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Exploring the Effect of Situational Factors on Hedonic and Utilitarian Browsing for Mobile App Impulsive Buying

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Abstract

The advent of internet-based technology has had a profound impact on the utilization of technology and the conduct of its users. The present utilization of technology is resulting in the creation of a globally networked human population. Impulse purchasing is a prevalent consumer behavior frequently observed within the realm of Internet commerce. This study investigates the situational variables that influence impulsive buying behavior among customers that utilize online mobile application marketplace platforms. The research model encompasses several key components, namely the physical surroundings, social environment, time perspective, and hedonic and utilitarian browsing. These aspects play a crucial role in influencing impulse buying behavior. The sample was selected using a purposive sampling strategy, specifically targeting individuals aged 18-40 years who were deemed to possess mobile devices. The data collection methodology employed in this study was the distribution of online questionnaires to a specific target population meeting preset criteria. Specifically, the participants were required to be mobile device users who accessed online market board applications and had engaged in frequent purchasing activities during the past six months. The employed methodology for data analysis is Structural Equation Modelling. The results derived from this study suggest that the impact of the physical environment on hedonic browsing is negligible, although it does have a discernible influence on utilitarian browsing. The browsing activities of individuals are influenced by the social environment, encompassing both hedonic and utilitarian factors. The temporal orientation does not exert an influence on hedonic browsing, but it does have an impact on utilitarian browsing. The impact of utilitarian browsing on impulse buying is found to be insignificant, but hedonic browsing is found to have a beneficial influence on impulse buying tendencies.

Keywords: Situational factors, Browsing behavior, Digital marketing, Impulsive buying, hedonic browsing

Introduction

The advent of internet-based technology has had a profound influence on the utilization of technology and the conduct of its users. The utilization of technology in contemporary society has resulted in the creation of a globally networked population. According to global internet user data, it is projected that by 2022, the global population will reach approximately 7.98 billion individuals. Among this population, there are expected to be around 5.03 billion internet users,

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5.34 billion mobile phone users, and 4.70 billion individuals actively engaged in social media platforms (Mahmud, Mamun, & Abdelgawad, 2022). Based on data provided by the Central Bureau of Statistics, it has been reported that around 62.10% of the population residing in Indonesia has access to the Internet as of 2021 (Sadri, 2023). The widespread utilization of the Internet indicates a significant level of public acceptance and a corresponding increase in the accessibility of information. In the year 2018, around 88.46% of families residing in Indonesia possessed at least one mobile phone within their premises. While observing the data, it was found that there was a rise of almost 2% in this particular statistic. The collected data indicated that approximately 90.54% of homes in Indonesia possessed at least one cellular device. The potential for e-commerce in Indonesia presents promising prospects. The majority of goods and services that are promoted are conducted through Internet platforms (El Junusi, 2020). In the Indonesian setting, the prevalence of engaging in internet purchasing is quite significant. Indonesian individuals have a preference for employing internet mechanisms via their smartphones whether seeking information, utilizing services, or making goods purchases. According to Chen and Dermawan (2020), in the context of Indonesia, the Internet serves as a significant resource for both making purchases and obtaining information.

The significance of application-based commerce has been amplified due to the rapid advancements in wireless communication technology (Zheng et al., 2019). Online application-based trading refers to the execution of electronic trading operations conducted in a wireless setting through the utilization of internet connectivity. As stated by Mai (2023), application-based commerce enables users to engage in online transactions using mobile devices, specifically cell phones. Users have exhibited an increased level of proficiency in utilizing cell phones as instruments for accessing information, making decisions, and engaging in purchasing activities (Mothersbaugh, 2016). The nature of mobile application-based trading, utilizing devices such as cell phones, differs significantly from electronic trading conducted via PCs due to the increased accessibility and flexibility it offers in terms of time and location (Nair et al., 2023)

In recent years, there has been a growing body of research investigating the phenomenon of mobile application-based commerce (Pujadi et al., 2020). However, it is important to note that the focus on impulsive buying models specifically tailored to users of mobile application-based platforms remains limited in the existing literature. Impulse buying is a prevalent and recurrent behavior observed among consumers (Wongkhamdi, Cooharajanone, & Khlaisang, 2020). The use of mobile-based applications is expected to lead to a rise in impulse purchase behavior among users and this may be attributed to the inherent characteristics of these applications, such as their high interactivity and convenience (Lee, Gan, & Liew, 2022). People that often utilize various mobile or online applications without proper strategizing generally have a tendency to engage in impulsive purchasing behavior. Given the escalating nature of this phenomenon within the Indonesian environment, it is imperative to undertake a comprehensive research study. Over half of the Millennial population in Indonesia can be classified as impulsive consumers, placing them within the Asia Pacific region (Ayuningtyas, Prihatiningsih, & Laura, 2018). These people exhibit a strong inclination toward adopting an electronic-oriented lifestyle. A previous study has characterized impulse buying as an unexpected purchasing behavior that arises from the immediate influence of specific external stimuli (Zheng et al., 2019). Occasionally, this behavior occurs as a consequence of environmental stimuli encountered throughout the purchasing process. Several previous scholars have employed motivation theory to comprehend the correlation between motives and the behavior exhibited by students (Arul Rajan, 2020). The topic of utilization motivations



