THE IMPACT OF ELECTRONIC WORD OF MOUTH AND DIGITAL PAYMENT ON ELECTRONIC BUSINESS APPLICATIONS

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Abstract

With the advancement of technology and information, many company sectors now use technology and media as a tool in marketing. Advertising development has become a contemporary trend for achieving long-term corporate performance. However, issues develop when the firm chooses the improper social networking platforms, resulting in a detrimental influence on the company itself. The purpose of this research is to look into the impact of electronic word of mouth and digital payment convenience on purchasing decisions made on the OLX application in Pangandaran Regency. In this study, 111 people were chosen at random to use an online shopping application on their smartphone. In this study, a multiple linear regression analysis strategy utilizing SPSS software version 26 is applied. The findings indicate that electronic word of mouth and digital payment variables have an impact on purchase intent and can be classified as positive.

Keywords: Electronic word of mouth, Digital payment, Purchase Intention

Introduction

When mobile has shifted from what was previously used only as a communication tool, it has now evolved into a versatile tool and become a necessity for everyone. (Kao, 2017). Digital payments in conducting marketing and promotion activities are a phenomenon that is currently widely used by companies to promote products, services and ideas. (Ahmad, 2019; Osei-Frimpong et al., 2019). Recently, many companies have entered and used digital payments to make it easier to make transactions. According to Peterson, (2018) celebrity endorsers can play an important role in the promotion process. This trend is visible in developing countries along with technological and information advancements. (Wang, 2017). Celebrity endorsement is felt to have benefited many companies financially. The unprecedented development of social media in everyday life has provided plenty of opportunities to connect with customers through the platform. (Kamel, 2020). But with its development, social media advertising gradually leads to increased user fatigue, it seems that many people ignore the ads that pop up from the platform.

Among the many innovative approaches that companies have tried today is influencer marketing that emerges as a successful approach to connecting with potential customers on social media. (Roy, 2021). Influencers used on social media are users who collect followers by creating online content. E-Wom is a deeper psychological bond with their followers by sharing content that revolves around their lifestyle and interests. Followers' positive perception of these influencers makes their message extremely effective in terms of creating the desired brand impact. Previous research conducted by Arora, (2020) suggested that the role of e-Wom does not influence consumer purchasing decisions. Prentice, (2017) stated that users of digital payment and e-Wom can provide influence that can arouse the intention of motivation to make a purchase. Consequently, the researchers found that there was a visible inconsistency

in the results so that researchers questioned the role of electronic word of mouth and digital payment in purchasing decisions. The aim of this study is to re-develop a model or concept in explaining the purchase decision process in the context of e-commerce business. As for the formulation in this study is, (1) how much influence electronic word of mouth on purchase decisions on e-commerce applications, (2) how much impact the use of digital payment on purchasing decisions on the ecommerce application, (3) how great influence the e-word of mouse and use of electronic payment on the purchase decision on ecommerce applications.

Theory and development of hypotheses

Electronic Word of Mouth

Electronic word of mouth (EWOM) is a positive or negative statement that gives statements from customers about products or services from social media. (Chan, 2021). Mahadevan, (2021) stated Word of Mouth is the process of passing information from person to person and plays a key role in customer purchasing interests. In addition, in commercial situations, e-Wom involves customers to share attitudes, opinions, or reactions about a business, product, or service with others. (Pratminingsih, 2019). Positive e-Wom is considered a powerful marketing communication medium for companies to influence customers. The e-Wom function is based on social networking and trust, people rely on family, friends and others in their social networks. Mahmud, (2020) mentions that the sender of the message has no intention of requesting so this is what makes the electronic word of mouth have a high level of trust and credibility. According to Torres, (2019) promotional media can provide an influence to get consumers while consumers use social media as a tool in searching for needs. According to Kuo, (2019) there are four dimensions in the variable word of mouth, interaligned intensity, negative valence, positive valence and content. The Yuan Research, (2020) states that e-Wom has a positive effect on consumer purchasing decisions on online business

Digital Payment

The emergence of various online purchases provides another dimension in consumerism in contemporary society (Dahlberg, 2015). With the presence of digital transactions, society is plagued by convenience and ease of transaction. In order to facilitate transactions, it is also necessary to use modern payment transaction tools that can facilitate consumers in the transaction, i.e. using non-cash transaction. According to Alburquerque (2014) The use of electronic money is more convenient than the use of cash (in small-value transactions), because the customer does not need to have an amount of cash for the transaction. The system of use of digital money today has been supported by a variety of applications launched by companies that have been integrated with the payment system with electronic money so that people can use the facilities in transactions easily. According to Andrianaivo and Kpodar (2012) there are types of transactions in electronic money (digital money) namely; issuance issue or recharge (top-up), transaction, transfer, cash withdrawal, and refund.

