Print ISSN: 1738-3110 / Online ISSN 2093-7717
JDS website: http://www.jds.or.kr/
http://dx.doi.org/10.15722/jds.20.05.202205.49

The Effect of Design Quality on Hedonic Search, Utilitarian Search and Impulse Buying in Distribution Market

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Received: March 11, 2022. Revised: April 06, 2022. Accepted: May 05, 2022.

Abstract

Purpose: This research aims to determine the quality of online store designs that make consumers who use online market board applications have the urge to make impulse buying. This research was conducted because impulse buying is the most common buying behavior. **Research design, data and methodology**: This research used non-probability sampling. The sample size was 195 respondents from the distribution and service industries by applying a purposive sampling technique. The data collection technique employed a questionnaire distributed online according to predetermined criteria: mobile device users who accessed the online market board application and made at least one purchase in the last six months. The data analysis method utilized was structural equation modeling (SEM). **Results**: The findings revealed that usability, functionality, and sociability factors affected hedonic and utilitarian search. Furthermore, these findings proved that hedonic search affected impulse buying drives. In contrast, the utilitarian search did not affect impulse buying drives. **Conclusions**: The usability, functionality, and sociability factors supported hedonic and utilitarian searches. Consumer information security increased consumer confidence in an online store because it was considered to protect matters related to their privacy. The hedonic search also increased impulse buying drives. Consumers prefer to use their spare time to search through online market board applications, which provide many attractive promos.

Keywords : Design Quality, Impulse Buying, Hedonic Search, Utilitarian Search, Distribution Market

JEL Classification Code : D21, D22, M31, M37

1. Introduction

The advent of internet-based technology has significantly impacted technology use and user behavior in the distribution market. Today's use of technology is moving the world's population in a more connected direction. A report released by PricewaterhouseCoopers (PwC) through Indonesia Investments estimated that the world's population would total 7.4 billion by 2020, and nearly 52% of this population was expected to be connected to the internet via smartphones or portable tablets. The observation results by wearesocial.com on internet users around the world revealed that there were 4.4 billion users in January 2019. This figure experienced an increase of 9% from the previous year.

Based on the survey results conducted by the Indonesian Internet Service Providers Association, the number of internet users in Indonesia has experienced significant

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growth from year to year to 143,260 million internet users. This number doubled compared to 2012, which was only about 63 million internet users. The high number of internet users is accompanied by the high number of mobile devices' ownerships to access the internet. The ownership of mobile devices in Indonesia was dominated mainly by smartphones or tablets, with a percentage of 50.08% of the population than ownership of laptops or computers, which was only around 25.72% of the population. Until the fourth quarter of 2017, it can be seen in Figure 1.1 that smartphone ownership was the highest among other mobile devices, with almost the same proportion of ownership between men and women.

In Indonesia, online commerce prospects demonstrate an increasingly positive trend. Almost all goods and services offered are already done online (Nugroho, 2019). Online shopping is a popular activity among Indonesians. In this case, Indonesian consumers prefer to use smartphones to search for products or services and read relevant and credible information. Hootsuite and wearesocial.com 2019 reported that 93% of Indonesia's e-commerce user activities are to browse products and services to be purchased online. Data from the same institution also reported that 76% of internet users in Indonesia made online purchase transactions via mobile devices, and the rest was done via computers (desktops). This statement is supported by a survey conducted by Association of Indonesian Internet Service Providers (APJII) in 2018 in Figure 1.2, reporting that the use of the internet in Indonesia, especially in the economic sector, was searching for information and making purchases online.

Furthermore, the rapid development of modern wireless communication technology accompanied by high internet penetration levels has made mobile app-based commerce one of the most popular channels for shopping (Zheng, Men, Yang, & Gong, 2019). It has made Indonesia one of the top three mobile app-based commerce markets in the world, after China and India. Through social commerce, consumers can more easily determine purchase decisions by participating online in available social media to obtain knowledge related to the desired product (Huang & Benyoucef, 2015). The social commerce concept allows an online store to have many features, such as product recommendations for friends, customer experience reviews, a means of discussion between consumers, and rating of products or sellers. These features are part of the design quality inherent in social commerce. Design quality has a massive effect on connecting consumer interactions with the online store in question (Cebi, 2013).

Wagner, Hassanein, and Head (2014) stated that the social commerce concept's design quality could be maximized by strengthening the three essential factors: usability, functionality, and sociability factors. Almost all online stores in Indonesia have used the commerce concept, but they have not maximally developed the quality of their designs, so the competition between online stores has become quite tight. Some of the online store websites that use the social commerce concept are *Forum Jual Beli (FJB) Kaskus* [Kaskus Buy and Sell Forum], Facebook, Instagram, Lazada, Bukalapak, Blibli, Shopee, JD ID, Tokopedia, and others.

The main factor for strengthening the social commerce concept for an online store is reinforcing the design quality sector, which can positively affect the online store's website because consumers will feel comfortable, so they will likely carry out the purchasing process. When it happens, consumers will certainly pass on this convenience through word of mouth to other consumers to positively impact the online shop's website.

Usability factors are related to the online store applications' ease of use, reduced errors, and positive attitudes (Wagner et al., 2014). It is proven to increase the consumers' intensity in buying a product and the system use level or the access duration to an online store application (Y. Lee & Kozar, 2012). Fernandez, Insfran, and Abrahão (2011) defined the usability factor as a software product's capacity to be easy to understand, learn, operate, and attractive to use. Luna-Nevarez and Hyman (2012) state that there are six attributes of usability factors in design quality: quality of content, navigation, textual information, advertisements, social media assistance, and visual design. Online stores can make consumers feel comfortable if they have good enough usability in their design quality to indirectly provide advantages for their online stores.

Meanwhile, the functionality factor in online store design quality refers to functions that satisfy consumer needs in shopping online. Stefani and Xenos (2011) stated that the functionality factor consists of several elements: suitability, accuracy, interoperability, and security. For example, good interoperability allows online shop websites to be integrated with specific other systems, such as courier services, payment methods, and official product websites. Data security from consumers must also be protected by online stores so that consumers also feel comfortable shopping online. The sociability factor is the final component of design quality (Huang & Benyoucef, 2015), affecting consumer interaction, consumer involvement level, consumer confidence, and purchasing decision-making (Gonçalves Curty & Zhang, 2013).

Moreover, a qualified sociability factor can further increase the interaction between consumers and sellers at the same time. Discussions among consumers on the site in online stores can increase consumer convenience. Besides, the chat feature with sellers and review columns also increases an online store's credibility. Consumers, who feel comfortable because they feel served and get good

responses from the seller, will have the opportunity to make purchases online.

