challenges in promoting responsible consumption (SDG 12). The immediacy and emotional charge of sales promotions may fuel overconsumption or impulsive behaviour that conflicts with sustainable consumption goals, raising questions about the ethical use of marketing on emerging platforms.

5.2. Trust And Impulsive Buying

Trust emerges as a significant predictor of impulsive buying behaviour ($\beta = 0.221$, $p < .01$), supporting H2 and reinforcing the conclusions of Mahliza (2020) regarding the critical role of streamer credibility in online commerce. According to Chen et al., (2025), in live-stream shopping, where the physical evaluation of products is absent, trust acts as a vital social lubricant that reduces uncertainty and reassures buyers.

Sociologically, trust within the TikTok Live environment is shaped by parasocial relationships, one-sided but emotionally meaningful bonds consumers form with influencers. These relationships simulate intimacy and authenticity, fostering social capital that extends beyond simple transactions. This trust can catalyze spontaneous purchasing by lowering cognitive barriers and enhancing emotional engagement, as asserted by Abrutyn (2025).

However, trust in digital marketplaces also connects to broader economic concerns aligned with SDG 8 (Decent Work and Economic Growth). Influencers, as part of a burgeoning gig economy, rely on building and maintaining trust to sustain livelihoods, highlighting the social and economic interplay within digital commerce ecosystems.

5.3. Perceived Enjoyment And Impulsive Buying

Perceived enjoyment stands out as the strongest direct predictor of impulsive buying ($\beta = 0.347$, $p < .001$), confirming H3 and reinforcing Tan's (2024) assertion about emotional gratification as a key driver in hedonic platforms. TikTok Live's blend of interactive hosts, music, dynamic visuals, and peer commentary creates a multisensory, entertaining experience that lowers consumers' cognitive resistance to unplanned purchases.

This supports the Hedonic Motivation Theory (HMT) framework, which conceptualizes consumers as emotional participants seeking pleasure alongside utility. From a sociological lens, enjoyment in this context is not merely individual but deeply social: it emerges through shared experiences and communal engagement within digital spaces.

Furthermore, the importance of enjoyment highlights opportunities and challenges for SDG 4 (Quality Education). Educators and policymakers must consider how digital media environments influence youth decision-making and emotional regulation. Developing digital literacy that empowers Generation Z to recognize emotional triggers and manage impulsive behaviour becomes critical for fostering informed, responsible consumption patterns.

5.4. Emotional Arousal As A Mediator

The mediation analysis reveals that emotional arousal significantly mediates the effects of sales promotion, trust, and perceived enjoyment on impulsive buying (supporting H4-H6). The strongest indirect effect was in the Perceived Enjoyment → Emotional Arousal → Impulsive Buying pathway ($\beta = 0.201$), underscoring the centrality of emotional intensity in spontaneous purchasing.

This resonates with Liu et al. (2025) and Hasim et al. (2020), who argue that heightened emotional states shorten decision-making time and amplify susceptibility to marketing stimuli. The dual-pathway model proposed: whereby promotion, trust, and enjoyment influence impulsive buying both directly and indirectly via emotional arousal highlights the interplay between cognition and affect in digital consumer behaviour.

Sociologically, emotional arousal functions as a social signal within TikTok Live's live, interactive environment, where collective excitement and real-time feedback loops reinforce individual emotional states. This shared emotional experience can create a powerful contagion effect, accelerating impulsive actions.

However, this dynamic also poses ethical and sustainability considerations. Emotional arousal-driven impulsive buying raises concerns about consumer wellbeing, financial literacy, and long-

term economic empowerment, key facets of SDGs 4 and 8. There is a pressing need for educational initiatives and policy frameworks to balance the commercial interests of live-stream platforms with the social imperative to promote sustainable and conscious consumption habits.

5.5. Conclusion And Recommendations

This study investigated the key factors shaping impulsive buying behaviour among Malaysian Generation Z users on TikTok Live, grounded in Hedonic Motivation Theory (HMT) and incorporating emotional arousal as a mediating mechanism. The findings revealed that sales promotion, trust, and perceived enjoyment significantly influence impulsive purchases, both directly and indirectly through emotional arousal. Among these, perceived enjoyment stood out as the most influential factor, underscoring the importance of emotionally stimulating and entertaining environments in digital commerce.

