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# EXPLORING THE TIKTOK INFLUENCES ON CONSUMER IMPULSIVE PURCHASE BEHAVIOUR

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## ABSTRACT

TikTok is one of the most widely used platforms popular among young adults and teenagers and had over 800 million monthly active users in 2020. TikTok enjoys significant user acquisition growth with a rise in brands appearing on the platform. This study explores how TikTok influences consumer impulse purchase behaviour in Malaysia through the lens of the Stimulus-Organism-Response (S-O-R) model comprising product-related visual appeal and product feasibility (stimuli), perceived enjoyment, and perceived usefulness (Organism), and impulsive purchase intention (Response). SPSS and Smart PLS analysed data per one hundred sixty-nine responses from close-ended questionnaires distributed across online channels. The findings indicate that visual appeal and product feasibility positively influence perceived enjoyment and perceived usefulness. The data affirms the positive effect of perceived enjoyment and perceived usefulness among TikTok users on their impulsive buying behaviour. In addition to theoretical implications and suggestions for broadening the research domain, this paper offers practical recommendations for marketers to leverage TikTok's ability to drive impulsive purchase behaviour.

***Keywords***: TikTok, S-O-R model, impulsive purchase, perceived usefulness, perceived enjoyment.

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## 1. INTRODUCTION

In recent decades, the rapid internet growth has compelled business and marketing to evolve and adapt significantly to digital commerce while leveraging the network effect in contributing value and meeting consumer demands. TikTok is a short-form video community application prevalent among the young generation today (Yang et al., 2019). It is also known as Douyin in China. The social media platform is algorithmically driven based on the user's interests and browsing history, which adopts a one-at-a-time content consumption model that loops and changes when the user swipes from one video to another. TikTok is categorized as a social commerce platform despite

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having no direct shopping experience in its early stages. The application initially enables marketers and sellers to acquire advertisement time between swipes and engage in influencer marketing. Online influencers and key opinion leaders can provide links in their bio pages that usher viewers or fans to the online stores, leading to rapidly viral products due to the influencers' endorsements directing them to online shopping destinations on merchant websites (Yang et al., 2019).

Piron (1991) defines impulse purchases as "unplanned purchases that are the result of stimulus and decided on the spot." TikTok specifies that more than half of the users on the application, around 67%, motivate to shop when they have no intention of doing so, 74% of its audience inspire to know more about a brand or product, and 66% make decisions on what to buy with the assistance of TikTok (TikTok for Business, 2023). Additionally, the power of that #tiktokmademebuyit trend on the platform cannot go unnoticed, considering the hashtag now holds a 7.4 billion viewership in 2021 (Cyca, 2022). TikTok's hyper-specific algorithm curates the feed to its user's exact interests, which makes TikTok potent for impulse shoppers. Users might also be more inclined to buy from TikTok than another platform because the videos are short (often under 30 seconds) and personal (Adamczyk, 2021).

In August 2021, TikTok launched TikTok shop, a new integration with Shopify that allows in-app shopping that embodies the entire shopping process within the platform itself (Cyca, 2022). Before the release of TikTok Shop, business owners could only use links on third-party sites directing audiences to and having to leave the app. Therefore, a more complicated, long-winded, and disjointed purchasing cycle. After gaining experience from its U.S./U.K./Canadian trial with Shopify-based retailers like Kylie Cosmetics, TikTok rolled TikTok shop on a broader scale for any brand can host live shopping or link its videos to product pages (Geyser, 2022). TikTok's current and future integration partners include Prestashop, Base, Square, BigCommerce, OpenCart, Ecwid, Shopline, and Wix eCommerce.

BOTS team (2021) reported that alongside consumers' ad preference, TikTok is one of the key factors in stimulating conversations around new product discoveries and impelling sales, especially when paired with the mega sales seasons in Malaysia. The mega deals in Malaysia include the widely celebrated festive seasons such as Christmas, Hari Raya, Deepavali, Chinese New Year, and 9.9, 10.10, 11.11, and 12.12, which can lead to consumers diving into purchasing products shown on the application. TikTok anticipated that Shoppertainment - a new phenomenon that merges entertainment and shopping, would dominate buying patterns in 2021 (BOTS team, 2021). TikTok shop reached Malaysian shores at the end of April 2022; from the discovery of products to the order, fulfilment is now completed within the app (Tiktok, 2022). Given the merge of the entertainment aspects and convenience of e-commerce sites, the shoppable social platform and merchants on it now reap the benefits of shoppertainment influence to its fullest potential.

