The Role Website Quality, Credit Card, Sales Promotion On Online Impulse Buying Behavior

Adhi Prasetio[1*] and Aliffia Muchnita[2]
[1,2]Faculty of Economic and Business, Telkom University, Bandung, Indonesia

Email Address:
adhipras@telkomuniversity.ac.id, aliffiamuchnita@student.telkomuniversity.ac.id*
**Corresponding Author*

Abstract: The usage of online marketplace in Indonesia increases due to Covid-19 pandemic and its supporting environment such as payment systems. This investigation was conducted to determine the effect of Website Quality on Online Impulsive Buying Behavior moderated by Sales Promotion and Credit Card Usage in Indonesian marketplace. This study uses quantitative methods with causal analysis. In this research, data was collected through online questionnaires and 275 respondents who used the marketplace website responded. This research uses PLS-SEM data analysis technique. The results of this study showed that three out of five hypotheses are accepted. This study shows that Website Quality, Credit Card Use, and Sales Promotion have positive significant effect on Online Impulse Buying Behavior. However, the result of this study also revealed interesting findings, that there is not enough evidence to support moderation effect of Credit Card use and Sales Promotion in the relationship between web quality and Online Impulse Buying Behavior.

Keywords: Marketplace; Website Quality; Credit Card Use; Sales Promotion; Online Impulse Buying Behavior.

Abstrak: Penggunaan online marketplace di Indonesia meningkat akibat pandemi Covid-19 dan lingkungan pendukungnya seperti sistem pembayaran. Penelitian ini dilakukan untuk mengetahui pengaruh Kualitas Situs Web terhadap Perilaku Pembelian Impulsif Online yang dimoderatori oleh Promosi Penjualan dan Penggunaan Kartu Kredit di marketplace Indonesia. Penelitian ini menggunakan metode kuantitatif dengan analisis kausal. Dalam penelitian ini, data dikumpulkan melalui kuesioner online dan 275 responden yang menggunakan situs marketplace merespons. Penelitian ini menggunakan teknik analisis data PLS-SEM. Hasil penelitian ini menunjukkan bahwa tiga dari lima hipotesis diterima. Penelitian ini menunjukkan bahwa Website Quality, Credit Card Use, dan Sales Promotion berpengaruh positif signifikan terhadap Online Impulse Buying Behavior. Namun, hasil penelitian ini juga mengungkapkan temuan menarik, bahwa tidak ada cukup bukti yang mendukung efek moderasi penggunaan Kartu Kredit dan Promosi Penjualan dalam hubungan antara kualitas situs web dan Perilaku Pembelian Impulsif Online.

Kata Kunci: Marketplace; Kualitas Situs Web; Penggunaan Kartu Kredit; Promosi Penjualan; Perilaku Pembelian Impulsif Online.

INTRODUCTION

The increasing development of technology that is increasingly fast makes this technology have an impact on many fields (Ramadhani, 2020). Including in the economic and social sectors (Fitriani, 2014). Minister of Communication and Information (Menkominfo) Johnny G. Plate said internet users in Indonesia reached 202.6 million people and this shows an increase of 37 percent during the Covid-19 pandemic (Prasasti, 2021). According to the findings of a study performed by the Association of Indonesian Internet Service Providers (APJII), In the second quarter of 2020, Indonesia had 196.7 million internet users (Djumena, 2020). The increasing number of internet users in Indonesia can be caused by changes in people's lifestyles due to the Covid-19 pandemic that is currently hitting Indonesian society (Irso, 2020).

According to the WHO (Word Health Organization) Covid-19 or also known as Coronavirus disease was cause by a virus that is called Coronaviridae (WHO, 2021). On March 01, 2020, Coronavirus has spread across 59 countries around the world including Indonesia (ourworldindata, 2021). To overcome the increasingly massive spread of COVID-19, the government is trying to intensify the socialization of restrictions on community activities to suppress the higher patient rate (Permatasari, 2021). Customers' purchasing, shopping, and consuming patterns have been completely altered because of the COVID-19 outbreak, social isolation, and lockdown instructions. The increasing number of internet users also supports the increase in online transactions and e-commerce and this statement is also supported by data from Bank Indonesia (BI) (Jayani, 2021).

According to data from Bank Indonesia, the value of e-commerce transactions has increased by 29.6 percent over the previous year, this is equivalent to 266,3 trillion rupiah (Jayani, 2021). According to (Lidwina, 2020), based on online purchase data in Southeast Asian countries, Indonesia is in second position after Malaysia with a percentage increase of 46 percent this year. This shows the development of e-commerce has created new customer behavior by changing their shopping habits (Ghasemaghaei et al., 2018). According to (Wiranata and Hananto, 2020), Internet users were shown to be more impulsive than non-internet shoppers, suggesting the presence of impulse purchasing behavior in the e-commerce sector. The value of e-commerce transactions in Indonesia continues to rise, as evidenced by the fact that in 2019, the gross transaction value or gross merchandise value (GMV) of Indonesia surpassed US$ 40 billion, or Rp 568 trillion (Pahlevi, 2021).

There also some increase in website industry there are three Southeast Asian nations, namely Indonesia, Malaysia, and Singapore, shows the website industry grew by 35 percent. According to Exabytes survey data collected in 2020, the website industry in Indonesia grew by 9.4 percent from the first quarter (January - March) to the second quarter (April - June) of 2020 (Koesno, 2020). According to Kemp (2021), shows that e-commerce transactions in the past month of 2021 dominate by aged 16 until 54 years. According to (Pahlevi, 2021), Shopee has the highest hourly transaction value in Indonesia, with a GMV of US$14.2 billion in 2021 and an hourly transaction value of US$1.6 million, equivalent to Rp23 billion.

According to data from (iprice, 2021), Shopee's monthly website traffic continued to grow (Dianka, 2021). The number of monthly visitors grew by 73.910 percent year on year

when compared to the first quarter of 2020 (Dianka, 2021). The number of site visits to Shopee reached 127.400,000 in the first quarter of 2021 (Dianka, 2021). Retailers create a website that serve as a platform for potential customers to engage and transact, making buying more convenient (Widagdo and Roz, 2021). Previous research has found that website features or design can impact impulsive buying behavior by functioning as an environmental signal (Wiranata and Hananto, 2020).

In research by (Ittaqullah et al., 2020), said that there are two factors that influence impulse buying or unplanned purchases, External elements like as discounts, displays, and promotions, as well as internal consumer characteristics such as lifestyle, shopping addiction, resource availability, and so on. Shopee itself is known for its Marketing Strategy because it can attract the attention of the Indonesian people to continue transacting on the platform (Christina, 2019). With a variety of promotional activities and campaigns carried out by Shopee in 2017 Shopee won the award for "*The Best Marketing in Campaign*" which was organized by Marketing Magazine (Dinisari, 2017). Shopee also recorded an increase in transactions in several other product categories, such as souvenirs and clothing (Ginee, 2021).

Another factor is Credit card use, that allows for rapid purchases and acts as a trigger for spending behavior from a psychological standpoint (Akram et al., 2018). This element is backed by the increased knowledge to stay at home to prevent the spread of the corona virus, as well as the increased usage of the marketplace, where credit cards are one of the favored payment tools (Maulana, 2021). Filianingsih Hendarta, Assistant Governor and Head of the BI Payment System Policy Department, said that, based on April 2021 statistics, nominal credit card transactions had climbed by 25.500 percent year on year (Putri, 2021). It is interesting to see how this payment method role change among other growing payment method offered by many financial technology nowadays.

(Akram et al., 2018) revealed that the quality of a web page might drive online impulsive purchasing behavior. The study also discovered that sales advertising is a significant component in increasing OIBB since it encourages consumers to buy things spontaneously and instantly. OIBB and sales promotion have a strong and meaningful relationship. Credit card use allows consumers to make immediate purchases. As a result, the author uses the Shopee website as the object. Even though there has been researches that explores the influence of web quality on online impulse buying behavior, but to our knowledge, there is still limited research that explores the influence of web quality on online impulsive buying behavior especially moderated by sales promotion and credit card use in growing country like Indonesia.

THEORETICAL REVIEW

Impulse Buying. According to (Nurcaya and Rastini, 2018), Impulse Buying Behavior define as phenomena and a developing trend of purchasing behavior that occurs in the market and happens to be a key point that underpins marketing activity. It's also type of purchase that was not previously planned by the customer, where this circumstance is purposefully produced by the retail entrepreneur to survive in the business (Nurcaya and Rastini, 2018). Information and prediction of consumer reactions to changes in actions (situational variables), as well as understanding of the influence of demographic and

socioeconomic characteristics of customers on impulse purchase behavior (Amos et al., 2014). According to (Ciunova-Shuleska, 2012), determine the situational components were divided into three categories namely physical surrounding indicators, social surrounding indicators, and collateral situational aspects.

