



The Effect of Electronic Word of Mouth and Brand Image on Purchase Decision on Consumers of J&T Express Delivery Services

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Abstract. Purchasing decisions are important issues that need to be considered in the competition of delivery services. Electronic word of mouth (eWOM) and brand image need to be managed by J&T Express, where both factors become information channels that are able to affect consumer purchasing decisions. Finding out the influence of eWOM and brand image on the purchase decisions of consumers both partially and simultaneously becomes the objective of this research. Research methods in this writing were implemented quantitatively. Non-probability was the sampling method used with the application of a purposive sampling technique. Meanwhile, there were 100 respondents who lived in Bandung and have used J&T Express delivery services. This research revealed that both partially and simultaneously there was a positive and significant effect of eWOM and brand image on purchase decisions in consumers of J&T Express delivery services in Bandung.

Keywords: Brand image · Electronic word of mouth · Purchase decision

1 Introduction

The rapid development of e-commerce has become fertile ground for the growth of the logistics industry, especially delivery services in Indonesia [1]. The purchase decision on delivery services is one of the important issues that need to be considered in a competitive situation in this industry. As explained in [2] that the decision is a choice of two or more choices. In other words, the large number of choices available will affect a person's decision to choose. Consumers may now easily, quickly, and completely find additional information or advice about goods and services because of technological advancements [2]. Therefore, electronic word of mouth (eWOM) and brand image as parts that are closely related to information needs to be considered by J&T Express in improving its strategy.

One of the person's purchasing decisions can be influenced by the attitudes of others. This influence depends on two conditions, namely the intensity of the other person's criticism of our preferred alternative and our desire to follow the wishes of others [3]. The first circumstance corresponds to eWOM, which is an informal communication

directed at consumers over network technology and focuses on the use or qualities of products and services, or the merchant himself [4]. Meanwhile, the way consumers deal with risk when making purchasing decisions can be done by choosing through brand image. Customers who have never used a product before are more likely to trust popular or well-known brand names [2].

The inability of a delivery service company to face intense competition can make it difficult to develop [1]. The company's ability to be able to provide a good brand image to consumers demonstrates that it can effectively manage its brand, which ultimately give a beneficial effect on consumers' purchase decisions [5]. The results of previous studies regarding the brand image on purchasing decisions on delivery services yielded fairly consistent findings, which had a significant and positive effect [5–7]. In contrast to brand image, research that examines the effect of eWOM on purchasing decisions for delivery services is still difficult to find.

From what has been explained before, the aim of this research is to determine the effect of eWOM and brand image both partially and simultaneously on the purchase decisions of consumers of J&T Express delivery services in Bandung.

The emergence and development of internet usage have led to a shift in the communication paradigm from WOM to eWOM. On blogs, discussion forums, review websites, or social networking sites, consumers can share their thoughts, comments, and reviews on a product online [8]. Consumers can communicate their opinion in a significant way using eWOM, a new style of WOM communication thought to be more effective than conventional WOM because of its level of accessibility and wider reach [9].

In the previous study [10] on consumer motivation for expression on the internet, he describes eight dimensions related to eWOM. The dimensions are: 1) Platform Assistance, 2) Venting Negative Feelings, 3) Concern for the Other, 4) Extraversion/Positive Self-Enhancement, 5) Social Benefits, 6) Economic Incentives, 7) Helping the Company, and 8) Advice Seeking.

Brand image is the outcome of brand identity and consists of ideas people have about a specific brand [11]. Meanwhile, in [12] it highlights the five main roles of brand image. First, it functions when users retrieve and analyze information. Second, a product's positioning and distinction are based on the brand image. Third, offer compelling reasons to purchase. Fourth, foster associations that lead to favorable perceptions of the brand. Fifth, decide on brand extension.

It was stated that brand image is a consumer's opinion of a product or service, which is represented in brand associations in the consumer's memory [13]. Consumer responses to brand associations can be used to measure a positive brand image, namely as follows [13]: 1) Strength of Brand Associations, 2) Favorability of Brand Associations, and 3) Uniqueness of Brand Associations.

A consumer's decision over which brand to purchase is known as a purchasing decision [11]. A "stage model" of the purchasing decision process has been created by marketing professionals. Long before the transaction, the purchasing process is ongoing and has consequences. Consumers form preferences for the brands in the option set throughout the evaluation step, and they may also decide to purchase the most favored brand [11].