In recent years, there have been many studies in the field of mobile app-based commerce, such as the introduction to the special issue of mobile app-based commerce: the past, present, and future of mobile app-based commerce research (Kourouthanassis & Giaglis, 2012); Trust and satisfaction: the keys to client loyalty in commerce based on mobile applications (Jimenez, San-Martin, & Azuela, 2016); Exploring convenience in commerce based on mobile applications: moderating effects of gender (Okazaki & Mendez, 2013). These studies have studied a lot about mobile app-based commerce, but relatively few have examined the mobile app-based commerce users' impulse buying. In fact, impulse buying is the most common behavior among purchasing behaviors (Zheng et al., 2019). C. Lee and Lim (2020) stated that mobile app-based commerce will increase impulse buying because of its characteristics of ease and high interactivity. The increasing interest of Indonesian consumers in making online purchases via mobile devices makes research on the mobile app-based commerce consumers' impulse buying drives interesting to research.

Mastercard's research released by CNN Indonesia revealed that half of Indonesia's millennial generation was the most impulsive consumers in the Asia Pacific. Piron in Zheng et al. (2019) defined impulse buying as "a purchase that is not planned as a result of exposure to a stimulus and is carried out right away." This behavior often occurs and results from specific stimuli during the shopping process (Floh & Madlberger, 2013). Several previous researchers adopted motivation theory to understand consumer motivation and determine their response to specific stimuli (Zheng et al., 2019). Piron in Zheng et al. (2019) found that both hedonic motivation and utilitarian motivation encouraged people to do certain behaviors, such as shopping. These findings are supported by research carried out by Zheng et al. (2019), showing that there was a relationship between hedonic motivation and utilitarian motivation on impulse buying drives.

Hedonic motivation is related to feelings of pleasure when consumers are involved in an activity. When carrying out search activities, namely the process in which consumers access information in the online environment (Zheng et al., 2019), consumers get instant satisfaction and pleasure, hereinafter referred to as hedonic search activities. Previous research revealed that consumers, who search for pleasure and ignore their shopping task results, tend to get hedonic values, which in turn form impulse buying behavior (Zheng et al., 2019).

However, Zheng et al. (2019) also revealed that utilitarian motivation, on the other hand, had an indirect effect on the impulse buying drives by influencing hedonic search behavior first. Consumers with utilitarian motivation are very concerned about completing shopping tasks, focusing on consumer needs according to their expectations, and do not have the intention or immediate desire to make impulse buying. Consumers search for the information needed so that the goods purchased are in accordance with their expectations; thus, consumers will have hedonic motivation and then make impulse buying (Zheng et al., 2019).

According to To et al. in Zheng et al. (2019), consumers with utilitarian motivation usually already know their initial shopping goals, and to achieve these goals, consumers will seek more and higher quality information. Parker and Wang (2016) suggest that consumers like to search through mobile app-based commerce for daily use and prefer to communicate with others in a traditional way rather than the consumer experience itself (Parker & Wang, 2016). Online impulse buying will occur influenced by the product characteristics and the shopping environment characteristics (Parboteeah, Valacich, & Wells, 2009).

On the other hand, people often ask for suggestions and opinions from others (Handoyo & Mani, 2021). Users of mobile app-based commerce are more influenced by their peers (Pedersen, 2005). Consumers tend to have discussions with their peers because, according to C. Lee and Lim (2020), people tend to behave similarly to other people close to them to create a good image with them (Budiman, 2021; Budiman, Haryono, Haryanto, & Hidayat, 2017; C. Lee & Lim, 2020).

2. Literature Review and Hypotheses Development

2.1. Usability Factor

The usability factor is one of the essential factors of design quality to support the social commerce concept (Hassanein & Head, 2007). According to Fernandez et al. (2011), the usability factor is defined as a software product intended to be understood, studied, operated, and attractive to users. A website supported by a qualified usability factor will have its advantages because it can make it easy to take users to their destination. The same thing is stated by Venkatesh, Hoehle, and Aljafari (2014) that by maximizing the usability factor's function, a website can work effectively, efficiently, and satisfactorily for its users in getting what they are looking for.

2.2. Functionality Factor

Functionality factors refer to a set of functions and properties to meet user needs (Stefani & Xenos, 2011). The literature review also states that functionality has four

characteristic qualities: suitability, accuracy, interoperability, and security. According to Huang and Benyoucef (2017), suitability characteristics describe access to available functions to complete user tasks. Accuracy relates to a website's ability to get the right results with the required precision level. A website with spell check features, advanced search options, and search engine accuracy and speed can increase user satisfaction. Interoperability in the functionality factor refers to a system's ability to interact with one or several other systems.

2.3. Sociability Factor

According to Guo and Barnes (2011), the sociability factor is an essential factor of design quality, a major contributor to the social commerce concept. Research by Huang and Benyoucef (2017) explained that the sociability factor consists of several attributes: social community, sharing with others, social communication, participation, and electronic word of mouth. Another literature review by Yang, Li, Kim, and Kim (2015) stated that the consumers' participation in a website is crucial because it can enrich the content produced by consumers. Through consumer participation in a website, it will be possible to form a forum for consumers to interact with each other, find new friends, get new information from others, and communicate directly when shopping online. Besides, the participation feature can be a salient criterion for the website's performance.

2.4. Impulse Buying

The emergence of mobile app-based commerce makes impulse buying attract attention because of its characteristics of ease and high interactivity (C. Lee & Lim, 2020). Piron in Zheng et al. (2019) defined impulse buying as "an unplanned purchase that results from exposure to a stimulus and is carried out right away"; this behavior often occurs and results from specific stimuli during the shopping process (Floh & Madlberger, 2013). From different stimuli, Stern in Zheng et al. (2019) argues that four types of impulse buying are pure impulse buying, reminder impulse buying, suggestive impulse buying, and planned impulse buying. Pure impulse buying occurs when the consumer has no intention of buying, but the product evokes emotions, leading the consumer to the purchase action. Reminder impulse buying occurs when a consumer sees an item and remembers an advertisement or information about a product and has a previous desire to buy it. Suggestive impulse buying occurs when a consumer looks at an item for the first time and finds a need that can be met. Planned impulse buying occurs when a consumer intends to buy some particular product but also expects to make another purchase, depending on the special offers and promotions found.

In the context of online impulse buying, consumer responses are divided into two. The first is the urge to buy impulsively, and the second is actual impulse buying, according to Rook in Zheng et al. (2019). Betty and Ferrel in Zheng et al. (2019) defined the impulse to buy impulsively as "a state of desire experienced when an individual encounters an object in the environment." In Zheng et al. (2019), Rook stated that actual impulse buying only occurs after individuals experience the urge to buy impulsively. Not all impulse urges are acted upon; however, as more impulses are experienced, the likelihood of impulse buying will increase, as stated by Betty and Ferrel in Parboteeah et al. (2009).

