

Original Article

Website Quality Affects Online Impulse Buying Behavior (OIBB): Moderating Effects of Sales Promotion and Digital Wallet Use (A Study on Tokopedia E-Commerce)

Nyoman Sri Handayani¹, Ketut Rahyuda²

^{1,2} Faculty of Economics and Business, Udayana University (UNUD), Bali, Indonesia
Jalan PB. Sudirman, Denpasar, Bali, Indonesia

Received Date: 31 October 2020
Revised Date: 12 December 2020
Accepted Date: 13 December 2020

Abstract - This study aims to analyze the website quality effect on OIBB, along with the moderating effect of the sales promotions and digital wallet use on Tokopedia e-commerce. The population of this research is consumers who make purchases impulsively through the Tokopedia website within the last one month. The sample size was 150 residents living in Denpasar with a purposive sampling method and was distributed using a questionnaire, with criteria that had been adjusted through Google Form. Moderated regression analysis will be used as a data analysis technique.

The results showed that website quality, sales promotion, and digital wallet use had an effect on OIBB simultaneously. Sales promotion does not have a significant effect on OIBB partially, meanwhile on other factors, there are positive and significant effects. Sales promotion and digital wallet use are also able to moderate and strengthen the relationship between website quality and OIBB.

Keywords - Website Quality, Sales Promotion, Digital Wallet Use, Online Impulse Buying Behaviour.

I. INTRODUCTION

The increasing number of internet users accompanied by the rapidly developing information and communication technology (ICT) in Indonesia has had an impact on changes in various fields, as well as on lifestyle changes, including consumption patterns and people's way of selling and shopping. Consumers who are increasingly turning to make online purchases have caused the online shopping market to get bigger and encourage e-commerce competition to become more intense (Prihantoro et al., 2018). The Global Web Index (2019) further states that Indonesia has the highest level of e-commerce users in the world.

Research on shopping behavior states that Tokopedia is e-commerce in Indonesia with the largest number of

monthly web visitors in the third quarter of 2019, with a total of 66 million monthly web visitors to Tokopedia and controlling 25 percent of the total market share of all e-commerce users via desktop. However, despite still leading the market, Tokopedia's dominance has decreased by 4 percent compared to the previous quarter's achievement (Techinasia. id 2019). One of the reasons for this decline was the Tokopedia site that went down during important periods, such as during promotional events (Liputan6.com, 2018). Based on the experience of some consumers, it turns out that this does not happen only when a promotional event is in progress only but also occurs when in normal circumstances. (Uzone.id, 2019).

Apart from the potential obstacles when shopping on e-commerce, the phenomenon of online purchasing has begun to become a preferred alternative for consumers, compared to having to go to the stores and waste time. The fierce competition requires e-commerce players to implement an impulse buying strategy to attract and retain consumers. Online impulse buying behavior (OIBB) is an integral part needed to complement e-commerce, to attract consumers to buy on their site, by manipulating various marketing stimuli. Online shoppers were found to be more impulsive than offline shoppers, which suggests that OIBB is seen in e-commerce settings (Liu et al., 2013; Wiranata and Hananto, 2020).

OIBB is defined as a purchase without priority shopping intentions in an online platform, consumers tend to make unwanted purchases, related to the simplicity or involvement of the website (Rezaei et al., 2016). Website navigation, transaction security, and visual attractiveness are atmospheric cue factors that can directly influence the potential for consumers to experience impulse buying (Lo et al., 2016).

E-impulse buying as a purchase without a priori shopping intentions in an online context includes unplanned purchase decisions, which can be influenced, among others, by website quality factors (Akram et al.,



2018; Singh and Verma, 2018). Several factors such as situational factors, promotional offers, and website communication can underlie OIBB. Website attributes are mentioned as the main factor that forms the basis for urgent purchases in online purchases and then leads to e-impulse buying (Singh and Verma, 2018).

Website quality is said to be the main factor in e-commerce since customer perceptions of website quality will directly and positively affect purchase intentions. The dimensions of website quality can be categorized as usefulness, ease of use, entertainment, and complimentary relationships (Li et al., 2017; Akram et al., 2018). Website design is stated as an important determinant of website features and is very important in achieving the quality of service offered to customers through the website. Based on the perspective of Internet users, online consumers are the website users, who carry out all the purchase decision-making functions, from looking for the related product information to tracking product delivery and complete payment systems (Wells et al., 2011).

On the other hand, the website quality element is still considered as a hygiene factor (i.e., the basic condition to prevent users from leaving the online shop, but not sufficient to stimulate impulse buying). Consumers consider an easy-to-use website interface as one of the prerequisites for online shops. Lack of smooth browsing can also lead to consumer dissatisfaction and can further damage the online store's image. The results of research that show that website quality is not strong enough to stimulate impulse buying furthermore show inconsistent results, which still need to be re-examined (Lo et al., 2016; Wiranata and Hananto, 2020).

Sales promotion is a short-term incentive to increase the purchase or sale of a product or service, where purchases are expected to be made immediately (Kotler and Armstrong, 2016: 429). Sales promotions such as buy one get one free, gift coupons, cashback, and bundling are sales promotion stimuli that can encourage impulse buying. Sales promotion plays an important effect in the online-shopping environment, also in the advertising strategies, the direct rewards implicit in sales promotion are the same as the idea of impulse buying (Dawson and Kim, 2010; Akram et al., 2018). Sales promotion has been stated to positively affect consumer OIBB (Malik and Sachdeva, 2015; Lo et al., 2016; Ho et al., 2017; Akram et al., 2018; Yahya et al., 2019).