and hedonic motivation in relation to impulse purchases has also been examined by scholars. There is a correlation between the experience of pleasure and hedonic incentives when an individual engages in a purchasing activity. During the process of completing the search activity, customers experience transient feelings of pleasure and satisfaction (Zheng et al., 2019). Previous research has indicated that customers who prioritize pleasure-seeking over outcome evaluation during the shopping process are more likely to experience hedonic values, which subsequently influence their purchasing behavior.

The practice of impulse buying is found to be influenced indirectly by utilitarian motives (Kimiagari & Malafe, 2021). Consumers driven by utilitarian motivation prioritize the fulfillment of their original shopping objectives and consumption requirements, aligning them with their pre-established expectations. They exhibit a reluctance to engage in impulsive purchasing behaviors. When an individual seeks knowledge in an enjoyable manner, they experience hedonic motivation, which subsequently leads to impulsive purchasing behavior. Consumers frequently seek guidance and perspectives from external sources (Izquierdo-Yusta, Martínez-Ruiz, & Pérez-Villarreal, 2022). The majority of users of mobile applications are primarily swayed by influencers in their vicinity (Grafström, Jakobsson, & Wiede, 2018). People generally engage in direct conversations with peers or utilize social media platforms. This inclination towards social interaction stems from the human tendency to mirror the behaviors of those in their proximity. Simultaneously, individuals also strive to project a positive image to others (Ali Taha et al., 2021). Shoppers driven by utilitarian motives are well-aware of their primary shopping objectives. These consumers actively seek more comprehensive information to fulfill their functional aims (Indrawati et al., 2022). Scholars have indicated that individuals employ mobile apps both for communication and online shopping purposes (Wang, Liu, & Parker, 2020). The contextual attributes of the shopping environment significantly impact impulsive buying behavior. Hence, the primary objective of this study is to investigate how factors such as time perspective, social surroundings, and physical context influence impulsive purchasing behavior, considering both utilitarian and hedonic motives while browsing.

Literature Review

Situational Factors

Situational factors encompass brief occurrences that exert an impact on consumer behaviors, encompassing influences like culture and consumer personality. Consumer personality traits have a tendency to drive impulsive purchases (Barakat, 2019). The capacity of consumers to make purchases becomes evident when financial resources are at their disposal. Likewise, circumstances such as consumers' awareness of a novel product prompt reconsideration during shopping. This awareness significantly correlates with impromptu buying decisions. Numerous aspects of situational factors, including crowd density and employee interactions, constitute facets of social factors that tend to sway consumers towards spontaneous purchases (Prakash & Sharma, 2016). Situational factors can be in the physical environment, social, and time aspects.

The tangible situational factor that stands out the most is the physical environment. This environment, which shapes consumer choices, encompasses elements such as color, sound or music, lighting, weather conditions, and spatial arrangement (Ayalp et al., 2016). Each aspect of the physical environment is meticulously designed to evoke specific emotions in buyers, thereby intensifying its impact on purchasing decisions. It serves as a tangible, spatial dimension encompassing all the factors that contribute to consumer choices. Alongside the physical

environment, the social context also plays a role in influencing consumer behavior. The social environment encompasses all types of social interactions occurring among individuals within a given setting. Consumers engage in activities while observing others engaging in specific actions (Zhang et al., 2017), often displaying a proclivity to mimic similar behaviors. Within the social environment, there exists the potential to encourage consumers to make more purchases than they would when shopping alone and without external influences. Another influential situational factor is time perspective, which relates to the impact of time on consumer buying choices. Time, as a contextual element, also exerts a considerable influence on consumer purchasing behavior. The quantity of time available for shopping substantially shapes the decision-making process for consumers (Unger, Lyu, & Zimbardo, 2018). Time dictates the scope and depth of information that consumers seek when engaged in shopping activities.