Malaysia had over 4 million TikTok users in 2019 (Ting, 2021) and reached 14.59 million users aged 18 and above in early 2022 (Resolute, 2022). Tiktok ads reached 49.4 percent of local internet users of all ages, 61.2% of users aged 18 and above in Malaysia, and 97.4% of TikTok users aged between 18-34 (Resolute, 2022; Start.Io, 2023). Millennial and Gen-Z consumers are dominant social media users, tense to perform online purchases, and are shaping the way to do business in the future (Loeb, 2020). Geyser (2022) claimed that TikTok's Gen Z and Millennial users are wary of marketing; marketers should avoid posting anything resembling a traditional advertisement. This also conforms with the trend prevalent among young consumers in Malaysia in which

purchase behaviours are influenced by influencers or key opinion leaders within the social media environments (Koay et al., 2021; Lee et al., 2022). Therefore, this study targeted Millennial and Gen-Z consumers as research respondents to understand better how TikTok influences impulse purchases.

With the various online products and services available worldwide, researchers and marketers have always been interested in capturing consumer interest and generating conversions. Zheng (2019) studied the role of browsing in mobile commerce and found that the significant factors include interpersonal influence, visual appeal, portability, hedonistic, and utilitarian browsing. Scholars have also examined the impact of social media platforms on impulse purchases focusing on YouTube advertising (Dehghani et al., 2016), Twitter hashtags (Wang, 2016), and blogger recommendations (Hsu et al., 2013). Research has shown that social media product recommendations can affect planned and impulse purchases (Chen, 2020). However, research on how 'vlog' content like TikTok affects impulse purchase behaviour is still scant.

There is limited research related to TikTok and consumer behaviour. Li et al. (2021) investigated the purchase intention of China residents in Changsha through TikTok; their results revealed that perceived media richness was the most influencing factor. Dwinanda et al. (2022) studied the influences of TikTok advertising elements and attitudes on consumers' purchase intention in Indonesia. Research that focuses on TikTok and impulsive purchase behaviour is even dearth. Fadillah and Kusumawati's study in 2021 has such a combination; however, their study focuses more on make-up products conducted in Indonesia. Their study found that model, gratification shopping, and value shopping positively affect online impulsive buying behaviour. This study attempts to fill the research gap by exploring how TikTok usage impacts impulsive purchase behaviour in Malaysia.

Citing previous research on social commerce platforms, we adopt the Stimulus-Organism-Response (S-O-R) model to study the role of external stimuli affecting consumers' affective and cognitive reactions that trigger impulse purchase intentions. More specifically, this study examines the effects of visual appeal and feasibility of products in TikTok content on perceived enjoyment (affective reaction) and perceived usefulness (cognitive reaction) and the subsequent impacts on the urge to purchase impulsively.

## 2. LITERATURE REVIEW

### *2.1. Urge to Purchase Impulsively*

Impulse purchases are unplanned buys induced by sudden, irresistible actions and hedonistically complex behaviour. Rook (1987) defines the urge to purchase impulsively as "when the consumer feels a strong and sudden desire to buy a particular item; the decision to purchase is taken immediately without much consideration or the consequences of that decision." Stern (1962) proposes four distinct impulse purchase types: planned impulse buying, pure impulse buying, reminder impulse buying, and suggestive impulse buying — these share a common trait insofar as they are all unintentional purchases. Because purchase behaviours entail consumers perceiving the stimuli, assimilating them, and ultimately reacting to them (Huang, 2016), the S-O-R model is ideal for this research.

Different elements within information systems can influence impulse purchases. For e-commerce, some of these features are associated with system design, website attributes, website quality, website atmosphere, and online store beliefs (Turkyilmaz et al., 2015). Framed within the context of social commerce platforms such as WeChat, impulse purchase behaviour has been shown to relate to cognitive and affective trust and product emotions (Chen et al., 2019). Sundström et al. (2019) found that a sense of boredom can drive impulse purchases of fashion items online. The ubiquitous use of the internet, social media platforms, and social commerce create prospects for higher impulse purchase tendencies.

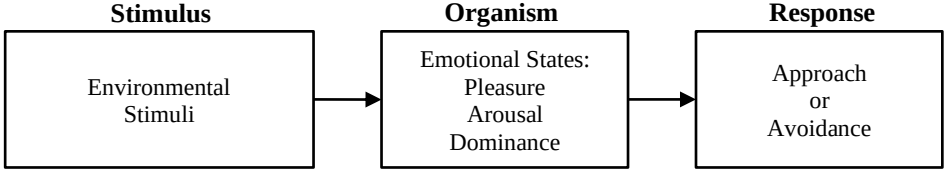
There are two aspects of the impulse purchase process. The initial stage concerns the urge to buy impulsively, defined as "a state of desire experienced when encountering objects in the environment" (Beatty & Ferrell, 1998). The second stage is defined by the actual impulse purchase. Particularly in marketing research, behavioural intentions have been conventionally assessed in place of actual behaviours (Fishbein & Ajzen, 1975). Indeed, it has been suggested that observing actual behaviour within a controlled environment can be troublesome since there is a tendency for biased results because personal reactions or behaviour may be skewed based on their need to react based on societal expectations. Hence, this study measures impulse purchase intention rather than actual impulse buying behaviour.

