

# El Boca Electronic Ear in a Company Dedicated to the Sale of Pharmaceutical Products and Toiletry Articles. Peru Case

Lady Violeta Dávila Valdera (), Madeleine Espino Carrasco (), Danicsa Karina Espino Carrasco (), Luis Jhonny Dávila Valdera (), Anny Katherine Dávila Valdera (), Mayury Jackeline Espino Carrasco (), Royer Vasquez Cachay (), Ricardo Rafael Díaz Calderón (), Edson David Valdera Benavides (), and Karina Elizabeth Bravo Gonzales ()

Pedro Ruiz Gallo National University, Lambayeque, Peru lavidaval@gmail.com

<sup>2</sup> Señor de Sipan University, Pimentel, Peru

<sup>3</sup> Cesar Vallejo University, Chulucanas, Peru

**Abstract.** The purpose of the research is to determine the electronic word of mouth of a company dedicated to the sale of pharmaceutical products and toiletries, whose applied model was the one proposed by Matute, Polo & Utrilla (2015), the sample was 384 people surveyed, by what the approach applied was the quantitative and descriptive level, obtaining as a result a total score of 5.62 which expresses that the knowledge of the service through the eWOM is influencing the purchase decision and the amount of feedback of the eWOM applied in the company, so it is concluded that the eWOM has become a crucial component of the website, serving as its business card, this is due to the reviews and information provided by customers who have used the product in the past.

**Keywords:** Mouth ear electronic · pharmaceutical products · toiletry articles

### 1 Introduction

Word of mouth that is carried out over the Internet is also called electronic word of mouth. The eWOM are the comments either positive or negative about a product or service made by a new or old customer. Therefore, there is a difference between traditional and electronic word of mouth, since the traditional is a comment distributed in a limited way to a small group of people, while the electronic, the comments are made through a forum where there are more arguments, which the user can easily access, so they can read, comment and respond to the opinions of other people, without any limit (Handoko & Melinda, 2021).

<sup>&</sup>lt;sup>4</sup> Santo Toribio de Mogrovejo University, Chiclayo, Peru

<sup>&</sup>lt;sup>5</sup> National University of San Marcos, Lima, Peru

<sup>&</sup>lt;sup>6</sup> Cesar Vallejo University, Pimentel, Peru

For this reason, at an international level, electronic commerce (e-Commerce) in 2020 increased its income with 431 billion dollars and by 2025 a reach of 563 billion dollars is scheduled. In the same way, the Retail sector in 2020 grew by 27.6 and it is scheduled that by 2022 it will have generated 5.4 billion dollars (Martínez, 2021), given that the number of users in social networks increased in 53% of the world population (Álvarez, 2021). Being young people between the ages of 16 and 24 who spend more time browsing the internet, where women are the ones who interact the most on social networks, especially those pages that are based on recommendations and new ideas, unlike men who prefer only to read. Opinions (Borondo, 2021). With these statistics, online sales have become an advantage for cosmetics and beauty care companies, showing their wide range of products to users through their website. The pandemic reinforced the growth in online sales where it came to play a very important role in the face of reality (González, 2021).

In Peru, the Sales Manager of the pharmaceutical products and toiletries company commented that they developed the interactions due to the benefit that users between the ages of 18 and 39 had for buying and selling online, obtaining a business opportunity, since this could be done from home, for reasons of Covid-19.

Therefore, when an online platform obtains many sales, electronic word of mouth is given, either making or reading both positive and negative comments by people who have already had experience with the products (Berné et al., 2017). For this reason, companies must interact in the online environment, to strategically respond to comments that are in favor or against their product or service from their customers, with the aim of maintaining loyal customers and attracting new consumers., to prevent moments of dissatisfaction (Gondim & Araújo, 2020).

In an exploratory interview, an entrepreneurial partner of pharmaceutical products and toiletries, reveals that negative comments often made by consumers generate distrust in users, this suggests that the page possibly contains erroneous information about the products, since the Most of them are not responded to by the company and finally they are the same partners of the company that sometimes try to appease those comments that denigrate the brand, but this does not always happen. Therefore, in the company there is no protocol to deal with those situations created by the eWOM.

