

e-Application Quality, e-WoM, and Perception Value on Customer Value Transaction e-Ticketing

1st Raja Putri

dept. of Business Management
Politeknik Negeri Batam
Batam, Indonesia
sisilyaandriani@gmail.com

2nd Hendra Gunawan

dept. of Business Management
Politeknik Negeri Batam
Batam, Indonesia
Hendra@polibatam.ac.id

Abstract—The purpose of this research is to examine the quality of e-application, e-wom, and perceived value of the e-ticketing transaction decision. This research took a sample of 102 respondents using purposive sampling technique. Data collection was done using questionnaires conducted online by Instagram direct message. Questionnaires were measured using a Likert scale. The research data were analyzed by simple linear regression analysis. The results of this research showed that there was an influence between the quality of e-application, e-wom, and perceived value of the e-ticketing transaction decision.

Keywords—e-application quality, e-wom, perceived value, purchase decision

I. INTRODUCTION

In this modern era, the progress of information and technology is growing rapidly and massively. The development of information and technology is characterized by the need for internet connection. The internet greatly affects human life at this time. The internet can be said to be the biggest information network because with the internet, the public is increasingly facilitated in finding the information needed. In addition, the internet also influences technological developments, especially in the world of commerce. These opportunities are used by entrepreneurs to develop their business online. According to data from the Indonesian Internet Service Providers Association (APJII), internet users in Indonesia continue to increase. In 1998 there were 500,000 people using the internet, but that number continued to increase to 112.6 million in 2017. Based on these data, the use of the internet in developing businesses is a very effective way. The internet is the second world of humans because humans are always in touch with the internet, so the concept of internet-based trading was born which is often called e-commerce [21]. E-commerce activities are activities to buy or sell products or services through the internet [14]. The shopping online is certainly different from shopping offline because it is able to offer more products and services and access that is not limited by space and time [5].

In the beginning, online businesses only sold magazines, books, tapes, and dishes [18], but at this time e-commerce has experienced very rapid development. The development of e-

commerce in Indonesia is marked by the emergence of several sites and applications for buying and selling. As for some of the online shopping products and products and services that have been widely known, Tix.Id, Lazada, Mtix, Tokopedia, Shopee, Zalora, Agoda, Traveloka, and Amazon. One of them has e-commerce that is just developing its business and successfully utilizing e-commerce opportunities, namely Tix.Id. Tix.Id is an e-commerce business website that provides services in purchasing movie tickets, but is not only limited to websites because Tix.Id also launches a mobile application. Tix.Id provides a solution for consumers who want to buy movie tickets anytime and without having to queue. Tix.Id provides convenience such as easy top up with a minimum nominal of IDR 10,000 without top up fees, payment using e-money in the form of FUNDS so that it can be used in other applications that support payment through FUNDS, the amount of discounts and promotions given by Tix. Id. Tix.Id is currently continuing to push for an increase in the decision to transact tickets online at Tix.Id.

The buyer's decision is the most important aspect because it will determine the attitude of the consumer, whether the consumer will make a purchase or not [25]. Buyer decisions are closely related to information and knowledge that consumers have about the product or service they want to buy. In some studies, the quality of the website or the quality of e-application has a direct effect on consumer interest in transactions and is one of the factors that can encourage consumers to conduct e-commerce activities. E-application is the first meeting point between consumers and companies so the company must provide a satisfying first impression. In some studies, the quality of e-application has a direct effect on the intention to transact. The study found that the quality of e-application had a significant effect on the intention to transact on mobile shopping [7], but if only looking at e-application the consumers would only be limited to what is in e-application. Therefore, additional information is needed such as e-wom in the form of comments or recommendations.

E-wom is an important means for consumers to get information about products and service quality, the more frequent e-wom is done the more likely it is to create consumer

buying interest [8]. E-wom has a big influence on decision making in the formation of consumer behavior [16]. In addition to the quality of e-application and e-wom, perceived value is also related to purchasing decisions. Perception of value will form a reference and attitude of consumers that can influence the decision of a consumer to buy or not buy. Research found that customer perceptions play a very important role in the success of the company [24].