Converting a brand or product audience into customers is the most rewarding but challenging step in marketing from a merchant's standpoint. In a survey of British consumers, Uswitch discovered that 61% of people base their purchases on current trends, and 41% said TikTok provides the most inspiration succeeding Instagram by 14% (Beckett, 2021). Uswitch's survey also indicated that participants increased their online spending during the lockdown, with average expenditures of £102 on impulse purchases each month. Geyser (2023) reported that through TikTok, consumers had spent over half a million ($535 mill) in Q2 2021 itself. With TikTok being a social commerce company recently announcing its newest direct selling method on the shoppable media platform, TikTok has observed significant purchasing traffic and businesses jumping on the trend. Thus, it affects consumers' urge to purchase impulsively in a positive light.

### *2.2. Urge to Purchase Impulsively*

Initially derived from environmental psychology (Mehrabian & Russel, 1974), the S-O-R model has been applied to the physical store environment, online environment, and e-service landscape (Kühn & Petzer, 2018).

**Figure 1:** S-O-R Framework




***Source:*** Mehrabian and Russel (1974).

The S-O-R model is flexible regarding predictors (stimuli), emotional states (organism), and responses. Stimulus factors from a social-commerce perspective include website or platform content and interaction characteristics — these are regarded as external environmental stimuli. Organism refers to an individual's emotional state and internal cognitions, such as attitude, value perception, social or related-oriented perception, and affection (Wang, 2019). In contrast, response comprises resultant actions such as search, evaluation, purchase intention, and purchase behaviour (Ergolu et al. 2001) stemming from different situational factors. Though to iterate, the model has been used as a paradigm for numerous studies on impulsive purchase behaviour in social and mobile commerce (Xiang et al., 2016; Chuan & Zhuang, 2018; Handayani et al., 2018; Zhang et al., 2020; Huang & Suo, 2021; Lee & Chen, 2021).

Chuan and Zhuang (2018) adopted the model when examining impulse buying behaviour in mobile commerce. Zhang et al. (2021) used the S-O-R model to explore consumers' mobile impulse purchase intention during Covid-19 from the system users' perspective. Xiang et al. (2016) examined impulse purchase behaviour on social commerce platforms and the role of parasocial interaction with the S-O-R model. Handayani et al. (2018) used the model to analyse the impact of Instagram's "Call-to-Action" buttons on customers' customers' impulse buying. This study utilizes the S-O-R model to investigate the implications of social commerce factors and impulse buying behaviour. Most recent studies were conducted in China (Huang & Suo, 2021; Lee & Chen, 2021) on impulse buying decisions of live streaming commerce stimulus factors from a social-commerce viewpoint.

The practicality of the S-O-R model in analysing an individual's purchase intention triggered by some stimuli has demonstrated itself well enough to be utilised in this research on TikTok influences and impulse buying behaviour.

### *2.3. Product-related Stimulus and Organism Perception*

#### *Visual Appeal and Perceived Enjoyment*

Visual appeal refers to the exhibition of product information through multiple optical elements and hedonistic features (Chen et al., 2020). Visual appeal is a commonly used variable within the S-O-R model as it is a feature consumer most appreciate in m-commerce (Okazaki & Mendez, 2013). It is a salient aspect that influences buying intention and tends to affect the users' perceived enjoyment and affective trust toward a content creator (Fang et al., 2017; Chen et al., 2020). Zheng (2019) studied the role of browsing in mobile commerce and found that the significant factors include interpersonal influence, visual appeal, portability, hedonistic, and utilitarian browsing. TikTok is a visual platform presenting information in a lively and entertaining format that affects a viewer's enjoyment. Despite many studies utilizing visual appeal as a stimulus, most assessed its relationship with impulse purchase behaviour from a website and e-commerce rather than a social commerce platform such as TikTok perspective. Nonetheless, the consensus derived from the literature indicates a positive relationship between visual appeal and perceived enjoyment, and this forms the first hypothesis:

*H1a: Visual appeal positively influences perceived enjoyment of TikTok.*

***Visual Appeal and Perceived Usefulness***

The visual appeal of products can positively affect users' perceived usefulness of social commerce platforms (Xiang, 2016). When visual tools are used effectively, they can showcase social commerce platforms as convenient and useful shopping channels (Chen et al., 2020). While studies have shown that product visual appeal influences perceived usefulness, there is limited empirical finding for social commerce platforms. Hence, this study explores this notion by formulating the following hypothesis:

*H1b: Visual appeal positively influences perceived usefulness of TikTok.*

***Product Feasibility and Perceived Enjoyment***

Product feasibility refers to consumers' feelings about the product's suitability for them (Chen et al., 2020). The higher the feasibility of a particular recommended product, the stronger the sense of pleasure observed by the user when browsing (Parboteeah et al., 2009). Chen et al. (2020) also affirmed that product feasibility has a positive relationship with perceived enjoyment. The previous studies on product feasibility were conducted on e-commerce, offline, or website rather than social commerce. This study extends to a social commerce platform by offering the following hypothesis:

*H2a: Product feasibility positively influences perceived enjoyment of TikTok.*

***Product Feasibility and Perceived Usefulness***

Chen et al. (2020) claimed that product feasibility has a positive impact on the perceived usefulness of a product. When users perceive visual elements from social commerce as feasible, they are more likely to acknowledge social commerce applications as an ideal shopping platform. While the empirical findings indicating the relationship between the two variables are limited, this study proposes the following hypothesis:

*H2b: Product feasibility positively influences perceived usefulness of TikTok.*

### *2.4. Perception of Enjoyment, Usefulness, and Impulse Purchase Urge*

***Perceived Enjoyment and Urge to Purchase Impulsively***

Perceived enjoyment is the degree of fun someone can derive from using a system (Van der Heijden, 2004). Lee et al. (2022) contend that perceived enjoyment positively correlates with the urge to buy impulsively in e-wallet adoption. Xiang et al. (2016) found that perceived enjoyment and impulse buying tendencies together significantly affect the urge to buy impulsively. Ceci (2022) stated the most content category on TikTok as of July 2020 was entertainment content, with accumulated 535 billion hashtag views collectively. This shows that perceived enjoyment is one of the important elements for TikTok users. Dwinanda et al. (2022) found a positive relationship between entertainment and the formation of perceived advertising value because the respondents felt entertained and enjoyed watching TikTok video ads. The content displayed on TikTok ads is generally funny or involves dancing, acting, and lip-syncing, which meets the interests of Gen Y and Gen Z (Dwinanda et al., 2022). The following hypothesis is thus, developed:

*H3: Perceived enjoyment of TikTok positively influences the urge to purchase impulsively.*

***Perceived Usefulness and Urge to Purchase Impulsively***

Perceived usefulness is the extent to which the users believe that the particular features of image-sharing social commerce platforms will enhance their shopping productivity (Anandarajan et al., 2002). There is limited research on perceived usefulness and its direct relationship to the urge to purchase impulsively within the social commerce context. Chen et al. (2020), Xiang et al. (2016), and Parboteeah et al. (2009), among other researchers, employed the S-O-R model to test perceived usefulness with perceived enjoyment rather than directly to urge to buy impulsively. Although Lee and Chen (2021) testify that perceived usefulness does not positively affect impulse purchases in live-streaming commerce in China, it has yet to be tested in TikTok in Malaysia. Hence, this study factors this variable's direct relationship with the response urge to purchase impulsively. Thus, the final hypothesis is conceived:

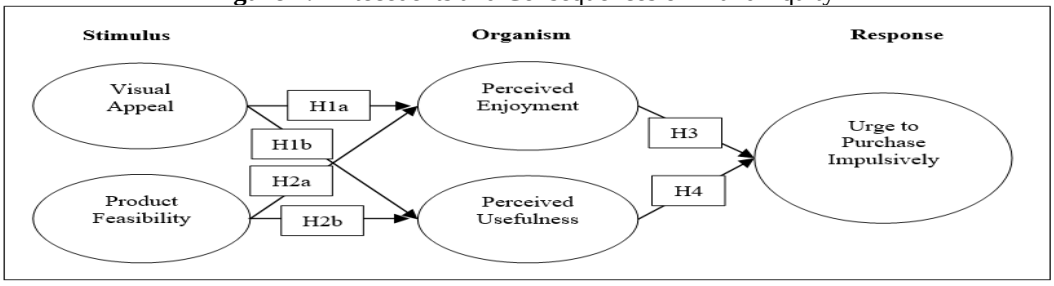
*H4: Perceived usefulness positively influences the urge to purchase impulsively.*

## 3. RESEARCH METHODOLOGY

The research framework presented in Figure 2 illustrates the variables used in this study and the hypotheses based on the S-O-R model, adopted from Chen et al. (2020) as one of the most recent relevant studies. The in-depth discussions of the researchers' topic of interest and the relevance of variables used within the context of the paper were written (through the lens of social commerce platforms, specifically TikTok). Those variables aligning with this article are visual appeal, feasibility, perceived enjoyment & usefulness, all investigated together under one context of the Social Commerce Platform (SCP). Limited studies investigated the implications of SCP on consumer impulse purchase behaviour, focusing on product feasibility and visual appeal. TikTok was relatively new, moving from the infancy stage towards growth as most sources specified the app gained popularity around the first quarter of 2020; as Montag et al. (2021) reported, over 800 million monthly users.