2.5. Motivation

Motivation influence individual behavior (Dewayani, Udin, & Djastuti, 2020; Haryono, Supardi, & Udin, 2020; Sukhumvito, Yuniawan, Kusumawardhani, & Udin, 2020; Zubaidah, Haryono, & Udin, 2021). Motivation is a force that can generate individual behavior and direct that behavior to achieve predetermined goals (Mothersbaugh, Hawkins, Kleiser, Mothersbaugh, & Watson, 2020). Kuo et al. in Parker and Wang (2016) stated that the first step when determining consumer decision-making in online purchases is that consumers have the motivation to shop online. There are two types of motivation: intrinsic motivation (hedonic motivation) and extrinsic motivation (utilitarian motivation) (Zheng et al., 2019).

Hedonic motivation is related to experimental consumers who are more likely to engage in activities when they have experienced instant pleasure or satisfaction from the activity (Zheng et al., 2019). Experimental consumers are more concerned with attractive web interface design or friendly online services and perceive shopping as a recreational activity (Zheng et al., 2019). Meanwhile, utilitarian motivation is related to consumers who lead to goals and focus on completing tasks (Kim, Cha, Knutson, & Beck, 2011). Consumers who have utilitarian motivation are those who have a specific purchase plan (Olbrich and Holsing in Zheng et al., 2019) and are looking for the most efficient method to complete shopping tasks (Babin, Darden, & Griffin, 1994).

2.6. Search

Consumers can access information in the online environment by browsing web pages (Zheng et al., 2019). Bloch and Richins define search in Zheng et al. (2019) as the "inspection of in-store merchandise for informational and/or recreational purposes without the intention to own." Search is essential for consumers to get the information they need for recreational activities from online stores.

According to Aragoncillo and Orus (2018), consumers who search online are constantly exposed to products they might like even though they have no intention of searching or have a purchase plan.

The notions of utilitarian motivation and hedonic motivation are similar to the notion of searching to obtain information and for recreation (Zheng et al., 2019). Zheng et al. (2019) categorized two types of searches: hedonic and utilitarian searches. The hedonic search focuses on fun and entertaining experiences obtained through web pages and aspects of shopping behavior that are entertaining, fun, and interesting (E. J. Park, Kim, Funches, & Foxx, 2012). Utilitarian search emphasizes the goal of obtaining information or getting products that match consumer expectations (Zheng et al., 2019).

The hypothesis of the research framework has been made so that the hypotheses in this study are:

The usability factor is one of the essential factors of design quality to support the social commerce concept (Hassanein & Head, 2007). According to Fernandez et al. (2011), the usability factor is defined as a software product intended to be understood, studied, operated, and attractive to users. The most visible features of a situation include consumer activity, such as color, sound or music, lighting, weather, and room settings. All these aspects are designed to create a specific feeling (Zhuang, Tsang, Zhou, Li, & Nicholls, 2006). Some usability factor elements are basically supported by text and images because mobile devices have online shop site restrictions, such as screen size and resolution and the number of colors supported. The use of text and images can significantly increase the search time for mobile application-based commerce users/consumers (Garofalakis, Stefani, Stefanis, & Xenos, 2007).

Another opinion from Yong Liu, Li, and Hu (2013) stated that the information quality, visual attractiveness, and ease of use on a website could influence consumer emotions by triggering purchase decision efforts. According to Zheng et al. (2019), a well-organized web page can keep consumers entertained. It aligns with the opinion of Moon et al. (2017), which explains that hedonic tracing is the overall experience to obtain benefits, such as entertainment and pleasure, rather than just completing shopping tasks (Moon et al., 2017). Thus,

H1: Usability factor has a positive effect on hedonic search.

Usability factors help consumers find the information they need efficiently. A well-organized web page can reduce consumer distrust caused by information asymmetry and improve the efficiency of consumer spending in using mobile app-based commerce (Zheng et al., 2019). Efficiency (including convenience) in shopping tasks is an essential factor that significantly influences consumers with utilitarian motivation to search through mobile app-based commerce (Parker & Wang, 2016).

In line with Pallud and Straub (2014), consumers' product introduction activities can be assisted by the ease of using navigation instructions on usability factors. The same thing is stated by Venkatesh et al. (2014), namely, a website's design aesthetics can affect product introduction. Increasing the quality of these usability factors can ease consumers' cognitive load during the stages of the purchasing decision-making process. The product introduction stage and consumers will also be helped when doing the information search process. Huang and Benyoucef (2017) stated that a website's quality design could make it easier for consumers to search for information.

Usability factors will motivate user intention and encourage them to use web pages (Pengnate & Sarathy, 2017). The usability factor element relates to the clarity of text, images, and easy-to-understand content provided by mobile application-based commerce services that can be accessed (Garofalakis et al., 2007) and are believed to improve utilitarian consumer searches (Zheng et al., 2019) because the existence of a clear and easy to understand web page will save time and provide convenience for consumers in finding the product information they expect. Thus,

H2: Usability function has a positive effect on utilitarian search.

On the other hand, Huang and Benyoucef (2017) stated that design quality must provide adequate support for the functionality factor to help consumers meet their needs at every stage of the purchasing decision-making process being passed. Liang and Lai (2002) asserted that the alternative evaluation stage in purchasing decision making could be affected by the price comparison feature and the availability of viewing pages for other consumer comments on a website.

According to Kim et al. (2011), the purchasing stage can be triggered by the availability of the ordering feature, various payment methods, and product delivery services. When an online store website has these services, it is possible that consumers can be motivated to carry out word-of-mouth activities positively. The same thing is stated by Vila and Kuster (2011) that the post-purchase stage could be influenced by emphasizing the functionality of online store websites. The functionality in question is the flexibility of shipping services, tracking orders, and returning products to increase the customer satisfaction level.

Consumers can directly contact anyone or experience specific events because they pay attention to other people doing specific activities (Zhuang et al., 2006). The functionality factor is implemented in the presence of other people who accompany or give preferences in shopping and

can encourage consumers to buy more products when shopping alone. Individuals tend to align their attitudes, opinions, and choices with other individuals considered to have similar interests to them (Handoyo & Mani, 2021). Consumers, especially young people, tend to communicate with friends about their favorite products and get pleasure by discussing their purchase plans, which in turn can influence hedonic motivation (Zheng et al., 2019). Thus,

H3: Functionality factor has a positive effect on hedonic search.