There are different results in recent research that sales promotion has a negative effect on consumer purchases. A large number of discounts is said to be a cause of discomfort among consumers, which in turn will lead to a sense of caution, negatively associated with hedonic features. Sales promotion is also stated to have no effect on the brand formation and can cause the impact of brand decline, especially for established ones (Santini et al., 2015; Hanaysha, 2017). Sales promotion is also not proven to have a positive and significant effect on impulse buying, which shows that the more attractive the sales promotion offered, it will not necessarily increase consumer impulse buying, because it could be that the sales promotion which had offered was not good enough or not attractive enough,

so that consumers tend to ignore aspects of sales promotion when making purchases unplanned (Diany et al., 2019; Poluan et al., 2019).

Research that analyzes the impact of specific sales promotions on online purchases has not been heavily addressed. Previous research results also still show inconsistencies regarding the impact of sales promotions on OIBB. Hence, the literature can be expanded by analyzing its impact on online platforms. Many existing studies show the direct effect of website quality and sales promotion on OIBB. However, as far as tracing, there are still few studies that have tried to explore the use of sales promotion as a moderating variable between website quality and OIBB, seeing also the results of recent research by Wiranata and Hananto (2020) which found that sales promotions make a relationship between website quality and impulse buying which previously declared unrelated, becomes positive and significant after moderation. Filling this gap, research was raised.

In connection with the phenomenon of the increasing number of e-commerce, internet users that indirectly increase website users, from time to time, the digital industry in various countries is increasingly showing its development, including in Indonesia, and has a significant impact, one of which is the development of Indonesia's digital payment. Various digital payments that are widely used today include digital payments or e-money, and digital wallets. In the past few years, Indonesia has indeed been intensively migrating regarding payment methods to be more cashless or minimizing the use of cash (Kompas.com, 2019). Previous research regarding the effectiveness of the payment system used in retail stores, both by credit card and debit card on impulse buying behavior, stated that credit card use had no effect on impulse buying behavior. Meanwhile, payments using a debit card can affect impulse buying behavior (Risqiani, 2017).

In contrast to several studies on credit card use, which is a cashless payment method, and OIBB shows a positive and significant relationship between the two variables (Badgaiyan and Verma, 2015; Akram et al., 2018). The research further shows that there is a direct and significant moderating effect of credit card use by 53.2 percent. This means that there is still a gap for further research on the use of other cashless payment instruments (Akram et al., 2018).

Research on digital wallets in one of the developing countries, India, shows that cash is still the most popular payment method for shopping. Debit cards and credit cards, or cashless payment methods, are found to be used frequently for online shopping and order movie tickets. The results of further research show that 43 percent of respondents use digital wallets, which means that the potential for using digital wallets has a great opportunity to grow (Bagla and Sancheti, 2018).

Morgan Stanley's research results published in February 2019 also show a large number of users and digital payment transactions in developing countries to be precise in Indonesia, and predict the number of transactions through digital payments will reach the US

\$ 50 billion by 2027 (Bisnis.com, 2019). In line with the results of previous research by Morgan Stanley, the study also revealed that the reasons that make electronic money an option in transactions, one of which is practicality, in other words, there is no need to carry cash, and there are many promos. This is also in line with previous research on digital wallet use in developing countries by Bagla and Sancheti (2018).

The Central Statistics Agency (BPS) in February 2019 also stated that Bali was included in the top 10 (ten) regions with the largest number of e-commerce businesses. Furthermore, it can indirectly encourage even more rapid growth in the use of digital wallets and show a novelty in e-commerce payment methods. More specifically, BPS also stated that the percentage of e-commerce sales media in Bali is controlled by Bukalapak (1.18 percent), followed by Tokopedia (0.59 percent) and Shopee (0.59 percent) (BPS, 2019).

Previous studies have discussed this topic a lot, however, there is still a need for additional literacy on this topic, seeing as previous studies mostly focused on online clothing or in the realm of fashion alone, researching credit card use variables, or not specifically researching in the online realm. There are still a few, who have researched digital wallet use, especially in the realm of domestic consumers. In addition, there are still research gaps in the form of inconsistent results on the combination of discussion of website quality, sales promotion, and digital wallet use, where these factors are important factors that need to be of concern to technology-based service providers.

II. LITERATURE REVIEW AND HYPOTHESIS

A. Literature Review

a) Website Quality

The increasingly popular use of the internet, which is a result of the rapid expansion of public access to media, has caused businesspeople to reimagine their strategies, many businesses have restructured their marketing strategies with a presence on the World Wide Web (Thomas et al., 2004), to develop a reputation. brand, to make transactions by providing services to customers, or for public relations purposes only. Website marketing strategy has become widespread in various sectors of the economy because it offers different business opportunities (Liao et al., 2006).

Website quality is a key factor in e-commerce because customer perceptions of website quality positively and directly affect their purchase intentions (Li et al., 2017). The dimensions of website quality can be categorized as usefulness, ease of use, enjoyment, and complementary relationships. It is also said that website design is an important determinant of website features and is very important in achieving the quality of service offered to customers through the website.

