

# The Influence of Website Quality and Payment Systems on Decisions for Transactions with E-WOM as Mediation Variable

Siti Sarah HD<sup>1</sup>, Agustin Rusiana Sari<sup>2</sup>

<sup>1,2</sup>Information Systems Management, Postgraduate Program, University of Gunadarma

Jl. Margonda Raya No. 100, Depok 16424, East Java

Email address: <sup>1</sup>sarahhsiti(at)gmail.com, <sup>2</sup>agustin.staff(at)gunadarma.ac.id

**Abstract**— Website quality is an instrument developed to assess the usefulness of information and the quality of service interactions from a website. On this website, there is a payment system, which is a system related to transferring an amount of money value from one party to another. The purpose of this study was to determine the effect of website quality and payment systems on transactional decisions with E-WOM as a mediating variable. The research sample was 100 respondents as consumers of the Shopee e-commerce website. Collecting data using online questionnaires and analyzed by PLS-SEM using SmartPLS 3.3.3. The results show that the quality of the website has an effect on E-WOM, the quality of the website has an effect on the decision to transact through E-WOM, the payment system has an effect on E-WOM, the payment system has an effect on the decision to transact through E-WOM, and E-WOM has an effect on transaction decisions.

**Keywords**— E-WOM, Payment System, Structural Equation Model, Transaction Decisions, Website Quality.

## I. INTRODUCTION

Today, one type of modern human communication is information technology. Information technology has grown increasingly significant in social, economic, and political life in a globalized world as a result of its use of the internet. Because of the vast market for internet users, many entrepreneurs have come up with new ways to entice consumers to switch from conventional to modern buying by using e-commerce websites. In today's e-commerce, the marketing concept is consumer-oriented. As a result, the website serves as an auxiliary to e-commerce. A decent website quality might be one of the elements for consumers to make transactions. A payment system is available on the website to support customer transactions.

One of the characteristics that encourages customers to transact on e-commerce websites is an easy-to-understand and operate payment system. Consumers who are pleased with the quality of an e-commerce website's services and payment systems will post about their transactions on social media and share information with other social media users.

The purpose of this study are to (1) determine the impact of website quality on E-WOM, (2) determine the impact of website quality on decisions to transact via E-WOM, (3) determine the impact of the payment system on E-WOM, (4) determine the impact of the payment system on the decision to transact via E-WOM, and (5) determine the impact of E-WOM on the decision to transact via E-WOM.

The following is summary of previous research:

1. Sastika (2016), The Effect of Website Quality (Webqual 4.0) on Purchase Decisions on the Traveloka E-commerce Website. The study's findings are intended to establish the impact of website quality on purchase decisions.
2. Sari et al., (2017), Effect of Electronic Word of Mouth on Purchase Decisions at Bukalapak.com Online Store, with results that aim to determine the effect of E-WOM on transaction decisions.
3. Mulyasari et al., (2016), Analysis of Types of Electronic Payment Systems in E-Commerce Transactions in Indonesia. The study's findings are intended to establish the impact of payment system type on the decision to transact in e-commerce.

## II. THEOROTICAL BASIC

Website quality is an instrument devised to measure the usability, information, and service interaction quality of internet websites, according to Barnes and Vidgen in Muhsin and Zuliestiana (2017). Website quality (webqual) is one technique of determining website quality based on end user perceptions, according to Widya in Muhssin and Zuliestana (2017). Webqual is a fork of servqual, which has been frequently used to assess service quality.

The payment system, according to Bank Indonesia's bi.go.id, is a system for transferring a specific amount of money from one party to another. The media used to transfer the value of money are extremely diverse, ranging from simple payment instruments to complex systems involving multiple institutions and game rules. Bank Indonesia, as defined by the Bank Indonesia Law, has the authority to regulate and maintain the smooth operation of the payment system in Indonesia.

Electronic word of mouth, according to Julilvand and Samiei in Zalni and Abror (2019), is a critical or positive comment made about a product or firm by actual, potential, or former consumers when this information is available to people or institutions over the internet.

## III. RESEARCH METHOD

### A. Object of study

The user of the Shopee e-commerce website is the subject of this study. Users of the Shope e-commerce website in DKI Jakarta make up the study's population. Using the Bernoulli

formula, determine the minimal sample size as follows: (Bernoulli in Komala and Nellyaningsih, 2017).  $n \geq \frac{(1,96)^2 \cdot 0,5 \cdot 0,5}{(0,1)^2}$

$$n \geq 96,04 \approx 96$$

Description:

- n = number of samples
- Z = Value obtained from standard normal table with probability /2
- e = error rate
- p = probability of the population not being sampled
- p = probability of the population being taken as a sample (1 - p)

As a result, the sample size for this survey is 100, and the minimum number of respondents is 96.