With the aforementioned, few investigations have taken a holistic approach corresponding to eWOM and the important role it plays in companies, along with its dimensions such as quality, quantity and credibility. Given this, the following research question arose: How is the electronic mouth-ear in the pharmaceutical and toiletries company, Chiclayo 2021?

In order to solve the problem announced, it is pertinent to consider the following objectives, as a general objective it was established to determine the electronic word of mouth. In addition, the specific objectives are to determine the quantity, credibility and quality of the eWOM in the company of pharmaceutical products and toiletries, Chiclayo 2021.

### 2 Literature Review

Regarding the background regarding the electronic mouth-ear variable, there is Bilal et al. (2021) who examined the effect on consumer purchase intentions of social media marketing components, including entertainment, engagement, eWOM, and trend. The

findings demonstrate that interaction, entertainment, eWOM, and fashion are core factors that specifically affect customer brand interest and purchase intent. Likewise, Shuaib et al. (2021) identified the factors that affect the credibility of electronic word-of-mouth stimulation through social networking sites, where the results show that SNS activities play an important role in building credibility of eWOM, which leads to shape the brand image and purchase intentions. As well as Truc et al. (2021) discovered and confirmed the e-WOM factors that influence the purchase intentions of users on Instagram, as a result it was shown that the fourth experience factor of the eWOM information provider positively impacts the purchase intention of users. on Instagram with decreasing levels such as information provider experience, e-WOM quantity and eWOM source credibility, and eWOM quality, respectively.

However, Budi (2019) studied the influence between Internet advertising and the practice of electronic word of mouth (eWOM) with customer perception and purchase intention in B2C electronic commerce, the results obtained from this study indicate that Internet advertising and eWOM have a positive effect on the perceived value of the customer and the perceived risk of buying on B2C e-commerce sites. Even Alabdullatif & Akram (2018) investigated the role of online customer reviews (eWOM) and review page key elements, the results show a significant impact of online review factors such as filters, quality, quantity, actuality, valence together with the characteristics of the property in the reservation decision of the clients. Something similar occurs with Muhammad et al. (2021) examined the impact of eWOM background on online purchase intention (OPI) of fashion-related products. Findings from this study found that all five eWOM antecedents, such as fashion involvement, sense of belonging, trust, bond strength, and informational influence, positively influence fashion product IPOs in China.

Regarding the theory, according to the Health Science Authority (2017), cosmetic products can be defined as a composition of natural or synthetic products intended to be used in various parts of the human body, with the purpose of cleaning, perfuming, improving or change consumers appearances to keep them in good condition. It is classified into various categories such as skin care products, hair care products, bath products, fragrance products, makeup products, personal care products, oral hygiene products, and manicure and pedicure products. (US Food and Drug Administration, 2017). In such a way, it was reported that sales of cosmetic products grew positively due to steady consumer demand, which reached USD 532 billion in 2017. Furthermore, the Asia Pacific region has the largest market share in the cosmetics industry. Worldwide with 3,000 million consumers (Zion Market Research, 2018). Therefore, the cosmetics industry is one of the prominent industries in the global market..

Likewise, regarding the variable under study, the eWOM is a positive/negative statement or comment made by a previous/current buyer about a product or company that is available to many people and institutions through the Internet (Henning-Thurau T., Gwinner, Walsh, & Gremler, 2004). In the customer's decision-making process, it is natural for him to seek the opinions of others first. Digital technology and the Internet have increased opportunities for consumers to access various types of eWOM provided by different people (Choi, Seo, & Yoon, 2017). In general, people can spread an eWOM message through several different social settings. Someone can spread eWOM messages to other people who have strong relationships with them (eg family, relatives, etc.)

and also an individual can spread eWOM messages to other people who have weak relationships with themselves (eg, as acquaintances, distant friends, etc.). According to Breazele (2009), negative electronic word of mouth is more powerful than positive word of mouth because perceived consumer dissatisfaction by consumers is easier to propagate through the Internet than face-to-face word of mouth. That is why the eWOM has a more important role in providing information on the risks contained in a product.