Consumers who have initial goals and want to realize their goals must seek more and better-quality information to make purchasing decisions. It is critical for consumers who carry out utilitarian searches to achieve their pre-planned shopping goals (Ribeiro Cardoso & Carvalho Pinto, 2010). Consumers carry out utilitarian searches to obtain product information according to the criteria they expect.

The consumer lifestyle that has changed due to disruptive technology and the 4.0 industrial revolution has led to new habits, namely the desire to be instantaneous and fast in carrying out an activity. In this case, maximizing the design quality functionality factor on the online store website can help overcome this and stimulate consumers in the buying process. According to Shaouf, Lü, and Li (2016), powerful functionality features will help consumers use online store websites better. Stefani and Xenos (2011) explained that security is one part of the functionality. Improved security features for transactions and privacy regarding personal data can affect consumer confidence when purchasing. Thus,

H4: Functionality factor has a positive effect on utilitarian search.

According to C. Park and Lee (2009), the social commerce concept is primarily due to the role of sociability factors that provide social value to consumers. Supporting this opinion, Mohan, Choi, and Min (2008) stated that social values are closely related to the word of mouth and content produced by consumers because both are powerful functions that can influence purchasing decision-making. Increasing the sociability factor on design quality through the development of online social communities can help consumers introduce products and services available on an online store website (Hajli in Huang and Benyoucef, 2017). According to Huang and Benyoucef (2017), consumers' product introduction can also be helped by the function of reviews, social recommendations, and sharing of product information.

The increased search that mobile app-based commerce consumers can do can make consumers experience fun and excitement, especially in leisure time or when feeling stressed, because it is believed that hedonic search activities can give consumers time to relax and reduce pressure or make them relax (Parker & Wang, 2016). Also, location and time do not prevent users from completing their transactions using mobile application-based commerce (Garofalakis et al., 2007). Thus,

H5: Sociability factor has a positive effect on hedonic search.

Furthermore, the existence of social interaction between consumers and sellers on online store websites can increase these consumers' knowledge and experience to select and filter in more detail the alternative evaluation stages (Coun et al., 2009). Social interaction can also be realized through various platforms. Creating chat applications, message boards, discussion forums, and general reviews can increase consumer engagement with online store websites so that a purchase may occur (Kim et al., 2011). The formation of good design quality in terms of the sociability factor also strengthens the consumer confidence level, both in online stores and sellers. Consumers' trust that has been formed can be positively affected if it is spread through word of mouth. Verhagen and van Dolen (2011) also stated the importance of discussion forums and online communities in the post-purchase stage because they can stimulate re-purchase behavior and create a post-purchase branding strategy at the same time.

In accessing information, consumers who carry out utilitarian searches already have specific shopping goals. Consumers tend to perform searches with an easy and fast process as time-consuming as possible (Ribeiro Cardoso & Carvalho Pinto, 2010) to help them save time, money, and effort when performing searches in mobile app-based commerce (Parker & Wang, 2016). Besides, convenience and efficiency will encourage consumers to conduct utilitarian searches (Parker & Wang, 2016). Thus,

H6: Sociability factor has a positive effect on utilitarian search.

Additionally, utilitarian motivation is more dominant than hedonic motivation in moving consumers to make purchases (Parker & Wang, 2016). In an online context, it is appropriate to adopt utilitarian searches. The utilitarian search focuses on getting information or products that match consumer expectations (Zheng et al., 2019). The same thing is also said by E. J. Park et al. (2012), stating that consumers who carry out utilitarian searches have an effort to obtain products according to information-seeking purposes with risk-reducing behavior. Search behavior has a longer flow, which allows consumers to have the opportunity to eliminate or reduce risks relevant to shopping tasks (E. J. Park et al., 2012).

When making impulse buying, consumers make not reflective purchases. Consumers with utilitarian motivation carry out searches to get information or products that match their expectations and feel happy with the searches they do. Thus, consumers have hedonic motivation from the search activities carried out (Zheng et al., 2019). Thus,

H7: The relationship between utilitarian search and impulse buying is mediated by hedonic search.

Moreover, web browsing is seen as an essential part of the shopping experience. It is also appropriate to adopt hedonic searches (Zheng et al., 2019). The hedonic search focuses on fun and entertaining experiences obtained through web pages and aspects of shopping behavior that are entertaining, fun, and interesting, which positively influence consumer impulse buying behavior (E. J. Park et al., 2012). Consumers prefer to use their spare time to search through daily online market boards (Parker & Wang, 2016). Using leisure time is in line with the hedonic search's intent to consider search activities as recreation. Besides, mobile app-based commerce consumers also carry out hedonic tracing when they experience stress (Parker & Wang, 2016).

Hedonic search can influence impulse buying (E. J. Park et al., 2012) because impulse buying is determined by the capacity of the senses to produce sudden responses and has a solid hedonic motivational component, which will lead consumers to purchase decisions without further consideration (Aragoncillo & Orus, 2018).

H8: Hedonic search has a positive effect on impulse buying.

3. Research Methods and Materials

This research applied a quantitative study with survey data collection techniques. Quantitative research was conducted based on data collected, processed, and presented into meaningful information for managerial and economic decision-making. Quantitative research tries to measure something appropriately (Cooper & Schindler, 2014).

The population in this research was all Indonesian consumers who used mobile devices connected to the internet and had made purchases through online market boards to experience firsthand search activities in the online market board application. If respondents did not use mobile devices to make purchases in the online market board application, it would be difficult and likely biased in filling out the distributed questionnaires.

In this research, sampling was carried out using non-probability sampling, meaning that the researchers did not randomly select the samples in this study. Researchers used the purposive sampling technique to take research samples, where samples were taken according to specific criteria to obtain samples with the desired characteristics (Cooper & Schindler, 2014). In the study, the author got 205 respondents, but there were 10 respondents who did not fit into the author's criteria so they could not be analyzed further. In this study, a sample of 195 respondents was obtained. The type of data used was primary data and collected using a questionnaire distributed online.

The criteria for respondents in this study were respondents aged 18-40 years considered to have a mobile device and could make their own purchase decisions in online stores, used online market board applications, made online purchases through online market board applications, utilized mobile devices such as smartphones, tablet, or laptop, and had made at least one purchase in the last six months. The time limit for the last six months was to present respondents' answers correctly and under current conditions.

The analysis method in this research employed Structural Equation Modeling (SEM) analysis, a multivariate technique that combines aspects of factor analysis and multiple regression, explaining the relationship between variables measured simultaneously (Black & Babin, 2019). SEM is a multivariate technique for determining structural relationships and is used to assess how well the proposed model is compatible with the results obtained from the data collected. SEM analysis was carried out using Analysis Moment of Structural (AMOS) version 23 software.