Impulsive buying

Exploring the correlation between impulse purchasing and mobile-based applications is a captivating endeavor due to the inherent attributes of heightened interactivity and convenience associated with these applications (Ittaqullah, Madjid, & Suleman, 2020). Researchers have articulated impulsive buying as an unpremeditated purchase that ensues without prior intention, often triggered by external stimuli during the shopping process (Sohn & Lee, 2017). Prior investigations have delineated four distinct categories of impulsive buying: planned, suggestive, reminder-based, and pure impulsive buying (Chan, Cheung, & Lee, 2017). According to Redine et al. (2023), the occurrence of impulse buying emerges when customers initiate the purchase process without any premeditated intention, yet their emotional response towards a product prompts them to make the purchase. Conversely, as highlighted by Chan et al. (2017), impulse buying is triggered when consumers recall product information or advertisements even without an initial inclination to buy. Additionally, suggestive buying refers to the scenario in which consumers encounter a product for the first time and cultivate a desire to purchase it. Ultimately, when individuals choose to avail of a product or service due to a promotional or discounted offer, this action is referred to as suggestive buying. Within the realm of online impulse buying, two distinct responses exist: actual impulse buying and impulse buying (Zheng et al., 2019). The impulse to make a spontaneous purchase is characterized by an initial urge or inclination to buy a product, subsequently followed by the actual act of purchasing. It's noteworthy to emphasize that not every impulsive urge translates into a final purchase (Jie et al., 2022).

Motivation and browsing

Researchers have highlighted that motivation serves as the driving impetus capable of influencing an individual's actions and guiding those actions towards specific objectives. Within the context of online shopping, two distinct types of motivation play pivotal roles: hedonic and utilitarian motivations (Sumarliah et al., 2022). Hedonic motivation pertains to experiential consumers who prioritize engagements that yield pleasure or contentment from the experience itself. The consumer's emphasis on activities within a website is often referred to as a recreational endeavor (Sumarliah et al., 2022). Utilitarian motivation pertains to individuals who prioritize the practical objectives of products, concentrating on their necessities and advantages. Customers driven by utilitarian motives adhere to well-defined purchasing plans and strive to identify the most effective means of satisfying their shopping requirements. One



approach for obtaining information online involves browsing through web pages. Browsing signifies a deliberate endeavor to scrutinize and explore products as a means of gathering information (Yuan, Zhang, & Wang, 2022). The act of browsing holds significant importance as a means of acquiring crucial shopping-related information. The internet has an impact on individuals who engage in regular online browsing, even if they don't intend to participate in any shopping activities (Indrawati et al., 2022). The terms "hedonic motivation" and "utilitarian motivation" share similar connotations with the concept of attempting and seeking information, albeit driven by distinct motivational factors.

Hedonic endeavors revolve around seeking enjoyable experiences through interactions with web pages. Conversely, utilitarian browsing centers on procuring information or products that align with consumers' functional expectations. Within this framework, while hedonic and utilitarian motivations contribute to understanding impulse buying, they encounter limitations when applied to elucidating online purchases within the realm of mobile applications. While consumers yearn for experiences that trigger impulsive actions (Zheng et al., 2019), in the context of mobile application usage, individuals often lean towards conventional communication methods when interacting with others, rather than solely relying on personal experiences. Addressing this disparity involves considerations of time and environmental factors (Arul Rajan, 2020)

Hypothesis Development

The tangible situational aspect, known as the physical environment, is readily perceptible and encompasses attributes like spatial arrangements, weather conditions, lighting, music, sounds, and colours. Each element within the physical environment is meticulously crafted to evoke particular emotions (Woodbridge et al., 2018). This concrete spatial dimension of the environment encompasses various consumer activities. Certain constituents of the physical environment within online markets are conveyed through text, sound, and images, influenced by constraints like screen dimensions, color limitations, and resolution. The imperative of efficiency and convenience during the shopping process holds substantial influence over consumers, prompting them to engage in searches using mobile applications. The impact of physical browsing on hedonic exploration is noteworthy, as the well-structured presentation of an online marketplace can captivate customers' interest (Akram et al., 2018). Consumers derive enjoyment and entertainment from skilfully designed and orderly web pages (Zheng et al., 2019). Comparable findings were demonstrated by Moon et al. (2017), who unveiled that the entire experience within hedonic browsing aims at acquiring benefits like pleasure and entertainment, rather than just product utilization. Enhanced attributes of the physical environment within the online market application menu correlate with heightened efforts in hedonic browsing. The subsequent hypothesis is as follows.

H1: *The physical environment has a positive effect on hedonic browsing.*

The physical environment plays a pivotal role in facilitating customers' efficient and effective acquisition of necessary information. By enhancing shopping efficiency and reducing information imbalances, the physical environment has the potential to alleviate customer distrust that may arise among webpage users when using the mobile app. Such improvements can serve as motivation for users, encouraging their continued engagement with the webpage. Conversely, inaccuracies in images and text can lead to prolonged browsing times for consumers (Rezaei et al., 2016), ultimately diminishing their desire to explore. Components of

the physical environment directly relate to the clarity and ease of understanding of textual content, images, and mobile application-based trading services. Components within the physical environment are thought to amplify utilitarian browsing among consumers (Zheng et al., 2019), as browsing through web pages that are clear and comprehensible saves time. Web pages that furnish comprehensive and easily comprehensible information can enhance consumer searches by simplifying the acquisition of necessary information. The ensuing hypotheses are presented below.