Purchase Intention

Purchase intention is the desire of a person against the fulfillment of needs and desires in the mind of consumers. Consumer intentions are always hidden and no one can know what the consumer wants and expects. (Lee et al., 2020). According to Singhal et al., (2019) Purchase intention is a tendency to buy a brand and is generally based on the correspondence between purchase motives with attributes or characteristics of the brand that can be considered. According to Imelia & Ruswanti, (2017) purchase intention can be measured through the probability dimension of consumer purchase plans for a product, definitely would refer to consumer certainty in a product and probability refers to the possibility of consumers in buying a product. (Bigoin-Gagnan & Lacoste-Badie, 2018; Kim et al., 2020). Purchase intention is associated with 2 (two) categories, namely the first category of purchase intention against the product category only or commonly called planned purchase even though the choice against the brand is

made at the time of purchase (point of sales). (Rana, 2017). The first category is the result of products with high involvement and extensive problem solving. (extended problem solving). In this case, consumers will have more desire to spend time and energy in shopping. The second category is the final decision will probably depend on promotions such as discounts, special displays, and more. According to Chetioui et al., (2020) there are many factors that can influence purchase intentions, one of which according to Boateng, (2021) is e-wom, and the use of influencers.applications.

Conceptual Framework and Hypotheses
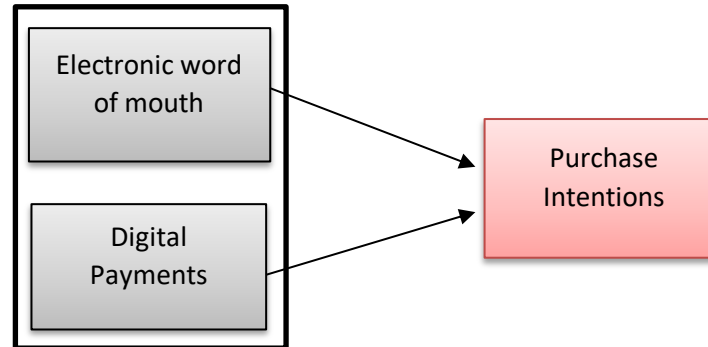
Effect of Electronic Word of Mouth on Purchase Intention

A word of mouth communication carried out through social media will greatly affect consumers who are interested in suggestions from people who have used the product and have experience with the product (Mahadevan, 2021). Mahmud's research (2020) states that a person will trust the opinions of other people who have experience with a product more when compared to advertisements and other media.

H1. There is an influence between electronic word of mouth on purchase intention.

The effect of Digital Payment on purchase intention

Misra (2019) states that the use of digital payments is significant for user attitudes. Furthermore, the use of digital payments can be influenced by various characteristics, namely social media and the human factor itself and interactions with other related users. Chakraborty (2020) states that the use of digital payments has an effect on purchase intention, this is based on the premise that the information technology in question is that the e-payment system has become a tool that facilitates transactions.

H2. There is an influence between digital payments on purchase intention

The effect of electronic word of mouth and digital payments on purchase intention

Electronic word of mouth is a promotional media that can have an impact on getting consumers as long as consumers use social media as a tool in finding needs (Chakraborty, 2020). However, this cannot work effectively if it is not supported by the use of digital payments in promotional media. Song's research (2020) states that the use of digital payments can have a positive effect on attracting consumer buying interest.

H3. Electronic word of mouth and digital payment endorsements have an effect on purchase intention.