This research is different from previous research because the authors modified the independent variables into three, namely the quality of e-application, e-wom, and perceived value with the dependent variable using customer decisions. In addition, this study is interesting to study because there are still many different research results. For example: 1) E-wom. In the research of Wijaya & Paramita (2014), it was explained that e-wom has no significant effect on purchase decision to purchase a DSLR camera [35], while in the research of Apriani & Pradana (2017) explained that e-wom had a significant effect on purchases at Boedjangan Meatballs in Bandung [3]. 2) E-application quality. In the research of Kurniawan, Kusumawati, & Priambada (2018) explained that the quality of the website has a significant effect on the purchase decision [19], while in the research of Piarna (2016) explaining that the quality of the website has no significant effect on purchase decision [23], and 3) Perception Values. In the research of Priansa (2016) explains that perception value has a significant effect on the purchase decision [24], while in the research of AL-Huwaishel & AL-Meshal (2018) explains that the perception of value does not affect the purchase decision [1]. This research is expected to see the effect of these variables so that they can be used as developments in the business world.

II. LITERATURE REVIEW

The quality of a website as an evaluation given by the user about how a website's features function in meeting user needs and what are the advantages of the entire website [6]. There are six dimensions for measuring website quality, namely: 1) Information, dimension that measures the quantity and quality of information about a product or service; 2) Ease of Use, an important dimension because it will make consumers feel intimidated by the complexity of the internet; 3) Fulfillment/reability, the dimension that explains how the seller can fulfill his promise in delivering the promised product or service; 4) Site design, including graphics, colors, images, videos that create interest in consumers to use the website; 5) Security/privacy, dimensions that concern the protection of consumer personal data that will not be shared and refer to security for users from fraud or financial loss, and 6) Interactivity, dimensions that refer to the ability of consumers to determine services as needed and modify content in real time [4].

E-wom is a negative or positive statement about a service or product made by former customers, actual customers, and potential customers through the internet [15]. There are three dimensions for measuring e-wom including: 1) Intensity. The intensity in e-wom is defined as how many opinions are written by consumers on social networks; 2) Valence of Opinion. Valence of opinion is the customer's opinion both negative and positive about a service, product, and brand. Valence of

opinion includes positive recommendations and complaints from users of social networks; and 3) Content. Content is information on social networking sites related to services and products [13].

The perception of value as the difference between the assessment of prospective customers for all benefits and sacrifices of an offer against the alternative [17]. If the cost with the product or service offered is not in accordance with the expectations of consumers, it will lead to dissatisfaction with a product or service, however, if the costs with the product or service offered are in line with expectations or even exceed consumer expectations, consumers will be satisfied. There are four aspects of the dimension of perception which consist of: a) Emotional value, dimensions that arise from positive emotions and feelings that arise due to consuming a service or product; b) Social value, dimensions obtained from the ability of services or products to improve consumers' social concepts; c) Functional value, dimensions derived from the quality of services or products; and d) Price value, dimensions obtained from perceptions of expected performance and quality of services or products [26].

Purchasing decisions are decisions to make purchases about what to buy, when to buy, how to buy, and where to buy [1]. Purchase decisions can be made if there are alternative choices. If alternative choices are not found, decision making will become more difficult. Purchasing decisions are important because they can be considered by the company regarding the marketing strategies that the company will make [23]. UTAUT is a technology acceptance model was proposed by Venkatesh, Morris, Davis, & Davis in 2003. This model combines eight models, namely: 1) Technology Acceptance Model ([10], [29]); 2) The Innovation Diffusion Theory [19]; 3) The Theory of Reasoned Action [12]; 4) The Theory of Planned Behavior [27]; 5) The Motivational Model [11]; 6) A model of combining TAM and TPB [27]; 7) The Model of PC Utilization [28]; and 8) The Social Cognitive Theory [9].

SCT's theory clarify that the interest in a person's behavior in receiving and using technology is influenced by five perceptions, namely: A) Performance expectancy. Performance expectancy is a construct of UTAUT which is intended to measure how much a person trusts technology and believes that by using the system it will help someone to achieve performance in his work); B) Effort expectancy. Effort expectancy is a level of effort for each individual to use a system to support his work; C) Social influence. Social influence is the level at which someone considers it important that other people need to help and convince themselves to be able to use a new system; D) Facilitating condition. Facilitating condition is a level of confidence in someone that infrastructure and technical in the company is available so that a company can support the use of the system; and E) Behavior Intention. Behavior intention is an intention for users to use the system consistently or repeatedly and assume they have access to a system.