H2: *The physical environment has a positive effect on utilitarian browsing*

The social environment encompasses the realm of interactions among individuals within a given context. Consumers have the opportunity to engage in interactions or foster specific activities based on their observations of others (Jamil et al., 2022). This social context unfolds when multiple individuals coexist, offering shopping preferences that may influence others to make various purchases. Prospective customers frequently synchronize their choices, viewpoints, and attitudes with those who share similar interests. A considerable number of young and teenage customers commonly discuss their preferences with peers, subsequently impacting their hedonic motivation (Ahlers, 2019). Norms or role models that function as benchmarks can stimulate hedonic browsing behaviors, stemming from the desire to experience joy or comfort, inspired by observations made during social interactions. The resultant hypothesis is formulated as follows. .

H3: *The hedonic browsing is significantly impacted by social environment.*

Frequently, there are customers who aspire to amass extensive information to fulfill their predetermined shopping objectives. Such consumers engage in utilitarian browsing with the aim of obtaining product details that align with their envisioned criteria. Those who partake in utilitarian browsing during online shopping heavily rely on search results and information acquisition (Arul Rajan, 2020), often drawing on the input of colleagues. Moreover, consumers' expectations are influenced by information disseminated through media channels and social networks, which significantly shape the landscape of mobile application-based trading services. Elements within the media realm, particularly those encompassing social interactions, actively foster utilitarian browsing. The presence of social interactions tends to elevate motives during the course of utilitarian browsing (Fondevila-Gascón et al., 2020). The hypothesis proposed is:

H4: *The Social Environment has a positive effect on utilitarian browsing.*

Extended browsing durations while engaging in mobile application-based commerce can offer consumers a sense of enjoyment during their leisure moments. Convenience in accessing the online realm is contingent on time allocation. Having ample free time cultivates a relaxed environment devoid of haste. In the context of hedonic browsing, sufficient time is presumed to create an atmosphere where consumers can reduce stress or unwind. The utilization of hedonic browsing is promoted by the presence of opportunities for such activities within mobile applications (Parker & Wang, 2016). The likelihood of engaging in hedonic browsing increases when greater time availability is present (Lai & Chong, 2023). The hypothesis developed is as follows.

H5: *Time Perspective has a positive effect on hedonic browsing.*

Consumers who engage in utilitarian browsing do so with specific objectives in mind, aiming to extract particular information. Swift and effortless searches are favored by these



consumers, as they require minimal time investment, resulting in savings in terms of effort, money, and time (Cuandra, 2022) within the context of mobile application-based commerce. The presence of available time undoubtedly affords consumers ample opportunity to peruse the requisite information. Effectiveness in time management and convenience assume crucial roles in motivating customers to embark on utilitarian browsing endeavors (Parker & Wang, 2016). As previously mentioned, the propensity for utilitarian browsing is augmented in scenarios where more time is accessible. Consequently, time emerges as a pivotal determinant in the realm of utilitarian browsing. Thus, we hypothesize that

H6: *Time Perspective has a significant positive effect on utilitarian browsing*

In the context of motivating customers for the purchasing process, utilitarian motivation tends to hold a stronger influence compared to hedonic motivation. Within the domain of online shopping, utilitarian browsing exhibits a notable prevalence due to the ease and efficiency with which information is accessible on websites. The core objective of utilitarian browsing is to acquire information aligning with customer expectations (Parker & Wang, 2016), a point reiterated by Zheng et al. (2019). This alignment with utilitarian browsing efforts is echoed in a study by Arul Rajan (2020), which indicates that consumers who engage in utilitarian browsing strive to secure products in accordance with information availability and risk mitigation endeavors. Individual browsing behavior plays a significant role over an extended period, allowing customers to mitigate or eliminate the risks associated with shopping activities. During an impulse purchase, the consumer engages in a spontaneous buying decision. Consumers driven by utilitarian motives are in pursuit of information or products that align with their expectations (Hussain, 2018). The congruence between the functional aspects and the acquired information can serve as an impetus for unplanned purchases. Consequently, utilitarian browsing can effectively stimulate impulse buying behaviors (Zheng et al., 2019). The hypothesis proposed is:

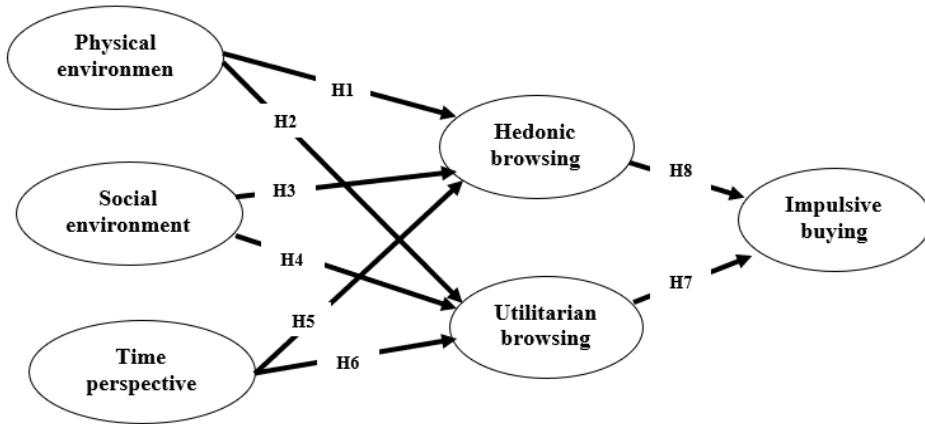
H7: *Utilitarian browsing has a positive effect on impulse buying.*

Engaging in web browsing is a significant component of the shopping experience. Hedonic browsing, primarily centered on delivering entertainment and enjoyable interactions through web pages, can wield a positive influence on impulse buying (Widagdo & Roz, 2021). Consumers opt to utilize their leisure moments for browsing, aiming to do so in a manner that's both comfortable and pleasurable (Parker & Wang, 2016). Consumers typically dedicate their free time to hedonic browsing, considering it a recreational activity. Notably, in the context of mobile application-based commerce, individuals also undertake hedonic browsing as a means of relieving stress or alleviating pressure (Parker & Wang, 2016). Hedonic browsing is acknowledged for its capacity to induce a state of relaxation, thereby prompting consumers towards impulsive purchases (Arul Rajan, 2020). The assessment of impulse buying encompasses the ability to elicit swift reactions, particularly in relation to the hedonic motivation aspect that guides customers in making purchase choices without extensive contemplation (Aragoncillo & Orus, 2018). The degree of comfort experienced during browsing is directly proportional to the likelihood of stimulating impulse buying behavior. The hypothesis developed is:

H8: *Hedonic browsing has a positive effect on impulse buying.*

Based on the development of the hypotheses that have been discussed previously, the models developed in this study are :

Fig 1. Conceptual Research model



Methodology

This research adopts a post-positivist approach to evaluate the model concerning impulsive buying behavior within users of online marketplace applications and its associated factors. The study's scope encompasses consumers of mobile devices in Indonesia who possess active internet connections and participate in online shopping activities. Employing a purposive sampling technique, data was gathered from respondents aged between 18 to 40 years, who utilize mobile devices. Specifically, the sampled individuals are customers from Indonesia engaged in online purchases over the past six months. The data collection involved administering questionnaires to the participants. The survey scale used for data collection was derived from works by Zheng et al. (2019), Garofalakis, Mettouris, and Stefanis (2007), and Aragoncillo and Orus (2018). Collected data was subsequently reviewed for completeness and assessed for quality. The analytical approach employed in this research involves Structural Equation Modeling (SEM) analysis.

Data Analysis and Findings

This study used validity and a reliability test. The results of the validity test using factor analysis are as follows:

Table 1: Rotated Component Matrix

	Component					
	1	2	3	4	5	6
PE1				.615		
PE2				.804		
PE3				.752		
PE4				.811		
SE1					.782	
SE2					.865	
SE3					.877	
TP1						.735
TP2						.788



TP3		.802
UB1	.769	
UB2	.622	
UB3	.714	
UB4	.639	
UB5	.677	
HB1	.859	
HB2	.868	
HB3	.848	
IB1		.867
IB2		.894
IB3		.844
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. ^a		
a. Rotation converged in 7 iterations.		

Source: Primary Data Processed

Referring to the above Table 1, the arrangement of question items under the categories of physical environment (PE), social environment (SE), time perspective (TP), utilitarian browsing (UB), hedonic browsing (HB), and impulsive buying (IB) is apparent. The collected research data satisfies the criteria for construct validity, with all values exceeding 0.50, thus indicating suitability for further analysis. The conducted correlation matrix serves to unveil the interrelationships between the variables under investigation. In this study, a total of six variables are considered to discern the connections between each of them. Presented below are the outcomes of the correlation matrix examination among the variables:

Table 2: Correlation Matrix

Variable	Correlations					
	PE	SE	TP	UB	HB	IB
PE	1	.332**	.227**	.396**	.271**	.193**
SE	.332**	1	.454**	.486**	.187**	.159*
TP	.227**	.454**	1	.485**	.197**	.064
UB	.396**	.486**	.485**	1	.170*	.141*
HB	.271**	.187**	.197**	.170*	1	.462**
IB	.193**	.159*	.064	.141*	.462**	1

** . Correlation is significant at the 0.01 level (2-tailed).
* . Correlation is significant at the 0.05 level (2-tailed).