Research methods

In this study, researchers intend to investigate the effect of electronic word of mouth and digital payments on consumer purchase intentions in e-commerce applications in Pangandaran Regency.This type of research is descriptive verification to test hypotheses using statistical calculations. The research method used is the explanatory method. According to Sugiyono (2012) Explanatory research is a research method

that intends to explain the position of the variables studied and have a causal relationship between one variable and another.In this study, researchers distributed questionnaires online which would direct the object to several questionnaire questions. Furthermore, researchers select respondents who use e-commerce applications. The population was selected as many as 111 people and selected incidentally who met the criteria. The sample in this study is the population itself. The data collection methods used in this study were observation, interviews and questionnaires using a Likert scale of 1 to 5. A questionnaire is said to be valid if the questions on the questionnaire are able to reveal something to be measured.Data analysis was performed using multiple linear regression with the equation $Y = a+b_1X_1+b_2X_2+e$ using SPSS 23 software.

Result and Discussion

Respondent profile

The results of the distribution of 111 respondents showed that the results were obtained as follows:

Table 1.1 Profile of respondents

Respondent Profile		Percentage
Gender	Man	68%
	Woman	32%
Age	20- 30 yrs	72%
	31 - 40 yrs	28%

Source: Data processed 2020

In the table above, the results show that 68% of respondents and 32% are women. Respondents in this study were on average > 20 years old. The results of the descriptive analysis test can be seen in the table below:

Table 1.2. Descriptive Analysis Results

No	Variable	Percentage of Average Score	Interpretation
1	Electronic Word of Mouth (X1)	85.47%	Very good
2	Digital payments (X2)	75.17%	Good
3	Purchase intention (Y)	76.81%	Good

Source: Data processed 2020

Table 2 shows that electronic word of mouth (Ewom) is in the very good category, digital payment (DP) and purchase intention (PI) are in the good interpretation category. The classic assumption test is as follows:

Table 1.3. Normality test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residuals
N		111
Normal Parameters, b	Means	.0000000
	std. Deviation	1.06319280
Most Extreme Differences	absolute	044
	Positive	.033

Negative	-.044
Test Statistics	044
asymp. Sig. (2-tailed)	.058c
a. Test distribution is Normal.	
b. Calculated from data.	
c. Lilliefors Significance Correction.	

In table 1.3 it can be seen that the significance value is 0.0058> 0.05. So it can be concluded that the data used is normally distributed. The multicollinearity test is as follows:

Table 1.4 Multicollinearity Test

Coefficientsa			
Model		Collinearity Statistics	
		tolerance	VIF
1	Electronic word of mouth	.550	1,818
	Digital Payments	.738	1,354
a. Dependent Variable: Purchase Intention			

Source: Data processed 2022

In table 1.4 it can be seen that the independent variable has a tolerance value of not less than 0.10. The Variance Inflation Factor (VIF) value also shows that the independent variable has a VIF value of no more than 10. So it can be concluded that multicollinearity does not occur in the independent variables.

Regression Test Results

From the output above it is known that the intercept value and the regression coefficient so that the multiple linear regression equation can be formed as follows:

$Y = 6.013 + 0.271 X_1 + 0.216 X_2 + e$

Table 3. Regression Test Results

Model		Unstandardized Coefficients		standardized Coefficients	t	sig.
		B	std. Error	Betas		
1	(Constant)	6,013	1,497		4,038	0.000
	e-Wom	0.271	0.064	0.250	3,334	0.001
	Digital Payments	0.216	0.073	0.179	2,708	0.014

a. Dependent: Purchase Intention

Source: Data processed, 2022

The above equation can be interpreted as follows:

$a = 6.013$ It means if the electronic word of mouth (e-Wom) and digital payment variables are zero then the purchase intention variable will be worth 6.013 units, thus it can be seen that the regression lines intersect the Y axis at point 6.013.

$b_1 = 0.271$ meaning if e-Wom increases by one unit while the other variables are constant, then the e-Wom variable will increase by 0.241 units.

$b_2 = 0.216$ means that if the digital payment digital payment increases by one unit while the other variables are constant, then the digital payment variable will increase by 0.286 unit.

