# Analysis of Advertising, Brand Image, E-Word Mouth and E-Servqual on Buying Decisions to Shopee in Tangerang

# Thania P. Dewi and John Tampil Purba

Department of Management Faculty of Economics and Business Universitas Pelita Harapan, Tangerang-15811, Indonesia Corresponding author: john.purba@uph.edu

## **Sidik Budiono**

Department of Management Faculty of Economics and Business Universitas Pelita Harapan, Tangerang-15811, Indonesia sidik.budiono@uph.edu

## **Abstract**

The relationship between advertising, Brand Image, E-Word Mouth, and E-ServQual to Buying Decisions has always been ongoing and has never stopped being discussed in the business arena. It is well-known; the previous research showed the related role of these variables in many products and services. Due to that purpose, this research would like to examine and analyze the effect of advertising on buying decisions of Shopee customers in Tangerang, Indonesia. The hypotheses on this research: to test and analyze the effect of Brand Image on Buying Decisions on Shopee customers, to examine and analyze the effect of E-word mouth on Buying Decisions on Shopee customers, and to test and analyze the effect of E-ServQual on Buying Decisions by Shopee's customers in the area of survey. The sampling technique in this study was obtained from the study population using the purposive sampling method. In this study, the sample was 305 Shopee customer respondents in the Tangerang area. This study used the primary data directly distributed to the respective respondents. This study concludes that advertising influences buying decisions, brand image influences buying decisions, the e-word mouth influences buying decisions, and e-service quality influences buying decisions that different coefficients value from the previous ones.

## **Keywords**:

Advertising, Brand Image, E-Word Mouth, E-Service Quality, Decision PurchaseAbstract

## 1. Introduction

E-commerce in Indonesia grows significantly every year (Tan et al., 2019). One example of big e-commerce from the existing ones in Indonesia is Shopee company. Shopee's journey started in December 2015 in Indonesia (Adirinekso. G.P. et al., 2020). Since its establishment, Shopee has developed in such a way as to become one of the e-commerce sites in Indonesia thanks to the hard work of its employees and the support of its loyal customers to provide a place or service that facilitates various trade transactions (Adirinekso et al., 2020); (Budiono et al., n.d.). According to David Baum (1999), e-commerce is the buying and selling of products or services via the internet involving the transfer of money to complete a sale (Purba & Panday, 2015). The buying and selling of products or services, money transfer, and data transfer are online through electronic media (Purba & Tan, 2018). This network allows people to do business without distance and time constraints, even family businesses doing the same (Tan et al., 2019). E-commerce is evolving by adopting Web 2.0 capabilities to increase customer participation and achieve excellent economic value (Kamaludin & Purba, 2015); (Purba, Budiono, et al., 2020). One reason for the development of eCommerce is the ease and convenience and its many advantages, namely to keep sellers interested in reducing costs (Purba et al., 2018); (Purba, Samuel, et al., 2020). Many sellers have to pay dearly to maintain their physical stores. Because it may need to pay additional costs upfronts such as rent, repairs, shop design, inventory, and buying and selling activities anywhere without any restrictions and can be done for 24 hours, the other advantage is that e-commerce has lots of discounts, promos, and even free shipping for shopping (Adirinekso et al., n.d.); (Purba, Budiono, et al., 2020); (Rajagukguk et al., n.d.). In 2020 the Shopee branch in Indonesia was ranked first among Indonesia's most clicked ecommerce sites (Budiono et al., n.d.)sshopee(Adirinekso et al., 2020); (Budiono et al., n.d.). Shopee is one of the newcomer e-commerce shopping applications successful on the AppStore and PlayStore and has the most Instagram

followers among other e-commerce. Shopee is available in a Mobile App and a website that makes it easy for users to shop online (Budiono et al., n.d.). Looking for attractive offers, consumers should visit Shopee because they can get affordable food, clothing, fashion accessories, and toys to entertain children during this self-quarantine period. In the Shopee Mobile application, several features make it easier for users to shop online without opening a website (Purba & Panday, 2015); (Panday & Purba, 2015). The Shopee website and app are easy to use, and payment options include ShopeePayLater, credit card payments, bank transfers, payments at Indomaret and Alfamart, and cash on delivery (C.O.D.) (Pratmanto et al., 2020).