The website can be called the main information warehouse, which can help the consumers when they are looking for information. B2C websites are the sites that allow consumers to freely shop through the World Wide Web. Website quality itself can be measured by factors of

ease of use (ease of use), usefulness, entertainment, and complimentary relationships (Akram et al, 2018).

b) Sales Promotion

Sales promotions are designed to stimulate purchases and product trials immediately during a certain period, so it has the potential to trigger impulse buying behavior. Stimulation of sales promotion is stated to generate impulse buying, by implying a direct gift that if it is overlooked, it can make consumers feel sorry for missed opportunities so that it will trigger consumers to engage in impulse buying to avoid being left behind. Buyers are more likely to behave impulsively when they find a discount on products. Sales promotion has also significantly influenced OIBB and acted as a firm moderator in the relationship between website quality and OIBB (Badgaiyan and Verma, 2015; Lo et al., 2016; Akram et al., 2018; Solomon et al., 2018).

Sales promotions in the form of coupons, discounts, and free shipping are some of the sales promotions that websites use to attract more customers to buy their goods (Yahya et al., 2019). Flash Sale events have become very popular in e-commerce in recent years. Flash sales are a popular e-commerce marketing mode, where producers sell a number of new products at discounted prices within a certain time before the normal sales period (Singh and Verma, 2018; Zhang et al., 2018). Cashback promotions, which are increasingly attached to the widespread use of digital payment instruments today, can also attract customers to buy products (Ho et al., 2017).

c) Digital Wallet Use

The demand for electronic payments has emerged, due to the rise of online shops, so there are innovative and easy-to-use solutions that better suit the needs of merchants and customers (Dahlberg et al., 2008). The term digital wallet describes digital storage for money that fulfills most of the tasks of a physical wallet so that it can replace a physical wallet (Ebringer et al., 2000).

In digital wallets, payments mostly happen through apps, and the apps quickly overshadow the websites when used on a smartphone. Factors that have contributed to the adoption of the digital wallets by the buyers include cashback and rewards, several conveniences such as easy use anywhere and anytime, no need to bring the cash (practical), and no transaction fee (Rathore, 2016; Bagla and Sancheti, 2018).

d) Online Impulse Buying Behavior (OIBB)

OIBB is stated as an unplanned purchase decision, influenced by several factors such as hedonic motivation, utilitarian motivation, social shopping, adventure shopping, idea shopping, perceived benefits, perceived enjoyment, information on visual attractiveness according to the task, and the desire to buy. impulsively. This can be influenced by several factors such as website quality, which is moderated by sales promotions and the use of credit cards (Akram et al., 2018).

Website design is normally defined from the usefulness perspective, the major focus is on designing the

user-friendly interface to enhance the customer's online shopping experience. If online buyers enjoy the shopping experience in terms of confidence in using the web to meet their shopping needs, they can potentially involve in more positive feelings about shopping and lead to more impulsive purchases (Wu et al., 2016; Prihantoro et al., 2018).

B. Hypothesis

a) Website Quality

The effect of website quality on online impulse buying behavior (OIBB) states that website quality (usefulness, ease of use, entertainment, complementary relationships) can positively and significantly affect OIBB (Rezaei et al., 2016; Wu et al., 2016; Li et al., 2017; Akram et al., 2018; Singh and Verma, 2018; Tariq et al., 2019).

Different results have also been found that website quality is stated as a basic condition to prevent the users from leaving the online store, but not sufficient to stimulate impulse buying. Website quality is stated to have no direct influence on impulse buying, however, the effect of website quality is said to be still important, because it still plays an effect as a hygiene factor (Lo et al., 2016; Wiranata and Hananto, 2020).

H1: Website quality has a positive and significant effect on online impulse buying behavior (OIBB).

b) Sales Promotion

Sales promotion is a motivator for online impulse buying on website quality because website quality is not strong enough to stimulate online impulse buying (Lo et al., 2016). This is also similar to the latest research conducted by Wirananta and Hananto (2020) which found that sales promotions positively and significantly affect OIBB as an independent variable. Likewise, based on previous studies regarding website quality and sales promotion, the existence of sales promotions is stated to increase the positive influence that has been generated by good website quality attributes, and further increase OIBB (Malik and Sachdeva, 2015; Badgaiyan and Verma, 2015; Lo et al., 2016; Ho et al., 2017; Akram et al., 2018; Yahya et al., 2019).

The website quality element is said to be still considered a hygiene factor (namely, the basic condition to prevent users from leaving the online store) even though it is not sufficient to stimulate impulse buying, while sales promotion is stated as a motivator for online impulse buying (Lo et al., 2016). This shows that sales promotions can strengthen the influence of websites or e-commerce platforms in encouraging impulse buying. Recent research by Wiranata and Hananto (2020) also found that website quality did not significantly influence impulse buying behavior.

Sales promotion is also stated to increase impulse buying behavior in e-commerce, also positively and significantly influencing OIBB as a moderating variable in knowing the effect of website quality on OIBB (Rismawan and Purnami, 2017; Akram et al., 2018).

Sales promotions were also found to have a negative effect on sales, brand image especially on established

brands, and reference prices. A large number of discounts is said to be a cause of inconvenience among consumers, which in turn will lead to a sense of caution (Santini et al., 2015; Hanaysha, 2017). Recent research has also found that sales promotion is not proven to have a positive and significant effect on impulse buying. This shows that the more attractive the sales promotion offered will not necessarily increase the consumer's impulse buying, because it could be that the sales promotion carried out is not good enough or not attractive enough so that consumers tend to ignore the sales promotion aspect when making unplanned purchases (Diany et al. al., 2019; Poluan et al., 2019). There are still discrepancies from the results of previous studies, this study was conducted also to determine the effect of sales promotions.