We conceptualize the relationship between product-related stimulus variables (visual appeal and product feasibility) and the organism variables at affective (perceived enjoyment) and cognitive (usefulness) reactions. We then assess the subsequent effects on the response variable (urge to purchase impulsively).

**Figure 1:** Antecedents and Consequences of Brand Equity




***Source:*** Chen et al. (2020).

### *3.1. Sampling Method and Questionnaire Design*

This study collected primary data through the distribution and collection of close-ended questionnaires across online channels. The groups of gen Y and Z between the age of 18-40, Malaysian TikTok users, were chosen for this study, as data collected on Start.Io (2023) indicates the majority of Malaysian users of the application falls between the age brackets. The questionnaire consisted of two primary sections: Section A asked demographic-related questions, and Section B involved the constructs measurements of the study. The measures regarding perceived enjoyment, perceived usefulness, and the urge to purchase impulsively were modified from Xiang et al. (2016)'s research. The measurements for visual appeal and product feasibility were revised from Chen et al. (2020)'s study. The constructs were assessed on a 6-point Likert scale of agreeableness from 1 to 6. 1 (strongly disagree), 2 (disagree), 3 (slightly disagree), 4 (slightly agree), 5 (agree), 6 (strongly agree). While the 5-point Likert scale is the most used in survey research, we opted for the 6-point Likert scale to prevent neutral bias. It encourages participants to consider the question more carefully and choose either leaning positively or negatively (Thompson, 2018). Human perceptions are rarely neutral; hence a six-point scale is the most suitable for this study (Thomson, 2018; Taherdoost, 2019).

**Table 1:** Respondents Demographic Profile

| **Demographics** | | **Frequency** | **%** |
|---|---|---|---|
| Gender | Male | 43 | 25.4 |
| | Female | 126 | 74.6 |
| Age Group | Below 20 years old | 48 | 28.4 |
| | 21-30 years old | 116 | 68.6 |
| | 31-40 years old | 5 | 3.0 |
| Race | Chinese | 113 | 66.9 |
| | Malay | 30 | 17.7 |
| | Indian | 16 | 9.5 |
| | Others | 10 | 5.9 |
| Marital Status | Single | 165 | 97.6 |
| | Married | 3 | 1.8 |
| | Widowed | 1 | 0.6 |
| Nationality | Malaysian | 161 | 95.2 |
| | Non-Malaysian | 8 | 4.7 |
| Employment Status | Student | 155 | 91.7 |
| | Employed | 9 | 5.3 |
| | Self-Employed | 3 | 1.8 |
| | Unemployed | 1 | 0.6 |
| | Housewife | 1 | 0.6 |
| Education Level | Secondary | 2 | 1.2 |
| | Post-Secondary | 9 | 5.3 |
| | Tertiary | 153 | 90.5 |
| | Postgraduate | 5 | 3.0 |
| Income Level | Less than RM,2500 | 160 | 94.6 |
| | RM2,500 – RM4,849 | 4 | 2.4 |
| | RM4,850 – RM7,099 | 0 | 0 |
| | RM7,110 – RM10,959 | 4 | 2.4 |
| | RM10,960 – RM15,0399 | 1 | 0.6 |

The G*Power provides a suggested minimum sample size of 129; nevertheless, we obtained 169 valid responses from generations Y and Z respondents. Data was collected amidst the Covid-19 pandemic from November 2020 to January 2021 via purposive sampling and distributed through social networking platforms, social groups, and forums — more specifically, Facebook's TikTok sharing group, WhatsApp friends and family groups, and Instagram comment sections on videos with #TikTok, and the comments section of TikTok videos by Malaysian creators. Purposive sampling ensures respondents are smartphone users with experience using the TikTok application in Malaysia. As TikTok users are internet users, and the target respondents scatter across Malaysia, it is reasonable to acquire responses through digital channels than offline distribution. Table 1 below summarises the sample demographic profiles. From the demographic analysis, 74.6% of respondents are female, where 68.6% are aged between 21-30, consisting of students primarily at 91.7% and 95.2% are Malaysian, with 90.5% completed or undergoing tertiary education, 94.6% earning less than RM2,500 a month. It is not surprising that more respondents are female globally, and in Malaysia, as of early 2022, 56.8% of TikTok's ad audience was female (Resolute, 2022).

## 4. RESULTS AND DISCUSSION

This study uses SPSS version 27 for descriptive analysis. Table 2 shows the mean and standard deviations computed for the endogenous and exogenous latent variables used in this study based on the rating given by the respondents.

