

Analysis of the influence of perceived value on browsing behavior in C2C E-Commerce with depth of review as antecedent

Febri Suryaning Putri^a, Rizal Purwosaputro^a, Septiayu Kusuma Murdiono Putri^a and Artha Sejati Ananda^{a*}

^aManagement Department, BINUS Business School Master Program, Bina Nusantara University, Jakarta Indonesia, 11480

CHRONICLE

Article history:

Received: March 16, 2023
Received in revised format: May 25, 2023
Accepted: August 5, 2023
Available online: August 5, 2023

Keywords:

Depth review
Perceived utilitarian value
Perceived hedonic value
Browsing
e-commerce

ABSTRACT

Online shopping has developed rapidly in Indonesia since the Covid-19 outbreak, making potential customers frequently browse e-commerce. In e-commerce there is a social commerce construct which is a construction originating from social commerce such as online reviews. Depth from online reviews on a product cannot necessarily be trusted and prospective customers also cannot use other people's experiences as an assessment of product quality. Customer review also considers perceived value from a utilitarian and hedonic perspective. Therefore, this study analyzes the effect of perceived value on browsing behavior in C2C e-commerce with the antecedent depth of review in Indonesia. This study uses SOR (stimulus-organism-response) theory. The population of this study are individuals who live in Indonesia and have done shopping online in one commerce which has facilities online review such as Tokopedia, Blibli, Amazon, Alibaba, and JD.ID. Sampling technique nonprobability sampling by using techniques convenience sampling total 137 samples. The data collection method uses the survey method, while the data analysis method used is PLS-SEM. The results of the study show that depth review affects perceived utilitarian and hedonic values, and perceived utilitarian and hedonic values also affect browsing. Thus, all hypotheses are accepted, which means that there is an influence of perceived value on browsing behavior in C2C e-commerce with an antecedent of review depth. This research can be used as a reference for further studies by digging deeper into the effect of the depth of review on other variables that can have an impact on the viability of a seller's business in e-commerce. This research can be used as a reference for sellers to evaluate and create strategies to encourage customers to give positive reviews so that they can influence other readers when browsing e-commerce where it is hoped that purchases will occur. This research pioneered the study of perceived value of browsing behavior in C2C e-commerce with antecedents of depth of review in Indonesia.

© 2023 by the authors; licensee Growing Science, Canada.

1. Introduction

Since the Covid-19 pandemic took place in 2020, various policies have been issued by the government to anticipate the expansion of the spread of the Covid-19 virus. This policy can be in the form of a ban on traveling outside the home during a pandemic or a partial lockdown policy (Güngördü Belbağ, 2021), so it is undeniable that lifestyle changes occurred during the pandemic (Pantano et al., 2020; Sheth, 2020). One of the changes that has occurred is the shift in terms of shopping from offline to online which is supported by an increase in internet users in Indonesia. According to the Indonesian Internet Service Providers Association, in 2020 e-commerce users increased by 73.7% compared to 2019 and internet penetration in Indonesia has reached 77.02% in 2021-2022. In e-commerce, consumers can be involved in the buying and selling process, sharing experiences or knowledge regarding certain products or services with other consumers (Zhou et al., 2013).

* Corresponding author.

E-mail address: artha.ananda@binus.edu (A. S. Ananda)

ISSN 2561-8156 (Online) - ISSN 2561-8148 (Print)

© 2023 by the authors; licensee Growing Science, Canada.

doi: 10.5267/j.ijds.2023.8.002

In Indonesia, customer-to-customer (C2C) e-commerce has been growing rapidly lately. E-commerce is a new medium that can be used for business and digital marketing purposes (Syazali et al., 2019). According to Gupta (2014), e-commerce has several categories, one of which is consumer to consumer (C2C) e-commerce. C2C e-commerce is a transaction or trade between individuals or private consumers. Based on the results of research from Google in the 2018 SEA e-Conomy, e-commerce growth has reached 500 percent in the last 4 years and with a transaction value of IDR 391 trillion (Rahayu, 2019). In Indonesia, e-commerce companies that provide online reviews include Tokopedia, Blibli, and JD.ID, while the global ones are Alibaba and Amazon. In analyzing e-commerce there is a paradigm used, namely social commerce constructs.

In e-commerce there is a social commerce construct which is a construction originating from social commerce such as online reviews (Hajli, 2013). Because online reviews are useful for viewing opinions from buyers regarding the products and services provided. Based on research that has been done, it is said that online reviews can increase customer awareness of the product you want to buy (Liu, 2006). Then according to Yin Bond., & Zhang (2014), Lo & Yao (2019) in his research stated that reviews and ratings written consistently by buyers are very beneficial, and have good and trustworthy perceptions. One customer's assessment of a product may be in contrast to another customer's assessment (Genc- Nayebe and Abran, 2017). In addition, too many reviews will make it difficult for prospective customers to obtain relevant information (Janani & Krishnamoorthy, 2015). The characteristics of the review can be seen from the extremity review, depth review and helpfulness review (Wang et al., 2018).

The depth of an online review of a product cannot necessarily be trusted and prospective customers also cannot use other people's experiences as an assessment of product quality (King et al., 2014). Most customers have provided reviews and ratings on the online marketplace but the frequency of giving them is still low (Farki et al., 2016). There is harmony between the research results and the results of customer interviews where not many provide reviews on each transaction, and the reviews given tend to be brief. Reviews given by customers are not always the same, some customers tend to like short reviews and some others like to write long reviews (Hossain et al., 2022). Review is the main concern in utilitarian value, especially usefulness and helpfulness. Utilitarians consider judgments from a rational perspective such as ease of access to a place, product quality and time required (Rintamaki et al., 2006). In addition, customers can also read reviews with pleasure when searching for information, so hedonic values must be considered in customer review values (Ham et al., 2019).

Wang (2010) said that to get pleasure, consumers often conduct searches on e-commerce sites for online review features as an escape to relieve stress. This is done as a recreational activity for oneself to relax and improve negative moods. Then browsing is an activity of checking the product you want to buy and searching for information about the product without any desire to buy right away (Verhagen, 2011). It is a disoriented and unfocused process of exploratory search. If we look at it from the context of e-commerce, websites are designed in such a way and display a lot of information to attract consumers' attention (Chen & Tseng, 2011). They said e-commerce features can strengthen search as a search function for product or service information by providing fast product search and providing value-added information. An effective search function or well-organized search results enable consumers to efficiently find products or services that meet their goals. Meanwhile, providing value-added information such as providing knowledge about the best product of the year allows consumers to easily understand popular items (Liang, 2011). From a consumer perspective, consumer intentions to search for information are formed when consumers feel they will get useful information (Zhang et al., 2018).

In their research, Li et al. (2020) stated that consumers with disconfirmation tend to put more effort into writing longer reviews and are willing to give ratings and upload these reviews. Ham (2019) states that the perceived hedonic value of customer reviews can be increased by having an empathic review, an empathic review is a review that is continuously written by an active reviewer. Ningsih and Rahmawati (2021) shows that the perceived utilitarian value variable has no significant effect on browsing while the perceived hedonic value variable has a significant effect on browsing variables. Whereas in Wang's research (2010) stated that there is a positive relationship between perceived utilitarian value and information seeking. Not only utilitarian values, but hedonic values also have a role in consumer behavior to search for information in the marketplace (Zhang et al., 2018). In addition to differences in results, previous studies have also focused on the impact of ratings, sales and intentions rather than other factors (Lu et al., 2010; Xie et al., 2011; Ye et al., 2009; Ye et al., 2011) so that there is still not much research discussing the relationship between depth and perceived utilitarian value (PUV) and perceived hedonic value (PHV) related to search in C2C e-commerce.