Therefore, the model adapted to the research belongs to Matute, Polo, and Utrillas (2015) who study the eWOM that is divided into: quantity, credibility, and quality.

eWOM quality: According to Asshidin (2016), quality can be deduced as knowledge of a certain service or product, which influences the purchase decision. According to Lin and Wang (2015), likewise the quality of eWOM is based on the level of interaction that a customer has had on the website over time, Lin and Wang (2015) therefore, the higher the level of quality, the lower the perception of risk, increasing the intention to purchase online. This is also how companies face this challenge of uncertainty in the web platform, it is for this reason that loyalty between the client and the brand must be built through trust (Mansour et al., 2014).

Quantity of eWOM: Ismagilova (2019), See-To and Ho (2013) confirm that the eWOM produced thanks to social networks does manage to influence the repurchase. On the other hand, according to Erkan & Evans (2016), Internet users are exposed, directly or indirectly, to a large number of eWOM and their information influences their decision-making.

In the same sense, the work of Pappas (2015) maintains that the quantity and quality of the information provided through eWOM has positive effects when buying.

eWOM credibility: The credibility of the information determines how much the receiver learns and adopts this information: if the information received is perceived as credible, the receiver will have more confidence to use it in the purchase decision (Sussman and Siegal 2003). Given that online information exchanges occur between people who may not have a prior relationship, it is essential to consider how the perceived credibility of information influences consumer behavior. Some studies have examined the relationship between eWOM credibility and purchase intention (Teng et al. 2017). For example, Koo (2016) surveyed 302 South Korean students and found that eWOM credibility has a significant positive effect on purchase intention for airline tickets, meals at a family restaurant, and skin care service.

### 3 Materials Y Methods

The present study has a quantitative approach, descriptive level. Therefore, the survey technique was used and the questionnaire as an instrument, with a non-probabilistic sampling procedure for convenience, composed of a 3-dimensional model that makes up a total of 18 indicators of electronic mouth-ear, evaluated on a Likert-type scale. of 7 points. The total sample was 384 male and female clients, between 18 and 45 years old, obtaining a reliability level of 0.95 according to Cron Bach's Alpha and KMO or Bartlett's sphericity test (<0.05) and the variance explained is 77.861%. Access to the questionnaire was provided through a link, sent through social networks, encouraging participants to pass this survey with their friends who present the same profile.

Regarding the data processing and analysis plan, obtained the information from the surveys applied through Google Drive, the data was entered into the Excel 2010 program, then the information was transferred to the statistical program SPSS v.25. The SPSS was also used for its statistical analysis and the cross tables to find the sociodemographic data, then a table was developed in Excel to find the average and group the items according to the dimensions and variable according to the objectives set (Table 1).

## 4 Results Y Discussion

Table 1. Demographic and behavioral data

		He commented on the website after his experience with pharmaceuticals and toiletries		
		Si	No	Total
Sex	Male	16%	12%	28%
	Female	38%	34%	72%
Age	18 to 25 years	30%	25%	55%
	26 to 33 years	15%	14%	29%
	34 to 45 years	9%	7%	16%
Shopping in the Web page	Two	9%	17%	26%
	Three	12%	6%	18%
	More than three	42%	14%	56%

Note. According to data obtained from surveys

It was found that, in terms of age, sex and purchases, it is young women who make more than three purchases on the website, and together with their experience, express their opinions, whether good or bad about the product (Annex 4). Given that women spend more time on social networks, they comment more than men, who only enter to read arguments from other clients (Borondo, 2021). Therefore, when an online platform obtains many sales, word of mouth is heard. Electronically, either by making or reading both positive and negative comments by people who have already had experience with the products (Berné et al., 2017). Therefore, it is inferred that men are the ones with the least interaction on the website of the company under study, while women, according to the number of purchases they make, provide more information according to their experience. Since, in the client's decision-making process, it is natural that they first seek information from other clients more than women. Digital technology and the Internet have increased opportunities for consumers to access various types of eWOM provided by different people (Choi, Seo, & Yoon, 2017) (Table 2).