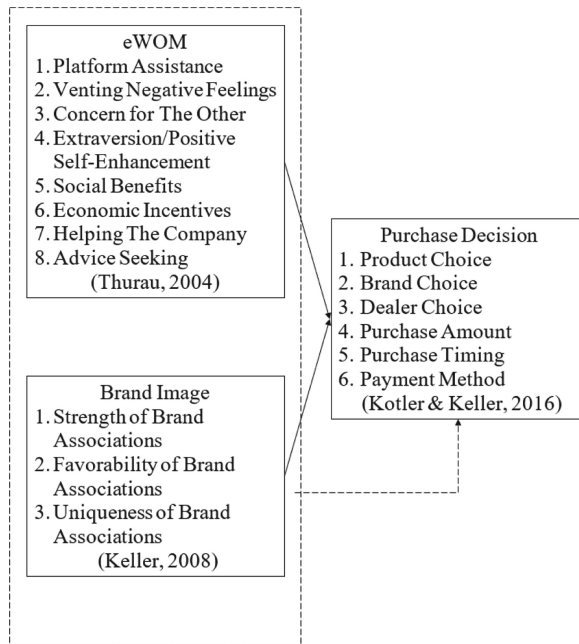


Fig. 1. Research framework

Based on the model of consumer behavior, purchase decision has the following six dimensions [3]: 1) Product Choice, 2) Brand Choice, 3) Dealer Choice, 4) Purchase Amount, 5) Purchase Timing, and 6) Payment Method.

The decision to adopt information is a fundamental consequence resulting from digesting information on eWOM exchange, as well as in the purchasing decision-making process [14]. eWOM allows consumers to learn and change their attitudes and purchasing decisions [15]. Meanwhile, a good and strong brand image in the eyes of consumers will result in the perception that the company has an added value and can be an important reference, especially for prospective consumers to decide what to buy [16] (Fig. 1).

2 Methods

In this study, descriptive and verification research methods were used. Customers that use the J&T Express delivery service in Bandung make up the population in this research, where the number is unknown so that it can be categorized as infinite. An infinite population's sample size is calculated using the Lemeshow formula. According to the calculations, the minimum number of samples required is 96 respondents, this number will be rounded to 100 respondents.

Non-probability is the sampling method used in this research, where this method of data gathering does not provide the same opportunity for every member of the population to be picked as a sample [17]. Meanwhile, purposive sampling was chosen as the sampling technique. This study's analysis method utilized quantitative analysis approaches,

which took an objective approach and made use of quantitative data collecting, analysis, and statistical testing tools. A 5-point Likert system rating scale was used to evaluate the data collected.

3 Results and Discussions

3.1 Description of Respondent Characteristics

This study tested a total of 100 respondents. Referring to the questionnaire data processing, it is evident that the proportion of male and female respondents is equal, which is 50 people or 50%. Meanwhile, the age of respondents aged 16–25 years consisted of 70 people (70%), aged 26–35 years consisted of 22 people (22%), aged 36–45 years consisted of 5 people (5%), and over 46 years consisting of 3 people (3%).

3.2 Multiple Linear Regression Analysis

The constant coefficients and the variable regression coefficients are shown in Table 1.

Based on the values of the constant coefficients and the variable regression coefficients contained in the unstandardized coefficient B column in Table 1, the regression equation model is as shown below:

$$Y = 1.734 + 0.226X_1 + 0.607X_2 \tag{1}$$

From the regression Eq. (1), a constant coefficient value of 1.734 is obtained, this suggests that if eWOM and brand image have no effect, the purchase decision for consumers of J&T Express delivery services is 1.734. Each independent variable’s regression coefficient has a positive value, which suggests that the correlation between the purchase decision and the regression coefficient of the independent variable is unidirectional. Meanwhile, the eWOM regression coefficient has a value of 0.266 meaning that for every unit increase, the purchase decision will be increased by 0.226. Likewise with the brand image regression coefficient which has a value of 0.607, where every unit increase, the purchase decision will be increased by 0.607.

Table 1. Coefficients

Model		Unstd. Coef		Std. Coef	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.734	2.475		.701	.485
	eWOM	.226	.072	.254	3.137	.002
	Brand Image	.607	.092	.535	6.607	.000

Table 2. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.674 ^a	.454	.443	2.850

3.3 Coefficient of Determination (R^2)

Table 2 shows that R^2 has a value of 0.454. The findings of these data show that the effect of eWOM and brand image on purchase decisions has a 45.4% coefficient of determination.

The coefficient of determination value interprets that eWOM and brand image have an effect of 45.4% on purchase decisions of consumers of J&T Express delivery services in Bandung. While other variables not included in this research affect 53.6% of the purchasing decision.