2. Literature Review and Hypotheses

Zhang's (2018) research is not the only one discussing online buying behavior; for example, Forney and Park (2009) were also able to explain the direct effect of browsing on buying behavior. Based on this research, researchers want to find out more about the effect of perceived value on browsing behavior in e-commerce C2C with antecedent depth of review. This study focuses on theories that explain several variables, such as consumer perceived value, review depth, and browsing behavior.

2.1 Stimulus–Organism–Response (S–O–R) Theory

This study uses the S-O-R Theory. The S-O-R theory is neobehaviorism which explains the efforts made by a person to gain or lose themselves from certain stimuli (Jacoby, 2002). Stimulus (S) is a trigger that arouses consumer desire, Organism (O) is a way for consumers to evaluate internally, while Response (R) is a reaction from consumers to the stimulus and organisms received (Chan et al., 2017). This theory was also put forward by Hovland et al. (1953) where S-O-R is a theory that can produce a response or a person's behavior. The S-O-R model consists of 3 (three) components, namely Stimulus functions as an independent variable, Organism functions as a mediating variable, and Response functions as a dependent variable. The following is the S-O-R Theory Model (Effendy, 2003):

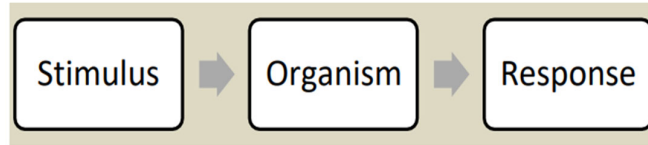


Fig. 1. Stimulus-Organism-Response (S-O-R) Theory Model

a. Stimulus

In business communication practices, the information contained in a stimulus is usually related to sales messages. In the concept of business communication, it is explained that the main purpose of writing sales messages is to capture the attention of consumers. Efforts to attract consumers' attention should be placed at the beginning of the message, so that consumers listen to the information provided in its entirety. The beginning of the message should be concise, honest, relevant and stimulating. The AIDA strategy (Awareness, Interest, Desire, Action) can be applied to sales messages (Guffey & Loewy, 2016). Marketers can determine for themselves whether the stimulus created is just to raise consumer awareness or want consumers to be interested, and finally do something the marketer wants. In addition, message design should use typography that is easily captured by consumers' eyes, or it could be by providing a provocative element in the message. There are several categories of sentences in sales messages that can be used to attract consumer attention, namely offers, promises, questions, quotes, facts, product benefits, starting statements, and personalized action settings (Guffey & Loewy, 2016). Marketers can just add persuasive sentences in the stimulus that is created. One of the elements that must be considered in the preparation of effective persuasive sentences is clarity regarding the actions that need to be taken by consumers. Consumers will be reluctant to follow marketer inducements that are unclear, difficult to do, or unrealistic (Guffey & Loewy, 2016).

b. Organism

Organism is more deeply defined as a person's feeling and cognitive condition that influences the relationship between stimuli and responses (Eroglu et al., 2001). According to Chan and Li (2010), the organism is defined as an internal process that occurs within a person, the process consists of perceiving, feeling, and thinking. When there is a capture of stimulation by the five senses of a consumer, the consumer with his feelings and thoughts will interpret the stimulus, so that a response is produced to the stimulus. Perception is a process that begins with exposure to stimuli, the emergence of attention, and ends with the interpretation made by consumers of these stimuli (Hawkins, et al., 2013). In order for consumer exposure to occur, the stimulus must be created in such a way that it can be captured by the consumer's five senses. However, consumers can choose for themselves which stimuli consumers will respond to and which will not (selective exposure). A good stimulus will certainly make consumers choose to respond to this stimulus. After the stimulus is received by the consumer's five senses, the consumer will then translate the stimulus into a meaning. This translation process can be carried out by consumers cognitively or emotionally.

c. Response

According to Donovan (1982) and Sherman, et. al. (1997) in Eroglu, et. al. (2001), the response is the final result and decision of the internal process that occurs within the consumer. At this stage consumer responses can vary, consumers can just make purchases, delay purchases, cancel purchases, or even avoid purchases. The S-O-R theory is quite popular and is often used by marketers with the aim of knowing the relationship between stimuli and consumer reactions to the stimuli provided through buying, consuming and spending activities. Marketers are expected to be able to make information as an interesting stimulus so that it can be exposed by consumers, which includes information about products, prices, points of sale, and attractive promotions, for example by inserting educational messages in promotions using this model. By creating an attractive stimulus, it is hoped that consumers will be able to react in accordance with what is expected by marketers.

2.2 Social Commerce Construct

Social commerce constructs are social platforms that emerged from web 2.0 and are used by consumers to provide suggestions and share information based on their experiences. Social commerce constructs are constructs that originate from social commerce such as online reviews (Hajli, 2013). Online suppliers have facilitated social interaction and online communication

between consumers who use social commerce constructs (Hajli & Sims, 2015). Online review forums gather people with the same or various interests in a special network to share interests and gain knowledge (Chen and Tseng, 2011 in Shanmugam et al., 2016). In addition, people also easily publish product and service ratings and reviews online and provide comprehensive information about products and services to potential customers (Hajli, 2015).

2.3 C2C E-Commerce

Electronic commerce (e-commerce) according to Laudon and Laudon (2009) is a process of buying and selling products electronically by consumers and from company to company with computers as intermediaries for business transactions. E-commerce C2C or consumer to consumer or also called person to person is a business model that has been around since the 1990s because of computers and the internet, where consumers buy from other consumers but with the help of the internet and third parties involved in the business (Him, 2013). Currently in the C2C concept there is a platform that can provide customer facilities to sell goods or services to one another (Hamdani, 2019; Sujatha & Karthikeyan, 2021). Generally, e-commerce is a new commercial strategy that leads to increased quality of products as well as services and improvements in the level of service provision while linking organizational, supplier, and consumer requirements towards reducing costs (Shaw, 2012).

2.4 Browsing

Browsing is a behavior performed in the form of information filtering, from window-shopping to information gathering (Xia, 2010). Bloch et al. (1986, 1989) suggested browsing as an ongoing search activity without developing a specific purchase plan. Consumers who allocate more time for browsing can increase their interest and the number of purchases of goods they want (Iyer, 1989). In addition, the time spent browsing also increases the amount of exposure. If the exposure period increases, shopping stimuli may increase and consumers may feel how much they need certain products (Jarboe and McDaniel, 1987).

2.5 Depth Review

Depth review plays a role in providing information and recommendations about products from a consumer's point of view (Lee et al., 2008). Reviews or specific information on a product from one consumer can influence other consumers in determining which product to buy (Kim et al., 2018). At this time consumers will trust more diverse and specific information that cannot be obtained from the surrounding environment from groups of people who have had certain experiences via the internet (Bhandari & Bansal, 2019). There is research which says that online reviews are more interesting in describing information and more reliable than other sources of information (Hu et al., 2019). Other research states that reviews uploaded by other consumers have a positive impact on increasing the expectations of other potential consumers (Qazi et al., 2017). In the research of Mudambi and Schuff (2010) helpfulness reviews are defined as reviews about products uploaded by other consumers who have purchased these products which can influence purchasing decisions. Ham (2019) stated that the longer the review, the more beneficial it will be.