According to the results presented, in terms of the quantity of eWOM with a higher average than the other dimensions, it can be explained why customers felt that they

Variable	Dimension	Average	Sub dimension	Average	Indicators
eWOM Average: 5,62	Quantity	5,74			CT1
					CT2
					CT3
	Credibility	5,49			CD1
					CD2
					CD3
	Quality	5,62	Present	5,64	CA1
					CA2
					CA3
			Comprehension	5,52	CC1
					CC2
					CC3
			Relevance	5,72	CR1
					CR2
					CR3
			Precision	5,58	CP1
					CP2
					CP3

**Table 2.** Result of the Electronic Ear Mouth and its dimensions

Note. According to the proposed model

needed information before making a purchase, but that it did not meet their expectations when they could not find it. Details about the article, which underlines the fact that his subsequent comments were aimed at inquiring about such aspects (information, details, mode of use). Alabdullatif & Akram (2018) show a significant impact of online review factors, as the quantity together with the characteristics of the property in the reservation decision of the clients. While Truc et al. (2021) showed that there is a decreasing level as the amount of e-WOM in relation to the provider's experience in terms of eWOM information. With these findings, it can be concluded that information is required so that the user has expectations before reserving their product based on justifications provided by the clients so that there is a high level in the amount of eWOM.

According to the credibility dimension, it has been the dimension that has obtained the lowest score in the results, where it is determined that despite the fact that they have accurate information, the respondents still harbor these reservations because the comments are undoubtedly anonymous and the experiences of clients vary greatly. Shuaib et al. (2021) show that notification activities on social media play an important role in building eWOM credibility. Instead, Truc et al. (2021) showed that there is a decreasing level of e-WOM credibility in relation to the provider's experience in terms of eWOM

information. With these results it can be inferred that credibility is based on trust in customer experiences, having reliable information is still crucial for many people.

Moving on to the quality dimension, which obtained an average score between the quantity and credibility dimensions, this is based on the fact that because there is not all the necessary information to make a decision, the respondents believe that the comments do not have enough depth. Budi (2019) indicate that Internet advertising and eWOM have a positive effect on the perceived value of the customer (quality) and the perceived risk of buying on B2C e-commerce sites. A significant relationship also emerges between Internet advertising and eWOM. Instead, Alabdullatif & Akram (2018) show a significant impact of online review factors such as quality along with property characteristics on customers' booking decision. With these findings, it can be deduced that customers must perceive the value of the comments as genuine and lasting because they do not find the information, they need to make a purchase in the aforementioned comments.

Finally, it is detailed that the eWOM in the pharmaceutical products and toiletries company, obtaining a total score of (5.62), results in that the knowledge of the service through the eWOM is influencing the purchase decision and the amount of feedback from eWOM applied in the company. Billal et al. (2021) demonstrates that interaction-based eWOM, entertainment, and fashion are core factors that specifically affect customer brand interest and purchase intention. Muhammad et al. (2021) details that the eWOM significantly mediates the relationship between participation in fashion, sense of belonging, trust, informational influence, and online purchase intention. Sheikh et al. (2021) state that brand equity is not an integral part of eWOM, but it is still an important feature of the online shopping process. With these findings, it can be concluded that eWOM has a significant impact on consumer decisions, since consumers currently make purchases based on the experiences of other users instead of the brand, which is the most relevant aspect of eWOM, rather than the brand itself, consumers may infer that eWOM plays an important role in consumer decisions.

#### 5 Conclusions

According to the quantity, it was possible to verify the high volume of recommendations and evaluations on the website due to the fact that many people comment on their appreciations, accumulating or overwhelming the recipient with the amount of information, both necessary and unnecessary, and causing them to become confused. Before making a purchase decision.

When it comes to credibility, the comments and opinions posted on this website are not reliable enough because customers share their experiences with the items, good or bad, while using them. Since this is where most users look for accurate information and do not find a satisfactory answer, they start to have doubts because the information has a significant impact on their purchase decision, regardless of the caliber of the products.

Regarding the quality of the comments on the web page, by not delving into a detailed explanation confusion is created for the user, when the company verifies the comment, it tries to provide an answer explaining the mode of use, how you can obtain more information or find solutions that do not harm the value of the brand.

Last but not least, eWOM has become a crucial component of the website, serving as its calling card. This is because, thanks to the reviews and information provided by

customers who have used the product in the past, new or old users who are interested in the mentioned item are informed before making their purchase, since they are not only seduced by the brand but also by the results obtained by other clients.

Current research is important in exploring the value of electronic mouth and ear in the pharmaceutical and toiletries business, and in determining whether comments made on a website actually have an effect on user purchasing behavior. Since it shows customer feedback, this will help businesses to give more importance to their website. They will also be able to differentiate themselves from the competition and be professional towards the competition by knowing the caliber, reliability and number of comments they make on their website, eWOM being a specific example.