Source: Primary Data Processed

In the above-presented Table 2, the correlation coefficients among the variables are displayed. Alterations in one variable are linearly related to corresponding changes in other variables. Notably, the highest correlation value, reaching 0.486, is observed between utilitarian browsing and social environments, indicating a substantial relationship between these two factors. Conversely, the lowest correlation value of 0.064 pertains to the connection between impulse buying and time perspective, suggesting a lack of direct influence between them. To assess the model's goodness of fit (GoF), an evaluation is conducted regarding how specific models generate a covariance matrix among indicators. Three steps are employed to gauge the model's accuracy: parsimony fit indices, incremental fit indices, and absolute fit indices (Hair Jr et al., 2014). The fit of the model is elaborated in the subsequent Table 3.

Table 3: Goodness of Fit Model (GoF)

Index	Standard value	Result	Conclusion
Chi-square (χ^2)	$\chi^2 < \chi_{table}$	170,116	Good
p	$\geq 0,05$	0,881	Good
GFI	$\geq 0,90$	0,912	Good
RMSEA	$\leq 0,08$	0,000	Good
NFI	$\geq 0,90$	0,994	Good
CFI	$\geq 0,90$	1,000	Good
TLI	$\geq 0,90$	1,010	Good
AGFI	$\geq 0,90$	0,884	Moderate
CMIN/DF	$\leq 2,00$	0,881	Good
PNFI	$\geq 0,60$	0,789	Good

Source: Primary Data Processed

Referring to the aforementioned Table 3, the collective chi-square value at a significance level of 0.881 exceeds the threshold of 0.05. This indicates that the overall model adheres to the fitting criteria. The outcomes of the hypothesis testing are depicted in Figure 2 and elaborated in Table 4, complete with the corresponding significance values. The hypothesis testing results are based on a significance level of 0.05, with a critical value (CR) of 1.96 (Hair Jr et al., 2014).

Fig 2. Path model

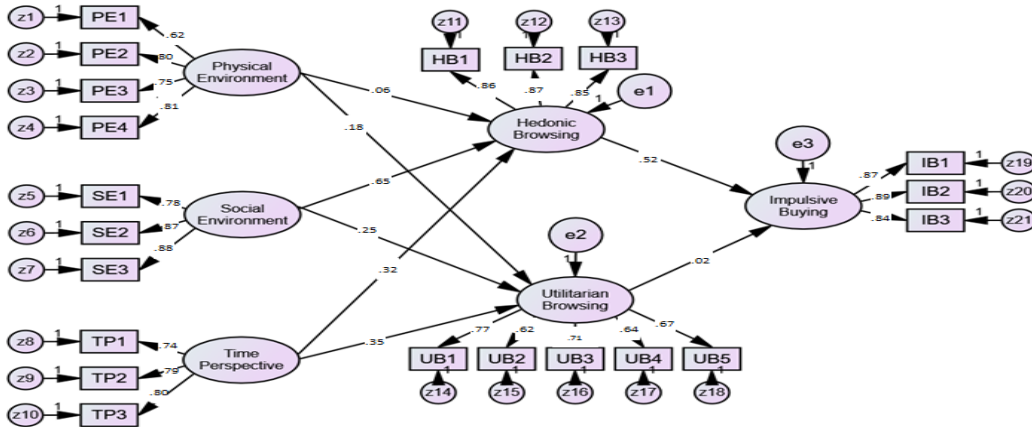


Table 4: Hypothesis testing

No	Variable	Estimate	CR	Conclusion
1	Physical environment -> Hedonic browsing	0.066	0.422	H1 unsupported
2	Physical environment -> Utilitarian browsing	0.180	2.797	H2 supported
3	Social environment -> Hedonic browsing	0.648	2.811	H3 supported
4	Social environment -> Utilitarian browsing	0.248	2.877	H4 supported
5	Time perspective -> Hedonic browsing	0.323	1.667	H5 unsupported
6	Time perspective -> Utilitarian browsing	0.345	4.579	H6 supported
7	Utilitarian browsing -> Impulsive buying	0,017	0,572	H7 unsupported
8	Hedonic browsing -> Impulsive buying	0.522	6.589	H8 supported