Table 1: Variables and Indicators

Variables	Indicators
Usability Factor	FK1: I find the online shop website easy to use.
	FK2: I feel the online shop website has an aesthetically pleasing design.
	FK3: I feel that the online shop website has well-organized content.
	FK4: I find the information on the online shop website easy to access.
Functionality Factor	FF1: I feel that online shop websites protect consumers' personal information.
	FF2: I feel that the online website page provides several payment methods.
	FF3: I feel that online shop websites provide a helpful feature to explain things that consumers don't know.
Sociability Factor	FS1: The online shop website that I accessed provides a feature to provide product recommendations.
	FS2: The online shop website that I accessed provides features for interacting with each other among consumers.

	FS3: The online shop website that I accessed provides an online discussion feature to share experiences and knowledge.
Utilitarian Search	PU1: I browsed through online market board apps to buy items that were better in terms of price.
	PU2: I searched online marketplace board apps for better quality items.
	PU3: I browse online market board applications to gather information about products.
	PU4: I browsed online marketplace board apps to compare stores.
	PU5: I browsed online marketplace board apps for more efficient online shopping.
Hedonic Search	PH1: When I think I can forget my troubles while browsing online market board apps.
	PH2: I feel like I can enjoy my rest time while browsing online market board apps.
	PH3: I have a lot of fun browsing online marketplace board apps.
Impulse Buying	DPI1: I have the desire to purchase additional items other than my shopping purpose while browsing.
	DPI2: I have the urge to purchase items that are not related to my shopping purpose while browsing.
	DPI3: I have a tendency to buy items outside of my shopping purpose when doing a search.

The questionnaire used for this study consisted of three parts. The first part contained a brief introduction and the researchers' profile explaining the research's aims and objectives. The second part was about the respondent's identity, including gender, age, occupation, domicile, monthly expenses, and average nominal expenditure per transaction. The third section dealt with the usability factor (FK) variable, functionality factor (FF), sociability factor (FS), utilitarian search (PU), hedonic search (PH), and impulse buying drives (DPI). The fourth part encompassed gratitude for the availability of being a respondent in this study.

4. Results and Discussion

The data analysis results showed that the number of female respondents (64.5%) was higher than that of male respondents (35.5%). Respondents with the largest domicile were in Java (62.1%) and followed by Sulawesi (20.7%). Most respondents (47.8%) opened online market board applications more than ten times in the past six months, followed by respondents (7.2%) who only opened online market board applications three to four times in the last six months. Besides, Shopee was the online market board application most used by respondents to make online purchases, with a percentage of 73.8%, followed by Tokopedia (46.1%) and Lazada (18.0%). The mobile devices used by almost all respondents to access online market board applications were smartphones (96.1%), followed by laptops (3.0 %). Most respondents had expenses that ranged from IDR 1.500.001 - IDR 2.500.000 (34.0%). Most respondents also had an average nominal expenditure in the range of IDR 150.001 - IDR 300.000 (54.2%).

Table 2: Bartlett Test of Sphericity and KMO

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.824
Bartlett's Test of Sphericity	Approx. Chi-Square	2198.749
	df	210
	Sig.	0.000

Based on Table 2, the KMO MSA value obtained was 0.824, where this value was greater than the requirement of 0.5, so the variables in this research were considered valid. Besides, the significance value obtained was 0.000, so it could be concluded that the question items in this research could be further processed for factor analysis.

Table 3: Rotated Component Matrix

	Component					
	1	2	3	4	5	6
FK1				0.615		
FK2				0.804		
FK3				0.752		
FK4				0.811		
FF1					0.782	
FF2					0.865	
FF3					0.877	
FS1						0.735

FS2						0.788
FS3						0.802
PU1	0.769					
PU2	0.622					
PU3	0.714					
PU4	0.639					
PU5	0.677					
PH1		0.859				
PH2		0.868				
PH3		0.848				
DPI1			0.867			
DPI2			0.894			
DPI3			0.844			
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.[a]						
a. Rotation converged in 7 iterations.						

Table 3 shows that the question items contained in the usability factor (FK) variable, functionality factor (FF), sociability factor (FS), utilitarian search (PU), hedonic search (PH), and impulse buying drives (DPI) had been group according to each variable. It could be concluded that this research data was considered to meet the criteria for construct validity, which was a value greater than 0.50; thus, it could be further processed.

Table 4: Correlation Matrix between Variables

Correlations							
		FK	**FF**	**FS**	**PU**	**PH**	**DPI**
FK	Pearson Correlation	1	0.332**	0.227**	0.396**	0.271**	0.193**
FF	Pearson Correlation	0.332**	1	0.454**	0.486**	0.187**	0.159*
FS	Pearson Correlation	0.227**	0.454**	1	0.485**	0.197**	0.064
PU	Pearson Correlation	0.396**	0.486**	0.485**	1	0.170*	0.141*
PH	Pearson Correlation	0.271**	0.187**	0.197**	0.170*	1	0.462**
DPI	Pearson Correlation	0.193**	0.159*	0.064	0.141*	0.462**	1
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

Based on Table 4, the correlation value between all variables was positive. It signified that an increase in a variable would provide a positive correlation to the variables being compared. The highest correlation was the relationship between social environment variables and utilitarian search variables, amounting to 0.486. It showed that the two variables had the highest relationship. Meanwhile, the lowest correlation variables were the time perspective and impulse buying motivation variables with 0.064. These results indicated that low correlation occurred in variables that did not directly influence each other.

Table 5: The Goodness of Fit Model

Goodness of Fit Model Types	Goodness of Fit Model Indices	Recommended Value	Results	Conclusion
Absolute fit measures	Chi-square (χ^2)	Small expected	170.116	Good
	p	≥ 0.05	0.881	Good
	GFI	≥ 0.90	0.912	Good
	RMSEA	≤ 0.08	0.000	Good
Incremental fit Indices	NFI	≥ 0.90	0.994	Good
	CFI	≥ 0.90	1.000	Good
	TLI	≥ 0.90	1.010	Good
Parsimony fit Indices	AGFI	≥ 0.90	0.884	Marginal
	CMIN/DF	≤ 2.00	0.881	Good
	PNFI	≥ 0.60	0.789	Good

Table 5 displays the absolute fit indices, which consisted of chi-square, GFI (Goodness-of-Fit Index), and RMSEA (Root Mean Square Error of Approximation), showing mixed results. In the Absolute fit indices group, the chi-square value obtained in this study was 170.116, where this value was expected to be smaller than the chi-square table value. This research's chi-square value could be considered low because it was smaller than the chi-square table, with a df = 193 and a significance level of 0.05, obtaining 226.413. The GFI value in this research was obtained at 0.912, indicating a value greater than 0.90 to be considered good (Black & Babin, 2019). The RMSEA value obtained was 0,000, indicating a value smaller than the recommended 0.08, so it could be considered good (Black & Babin, 2019).