**Table 2**: Descriptive Statistics for Variables

| No | Variables | Mean | Std. Deviation |
|---|---|---|---|
| 1 | Urge to Purchase Impulsively | 3.4753 | 1.30560 |
| 2 | Perceived Enjoyment | 4.6824 | 0.94967 |
| 3 | Perceived Usefulness | 3.4655 | 1.32299 |
| 4 | Visual Appeal | 4.4178 | 1.01415 |
| 5 | Product Feasibility | 3.8036 | 1.17706 |

The descriptive statistics showed that perceived enjoyment had the highest mean of 4.68 and lowest standard deviation of 0.95, indicating responses lean more towards slightly agreeing with the minimum dispersion. The lowest mean of 3.47 and highest standard deviation of 1.32 were obtained by perceived usefulness, leaning a little less than half of the Likert scale showing average slight disagreement on the helpfulness of TikTok for shopping, with the responses being more spread out from the mean.

Smart-PLS is used to validate the measurement constructs and examine the structural model. The resultant convergent validity for the measurement constructs is in Table 3. Smart-PLS's results show that all constructs have substantial composite reliability ranging from 0.94 to 0.959, with a minimum average variance extracted value of 0.798, exceeding the threshold of 0.7 and 0.5 (Hair et al., 2017), respectively. Table 4 shows the Heterotraid-Monotrait (HTMT) criterion with a 95% bias-corrected and 5000 bootstrapping sample. As all HTMT interval values are clear from a value of 1, the discriminant is validated.

**Table 3:** Correlation Validity for the Measurement Model

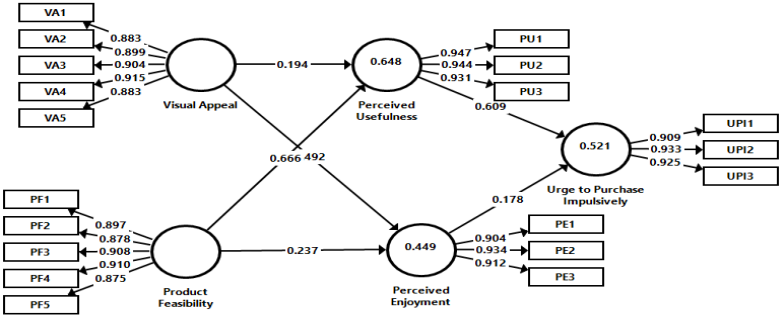
| Constructs | Indicator | Factor Loading | CR | AVE |
|---|---|---|---|---|
| Visual Appeal (VA) | VA1 | 0.883 | 0.954 | 0.805 |
| | VA2 | 0.899 | | |
| | VA3 | 0.904 | | |
| | VA4 | 0.915 | | |
| | VA5 | 0.883 | | |
| Product Feasibility (PF) | PF1 | 0.898 | 0.952 | 0.798 |
| | PF2 | 0.878 | | |
| | PF3 | 0.908 | | |
| | PF4 | 0.910 | | |
| | PF5 | 0.875 | | |
| Perceived Enjoyment (PE) | PE1 | 0.904 | 0.94 | 0.840 |
| | PE2 | 0.934 | | |
| | PE3 | 0.912 | | |
| Perceived Usefulness (PU) | PU1 | 0.947 | 0.959 | 0.885 |
| | PU2 | 0.944 | | |
| | PU3 | 0.931 | | |
| Urge to Purchase Impulsively (UPI) | UPI1 | 0.909 | 0.945 | 0.850 |
| | UPI2 | 0.933 | | |
| | UPI3 | 0.925 | | |

**Table 4:** Discriminant Validity by Heterotraid-Monotrait (HTMT) Criterion

| | VA | PF | PE | PU | UPI |
|---|---|---|---|---|---|
| VA | | | | | |
| PF | 0.692 (0.605, 0.762) | | | | |
| PE | 0.697 (0.617, 0.767) | 0.604 (0.506, 0.685) | | | |
| PU | 0.667 (0.580, 0.736) | 0.847 (0.763, 0.904) | 0.592 (0.501, 0.673) | | |
| UPI | 0.624 (0.524,0.709) | 0.75 (0.645, 0.0829) | 0.56 (0.451, 0.649) | 0.765 (0.673, 0.838) | |

***Note:*** The values in the brackets represent the 95% bias-corrected and accelerated confidence derived from bootstrapping with 5000 samples. VA=Visual appeal, PF=Perceived feasibility, PE=Perceived enjoyment, PU=Perceived usefulness, UPI= Urge to purchase impulsively.