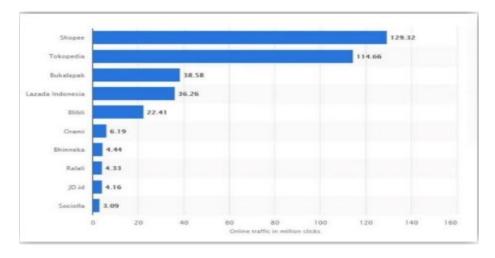


Figure 1. E-commerce Players in Indonesia

## 1. 2. Statement of the Problem

1. How does advertising influence purchasing decisions on Shopee consumers in Tangerang? 2. How does brand image influence purchasing decisions for Shopee consumers in Tangerang? 3. How does e-word mouth influence purchasing decisions on Shopee consumers in Tangerang? 4. How does e-Servqual affect purchasing decisions for Shopee consumers in Tangerang?

## 1. 3. Hypothesis

The main hypotheses of the study were:

- H1: There is a significant relationship between advertising toward the purchase decision in Shopee.
- H2: There is a significant relationship between brand image toward purchase decisions in Shopee.
- H3: There is a significant relationship between e-word mouth toward purchase decisions in Shopee.
- H4: There is a significant relationship between e-service quality toward purchase decisions in Shopee.

## 1. 4. Significance of the Study

The benefits of this research are: writers add to knowledge in applying the theories obtained in research to determine what strategies are suitable for the company from some of the existing influences on purchasing decisions. For the theoretical: the results of this study open up new knowledge about the effect of advertising, brand image, electronic mouths, and electronic service quality on purchasing decisions. For Academics: for future research references with the same Discussion in the future.

## 1. 5. Scope and Limitation

This research population is focused only on the Shopee customers in Greater Tangerang. The total sample of this research is 305 respondents. Comprehensively measuring all factors influencing the purchase decision, the research is based only on determining variables: advertising, brand image, e-word mouth, and e-service quality.

## 1. 6. Conceptual Framework

The conceptual framework is considered based on independent and dependent variables. The independent variables advertising, brand image, e-word mouth, and e-service quality, and the dependent variable is the influence in Purchase decision on customers for Shopee, which relationship is illustrated in the figure below:

## 1.7. Conceptual Framework

The conceptual framework is based on independent and dependent variables. The independent variables advertising, brand image, e-word mouth, and E-service quality, and the dependent variable is the influence in Purchase decision on customers for Shopee, which relationship is illustrated in the figure below:

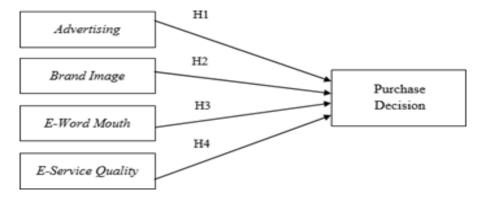


Figure 2. Conceptual Framework Model

## 2. Literature Review

Advertising is a marketing approach requiring advertising space payment to enjoy a business or product (Altberg et al., 2018); (Manandhar, 2018); (Shareef et al., 2019). This advertising space is usually located in public strategic spaces operated by other companies (Ganesan et al., 2018); (Kim & Moon, 2020). Suppose it belongs to digital space, or real media, such as radio or television commercials usually contracted to other companies. Advertising usually builds the brand image, e-word mouth, and e-service quality influence the purchase decision of Shopee e-commerce. Advertising payment can be made in a few ways depending on a company's choice. They can use advertising to acknowledge their brand awareness, reach new customers, and engage existing consumers.

Advertising is part of a marketing strategy and can increase opportunities other options do not offer. All tactics have pros and cons, so it is essential to see what is in the way (Haider & Shakib, 2017). According to (Kotler & Keller, 2009), the concept of Brand Image is a set of ideas interpreted responses about a brand. Whereas in the science of brand image management is said to be "the system of images and thoughts in human consciousness, revealing information about a particular brand and its basic attitude towards it." certain brands, which lead to differentiation while ensuring the recognition of the desired market (Soim, Suharyono, & Abdillah, 2016).