2.6 Consumer Perceived Value

Consumer perceived value refers to evaluations made by consumers on products or services (Zeithaml, 1988). In addition, consumer perceived value also plays an important role in facilitating and predicting consumer behavior (Arnold & Reynolds, 2003). Another definition is stated by McDougall & Levesque (2000) which states that perceived value is the result of a tradeoff between perceived benefits and sacrifices. Perceived values are divided into several types, names, social, functions, emotional, epistemic and conditional values (Sheth, 2020). Meanwhile Gronroos (1997) divides perceived value into cognitive value and emotional value. There is also another opinion from Sweeney and Soutar (2001) who divides consumer perceived value into three categories namely, functional, emotional, and social value. Of the several dimensions of consumer perceived value, perceived utilitarian value (PUV) and perceived hedonic value (PHV) are the most frequently used in marketing (Babin et al., 1994). When reading online reviews, consumers will get more utilitarian values and hedonic values than other values. Perceived utilitarian value (PUV) and perceived hedonic value (PHV) are two important constituents that influence purchases (Picot Coupey et al., 2020). Wang (2010) argues that consumers can get utilitarian and hedonic values during the process of searching for information in the online environment.

2.6.1 Perceived Utilitarian Value

Utilitarian values are defined as values that provide functional benefits when shopping online, such as usability, satisfaction, and fulfillment of needs (Lin, 2016; Xu, 2015). Utilitarian value is a specific goal in shopping and describes how to get products efficiently (Babin et al., 1994). In shopping, consumers with utilitarian values tend to know what to buy (Faqih & Jaradat, 2015). To support their shopping activities, they need information before finally making a decision (To et al., 2007). This information can be obtained from various sources, including from other consumers. Based on research, consumers tend to seek information on a product from reviews of other consumers who have purchased or used the product (Ismagilova et al., 2019). The phenomenon of sharing experiences on an e-commerce platform is an application of utilitarian values due to the

ability to moderate the relationship of usefulness, satisfaction, fulfillment needs, and the level of involvement in an electronic communication media (Yang, 2013).

2.6.2 Perceived Hedonic Value

Hedonic values are defined as values that are based on pleasure and provide non-functional benefits such as pleasure, happiness, and pay more attention to emotional benefits (Heyden, 2004). Hedonic value is a value that refers to feelings of pleasure when shopping (Babin & Attaway, 2000). Babin (1994) revealed that hedonic value is a value that can provide entertainment and emotional pleasure that is felt through shopping activities. This happens when consumers feel their own happiness from shopping activities and shopping because of their own desires, not because of a need. Hedonic motivation leads someone to buy for reasons of pleasure. According to Chang (2014), hedonic value in the context of e-commerce can add value to the feeling of pleasure itself and is believed to increase consumer productivity in using information systems in the process of finding the product or service they want. The phenomenon of sharing experiences on an e-commerce platform is the application of hedonic values due to the ability to moderate pleasurable relationships, escape as a stress reliever, time availability, and level of involvement in an electronic communication medium (Yang, 2013).

2.7 Hypothesis Development

This study aims to see the effect of perceived value from a review of both utilitarian value and hedonic value on browsing behavior in C2C e-commerce with depth review antecedents.

The relationship between depth review on perceived value

The lack of direct interaction through face-to-face is one of the determining factors that influence the level of consumer confidence in the credibility of the seller. The use of online reviews is often used as a guide by consumers as an effort to minimize risk. Research by Mudambi and Schuff (2010) stated that depth has a positive effect on perceived value especially on goods sought by consumers. In-depth review can assist decision making by strengthening consumer confidence in the decision. Ham (2019) states that the depth of reviews is one of the factors commonly used in defining the perceived value of reviews. Gan and Wang (2017) also found that in-depth reviews can increase consumers' perceived utilitarian value. Yang et al. (2017) stated that depth review is the factor that most influences utilitarian and hedonic values. Hedonic perceived value can be increased with professional reviews and high-quality content (Ham, 2019). Apart from that, Ham (2019) also stated that the utilitarian value of reviews can be increased by providing logical and influential reviews which also include photos, with positive writing and compiled by active reviews. Referring to this opinion, two hypotheses can be formulated as follows:

H₁: *Depth review influences perceived utilitarian value.*

H₂: *Depth review influences perceived hedonic value.*

The relationship between perceived value and browsing

The utilitarian value of online reviews can function as a means of educating consumers so that they get useful information and feel satisfied when the desired information is fulfilled. Wang et al. (2019) proved that there is a significant effect of utilitarian value against browsing. In addition, other researchers such as Mikalef et al., (2012) support Wang's statement (2010) by proving that utilitarian value has a direct influence on searches. If consumers have a low level of impulsivity, then utilitarian value shows significant results for browsing (Zhang et al., 2018).

We must have a pleasant feeling when using new technology, such as searching for information on e-commerce sites, because this is something that can make users feel at home until they are willing to use the new technology over and over again. The convenience that is formed is predicted to encourage search because it makes consumers feel willing to spend time on the new technology (Cheung, 2012). Wang (2010) said that to get pleasure, consumers often search for information on websites e-commerce on the discussion forum feature as an escape to relieve stress. This is done as a recreational activity for oneself to relax and improve negative moods. In addition, research by Zhang et al., (2018) also discusses the influence of hedonic value in relation to search and impulsive buying which proves that hedonic value has an important role in influencing consumers. Research Gultekin & Ozer (2012) and Wahab et al. (2018) also showed the same results where hedonic value had a significant effect on search. Referring to this opinion, two hypotheses can be formulated as follows:

H₃: *Perceived utilitarian value affects browsing.*

H₄: *Perceived hedonic value affects browsing.*

In this study, researchers also present a hypothetical model to make it easier to understand the problem being studied. This model is presented in the form of a schematic or description that shows the relationship of each variable as follows:

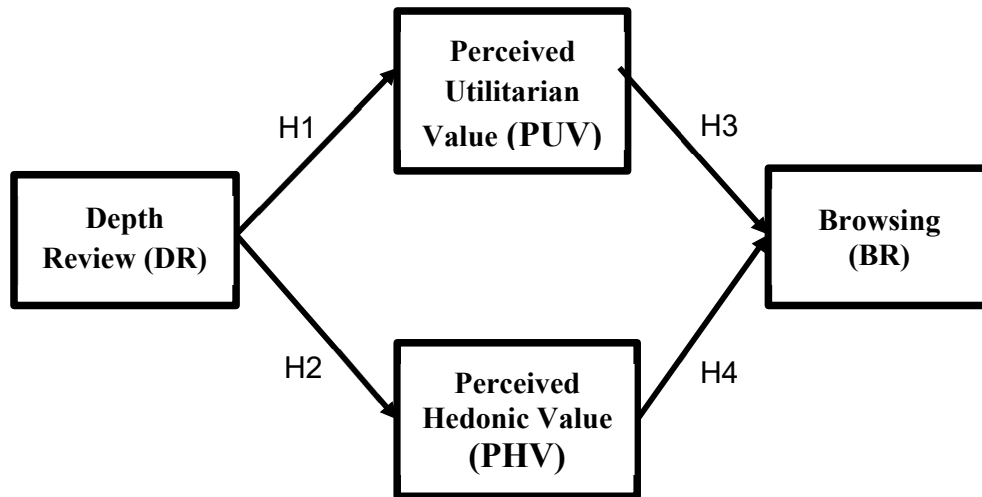


Fig. 2. Hypothetical Conceptual Framework

3. Research Methodology

3.1 Research Design

Research design relates to decision making regarding research objectives, types and sources of research data, level of researcher intervention, unit of analysis, and research time horizon (Sekaran & Bogie, 2016). This study aims to analyze the effect of perceived value (utilitarian and hedonic value) on browsing behavior in e-commerce in Indonesia with depth review antecedents. This research is a type of quantitative research that is used to analyze data that has been collected as it is. Quantitative research in this study uses a correlation approach. The data source used in this research is primary data obtained by the researcher directly from the respondent's answers. The level of intervention carried out in this study was a correlational study with a minimum degree of researcher intervention. This is because researchers do not intervene or disrupt too much in research. The unit of analysis in this study is the individual, because we examine those who live in Indonesia and have done shopping *online* on *ecommerce* which has facilities *online review* namely Tokopedia, Blibli, Amazon, Alibaba, and JD.ID. The time horizon used in this research is Cross-Sectional Studies. We will collect data at 1 (one) time during a period of 1 (one) month.