H2: Sales promotion has a positive and significant effect on online impulse buying behavior (OIBB).

H3: Sales promotion positively and significantly moderates the relationship between website quality and online impulse buying behavior (OIBB).

c) Digital Wallet Use

The perceived benefits and perceived ease of use also affect user attitudes when adopting digital wallets. It has also been found that perceived benefits and ease of use are positively correlated with the intention to use the digital wallet system (Rathore, 2016). On the other hand, offering discounts and reward points for making payments via digital wallets can increase its popularity and adoption as well (Rathore, 2016).

Akram's research (2018) found that credit card use, which is a cashless payment method, facilitates direct purchases for consumers. The study also found that credit card use positively and significantly influences OIBBB purchases. The findings are also supported by previous studies (Karbasivar and Yarahmadi, 2011; Badgaiyan and Verma, 2015).

Bagla and Sancheti's research (2018) found the use of digital wallets in priority order, namely instant money transfer, cashback and rewards, easy, practical, and "forced" user interfaces to be used by merchants or service providers. Badgaiyan and Verma (2015) and Akram et al. (2018) also stated that the interaction on the credit card use variable or those that include cashless is also significant so that there is a significant and positive moderating effect of the credit card used in the relationship between website quality and OIBB.

Along with the development of e-commerce, the use of digital payment instruments, one of which is a digital wallet, plays an important effect, especially in developing countries (Bagla and Sancheti, 2018). The same thing also happened, one of them in Indonesia, so further understanding is needed about the payment methods offered on the website, which in turn is expected to motivate OIBB. This study also wants to examine this relationship.

A recent study has found different results, namely that credit card use has no effect on impulse buying behavior, whereas only payments using a debit card are stated to affect impulse buying behavior (Risqiani, 2017).

Based on existing empirical studies, which states that credit card use is one of the cashless payments, which has similar characteristics to digital wallets (as a cashless payment too), then there are two hypotheses that can be built, namely H3 to test the direct effect and H4 to test the moderating effect of digital wallet use, as follows:

H4: Digital wallet use has a positive and significant effect on online impulse buying behavior (OIBB).

H5: Digital wallet use positively and significantly moderates the relationship between website quality and online impulse buying behavior (OIBB).

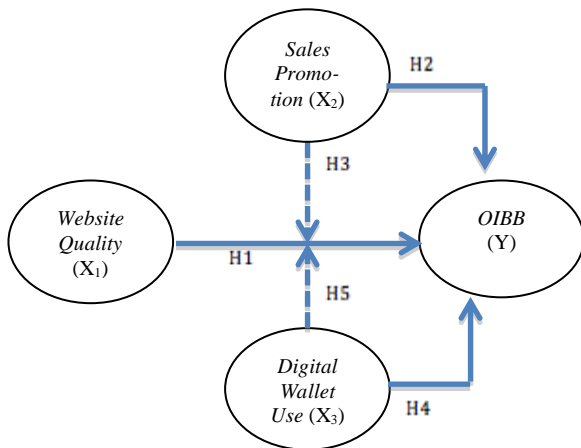


Fig. 1 Conceptual framework

III. RESEARCH METHODOLOGY

The approach used is a quantitative approach in the form of an associative or relationship (Sugiyono, 2017: 14). The research is in the form of a study of consumers using the Tokopedia website in Denpasar City. Data collection was carried out using a questionnaire instrument that was distributed in the form of a list of questions online using a google form to the appropriate respondents (Sugiyono, 2017: 142).

The data used is quantitative data, which is expressed in the form of numbers from the calculation and measurement of the results of the questionnaire answers using the Likert scale method (Sugiyono, 2017: 15). The data sources used are primary and secondary data sources. The primary data sources are directly from respondents, meanwhile, secondary data are obtained from related literature reviews.

The population is consumers who have graduated from high school or equivalent, who make purchases impulsively, minimal or more than three times a month through the Tokopedia website in Denpasar City, based on the consideration that shopping minimal or more than three times a month can be indicated as purchases impulsive or unplanned. The sampling method used in this study is non-probability sampling with the purposive sampling technique (Rahyuda, 2017: 156).

The indicators studied are 25 indicators, so the sample required is at least 125 (5x25) and a maximum of 250 (5x10) (Sugiyono, 2017: 164). This study uses 150 (6x25) respondents based on that using 150 respondents is expected to produce accurate outputs or results.

The data collection method used in this study is through multiple linear regression, followed by the Moderated Regression Analysis (MRA) test using the SPSS application.

The study measures 25 indicators of 4 variables (website quality, sales promotion, digital wallet use, and OIBB) using a Likert scale ranging from 1 to 5, starting from notation 1 to strongly disagree to notation 5 to strongly agree (Rahyuda, 2017: 188).

Website quality variables are measured through 4 dimensions (usability, convenience, entertainment, complementary relationships) based on the adaptation of Li et al. (2017), Akram et al. (2018), and Wiranata and Hananto (2020). Measurement of the sales promotion variable was adapted from the research of Ho et al. (2017), Singh and Verma (2018), Zhang et al. (2018), and Yahya et al. (2019) which have been adjusted to the object of research (shopping coupons, discounted prices, free shipping, cashback, Flash Sale). The digital wallet use variable is measured based on research by Badgaiyan and Verma (2015), Rathore (2016), and Bagla and Sancheti (2018) which have been modified based on the research object. The measurement of the OIBB variable used refers to the research of Wu et al. (2016), Akram et al. (2018), and Singh and Verma (2018).