Source: Primary Data Processed



Analyzing the outcomes of hypothesis 1 testing, both the estimated value (0.066) and the critical value (0.422) fall below 1.96, signifying that the physical environment does not exert a significant influence on hedonic browsing. Conversely, the hypothesis 2 testing results demonstrate a critical value of 2.97 and an estimated value of 0.180, surpassing the threshold of 1.96. These findings indicate a substantial and affirmative impact of the physical environment on utilitarian browsing. In the context of hypothesis 3 testing, a critical value of 2.811 and an estimated value of 0.648 are observed, both exceeding 0.96. This implies that the social environment significantly and positively affects hedonic browsing. Hypothesis Testing 4 is designed to substantiate the connection between the social environment and utilitarian browsing. Upon scrutinizing the hypothesis testing outcomes, both the critical value and estimated values (2.877 and 0.248 respectively) fall below the threshold of 1.96. This underscores the constructive influence of the social environment on utilitarian browsing. Considering the findings pertinent to hypothesis 5, both the critical value and estimated value (1.667 and 0.323 respectively) are situated below 1.96. These outcomes indicate an absence of noteworthy impact on hedonic browsing.

Hypothesis 6 testing is undertaken to establish the affirmative impact of time perspective on utilitarian browsing. The outcomes reveal that both the estimated and critical values (0.345 and 4.579 respectively) exceed 1.96, indicating a significant and favorable effect of time perspective on utilitarian browsing. In the context of hypothesis 7 testing, the estimated value is 0.017, while the critical value is 0.572, signifying that utilitarian browsing does not exert a positive impact on impulse buying. As for hypothesis testing 8, the aim is to substantiate the relationship between hedonic browsing and impulse buying. According to the test results, an estimated value of 0.522 and a critical value of 6.589, surpassing 1.96, highlight the affirmative and substantial influence of hedonic browsing on impulse buying.

The lack of significant influence of the physical environment on hedonic browsing may stem from the presentation on online market platforms not being designed to captivate or provide a sense of happiness to consumers during their searches. Consumers often conduct searches during their leisure time and tend to overlook the visual aesthetics presented by online marketplace applications. This outcome suggests that the physical environment does not prompt consumers to engage in hedonic browsing. Scholars have contended that the physical environment significantly impacts utilitarian browsing due to its potential to enhance shopping efficiency through the visual layout of the online marketplace. A visually comprehensible display leads to time savings for customers as essential information becomes readily accessible. Customers generally prefer clear and well-defined graphics, images, and textual content, which serves to motivate them by conserving their energy and effort. These observations underscore the role of visual aesthetics in facilitating utilitarian browsing endeavors. The societal context significantly and positively impacts hedonic browsing; when customers share their shopping plans, it brings about a sense of pleasure (Zheng et al., 2019). The social environment holds considerable significance, as customers' online shopping behavior is influenced by information provided by their peers. The study's findings reveal that customer choices and behaviors are often aligned with social considerations.

Customers driven by utilitarian motives possess well-defined objectives, rendering them less susceptible to external influences. These findings resonate with the outcomes reported by Arul Rajan (2020), underscoring the necessity of higher-quality information for individuals engaged in utilitarian browsing. Consequently, such individuals tend to rely on information shared by friends or relatives. Previous research indicates a lack of substantial impact from time perspective on hedonic browsing. Customers guided by hedonic motivation prioritize pleasure

and motivation over considerations of time and efficiency (Zheng et al., 2019). The temporal dimension, however, offers support to customers during their utilization of online applications. Time is a secondary concern since consumers typically search during available intervals.

The findings from Zheng et al. (2019) assert that time perspective indeed holds a significant influence on utilitarian browsing, enabling customers to seek necessary information using wireless methods. This observation aligns with the notion that searches can be conducted without constraints of location or time. The presence of a time perspective lends support to customers, facilitating their acquisition of requisite information for the purchasing process expediently. This discovery underscores the role of time perspective in bolstering utilitarian browsing endeavors undertaken by consumers; a surplus of available time corresponds to heightened opportunities for information retrieval. The outcomes reported by Zheng et al. (2019) indicate that customers driven by utilitarian motives exhibit a heightened discernment in fulfilling their specific needs. This revelation suggests that utilitarian browsing doesn't engender impulsive buying tendencies among customers, as highlighted by Cuandra (2022), but rather steers them towards planned purchases. On the other hand, hedonic browsing manifests a positive correlation with the impulsive urges experienced by consumers. This stems from the fact that consumers seek enjoyment in their browsing activities, displaying less concern for the consequences of their purchases (Shahpasandi, Zarei, & Nikabadi, 2020). Customers motivated by hedonic factors demonstrate stronger impulsive tendencies compared to those driven by utilitarian considerations.