3.2 Population and Sample

The population in this study are individuals who live in Indonesia and have done shopping online on ecommerce which has facilities online review such as Tokopedia, Blibli, Amazon, Alibaba, and JD.ID. In this study, researchers used a sampling technique non probability sampling. According to Sekaran & Bougie (2016), sampling technique non probability sampling is a sampling technique in which each respondent who meets the population criteria does not have the same opportunity to be selected as the research sample. This research uses the method non probability sampling by using techniques of convenience sampling in determining respondents. Convenience sampling is sampling based on the availability of elements and the ease of obtaining them. The sample is taken or selected because the sample is in the right place and time. Hair et al. (2014) suggests determining the size of the sample made by following the Cohen formula (1992) so that the research meets the statistical level power sufficient. In this study, the number of latent/construct variables built into the model is four, with a significance level of 5% and R^2 the minimum detected is 0.10, so the recommended sample size is 137 samples. The 5% significance level is a commonly used standard to determine the significance level (Abdillah & Hartono, 2015). Table of recommendations for the number of samples Hair et al. (2014) can be seen in the table below.

Table 1
Cohen's formula (1992)

Maximum Number Arrows Pointing at a Construct	Significance Level											
	1%			5%						10%		
	Minimum R^2			Minimum R^2						Minimum R^2		
	0.10	0.25	0.50	0.75	0.10	0.25	0.50	0.75	0.10	0.25	0.50	0.75
2	158	75	47	38	110	52	33	26	88	41	26	21
3	176	84	53	42	124	59	38	30	100	48	30	25
4	191	91	58	46	137	65	42	33	111	53	34	27
5	205	98	62	50	147	70	45	36	120	58	37	30
6	217	103	66	53	157	75	48	39	128	62	40	32
7	228	109	69	56	166	80	51	41	136	66	42	35
8	238	114	73	59	174	84	54	44	143	69	45	37
9	247	119	76	62	181	88	57	46	150	73	47	39
10	256	123	79	64	189	91	59	48	156	76	49	41

Following are the demographics of the respondents in this study:

Table 2
Research Respondent Demographic Sources

No	Construct	Indicator	Source
1	Respondent's gender	Man; Woman	Lavuri, R. (2021)
2	Respondent's age	< 18 Years; 18-25 Years; 25 - 30 Years; 31-35 Years; 36-40 Years; >40 Years	Lavuri, R. (2021)
3	Respondent's marital status	Single; Married	Badan Pusat Statistik (2022)
4	Respondent's education	High school or equivalent; D1-D3; S1/D4; S2; S3	Lavuri, R. (2021)
5	Respondent's occupation	Private employees; Government employees; Employees of BUMN/BUMD/Institutions; Businessman; Housewife; Retired; Student; College Student; others.	Lavuri, R. (2021)
6	Respondent's monthly income	< Rp. 4,000,000; Rp. 4,000,000 - Rp. 9,999,999; Rp. 10,000,000 - Rp. 19,999,999; Rp. 20,000,000 - Rp. 29,999,999; Rp. >= 30,000,000	Lavuri, R. (2021)
7	Domicile city	Jabodetabek; Bandung; Semarang; Yogyakarta; Surabaya; Bali; Medan; others.	-
8	Frequently purchased products	Accessories; book; health; hobbies and toys; furniture; kitchen; <i>fashion</i> ; electronic; sport; beauty; others.	Citra and Dudi (2017)
9	The online marketplace is most often used	Tokopedia, Amazon, Blibli, Alibaba, JD.ID, others.	
10	Frequency of shopping online	1 time a week, 1-5 times a week, >5 times a week, once a month, once a year	Citra and Dudi (2017)
11	Average shopping time on the online marketplace	<5 minutes, 5-15 minutes, 16-30 minutes, 30-60 minutes, >60 minutes	Joewono et al. (2020)
12	Online marketplace most visited and read reviews	Tokopedia, Amazon, Blibli, Alibaba, JD.ID, others.	

3.3 Data Collection Methods

This study uses data collection techniques with survey methods. The survey method was carried out using an online questionnaire consisting of a set of questions through *Google Form*. According to Rowley (2014), questionnaires are widely used to conduct quantitative research where researchers want to collect information and analyze the attitudes, opinions, and behavior of respondents. Survey questionnaire using *Google Form* was chosen because it has advantages including faster response, easier to reach, and reduced survey costs (Do et al., 2020). The assessment measurement used in the questionnaire, we used a 7 (seven) point Likert Scale with a score of 7 for Strongly Agree (SA), a score of 6 for Agree (S), a score of 5 for Somewhat Agree (SWA), a score of 4 for Neutral (N), a score of 3 for Somewhat Disagree (SWD), a score of 2 for Disagree (D), and a score of 1 for Strongly Disagree (SD). The following are indicators for each research variable:

Table 3
Research Indicators

Variable	Code	Indicator	Source
Depth Review	DR1	The average customer review on this store has a large number of words.	Hong et al. (2017); Mudambi & Schuff
	DR2	The total volume of reviews left by customers on this store is huge.	
	DR3	I can easily understand consumer reviews at this store regarding product details and consumption experiences.	
Perceived Utilitarian Value	PUV1	I found the customer reviews on this store useful to read.	Wang (2010)
	PUV2	I am satisfied with the customer reviews on this store.	
	PUV3	I feel like I got what I wanted when I read the customer reviews on this store.	
	PUV4	I found the information I was looking for while reading customer reviews on this store.	
Perceived Hedonic Value	PHV1	SI feel happy when I read customer reviews on this store.	Wang (2010)
	PHV2	I had a great time while reading customer reviews on this shop.	
	PHV3	I enjoy reading customer reviews on this store solely because of the reviews themselves, not just because of the information sought.	
	PHV4	It felt like escapism to me reading the customer reviews on this shop.	
Browsing	BR1	During my visit to this store, the average percentage of time I spend just "browsing" is quite high.	Beatty & Ferrell (1998); Park et al. (2010)
	BR2	I usually just "browse" this store.	
	BR3	I usually devote most of my attention to the products I will buy in this store.	

3.4 Data Analysis Methods

This study uses component-based PLS-SEM. According to Chin in Ningsih (2012), SEM is one of the studies in the field of statistics that can be used to address research problems, where the independent variables and response variables are immeasurable variables, whereas according to Hair et al. (2014), PLS-SEM to examine latent relationship patterns in data, in conditions where there is little or no knowledge about how the variables are related. The purpose of using PLS-SEM is to develop theory in exploratory research. Another advantage of using the PLS-SEM method is that it has a high level of statistical power on complex model structures or smaller sample sizes. A similar opinion was also expressed by Hair, Ringle, and Sarstedt

(2011) who explained *Rules of Thumb* in choosing the CBSEM or PLS-SEM approach. It is said that the selection can be based on the purpose of the research and the characteristics of the data. When the purpose of the research is exploratory and when a large sample is the basis of consideration (where the sample is relatively small), then the chosen approach is PLS-SEM.