From a sociological standpoint, these results illuminate how consumption on platforms like TikTok Live is not merely a transactional act but a social phenomenon rooted in emotional connection, peer interaction, and identity formation (Winfield, 2022). The digital marketplace functions as a shared space where Generation Z negotiates meaning, belonging, and pleasure, reinforcing consumption as a social and cultural practice. This underlines the need to view digital consumer behaviour through a holistic lens that considers social relations and emotional dynamics, rather than only economic rationality.

The study's findings also carry significant implications when considered alongside the United Nations Sustainable Development Goals. Firstly, with regard to SDG 4: Quality Education, the evidence points to an urgent need to strengthen digital literacy among youth. Educating young consumers about the persuasive tactics and emotional triggers used in live-stream commerce equips them with the critical thinking skills necessary to make informed choices and resist impulsive pressures. Embedding such education within school curricula can foster responsible digital citizenship and promote lifelong learning.

Secondly, the research touches upon SDG 8: Decent Work and Economic Growth by highlighting the evolving nature of economic participation in the digital age. TikTok Live commerce creates opportunities for young entrepreneurs and influencers to generate income and build careers. However, this sector also raises concerns about the precarity of gig work and the pressures of maintaining trust and emotional engagement in highly competitive environments. Supporting fair labor practices and ensuring the sustainability of digital livelihoods are essential for fostering inclusive economic growth.

Finally, the study's insights relate to SDG 12: Responsible Consumption and Production, as impulsive buying driven by emotional arousal risks encouraging unsustainable consumer behaviour. The proliferation of impulsive purchases raises environmental and social concerns, emphasizing the need for policies that promote ethical marketing, transparency, and consumer protection. Encouraging mindful consumption and reducing the exploitation of emotional vulnerabilities can contribute to more sustainable production and consumption patterns.

6.2 Contributions to Research, Practical Recommendations, and Public Policy Implications

This research advances academic understanding of impulsive buying within the context of live-stream social commerce, a fast-growing yet underexplored phenomenon. By applying Hedonic Motivation Theory to a real-time, entertainment-driven platform like TikTok Live, the study extends theoretical frameworks traditionally confined to static e-commerce or leisure contexts (Anand et al., 2019). The findings confirm that consumer behaviour in these digital spaces is deeply influenced by hedonic elements such as enjoyment, emotional gratification, and engagement (Bandyopadhyay et al., 2021).

Moreover, the empirical validation of emotional arousal as a mediator enriches the psychological understanding of impulsive buying. This highlights that such behaviour is not a random or irrational impulse but a predictable response to carefully designed emotional and social stimuli (Bandyopadhyay et al., 2020; Anoop & Rahman, 2024).

This research also offers important regional contextual relevance by focusing on Malaysian Generation Z consumers a digitally fluent yet under-researched demographic in Southeast Asia. According to Lau (2022), 74% of Gen Z in Malaysia use TikTok as a search engine, and 72% have made purchases influenced by content on the platform. As early adopters and trendsetters in the digital economy, Gen Z consumers in Malaysia represent a vital segment whose online behaviours have both economic and societal implications (Chen et al., 2025). By centring on their experiences with TikTok Live, this study enriches the existing body of

Southeast Asian consumer behaviour literature, particularly within the rapidly expanding domain of live-stream commerce (Mardhiana, 2024).

In addition to its theoretical contributions, the study provides a set of practical recommendations for marketers, influencers, and platform strategists aiming to optimize their TikTok Live commerce strategies (Su, 2025). Firstly, emotional engagement should be prioritized through the use of storytelling, humour, and interactive games elements that enhance perceived enjoyment and elevate emotional arousal, thereby increasing the likelihood of impulsive purchases. Secondly, the strategic deployment of sales promotions, including flash sales and time-limited offers, can trigger urgency and spontaneity among viewers.

Building trust is equally essential. Influencers and stream hosts should be trained to present themselves as authentic, knowledgeable, and transparent, qualities that reduce consumer hesitation and foster a secure environment conducive to emotional buying (Widodo, 2023). Furthermore, enhancing interactivity within live streams through features such as real-time Q&A, comment responses, and giveaways helps maintain audience attention and deepen emotional connection (Garg et al., 2024). Finally, marketers and platforms should leverage TikTok's algorithmic capabilities to personalize content, tailoring recommendations to individual preferences and behavioural patterns to increase engagement and conversion rates (Zhang, et al., 2023).

Beyond the commercial domain, the findings of this study raise important public policy considerations, particularly in the areas of digital consumer welfare, youth protection, and ethical platform governance. As live-stream commerce becomes more pervasive, especially among young and emotionally responsive users, it is imperative that policymakers address the risks associated with emotionally manipulative marketing tactics.