Web Quality. A website is a systematic structure of web pages and the interaction between those pages, which contain texts, photos, audio files, videos, and other digital assets kept on one or more web servers that are typically accessible through the internet, cellular phone, or LAN (Zeng et al., 2012). According to (Faridzie, 2021), The quality of a website is a key aspect in online sales and has its own worth for customers. In the context of online shopping, an aspect of website functionality may be studied by looking at a web site's browsing, ordering, and information seeking capabilities, as well as the speed with which such activities and procedures may be done (Al-Debei et al., 2015). Web quality may be defined in the context of this study as the desired features of an online shopping website as viewed by online shoppers (Al-Debei et al., 2015). Web Quality originally appeared in 1998, and there are currently four versions of Webqual, ranging from 1.0 to 4.0 (Widagdo and Roz, 2021). According to (Akram et al., 2018), Web Quality has four characteristics it's called usefulness, ease of use, entertainment, and complementary relationship.

Sales Promotion. Sales promotion is a type of promotion, and promotion is one of the primary components of the "marketing mix." (Setiawan, 2021). According to (Fitri, 2018), Sales promotion is a short-term increase in the value of a product or service to motivate the consumer. Sales promotion in markets with significant brand resemblance can generate a large sales reaction in the short run but minim in long-term gain (Kotler and Keller, 2016). The goal of sales promotion is to have an immediate and direct impact on the purchasing behavior of customers (Kotler and Keller, 2016). According to (Belch and Belch, 2018), There are two types of sales promotions: consumer-oriented and trade-oriented promotions. Where samples, coupons, premiums, contests and sweepstakes, refunds and rebates, bonus packs, price reductions, loyalty programs, and event marketing are examples of consumer-oriented sales promotion activities (Belch and Belch, 2018). Meanwhile, trade-oriented sales promotion includes dealer contests and incentives, trade allowances, point-of-purchase displays, sales training programs, trade fairs, cooperative advertising, and other activities (Belch and Belch, 2018).

Credit Card Use. Credit cards are a type of plastic money that is becoming increasingly popular among customers (Akram et al., 2018). According to (Wickramasinghe and Gurugamage, 2012), In an era when credit cards have been heavily promoted and sold, widespread credit card use raises two concerns. According to (Akram et al., 2018) Credit card ownership is related with the type of consumer that purchases high-priced goods. In the study that conduct by (Akram et al., 2018), states that Credit cards that are easily available eliminate the sudden need for money to purchase anything, which leads to consumer overspending.

Hypothesis Development. In research conduct by (Turkyilmaz, 2015), has stated that online firms who wish to expand and retain their customer base must stress and improve the

quality of their website, failure of which may result in consumer loss. This statement in line with what (Wells et al., 2011), has claimed that a well-designed interface increases the likelihood of impulsive purchases. Empirically, this result is consistent with the study was conducted by (Akram et al., 2018), It concludes that web quality has a favorable and significant influence on online impulse buying behavior.

A study that conducts by (Turkyilmaz, 2015), reveals that the three characteristics of Web Quality, which include ease of use, usefulness, and entertainment, have a favorable and substantial influence on online impulsive purchasing behavior. It was determined that a high-quality website drives people to make accidental purchases (Fitri, 2018). But in research conduct by (Wiranata and Hananto, 2020), state that web quality does not influence online impulse buying since the analysis found that website quality was not found significant toward online impulse buying. This demonstrates that website quality alone was insufficient to drive online impulsive purchase. According to the explanation, the hypothesis in this study is as follows:

H1: Website Quality has positive significant effect on Online Impulse Buying Behavior.

According to (Akram et al., 2018), the objective is to have a direct and immediate influence on the purchase habits of customers. Usually use by Marketers as develop customer marketing tactics for specific product categories to influence customers' impulsive purchases (Alimpic et al., 2020). In line with previous study by (Akram et al., 2018), states that what consumer gains from sales promotions which can be classified as hedonic (amusement, value, and discovery) or utilitarian (cost savings) (convenience and money saving). The result of research by (Fitri, 2018), It has been demonstrated that sales promotion tools, notably price reductions, free samples, buy one get one free, and loyalty programs, have a positive influence on consumer impulsive purchase behavior. These are the most used promotional methods to attract impulse buying behavior. From the explanation, the hypothesis in this research describe as follows:

H2: Website Quality has positive significant effect on Online Impulse Buying Behavior.

In the previous study conduct by (Chen and Yao, 2018), It has been proposed that sales promotions cause customers to buy on impulse because they promote pleasant feelings and shift the consumer's standard of reference pricing, which affects their readiness to make a purchase. According to (Lo et al., 2016), indicates that website quality components were given as a hygiene element (i.e., the essential criterion to keep customers from quitting an online store, but not sufficient to stimulate impulsive spending), but sales promotion was highlighted as a driver of online impulse buying. From that it can be conclude that the presence of sales promotion would amplify the favorable effect already generated by strong website quality qualities, resulting in increased customer impulsive buying behavior (Wiranata and Hananto, 2020). Based on the explanation, the hypothesis in this research describe as follows:

H3: Sales Promotion has positive significant moderate the relationship between website quality and Online Impulse Buying Behavior.

There are several aspects of internet purchasing that make it appealing and pleasurable for customers (Akram et al., 2018). This, along with the availability of non-cash payment systems in our current day, such as credit cards, simplifies materialistic purchases (Fendy Cuandra, 2021). Credit cards, from a psychological aspect, are a trigger for spending behavior (Akram et al., 2018). According to the findings of a study conducted by (Akram et al., 2018), credit card utilization has a favorable and substantial effect on online impulsive purchase. This result also found in (Badgaiyan and Verma, 2015), research show the fact that credit cards were discovered to have a considerable impact on impulsive purchasing behavior sums up the key contribution of the empirical investigation. However, these findings contradict the findings of the research conduct by (Yuniarti et al., 2021), which shows that the payment method using a credit card is included in the negative category or has no effect on online impulse buying behavior. Based on the explanation, the hypothesis in this research describe as follows:

H4: Credit Card has positive significant effect on Online Impulse Buying Behavior.

Digital payments utilized as a route for transferring goods and services are referred to as cashless payments, such as transfers or using a credit card by simply displaying the credit card number on the e-commerce site (Dewi and Mahyuni, 2020). When using credit cards, make shopping more easy, and when contrasted to cash transactions, they increase consumer spending (Akram et al., 2018). This shows that Credit card use has significant effect on Impulsive Buying (Pradhan et al., 2018). In the research conduct by (Kumbhar, 2011), shows result that 28 percent of Credit Card User in e-payment were satisfy in the service quality dimensions namely ease to use, informativeness and etc. This reveals the existence of a relationship between Web quality and online impulsive purchasing behavior, which is moderated by credit card use. Similarly, in the research conducted by (Akram et al., 2018), states that in investigates the moderating behavior of credit card usage to determine whether or whether the existence of credit card also effects the OIBB. As well as website quality, it is discovered that credit card use has a positive and substantial influence on online impulsive purchasing (Akram et al., 2018). Based on the explanation, the hypothesis in this research describe as follows:

H5: Credit card use has positive significant moderate the relationship between website quality and online impulse buying behavior.

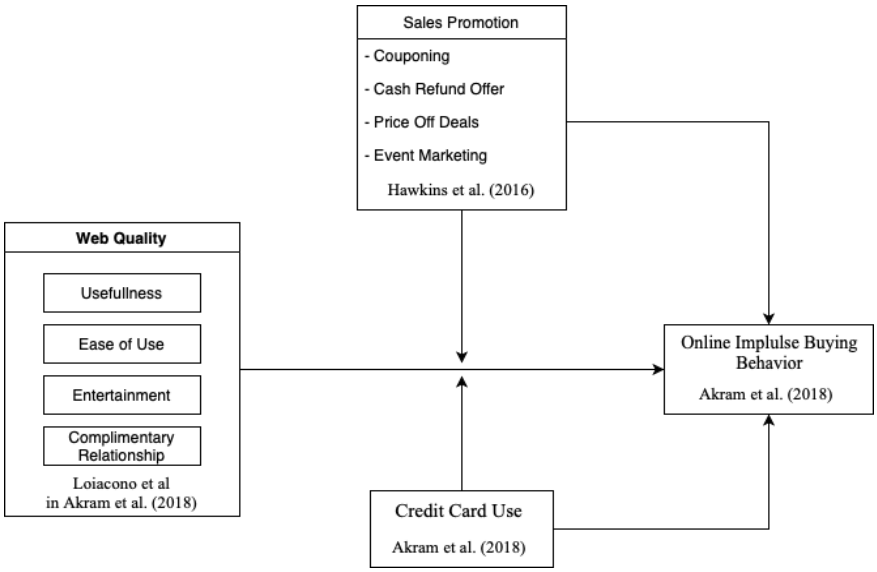

Figure 1. Research Framework
Source: (Akram et al., 2018)

METHODS

Research Characteristics and measurement. In this research the analytical method that used is the quantitative method and the type of purpose of the research used are descriptive and causal research. The Likert scale were used in this research. According to (Indrawati, 2015), The Likert scale is an example of an interval scale since it assesses how strongly respondents agree or disagree with things using a five-point scale. The five-point scale anchored by the following anchor are one for Strongly disagree, two for Disagree, three for Neither agree nor disagree, four for Agree and five for Strongly Agree measured by (Sekaran and Bougie, 2016).