4. Results and Findings

4.1 Respondent Descriptive Analysis

Respondents in this study are individuals who live in Indonesia and have done shopping *online* through e-commerce on Tokopedia, Amazon, Blibli, Alibaba, and JD.ID. The number of respondents used in this study was 137 respondents. The following are the characteristics of the respondents based on the results of distributing the questionnaires that the researchers did:

Table 4
Characteristics of Research Respondents

Characteristics of Respondents	Type	Amount	Percentage
Gender	Man	48	35.0%
	Women	89	65.0%
Age	< 18 years	7	5.1%
	18 - 25 Years	26	19.0%
	25 - 30 Years	85	62.0%
	31 - 35 Years	7	5.1%
	36 - 40 Years	4	2.9%
	41 - 45 Years	2	1.5%
	45 - 50 Years	2	1.5%
Marital status	> 50 Years	4	2.9%
	Single	81	59.1%
Last education	Married	56	40.9%
	High School/equivalent	21	15.3%
	D1-D3	14	10.2%
	S1/D4	92	67.2%
	S2	9	6.6%
Work	S3	1	0.7%
	Private Employees	52	38.0%
	State Employees	19	13.9%
	BUMN/BUMD/Institution Employees	38	27.7%
	Businessman	5	3.6%
	Housewife	4	2.9%
	Student	9	6.6%
	College Student	7	5.1%
Income	Others	3	2.2%
	< IDR 4,000,000	34	24.8%
	IDR 4,000,000 - IDR 9,999,999	70	51.1%
	IDR 10,000,000 - IDR 19,999,999	23	16.8%
	IDR 20,000,000 - IDR 29,999,999	5	3.6%
Domicile City	IDR > = 30,000,000	5	3.6%
	Jabodetabek	44	32.1%
	Bandung	5	3.6%
	Semarang	44	32.1%
	Yogyakarta	2	1.5%
	Surabaya	9	6.6%
Frequently purchased products	Others	33	24.1%
	Accessories	1	0.7%
	Books	3	2.2%
	Health	4	2.9%
	Hobbies and toys	7	5.1%
	Furniture	3	2.2%
	Kitchen	11	8.0%
	Fashion	50	36.5%
	Electronic	19	13.9%
	Sport	7	5.1%
	Beauty	25	18.2%
The online marketplace is most often used	Others	7	5.1%
	Tokopedia	131	95.6%
	Amazon	1	0.7%
	Blibli	3	2.2%
	Ali Baba	0	0%
JD.ID	2	1.5%	

Table 4
Characteristics of Research Respondents (Continued)

Frequency of shopping online	1 time a week	39	28.5%
	1-5 times a week	25	18.2%
	> 5 times a week	4	2.9%
	Once a month	66	48.2%
	Once a year	3	2.2%
Average shopping time on the online marketplace	<5 minutes	10	7.3%
	5-15 minutes	29	21.2%
	16-30 minutes	49	35.8%
	30-60 minutes	32	23.4%
	>60 minutes	17	12.4%
Online marketplace most visited and read reviews	Tokopedia	131	95.6%
	Amazon	1	0.7%
	Blibli	3	2.2%
	Ali Baba	0	0%
	JD.ID	2	1.5%

From the results of the questionnaire above it can be seen that the characteristics of respondents who do online shopping on e-commerce in Indonesia are dominated by women by 65% with an average age range of 25 to 30 years by 62% who are still single by 59.1% with last education the average Strata 1 (S1) or D4 equivalent is 67.2%, the average job as a Private Employees is 38% followed by BUMN/BUMD/Institution Employees at 27.7% and State Employees at 13.9%, and an average income of Rp. . 4,000,000 - Rp. 9,999,999, which is 51.1%. Most of the respondents' domiciles were in Jabodetabek and Semarang City where each of the remaining 32.1% were in the areas of Bandung, Yogyakarta, Surabaya and others. Products that are often purchased by respondents are in the fashion sector by 36.5% and followed by beauty by 18.2%, the rest are electronics, sports, accessories, books, health, hobbies and toys, furniture, kitchen, and others. For online marketplaces that are frequently used, Tokopedia accounts for 95.6%, followed by Blibli, Alibaba, and others. The average frequency of online shopping is once a month, which is 48.2%, with an average online shopping time of 16-30 minutes, which is 35.8%. For the online marketplace most frequently visited and read reviews among Tokopedia, Amazon, Blibli, Alibaba, and JD.ID, Tokopedia is 95.60%.

4.2 Validity and Reliability Test

To test the questionnaire, researchers used validity and reliability tests on Smart PLS.

4.2.1 Validity test

Table 5
Research Outer Loading Value

Indicator Variable	Outer Loading Value	Indicator Variable	Outer Loading Value
Depth Review (DR)		Browsing (BR)	
DR1	0.702	BR1	0.864
DR2	0.814	BR2	0.671
DR3	0.857	BR3	0.788
Perceived Utilitarian Value (PUV)		Perceived Hedonic Value (PHV)	
PUV1	0.822	PHV1	0.864
PUV2	0.852	PHV2	0.921
PUV3	0.876	PHV3	0.864
PUV4	0.900	PHV4	0.764

Based on the data output above, value *outer loading* all variables are greater than 0.6. This shows that all the variable indicators in this study have a high level of validity so that they are fulfilled *convergent validity*.

Table 6
Research AVE Value

Variable Type	Average Variance Extracted (AVE)
Depth Review (DR)	0.630
Perceived Utilitarian Value (PUV)	0.745
Perceived Hedonic Value (PHV)	0.731
Browsing (BR)	0.606

Average Variance Extracted (AVE) of all variables is also greater than 0.5. This shows that there is no problem *convergent validity* on the model tested in this study.

Table 7
Fornell Larcker Criterion Value

	BR	DR	PHV	PUV
Browsing (BR)	0.779			
Depth Review (DR)	0.483	0.794		
Perceived Hedonic Value (PHV)	0.561	0.640	0.855	
Perceived Utilitarian Value (PUV)	0.547	0.668	0.757	0.8633

Loading each indicator of the construct is greater than the Cross Loadings value. This shows that all variables already have *discriminant validity* good.

Table 8
Nilai Heterotrait-Monotrait Ratio (HTMT)

	BR	DR	PHV	PUV
Browsing (BR)				
Depth Review (DR)	0.673			
Perceived Hedonic Value (PHV)	0.691	0.772		
Perceived Utilitarian Value (PUV)	0.661	0.795	0.818	

Loading all indicators below 0.9. This shows that all variables already have *discriminant validity* good.

4.2.2 Reliability Test

Composite Reliability all variables are greater than 0.7 and the Cronbach's Alpha value of all variables is greater than 0.6. This shows that all variables already have good reliability with the required minimum value limit.

Table 9
Composite Reliability and Cronbach's Alpha Research Values

Variable Type	Composite Reli-	Cronbach's
Depth Review (DR)	0.835	0.713
Perceived Of Utilitarian Value (PUV)	0.921	0.886
Perceived Of Hedonic Value (PH.V)	0.915	0.878
Browsing (BR)	0.820	0.682

Table 10
Research R Square Value

Variable Type	R Square
Perceived Of Utilitarian Value (PUV)	0.446
Perceived Of Hedonic Value (PHV)	0.410
Browsing (BR)	0.350

4.2.3 Determination Coefficient Test (R^2)

The coefficient of determination or R square explains how far the dependent variable can be explained by the independent variable. In the output above the R square value of the PUV variable is 0.446 which means that 44.6% of the distribution of the PUV variable can be explained by the independent variables. The remaining 55.4% is explained by other variables outside the independent variables. The R square value for PHV is 0.410 which means that 41% of the distribution of the PHV variable can be explained by the independent variables, the remaining 59% is explained by other variables outside the independent variables. Meanwhile, the R square value for the BR variable has an R square value of 0.350, which means that 35% of the distribution of the BR variable can be explained by the independent variables and the remaining 65% is explained by the independent variables outside the model.