TAM is a theory development from theory of reasoned action (TRA) and theory of planned behavior (TPB) as a theory that shows the factors that influence a person in accepting technology [10]. TAM's theory is increasingly developing.

There is a difference between the Davis model and the Wang Model, namely the addition of factors in the form of perceived credibility, trust, and perceived risk [31]. UTAUT model shows performance expectancy is a representation of five constructs from different models including perceived usefulness (TAM/TAM2 and C-TAM-TPB), extrinsic motivation (MM), job-fit (MPCU), relative advantage (IDT) and outcome expectations (SCT). Performance expectancy aims to increase one's trust that using the system will help [30]. E-application is one of the causes that can encourage consumers to conduct e-commerce activities.

Website quality, electronic word of mouth, and sales promotion had a significant effect on impulse buying [22]. This explains that e-application provides benefits to its users and the quality of e-application influences consumer decisions. Based on the description above, the hypothesis is formulated:

H1: The quality of e-application has a significant effect on the customer's decision to transact e-ticketing

E-wom is one of the most effective and efficient marketing strategies because comments and recommendations from someone are usually more reliable than information obtained from company advertisements. The key to e-wom is opinion leaders, namely people who have the power to influence decisions. Based on UTAUT's theory, a person's interest and behavior in using technology is influenced by social influence. Social influence is a representation of three constructs namely subjective norms (TRA, TPB, TAM), public image (IDT) and social factor (MPCU) [30]. Social influence refers to a person's feelings so that the person feels important to use an application. E-wom had a significant effect on shopping decisions [2] [21]. This explains that e-wom plays a role in the business world and provides benefits for companies to promote a product or service. Based on the description above, the hypothesis is formulated:

H2: E-wom has a significant effect on customer decisions on e-ticketing transactions

Perception of value is defined as a person's perception of the value of quality offered so that it has an influence on customer satisfaction [22]. The higher the value of a product or service, the consumer will increasingly like the product or service so that it will tend to make a purchase transaction. Perceived value has a significant effect on shopping decisions. Based on the description above, the hypothesis is formulated:

H3: Perception of value has a significant effect on the customer's decision to transact e-ticketing

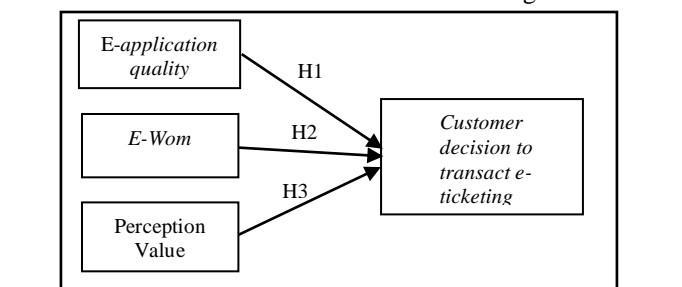


Fig. 1. Variable Model

III. RESEARCH METHOD

This study uses a quantitative approach using primary data. This approach aims to prove the relationship between the independent variable and the dependent variable. The independent variable found in this study is the quality of e-application, e-wom, perceived value and the dependent variable is the customer's decision.

This study uses a type of interval data because the data obtained from the questionnaire will be in the form of words so that the answers from the questionnaire need to be given a score equal to the interval scale because in the processing, the questionnaire answer scores are assumed to have the same characteristics as interval data. The data source in this study is primary data. Primary data is obtained directly from the respondent. The source of the data was obtained by the researcher by sending a questionnaire link to the respondent through direct message on Instagram.

This study uses a Likert scale, 1 for strongly disagreeing, 2 for disagreeing, 3 for uncertainty, 4 for agreeing, and 5 for strongly agreeing. The object of this research is Politeknik Negeri Batam students who are registered in Tix.Id. The selection of research objects is because the author wants to know the perception of Tix.Id users on the e-application. The data collection technique in this study was a survey conducted by distributing questionnaires to collect respondents' perceptions of the problems to be studied. The questionnaire will be conducted online in the form of a google form. The data collection technique in this study was a survey conducted by distributing questionnaires to collect respondents' perceptions of the problems to be studied. The questionnaire will be conducted online in the form of a google form. Data analysis techniques used by the authors are statistical analysis techniques, classic assumption tests, and hypothesis testing. This research requires tests of validity and reliability to measure the level of validity and reliability of the instrument.