3.4 T-Test

Table 1 shows that eWOM has a significance value of $0.002 < 0.05$. It can also be seen the eWOM has a t_{count} value of 3.137 compared to t_{table} value of 1.985, then $t_{\text{count}} > t_{\text{table}}$. Meanwhile, brand image has a significance value of $0.000 < 0.05$. While the brand image has a t_{count} value of 6.607 compared to t_{table} value of 1.985. This indicates that eWOM and brand image both have a partial effect on purchasing decisions.

3.5 F-Test

Table 3 displays a significant value of $0.000 > 0.05$. Meanwhile, the F_{count} value of 40.360 compared to the F_{table} value of 2.70, then $F_{\text{count}} > F_{\text{table}}$. It can be concluded that eWOM and brand image affect purchasing decisions simultaneously.

The results of the study related to the effect of eWOM on purchase decisions obtained in this research support the findings that already exist in previous research [18, 19]. The t-test results indicate that eWOM had a positive and significant effect on purchasing decisions of consumers of J&T Express delivery services in Bandung. Previous findings stated that consumer involvement related to eWOM is reflected in three behaviors, namely opinion-seeking (OS), opinion giving (OG), and opinion passing (OP) [20]. Consumers that seek advice and information from others when making decisions about purchases demonstrate opinion-seeking behavior [21].

Table 3. Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	655.421	2	327.711	40.360	.000 ^b
	Residual	787.619	97	8.120		
	Total	1443.040	99			

Previous research has shown that specifically, opinion-seeking behavior in eWOM is a part that can affect consumer purchase decisions [18]. According to data from DEI Worldwide, two-thirds of customers believe that suggestions through others are an important and trusted information source that can affect their purchasing decisions [22].

Other research shows the adverse effects on sales due to unfavorable online customer reviews [23, 24]. Prior studies show that the quantity of unfavorable online customer reviews may be a key indicator for consumers who are very involved due to the recommendation role of customer reviews [23]. However, this does not change the conclusion that this research reveals, because eWOM will still affect purchasing decisions, both positive and negative consumer reviews.

The findings of this research also showed a positive and significant effect of brand image on purchase decisions, where the findings support previous studies [5–7]. In other words, the better their brand image, the better someone will make a product purchase decision for that brand [7].

According to [23], a company's brand image is an intangible asset that is developed during the course of its establishment based on its performance and reputation. Ultimately, a positive brand image can spark consumer attention in the promotions carried out by the brand [2]. A company can distinguish itself from competitors with a strong brand image, giving it a unique place in the minds of consumers [24].

In addition to positive memories, negative cues and memories also influence consumer sentiments about products or brands which may result in risk perception [25]. Results from the research [25] particularly demonstrate that customers' online purchase intentions were affected by product brand image that risk perceptions mediate. The findings of this research can be said to be closely related to those of that research, due to the evaluation step in purchasing consumers forms their preferences for the product brand.

4 Conclusion

This research revealed that both partially and simultaneously there was a positive and significant effect of eWOM and brand image on purchase decisions in consumers of J&T Express delivery services in Bandung. In other words, this shows that both eWOM and brand image are important considerations for consumers when making purchasing decisions for J&T Express.

The findings of this research suggest that J&T Express can improve the quality of services and service products they offer to consumers. Quality improvement can certainly encourage consumers to provide good feedback. This in turn will result in the perception that the company has an added value and can be an important reference for potential consumers [9]. Companies can gain a competitive advantage by leveraging the power of social networking platforms for both eWOM and strengthening their brand image.

References

1. Puspa, A. W. Persaingan Makin Sengit, Membedah Strategi Bisnis Logistik di Indonesia. <https://ekonomi.bisnis.com/read/20220221/98/1503146/persaingan-makin-sengit-membedah-strategi-bisnis-logistik-di-indonesia> (2021).