The sample selection technique is non-probability sampling with a purposive sampling approach, which is a sampling technique with certain considerations. Respondents were chosen from website users who had visited the site in the previous six months and had made at least one transaction. This study used a survey method with a questionnaire delivered through Google Docs as the data gathering method. PLS-SEM with the SmartPLS version 3.3.3 program was the data analysis technique utilized to discuss the concerns in this study. The variables in this study are separated into three categories: independent variables, such as website and payment system quality, dependent variables, such as transaction decisions, and mediating variables, such as E-WOM.

The Likert scale was utilised in this study as a sort of variable assessment scale. The Likert scale is used to assess a person's or a group's attitudes, views, and perceptions of social phenomena (Sugiyono, 2017). The questionnaire assessment utilising a Likert scale has a weight of 5 (strongly agree), 4 (agree), 3 (neutral), 2 (disagree), and 1 (strongly disagree) (strongly disagree). The Likert's Summated Rating (LSR) formula can be used to compare a person's attitude score to a scale distribution (Rahayu et al., 2018).

$$Rs = \frac{m - n}{b}$$

$$Rs = \frac{5 - 1}{5} = 0,8$$

Description:

- Rs = Range scale
- m = The highest number in the measurement
- n = The lowest number in the measurement
- b = The number of classes or categories formed

As a result, the numerical scale is as follows.

TABLE I. Descriptive Analysis of Respondents Characteristics

Scale Description		Interpretation Interval
Strongly disagree	STS	1 – 1,7
Disagree	TS	1,8 – 2,5
Neutral	N	2,6 – 3,3
Agree	S	3,4 – 4,1
Strongly agree	SS	≥ 4,2

The following calculations (Rahayu et al., 2018) can be used to create a calculation table for each variable based on the results of the interval calculation above:

$$\text{Score} = (SS \times 5) + (S \times 4) + (N \times 3) + (TS \times 2) + (STS \times 1)$$

$$\text{Mean item} = \frac{\text{Score}}{\text{Numbers of respondent}}$$

$$\text{Mean dimension} = \frac{\text{Mean item}}{\text{Numbers of item}}$$

#### IV. RESULT AND DISCUSSION

##### A. Descriptive analysis

TABLE II. Descriptive Analysis of Respondents Characteristics

Characteristic	Category	Frequency	Percentage
Age	< 25 years old	35	35%
	25 – 40 years old	54	54%
	>25 years old	11	11%
Domicile	East of Jakarta	20	20%
	South of Jakarta	29	29%
	West of Jakarta	17	17%
	Central of Jakarta	21	21%
	North of Jakarta	13	13%
Education level	High school	24	24%
	Diploma degree	9	9%
	Bachelor degree	60	60%
	Master degree	7	7%
	Postgraduate	0	0%
Job	Student	1	1%
	College student	18	19%
	Civil servant	4	4%
	TNI/POLRI	0	0%
	Private sector employee	41	41%
	Entrepreneur	19	19%
	Housewife	15	16%
	Teacher	2	2%
Job level	Fresh Graduate	22	22%
	Junior	36	36%
	Senior	11	11%
	Principal	1	1%
	Manager	4	4%
	Director	2	2%
	Housewife	13	13%
	Entrepreneur	6	6%
	College student	3	3%
	Student	1	1%
Income level	< IDR 2.500.000	40	40%
	>IDR 2.500.000 – IDR 5.000.000	33	33%
	>Rp 5.000.000 – IDR 7.500.000	12	12%
	>Rp 7.500.000 – IDR 10.000.000	7	7%
	>IDR 10.000.000	8	8%

Characteristic	Category	Frequency	Percentage
Resources	Friend	16	16%
	Family	5	5%
	Social media	55	55%
	Internet	24	24%
Visit intensity	Everyday	30	30%
	Twice a week	47	47%
	Once a week	13	13%
	Once a month	10	10%
Access media	PC	2	2%
	Laptop	7	7%
	Tablet	0	0%
	Handphone	91	91%
Payment method	ShopeePay	61	61%
	Spay Later	6	6%
	Bank transfer	23	23%
	Debit card/Debit Online	3	3%
	COD	6	6%
	Pay at Indomaret	1	1%

The basic description of the responders can be established

based on table II. The majority of the respondents are female, between the ages of 25 and 40, and live in South Jakarta. The majority of responders have an S1 education and work as a private employee. Respondents' earnings are highly variable, with the majority earning less than Rp 2,500,000. According to the survey, up to 55% of respondents learned about the Shopee e-commerce website through social media, with frequent visits and access through cellphone. Meanwhile, ShopeePay is the respondent's favourite payment option.