IV. RESULT AND DISCUSSION

Respondents in this study were Politeknik Negeri Batam students with 112 respondents from a population of 4,584 students [3]. Respondents who filled out the questionnaire were selected based on criteria, namely internet users who knew of e-ticketing and internet users who had made purchases at Tix.Id. There are several characteristics of the data that can be seen in Table I.

TABLE I. CHARACTERISTICS OF RESPONDENTS

Explanation	Freq	Percentage
Distributed questionnaire	177	100%
Questionnaires that do not meet the requirements	65	36.72 %
Number of samples used	112	63.28%

Table II shows that the amount of data on each variable is 112 respondents from the sample of Politeknik Negeri Batam students. Each variable in Table 2 will be described as follows: 1) Quality of e-application. E-application quality variable has a mean value of 31.5804 and a standard deviation of 3.37355.

These results indicate that the mean value is greater than the standard deviation so it can be concluded that the assessment of the quality of e-application is high; 2) E-wom. E-wom variable has a mean value of 26.5357 and a standard deviation of 3.02818. These results indicate that the mean is greater than the standard deviation so it can be concluded that the assessment of e-wom is high; 3) Perception of Value. Perception variable value has a mean value of 23.1429 and a standard deviation of 2.88787. These results indicate that the mean is greater than the standard deviation so it can be concluded that the assessment of perceived value is high.; and 4) Purchasing Decisions. The purchase decision variable has a mean value of 30.8393 and a standard deviation of 3.83806. These results indicate that the mean is greater than the standard deviation so that it can be concluded that the assessment of purchasing decisions is high. The results of the validity test show that the calculated value of each indicator is greater than the r table value, this indicates an indicator of the variable (X), namely the quality of e-application, e-wom, perceived value, and variable (Y) that is a valid purchase decision as a measuring instrument in the research variable. The results of the validity test show that all research variables have Cronbach Alpha values >0.60 so it can be concluded that all instruments in this study are reliable.

The following is Table II which shows descriptive statistical data of each variable that will be analyzed in this study.

TABLE II. DESCRIPTIVE STATISTICS

	Min	Max	Mean	Std. Deviation
E-application Quality	22.00	40.00	31.5804	3.37355
E-Wom	20.00	35.00	26.5357	3.02818
Perception Value	16.00	30.00	23.1429	2.88787
Purchase Decision	20.00	40.00	30.8393	3.83806
Valid N (listwise)				

The results of data that have been processed with the classic assumption test shows that all data are normally distributed, there is no multicollinearity, and there is no heteroscedasticity so that the processed data has met the criteria for a simple regression model. Simple linear regression analysis is used to determine the direction of the relationship between the independent variable and the dependent variable. The results of simple linear regression calculations can be seen in Table III.

TABLE III. SIGNIFICANCE TEST

Model	Unstandardized Coefficients		Sig.
	B	Std. Error	
Constant	1.541	2.450	0.531
E-application quality	0.302	0.092	0.001
E-wom	0.301	0.110	0.007
Perception Value	0.508	0.116	0.000

The following is Table IV which shows the test of the coefficient of determination of each variable to be analyzed in this study.

TABLE IV. SIGNIFICANCE TEST

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.766 ^a	0.587	0.576	2.50063

Table IV shows that the adjusted square value is 0.58. This shows that 58% of variable variations can be explained by the variables of e-application, e-wom, and perceived value quality. The remaining 42% is explained by other variables outside the study. Hypothesis testing is done by testing the significance partially from the significance value and probability value. The test is based on the results of a simple regression analysis.

V. CONCLUSION

This study aims to determine whether there is a relationship between the quality of e-application, e-wom, and perceived value that influence the decision to transact Politeknik Negeri Batam students with four majors namely Business Management, Informatics Engineering, Electrical Engineering and Mechanical Engineering. SO, a conclusion can be drawn regarding the results of testing the variables suspected of influencing the decision to transact e-ticketing as follows: 1) There is the influence of the quality of e-application on customer decisions on e-ticketing transactions, 2) There is an e-wom influence on customer decision to transact e-ticketing, and 3). There is an influence of perceptions of customer decisions on e-ticketing transactions.