IV. RESULTS AND DISCUSSION

A. Results

Respondent Characteristics

Data collected from 150 valid responses analyzed, from respondents who live in Denpasar. Descriptive analysis was performed to obtain the characteristics of the respondents, followed by multiple regression analysis and MRA. Based on the data, most respondents are women. Most of the respondents were between the ages of 24 and 29 years, and most had shopping impulsively more than 10 times in the past month with an average expenditure of 151,000 Rp to 200,000 Rp.

Validity and Reliability Test

The minimum requirement that is considered to meet the validity requirements is the value of the correlation coefficient ($r \geq 0.30$), so that if the value of $r < 0.30$, the instrument is declared invalid (Sugiyono, 2017: 134). The r-value on each of the indicators of this research variable has the lowest value is 5.14 and the highest value is 8.12, indicating a number higher than 0.30 so that the research instrument can be declared valid, can be used, and can be continued to the next analysis. Furthermore, Cronbach's Alpha coefficient ≥ 0.60 indicates that the construct in the study is declared reliable. The correlation coefficient value of Cronbach's Alpha for all variables is > 0.60 , meaning that all research variables have met the reliability requirements.

Classic Assumption Test

Normality test

The results of the residual normality test with the one-sample Kolmogorov-Smirnov found that the Asymp. Sig.

(2-tailed) obtained a value of $0.762 > \alpha = 0.05$. These results indicate the data used are normally distributed.

Heteroscedasticity Test

The results of the significant value of the heteroscedasticity test found that all research variables carried out with the Gleiser test were above 0.05, namely 0.059 for the website quality variable (X_1), 0.068 on the sales promotion variable (X_2), and 0.067 for the digital wallet use variable (X_3) so that the data is free from heteroscedasticity.

Multicollinearity Test

The multicollinearity test results found that the tolerance value is close to 0.10 and the VIF value is lower than 10. The website quality (X_1) variable has a tolerance value of 0.686 with a VIF value of 1.458. The sales promotion variable (X_2) has a tolerance value of 0.581 and a VIF value of 1.721. The digital wallet use variable (X_3) has a tolerance value of 0.446 and a VIF value of 2.242 so that all variables in the regression model have met the requirements for the multicollinearity test.

Multiple Regression Analysis

Table 1. Correlation (R) and Determination Test (R²)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.706	0.499	0.488	1.609

The R-value obtained is 0.706, meaning that there is a strong relationship between website quality (X_1), sales promotion (X_2), and digital wallet use (X_3) on online impulse buying behavior (Y).

The Adjusted R Square value obtained is 0.488 or 48.8 percent, meaning that the influence of the independent variables (website quality, sales promotion, and digital wallet use) on the dependent variable (online impulse buying behavior) is 48.8 percent and the remaining 50.1 percent is influenced by other variables not discussed in this study.

Model feasibility test (F test)

Table 2. Model Feasibility Test (F Test)

ANOVA ^a						
Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	378.629	3	126.210	48.724	0.000
	Residual	380.775	147	2.590		
	Total	759.404	150			

The resulting significance value is less than $\alpha = 0.05$, namely 0.00, indicating that the research regression equation model is included in the fit criteria.

Hypothesis test (t test)

Table 3. Partial Regression Coefficient Test (t-test)

Coefficients ^a					
Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
Model	B	Std. Error	Beta		
(Constant)	-5.24	1.737		-3.02	0.003
WQ	0.180	0.027	0.466	6.611	0.000
SP	0.064	0.071	0.070	0.908	0.366
DWU	0.280	0.086	0.286	3.265	0.001

The regression equation formed from the regression test on the OIBB is as follows:

$$Y = -5.24 + 0.18X_1 + 0.06X_2 + 0.28X_3 \quad (1)$$

The t value of the website quality variable (X_1) is 6.611. The t distribution table is sought at $\alpha = 0.05$: 2 = 0.025 (2-sided test) with nk-1 degrees of freedom (df), namely (df) $151-3-1 = 147$, then the t table value obtained in the study is amounting to 1.976. The value of t count (6.611) > the value of t table (1.976). This means that H1 is accepted.

The t value of the sales promotion variable (X_2) is 0.908 < t table value (1.976). This means that H2 is rejected. Furthermore, the t value of the digital wallet use variable (X_3) is 3.265 > the t table value (1.976). This means that H4 is accepted.

Moderate Regression Analysis (MRA) Test

Table 4. Sales Promotion as Moderating Variable (X²)

Coefficients ^a					
Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
Model	B	Std. Error	Beta		
WQ* SP	0.003	0.001	0.467	4.005	0.000

The parameter coefficient value is 0.467 and a significant value is 0.000. The results of this test indicate that sales promotion is a moderator variable in the study.

Sales promotion as a moderator is also able to strengthen the relationship between website quality and online impulse buying behavior (OIBB) by 0.001 or 0.1 percent. This also means that H3 is accepted.

Table 5. Digital Wallet Use as Moderating variable (X³)

Coefficients ^a					
Unstandardized Coefficients			Standardized Coefficients	t	Sig.
Model	B	Std. Error	Beta		
WQ * DW U	0.006	0.001	0.491	5.319	0.000

The value of the parameter coefficient is 0.491 with a significance of 0.000. This means that digital wallet use is also a moderating variable in the study. Digital wallet use as a moderating variable is also able to strengthen the relationship between website quality and OIBB by 0.205 or 20.5 percent. This shows that H5 is accepted.