In this research, the incremental fit indices consisting of NFI (Normed Fit Index), CFI (Comparative Fit Index), and TLI (Tucker Lewis Index) showed mixed results. Based on Table 5, the NFI value was 0.994, greater than the recommended NFI value of 0.90, so it could be considered good. The CFI value obtained was 1.000, indicating a value greater than 0.90, so it was considered good (Black & Babin, 2019). The TLI value obtained was 1.010, meaning a value greater than the recommended 0.90, so it could be considered good.

Meanwhile, the value of parsimony fit indices consisting of AGFI (Adjusted Goodness of Fit Index), CMIN/DF, and PNFI (Parsimony Normed Fit Index) also exhibited mixed results. The AGFI value obtained in this research was 0.884, smaller than 0.90, so it could be considered bad. The CMIN/DF value of 0.881 was considered good because it was smaller than the recommended value of 2.00. The PNFI value obtained was 0.789, greater than 0.60, the recommended PNFI value to be considered good.

Table 6: Hypothesis Testing Results

Hypotheses	Estimate	CR	Results
Usability Factor → Hedonic Search	0.660	2.722	H1 is supported
Usability Factor → Utilitarian Search	0.180	2.797	H2 is supported
Functionality Factor → Hedonic Search	0.648	2.811	H3 is supported
Functionality Factor → Utilitarian Search	0.248	2.877	H4 is supported
Sociability Factor → Hedonic Search	0.323	2.667	H5 is supported
Sociability Factor → Utilitarian Search	0.345	4.579	H6 is supported
Utilitarian Search → Hedonic Search	-0.197	-0.686	H7 is not supported
Hedonic Search → Impulse Buying	0.509	6.323	
Utilitarian Search → Impulse Buying	0.117	0.772	
Utilitarian Search → Hedonic Search → Impulse Buying			
Hedonic Search → Impulse Buying	0.522	6.589	H8 is supported

This study's results indicate the first hypothesis, namely, the usability factor positively influences hedonic search. Based on the hypothesis testing results in Table 6, there was an estimated value of 0.660, and the value of CR on the effect of 2.772 was higher than 1.96. It demonstrated that the usability factor had a significant effect on hedonic search. Huang and Benyoucef (2017) stated that the better the online store website's usability factor, the higher the purchasing decision will be achieved. An online store, which has advantages in ease of use and accessibility, contains quality information, good content organization and design, qualified navigation features, and good aesthetics, can bring consumers to their goal, namely, to shop online. Ease of use can help first-time consumers access online stores when searching for a product, making alternative evaluations, and making purchases.

According to Handoyo and Mani (2021), the design quality's usability factor in online stores significantly affects hedonic search because a well-organized display of online market board applications can make consumers feel entertained. This research's hypothesis results could be caused by online market boards' displays that made consumers feel entertained or happy when searching. It indicated that the usability factor made consumers do hedonic searches.

The second hypothesis in this research is that the usability factor positively affects utilitarian search. Based on the hypothesis testing results shown in T8, there was an estimated value of 0.180 and the value of CR on the effect of 2.797, higher than 1.96, meaning that the usability factor had a positive and significant effect on the utilitarian search. According to Huang and Benyoucef (2017), aesthetic design combined with a good content organization can make consumers linger in an online store so that purchasing decisions can be reached more quickly. It also applies to the ease of access to information and the information quality contained therein. The easier it is for consumers to access quality information on an online store, the more knowledge they will get, and it provides its education in influencing alternative evaluation activities so that consumers feel comfortable making a purchase. Meanwhile, an unobtrusive or straightforward design also provides convenience for

consumers when accessing an online store. The generated convenience, of course, affects consumers in spending time surfing in online stores to make it easier to take consumers to make purchases. The explanation above is in line with what is conveyed by Yang Liu, Li, Edu, Jozsa, and Negricea (2020) that the usability factor's elements, including visual appeal or design and convenience, are the main determinants for consumers in making purchasing decisions. These findings can provide insight for online store companies in determining the direction of a more mature strategy to guide consumers to purchase decisions.

According to Zheng et al. (2019), the usability factor significantly affects utilitarian search because a well-regulated online market board application's visual display can increase consumer spending efficiency. The existence of an easy-to-understand online market board application's visual display will save time when searching and provide a sense of comfort when consumers search for the expected information. Consumers like the clarity of text, images, and graphics, which allows them to save energy while searching. It indicates that the online market board application's visual display supports the utilitarian search activities undertaken.

The third hypothesis in this research states that the functionality factor positively affects hedonic search. Based on Table 8, the hypothesis testing results indicated an estimated value at 0.648 and a CR value obtained at 2.811, higher than 1.96. It denoted that the functionality factor had a positive and significant effect on hedonic search. Huang and Benyoucef (2017) stated that the better the functionality factor on online store sites, the more motivated consumers would be to make purchases. The ability of online store websites to provide four functional characteristics, consisting of suitability, accuracy, interoperability, and security, is proven to help consumers complete online shopping activities with satisfaction. The more the online store's website has these four characteristics, the higher the consumer satisfaction and comfort level surfing the online store. This increase can trigger online purchasing activities based on a sense of security, comfort, and satisfaction.

According to Zheng et al. (2019), the functionality factor has a positive and significant effect on hedonic search because consumers will get pleasure when discussing purchase plans with friends and will affect hedonic motivation to perform searches. The consumers' satisfaction and convenience levels are essential because, usually, consumers will use an online market board application based on the satisfaction and comfort level that can be shared with friends or other individuals. It indicates that consumers will equalize their behavior and choices based on the functionality factor's influence on relatives and friends, which will support the hedonic search activities carried out.

The fourth hypothesis in this research is that the functionality factor positively affects utilitarian search. Based on Table 8, the hypothesis testing results had an estimated value of 0.248 and a CR value of 2.877, higher than 1.96. It suggested that the functionality factor positively and significantly affected utilitarian search. Shaouf et al. (2016) stated that an online store's good functionality makes consumers comfortable interacting with the information and services contained in it. Therefore, online store companies must also pay attention to the system functionality to increase consumer convenience so that purchasing decision-making activities, especially making purchases, will be easily achieved.

According to Zheng et al. (2019), consumers with utilitarian motivation have specific shopping goals and will not be easily influenced by others. The hypothesis testing results in this study are in line with the opinion of E. J. Park et al. (2012), stating that consumers who perform utilitarian searches have shopping goals from the start and need more and more quality information to make purchase decisions because consumers with utilitarian motivation rely heavily on search results and collect information from others. It indicates that influence from other people or friends will support utilitarian searches to gather quality information.