This study has several limitations, they are: 1) This study only involved respondents in a small number of 112 respondents so that they could not be generalized to large numbers of groups, 2) The respondents only focused on Tix.Id users at Politeknik Negeri Batam, 3) This study uses data collection methods with questionnaires so as to allow the data to be subjective, and 4) Difficulty in getting data because there are some respondents who fill out questionnaires inconsistently.

This research was shown to provide knowledge about the factors that influence purchasing decisions to Politeknik Negeri Batam students. Advice for application providers is to better understand the importance of the factors that influence purchasing decisions. Suggestions for further research are to be able to develop from the limitations of this study such as using a more varied sample, adding or using other variables such as risk perception, trust, and service quality, increasing the number of responses to be studied, and expand the research population.

ACKNOWLEDGMENT

We would like to express my special thanks of gratitude to Politeknik Negeri Batam who gave me the golden opportunity to do a lot of research. Secondly, we would also like to thank respondents who helped me a lot in finalizing this project within the limited time frame.

REFERENCES

- [1] AL-Huwaishel, N., & AL-Meshal, D. (2018). The Impact of Perceived Value, Quality, and Loyalty on Purchase Decision in the Accessories Department: Study on Saudi Females. *British Journal of Marketing Studies*, 6(4), 21-31.

- [2] Armstrong, G., & Kotler, P. (2008). Prinsip-prinsip Pemasaran (Vol. 1). Jakarta: Erlangga.
- [3] Apriani, D., & Pradana, M. (2017). The Influence of Electronic Word of Mouth Towards Consumers Purchase Decision at Bakso Boedjangan, Bandung. *Journal of Business Management*, 3(1), 38-44.
- [4] Batam, P. N. (2019). Retrieved April 4, 2019, from www.sia.polibatam.ac.id.
- [5] Bressoles, G., Durrieu, F., & Giraud, M. (2007). The Impact of Electronic Service Quality's Dimensions on Customer Satisfaction and Buying Impulse. *Journal of Customer Behaviour*, 6(1), 37-56.
- [6] Brynjolfsson, E., & Smith, M. (2000). Frictionless Commerce? A Comparison of Internet and Conventional Retailers. *Management Science*, 46(4), 563-585.
- [7] Chang, H. H., & Chen, S. W. (2008). The impact of Online Store Environment Cues on Purchase Intention: Trust and Perceived Risk as a Mediator. *Online Information Review*, 32(6), 818-841.
- [8] Chen, L. (2013). The Quality of Mobile Shopping System and Its Impact on Purchase Intention and Performance. *International Journal of Managing Information Technology (IJMIT)*, 5(2), 23-32.
- [9] Chevalier, J., & Mayzlin, D. (2006). The Effect of Word of Mouth on Sales: Online Book Reviews. *Journal of Marketing Research*, 43, 345-354.
- [10] Compeau, D., & Higgins, C. (1995). Computer Self-Efficacy: Development of a Measure and Initial Test. *MIS Quarterly*, 19(2), 189-211.
- [11] Davis, F. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319-340.
- [12] Davis, F., Bagozzi, R., & Warshaw, P. (1992). Extrinsic and Intrinsic Motivation to Use Computers in the Workplace. *Journal of Applied Social Psychology*, 22(14), 1111-1132.
- [13] Fishbein, M., & Ajzen, I. (1977). Attitude-Behavior Relations: A Theoretical Analysis and Review of Empirical Research. *Psychological Bulletin*, 84(5), 888-918.
- [14] Goyette, I., Ricard, L., Bergeron, J., & Marticotte, F. (2010). e-WOM Scale: Word of Mouth Measurement Scale for e-Services Context. *Canadian Journal of Administrative Sciences*, 27(1), 5-23.