TABLE III. Descriptive Analysis of Respondents Characteristics

Item	STS (1)	TS (2)	N (3)	S (4)	SS (5)	Score	Mean item	Mean dimension
Website quality variable								
Usability dimension								
US1	1	1	17	43	38	416	4,16	4,02
US2	0	2	20	50	28	404	4,04	
US3	0	3	14	39	43	419	4,19	
US4	2	6	38	27	25	369	3,69	
Information quality dimension								
IQ1	1	6	31	46	16	370	3,70	3,84
IQ2	1	6	31	33	27	373	3,73	
IQ3	0	2	27	48	23	392	3,92	
IQ4	1	2	36	34	27	384	3,84	
IQ5	0	1	23	54	22	397	3,97	
IQ6	1	5	28	33	33	392	3,92	
Interaction quality dimension								
ITQ1	0	4	16	58	22	398	3,98	4,02
ITQ2	0	8	25	39	28	387	3,87	
ITQ3	0	2	24	42	32	404	4,04	
ITQ4	1	0	21	53	25	401	4,01	
ITQ5	0	0	21	38	41	420	4,20	
Payment system variable								
Service quality dimension								
SQ1	1	1	13	32	53	435	4,35	4,01
SQ2	1	2	16	49	32	409	4,09	
SQ3	0	6	41	29	24	371	3,71	
SQ4	0	3	27	47	23	390	3,90	
Perceived ease of payment dimension								
EP1	0	2	18	41	39	417	4,17	4,21
EP2	0	6	22	45	27	393	3,93	
EP3	0	1	24	41	34	408	4,08	
EP4	0	0	24	45	42	462	4,62	
EP5	0	1	13	45	41	426	4,26	

Item	STS (1)	TS (2)	N (3)	S (4)	SS (5)	Score	Mean item	Mean dimension
Perceived speed dimension								
PS1	0	2	24	52	22	394	3,94	4,14
PS2	0	0	18	44	38	420	4,20	
PS3	0	0	18	52	30	412	4,12	
PS4	0	1	13	40	46	431	4,31	
Perceived enjoyment dimension								
PE1	0	0	20	40	40	420	4,20	4,18
PE2	0	0	21	53	26	405	4,05	
PE3	0	1	19	49	31	410	4,10	
PE4	0	1	13	34	52	437	4,37	
Security dimension								
SC1	0	6	22	52	20	386	3,86	4,02
SC2	1	2	20	48	29	402	4,02	
SC3	0	2	32	38	28	392	3,92	
SC4	0	1	21	35	43	420	4,20	
SC5	1	4	17	39	39	411	4,11	
Actual use dimension								
AU1	1	0	22	45	32	407	4,07	3,95
AU2	1	1	26	46	26	395	3,95	

AU3	1	1	28	41	29	396	3,96	
AU4	2	5	28	36	29	385	3,85	
Perceived benefits dimension								
PB1	1	0	17	46	36	416	4,16	4,09
PB2	1	1	22	43	33	406	4,06	
PB3	1	0	18	53	28	407	4,07	
PB4	0	1	16	35	48	430	4,30	
PB5	2	1	34	35	28	386	3,86	
User satisfaction dimension								
UST1	0	0	16	58	26	410	4,10	3,95
UST2	0	0	20	56	24	404	4,04	
UST3	2	4	29	45	20	377	3,77	
UST4	1	3	23	54	19	387	3,87	
UST5	1	0	24	47	28	401	4,01	
Transaction decision variable								
KB1	0	1	10	47	42	430	4,30	3,92
KB2	0	5	15	54	26	401	4,01	
KB3	0	5	21	33	41	410	4,10	
KB4	0	12	33	36	19	362	3,62	
KB5	6	11	26	34	23	357	3,57	
E-WOM variable								
Intensity dimension								
IN1	2	14	37	25	22	351	3,51	3,43
IN2	4	23	35	26	12	319	3,19	
IN3	2	9	24	40	25	377	3,77	
IN4	7	12	40	31	10	325	3,25	
Content dimension								
KN1	0	2	20	52	26	402	4,02	3,96
KN2	0	4	26	39	31	397	3,97	
KN3	1	2	16	52	29	406	4,06	
KN4	0	5	22	45	28	396	3,96	
KN5	0	4	36	37	23	379	3,79	
Positive comment								
PP1	0	2	21	50	27	402	4,02	3,93
PP2	0	3	27	48	22	389	3,89	
PP3	0	2	24	48	26	398	3,98	
PP4	0	5	25	50	20	385	3,85	
PP5	0	3	26	45	26	394	3,94	
Negative comment								
PN1	4	29	32	26	9	307	3,07	2,44
PN2	7	35	31	20	7	285	2,85	
PN3	47	24	13	10	6	204	2,04	
PN4	44	21	17	10	8	217	2,17	
PN5	48	21	14	9	8	208	2,08	