Electronic service quality is an essential factor of electronic commerce. Electronic word of mouth also gives companies an advantage over traditional W.O.M. to explore what drives consumers to post reviews online and quantify these reviews' impact on other consumers. However, the use of technology by consumers to share opinions about products or services (eWOM) can be an obligation for companies because it can be a factor that they have no control over. In finding another choice, businesses are trying to gain greater control over online customer reviews by creating virtual spaces on their websites, where consumers can comment and share opinions on business products and services (Ellen & Tunjungsari, 2019).

E-ServQual is becoming increasingly important in today's developing countries. It enables service providers with similar outputs to provide more excellent value, competitiveness, opportunities for service growth, and increased customer satisfaction. Service quality is the key to successful e-commerce. A conceptual model for the determinants of electronic service quality was proposed and discussed. Given the exploratory nature of this study, focus groups were used to investigate the dimensions of electronic service quality. It proposed that the quality of e-service has an incubative and active dimension to increase click rates, stickiness, and customer retention. The incubative dimension consists of ease of use, appearance, linkages, structure and layout, and content. The importance and implications of each determinant are presented (Nurlina, 2017).

## 3. Research Methodology

Researchers use quantitative methods. The quantitative method is the process of collecting and analyzing numerical data. The data collected through questionnaires is primary because it is collected exclusively from the source were

selected by the researchers. The questionnaire is the main instrument for collecting data in survey research. The most important part of the survey process is the creation of questions that accurately measure public opinion, experience, and behavior (Indriantoro and Supomo, 2012). One of the platforms used in this research is Google Form. Google Form is widely used to create surveys easily and quickly because it is easy to ask questions to respondents and collect various types of information simply and efficiently (Septiawan, 2020). The population of this research is Shopee customers in Greater Tangerang, whose numbers were 305. The data analysis method in this research uses SPSS and Structural Equation Modeling AMOS. (SEM-AMOS) program is an alternative model of covariance-based S.E.M.

## 4. Results and Discussion

The questionnaires were distributed to 567 respondents of Shopee customers in the Greater Tangerang area., but only 305 can be collected from all 567 respondents. It means respondents in this research were percentages: 42.3% male and 57.7% female. The dominant age range of respondents aged 17-22 years is 50.8%, age 23-28 years is 44.3%, age 29-34 years is 2%, and age >35 years is 3%.

Variable	Reliability
Advertising	0.851
Brand Image	0.852
E-Word Mouth	0.911
E-ServQual	0.902
Decision Purchase	0.892

Table 1. Indicator of Reliability

Based on table 1, the value of the composite reliability test is greater than 0.7, which means the value of each variable; Advertising, Brand Image, E-Word Mouth, E-ServQual, and Decision Purchase are reliable. Reliability Variable Advertising 0.851 Brand Image 0.852 E-Word Mouth 0.911 E-ServQual 0.902 Decision Purchase 0.892 The value of the composite reliability test is greater than 0.7, which means the value of each instrument is reliable.

Variable	Indicator	Validity	Results
	X1.1	0.790	Valid
	X1.2	0.818	Valid
Advertising	X1.3	0.812	Valid
	X1.4	0.780	Valid
	X1.5	0.718	Valid
	X1.6	0.622	Valid
	X2.1	0.717	Valid
D 17	X2.2	0.766	Valid
Brand Image	X2.3	0.773	Valid
	X2.4	0.782	Valid
	X2.5	0.747	Valid
	X2.6	0.771	Valid
E-Word Mouth	X3.1	0.792	Valid
	X3.2	0.818	Valid
	X3.3	0.835	Valid
	X3.4	0.840	Valid
	X3.5	0.860	Valid
	X3.6	0.860	Valid
	X4.1	0.849	Valid

Table 2. Indicators and Validity

	X4.2	0.904	Valid
E-Service	X4.3	0.827	Valid
Quality	X4.4	0.790	Valid
	X4.5	0.820	Valid
	X4.6	0.739	Valid
	Y1	0.793	Valid
	Y2	0.844	Valid
Decision Purchase	Y3	0.754	Valid
	Y4	0.821	Valid
	Y5	0.776	Valid
	Y6	0.860	Valid

Based on table 2, the value of the composite validity test meet the requirements as stipulated in the formula. All the variable Indicator Validity Result X1.1 0.790 Valid X1.2 0.818 Valid Advertising X1.3 0.812 Valid X1.4 0.780 Valid X1.5 0.718 Valid X1.6 0.622 Valid X2.1 0.717 Valid X2.2 0.766 Valid Brand Image X2.3 0.773 Valid X2.4 0.782 Valid.