2. Leon G. Schiffman, Kanuk, L. & Hansen, H. CHAPTER 1 Consumer Behaviour: A European Outlook, 2nd Edition. *Consum. Behav. A Eur. Outlook, 2nd Ed.* (2012).
3. Kotler, P. Marketing Management , Millenium Edition. *Mark. Manag.* **23**, 188–193 (2000).
4. Litvin, S. W., Goldsmith, R. E. & Pan, B. Electronic word-of-mouth in hospitality and tourism management. *Tour. Manag.* **29**, (2008).
5. Adiatma, D. Pengaruh Brand Image dan Kualitas Pelayanan terhadap Keputusan Pembelian Jasa J&T Express. *J. Wacana Ekon.* **20**, (2021).
6. Rachmawati, S. D. & Andjarwati, A. L. Pengaruh Kesadaran Merek dan Citra Merek Terhadap Keputusan Pembelian (Studi pada Pengguna JNE Express di Surabaya Selatan). *e-Journal Ekon. Bisnis dan Akunt.* **VII**, (2020).
7. Alifitiani Nantigiri, M. H., Handayani, S. & Veronica, V. Pengaruh Brand Image, Harga, Dan Ketepatan Waktu Pengiriman Terhadap Keputusan Pembelian Pada Jasa Pengiriman J&T Express Cabang Bekasi Tahun 2021. *J. Manaj. Bisnis Transp. dan Logistik* **7**, (2021).
8. Cheung, C. M. K. & Lee, M. K. O. What drives consumers to spread electronic word of mouth in online consumer-opinion platforms. *Decis. Support Syst.* **53**, (2012).
9. Reza Jalilvand, M. & Samiei, N. The effect of electronic word of mouth on brand image and purchase intention. *Mark. Intell. Plan.* **30**, (2012).
10. Hennig-Thurau, T., Gwinner, K. P., Walsh, G. & Gremler, D. D. Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *J. Interact. Mark.* **18**, (2004).
11. Armstrong, G. & Kotler, P. T. *Principles of Marketing, eBook, Global Edition. Principles of Marketing* (2017).
12. Aaker, D. A. *Managing brand equity : capitalizing on the value of a brand name.* (New York : Free Press ; Toronto : Maxwell Macmillan Canada ; New York : Maxwell Macmillan International, [1991] ©1991).
13. Keller, K. L. *Strategic Brand Management Building, Measuring and Managing Brand Equity. Journal of Brand Management* (Pearson, 2016). <https://doi.org/10.1057/bm.1998.36>
14. Erkan, I. & Evans, C. The influence of eWOM in social media on consumers' purchase intentions: An extended approach to information adoption. *Comput. Human Behav.* **61**, (2016).
15. Wang, X., Yu, C. & Wei, Y. Social Media Peer Communication and Impacts on Purchase Intentions: A Consumer Socialization Framework. *J. Interact. Mark.* **26**, (2012).
16. Indratama, A. B. & Artanti, Y. Pengaruh Citra Merek Dan Promosi Penjualan Terhadap Keputusan Nasabah Memilih Tabungan Bank Syariah Mandiri. *J. Ilmu Manaj.* **2**, (2014).
17. Sugiyono. *Metode Penelitian dan Pengembangan Pendekatan Kualitatif, Kuantitatif, dan R&D. Metode Penelitian dan Pengembangan Pendekatan Kualitatif, Kuantitatif, dan R&D* (2015).
18. Themba, G. & Mulala, M. Brand-Related eWOM and Its Effects on Purchase Decisions: An Empirical Study of University of Botswana Students. *Int. J. Bus. Manag.* **8**, (2013).
19. Yang, L., Cheng, Q. & Tong, S. Empirical study of eWOM's influence on consumers' purchase decisions. in *The Strategies of China's Firms: Resolving Dilemmas* (2015). <https://doi.org/10.1016/B978-0-08-100274-2.00008-X>
20. Flynn, L. R., Goldsmith, R. E. & Eastman, J. K. Opinion leaders and opinion seekers: Two new measurement scales. *J. Acad. Mark. Sci.* **24**, (1996).
21. Chu, S. C., & Kim, Y. (. Determinants of consumer engagement in electronic word-of-mouth (eWOM) in social networking sites. *Int. J. Advert.* **47–75** (2011).
22. Deiworlwide & OTX. ENGAGING CONSUMERS ONLINE: The Impact of Social Media on Purchasing Behavior. *Deiworlwide & OTX* (2008).
23. Khairani, K. the Effect of Brand Image and Food Safety on the Purchase Decision of Samyang Noodles Product To the Students of Faculty of Economics and Business of University of North Sumatra Medan. *Int. J. Lang. Res. Educ. Stud.* **2**, 266–280 (2018).

24. Okta Pradita, S. & Arifin Sitio. THE IMPACT OF BRAND IMAGE AND SERVICE QUALITY ON BUYING DECISIONS AND ITS IMPLICATION ON CONSUMER SATISFACTION (CASE STUDY AT PT IMI). *Dinasti Int. J. Digit. Bus. Manag.* **1**, (2020).
25. Aghekyan-Simonian, M., Forsythe, S., Suk Kwon, W. & Chattaraman, V. The role of product brand image and online store image on perceived risks and online purchase intentions for apparel. *J. Retail. Consum. Serv.* **19**, (2012).

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