Partial and simultaneous hypothesis testing

From the results of the acquisition of the above values it is apparent that the t-calculated value of the obtained variable Ewom 3,334 > t table (1,97214), in accordance with the test criteria of the hypothesis that Ho was rejected and Ha received. That is, in part, the e-Wom variable has a significant influence on consumer purchase intentions on e-commerce applications. The digital payment variable was obtained as 2,708 > t tables (1,97214), according to the test criteria of the hypothesis that Ho was rejected and Ha received. In part, digital payment variables have a significant impact on purchase intention on e-commerce applications. Simultaneous testing is as follows:

Table of 4. Simultaneous test results

	Model	Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	352,657	3	117,552	28,714	0.000b
	residual	804,363	196	4.104		
	Total	1157,020	199			

     a.   Predictors: (Constant), Digital payments, e-Wom
     b.   Dependent Variable: Purchase intention
     Source: SPSS Output Appendix (2022)

Based on the ANOVA test, the calculated F value is 28.714 with a significant value of 0.000. From the calculation of the F table, namely at the level of $\alpha = 0.05$, df1 = k – 1 = 4 – 1 = 3, and df2 = n - k = 200 - 4 = 196, an F table of 2.65 is obtained. So when compared, F count > F table, namely 22.821 > 2.65 so it is concluded that electronic word of mouth (e-Wom) and digital paymentssimultaneously influencing consumer buying intentions in e-commerce applications in Pangandaran Regency.

Determination Coefficient Test

From the calculation results, the coefficient of determination is 0.726, which means that the effect of the two independent variables on the dependent variable is 72.6%. While 27.4% or the rest is influenced by other variables not examined in this study.

Table 5. Test results for the coefficient of determination

Model	R	R Square
1	.815a	.726

     Source: Data processed, 2021

The Effect of Electronic Word of Mouth (e-Wom) Against Purchase Intention on E-Commerce Applications

In this study, the responses on the items of questions about electronic word of mouth (e-Wom) are already in the agreed category, meaning that companies that have a good image can shake a good e-wom so that it can have an impact on the performance of the business itself. It is also apparent from the results of the calculation that the respondents' responses that have been shown previously, from each indicator submitted are included in the agreed category. Based on the test results of the partial hypothesis or the test-t that has been carried out can be concluded that the variable e-wom shows that H0 is rejected and H1 is accepted, meaning it is important for business actors especially in the context of online business to maintain relationships and expand the network to remain competitive in the face of competition. ()

The Effect of Digital Payment on Purchase Intention on E-Commerce Applications

In this study, responses about Digital payments are in a very good category. This shows that the ability to use digital payments has become one of the strategies for online business players, especially in the digital marketplace. Seeing from the results of the calculation of respondent responses that have been shown previously, from each indicator submitted belongs to the category of excellent. Based on the test results of the partial hypothesis or test-t that has been carried out can be concluded that the digital payment variable endorsement indicates that H0 is rejected and H1 is accepted. (Roper & Love, 2018).

The impact of e-Wom and Digital Payment on consumer purchase intent on e-commerce applications.

Based on the test results of the hypothesis simultaneously carried out, it can be concluded that the two free variables, E-wom and Digital payment, influence the Purchase intention in using e-commerce applications in the Banking District. In the results of ANOVA acquisition the conclusion that can be obtained shows that the e-Wom variable is a variable that has an important influence on the success of online business especially in making promotions to build a competitive advantage. The results also showed consistency with previous research that has been shown in the literature review that e-Wom is one of the factors in building sustainable business performance.

Conclusion

The results of this study reveal that at present the growth of online business in various countries has experienced a considerable increase, especially in Indonesia. The rapid growth of online business, of course, is accompanied by high competition as well. This requires online business actors to review their chosen strategies. In this study, the role of digital payment and electronic word of mouth provides a significant influence in shaping the creation of knowledge for business actors to survive in the face of competition especially in today's all-digital business context. However, it still feels not enough if the organization does not have a good strategy in promoting. The development of consumer behavior models in online business is a challenge for academics that is highly anticipated by online marketers. However, the model tested in this study gives a picture that in the context of online business, the use of digital payment and electronic word of mouth variables are one of the factors in business success. Therefore, it is advisable for companies or organizations to always maintain and develop networks in order to gain knowledge of which it is especially useful for sustainable business strategies. For subsequent researchers, the findings of this study are limited to only two variables, then for future researchers to add another variable either as a free variable or moderation to explain any factor that can affect purchase intention.