The website quality variable, usability dimension, with a mean of 4.02, implies that Shopee e-commerce delivers a user experience in engaging with the website so that users can operate it easily and swiftly, according to table III.

The information quality dimension, which has a mean of 3.84, indicates that the Shopee e-commerce website has delivered quality in terms of the amount, correctness, and form of product and service information presented to its visitors.

The Shopee e-commerce website has developed a sense of trust and empathy from users with user involvement when analysing the website, according to the interaction quality dimension, which has a mean of 4.02.

The service quality dimension of the payment system variable has a mean of 4.01, indicating that the Shopee e-commerce website has offered service quality, which relates to all support when utilising the electronic payment system.

The Shopee e-commerce website has made it easy for customers to access electronic payment systems, as measured by the dimension of perceived ease of payment, which has a

mean of 4.21.

With a mean of 4.14, the Shopee e-commerce website has substantially facilitated the interchange of payment information, resulting in actual use and, ultimately, user satisfaction with the system.

With a mean of 4.02, the security dimension suggests that the Shopee e-commerce website gives secure access to all offered features.

Users spend a lot of time using the technology supplied by the Shopee e-commerce website, as seen by the actual usage dimension, which has a mean of 3.95.

The dimension of perceived benefits, which has a mean of 4.09, implies that visitors on the Shopee e-commerce website are provided the benefit of using an electronic payment system.

The electronic payment system on the Shopee e-commerce website satisfies customers when making payment transactions, according to the user satisfaction dimension, which has a mean of 3.95.

The variable mean of the transaction decision variable is 3.57, indicating that customers are interested in making transactions on the Shopee e-commerce website.

The intensity dimension of the E-WOM variable has a mean dimension of 3.43, indicating that there are many thoughts or comments expressed by customers on social media about the Shopee e-commerce website.

The content dimension has a mean dimension of 3.96, indicating that information from social networking sites is relevant to the Shopee e-commerce website's products and services.

The positive comment dimension has a mean dimension of 3.93, indicating that consumers are providing the good news of testimonials and support that the Shopee e-commerce website desires.

Users do not leave negative comments on the items, services, or brands offered by the Shopee e-commerce website, according to the negative comment dimension, which has a mean dimension of 2.44.

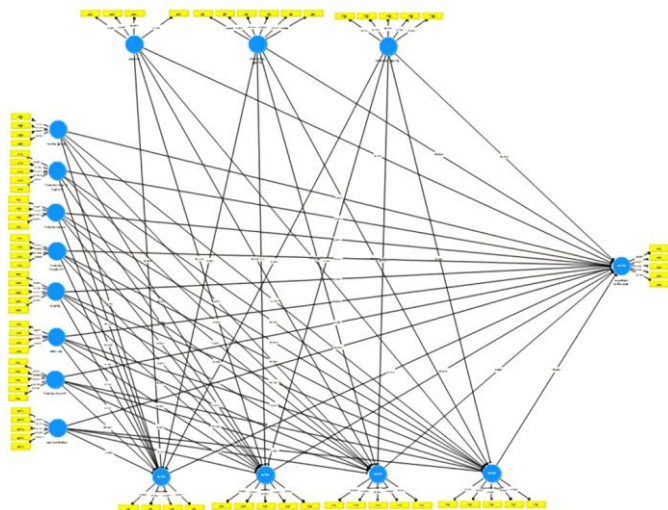


Fig. 1. Example of a figure caption

**B. Evaluation model**

The evaluation of the measurement model (outer model)

and the evaluation of the structural model were carried out in two stages of model evaluation using PLS-SEM (inner model). The outer model is used to evaluate the model's validity and reliability, and it tests convergent validity, discriminant validity, and composite reliability. While the inner model is being run, the R-square value is being used to see how much influence the latent variables have. The PLS-SEM model described in Figure 1 is put to the full test in the following section.