#### References

- Álvarez, J. (2021, Enero 27). Reporte digital 2021: The Report on Digital Trends, Social Networks and Mobile. We Are Social. https://wearesocial.com/es/blog/2021/01/digital-report-2021-el-inf orme-sobre-las-tendencias-digitales-redes-sociales-y-mobile/
- Alabdullatif, A., Akram, M.: Exploring the impact of electronic word of mouth and property characteristics on customers' online booking decision. TEM J. Technol. Educ. Manag. Inf. 7(2), 411–420 (2018).https://doi.org/10.18421/TEM72-24
- Asshidin, N., Abidin, N., Borhan, H.B.: Perceived quality and emotional value that influence consumer's purchase intention towards American and local products. Procedia Econ. Finan. **35**(2016), 639–643 (2016). https://doi.org/10.1016/S2212-5671(16)00078-2
- Berné, C., Pedraja, M., Ciobanu, A.: Electronic word of mouth as a context variable in the hotel management decision-making process. Manag. Notebooks 20(1), 111–136 (2017). https://doi. org/10.5295/cdg.170860cb
- Bilal, M., Jianqu, Z., Ming, J.: How does consumer brand engagement affect purchase intent? the role of the elements of social networks. Mag. Bus. Strategy Finan. Manag. **2**(1&2), 44–55 (2021). https://jbsfm.org/pdf/vol2no1/JBSFM\_Vol2\_No1\_p\_44-55.pdf
- Breazeale, M.: FORUM word of mouse an assessment of electronic word-of-mouth research. Int. J. Mark. Res. **51**(3), 1–19 (2009). https://doi.org/10.1177/147078530905100307
- Borondo, S.: Redes sociales más utilizadas por hombres y mujeres (2021). https://www.elcorreo.com/tecnologia/redes-sociales/redes-sociales-utilizadas20210804125007nt.html?ref=https% 3A%2F%2Fwww.elcorreo.com%2Ftecnologia%2Fredes-sociales%2Fredes-sociales-utilizadas-20210804125007-nt.html
- Budi, A.: The influence of Internet advertising and e-WOM on the perception and purchase intention of B2C e-commerce customers in Indonesia. In: International Conference on Accounting, Business and Economics, pp. 207–218 (2019). https://journal.uii.ac.id/icabe/article/view/14715#:~:text=The%20results%20obtained%20from%20this,between%20internet%20advertising%20and%20eWOM
- Choi, Y.K., Seo, Y., Yoon, S.: Social ties, temporal distance and concretion of the message. E-WOM Messages on Social Networks 27(3), 495–505 (2017). https://doi.org/10.1108/IntR-07-2016-0198
- Erkan, I., Evans, C.: EWOM's influence on social media on consumer purchase intentions: an extended approach to information adoption. Comput. Hum. Behav. **61**, 47–55 (2016). https://doi.org/10.1016/j.chb.2016.03.003
- Gondim, C.B., Pereira, M.V., de Araújo,: Gestão da reputação on-line pelos meios de hospedagem: uma análise das respostas ao EWOM negativo. Turismo Visão e Ação **22**(1), 185 (2020). https://doi.org/10.14210/rtva.v22n1.p185-209