References

Ahmad, A. (2019). The impact of young celebrity endorsements in social media advertisements and brand image towards the purchase intention of young consumers. *International Journal of Financial Research*, *10*(5), 54–65. https://doi.org/10.5430/ijfr.v10n5p54

Arora, D. (2020). Celebrity endorsements – the interplay between intellectual property law and the consumer protection act, 2019. *Journal of Intellectual Property Rights*, *25*(6),

Bigoin-Gagnan, A., & Lacoste-Badie, S. (2018). Symmetry influences packaging aesthetic evaluation and purchase intention. *International Journal of Retail & ....* https://www.emerald.com/insight/content/doi/10.1108/IJRDM-06-2017-0123/full/html

Boateng, S. L. (2021). Electronic word of mouth (eWOM) and makeup purchase intention among Gen-Z females: The serial mediating effect of brand image and brand integrity. In *International Journal of Customer Relationship Marketing and Management* (Vol. 12, Issue 2, pp. 17–35). https://doi.org/10.4018/IJCRMM.2021040102

Bupalan, K. (2019). Consumers' repurchase intention towards counterfeit products. *International Journal of Supply Chain Management*, *8*(3), 973–981. https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85068349618&origin=inward

Chakraborty, S. (2020). Measuring the impact of celebrity endorsement on consumer purchase intention of beauty soap in Indian context. *International Journal of Scientific and Technology Research*, *9*(2), 1019–1022.

Chan, H. (2021). Culture and Electronic Word of Mouth: A Synthesis of Findings and an Agenda for Research. *Journal of Global Marketing*, *34*(3), 165–169. https://doi.org/10.1080/08911762.2021.1903642

Chen, Z. (2019). The influence of e-commerce live streaming on lifestyle fit uncertainty and online purchase intention of experience products. In *Proceedings of the Annual Hawaii International Conference on System Sciences* (Vol. 2019, pp. 5081–5090).

Chetioui, Y., Benlafqih, H., & Lebdaoui, H. (2020). How fashion influencers contribute to consumers' purchase intention.

Cuomo, M. T. (2019). Celebrity endorsement and the attitude towards luxury brands for sustainable consumption. *Sustainability (Switzerland)*, *11*(23).

Dhandhnia, K. A. (2018). Emotional branding through celebrity endorsements. In *Brand Culture and Identity: Concepts, Methodologies, Tools, and Applications* (Vol. 1, pp. 33–47).

Imelia, R., & Ruswanti, E. (2017). Factors affecting purchase intention of electronic house wares in Indonesia.

Jaya, U. A., & Raya, A. N. (2022). PENGARUH E-COMMERCE DAN MEDIA SOSIAL TERHADAP PENJUALAN UMKM DI ERA PANDEMI (STUDI KASUS DESA CIBOLANG). Valuasi: Jurnal Ilmiah Ilmu Manajemen dan Kewirausahaan, 2(2), 729-738.

Kamel, N. A. (2020). Examining the mediating role of celebrity endorsement in green advertisements to improve the intention of Egyptian Millennials towards environmental behaviours in tourist destinations. *Tourism and Management Studies*, *16*(4), 7–21. https://doi.org/10.18089/tms.2020.160401

Kao, K. C. (2017). Online consumers' responses to deal popularity as an extrinsic cue. *Journal of Computer Information Systems*, *57*(4), 374–384. https://doi.org/10.1080/08874417.2016.1232997

Kim, J. H., Song, H., & Youn, H. (2020). The chain of effects from authenticity cues to purchase intention: The role of emotions and restaurant image. *International Journal of Hospitality Management*.

Ku, Y. (2019). The Effect of Internet Celebrity's Endorsement on Consumer Purchase Intention. In *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)* (Vol. 11588, pp. 274–287). https://doi.org/10.1007/978-3-030-22335-9_18

Kuo, H. C. (2019). The Impact of Electronic Word-of-Mouth on Customer Satisfaction. *Journal of Marketing Theory and Practice*, *27*(3), 331–348. https://doi.org/10.1080/10696679.2019.1615840

Lee, E. J., Bae, J., & Kim, K. H. (2020). The effect of environmental cues on the purchase intention of sustainable products. *Journal of Business Research*.