Population, Sample, and Sampling Method. The population in this research is Indonesian citizen who have been shop in Shopee website by using credit card as the payment method. However, the population of Shopee website user who have shopped using credit card is unknown. Since the population is unknown, the formula that used in this research to find the sample is Cochran formula. Which the formula will be described as follows:

Cochran Formula

$$n = \frac{z^2(p)(q)}{e^2} \quad \text{.... (1)}$$

Table 1. Variable Operationalization

	Web Quality (Independent Varible)	
Usefulness (UF)	Shopee website provide every information I need.	UF1
	Shopee website loads quickly.	UF2
	The information on Shopee website is effective.	UF3
Ease of Use (EU)	Shopee website labels are easy for users to understand.	EU1
	Shopee website can be easily operated by users.	EU2
	Shopee website page are easy to read.	EU3
Entertainment (ENT)	Shopee website has an attractive appearance.	ENT1
	Shopee website have fashionable design.	ENT2
	Website design of Shopee was innovative.	ENT3
Complimentary Relationship (CM)	The image of Shopee website matches the Shopee image itself.	CM1
	Shopee website can be used to online transaction.	CM2
	Online Impulsive Buying Behavior (Dependent Variable)	
Online Impulsive Buying Behavior (OIB)	I buy product at Shopee due to myself encouragement.	OIB1
	I ended up spending more money than I originally set out to spend while shopping in Shopee.	OIB2
	"Buy now, think about it later" describe me when doing transaction in Shopee.	OIB3
	Before visiting shopee website, I did not have intention to do purchasing.	OIB4
	Sales Promotion (Moderate Variable)	
Couponing (C)	Shopee gives free coupon or free delivery payment.	C1
	Coupon provides in shopee have caused me to buy product I normally would not buy.	C2
	I redeem coupons I find in Shopee while shopping online.	C3
Refund or Rebates (RF)	Shopee has given attractive cashback.	RF1
	Cashback program in Shopee makes me buy more than I have planned.	RF2
	Cashback program in Shopee are ease to use.	RF3
Price Off Deals (PO3)	Shopee has given attractive price discount promotion.	PO1
	Shopee website carries product with relatively lower price.	PO2
	Shopee provides a big discount price.	PO3
	Credit Card Use (Moderate Variable)	
Credit Card Use (CCU)	Shopee often gives flash sale.	EM1
	Flash sale program in Shopee is very interesting.	EM2
	The discount that given by Shopee during flash sale is bigger than outside flash sale.	EM3
	I generally use credit card as payment method to do transaction in Shopee.	CCU1
	I use credit card to buy impulsively on Shopee.	CCU2
	I am less concerned with the price of a product when I use a credit card as payment method in Shopee.	CCU3

In this study, the hypothesis testing used is a one-tailed test. So, the z used is 1.650. the p used is 0.500 while the formula to find q is q is (1- p) therefore the q used is 0.500. the confidence level used is 95 percent where the value of significant level is 0.05 and the error rate is 0.050. then, the findings of the computation of the number of research sample as follows:

Cochran Formula Calculation

$$n = \frac{1.65^2(0,5)(1-0.5)}{0.05^2} \quad \text{(2)}$$

$$n = 272.25 \approx 273 \quad \text{(3)}$$

Based on the calculation results that the total sample that needed in this research amounted 272.250 and it was rounded up to 273 respondents were needed in this research. As a result, it is feasible to suppose that the sample size in this study is as many as 275 respondents to minimize errors and enhance the outcomes of this investigation. In this study, the non-probability sampling that will be used is purposive sampling. Four criteria have been determined to be respondents, such as: participants are Indonesia Shopee user, participants are female and male with the range age 16 to 54 years old, participants have used Shopee website for at least three times, and participants used credit card in transaction.

Data Collection method. In this research, primary data sources can be obtained from questionnaires related to this research and will be distributed in Indonesia through social media using online google form. The questionnaire items raised by the author are from (Li et al., 2017), (Firdausy and Fernanda, 2021), (Badgaiyan and Verma, 2015), (Wells et al., 2011), (Akram et al., 2018), (Christino et al., 2019), (Clark et al., 2013), (Ramadhani et al., 2020), (Pradhan et al., 2018), (Zhang et al., 2021). Table 1 shows the operationalization variable that the author uses in this study.

Data Analysis Techniques

Descriptive Analysis. In this study the research use Likert scale interval that analyzes how strongly respondents agree or disagree with the five scale choices contained in the question. Therefore, to determine the interval group in which each evaluation of the respondents answer results will be updated as a percentage as follows (Riduwan, 2012): (1) The cumulative value of each statement, is the answer of all respondents, is the overall value of each statement. (2) Percentage is calculated by multiplying an item's cumulative value by its frequency value by one hundred percent. (3) In this study the number of respondents is 275with the largest measurement scale value is five and the smallest measurement scale is one. Therefore, the calculation will be: The largest cumulative number = 275 x 5 = 1375 and the smallest cumulative number = 275 x 1 = 275, the largest percentage value is 100 percent and the smallest percentage value = (275:1375) x 100 percent = 20 percent; Value range = 100 percent - 20 percent = 80 percent. If the measurement scale's range value is divided by five, the percentage interval value is 16 percent, and the scoring requirements are shown in Table 2.

Table 2. Percentage of Questionnaire Assessment

Percentage	Category
20 - 36	Very Not Good
36 - 52	Not Good
52 – 68	Good Enough
68 – 84	Good
84 - 100	Very Good

Structural Equation Modeling. Modelling that suits in this study is variance-based matrix structural equation modelling (VB-SEM) with PLS is used as statistical analysis. The gathered data will be processed using the SmartPLS 3.0 software. According to (Indrawati, 2017), to process data using PLS, two steps must be taken: assessment of the measurement model or outer model, and evaluation of the structural model or inner model.

RESULTS

Respondents Characteristics. During the data collecting process the author managed to collect as many there hundred one respondents. Since only 275 respondents were valid to fulfill the criteria on this research this research. Then, data processed will be 275 respondents. In the data collection period starting from January 2022 and ending in February 2022. In Table 3, Table 4, and Table 5 where will be explained the characteristics of respondents based on gender, age, and occupation.

Table 3. Respondent Characteristics by Gender

Gender	Respondent	Percentage
Female	245	89.090
Man	30	10.910
Total	275	100.000

As shown in the Table 3, in this research the involvement of Female respondent was 245 out of 275 respondents or in percentage equivalent to 89.09 percent respondent who have shopped in Shopee Website at least three times by using Credit Card Use as payment method.

Table 4. Respondent Characteristics by Age

Age	Respondent	Percentage
21-24	111	40.360
25-34	116	42.180
35-44	32	11.640
45-54	16	5.820
Total	275	100.000

As shown in Table 4, the most respondent contribution in this research came from age 25 until 34 years old with 116 out of 275 respondents or in percentage same with 42.180 percent on this research. This shows that

Table 5. Respondent Characteristics by Age

Occupations	Respondent	Percentage
Student	72	26.180
Entrepreneur	81	29.450
Private Sector Employee	63	22.910
Government Employee	19	6.910
Others	40	14.550
Total	275	100.000

As shown in table 5, From 275 respondents in this research Entrepreneur has most contribute to this research for 81 respondents or equivalent to 29.450 percent. This shows that in this research, respondent that shopped in Shopee website by using Credit Card were dominate by Entrepreneur.