**C. Measurement Model (Outer Model)**

**Convergent Validity Test**

The value of the loading factor and AVE show the convergent validity of each item in measuring the latent variable (average variance factor). If the loading factor is 0.7 and the AVE is 0.5, it is said to be legitimate (Hamid and Anwar, 2019). As shown in table IV, the loading factor value for each item is as follows.

TABLE IV. Descriptive Analysis of Respondents Characteristics

Dimension	Item	Loading factor	Description
Website quality variable (X <sub>1</sub> )			
Usability	US1	0,885	Valid
	US2	0,887	Valid
	US3	0,928	Valid
	US4	0,758	Valid
Information quality	IQ1	0,838	Valid
	IQ2	0,863	Valid
	IQ3	0,758	Valid
	IQ4	0,862	Valid
	IQ5	0,747	Valid
	IQ6	0,908	Valid
Interaction quality	ITQ1	0,755	Valid
	ITQ2	0,749	Valid
	ITQ3	0,755	Valid
	ITQ4	0,704	Valid
Payment system variable (X <sub>2</sub> )			
Service quality	SQ1	0,783	Valid
	SQ2	0,889	Valid
	SQ3	0,841	Valid
	SQ4	0,853	Valid
Perceived ease of payment	EP1	0,897	Valid
	EP2	0,793	Valid
	EP3	0,857	Valid
Perceived speed	PS1	0,884	Valid
	PS2	0,876	Valid
	PS3	0,842	Valid
	PS4	0,833	Valid
	PE1	0,913	Valid
Perceived enjoyment	PE2	0,852	Valid
	PE3	0,908	Valid
	PE4	0,858	Valid
	Security	SC1	0,892
SC2		0,793	Valid
SC3		0,757	Valid
SC4		0,841	Valid
SC5		0,781	Valid
Actual use	AU1	0,877	Valid
	AU2	0,85	Valid
	AU3	0,937	Valid
	AU4	0,838	Valid
Perceived	PB1	0,846	Valid

benefits	PB2	0,898	Valid
	PB3	0,851	Valid
	PB4	0,781	Valid
	PB5	0,719	Valid
User satisfaction	UST1	0,835	Valid
	UST2	0,776	Valid
	UST3	0,777	Valid
	UST4	0,824	Valid
	UST5	0,819	Valid
Transaction decision variable (Y)			
	KB1	0,823	Valid
	KB2	0,833	Valid
	KB3	0,785	Valid
	KB4	0,775	Valid
	KB5	0,709	Valid
E-WOM variable (Z)			
Intensity	IN1	0,885	Valid
	IN2	0,884	Valid
	IN3	0,862	Valid
	IN4	0,837	Valid
Content	KN1	0,888	Valid
	KN2	0,873	Valid
	KN3	0,869	Valid
	KN4	0,885	Valid
	KN5	0,837	Valid
Positive comment	PP1	0,828	Valid
	PP2	0,82	Valid
	PP3	0,887	Valid
	PP4	0,869	Valid
	PP5	0,841	Valid
Negative comment	PN1	0,747	Valid
	PN2	0,852	Valid
	PN3	0,894	Valid
	PN4	0,866	Valid
	PN5	0,907	Valid

The resulting loading factor value can be shown in table IV: all components of each variable, including website quality, payment system, transaction decisions, and E-WOM, all have a loading factor value of 0.7. As a result, the items that characterise each variable's indicators can be certified valid as a measure of the hidden variable.

In addition to the loading factor value, the AVE value of 0.5 is used to test convergent validity. As shown in table V, the AVE value for each dimension is as follows.

TABLE V. Convergent Validity Test with AVE

Variable	Dimension	AVE	Description
Website quality (X <sub>1</sub> )	Usability	0,751	Valid
	Information quality	0,691	Valid
	Interaction quality	0,588	Valid
	Payment system (X <sub>2</sub> )	Service quality	0,709
	Perceived ease of payment	0,712	Valid
	Perceived speed	0,738	Valid
	Perceived enjoyment	0,78	Valid
	Security	0,663	Valid
	Actual use	0,768	Valid
	Perceived benefits	0,675	Valid
	User satisfaction	0,65	Valid
	Transaction decision (Y)		0,618
E-WOM (Z)	Intensitas	0,752	Valid
	Konten	0,758	Valid
	Komentar positif	0,722	Valid
	Komentar negatif	0,731	Valid

In addition to the loading factor value, the AVE value of 0.5 is used to test convergent validity. As shown in table V, the AVE value for each dimension is as follows.

*Discriminant Validity Test*

The cross loading value can be used to verify discriminant validity using reflecting indicators. 0.7 is the value for each variable (Hamid and Anwar, 2019). Table VI below shows the cross loading value for each variable.