4.3 Hypothesis Testing

Based on the results of the hypothesis test above, *T values* all hypotheses greater than 1.96 as well *P Values* all hypotheses are less than 0.05 which means H1, H2, H3, and H4 **hypothesis accepted**. It can be concluded that depth review has a positive effect on perceived utilitarian value and perceived hedonic value and perceived utilitarian value and perceived hedonic value has a positive effect on browsing.

Table 11
Hypothesis Test Results

Hypothesis test	T Values	P Values
H1	10.336	0.000
H2	9.984	0.000
H3	2.423	0.015
H4	2.976	0.003

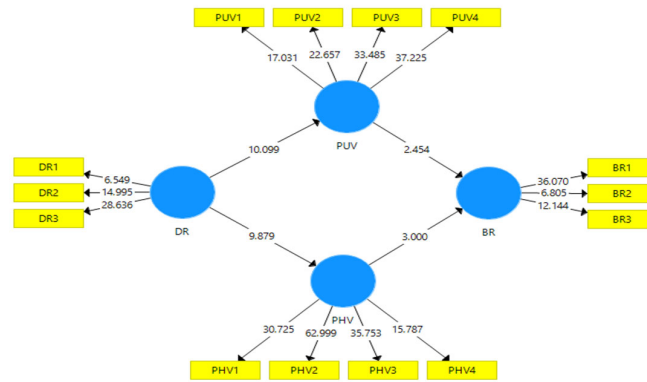


Fig. 3. The results of testing the hypothesis

5. Conclusion and Implications

Based on the research results above, all hypotheses are accepted, which means that all variables have a significant influence on one another. In this study, H1 and H2 are accepted, which means that the depth review has a positive effect on perceived utilitarian and perceived hedonic values. This is in line with the research of Mudambi and Schiff (2020) which states that in-depth review has a significant effect on perceived utilitarian value. Gan and Wang (2017) also found that in-depth reviews can increase consumers' perceived utilitarian value. Yang et al. (2017) also stated that depth review is the factor that most influences utilitarian and hedonic values. Ham (2019) stated that perceived utilitarian value reviews can be increased by providing reliable reviews that are written continuously by active reviewers. Ham's research (2019) also states that perceived hedonic value can increase when the review has the same relevance as what the reader is looking for and has interesting content. Online reviews have a significant effect on perceived helpfulness when the reviewer provides an appropriate review of the product being evaluated and also has a good understanding of the product (Korfiatis et al., 2012). Customers have a tendency to look for product reviews that have specific information needed (Liu & Park, 2015). The number of words in a review can have a different effect on the perceived value of the customer. The longer the review, the more it will attract customer attention, so that it has a greater opportunity to influence customers in buying a product (Racherla & Firske, 2012). In previous research Liu and Park (2015) also stated that the reliability of a review as a message influences perceived helpfulness. Opinions and experiences from customers according to readers can influence subjectivity and perceived helpfulness (Dillard & Shen, 2013).

Based on the data above, it can also be seen that H3 and H4 are accepted, which means that perceived utilitarian value and perceived hedonic value have a positive effect on browsing. This is in line with the research of Wahab et al., (2018) and Mikalef et al. (2012) which in his research proved that there is an influence between perceived utilitarians on browsing. Wang (2010) in his research also proved that there is a significant effect of *utilitarian value* against browsing. A browsing activity can have a positive or negative impact on other customers during browsing activities or through word of mouth interactions among customers (Mangleburg et al., 2004). In addition, the research by Zhang et al. (2018) stated that hedonic values play an important role in encouraging consumers to browse. Zhang stated that the pleasure and enjoyment that consumers receive from online reviews will be more likely to be spent by them on browsing. The feeling of pleasure encourages consumers to browse (Poyry et al., 2013).

This study uses the SOR theory in researching the influence of perceived value from both utilitarian and hedonic values from the review of browsing behavior on *ecommerce* in Indonesia. In this study the stimulus studied was a depth review, Where These variables are included in the external variables written by other customers about their ratings and experiences in buying a product. Meanwhile, the organism or internal factor in this study is perceived utilitarian value and perceived hedonic value. While the response in this study is behavior browsing review on the page *ecommerce*. In this study, we try to look at it from a depth perspective in discussing reviews and linking these variables to perceived utilitarian and hedonic values. Then linking the influence of perceived utilitarian and hedonic values with browsing activities carried out by customers. Based on the results of the tests above, it can be said that the depth review gives effect to the perceived utilitarian and hedonic value of the customer. Besides that, perceived utilitarian value and perceived hedonic value dari review Also produce influence on browsing activity carried out by the customer.

The implications of this research for business is that salespeople *ecommerce* can know that the review can influence the customer in doing *browsing* on the marketplace page, so it is hoped that sellers can encourage the development of reviews on their marketplace pages. In addition, sellers can respond to reviews written by customers so that two-way conversations can occur and buyers feel more valued. PSellers can also carry out evaluations related to their performance by looking at the ratings from reviews conducted with customers. This evaluation aims to improve the quality of sellers in e-commerce so that it can

increase sales. Apart from that, with this research, sellers can also be used as a reference in making strategies to be able to increase purchases from e-commerce owned by sellers. From the buyer's side, with this research, buyers can find out that reviews are important in providing information to fellow customers. So that it is expected to encourage other customers to be more active in providing reviews on the products they buy. This will make it easier for other buyers to get information about the product. In addition, it is expected that customers are also encouraged to provide reviews that are relevant to the quality purchased, so that the information obtained by other buyers is also in accordance with their experiences in using these products. In other researchers it is hoped that this research can be used as a reference in conducting more in-depth research related to the effect of perceived value on browsing activity that happens in e-commerce. Subsequent research can relate to other theories so that phenomena can be described from various sides and points of view. In addition, other studies can also further examine the effect of reviews on other things that can have an important influence on the sustainability of the seller.