B. Discussions

a) The Effect of Website Quality on Online Impulse Buying Behavior (OIBB)

Based on the results of the H1 hypothesis test, it has been found that website quality has a positive and significant effect on online impulse buying behavior, which is hereinafter abbreviated as OIBB. These results indicate that the better the quality Tokopedia website is, the higher the OIBB of the customer. The results of this study are in line with previous studies by Wells et al. (2011), Rezaei et al. (2016), Li et al. (2017) Akram et al. (2018), and Tariq et al., (2019) which state that website quality is positively and closely related to OIBB.

b) The Effect of Sales Promotion on Online Impulse Buying Behavior (OIBB)

Based on the results of the H2 hypothesis testing, it can be stated that sales promotion has no positive and insignificant effect on online impulse buying behavior (OIBB). This shows that sales promotion on the Tokopedia website, independently, have not been able to increase the OIBB of its customers.

The results of this study are in line with previous studies, including Santini et al. (2015) and Hanaysha (2017) who found that sales promotions were stated to have a negative effect on sales, brand image, especially on established brands, and on reference prices. Too many discounts are offered, also said to be a cause of

inconvenience among consumers, which in turn will create a sense of caution in shopping.

This also shows that the more attractive the sales promotion offered will not necessarily increase the consumers' impulse buying, because it is possible that the sales promotion that is carried out turns out to be not good enough or not attractive enough so that consumers tend to ignore the sales promotion aspect when making the impulse buying (Diany et al., 2019; Poluan et al., 2019).

c) The Sales Promotion Effect Moderates The Relationship Between Website Quality and Online Impulse Buying Behavior (OIBB)

Based on the results of hypothesis testing H3, sales promotion can be stated as a moderator variable in the study. The test results state that although sales promotion in the study is stated to have no positive and significant influence on direct OIBB when interacting with website quality, sales promotion is a variable that can moderate, and is able to strengthen the relationship between Tokopedia's website quality and online impulse buying behavior (OIBB).) customers by 0.001 or 0.1 percent.

This result is in line with previous research by Rismawan and Purnami (2017), and Akram et al. (2018). Wiranata and Hananto (2020) state that sales promotion can positively and significantly influence OIBB as a moderating variable in determining the effect of website quality on OIBB.

d) Effect of Digital Wallet Use on Online Impulse Buying Behavior (OIBB)

Based on the results of hypothesis testing H4, it was found that digital wallet use has a positive and significant effect on online impulse buying behavior (OIBB). This shows that customers who use digital wallets provided by the Tokopedia website when making transactions will tend to experience impulse buying with more frequent intensity compared to customers who do not transact using digital wallets on the Tokopedia website. In other words, the higher the level of digital wallet use by Tokopedia website customers, the more positive OIBB customers will be when shopping through the Tokopedia website.

The results of this study are in line with previous research by Akram et. al (2018) who found credit card use, as a cashless payment method, was stated to have a positive and significant effect on customer OIBB. In other words, customers are encouraged to buy products through credit card use, or one of the cashless payment methods. Likewise, digital wallet use, which is one of the increasingly growing cashless payment methods, has been declared capable of positively encouraging OIBB.

The results of research by Bagla and Sancheti (2018) regarding gaps in customer satisfaction with challenges for the sustainability of digital wallet use, also support the research results. It is further stated, the reasons for using a digital wallet in priority order are instant money transfer, wide acceptance, cashback and rewards, easy user interface, no need to carry cash (practical), minimum risk, no transaction fees, and being "forced" to use by merchants or service providers.

e) The Digital Wallet Use Effect Moderates The Relationship Between Website Quality and Online Impulse Buying Behavior (OIBB).

Based on the results of the H5 hypothesis test, the results show that digital wallet use can also be stated as a moderating variable in the study. The test results state that digital wallet use in the study is stated to have a positive and significant effect on direct OIBB, and is also a variable that can moderate, and is able to strengthen the relationship between Tokopedia's website quality and online impulse buying behavior (OIBB) of its customers by 0.205 or 20.5 percent.

This result is in line with previous research by Badgaiyan and Verma (2015) which states that the interaction on the credit card use variable or which includes the cashless payment method is significant so that there is a significant and positive moderating effect of using credit card use or including cashless payment methods. in the relationship between website quality and OIBB.

Akram et al. (2018) also found that credit card use, which is also a cashless payment method, shows that there is a significant and direct moderating effect of credit card use of 53.2 percent. This shows that credit card use still uses other digital or cashless payment instruments which have a significant effect on the relationship between website quality and OIBB, including digital wallet use in the study. Along with the development of e-commerce, the use of digital payment instruments, one of which is a digital wallet, is playing an important effect, especially in developing countries (Bagla and Sancheti, 2018).

V. CONCLUSION AND RECOMMENDATION

Conclusion

Based on the results of the analysis test, it was found that there was a positive influence by website quality, sales promotion, and digital wallet use on OIBB simultaneously, meaning that website quality, sales promotion, and digital wallet use could affect OIBB.

Based on the results of the hypothesis analysis, it can be concluded that part there is a significant positive effect of website quality on OIBB, which means that website quality partially affects firm value. Based on the results of the hypothesis analysis, it can be concluded that there is no insignificant positive influence between sales promotion on OIBB, meaning that there is no effect of sales promotion on OIBB partially.