The fifth hypothesis in this research is that the sociability factor positively affects hedonic search. Based on the hypothesis testing results presented in Table 8, there was an estimated value of 0.323 and the value of CR on the effect of 2.667, higher than 1.96. It indicated that the sociability factor significantly affected the hedonic search. Constatinides (in Huang and Benyoucef, 2017) stated that sharing experiences and information between consumers can bind consumers when using the same services and applications. Besides, Yang et al. (2015) also asserted that consumer participation, which allows them to communicate directly when shopping online, is crucial and vital for online stores. Therefore, online store companies can consider creating a more mature and reliable system on the sociability factor. Through better sociability factor services, online stores' social activities can increase and influence consumer interest in using them.

Zheng et al. (2019) found a significant relationship between sociability and hedonic search factors because consumers with hedonic motivation pay attention to entertainment and pleasure from shopping behavior without paying attention to the purchase results made by efficiency and sociability factors in searching itself. The sociability factor supports consumers to access the online market board application anywhere and anytime. However, test results indicated that consumers searched online market applications all the time for pleasure. It made the sociability factor support the hedonic tracing activities carried out.

The sixth hypothesis in this research is that the sociability factor positively affects utilitarian search. Based on the hypothesis testing results in Table 8, there was an

estimated value of 0.345 and the value of CR on the effect of 4.579, higher than 1.96. It meant that the sociability factor had a positive and significant effect on utilitarian search. The results of testing the sixth hypothesis support the results of the research hypothesis conducted by Zheng et al. (2019), who argued that the sociability factor has a significant effect on utilitarian search because it allows consumers to search for the necessary wireless information beyond time and place constraints. It means that searches can be done anywhere and anytime.

Huang and Benyoucef (2017) affirmed that current technological advances have succeeded in integrating a website with social features in the same place. The social feature in question is the availability of a means to interact with each other online, making consumers interact with each other, share education and information, participate, and carry out word of mouth online. When consumers access online sites with good social features, product introduction activities and evaluation of consumer alternatives will be easier to miss because previous consumers convey various information. Besides, there is the possibility of word-of-mouth online, in which consumers can share their experiences with other consumers and thus trigger purchasing decisions. A sociability factor can help consumers find the information they need or make the purchases they want or expect immediately. It indicates that the sociability factor can support consumers' utilitarian search activities.

The seventh hypothesis in this research is that hedonic searches mediate the relationship between utilitarian searches and impulse buying drives. Based on the hypothesis testing results in Table 8, the mediation relationship was obtained from the relationship A and B, namely the relationship between utilitarian search and hedonic search, with an estimated value of -0.197 and a value of cr -0.686. It signified that the independent variables did not affect the mediator, the relationship between B and C, namely the relationship between hedonic search and impulse buying, with an estimated value of 0.509 and a CR of 6.323. It indicated that the mediator significantly influenced the dependent variable, the relationship between A and C, namely the relationship between utilitarian search and impulse buying, with an estimated value of 0.117 and a CR value of 0.772. It suggested that the independent variable did not influence the dependent variable. Thus, the mediation conditions were not met, and the seventh hypothesis was not supported (Baron & Kenny, 1986). Hedonic searches did not mediate the relationship between utilitarian searches and impulse buying drives. The results of testing the seventh hypothesis reinforce the research carried out by Zheng et al. (2019), who found that consumers who carry out utilitarian searches are very concerned about meeting their needs in accordance with expectations and do not have the direct intention to make impulse buying. It indicates that utilitarian search does not make consumers have the urge to buy impulsively.

The eighth hypothesis in this research is that hedonic search positively affects impulse buying drives. Based on the hypothesis testing results displayed in Table 8, there was an estimated value of 0.522 and the value of CR on the influence of 6,589, higher than 1.96. It denoted that hedonic search positively and significantly affected impulse buying drives. The results of testing the eighth hypothesis support the research hypothesis results carried out by Zheng et al. (2019) that hedonic searches have a strong relationship and a positive influence on impulse buying drives experienced by consumers because they search for fun and do not care about the purchase results so that consumers who get hedonic motivation, then have the urge to make impulse buying.

5. Conclusions

The results in this study concluded as follows:

1. The usability factor supported a hedonic search in distribution market. It could be because consumers searched the application only to fill spare time or waiting time and pay attention to application usability factors related to the collection of fonts or the clarity of text and images presented by online market board applications Tokopedia, Shopee, Bukalapak, and Lazada. An online store with ease of use, an aesthetic yet simple design, organized content, easily accessible and quality information, and qualified navigation would influence consumer emotions by providing convenience at every stage of making a purchase. Consumers have a feeling of pleasure and get entertainment when browsing activities.
2. The usability factor supported utilitarian search. Consumers liked the color combination and choice of fonts and images so that the display of the application pages was easy to read, such as the Bukalapak, Shopee, and Lazada applications, simplifying the search process that consumers could save time and save energy. Consumers would help make product introduction and information search when faced with a comfortable design, good content preparation, and good quality information. The subsequent effect that arose was that it could trigger consumers to make purchasing decisions so that it was possible that positive word of mouth would spread. It could make consumers search efficiently.
3. The functionality factor supported a hedonic search. The effect of this functionality factor could make consumers feel happy to use online market board applications and perform searches as an entertaining activity. The more an online store increases the functionality factor in its

design quality, the higher the consumers' opportunities to make a purchase. The supporting functions of the purchase decision stages, such as the choice of payment methods, the availability of online assistance, delivery service offerings, and tracking information for items purchased, increase consumer confidence. The higher the confidence level obtained, the higher it triggers a purchase decision. Consumers using online market applications, primarily millennials, will usually discuss their purchase plans with friends or other individuals before purchasing decisions. Besides, consumers will equalize their choices based on recommendations or social environment influences, such as friends or relatives. One of the things that made consumers feel entertained is that they could see the many variations of the products presented in the Tokopedia and Shopee applications and the promotions highlighted by the Lazada application. These efforts could support hedonic searches carried out by consumers using online market board applications.