**Figure 2:** Structural Model




***Note:*** Outer -Path coefficient, Inner - R square.

**Table 5:** Summary of the Assessment for the Structural Model

| HP | Path | Std. Beta | Std. Error | *t*-value | Decision | $R^2$ | $Q^2$ | $F^2$ | VIF |
|---|---|---|---|---|---|---|---|---|---|
| H1a | VA→PE | 0.492 | 0.075 | 6.558** | Supported | 0.449 | 0.369 | 0.254 | 1.729 |
| H1b | PF→PE | 0.237 | 0.076 | 3.130** | Supported | | | 0.059 | 1.729 |
| H2a | VA→PU | 0.194 | 0.081 | 2.405** | Supported | 0.648 | 0.564 | 0.062 | 1.729 |
| H2b | PF→PU | 0.666 | 0.080 | 8.284** | Supported | | | 0.728 | 1.729 |
| H3 | PE→UPI | 0.178 | 0.066 | 2.690** | Supported | 0.521 | 0.438 | 0.046 | 1.424 |
| H4 | PU→UPI | 0.612 | 0.067 | 9.123** | Supported | | | 0.544 | 1.424 |

***Note:*** ** $p < 0.01$.

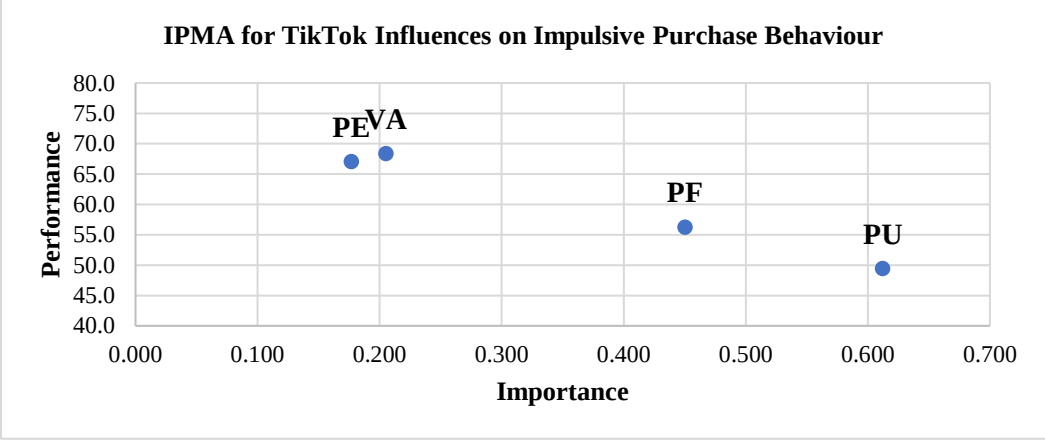
Figure 2 depicts the structural model, and Table 5 tabulates the assessment summary of the bootstrapping with 5000 subsamples. All hypotheses have a significant positive relationship with a p-value of less than 1%. Visual appeal has a higher path coefficient on perceived enjoyment ($\beta$ = 0.492) than perceived usefulness ($\beta$ =0 .194). In contrast, Xiang et al. (2016) and Chen et al. (2020) reported that visual appeal has a more significant influence on perceived usefulness than perceived enjoyment in their study on a social commerce platform (other than TikTok). In addition, Chen et al. (2020) also found that product feasibility has a more decisive influence than visual appeal in perceived enjoyment. The contradictory results show that Malaysian and China users have different perceptions of visual appeal. For Malaysian users, when the products shown in TikTok videos are attractive and visually cheerful, they will feel their interaction with TikTok was enjoyable and exciting. Most notably, product feasibility did yield the highest path coefficient in influencing perceived usefulness at 0.666. Hence, if the users feel that the products displayed in the TikTok videos are practical and what they are looking for, this will increase their shopping performance and effectiveness. Chen et al. (2020) did not test this path.

R square of 0.449 and 0.648 indicate that 44.9% total variation in perceived enjoyment and 64.8% of the total variation in perceived usefulness can be explained by total variation in visual appeal and product feasibility, respectively. In addition, perceived enjoyment and perceived usefulness contribute 52.1% of the variation in the urge to purchase impulsively. Hair et al. (2017) described an R2 value of 0.50 as moderate for research focused on marketing, while Sarstedt and Mooi (2019) further specified that $R^2$ values of 0.50, 0.30, and 0.10 are substantial, moderate, and weak, respectively, primarily for exploratory research using cross-sectional data. This study uses cross-sectional data; hence the model's explanatory power (R square of 0.521) is remarked as moderate by Hair et al. (2017) and as substantial by Sarstedt and Mooi (2019). Among the two exogenous latent variables tested with the urge to purchase impulsively, the higher beta value of perceived usefulness ($\beta$ = 0.612, $p < 0.01$) shows that it is the most significant determinant versus perceived enjoyment ($\beta$ = 0.178, $p < 0.01$). Besides, the $f$ square value of 0.544 of perceived usefulness indicates that it substantially produces R square for impulsive purchases.