Lopes, E. L. (2021). The effect of celebrity endorsement on omission neglect at different levels of skepticism. *International Journal of Consumer Studies*. https://doi.org/10.1111/ijcs.12729

Mahadevan, K. (2021). Trends in electronic word of mouth research: A bibliometric review and analysis. *Indian Journal of Marketing*, *51*(4), 8–26. https://doi.org/10.17010/ijom/2021/v51/i4/158468

Mahmud, M. S. (2020). Impact of Electronic Word of Mouth on Customers' Buying Intention Considering Trust as a Mediator: A SEM Approach. *Global Business Review*. https://doi.org/10.1177/0972150920976345

Mumtahana, H. A., Nita, S., & Tito, A. W. (2017). Pemanfaatan Web E-Commerce untuk meningkatkan strategi pemasaran. Khazanah Informatika: Jurnal Ilmu Komputer dan Informatika, 3(1), 6-15.

Misra, S. K. (2019). Factors influencing consumer choice of celebrity endorsements and their consequent effect on purchase decision. *International Journal on Emerging Technologies*, *10*(2), 392–397.

Osei-Frimpong, K., Donkor, G., & ... (2019). The impact of celebrity endorsement on consumer purchase intention: An emerging market perspective.

Peterson, N. (2018). Celebrity Endorsements and Donations: Empirical Investigation of Impact on Philanthropic Giving. *Business Perspectives and Research*, *6*(2), 79–89. https://doi.org/10.1177/2278533718765533

Pratminingsih, S. A. (2019). The influence of electronic word of mouth and brand image on buying decision. *Journal of Advanced Research in Dynamical and Control Systems*, *11*(3), 995–1002.

Prentice, C. (2017). Celebrity endorsement and stock market return. *Marketing Intelligence and Planning*, *35*(4), 529–543. https://doi.org/10.1108/MIP-10-2016-0197

Rana, J. (2017). Consumer behavior and purchase intention for organic food: A review and research agenda. *Journal of Retailing and Consumer Services*, *38*, 157–165. https://doi.org/10.1016/j.jretconser.2017.06.004

Roper, S., & Love, J. H. (2018). Knowledge context, learning and innovation: an integrating framework. *Industry and Innovation*, *25*(4), 339–364. https://doi.org/10.1080/13662716.2017.1414744

Roy, S. (2021). Celebrity endorsements in destination marketing: A three country investigation. *Tourism Management*, *83*. https://doi.org/10.1016/j.tourman.2020.104213

Singhal, D., Jena, S. K., & Tripathy, S. (2019). Factors influencing the purchase intention of consumers towards remanufactured products: a systematic review and meta-analysis.

Song, S. (2020). Celebrity endorsements for luxury brands: followers vs. non-followers on social media. *International Journal of Advertising*, *39*(6), 802–823. https://doi.org/10.1080/02650487.2020.1759345

Suharto, S., Junaedi, I., Muhdar, H., Firmansyah, A., & Sarana, S. (2022). Consumer loyalty of Indonesia e-commerce SMEs: the role of social media marketing and customer satisfaction. International Journal of Data and Network Science, 6(2), 383-390.

Torres, J. (2019). The impact of trust and electronic word-of-mouth reviews on purchasing intention. In *International Journal of Entrepreneurship and Small Business* (Vol. 37, Issue 1, pp. 136–151).

Thorfiani, D., Suarsa, S. H., & Oscar, B. (2021). Teknologi E-commerce dan Pengalaman Konsumen. Jkbm (Jurnal Konsep Bisnis Dan Manajemen), 7(2), 139-148.

Viona, V., Yohanes, K., Kurniawati, L. S. M. W., Marta, R. F., & Isnaini, M. (2021). NARASI SHOPEE DALAM MENGEMBANGKAN EKONOMI KREATIF BERBASIS TEKNOLOGI E-COMMERCE DI ERA MODEREN. AGUNA: Jurnal Ilmu Komunikasi, 2(1), 46-65.

Wang, S. W. (2017). Consumers' attitude of endorser credibility, brand and intention with respect to celebrity endorsement of the airline sector. *Journal of Air Transport Management*, *60*, 10–17. https://doi.org/10.1016/j.jairtraman.2016.12.007

Yuan, Y. H. (2020). An empirical study on effects of electronic word-of-mouth and Internet risk avoidance on purchase intention: from the perspective of big data. *Soft Computing*, *24*(8), 5713–5728. https://doi.org/10.1007/s00500-019-04300-z