4. The functionality factor supported utilitarian search. Consumer information security also increased consumer confidence in an online store because it was considered to protect matters related to their privacy. The four online stores above had a reasonably good accuracy level of the search function to ease consumers' burden in searching for products. Consumers tend to look for quality information that matches expectations and listen to peer opinions using online market board applications. This information disclosure has also contributed to increased consumer confidence in online stores and has resulted in positive word of mouth for other potential customers. Consumers will also equate behavior with friends who have information about consumer shopping goals. It makes consumers use online market board applications based on other people's opinions to efficiently search for higher quality information. The Shopee application has complete information about products and special features for blocked items to help consumers avoid problematic products and get additional information. The Tokopedia, Bukalapak, Shopee, and Lazada applications also provide a search field on the application's start page to make it easier for users to search. Thus, searching could be carried out more efficiently. These efforts supported consumer searches.
5. Sociability factors supported hedonic searches carried out by consumers using online market board applications. The availability of social features, such as discussion forums and reviews on an online store, could increase consumer knowledge when developing product introduction, information search, and alternative evaluation. Besides, the availability of services for mutual interaction between consumers and sellers also increased consumer confidence in the seller and online shop. This feature's importance has been implemented by Tokopedia, Bukalapak, Shopee, and Blibli, which provide chat features with sellers. Smartphones used by consumers can be accessed anytime and anywhere without any obstacles so that consumers can search during times of stress to make them feel relaxed by opening the Tokopedia, Bukalapak, Shopee, and Lazada applications.
6. The sociability factor supported a utilitarian search. Re-purchase behavior could be stimulated by the presence of an online community and discussion features. Consumers who have already had a high trust level in online shops can transmit word of mouth to others online and offline. Therefore, the more online stores improve quality and service on their sociability factors, the higher the opportunity to influence consumer purchasing decisions, especially at the purchasing stage. It could be due to the absence of space and time constraints, meaning that consumers can access online market board applications, such as Tokopedia, Shopee, Bukalapak, and Lazada, anytime and anywhere so that they can search for information and purchases that can be accessed while traveling through mobile devices, especially smartphones connected to the internet.
7. The relationship between utilitarian search and impulse buying drives was not mediated by hedonic search. It could be because consumers who used online market board applications had an initial shopping objective, so they did not urge to make impulse buying. Consumers performed searches to obtain information relating to consumer purchase objectives and obtained products according to the original purpose. On the Bukalapak application page, consumers could easily find product categories. In the Shopee application, consumers could get much information from the many product variants offered.
8. The hedonic search had a positive influence on impulse buying drives. Consumers prefer to use their spare time to search through online market board applications, such as Lazada, which provides many attractive promos or Shopee, which offers free shipping, then consumers feel happy about the activity, making them have the urge to buy impulsively without further consideration.

The managerial implications of this research regarding marketing strategies are as follows:

1. Usability factors influenced consumers who performed hedonic searches. A consumer's first impression of an online store must lie in what they first look at. In this case, an aesthetically pleasing and attractive design, ease of operation of the website, and quality of information

should be the focus to attract consumers when they first visit an online store website. There is nothing wrong with online store companies improving the quality of these three components. Changing the color theme is potential for consumer convenience when surfing the online store. That way, marketers can also provide other marketing strategies, such as pricing strategies to make consumers happy to hunt or search for products at low prices or other offers that make sense. Companies can also strive to create interactive and aesthetic online market applications with products communicated through animation, text, images, video, and audio, which can add pleasure when consumers search.

2. Online market board application providers and marketers can provide more detailed product information. The existence of detailed information provided about the product will reduce consumer ambiguity about the product to be purchased. Online stores also need to make it easy for consumers to use the systems they have in place. Online store companies with systems with fairly complex operations can minimize the program's flow on the online store site. Finally, online store companies can combine the above with a well-organized content arrangement so that it is expected to give a positive first impression and make consumers feel at home for a long time. Besides, companies can select various kinds of products into color, design, or price categories, making it easier for consumers to search.
3. Online market board application providers can use the functionality factor to increase consumer motivation to perform hedonic searches because consumers rarely perform hedonic searches. Many online stores now offer several functionality services, but they are not maximal in applying them. Some things that need to be underlined by online shop companies are ensuring the availability of various payment methods, courier services, information on tracking customer orders, and in-person support services. Currently, several online stores have several payment methods, but in the future, it is hoped that the payment method feature will be more integrated with the system currently being used by consumers daily. Online market board application providers can also provide additional product variations or price offers in the form of discounts or gifts for consumers who are happy to share their purchase information. Thus, it is hoped that consumers can feel happy doing searches for information shared by other people or friends.
4. Online market board application providers can provide features that make it easier for consumers to share experiences or discuss their search results or consumer purchasing experiences in the online market application itself or connect it to social media. Providing a direct help feature for consumers who have difficulty operating the online store is also necessary. Online store companies can provide online admins with chat media on online stores to accommodate this. Many positive effects will be obtained for the online shop itself whenever consumers feel enlightened. Thus, consumers are more efficient in providing information and obtaining quality information as expected.
5. Positive or negative information can quickly change consumers' mindsets today, regardless of the information's truth. Referring to such consumer habits, online store companies should pay attention to several things related to social functions to anticipate negative rumors that may be detrimental. Providing communication or interaction features between consumers and sellers is one way out. Online marketplace application providers can also invest in innovation and development to create features, such as great bargain-hunting games, to give consumers a sense of their search excitement.
6. Online market board application providers can invest in innovation and development for location-based application usage functions that can provide consumers with product recommendations based on the consumer's location so that products found are close to consumers. Access and costs to get products are even cheaper faster. Providing product recommendation features should be put forward by online shop companies. The existence of this feature is beneficial for consumers in assessing a product and its seller. It also has a positive effect on the quality of the online shop itself. Finally, if possible, online store companies must involve their customers in providing evaluation and system development input to make it even better.
7. Consumers really care about their needs met in accordance with the original expectations or goals and do not have the direct drive to make purchases impulsively. Online market board application providers can store consumer purchase histories and provide product recommendations to consumers based on their previous purchase history to stay informed according to preferences and more efficient searches.
8. Consumers who do hedonic searches will experience impulse buying drives. Hedonic search can increase when consumers get influenced by friends or other people. Thus, marketers can use an endorser, an influencer (someone is known for having a large number of followers, as an artist), or a brand ambassador, who can influence other people to search, and then urge them to make impulse buying.

Some limitations in this research are as follows:

1. The questionnaire distribution was carried out online to allow multiple filling in by an individual, which could bias the research.

2. The rapid development of technology and information in Indonesia can make this research's topics and managerial implications less relevant. It may be that online retailers have noticed this at the same time this research is being done.

Future research directions are as follows:

1. Subsequent research can add product categories as research subjects to reduce generalization elements by more specific subjects.
2. In further research, it is better to distribute questionnaires to more targeted respondents in the sense that the researchers know if the respondents really fit the criteria needed in the study.
3. For further research, it is hoped that the research will be completed in the shortest possible time to anticipate the rapid advancement of technology and information in Indonesia so that it is expected that the research results are still relevant to the actual situation.

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