As displayed in Figure 3, further analysis using Importance-performance map analysis (IPMA) in Smart-PLS indicates that perceived usefulness and product feasibility exerted the top and second significant influence on the urge to purchase impulsively with a standardized path coefficient of 0.612 and 0.450, respectively. Despite their essential role in influencing impulsive purchases, these two variables have much lower performance than other variables, which is also reflected by the respondent's low agreement toward their constructs, as in Table 2. IPMA analysis is then performed at the indicator level to gain better insight into improving construct performance. PU1 ("Using TikTok can improve my shopping performance") and PU2 ("Using TikTok can increase my

shopping productivity") are two essential indicators of an impulse purchase that have much room for improvement in their performance. The recent launching of TikTok Shop in Malaysia, which integrates the whole shopping process within the app itself, is the right move to increase the urge to purchase impulsively among Malaysian users.

**Figure 3:** IPMA for TikTok Influences on Impulsive Purchase Behaviour




## 5. CONCLUSION

Impulse buying behaviour has long been studied as a behavioural response toward certain stimuli contingent on many factors. With the advent of social media adoption, platform trends such as TikTok, increasing user acquisition, business adoption, and evolving marketing strategies, the digital space has opened doors for commerce. The global Covid-19 pandemic has brought about increased internet usage and online business. According to Global Data (2020), many brick-and-mortar shops closed due to the pandemic, which forced companies to transform from offline to online. A surge in online purchasing and shopping from Malaysian consumers resulted in the country's extensive market growth in e-commerce. TikTok is one of Malaysia's most used social commerce platforms among younger generations, such as Gen Y and Z. Institute for Capital Market Research Malaysia (2021) states there are 17.1 million Malaysians between 10-40 years old, making up 52.5 % of the population. As this research focuses on these age groups, it can provide unique insights for businesses to better strategies their marketing efforts. Generation Z is soon becoming a lucrative market segment. Examining the success of TikTok amongst this cohort can provide insights into how the rising generation interprets cultural trends and their cross-generational dialogue with brands (Mintel, 2020).

Practical implications derived from this study can be associated with young consumers in Malaysia who are active subscribers to TikTok influencers and key opinion leaders (Koay et al., 2021; Lee et al., 2022). For one, this form of collaborative branding and marketing can induce impulse purchases when infused with features projecting usefulness and enjoyment. The TikTok interface can enhance perceived usefulness by accentuating links and processes for shopping and payment activities. Besides, TikTok influencers and key opinion leaders in advertisements or live streaming

should project simple and clear ways for potential buyers to shop and purchase. Concerning enjoyment, TikTok branding videos should be designed with aesthetics that arouse pleasant emotions among users — this is affected through a convergence of catchy songs, memes, dance, and cute images often associated with TikTok videos. Similarly, Malaysian TikTok influencers and key opinion leaders evoking enjoyment through charisma can compel impulse buying behaviors.

This study's contribution is situated within TikTok as a social media and a social commerce platform, a research domain in which scarce studies have investigated the implications TikTok has on consumer impulse purchase behaviour. This study identifies perceived usefulness as the most vital factor in adapting the S-O-R model. The IPMA results show room for improvement on TikTok's influence on perceived usefulness and product feasibility. TikTok marketers could use their creativity to develop a compelling video emphasizing product feasibility deemed suitable and practical for the audience. Marketers could utilize the newly launched TikTok shop that provides a seamless shopping experience among TikTok users, improving the perceived usefulness of the targeted consumers and increasing their tendency for impulsive purchases.

This study advocates that marketers should enhance usefulness and enjoyment by employing stimulus cues to entice potential shoppers on TikTok. This observation highlights the importance of UI/UX and a well-designed user interface of a platform. The shoppertainment phenomenon in Malaysia is dominant in the purchasing trend, where consumers purchase from brands offering entertainment. The phenomenon has further proven that our study's findings of consumer perceived enjoyment remarkably affect their urges to buy impulsively.

Policymakers may consider policies such as the Terms of Service for users to be 18 and above to address issues concerning impulse buying tendencies among minors and vulnerable parties. Governmental agencies can push for location-based login requirements to identify the user's country and apply required national digital identity solutions to validate a citizen's age when logging on. They can also enforce sponsorship disclosure laws observed in the US with the Federal Trade Commission to hamper sneaky marketing and rampant impulse buying.

Future studies should inspect the stimulus and human response of the S-O-R model. To yield more accurate results, researchers may employ qualitative methods such as interviews and open-ended questions by presenting TikTok videos with advertised products (with or without the respondent knowing in a double-blind experiment) and answering questions after. Finally, when studying TikTok factors to influence impulse purchase behaviour, researchers should look into product recommendations and influencers, from the platform level to third-party advertisements, to influencer endorsements. Being more specific in defining the focus can help provide better clarity and insight on impulse purchases on the platform.

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