References

- Abdillah, W., & Hartono, J. (2015). Partial Least Square: An Alternative of Structural Equation Modeling (SEM) in Business Research (in Bahasa). *CV Andi Offset*.
- Arnold, M.J., & Reynolds, K.E. (2003). Hedonic shopping motivations. *Journal of Retailing*, 79(2), 77-95.
- Association of Indonesian Internet Service Providers. (2020). *Survey of E-Commerce Users in Indonesia*. Available online: <https://apjii.or.id/>.
- Babin, B. J., & Attaway, J.S. (2000). Atmospheric affect as a tool for creating value and gaining share of customer. *Journal of Business Research*, 49(2), 91-99.
- Babin, B. J., Darden, W. R., & Griffin, M. (1994). Work and/or fun: measuring hedonic and utilitarian shopping value. *Journal of consumer research*, 20(4), 644-656. <https://doi.org/10.1086/209376>.
- Beatty, S. E., & Ferrell, M. E. (1998). Impulse buying: Modeling its precursors. *Journal of retailing*, 74(2), 169-191.
- Bhandari, R. S., & Bansal, A. (2019). A study of characteristics of e-WoM affecting consumer's social media opinion behavior. *JIMS8M: The Journal of Indian Management & Strategy*, 24(1), 33-43.
- Bloch, P. H., Ridgway, N. M., & Sherrell, D. L. (1989). Extending the concept of shopping: An investigation of browsing activity. *Journal of the Academy of Marketing Science*, 17, 13-21. <https://doi.org/10.1007/BF02726349>.
- Bloch, P. H., Sherrell, D. L., & Ridgway, N. M. (1986). Consumer search: An extended framework. *Journal of consumer research*, 13(1), 119-126.
- Chan, K.W., & Li, S.Y. (2010). Understanding consumer-to-consumer interactions in virtual communities: The salience of reciprocity. *Journal of Business Research*, 63(9-10), 1033-1040. doi:10.1016/j.jbusres.2008.08.009
- Chan, T. K., Cheung, C. M., & Lee, Z. W. (2017). The state of online impulse-buying research: A literature analysis. *Information & Management*, 54(2), 204-217.
- Chang, R. (2010). *Chemistry 10th edition*. New York: McGraw-Hill
- Chen, C. C., & Tseng, Y. D. (2011). Quality evaluation of product reviews using an information quality framework. *Decision Support Systems*, 50(4), 755-768.
- Do, H. N., Shih, W., & Ha, Q. A. (2020). Effects of mobile augmented reality apps on impulse buying behavior: An investigation in the tourism field. *Heliyon*, 6(8).
- Eroglu, S. A., Machleit, K. A., & Davis, L. M. (2001). Atmospheric qualities of online retailing: A conceptual model and implications. *Journal of Business research*, 54(2), 177-184.
- Faqih, K. M., & Jaradat, M. I. R. M. (2015). Assessing the moderating effect of gender differences and individualism collectivism at individual-level on the adoption of mobile commerce technology: TAM3 perspective. *Journal of Retailing and Consumer Services*, 22, 37-52.
- Farki, A., Baihaqi, I., & Wibawa, M. (2016). Pengaruh online customer reviews rating terhadap kepercayaan place di indonesia. *Jurnal Teknik ITS*, 5(2).
- Forney, J. C., & Park, E. J. (2009). *Browsing Perspectives for Impulse Buying*.
- Gan, C., & Wang, W. (2017). The influence of perceived value on purchase intention in social commerce context. *Internet research*, 27(4), 772-785.
- Genc-Nayebi, N., & Abran, A. (2017). A systematic literature review: Opinion mining studies from mobile app store user reviews. *Journal of Systems and Software*, 125, 207-219. doi:10.1016/j.jss.2016.11.027
- Grönroos, C. (1997). Value-driven relational marketing: from products to resources and competencies. *Journal of marketing management*, 13(5), 407-419.
- Guffey, M. E., & Loewy, D. (2016). *Essentials of business communication (10th ed.)*. Boston, MA: Cengage Learning
- Gultekin, B., & Ozer, L. (2012). The Influence of Hedonic Motives and Browsing On Impulse Buying. *Journal of Economics and Behavioral Studies*, 4(3), 180-189. <https://doi.org/10.22610/jebbs.v4i3.315>.
- Güngördü Belbağ, A. (2022). Impacts of Covid-19 pandemic on consumer behavior in Turkey: A qualitative study. *Journal of Consumer Affairs*, 56(1), 339-358.
- Gupta, A. (2014). E-Commerce: Role of E-Commerce in today's business. *International Journal of Computing and Corporate Research*, 4(1), 1-8.
- Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European business review*, 26(2), 106-121.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis: Pearson new international edition*.

- Essex: Pearson Education Limited, 1(2).
- Hajli, M. (2013). A research framework for social commerce adoption. *Information Management & Computer Security*, 21(3), 144-154.
- Hajli, N., & Sims, J. (2015). Social commerce: The transfer of power from sellers to buyers. *Technological Forecasting and Social Change*, 94, 350–358.
- Ham, J., Lee, K., Kim, T., & Koo, C. (2019). Subjective perception patterns of online reviews: A comparison of utilitarian and hedonic values. *Information Processing & Management*, 56(4), 1439-1456. <https://doi.org/10.1016/j.ipm.2019.03.011>.
- Hamdani, T. (2019). Survey Results: Indonesians Shop Online 5 Times/Month, detik Finance. Available online: <https://finance.detik.com/industri/d-4805460/hasil-survei-orang-indonesia-belanja-online-5-kalibulan> (accessed on October 2021)
- Hawkins, D., Mothersbaugh, D., & Best, R. (2013). *Consumer Behavior: Building Marketing Strategy*. New York: McGraw-Hill.
- Hong, H., Xu, D., Wang, G. A., & Fan, W. (2017). Understanding the determinants of online review helpfulness: A meta-analytic investigation. *Decision Support Systems*, 102, 1-11. doi:10.1016/j.dss.2017.06.007
- Hossain, A., Hasan, S., Begum, S., & Sarker, M. A. H. (2022). Consumers' Online Buying Behaviour during COVID-19 Pandemic Using Structural Equation Modeling. *Transnational Marketing Journal*, 10(2), 311-334.
- Hu, N., Zhang, T., Gao, B., & Bose, I. (2019). What do hotel customers complain about? Text analysis using structural topic model. *Tourism Management*, 72, 417-426.
- Ismagilova, E., Dwivedi, Y. K., & Slade, E. (2020). Perceived helpfulness of eWOM: Emotions, fairness and rationality. *Journal of Retailing and Consumer Services*, 53, 101748. <https://doi.org/10.1016/j.jretconser.2019.02.002>.
- Iyer, E.S. (1989). Unplanned purchasing: knowledge of shopping environment and time pressure. *Journal of Retailing*, 65(1), 40-57.
- Jacoby, J. (2002). Stimulus-organism-response reconsidered: an evolutionary step in modeling (consumer) behavior. *Journal of Consumer Psychology*, 12(1), 51-57, doi: 10.1207/153276602753338081.
- Janani, V., & Krishnamoorthy, K. (2015). Evaluation of cloud based performance testing for online shopping websites. *Indian Journal of Science and Technology*, 8(35), 1-7.
- Jarboe, G. R., & McDaniel, C. D. (1987). A profile of browsers in regional shopping malls. *Journal of the Academy of Marketing Science*, 15, 46-53.
- Kim, S., Kandampully, J., & Bilgihan, A. (2018). The influence of eWOM communications: An application of online social network framework. *Computers in Human Behavior*, 80, 243-254.
- King, R. A., Racherla, P., & Bush, V. D. (2014). What we know and don't know about online word-of-mouth: A review and synthesis of the literature. *Journal of interactive marketing*, 28(3), 167-183. doi:10.1016/j.intmar.2014.02.001
- Laudon, K., & Laudon, J. (2009). *Management Information Systems: International Edition, 11/E*. London, UK: Pearson Higher Education.
- Lavuri, R. (2023). Intrinsic factors affecting online impulsive shopping during the COVID-19 in emerging markets. *International Journal of Emerging Markets*, 18(4), 958-977.
- Lee, J., Park, D. H., & Han, I. (2008). The effect of negative online consumer reviews on product attitude: An information processing view. *Electronic commerce research and applications*, 7(3), 341-352.
- Li, H., Meng, F., & Pan, B. (2020). How does review disconfirmation influence customer online review behavior? A mixed-method investigation. *International journal of contemporary hospitality management*, 32(11), 3685-3703.
- Liang, T. P., Ho, Y. T., Li, Y. W., & Turban, E. (2011). What drives social commerce: The role of social support and relationship quality. *International journal of electronic commerce*, 16(2), 69-90.
- Liu, Y. (2006). Word of Mouth for Movies: Its Dynamics and Impact on Box Office Revenue. *Journal of Marketing*, 70(3), 74–89. doi:10.1509/jmkg.70.3.74
- Lo, A. S., & Yao, S. S. (2019). What makes hotel online reviews credible? An investigation of the roles of reviewer expertise, review rating consistency and review valence. *International Journal of Contemporary Hospitality Management*, 31(1), 41-60. doi:10.1108/ijchm-10-2017-0671
- Lu, Y., Kong, X.F., Quan, X.J., Liu, W.Y., & Xu, Y.L. (2010). Exploring the sentiment strength of user reviews. *Proceedings of Web-Age Information Management*, 6184, 471–482.
- Mangleburg, T. F., Doney, P. M., & Bristol, T. (2004). Shopping with friends and teens' susceptibility to peer influence. *Journal of retailing*, 80(2), 101-116.
- McDougall, G.H.G., & Levesque, T. (2000). Customer satisfaction with services: putting perceived value into the equation. *Journal of Services Marketing*, 14(5), 392–410.
- Mikalef, P., Giannakos, M., & Pateli, A. (2012). Shopping and word-of-mouth intentions on social media. *Journal of Theoretical and Applied Electronic Commerce Research*, 8(1), 17–34. <https://doi.org/10.4067/S0718-18762013000100003>.
- Mudambi, S. M., & Schuff, D. (2010). What makes a helpful review? A study of customer reviews on Amazon.com. *MIS quarterly*, 34(1), 185-200.
- Ningsih, W. (2012). *Modeling Indonesian Food Security Using Partial Least Square Path Modeling (PLS-PM)*. Bogor Agricultural University thesis.
- Ningsih, W. S., & Rahmawati, I. (2021). Analysis of the Factors That Determine Purchase Decisions at the Online Shop "Shopee". *JIP (Journal of Research Innovation)*, 2(3), 779–784.
- Pantano, E., Pizzi, G., Scarpi, D., & Dennis, C. (2020). Competing during pandemic? Retailers' ups and downs during the