Descriptive Analysis Result. Descriptive analysis in this research provides to explain the variable in research. Where the independent variable in this research is Web Quality and followed by the dependent variable is Online Impulsive Buying Behavior and the moderating variable in this research is Sales Promotion and Credit Card Use. The explanation of each variable is listed as Table 5, Table 6, Table 7, and Table 8.

Web Quality. The result of descriptive analysis on the item variable Web Quality indicates that the variable Web Quality categorized as Good. According to (Akram et al., 2018), state that five website features have a substantial impact on user perceptions regarding retail websites namely product information, convenience of use, currency, trust, and entertainment. In Web Quality variable the highest is 76.070 percent, which explain that respondents agree that Shopee website is easy to operate.

Table 6. Web Quality

Item		SD 1	D 2	N 3	A 4	SA 5	Total	Total Score	Ideal Score	Category
CM1	P	25	54	58	64	74	275	933	1375	Good Enough
	%	9.090	19.640	21.090	23.270	26.910	100.000	67.850		
CM2	P	11	52	55	75	82	275	990	1375	Good
	%	4.000	18.910	20.000	27.270	29.820	100.000	72.000		
ENT1	P	10	24	74	89	78	275	1026	1375	Good
	%	3.640	8.730	26.910	32.360	28.360	100.000	74.620		
ENT2	P	10	30	60	83	92	275	1042	1375	Good
	%	3.640	10.910	21.820	30.180	33.450	100.000	75.780		

ENT3	P	14	25	71	94	71	275	1008	1375	Good
	%	5.090	9.090	25.820	34.180	25.820	100.000	73.310		
EU1	P	14	33	61	87	80	275	1011	1375	Good
	%	5.090	12.000	22.180	31.640	29.090	100.000	73.530		
EU2	P	10	36	49	83	97	275	1046	1375	Good
	%	3.640	13.090	17.820	30.180	35.27	100.000	76.070		
EU3	P	13	32	71	85	74	275	1000	1375	Good
	%	4.730	11.640	25.820	30.910	26.910	100.000	72.730		
UF1	P	25	51	58	68	73	275	938	1375	Good
	%	9.090	18.550	21.090	24.730	26.550	100.000	68.220		
UF2	P	12	52	57	74	80	275	983	1375	Good
	%	4.360	18.910	20.730	26.910	29.090	100.000	71.490		
UF3	P	16	42	75	74	68	275	961	1375	Good
	%	5.820	15.270	27.270	26.910	24.730	100.000	69.890		
Total Average Score									**994.360**	
Total Average Percentage									**72.320**	**Good**
Overall Total Score									**10938**	

Sales Promotion. The result of descriptive analysis on the item variable Sales Promotion in Table 6 indicates that the variable Sales Promotion categorized as Good. According to (Rahmadhani, 2015), Sales promotion is an activity carried out by sales team to persuade specific target market segments to purchase products through activities other than personal selling, advertising, guerrilla marketing, and public relations that stimulate consumer and dealer purchase effectiveness. The highest item of sales promotion is 73.090 percent where it explains that respondents agree that Shopee provides attractive discounts.

Credit Card Use. As shown in the table 7, result of descriptive analysis on the item of variable Credit Card Use were categorized as Good Enough. Credit cards are a type of plastic money that is becoming increasingly popular among customers (Akram et al., 2018). By using credit cards makes shopping more convenient and painless (Akram et al., 2018). The highest score among the other items which is 65.020 percent where it describes that the respondents agree with using a credit card as a payment method when making transactions on the Shopee Website.

Table 7. Sales Promotion

Item		SD 1	D 2	N 3	A 4	SA 5	Total	Total Score	Ideal Score	Category
C1	P	20	51	70	77	57	275	925	1375	Good Enough
	%	7.270	18.550	25.450	28.000	20.730	100.000	67.270		
C2	P	20	53	70	75	57	275	921	1375	

	%	7.270	19.270	25.450	27.270	20.730	100.000	66.980		Good Enough
C3	P	16	45	74	78	62	275	950	1375	Good
	%	5.820	16.360	26.910	28.360	22.550	100.000	69.090		
RF1	P	12	32	74	88	69	275	995	1375	Good
	%	4.360	11.640	26.910	32.000	25.090	100.000	72.360		
RF2	P	20	54	70	75	56	275	918	1375	Good Enough
	%	7.270	19.640	25.450	27.270	20.360	100.000	66.760		
RF3	P	19	43	61	87	65	275	961	1375	Good
	%	6.910	15.640	22.180	31.640	23.640	100.000	69.890		
PO1	P	12	31	71	87	74	275	1005	1375	Good
	%	4.360	11.270	25.820	31.640	26.910	100.000	73.090		
PO2	P	19	40	66	83	67	275	964	1375	Good
	%	6.910	14.550	24.000	30.180	24.360	100.000	70.110		
PO3	P	13	34	71	92	65	275	987	1375	Good
	%	4.730	12.360	25.820	33.450	23.640	100.000	71.780		
EM1	P	15	28	76	86	70	275	993	1375	Good
	%	5.450	10.180	27.640	31.270	25.450	100.000	72.220		
EM2	P	17	36	67	87	68	275	978	1375	Good
	%	6.180	13.090	24.360	31.640	24.730	100.000	71.130		
EM3	P	13	34	71	87	70	275	992	1375	Good
	%	4.730	12.360	25.820	31.640	25.450	100.000	72.150		
Total Average Score									**965.750**	
Total Average Percentage									**70.240**	**Good**
Overall Total Score									**11589**	

Table 8. Credit Card Use

Item		SD 1	D 2	N 3	A 4	SA 5	Total	Total Score	Ideal Score	Category
CCU1	P	37	29	82	82	45	275	894	1375	Good
	%	13.450	10.550	29.820	29.820	16.360	100.000	65.020		
CCU2	P	47	38	103	53	34	275	814	1375	Good Enough
	%	17.090	13.820	37.450	19.270	12.360	100.000	59.200		
CCU3	P	42	56	83	53	41	275	820	1375	Good Enough
	%	15.270	20.360	30.180	19.270	14.910	100.000	59.640		
Total Average Score									**842.670**	**Good Enough**
Total Average Percentage									**61.280**	
Overall Total Score									**2528**	

Online Impulse Buying Behavior. As shown in the table 8, result of descriptive analysis on the item of variable Online Impulse Buying Behavior were categorized as Good Enough. According to (Fernanda, 2019), impulse buying, also known as unplanned purchasing, is a

type of shopping behavior in which a person does not plan ahead of time what they will buy. In the Online Impulse Buying Behavior variable item with the highest percentage is 73.530 percent. Where it indicates that respondents agree that purchasing products on the Shopee website is of their own volition.

Table 9. Online Impulse Buying Behavior

Item		SD 1	D 2	N 3	A 4	SA 5	Total	Total Score	Ideal Score	Category
OIB1	P	11	46	55	72	91	275	1011	1375	Good
	%	4.000	16.730	20.000	26.180	33.090	100.000	73.530		
OIB2	P	11	53	55	74	82	275	988	1375	Good
	%	4.000	19.270	20.000	26.910	29.820	100.000	71.850		
OIB3	P	52	65	63	49	46	275	797	1375	Good Enough
	%	18.910	23.640	22.910	17.820	16.730	100.000	57.960		
OIB4	P	39	55	70	67	44	275	847	1375	Good Enough
	%	14.180	20.000	25.450	24.360	16.000	100.000	61.600		
Total Average Score									**910.750**	**Good Enough**
Total Average Percentage									**66.240**	
Overall Total Score									**3643**	

SEM-PLS Analysis

Assessment of the Measurement Model . The findings of the outer model testing in this study are shown in Figure 2 above. SmartPLS 3.2.9 software was used for outer model testing in this study. The purpose of this outer model testing was to validate the validity and reliability of the data collection technology by employing all of the core data (Indrawati, 2017).