- González, D.: TodoModa enters the millionaire cosmetics business and strengthens its online channel. America Retail (2021). https://www.america-retail.com/argentina/todomoda-entra-millonario-negocio-de-la-cosmetica-y-potencia-su-canal-online/
- Handoko, N., Melinda, T.: Effect of electronic word of mouth on purchase intention through brand image as media in tokopedia. Int. J. Econ. Bus. Account. Res. 5, 83–93 (2021). https://jurnal. stie-aas.ac.id/index.php/IJEBAR/article/view/3184
- Health Science Authority: Cosmetic products (2017). www.hsa.gov.sg/content/hsa/en/Health\_Products\_Regulation/Consumer\_Information/Consumer\_Guides/Cosmetics.html
- 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**(1), 38–52 (2004). https://doi.org/10.1002/dir.10073
- Ismagilova, E., Slade, E.L., Rana, N.P., Dwivedi, Y.K.: The effect of electronic word of mouth communications on intention to buy: a meta-analysis. Inf. Syst. Front. **22**(5), 1203–1226 (2019). https://doi.org/10.1007/s10796-019-09924-y
- Koo, D.-M.: Impact of tie strength and experience on the effectiveness of online service recommendations. Electron. Commer. Res. Appl. 15, 38–51 (2016). https://doi.org/10.1016/j.elerap. 2015.12.002
- Lin, M., Wang, W.: Examining e-commerce customer satisfaction and loyalty integrated quality-risk-value perspective. J. Organ. Comput. Electron. Commer. 25(4), 379–401 (2015). https://doi.org/10.1080/10919392.2015.1089681
- Lopez, F., Correa, G.: Credibilidad en Facebook entre madres seguidoras de una página sobre crianza y síndrome de down. Revista Ibérica De Sistemas e Tecnologias De Informação 92–102 (2021). https://www.proquest.com/scholarly-journals/credibilidad-en-facebook-entre-madres-seguidoras/docview/2483955613/se-2?accountid=37610
- Mansour, K.B., Kooli, K., Utama, R.: Online trust antecedents and their consequences on purchase intention: an integrative approach. J. Customer Behav. 13(1), 25–42 (2014). https://doi.org/10. 1362/147539214X14024779343677
- Martínez: The key figures of eCommerce in the world in 2021 (2021). https://content.blacksip.com/cifras-del-ecommerce-en-el-mundo-en-2021
- Matute, P.: Utrillas: The characteristics of electronic word of mouth and its influence on online repurchase intention. Eur. J. Manag. Bus. Econ. **24**, 61–75 (2015). https://doi.org/10.1016/j.redee.2015.03.002
- Muhammad, B., Zeng, J., Suad, D., Mingyue, F., Ales, T.: Understanding the effects of eWOM antecedents on online purchase intention in China. Information 12, 1–15 (2021). https://doi.org/10.3390/info12050192
- Pappas, N.: Marketing strategies, perceived risks and consumer trust in online buying behavior. J. Retail. Consum. Serv. 29, 92–103 (2015). https://doi.org/10.1016/j.jretconser.2015.11.007
- See-To, E., Ho, K.: Value co-creation and purchase intention in social network sites: the role of electronic word-of-mouth and trust a theoretical analysis. Comput. Hum. Behav. **31**, 182–189 (2013). https://doi.org/10.1016/j.chb.2013.10.013
- Obaidullah, S., Shahbaz, A., Majeed, T.: Relationship between eWOM and purchase intention: moderating role of culture (evidence from university students of Pakistan). Bus. Rev. **16**(1), 101–120 (2021). https://doi.org/10.54784/1990-6587.1398
- Shuaib, M., Ahma, U., Arshad, M., Ghazi, I., Krishna, A., Haroon, J.: Building electronic word-of-mouth credibility through social networking sites and determining its impact on brand image and online purchase intentions in India. J. Teor. aplicación Electrón. Comer. Res. 16, 1008–1024 (2021). https://doi.org/10.3390/jtaer16040057
- Sussman, S.W., Siegal, W.S.: Informational influence in organizations: an integrated approach to knowledge adoption. Inf. Syst. Res. 14(1), 47–65 (2003). https://doi.org/10.1287/isre.14.1.47. 14767

- Teng, S., Khong, K.W., Chong, A.Y.-L., Lin, B.: Examining the impacts of electronic word-of-mouth message on consumers' attitude. J. Comput. Inf. Syst. 57(3), 238–251 (2016). https://doi.org/10.1080/08874417.2016.1184012
- Truc, V., Trong, N., Viet, P.: Impact of electronic word of mouth to the purchase intention the case of Instagram. Ind. J. Manag. Prod. **12**(4), 1019–1033 (2021). https://doi.org/10.14807/iimp.v12i4.1336
- US Food and Drug Administration: Cosmetic product category codes (2017). www.fda.gov/cosmetics/registrationprogram/paperregistration/ucm111279.htm
- Zion Market Research: Global cosmetic products market will reach USD 863 billion by 2024 (2018). https://globenewswire.com/news-release/2018/06/22/1528369/0/en/Global-Cosmetic-Products-Market-Will-Reach-USD-863-Billion-by-2024-Zion-Market-Research.html