- COVID-19 outbreak. *Journal of Business Research*, 116, 209–213.
- Picot-Coupey, K., Krey, N., Huré, E., & Ackermann, C. L. (2021). Still work and/or fun? Corroboration of the hedonic and utilitarian shopping value scale. *Journal of Business Research*, 126, 578–590. <https://doi.org/10.1016/j.jbusres.2019.12.018>.
- Qazi, A., Tamjidyamcholo, A., Raj, R. G., Hardaker, G., & Standing, C. (2017). Assessing consumers' satisfaction and expectations through online opinions: Expectation and disconfirmation approach. *Computers in Human Behavior*, 75, 450–460.
- Rahayu, N. (2019). Rapid Growth of E-Commerce in Indonesia. *Warta Ekonomi Online*, 19 February 2019. Accessed from: <https://www.wartaekonomi.co.id/read216302/perumbuh-e-commercepat-di-indonesia.html>, 21 August 2019.
- Rintamäki, T., Kanto, A., Kuusela, H., & Spence, M. T. (2006). Decomposing the value of department store shopping into utilitarian, hedonic and social dimensions: Evidence from Finland. *International Journal of Retail & Distribution Management*, 34(1), 6–24.
- Rowley, J. (2014). Designing and using research questionnaires. *Management Research Review*, 37(3), 308–330.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & sons.
- Shanmugam, M., Sun, S., Amidi, A., Khani, F., & Khani, F. (2016). The applications of social commerce constructs. *International Journal of Information Management*, 36(3), 425–432. doi:10.1016/j.ijinfomgt.2016.01.007
- Shaw, M., Blanning, R., Strader, T., & Whinston, A. (Eds.). (2012). *Handbook on electronic commerce*. Springer Science & Business Media.
- Sheth, J. (2020). Impact of Covid-19 on consumer behavior: Will the old habits return or die?. *Journal of business research*, 117, 280–283. <https://doi.org/10.1016/j.jbusres.2020.05.059>.
- Sujatha, R., & Karthikeyan, M. S. (2021). Determinants of e-commerce adoption: Evidence from small and medium-sized enterprises in India. *International Journal of Business and Society*, 22(2), 574–590. doi:10.33736/ijbs.3740.
- Sweeney, J.C., Soutar, G. (2001). Consumer perceived value: the development of multiple item scale. *Journal of Retailing*, 77(2), 203–220. [https://doi.org/10.1016/s0022-4359\(01\) 00041-0](https://doi.org/10.1016/s0022-4359(01) 00041-0).
- Syazali, M., Putra, F., Rinaldi, A., Utami, L., Widayanti, Umam, R., & Jermisittiparsert, K. (2019). *Partial Correlation Analysis Using Multiple Linear Regression: Impact on Business Environment of Digital Marketing Interest in the Era of Industrial Revolution 4.0*. *Management Science Letters*, 9(11), 1875–1886.
- To, P. L., Liao, C., & Lin, T. H. (2007). Shopping motivations on internet: A study based on utilitarian and hedonic value. *Technovation*, 27(12), 774–787.
- Wahab, Z., Shihab, M. S., Hanafi, A., & Mavilinda, H. F. (2018). The influence of online shopping motivation and product browsing toward impulsive buying of fashion products on a social commerce. *Journal of Motivation Management*, 14(1), 32. <https://doi.org/10.29406/jmm.v14i1.1030>.
- Wang, E. S. T. (2010). Internet usage purposes and gender differences in the effects of perceived utilitarian and hedonic value. *Cyberpsychology, Behavior, and Social Networking*, 13(2), 179–183. <https://doi.org/10.1089/cyber.2009.0200>.
- Wang, Y., Wang, J., & Yao, T. (2019). What makes a helpful online review? A meta-analysis of review characteristics. *Electronic Commerce Research*, 19, 257–284. <https://doi.org/10.1007/s10660-018-9310-2>
- Xia, L. (2010). An examination of consumer browsing behaviors. *Qualitative Market Research: An International Journal*, 13(2), 154–173. <https://doi.org/10.1108/13522751011032593>.
- Xie, H., Miao, L., Kuo, P.J., & Lee, B.Y. (2011). Consumers' responses to ambivalent online hotel reviews: The role of perceived source credibility and pre-decisional disposition. *International Journal of Hospitality Management*, 30(1), 178–183.
- Ye, Q., Law, R., & Gu, B. (2009). The impact of online user reviews on hotel room sales. *International Journal of Hospitality Management*, 28(1), 180–182.
- Ye, Q., Law, R., Gu, B., & Chen, W. (2011). The influence of user-generated content on traveler behavior: An empirical investigation on the effects of e-word-of mouth to hotel online bookings. *Computers in Human Behavior*, 27(2), 634–639
- Yin, D., Bond, S., & Zhang, H. (2014). Anxious or angry? Effects of discrete emotions on the perceived helpfulness of online reviews. *MIS Quarterly* 38(2), 539–560.
- Zeithaml, V.A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2–22. <https://doi.org/10.1177/002224298805200302>.
- Zhang, K. Z. K., Xu, H., Zhao, S., & Yu, Y. (2018). Online reviews and impulse buying behavior: the role of browsing and impulsiveness. *Internet Research*, 28(3), 522–543. <https://doi.org/10.1108/IntR-12-2016-0377>.
- Zhou, L., Zhang, P., & Zimmermann, H. D. (2013). Social commerce research: An integrated view. *Electronic Commerce Research and Applications*, 12(2), 61–68. <https://doi.org/10.1016/j.elerap.2013.02.003>