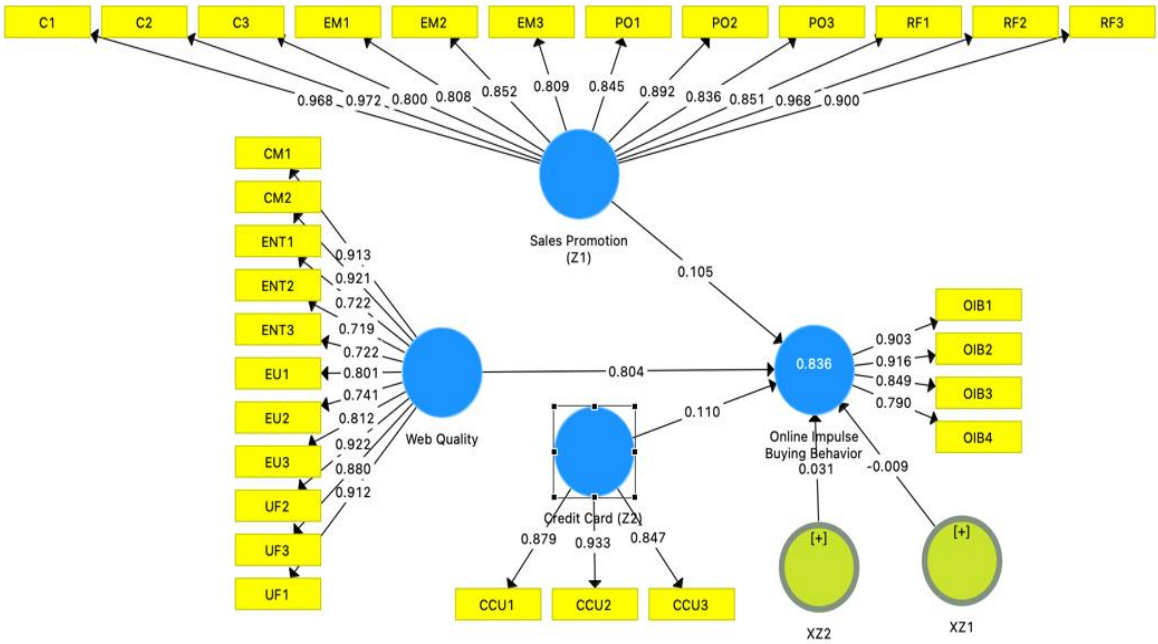

Figure 2. Measurement Model

Convergent Validity. Convergent validity is used to measure the level of accuracy of an item or set of items in a variable against what you want to measure (Indrawati, 2017). In testing convergent validity, it can be use from two indicators namely, Loading Factor (LF) and Average Variance Extracted (AVE). The characteristics of the loading factor value is the value must be more than 0.700, it might imply that an item in a factor has excellent convergent validity or valid (Indrawati, 2017). As in table 9 below, all items have a value above 0.7 which indicates that all items in this study are valid.

In using the AVE value, a variable can be said to have convergent validity if the AVE value is above 0.500 (Indrawati, 2017). In this research, all the variable constructs show an AVE score greater than 0.500.

Table 10. Convergent Validity by using Factor Loading and AVE

Latent Variable	Dimension	Indicator	Factor Loading	Conclusion
Web Quality (WQ)	Complimentary (CM)	CM1	0.913	VALID
		CM2	0.921	VALID
	Entertainment (ENT)	ENT1	0.722	VALID
		ENT2	0.719	VALID
		ENT3	0.722	VALID
	Ease to Use (EU)	EU1	0.801	VALID
		EU2	0.741	VALID
		EU3	0.812	VALID
	Usefulness (UF)	UF1	0.912	VALID
		UF2	0.922	VALID
		UF3	0.800	VALID

Sales Promotion (SP)	Coupon (C)	C1	0.968	VALID
		C2	0.972	VALID
		C3	0.800	VALID
	Event Marketing (EM)	EM1	0.808	VALID
		EM2	0.852	VALID
		EM3	0.809	VALID
	Price Offer (OP)	PO1	0.845	VALID
		PO2	0.892	VALID
		PO3	0.836	VALID
	Refund (RF)	RF1	0.851	VALID
		RF2	0.968	VALID
		RF3	0.900	VALID
Credit Card Use (CCU)		CCU1	0.879	VALID
		CCU2	0.933	VALID
		CCU3	0.847	VALID
Online Impulse Buying Behavior (OIB)		OIB1	0.903	VALID
		OIB2	0.916	VALID
		OIB3	0.849	VALID
		OIB4	0.790	VALID

Discriminant Validity. Discriminant validity is used to assess how distinct the items used to measure a variable are from the items used to measure other variables, as well as if the items used to measure variables mistakenly measure other variables that were not intended to be assessed (Indrawati, 2017).

Table 11. Correlation Value Between Variables

	Credit Card (Z2)	Online Impulse Buying Behavior (Y)	Sales Promotion (Z1)	Web Quality (X)
Credit Card (Z2)	**0.887**			
Online Impulse Buying Behavior (Y)	0.506	**0.866**		
Sales Promotion (Z1)	0.415	0.554	**0.877**	
Web Quality (X)	0.434	0.901	0.501	**0.828**

(Indrawati, 2017), indicate that a variable has discriminant validity if the value of the variable's square root AVE is larger than the correlation between the variables in the model. There are criteria for discriminant validity, including the requirement that the cross-loading value which also indicates the size of the correlation between each variable and the items, is bigger than the correlation value with other variables (Indrawati, 2017).

Table 12. Correlation Value Between Variables

	Credit Card (Z2)	Online Impulse Buying Behavior (Y)	Sales Promotion (Z1)	Web Quality (X)
C1	0.411	0.570	**0.968**	0.510
C2	0.409	0.574	**0.972**	0.512

C3	0.378	0.530	**0.800**	0.500
CCU1	**0.879**	0.407	0.303	0.338
CCU2	**0.933**	0.508	0.423	0.447
CCU3	**0.847**	0.423	0.368	0.359
CM1	0.421	0.863	0.469	**0.913**
CM2	0.394	0.919	0.485	**0.921**
EM1	0.358	0.451	**0.808**	0.430
EM2	0.338	0.394	**0.852**	0.332
EM3	0.320	0.413	**0.809**	0.349
ENT1	0.244	0.583	0.376	**0.722**
ENT2	0.291	0.619	0.403	**0.719**
ENT3	0.358	0.604	0.330	**0.722**
EU1	0.387	0.691	0.329	**0.801**
EU2	0.311	0.642	0.420	**0.741**
EU3	0.305	0.658	0.364	**0.812**
OIB1	0.393	**0.903**	0.460	0.883
OIB2	0.413	**0.916**	0.485	0.915
OIB3	0.503	**0.849**	0.524	0.674
OIB4	0.479	**0.790**	0.467	0.586
PO1	0.337	0.465	**0.845**	0.444
PO2	0.339	0.424	**0.892**	0.367
PO3	0.306	0.415	**0.836**	0.355
RF1	0.336	0.458	**0.851**	0.429
RF2	0.418	0.581	**0.968**	0.525
RF3	0.384	0.481	**0.900**	0.438
UF2	0.376	0.897	0.470	**0.922**
UF3	0.375	0.742	0.423	**0.880**
UF1	0.453	0.855	0.464	**0.912**

This shows that the variable meets the criteria of discriminant validity. In Table 11 below shows the value of cross loading in this study that indicates valid of discriminant validity.

Reliability Test. The amount of confidence, dependability, consistency, or stability of a measurement's results is referred to as its reliability. One of the qualities of an excellent measuring tool is its dependability (Indrawati, 2015). Reliability is used to calculate how much the indicator variable grows as the latent variable grows (Indrawati, 2017). Cronbach's Alpha (CA) and Composite Reliability (CR) were used to assess reliability, with research criteria CA and CR having values more than or equal to 0.700 (Indrawati, 2017).

Table 13. Cronbach's Alpha and Composite Reliability

	Cronbach's Alpha	**Composite Reliability**
Credit Card (Z2)	0.864	0.917
Online Impulse Buying Behavior (Y)	0.890	0.923
Sales Promotion (Z1)	0.972	0.976
Web Quality (X)	0.953	0.960

In this study, all variables have value of Cronbach Alpha (CA) and Composite Reliability (CR) score greater than 0.070. That means reliability in this study has good criteria where the score of Cronbach's Alpha (CA) and Composite Reliability (CR) is greater than 0.070.

Assessment of the Structural Model. The Inner model measurement to assess the influence of one latent variable on another latent variable (Indrawati, 2017). As shown in Figure 3 depicts an illustration of the inner model used in this study and ZX1 can be explain as moderating variable where sales promotion moderate the relationship between web quality and online impulse buying behavior and XZ2 explain as Credit Card Use moderate the relationship between web quality and online impulse buying behavior.