The value of discriminant validity or indicator correlation to the latent construct is greater than 0.1599 to other constructs so that the validity of the measurement model is fulfilled.

Table 3. Kolmogorov-Smirnov Test Results (K-S)

Description	Unstandardized Residual
N	305
Kolmogorov-	1,206
Smirnov	
Asymp. Sig. (2-	0,109
tailed)	

Description Unstandardized Residual N 305 KolmogorovSmirnov 1,206 Asymp. Sig. (2- tailed) 0,109 Based on the table 3, the value obtained is 0.109, which means that it is greater than 0.05, then this data is normally distributed.

Table 4. Multicollinearity Test

Variable	Tolerance	V.I.F.
Advertising	0.474	2.109
BrandImage	0.320	3.122
E-WordMouth	0.340	2.942
E-ServQual	0.474	2.111

Test Variable Tolerance V.I.F. Advertising 0.474 2.109 Brand Image 0.320 3.122 E-Word Mouth 0.340 2.942 E-ServQual 0.474 2.111 Based on table 4, it is found that the Tolerance value> 0.1 and V.I.F.

#### 4.1. Autocorrelation Test

The existence of autocorrelation in a regression model is carried out using the Durbin Watson (D.W.) test, and the results are as follows:

Table 5. Autocorrelation Test

Adjusted	Std. Error of	Durbin-
R Square	the Estimate	Watson
0.627	3.325	1.833

Based on the table 5, it can be seen that the test results for autocorrelation of 1,833 were between DU 1,784 and 4-DU 2,216, meaning that there was no autocorrelation in this study.

Table 6. Heteroscedasticity Test

Variable	Correlation	Sig.
Advertising	0,028	0,622
Brand Image	0,034	0,553
E-Word Mouth	0.035	0,546
E-ServQual	0,001	0,990

The table 6 above shows that all independent variables have a spearman correlation value above 0.05. So the conclusion is that there is no heteroscedasticity in the regression model in this study.

## 4.2 SEM-AMOS

The criteria taken for this study were the absolute fit indices (RMSEA and G.F.I.), the incremental fit indices (CFI and TLI), then the parsimony fit indices (PGFI and PNFI)

Table 7. Model Goodness of Fit

Fit Indexed	Goodness of Fit	Criteria	Cut-off value	Remarks
Absolute Fit	RMSEA	≤0.08	0,053	Marginal Fit
110001000 110	GFI	≥0.90	0,904	Marginal Fit
Incremental Fit	CFI	≥0.90	0,963	Good Fit
	TLI	≥0.90	0,950	Marginal Fit
Parsimony Fit	G.F.I.	≥0.60	0,622	Good Fit
	PNFI	≥ 0.60	0,685	Good Fit

The results in table 7 show that the Goodness of Fit [G.O.F.] and the values had met requirements as stipulated; that is why the model in this study is Fit.

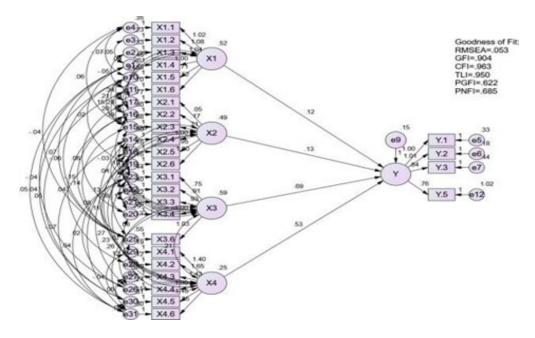


Figure 3. Structural Equation Model Calculation

To get the analysis of the results of data processing at the full stage S.E.M. model, suitability test, and statistical test were carried out. After obtaining the correct model, the parameter testing must then be carried out as it is hypothesized to be interpretable. The conclusions of the research results are:

	Estimate	S.E.	C.R.	P	Label
X1	.121	.045	2.707	.007	Accepted
X2	.134	.040	3.325	***	Accepted
Х3	.691	.068	10.126	***	Accepted
X4	.530	.097	5.480	***	Accepted