Based on the results of the analysis test, it was found that sales promotion is a moderating variable that can strengthen the relationship between website quality and OIBB, meaning that the more effective sales promotion offered on the website can encourage OIBB intention.

Based on the results of the analysis test, it was found that there was a partial positive influence by digital wallet use on OIBB, meaning that digital wallet use could affect OIBB.

Based on the results of the analysis test it was found that digital wallet use is also a moderating variable that can strengthen the relationship between website quality and OIBB, meaning that the more frequent use of digital wallets on the website as a cashless payment method, it can increase the intention of OIBB.

This study has limitations, namely that the scope of research is limited to one area and one e-commerce platform in Indonesia. Research is also only conducted on some of the driving factors for OIBB, whereas e-commerce platforms still have various other attributes that tend to influence OIBB, and research is only conducted at a certain point in time or is cross-sectional, while the environment and economic conditions tend to be dynamic and will change from time after time.

Recommendations

In particular, management needs to conduct periodic evaluations or checks, as well as review policies that are deemed ineffective in attracting customers to shop impulsively on its website. In general, future research is expected to add factors or deepen the criteria for other variables that affect OIBB, as well as those that can moderate the relationship between website quality and OIBB. Further researchers can also expand the research period and research samples from some of the e-commerce that is rife in Indonesia, so that the results obtained are better.

REFERENCES

- [1] Akram, U., Hui, P., Khan, M.K., Tanveer, Y., Mehmood, K. and Ahmad, W. How Website Quality Affects Online Impulse Buying. *Asia Pacific Journal of Marketing and Logistics*. 2018.
- [2] Badgaiyan, A.J., and Verma, A. Does the Urge to Buy Impulsively Differ from Impulsive Buying Behaviour? Assessing The Impact Of Situational Factors. *Journal of Retailing and Consumer Services*, 22 (2015) 45-157.
- [3] Bagla, R.K., and Sancheti, V. Gaps In Customer Satisfaction With Digital Wallets: Challenge for Sustainability. *Journal of Management Development*, 37(6) (2018) 442-451.
- [4] Bisnis.com. 2019. Digital Payment Industry: Bank and Fintech Fight Over the Market?. Retrieved Feb 25, 2020. <https://finansial.bisnis.com/read/20190225/90/893062/industri-pembayaran-digital-bank-dan-fintech-berebut-pasar>.
- [5] Bps.go.id. 2019. E-Commerce Statistic 2019. Retrieved Jan 3, 2020. <https://bps.go.id/publication/2019/12/18/fd1e96b05342e479a83917c6/statistik-e-commerce-2019>.
- [6] Dahlberg, T., Mallat, N., Ondrus, J., and Zmijewska, A. Past, Present, and Future of Mobile Payments Research: A Literature Review. *Electronic commerce research and applications*, 7(2) (2008) 165-181.
- [7] Damar, A.M. 2018. Flash Sale not going well, Tokopedia Speaks up. Retrieved Feb 26, 2020. <https://www.liputan6.com/tekno/read/3538833/flash-sale-tak-berjalan-lancar-tokopedia-angkat-bicara>.
- [8] Dawson, S., and Kim, M. Cues on Apparel Web Sites That Trigger Impulse Purchases. *Journal of Fashion Marketing and Management: An International Journal*, 14(2) (2010) 230-246.