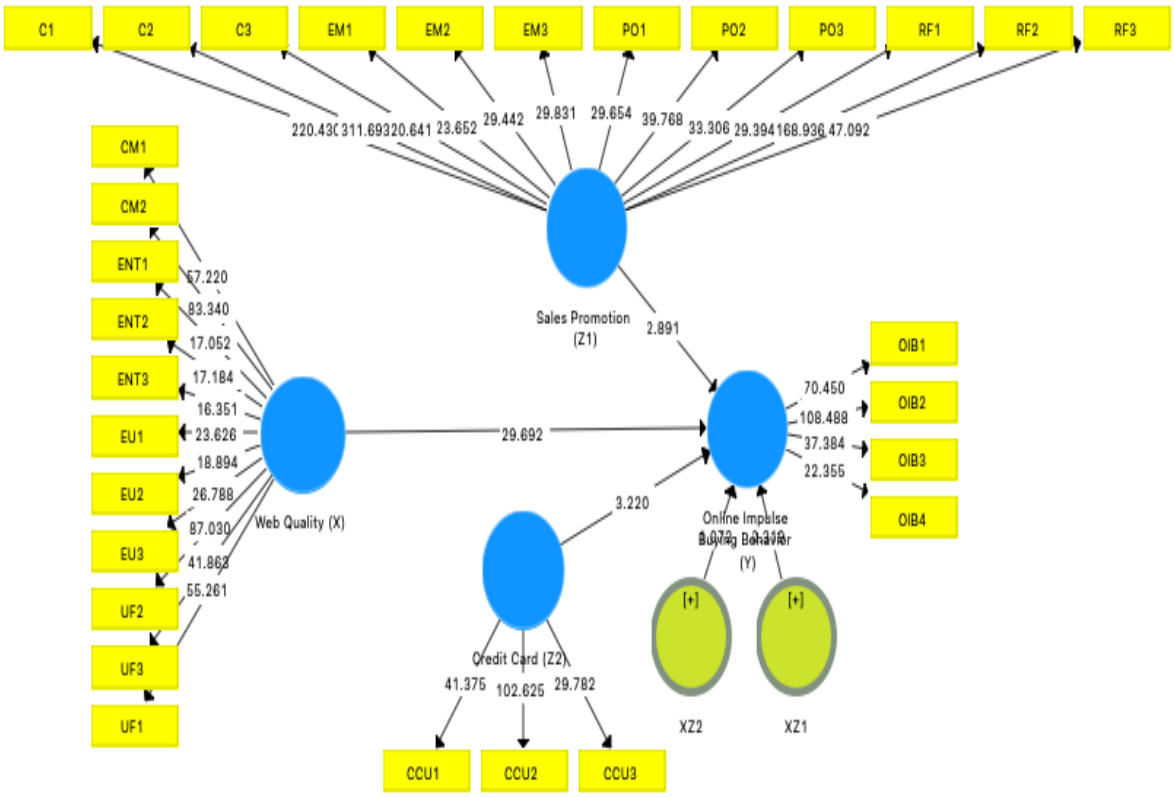

Figure 3. Structure Model

There are two outputs in the assessment of the structural model testing by using Partial Least Square (PLS): R^2 for latent variables and parameter coefficients and t-statistics. In addition, t-values in study were calculated using PLS bootstrapping. The t-value test is used to determine if the independent variable has a significant influence on the dependent variable (Indrawati, 2017).

Table 14. Path Coefficient and t-value

No	Path Diagram	Path Coefficient	t- Value	P-Value	Conclusion
1	WQ -> OIB	0.804	30.349	0.000	H_1 Accepted
2	SP -> IOB	0.105	2.805	0.003	H_1 Accepted
3	XZ1 -> OIB	-0.009	0.296	0.384	H_1 Rejected
4	CCU -> IOB	0.110	3.218	0.001	H_1 Accepted
5	XZ2 -> OIB	0.031	1.021	0.154	H1 Rejected

This research used 5 percent significant level, which means that if the t-value greater than 1.65 and p-value is smaller than 0.050 means that there is a significant influence between the independent variable and dependent variable. Testing the value of R^2 is used to measure the level of variation of changes in the dependent variable on the independent variable. The higher the R-square value, the better the model can predict the research object. The criteria for R-Square values are 0.670, 0.330 and 0.190 which indicate that the model is "Good", "Moderate" and "Weak" (Indrawati, 2017).

Table 15. R2 Result

Latent Variable	R^2
Online Impulse Buying Behavior (Y)	0.836

As shown in table 15, it shows that Online Impulse Buying Behavior variable is influenced by Web Quality, Sales Promotion and Credit Card Use has value of 0,836 or 83,600 percent where it can be categorized as good. This result indicates the robustness of this model to explain consumer impulse buying behavior in a marketplace environment especially in a growing country such as Indonesia.

DISCUSSION

Based on the result that has been found, there are five findings in this research. First Website Quality (WQ) has the strongest positive effects towards Online Impulsive Buying Behavior (OIB). Second finding is that Sales Promotion (SP) positively affect OIB. Third finding is that Credit Card Use (CCU) has positive effect on OIB. Additionally, we found the fourth finding that SP doesn't have moderating effect on the relationship between WQ and OIB. The last finding is that CCU doesn't act as moderator for the relationship between WQ and OIB.

First finding is in line with the results of research conducted by (Akram et al., 2018), (Firdausy and Fernanda, 2021), (Widagdo and Roz, 2021). Web Quality is a factor that is the main influence for OIB found in this study. The quality of the web site such as in visual appearance, convenience and security in general will affect the behavior of buying back, whether impulsive or not. Website visitors who have good quality will be more likely to make a purchase. For example, a website that is difficult to use to find product information or make a purchase will prevent potential buyers from making a purchase because they feel

they do not have sufficient control to complete the process. Perceived control is an important factor that affect behavior.

Second finding is in line with previous research conduct by (Akram et al., 2018), (Mutanafisa and Retnaningsih, 2021), and (Firdausy, 2021). Promotion is an important trigger in impulse buying. Impulse buying is generally not done in a planned manner. The existence of attractive discounts for a limited time will make potential buyers who previously had no interest to make a purchase. This behavior is because they think that they need to take advantage of these attractive promotional opportunities. Indonesian marketplace is a highly competitive environment where each marketplace needs to offer competitive advantage such as lowering cost by giving discount or other benefit related to customer cost. This situation also could be one possible explanation on this research finding.

Third finding on the effect of CCU on OIB, supports previous research by (Putra, 2015), (Akram et al., 2018), (Badgaiyan and Verma, 2015), and (Khare, 2013). High use of credit cards is a strong indicator of financial capability and adequate experience of making electronic payments. Both will trigger online purchases. Buyers with sufficient financial ability and experience will generally view the buying process through the marketplace as having a lower risk and encourage them to make purchases, including impulse purchases.

There are two interesting findings from this research related to the moderation effect of CCU and SP. Despite of expected results, sales promotion and Credit Card Use don't significantly moderate the relationship between web quality and Online Impulse Buying Behavior. The results of this study on Sales Promotion moderation effect have similarities with the results of research by (Akram et al., 2018). One of possible explanation according to (Akram et al., 2018), state that sales promotion has a negative effect on sales due to purchase acceleration and stockpiling, as well as a negative impact on brand image and reference price.

Credit Card Use also found not to have significant moderating effect. This result support (Engeln and Joseph, 2012) in (Abrar et al., 2017). Possible explanation offered is that it could be due to Online shoppers are anxious that their payment card information will be compromised or that they will be overcharged by sellers. Financial risk also refers to the possibility of not receiving the lowest feasible price for the chosen goods from a certain online business. In this research also have similarities respondent where it dominates by woman and age group twenty six until thirty years old.

The findings in this research indicate that Shopee marketplace needs to improve WQ, SP and CCU to increase OIB. Nevertheless, they need to focus on WQ, since this variable is the strongest factor that affect OIB. One of the main indicators that Shopee needs to focus indicated in Table 6. Based on that table, the less perceived quality indicator is CM2 which related to website usability. Shopee needs to improve the process and website interface to gain better perceived quality on this indicator.

CONCLUSION

This research found that web quality has positive significant influence on Online Impulse Buying Behavior. It also found that Sales Promotion and Credit Card use has positive significant influence on Online Impulse Buying Behavior. Sales promotion and Credit Card Use do not significantly moderate the relationship between web quality and

Online Impulse Buying Behavior. Despite the unexpected results of the moderation effect, this model proven to be useful to explain the nature of impulsive buying in a marketplace affected by Web Quality, Sales Promotion and Credit Card Use.

Shopee can improve further in terms of web quality, sales promotion, and their credit card payment method at Shopee Website especially in the statement that has lowest percentage of response. One of them that Shopee can provide various types of cash back offers to users with the freedom to use cashback on all products. Because with that the user will be more motivated to use cashback in making shopping transactions in large quantities. And Shopee also can provide offers that can attract the attention of credit card users to use credit cards when shopping at Shopee, namely by providing discounts on buying through credit cards or on large shopping. That way users will feel more compelled to use a credit card because users find it more profitable and easier to use a credit card with the benefits provided by e-commerce itself.