Table 8. Hypothesis Test result

In the next stage, hypothesis testing will follow the value of the critical ratio (C.R.) and probability (P) on the regression weight. The value of  $C.R \ge 1.96$  and significant  $\le \alpha = 0.05$  as a condition for the hypothesis accepted. Answering hypotheses 1,2,3, and 4 with an increase in advertising, improvement in brand image, increased e-word mouth, and e-service quality can significantly affect the purchase decision of Shopee. At the same time, all P-values are lower than the significant level (5%), which means all hypotheses are significant.

Having analyzed the data, we processed the next step by step for entire stages; the S.E.M. model, suitability test, and statistical test done to obtain the results. The results in table 8. show that the Goodness of Fit value has met all the criteria so that the model in this study can be said to be Fit as shown table 8 above. After obtaining the correct model, the parameter testing, then be carried out as it is hypothesized to be interpretable. The conclusions of the research results are:

#### 5. Conclusion and Recommendations

Based on the results of the research that has been stated, conclusions are drawn as follows:

- There is a significant relationship between advertising toward the purchase decision of Shopee.
- There is a significant relationship between brand image toward purchase decisions of Shopee.
- There is a significant relationship between e-word mouth toward purchase decisions of Shopee. There is a significant relationship between e-service quality toward purchase decisions of Shopee.

Regarding the results of this research, suggestions are proposed as the following.

- 1. For future research, you can do research with e-commerce Lazada, Tokopedia, and Bukalapak. Mascapii has modern and innovative potential in this era.
- 2. Judging from the highest number, it is known that the factor that most influences purchasing decisions is service quality, so it is recommended that Shopee be able to improve the quality of its services to its consumers.
- 3. Doing expansion, namely doing this research in other cities.
- 4. Research variables can add other factors that influence purchasing decisions.

## References

- Adirinekso. G.P., Purba, J. T., Budiono, S., & Rajagukguk, W. (2020). The Role of Price and Service Convenience on Jakarta's Consumer Purchase Decisions in Top 5 Marketplace Mediated by Consumer's Perceived Value.
- Adirinekso, G. P., Purba, J. T., Budiono, S., & Rajaguguk, W. (n.d.). How Brand Image Mediated Sales Promotion and Price to Impact Shopee Consumer's Decision? The Case of Urban Worker in Jakarta. In *ieomsociety.org*. http://www.ieomsociety.org/brazil2020/papers/558.pdf
- Adirinekso, G. P., Purba, J. T., Budiono, S., & Rajagukguk, W. (2020). The role of price and service convenience on Jakarta's consumer purchase decisions in top 5 marketplace mediated by consumer's perceived value. repository.uki.ac.id. http://repository.uki.ac.id/id/eprint/3232
- Altberg, E., Faber, S., Hirson, R., Linden, S. Van der, & ... (2018). System and method for providing advertisement. *US Patent* .... https://patents.google.com/patent/US9984377B2/en
- Budiono, S., Purba, J. T., & Adirinekso, G. P. (n.d.). Strategic Business Analysis by Using Determinants of Buying Decision on Products: Lessons from an International Company in Indonesia. In *ieomsociety.org*. http://www.ieomsociety.org/brazil2020/papers/555.pdf
- Ganesan, M., Antony, S. P., & George, E. P. (2018). Dimensions of job advertisement as signals for achieving job seeker's application intention. *Journal of Management* .... https://doi.org/10.1108/JMD-02-2017-0055
- Kamaludin, K., & Purba, J. T. (2015). Strategic management banking technology readiness analysis in facing challenges and opportunities. ... on Economics and Banking (Iceb-15). https://www.atlantis-press.com/proceedings/iceb-15/25368
- Kim, G., & Moon, I. (2020). Online banner advertisement scheduling for advertising effectiveness. *Computers & Industrial Engineering*. https://www.sciencedirect.com/science/article/pii/S0360835219306953
- Manandhar, B. (2018). Effect of Advertisement in Consumer Behavior. *Management Dynamics*, 21(1), 46–54. https://doi.org/10.3126/md.v21i1.27046
- Panday, R., & Purba, J. T. (2015). Lecturers and students technology readiness in implementing services delivery of academic information system in higher education institution: A case study. In *Communications in Computer and Information Science* (Vol. 516). https://doi.org/10.1007/978-3-662-46742-8 49
- Purba, J. T., Budiono, S., Rajagukguk, W., Samosir, P., & ... (2020). *E-business services strategy with financial technology: Evidence from Indonesia*. repository.uki.ac.id. http://repository.uki.ac.id/id/eprint/3230
- Purba, J. T., Hery, H., & Purba, P. C. (2018). *Usage ICT application for bundling products: strategic digital marketing in facing the 4.0 technology*. researchgate.net. https://www.researchgate.net/profile/John-Purba/publication/330783065\_Usage\_ICT\_Application\_for\_Bundling\_Products\_Strategic\_Digital\_Marketing\_in\_Facing\_the\_40\_Technology/links/5c6beb2c4585156b5706ec17/Usage-ICT-Application-for-Bundling-Products-Strategic-
- Purba, J. T., & Panday, R. (2015). Innovation strategy services delivery: an empirical case study of academic information systems in higher education institution. ... on Soft Computing, Intelligence Systems, and .... https://doi.org/10.1007/978-3-662-46742-8 47
- Purba, J. T., Samuel, S., & Purba, A. (2020). Strategic Collaboration ICT in the online Transportation Services in Jakarta Area. *IOP Conference Series: Materials Science and Engineering*, 918(1). https://doi.org/10.1088/1757-899X/918/1/012206
- Purba, J. T., & Tan, J. D. (2018). Owners' integrity, customers' relation, and focused attitude as strategiies of family