TABLE VI. Discriminant Validity Test with Cross Loading

Dimension	Item	Cross loading	Description
Website quality variable (X <sub>1</sub> )			
Usability	US1	0,885	Valid
	US2	0,887	Valid
	US3	0,928	Valid
	US4	0,758	Valid
Information quality	IQ1	0,838	Valid
	IQ2	0,863	Valid
	IQ3	0,758	Valid
	IQ4	0,862	Valid
	IQ5	0,747	Valid
	IQ6	0,908	Valid
Interaction quality	ITQ1	0,755	Valid
	ITQ2	0,749	Valid
	ITQ3	0,755	Valid
	ITQ4	0,704	Valid
Payment system variable (X <sub>2</sub> )			
Service quality	SQ1	0,783	Valid
	SQ2	0,889	Valid
	SQ3	0,841	Valid
	SQ4	0,853	Valid
Perceived ease of payment	EP1	0,897	Valid
	EP2	0,793	Valid
	EP3	0,857	Valid
	EP4	0,819	Valid
	EP5	0,847	Valid
Perceived speed	PS1	0,884	Valid
	PS2	0,876	Valid
	PS3	0,842	Valid
	PS4	0,833	Valid
Perceived enjoyment	PE1	0,913	Valid
	PE2	0,852	Valid
	PE3	0,908	Valid
	PE4	0,858	Valid

Dimension	Item	Cross loading	Description
Security	SC1	0,892	Valid
	SC2	0,793	Valid
	SC3	0,757	Valid
	SC4	0,841	Valid
	SC5	0,781	Valid
Actual use	AU1	0,877	Valid
	AU2	0,850	Valid
	AU3	0,937	Valid
	AU4	0,838	Valid
Perceived benefits	PB1	0,846	Valid
	PB2	0,898	Valid
	PB3	0,851	Valid
	PB4	0,781	Valid
	PB5	0,719	Valid
User satisfaction	UST1	0,835	Valid
	UST2	0,776	Valid
	UST3	0,777	Valid
	UST4	0,824	Valid
	UST5	0,819	Valid
Transaction decision variable (Y)			
	KB1	0,823	Valid

	KB2	0,833	Valid
	KB3	0,785	Valid
	KB4	0,775	Valid
	KB5	0,709	Valid
<b>E-WOM variable (Z)</b>			
Intensity	IN1	0,885	Valid
	IN2	0,884	Valid
	IN3	0,862	Valid
	IN4	0,837	Valid
Content	KN1	0,888	Valid
	KN2	0,873	Valid
	KN3	0,869	Valid
	KN4	0,885	Valid
	KN5	0,837	Valid
Positive comment	PP1	0,828	Valid
	PP2	0,820	Valid
	PP3	0,887	Valid
	PP4	0,869	Valid
	PP5	0,841	Valid
Negative comment	PN1	0,747	Valid
	PN2	0,852	Valid
	PN3	0,894	Valid
	PN4	0,866	Valid
	PN5	0,907	Valid

Table VI demonstrates that the cross loading value for all dimensions and variables of website quality, payment system, transaction decisions, and E-WOM is 0.7. As a result, every indicator that describes the hidden variable can be said to be genuine.

**Reliability Test**

The SmartPLS 3.3.3 program was used to conduct the reliability test in this study, which looked at the composite reliability value. The composite reliability score of 0.7 is a good rule of thumb for assessing construct dependability. The following table VII shows the value of composite reliability (Hamid and Anwar, 2019).

TABLE VII. Discriminant Validity Test with Cross Loading

Variable	Dimension	Composite Reliability	Description
Website quality (X <sub>1</sub> )	Usability	0,923	Reliable
	Information quality	0,930	Reliable
Payment system (X <sub>2</sub> )	Service quality	0,907	Reliable
	Perceived ease of payment	0,925	Reliable
	Perceived speed	0,918	Reliable
	Perceived enjoyment	0,934	Reliable
	Security	0,907	Reliable
	Actual use	0,930	Reliable
	Perceived benefits	0,912	Reliable
	User satisfaction	0,903	Reliable
Transaction decision (Y)		0,890	Reliable
E-WOM (Z)	Intensity	0,924	Reliable
	Content	0,940	Reliable
	Positive comment	0,928	Reliable
	Negative comment	0,931	Reliable

The composite dependability value for each latent variable is 0.7, as can be shown in table VII. This demonstrates that each latent variable has been determined to be dependable.