REFERENCES

A. A. Ngr Bagus Maha Putra, A. A. G. A. A. K. (2015). Pengaruh Kecanduan Internet, Daya Tarik Promosi Dan Kepemilikan Kartu Kredit Terhadap Perilaku Pembelian Impulsif Online. *E-Jurnal Manajemen*, *Vol.04*, 209–227. https://ojs.unud.ac.id/index.php/Manajemen/article/view/10269.

Abrar, K., Naveed, M., & Ramay, M. I. (2017). Impact Of Perceived Risk On Online Impulse Buying Tendency: An Empirical Study In The Consumer Market Of Pakistan. *Journal of Accounting & Marketing*, *06*(03). https://doi.org/10.4172/2168-9601.1000246.

Akram, U., Hui, P., Kaleem Khan, M., Tanveer, Y., Mehmood, K., & Ahmad, W. (2018). How Website Quality Affects Online Impulse Buying: Moderating Effects Of Sales Promotion And Credit Card Use. *Asia Pacific Journal of Marketing and Logistics*, *30*(1), 235–256. https://doi.org/10.1108/APJML-04-2017-0073.

Al Mutanafisa, T., & Retnaningsih. (2021). The Effect of Sales Promotion and Knowledge on Impulsive Buying of Online Platform Consumers. *Journal of Consumer Sciences*, *6*(1), 77–91. https://doi.org/10.29244/jcs.6.1.77-91.

Al-Debei, M. M., Akroush, M. N., & Ashouri, M. I. (2015). Consumer Attitudes Towards Online Shopping: The Effects Of Trust, Perceived Benefits, And Perceived Web Quality. *Internet Research*, *25*(5), 707–733. https://doi.org/10.1108/IntR-05-2014-0146.

Amos, C., Holmes, G. R., & Keneson, W. C. (2014). A Meta-Analysis Of Consumer Impulse Buying. *Journal of Retailing and Consumer Services*, *21*(2), 86–97. https://doi.org/10.1016/j.jretconser.2013.11.004.

Ananda Astri Dianka. (2021, August 26). *10 e-Commerce Terlaris 2021: Tokopedia Perkasa Jadi Jawara, Shopee Dikudeta*. Trenasia.com.

Andrea Lidwina. (2020, August 31). *Pembelian Online di Asia Tenggara Meningkat 1,5 Kali Lipat*. Databoks.katadata.co.id. https://databoks.katadata.co.id/datapublish/2020/08/31/pembelian-online-di-asia-tenggara-meningkat-15-kali-lipat.

Badgaiyan, A. J., & Verma, A. (2015). Does Urge To Buy Impulsively Differ From

Impulsive Buying Behaviour? Assessing The Impact Of Situational Factors. *Journal of Retailing and Consumer Services*, *22*, 145–157. https://doi.org/10.1016/j.jretconser.2014.10.002.

Ceyda Ayusuna Turkyilmaz, S. E. A. U. (2015). The Effects of Personality Traits and Website Quality on Online Impulse Buying - CORE Reader. *Procedia Social and Behavioral Science*, 98–105. https://doi.org/doi: 10.1016/j.sbspro.2015.01.1179.

Chen, C. C., & Yao, J. Y. (2018). What Drives Impulse Buying Behaviors In A Mobile Auction? The Perspective Of The Stimulus-Organism-Response Model. *Telematics and Informatics*, *35*(5), 1249–1262. https://doi.org/10.1016/j.tele.2018.02.007.

Christina, R. (2019, December 10). *Strategi Shopee dalam Menarik Perhatian Pelanggan*. Yoursay.suara.com. https://yoursay.suara.com/news/2019/12/10/131146/strategi-shopee-dalam-menarik-perhatian-pelanggan.

Christino, J. M. M., Silva, T. S., Cardozo, E. A. A., de Pádua Carrieri, A., & de Paiva Nunes, P. (2019). Understanding Affiliation To Cashback Programs: An Emerging Technique In An Emerging Country. *Journal of Retailing and Consumer Services*, *47*, 78–86. https://doi.org/10.1016/j.jretconser.2018.10.009.

Ciunova-Shuleska, A. (2012). The Impact of Situational, Demographic, and Socioeconomic Factors on Impulse Buying in the Republic of Macedonia. *Journal of East-West Business*, *18*(3), 208–230. https://doi.org/10.1080/10669868.2012.706869.

Clark, R. A., Zboja, J. J., & Goldsmith, R. E. (2013). Antecedents of Coupon Proneness: A Key Mediator of Coupon Redemption. *Journal of Promotion Management*, *19*(2), 188–210. https://doi.org/10.1080/10496491.2013.769475.

Dhita Koesno. (2020, September 28). *Pertumbuhan Industri Website di 3 Negara Meningkat Hingga 35 Persen*.

Dinisari, M. C. (2017, September 16). *Shopee Raih Penghargaan di " The Best in Marketing Campaign."* Entrepreneur.bisnis.com. https://entrepreneur.bisnis.com/read/20170916/239/690483/shopee-raih-penghargaan-di-the-best-in-marketing-campaign-.

Djumena, E. (2020, November 9). *Pengguna Internet Indonesia hingga Kuartal II 2020*. Money.kompas.com. https://money.kompas.com/read/2020/11/09/213534626/pengguna-internet-indonesia-hingga-kuartal-ii-2020-capai-1967-juta-orang.

Dwi Hadya Jayani. (2021, January 29). *Nilai Transaksi E-Commerce Mencapai Rp 266,3 Triliun pada 2020*. Databoks.katadata.co.id. https://databoks.katadata.co.id/datapublish/2021/01/29/nilai-transaksi-e-commerce-mencapai-rp-2663-triliun-pada-2020.

Faridzie, muhammad R. R. Al. (2021). *Analisis Kualitas Website Menggunakan Metode Webqual pada E-Commerce Elevenia*. Universitas Telkom.

Fatiha Rahmalita Fitri. (2018). The Influence Of Web Quality And Sales Promotion Toward Impulse Buying Behavior With Openness Personality As Moderating Variable. *Journal of Accounting Management and Economics*, *Vol.20*(01), 48–55.

Fendy Cuandra, K. K. (2021). Analysis Of Influence Of Materialism On Impulsive Buying And Compulsive Buying With Credit Card Use As Mediation Variable. *Jurnal Manajemen*, *13*(1), 7–16. https://doi.org/http://dx.doi.org/10.29264/jmmn.v13i1.8548.

Fernanda, M. (2019). Pengaruh Promosi Penjualan, Daya Tarik Iklan Internet, dan Kualitas Website Terhadap Pembelian Impulsif. *Jurnal Manajemen Bisnis Dan Kewirausahaan*, *3*(5), 07. https://doi.org/10.24912/jmbk.v3i5.6073.

Firdausy, C. M., & Fernanda, M. (2021). The Effects of Sales Promotion, Attractiveness of Internet Advertising, and Website Quality on Impulse Buying of Consumers of Tokopedia in Indonesia. *International Journal of Management and Enterprise Development*, *VOL.20 NO.1*, 34–48.

Fitriani. (2014, December 9). *Perkembangan Teknologi Informasi dan Komunikasi*. Acehprov.go.id. https://acehprov.go.id/berita/kategori/serba-serbi/80-perkembangan-teknologi-informasi-dan-komunikasi.

George E. Belch, & A. Belch. (2018). *Advertising And Promotion An Integrated Marketing Communications Perspective* (11th Edition). Mc Graw Hill.

Ghasemaghaei, M., Ebrahimi, S., & Hassanein, K. (2018). Data Analytics Competency For Improving Firm Decision Making Performance. *The Journal of Strategic Information Systems*, *27*(1), 101–113. https://doi.org/10.1016/j.jsis.2017.10.001.

Ginee. (2021, May 28). *25+ Kategori Terlaris Event Bulanan Shopee, Tokopedia, Lazada 2021*. Ginee. https://ginee.com/id/insights/kategori-terlaris-event-bulanan-shopee-tokopedia-lazada-2021/.

Indrawati, P. D. (2015). *Metode Penelitian Manajemen Dan Bisnis : Konvergensi Teknologi Komunikasi Dan Informasi* (Dinnah Sumayyah (ed.)). PT Refika Aditama.

Indrawati, P. D. dk. (2017). *Perilaku Konsumen Individu Dalam Mengadopsi Layanan Berbasis Teknologi Informasi Dan Komunikasi* (Nurul Falah Atif (ed.)). PT.Refika Aditama.

iprice. (2021). *Daftar 50 Website & Aplikasi E-Commerce di Indonesia 2019*. Iprice.co.id. https://iprice.co.id/insights/mapofecommerce/.