- business sustainability and growth: an empirical study. *Journal of Economics, Business*, & .... https://journal.perbanas.ac.id/index.php/jebav/article/view/1433
- Rajagukguk, W., Purba, J. T., & Budiono, S. (n.d.). Economic Development and Mobile Cellular Subscription. In *ieomsociety.org*. http://ieomsociety.org/proceedings/2021rome/468.pdf
- Shareef, M. A., Mukerji, B., Dwivedi, Y. K., Rana, N. P., & ... (2019). Social media marketing: Comparative effect of advertisement sources. *Journal of Retailing and* .... https://www.sciencedirect.com/science/article/pii/S096969891730591X
- Tan, J.D., Supratikno, H., Pramono, R., Purba, J. T., & Bernarto, I. (2019). Nurturing transgenerational entrepreneurship in ethnic Chinese family SMEs: exploring Indonesia. *Journal of Asia Business Studies*, *13*(2). https://doi.org/10.1108/JABS-04-2018-0132
- Tan, Jacob Donald, Purba, J. T., & Widjaya, A. E. (2019). Financial Technology as an Innovation Strategy for Digital Payment Services in the Millenial Generation. 292(Agc), 364–373. https://doi.org/10.2991/agc-18.2019.58

## **Biographies**

John Tampil Purba obtained a degree Doctor (S3) majoring Management from De La Salle University Systems Manila, Philippines in 2002. Dr. Purba also has several certifications international Standards in management information systems and technology, among others: M.C.P., MCSA, MCSE, MCSES, MCSAS, MCDL and MCT from Microsoft Technologies, U.S.A. and C.S.E. from Cisco System U.S.A. He is also Professional Membership of IEOM Society since last year. He has several managerial experiences in the Service Industries group for more than 25 years. He is currently served as an Associate Professor at the Faculty of Economics and Business Pelita Harapan University, Karawaci Banten, Indonesia.

**Thania P. Dewi,** has just complete his Bachelor Degree in Management from Faculty of Business and Economics Universitas Pelita Harapan, Karawaci Banten, Indonesia in the beginning of the year 2021.

**Sidik Budiono** is currently serves as an Associate Professor in Economics at Department of Management at Faculty of Economics and Business Pelita Harapan University, Lippo Karawaci Tangerang Banten-Indonesia. Dr. Budiono graduated Bachelor of Economics from Department of Economics, Universitas Kristen Satya Wacana, Salatiga Central Java, Masteral and Doctoral degree in Economics from Department of Economics at Faculty of Business and Economics Universitas Indonesia, Depok Indonesia. He interests in research around national, regional development and international economics.