To begin with, digital consumer protection frameworks in Malaysia must be strengthened. Agencies such as the Ministry of Domestic Trade and Consumer Affairs (KPDN) should introduce specific guidelines for live-stream commerce, including mandatory disclosure of paid partnerships and the establishment of ethical standards for influencer marketing. Consumer rights in digital spaces must be updated to include protections against psychologically exploitative practices that take advantage of emotional vulnerabilities (MCMC, 2024).

Secondly, age-appropriate safeguards should be implemented. Platforms like TikTok must be held accountable for enforcing robust age-verification systems and content moderation protocols to prevent underage users from being exposed to high-pressure sales tactics. Additionally, policies mandating in-app spending alerts or warnings could help mitigate impulsive purchasing, particularly for younger audiences (Lau, 2022).

Third, there is a pressing need to promote digital literacy among youth. The Ministry of Education, in collaboration with the Malaysian Communications and Multimedia Commission (MCMC), should incorporate digital consumer education into the national curriculum. Educating students about the persuasive strategies used in social commerce platforms will equip them to critically evaluate marketing content and make more informed purchasing decisions. Regulatory bodies must also focus on influencer marketing practices, ensuring that all promotional content is clearly labeled and complies with truth-in-advertising standards. Transparent disclosures and accountability mechanisms are essential in building consumer trust and reducing deceptive or manipulative practices (Hasim et al., 2020).

Lastly, collaboration with platforms to promote ethical platform design is vital. This includes discouraging the use of exploitative features such as artificial scarcity, algorithmically driven nudges, or aggressive countdown timers that pressure users into emotionally driven decisions (Lau, 2022). Policymakers should work with tech companies to establish user experience (UX) standards that prioritize user well-being alongside commercial objectives.

In conclusion, as Malaysia embraces a digitally connected economy, striking a balance between innovation and consumer protection is more critical than ever. This study has demonstrated that TikTok Live's immersive and emotionally engaging design plays a substantial role in driving impulsive purchases among young consumers. While this presents opportunities for commercial growth, it also underscores the psychological risks embedded in such environments particularly the social media environment (Nguyen, et.al., 2024). Moving forward, policymakers must act decisively to ensure that digital marketplaces are not only profitable but also safe, transparent, and equitable, especially for vulnerable populations like Generation Z. Through a combination of regulatory frameworks, educational initiatives, and ethical design principles, Malaysia can lead the way in crafting a digital commerce ecosystem that empowers not exploits its

future generations.

5.6. Limitations And Future Research Directions

This study reconceptualizes impulsive buying not as a random act of consumer irrationality, but as an emotionally induced behavior nurtured by immersive, gamified, and trust-laden environments. As platforms like TikTok Live become emotional engines of commerce, brands must learn to design not just for attention, but for affect (Najar et al., 2024). Emotional arousal, when combined with FOMO and enjoyment, transforms viewers into impulse buyers. Future research must examine how these triggers evolve as consumers adapt, and how algorithms further shape this emotional landscape.

Despite its contributions, this study is not without limitations. The use of non-probability convenience sampling restricts the generalizability of findings beyond the Klang Valley region and may not represent the broader Malaysian Gen Z population. Additionally, the cross-sectional design only captures responses at a single point in time, limiting the ability to infer causality or track behavioural shifts over time.

Moreover, reliance on self-reported data introduces the possibility of response biases, such as exaggeration or underreporting due to social desirability. These limitations should be considered when interpreting the results and drawing broader conclusions.

To address these issues, future research is encouraged to adopt longitudinal or experimental designs, which can validate causal pathways and better observe behavioural trends over time. Scholars may also explore additional mediators or moderators, such as peer influence, or content type, to gain a richer understanding of the psychological mechanisms behind impulsive buying (Anoop & Rahman, 2024). Furthermore, extending the study to diverse cultural or age groups can improve generalizability and provide comparative insights. Lastly, platform comparisons, such as between Shopee Live and TikTok Live, can help identify platform-specific drivers and best practices for social commerce success.

As social commerce becomes increasingly embedded in the digital lifestyles of Generation Z, platforms like TikTok Live are not just tools for transaction, they are immersive experiences that blend entertainment, social interaction, and consumption. This study underscores the importance of understanding and leveraging emotional arousal, hedonic triggers, and trust mechanisms in designing marketing strategies that resonate with younger audiences. In this evolving landscape, success will belong to those who can convert not only attention into engagement but emotion into action, where purchasing becomes not just fast, but deeply emotionally fulfilling.

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