**D. Structural Model (Inner Model)**

The proportion of variance described by the R-square value (Hamid and Anwar, 2019) is used to evaluate the structural model (inner model) in PLS-SEM, as shown in table VIII below.

TABLE VIII. Structural Model Evaluation (Inner Model)

Variable	R-square
E-WOM (Z)	0,749
Transaction decision (Y)	0,580

The E-WOM variable has R-square value of 0.749, while the transaction decision variable has an R-square value of 0.580, according to table VIII. Thus, the R-square value for the E-WOM variable is 0.749, indicating that the variability of E-WOM can be explained by the website and payment system quality variables of 0.749 0.5 or 74.9 percent, which falls into the moderate category, with the remaining 25.1 percent explained by indicators not included in this study. While the transaction decision variable has an R-square value of 0.580, this indicates that the variability of transaction decisions can be explained by the website quality and payment system variables of 0.580 0.5 or 58 percent, which falls into the moderate category, with the remaining 42 percent explained by other indicators not included in this study.

**E. Hypothesis testing**

The purpose of this study was to put the hypotheses mentioned in the preceding chapter to the test. A test is carried out to determine if the hypothesis is accepted or rejected by looking at the probability values and statistics. There is a significant influence between variables and vice versa if the p-value is 0.05 and the T-statistics T-table is 1.98. This test is conducted out with the SmartPLS 3.3.3 programme, which examines the path coefficient value (Hamid and Anwar, 2019). Table IX shows the results of hypothesis testing.

TABLE IX. Structural Model Evaluation (Inner Model)

Variable	T-statistic	P-value	Description
Website quality to E-WOM	2,125	0,034	Significant
Website quality to Transaction decision	3,385	0,001	Significant
Payment system to E-WOM	8,458	0,000	Significant
Payment system to Transaction decision	3,040	0,002	Significant
E-WOM to Transaction decision	2,031	0,043	Significant

The results of hypothesis testing are summarised in Table IX. The test findings reveal that the t-statistic for all variables is t-table (1.98) and that the p-value for all variables is 0.05, indicating that there is a significant effect between variables.

**F. Sobel test**

The Sobel test was used to examine how effective the mediating variable was at mediating the influence of the independent variables on the dependent variable. The t-statistic value and the significance value reveal the indirect effect value. If the t-statistic is 1.989 (t-table) and the significance threshold is 0.05, the mediating variable is effective in mediating the

effect of the independent variable on the dependent variable, and vice versa (Hamid and Anwar, 2019). By looking at the value of the overall indirect effect, this test was carried out using the SmartPLS 3.3.3 application. Table X shows the results of the Sobel test.

TABLE X. Sobel Test with Indirect Effect

Variable	T-statistic	P-value	Description
Website quality to Transaction decision	2,877	0,002	Mediate well
Payment system to Transaction decision	1,994	0,047	Mediate well

Table X shows that the mediating variable plays a good role in mediating the influence of the independent factors on the dependent variable, with a t-statistic of 1.989 (t-table) and a significant value level of 0.05.

G. Recapitulation of Research Results

Based on the results of the data analysis that has been done previously, it can be summarized in table XI below.

TABLE XI. Recapitulation of Research Results

Hypothesis	Result
H1: Website quality affects E-WOM	Accepted
H2: Website quality affects Transaction decision through E-WOM	Accepted
H3: Payment system affects E-WOM	Accepted
H4: Payment system affects Transaction decision through E-WOM	Accepted
H5: E-WOM affects Transaction decision	Accepted

For e-commerce, a website is one of the advertising and marketing mediums. A website with good website quality will attract a large number of visitors who would shop online. While E-WOM is defined as the interchange of marketing information between consumers in such a way that it shapes behaviour and shifts attitudes regarding the items and services offered by an e-commerce. As a result, a high-quality Shopee e-commerce website will make visitors happy with the current website's excellent services, encouraging them to leave comments on social media or share information about the Shopee e-commerce website with their friends.

The appearance of the website, convenience of use, fullness of information, and several other aspects connected to website quality reflect Shopee e-commerce's to deliver the finest service to consumers, according to the findings of the research. According to website users, the quality of the Shopee e-commerce website is fairly good, which makes website users interested in doing transactions on the Shopee e-commerce website, as well as spurred by reviews and recommendations posted on social media by website users. E-commerce is promoted on their website. Shopee improves the overall quality of its website by focusing on advantages as a method for influencing potential customers' purchasing decisions. For example, each existing seller may be assigned to a Star Seller or Shopee Mall category. Also, share transparent information regarding previous customer product and service reviews. Shopee e-commerce also offers Flash sales from time to time, which are in high demand among customers. This encourages potential customers to use the Shopee e-commerce website to

conduct business.