- [15] H. Gunawan and H. Karimah, "The Six Sigma Approach for the Development of Accounting Information System Performance", *JAAT*, vol. 2, no. 1, pp. 15-21, Mar. 2017.
- [16] Hennig-Thurau, T., Gwinner, K., Walsh, G., & Gremler, D. (2004). Electronic Word of Mouth Via Consumer Opinion Platforms: What Motivates Consumers to Articulate Themselves on the Internet? *Journal of Interactive Marketing*, 18(1), 38-52.
- [17] Jalilvand, M. R., & Samiei, N. (2012). The Effect of Electronic Word of Mouth on Brand Image and Purchase Intention: An Empirical Study in the Automobile Industry in Iran. *Marketing Intelligence & Planning*, 30(4), 460-476.
- [18] Kotler, P., & Keller, K. (2009). *Manajemen Pemasaran*. Edisi 12 Jilid 2. Jakarta: INDEKS.
- [19] Kurniawan, R., Kusumawati, A., & Priambada, S. (2018). Pengaruh Kualitas Website (Webqual 4.0) Terhadap Kepercayaan dan Dampaknya pada Keputusan Pembelian pada Website E-commerce. *Jurnal Administrasi Bisnis*, 62(1), 198-206.
- [20] LaQuey, T. (1997). Sahabat Internet: Pedoman Bagi Pemula untuk Memasuki. Bandung: ITB.
- [21] Moore, G., & Benbasat, I. (1991). Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation. *Information Systems Research*, 2(3), 192-222.
- [22] Palilati, A. (2007). Pengaruh Nilai Pelanggan, Kepuasan Terhadap Loyalitas Nasabah Tabungan Perbankan Di Sulawesi Selatan. *Jurusan Ekonomi Manajemen, Fakultas Ekonomi*, 9(1), 73-81.
- [23] Piarna, R. (2016). Pengaruh Kualitas Website Terhadap Kepercayaan Pelanggan dalam Menentukan Keputusan Bertransaksi Pada E-commerce. *Jurnal Ekonomi dan Bisnis Indonesia*, 1(2), 1-7.
- [24] Priansa, D. J. (2016). Pengaruh E-wom dan Persepsi Nilai Terhadap Keputusan Konsumen untuk Berbelanja Online di Lazada. *Jurnal Ecodemica*, 4(1), 117-124.
- [25] Sugianto, Y. M. (2016). Pengaruh Website Quality, Electronic Word of Mouth, dan Sales Promotion Terhadap Impulse Buying pada Zalora. *Jurnal Strategi Pemasaran*, 3(2).
- [26] Suharno. (2010). *Marketing in Practice*. Yogyakarta: Graha Ilmu.
- [27] Sulistiyowati, L. N., & Iswara, S. (2008). Pengaruh Persepsi Atas Produk dan Pelayanan Terhadap Kepuasan Pelanggan dan Perilaku Word of Mouth (WOM) (Studi Pada LBB "X" Maospati, Magetan). *Jurnal Ilmiah Media Soerjo*, 3(2), 17-32.
- [28] Sumarwan, U., Fachrodji, A., Nursal, A., Nugroho, A., Nurzal, E. R., Setiadi, I. A., . . . Alamsyah, Z. (2010). *Pemasaran Strategik: Perspektif Value-Based Marketing dan Pengukuran Kinerja*. Bogor: IPB Press.
- [29] Sweeney, J., & Soutar, G. (2001). Consumer Perceived Value: The Development of a Multiple Item Scale. *Journal of Retailing*, 77, 203-220.
- [30] Taylor, S., & Todd, P. (1995). Assessing IT Usage: The Role of Prior Experience. *MIS Quarterly*, 19(4), 561-570.
- [31] Thompson, R., Higgins, C., & Howell, J. (1991). Personal Computing: Toward a Conceptual Model of Utilization. *MIS Quarterly*, 15(1), 125-143.
- [32] Venkatesh, V., & Davis, F. (2000). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science*, 46(2), 186-204.
- [33] Venkatesh, V., Morris, M., Davis, G., & Davis, F. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3), 425-478.
- [34] Wang, Y. - S., Wang, Y. - M., Lin, H. - H., & Tang, T. - I. (2003). Determinants of User Acceptance of Internet Banking: an Empirical Study. *International Journal of Service Industry Management*, 14(5), 501-519.
- [35] Wijaya, T., & Paramita, E. L. (2014). Pengaruh Electronic Word of Mouth (e-WOM) terhadap Keputusan Pembelian Kamera DSLR. *Research Method and Organizational Studies*, 12-19.