Irso. (2020, November 9). *Dirjen PPI: Survei Penetrasi Pengguna Internet di Indonesia Bagian Penting dari Transformasi Digital*. Kominfo.go.id. https://www.kominfo.go.id/content/detail/30653/dirjen-ppi-survei-penetrasi-pengguna-internet-di-indonesia-bagian-penting-dari-transformasi-digital/0/berita_satker.

Ittaqullah, N., Madjid, R., & Rommy Suleman, N. (2020). The Effects Of Mobile Marketing, Discount, And Lifestyle On Consumers' Impulse Buying Behavior In Online Marketplace. *International Journal Of Scientific & Technology Research*, *Vol.9*(03). www.ijstr.org

Khare, A. (2013). Credit Card Use and Compulsive Buying Behavior. *Journal of Global Marketing*, *26*(1), 28–40. https://doi.org/10.1080/08911762.2013.779406.

Kotler, P., & Keller, K. L. (2016). *Marketing management* (15TH EDITION). Pearson India Education Services Pvt. Ltd.

Laily Ramadhani, M. K. S. P. R. (2020). Pengaruh Kualitas Website Dan Dimensi Kepribadian Big Five Terhadap Pembelian Impuls Online Dengan Promosi Penjualan Sebagai Variabel Moderasi "Studi Pada Shopee." *Jurnal Manajemen Dan Bisnis Indonesia*, *6*(2), 120–132. https://doi.org/https://doi.org/10.32528/jmbi.v6i2.3169.

Li, L., Peng, M., Jiang, N., & Law, R. (2017). An Empirical Study On The Influence Of Economy Hotel Website Quality On Online Booking Intentions. *International Journal of Hospitality Management*, *63*, 1–10.

https://doi.org/10.1016/j.ijhm.2017.01.001.
Lo, L. Y. S., Lin, S. W., & Hsu, L. Y. (2016). Motivation For Online Impulse Buying: A Two-Factor Theory Perspective. *International Journal of Information Management*, *36*(5), 759–772. https://doi.org/10.1016/j.ijinfomgt.2016.04.012.
Ni Komang Arista Dewi, L. P. M. (2020). Pemetaan Bentuk Dan Pencegahan Penipuan E-Commerce. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, *V0L.09 NO.09*, 851–878. https://doi.org/https://doi.org/10.24843/EEB.2020.v09.i09.p03.
Niko Ramadhani. (2020, February 28). *Ini Dampak Perkembangan Teknologi yang Dapat Dirasakan*. Akseleran.co.id. https://www.akseleran.co.id/blog/perkembangan-teknologi/.
Nurcaya, I. N., & Rastini, N. M. (2018). Impulse Buying Behavior on Modern Retail. *Udayana Journal of Social Sciences and Humanities (UJoSSH)*, *2*(2), 101. https://doi.org/10.24843/UJoSSH.2018.v02.i02.p06.
ourworldindata. (2021). *Cumulative COVID-19 Test, Confirm Cases And Deaths, Indonesia*. Ourworldindata.org. https://ourworldindata.org/coronavirus/country/indonesia.
Permatasari, D. (2021, July 31). *Kebijakan Covid-19 dari PSBB hingga PPKM Empat Level*. Kompaspedia.kompas.id.
Pradhan, D., Israel, D., & Jena, A. K. (2018). Materialism And Compulsive Buying Behaviour: The Role Of Consumer Credit Card Use And Impulse Buying. *Asia Pacific Journal of Marketing and Logistics*, *30*(5), 1239–1258. https://doi.org/10.1108/APJML-08-2017-0164.
Prasasti, G. D. (2021, October 13). *Menkominfo: Pengguna Internet di Indonesia Capai 202,6 Juta Orang per Januari 2021*. liputan6.com.
Putri, C. A. (2021, June 3). *Transaksi Kartu Kredit Tumbuh 25% di Tengah Pandemi Covid*. Cnbindonesia.com. https://www.cnbcindonesia.com/market/20210603155522-17-250389/transaksi-kartu-kredit-tumbuh-25-di-tengah-pandemi-covid.
Rahmad Maulana. (2021, March 29). *Tetap Irit, Belanja Pakai Kartu Kredit Saat Pandemi*. Pikiran-Rakyat.com. https://www.pikiran-rakyat.com/ekonomi/pr-011687504/tetap-irit-belanja-pakai-kartu-kredit-saat-pandemi.
Rahmadhani, R. S. (2015). *Pengaruh Fashion Involvement Dan Sales Promotion Terhadap Impulsive Buying Pada Toko Busana Muslim Rabbani Bandung*. Universitas Telkom.
Research, M., & Kumbhar, V. M. (2011). Factors Affecting The Customer Satisfaction In E-Banking: Some Evidences Form Indian Banks Factors Affecting The Customer Satisfaction In E-Banking: Some Evidences Form Indian Banks. *Management Research and Practice*, *3*(4), 1–14.
Reza Pahlevi. (2021, December 27). *"Berapa Nilai Transaksi E-Commerce Indonesia Setiap Jam?"* . Katadata.co.id. https://katadata.co.id/ariayudhistira/infografik/61c9230ccaf65/berapa-nilai-transaksi-e-commerce-indonesia-setiap-jam.
Riduwan. (2012). *Belajar mudah penelitian untuk guru-karyawan dan peneliti pemula / Riduwan*. Alfabeta.
Setiawan, karina P. (2021). *Pengaruh Fashion Involvement, Sales Promotion, Dan Hedonic Shopping Motivation Terhadap E-Impulse Buying Fashion Product Pada Marketplace Shopee*. Universitas Telkom.

Simon Kemp. (2021, February 11). *Digital 2021 : Indonesia*. Dataportal.com. https://datareportal.com/reports/digital-2021-indonesia?rq=indonesia.

Stefan Alimpic, T. M. N. N. P. (2020). Impact of Certain Sales Promotion Tools on Consumers' Impulse Buying Behavior. *Journal of Applied Economic Science*, *1*(67), 45–55.

Uma Sekaran and Roger Bougie. (2016). *Research Methods for Business* (Seventh Edition). John Wiley & Sons Ltd. www.wileypluslearningspace.com.

Wells, J. D., Parboteeah, V., & Valacich, J. S. (2011). Online Impulse Buying: Understanding The Interplay Between Consumer Impulsiveness And Website Quality. In *Issue 1 Journal of the Association for Information Abstract Research Article* (Vol. 12, Issue 1). www.amazon.com.

WHO. (2021). *WHO Coronavirus (COVID-19) Dashboard*. covid19.who.int. https://covid19.who.int.

Wickramasinghe, V., & Gurugamage, A. (2012). Effects Of Social Demographic Attributes, Knowledge About Credit Cards And Perceived Lifestyle Outcomes On Credit Card Usage. *International Journal of Consumer Studies*, *36*(1), 80–89. https://doi.org/10.1111/j.1470-6431.2010.00993.x.

Widagdo, B., & Roz, K. (2021). Hedonic Shopping Motivation and Impulse Buying: The Effect of Website Quality on Customer Satisfaction. *Journal of Asian Finance, Economics and Business*, *8*(1), 395–405. https://doi.org/10.13106/jafeb.2021.vol8.no1.395.

Wiranata, A. T., & Hananto, A. (2020). Do Website Quality, Fashion Consciousness, and Sales Promotion Increase Impulse Buying Behavior of E-Commerce Buyers? *Indonesian Journal of Business and Entrepreneurship*. https://doi.org/10.17358/ijbe.6.1.74.

Yuniarti, Y., Tan, M. I., Siregar, A. P., & Amri, A. I. S. (2021). Faktor Yang Mempengaruhi Impulse Buying Konsumen Saat Moment Hari Belanja Online Nasional (Harbolnas). *Jurnal Manajemen Terapan Dan Keuangan*, *10*(01), 153–159. https://doi.org/10.22437/jmk.v10i01.12711.

Zeng, L., Proctor, R. W., & Salvendy, G. (2012). User-Based Assessment Of Website Creativity: A Review And Appraisal. In *Behaviour and Information Technology* (Vol. 31, Issue 4, pp. 383–400). https://doi.org/10.1080/01449291003686203.

Zhang, L., Shao, Z., Li, X., & Feng, Y. (2021). Gamification And Online Impulse Buying: The Moderating Effect Of Gender And Age. *International Journal of Information Management*, *61*, 102267. https://doi.org/10.1016/j.ijinfomgt.2020.102267.