- [9] Diany, A. A., Sangen, M., dan Faisal, I. The Influence of Sales Promotion and Store Atmosphere on Positive Emotion and Impulse Buying Behavior at the Matahari Duta Mall Department Store, Banjarmasin. *Journal of Management Insights*, 7(1) (2019) 65.
- [10] Ebringer, T., Thorne, P. and Zheng, Y. Parasitic Authentication to Protect Your E-Wallet. *Computer*, 33(10) (2000) 54-60.
- [11] Fajrina, H.N. 2019. Netizen Screaming Because of Tokopedia Down?. Retrieved Jan 23, 2020. <https://uzone.id/netizen-menjerit-gara-gara-tokopedia-i-down-i->
- [12] Hanaysha, J. R. An Examination of The Factors Affecting Consumer's Purchase Decision In The Malaysian Retail Market. *PSU Research Review*, 2(1) (2018) 7-23.
- [13] Ho, Y.C., Ho, Y.J., and Tan, Y. Online Cash-Back Shopping: Implications for Consumers and E-Businesses. *Information Systems Research*, 28(2) (2017) 250-264.
- [14] Jayani, D.H. 2019. 10 E-Commerce with the Biggest Visitors in Quarter III-2019. Retrieved 25 Feb 2020. <https://databoks.katadata.co.id/datapublish/2019/10/22/inilah-10-e-commerce-dengan-pengunjung-terbesar>.
- [15] Karbasivar, A. dan Yarahmadi, H. 2011. Evaluating Effective Factors on Consumer Impulse Buying Behavior. *Asian Journal of Business Management Studies*, 2(4): 174-181.
- [16] Kharisma, G. 2019. 2019 iPrice Version of 50 E-commerce Competition Map in Indonesia. Retrieved Jan 9, 2020. <https://id.techinasia.com/persaingan-ecommerce-indonesia-q3-2019>.
- [17] Kotler, P., and Armstrong, G. *Principles of Marketing*, 13th edition. Volume 1. Jakarta: Erlangga. 2016.
- [18] Li, L., Peng, M., Jiang, N., and Law, R. An Empirical Study On The Influence of Economy Hotel Website Quality on Online Booking Intentions. *International Journal of Hospitality Management*, 63 (2017) 1-10.
- [19] Liao, C., Palvia, P. and Lin, H.N. The Roles of Habit and Website Quality in E-Commerce. *International Journal of Information Management*, 26(6) (2006) 469-483.
- [20] Liu, Y., Li, H., and Hu, F. Website Attributes in Urging Online Impulse Purchase: An Empirical Investigation on Consumer Perceptions. *Decision Support Systems*, 55(3) (2013) 829-837.
- [21] Lo, L.Y.S., Lin, S.W., and Hsu, L.Y. The motivation for Online Impulse Buying: A Two-Factor Theory Perspective. *International Journal of Information Management*, 36(5) (2016) 759-772.
- [22] Malik, G., and Sachdeva, H. Impact of Sales Promotion Technique Used by Online Dealers on Consumers. *International Journal of Applied Sciences and Management*, 1(1) (2015) 63-78.
- [23] Mariana, H. Times are sophisticated, this is the wallet trend that millennials love. Retrieved Jan 16, 2020. <https://money.kompas.com/read/2019/05/21/175800026/zaman-sudah-canggih-ini-tren-dompot-yang-lagi-digandrungi-milenial-2019>.
- [24] Poluan, F. J., Tampi, J. R. E., dan Mukuan, D. D. S. The Influence of Hedonic Shopping Motives and Sales Promotion on Consumer Impulse Buying at Matahari Department Store Manado Town Square. *Journal of Business Administration*, 8(2) (2019) 113.
- [25] Prihantoro, W.P., Satria, A., and Hartoyo, H. The Determinant Factors of Behavior in M-Commerce Application Usage for Online Purchasing. *Indonesian Journal of Business and Entrepreneurship (IJBE)*, 4(2) (2018) 118.
- [26] Pusparisa, Y. 2019. 96 Percent of Internet Users in Indonesia Have Ever Used E-Commerce. Retrieved Feb 26, 2020. <https://databoks.katadata.co.id/datapublish/2019/12/03/96-pengguna-internet-di-indonesia-pernah-gunakan-e-commerce>.
- [27] Rahyuda, K. *Business Research Methodologies*. Denpasar: Udayana University Press. 2017.
- [28] Rathore, H.S. Adoption of Digital Wallet by Consumers. *BVIMSR's Journal of Management Research*, 8(1) (2016) 69.
- [29] Rezaei, S., Ali, F., Amin, M., and Jayashree, S., 2016. Online Impulse Buying of Tourism Products. *Journal of Hospitality and Tourism Technology*.
- [30] Risqiani, R. Antecedents and Consequences of Impulse Buying Behavior. *Business and Entrepreneurial Review*, 15(1) (2017) 1.
- [31] Santini, F.D.O., Sampaio, C.H., Perin, M.G., and Vieira, V.A. An Analysis of The Influence of Discount Sales Promotion in Consumer Buying Intent and The Moderating Effects of Attractiveness. *Revista de Administração (São Paulo)*, 50 (4) (2015) 416-431.
- [32] Singh, S., and Verma H. A Comprehensive Structural Equation Modeling for E-Impulse Buying. *Academy of Marketing Studies Journal*, 22(1). 2018.
- [33] Solomon MR, Marshall GW, and Stuart EW. 2018. *Marketing Real People Real Choices* (9th ed.). Prentice-Hall: Pearson Education Limited.
- [34] Sugiyono. 2017. *Quantitative, qualitative, and R&D research methods*. Bandung: Penerbit Alfabeta.
- [35] Tariq, A., Wang, C., Tanveer, Y., Akram, U., and Akram, Z. Organic Food Consumerism Through Social Commerce in China. *Asia Pacific Journal of Marketing and Logistics*, 31(1) (2019) 202-222.
- [36] Thomas, B., Packham, G., Miller, C., and Brooksbank, D. The Use of Web Sites for SME Innovation and Technology Support Services in Wales. *Journal of Small Business and Enterprise Development*. 2004.
- [37] Wells, J.D., Parboteeah, V. and Valacich, J.S. Online Impulse Buying: Understanding The Interplay Between Consumer Impulsiveness and Website Quality. *Journal of the Association for Information Systems*, 12(1) (2011) 3.
- [38] Wiranata, A.T., and Hananto, A. Do Website Quality, Fashion Consciousness, and Sales Promotion Increase Impulse Buying Behavior of E-Commerce Buyers?. *Indonesian Journal of Business and Entrepreneurship (IJBE)*, 6(1) (2020) 74-85.
- [39] Wu, I.L., Chen, K.W., and Chiu, M.L. Defining Key Drivers of Online Impulse Purchasing: A Perspective of Both Impulse Shoppers and System Users. *International Journal of Information Management*, 36 (2016) 284-296.
- [40] Yahya, S.F.H., Hashim, N.A., Bahsri, N., and Dahari, N.A.. The Effect of Sales Promotion Strategy on Online Fashion Shopping Behavior Among Employees of Sahawan Sdn Bhd. *Global Business and Management Research*, 11(2) 2019 1-12.
- [41] Zhang, M., Zhang, J., Cheng, T.C.E., and Hua, G. Why and How Do Branders Sell New Products on Flash Sale Platforms?. *European Journal of Operational Research*, 270(1) (2018) 337-351.