Conclusion

The research findings lead to the conclusion that the physical environment is conducive to facilitating hedonic browsing. This inference stems from the fact that consumers primarily engage in application searches during idle or waiting moments, affording little consideration to the physical environmental attributes of the online market platforms. Their main focus is on deriving pleasure and seeking entertainment during their browsing sessions. In contrast, the physical environment proves beneficial for utilitarian browsing. The user interface of the application page is designed for readability, streamlining the browsing process and enabling consumers to economize time in their search activities. This approach enhances consumers' ability to conduct efficient searches. The social environment equally lends support to hedonic browsing. Users of online market board applications often belong to specific generational groups that frequently engage in discussions about their purchase intentions with friends or acquaintances before finalizing their decisions. Consumers strive to align their choices with recommendations or the influences of their social environment, such as input from friends or relatives. The impact of the social environment can evoke feelings of happiness and entertainment as it fulfills social needs. In the context of utilitarian browsing, the social environment plays a favorable role. Consumers exhibit a tendency to seek high-quality information that aligns with their expectations, often heeding the opinions of friends or other individuals. They aim to synchronize their behavior with the information shared by peers. Notably, consumers utilize online market board applications based on the viewpoints of others, efficiently seeking superior-quality information.

Theoretical and Practical Implications

The online market application offers comprehensive product information and distinctive features that furnish supplementary details. These added features are designed to cater to the



needs of consumers engaged in utilitarian browsing. However, the time perspective does not lend support to hedonic browsing among consumers utilizing online market board applications. For these consumers, the emphasis lies on deriving entertainment and pleasure from their browsing pursuits. The absence of temporal constraints when navigating the online market space may not yield pleasure, but it does provide more time for information retrieval. In contrast, the time perspective holds significance in bolstering utilitarian browsing activities. The lack of temporal and spatial limitations signifies that customers can employ online means to access requisite information at any location and time. Notably, impulse buying is not influenced by utilitarian browsing. Customers engaged in the usage of online market applications are characterized by their well-defined and premeditated goals, which precludes their engagement in impulse buying. Such customers consistently seek out information that aligns with their shopping goals and objectives. They often have access to information concerning various product variations. As a result, hedonic browsing has a favorable impact on impulse buying. It is notable that customers tend to allocate their leisure time to online shopping and related endeavors.

This research yields managerial implications concerning the formulation of search design strategies tailored to the hedonic and utilitarian dimensions. Insights drawn from research studies indicate that the inclination towards impulse buying is often influenced by the hedonic browsing factor. Organizations possess the capability to craft visually appealing and interactive marketplaces via online applications. This can be achieved by conveying product information through diverse multimedia elements such as audio, video, images, texts, and animations, thereby generating excitement among consumers. Companies offering online market applications can furnish comprehensive details regarding the markets and the available products. This comprehensive information provision by organizations serves to diminish uncertainties associated with product purchases.

Moreover, organizations can enhance user experience by categorizing diverse products based on criteria such as price, design, and color, streamlining customer searches for specific items. Leveraging the social environment is another avenue available to online marketplace providers. The utilization of social networks can significantly bolster motivation through hedonic browsing, often via methods like offering price incentives and product variations. Price incentives often manifest as discounts or gifts, serving to attract customers and engender a sense of satisfaction during the purchasing process. Such information is subsequently shared with friends or family members. On a parallel note, organizations can incorporate various features enabling customers to share their experiences with other existing or prospective customers, facilitated through social media applications.

Furthermore, organizations operating in the online business realm have the opportunity to channel investments into research and development (R&D) endeavors aimed at creating novel features such as gamified bid-hunting experiences. These features can serve to entice and captivate customers, fostering a sense of pleasure during their browsing activities. Additionally, organizations can allocate resources to the innovation and enhancement of applications, including location-based functionalities and similar features. By recommending products based on customers' geographical proximity, the linkage between available products and customers becomes more immediate, expediting access to products at a more cost-effective rate. Consumers exhibit a notable concern for meeting their needs to align with their goals and objectives. Impulse buying lacks inherent incentives. However, organizations engaged in online business have the opportunity to leverage customers' purchase history for strategic purposes.

By maintaining records of customers' past purchases, these organizations can subsequently provide personalized product recommendations, leveraging this historical data to inform customers' choices. This approach facilitates more efficient decision-making during the shopping process. Moreover, marketers can harness the power of trusted reference models to influence consumers towards conducting searches that lead to impulse buying behaviors.

Future Directions

The research scope exclusively centers on mobile application-based commerce, omitting an examination of web pages, even though it's acknowledged that online market boards encompass both application and web-based platforms that contribute to information search. Prospective research endeavors are anticipated to delve into the comparative analysis of application utilization versus online market web pages. Furthermore, the study of cross-generational dynamics holds relevance within the context of online market consumer behavior, as explored by Wijaya, Darmawati, and Kuncoro (2020). This suggests that future research can delve into investigating cross-generational influences as a subject of comprehensive exploration.

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