The simplicity of payment, quickness, security, and benefits that consumers experience while transacting on e-commerce platforms, according to research findings. Shopee continues to expand its payment system offerings, allowing customers to make simple and enjoyable transactions through the use of ShopeePay, Spay Later, Bank transfers, online credit/debit cards, COD, and pay at Indomaret. This makes it much easier for customers to share their positive experiences with the Shopee e-commerce website on social media.

Users supply the good news of testimonials and support desired by the Shopee e-commerce website, as seen by the findings of the descriptive analysis of the payment system variable on the positive remark dimension, where the mean dimension is 3.93. The good news of the testimonies and support is spreading on social media, as evidenced by the findings of a descriptive analysis of information sources, which show that 55 respondents, or 55 percent, are familiar with the Shopee e-commerce website through social media. Having information on social media implies demonstrating that customers share their experiences with the Shopee e-commerce website's ease of use on social media.

According to the findings, the convenience of payment, quickness, security, and rewards that consumers experience while transacting on an e-commerce website influence their decision to purchase. Consumer evaluations and comments on social media about how easy it is to transact on the Shopee e-commerce platform have also been encouraging. Shopee continues to expand its payment system offerings, allowing customers to make simple and enjoyable transactions through the use of ShopeePay, Spay Later, Bank transfers, online credit/debit cards, COD, and pay at Indomaret. Furthermore, the transaction procedure is sped up by ShopeePay, an e-money owned by e-commerce Shopee. This is corroborated by the findings of the descriptive analysis on payment method, which show that 61 respondents, or 61%, prefer to use ShopeePay as a payment method while transacting.

On the Shopee e-commerce website, users can exchange ideas, activities, reviews, suggestions, and hobbies through social networking. This is corroborated by descriptive analysis results, which show that the mean for the dimensions of content and favourable comments are 3.96 and 3.93, respectively, indicating that customers are interested in sharing their Shopee shopping experiences. As a result, reviews shared on social media aid potential customers' attitudes and behaviour in making purchases.

V. CONCLUSION

The conclusion that can be drawn from the results of the data analysis is that the quality of the Shopee e-commerce website affects E-WOM, the quality of the Shopee e-commerce website affects consumer decisions to transact mediated by E-WOM, and the quality of the Shopee e-commerce website affects payment systems on e-commerce websites. Shopee has an impact on E-WOM, the payment system on the Shopee e-commerce website has an impact on E-WOM-mediated consumer decisions to transact, and E-WOM has an impact on Shopee consumer decisions to transact.

Based on the findings of the study and the conclusions reached, it is hoped that future research will use a larger sample of respondents to ensure more accurate test results, test independent variables and other mediations that are thought to influence transaction decisions, such as intensity visits, consumer trust, consumer behaviour, and so on. It is also planned that future study will employ a variety of research objects, allowing the results of similar investigations to be altered.

## REFERENCES

- [1] Hamid, R. S., and Anwar, S, "Variant-Based Structural Equation Modeling (SEM): Basic Concepts and Applications with SmartPLS 3.2.8 Program in Business Research," Jakarta, 2019.
- [2] Komala, R. D., and Nellyaningsih. "e-Proceeding of Applied Science: Overview of Personal Selling Implementation at PT Astra Internasional Daihatsu Astra Biz Center Bandung in 2017," vol. 3, issue 2, pp. 330–337, 2017.
- [3] Mulyasari, H, Dan, T, and Wijaya, B. "National Seminar on Information and Communication Technology (SENTIKA): Analysis of Types of Electronic Payment Systems in E-Commerce Transactions in Indonesia," pp. 166–173, 2016.
- [4] Rahayu, L. K., Mustika, W. P., and Wahyudi, W. F. "Journal of Information System, Applied, Management, Accounting and Research: Webqual 4.0 for Evaluation of Service Quality of Alzafa.com E-Commerce Website Against Online Purchase Decisions," vol 2, issue 1, pp. 47–54, 2018.
- [5] Sari, N, Saputra, M and Husein, J. "Magister Management Journal: The Effect of Electronic Word of Mouth on Purchase Decisions at Bukalapak.com Online Stores," vol 3, issue 1, pp. 96–106, 2017.
- [6] Sastika, Widya. "National Seminar on Information and Communication Technology (SENTIKA): Analysis of the Effect of Website Quality (Webqual 4.0) on Purchase Decisions on the Traveloka E-commerce Website (Case Study: Traveloka Users in Bandung City 2015)," pp. 649–657, 2016.