Analysis E-Marketing Channel for Animal Health and Care Products in Three E-Marketplace in Indonesia (Case Study: www.dokterternak.co.id)

Kunta Adnan Sahiman[1], Siti Azizah[2], Umi Wisaptiningsih[3]
[1]Master Program of Animal Science, University of Brawijaya Malang, Indonesia, 65145
[2, 3]Lecturer of Animal Science, University of Brawijaya Malang, 65145

Abstract— *The development of the e-commerce world now also touches the livestock and animal health sectors. Various products are traded online using various marketing channels, one of which is an e-marketplace channel. Therefore, knowledge of the best e-marketplace channels is needed to market livestock production facilities, especially animal health and care products. This research takes a case study at www.dokterternak.co.id, an online store that provides animal and health care products using the three most popular e-marketplace types in Indonesia, namely: Tokopedia.com, Bukalapak.com, and Shopee.com. Sales data from three e-marketplaces were then tested using a descriptive statistical approach and the Kruskal-Wallis test to find out the best e-marketplace to market animal health and care products. The results of the study concluded that shopee e-marketplace is the best e-marketplace in marketing health and animal care products*

Keywords— E-Marketplace, Shopee, Tokopedia, Bukalapak Sales, Animal Care and Health Products.

I. INTRODUCTION

In 2018, internet users in Indonesia reached 143 million users, and each year an average increase of more than 10% of total users. With the increasing number of internet users indirectly affecting the increasing popularity of electronic commerce or e-commerce. The development of an increase in internet user penetration in Indonesia is seen in Figure I which shows an increase in internet users from 2008 to 2017. The graph implies that the internet was instrumental in boosting the economy in the digital era in Indonesia.[1]
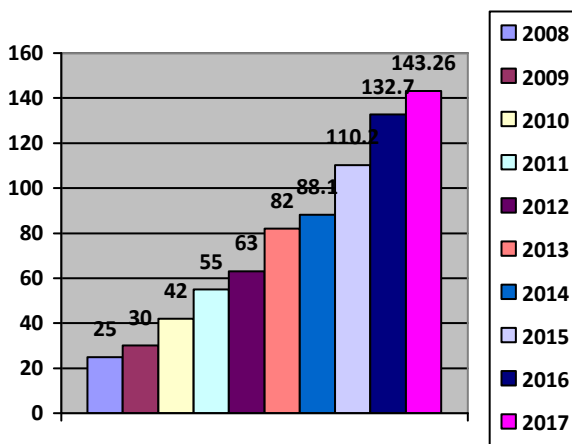

Fig. 1. Number of Indonesian Internet Users 2017 (Million)

The growth of internet users in Indonesia is also experiencing growth in e-commerce services. Various types of e-commerce compete for potential markets that continue to grow. One of the types of e-commerce that is in great demand by consumers is e-marketplace[2]. The presence of e-marketplaces helps many community needs. The e-marketplace offers a safe, inexpensive, easy and complete online shopping solution that has all been provided by a massive type of e-commerce and promotion that is increasingly exciting virtual markets in Indonesia (Bertha & Sutejo, 2006). This is also supported by data released by the Investment Coordinating Board (BKPM) which revealed the value of the investment in the digital market sector in 2017 reaching USD 5 billion. This makes the market the most sought after economic sector at the moment[3,4].

E-Marketplace has a role as a party that brings buyers and sellers to their website. E-marketplaces in Indonesia also have several types when viewed from the open or not the opportunity to become a seller. Some e-marketplaces are very closed to other sellers besides parties from the e-marketplace itself, there are also semi-open accepting external sellers with strict requirements, and there are also opportunities for anyone to become a seller on the electronic market platform [5]. By carrying out the concept of e-marketplace, e-commerce can develop quickly. But concepts like this can backfire if you're not careful. Seeing the benefits and broad benefits, of course, the use of the market will be very beneficial and help the growth of small businesses that have potential products and are needed by the market[6].

The changing shopping behavior of the Indonesian population from 2011 until now has made the rapid growth of e-marketplaces in the country of Indonesia. Consumers tend to like online shopping because it tends to be more practical, modern, can be done all the time without having to have difficulty doing mobility out of the house when you need the desired item[7]. This is a good opportunity for most small businesses to take an active role in offering their merchandise using the marketplace in Indonesia. Of course, this condition provides considerable opportunities and profits for businesses who want to peddle their goods in a marketplace that already has a good reputation in Indonesia. Discussing the role of e-commerce that supports the development of online trading activities through purchasing decisions made by consumers[8].

Online retail transactions in Indonesia are predicted by Euromonitor International, in 2019 could reach 18,325 billion

278

rupiahs for apparel and footwear more than quadrupled from 2015[9]. In the present situation in Indonesia, 2 public e-marketplaces have the highest number of visitor traffic. The first is Tokopedia.com which is ranked seventh. Underneath is Bukalapak.com following in the ranking of the ten most-visited web sites in Indonesia. Tokopedia, Bukalapak, and Shopee are pure online marketplaces in the form of C2C (customer to customer) that provide a means of buying and selling for individuals and companies to sell their products directly to consumers through the website and application platforms. Tokkopedia has an average number of visitors of 2,160,000 people every day. Bukalapak has 1,950,000 people every day, while Shopee has 234,000 visitors every day[4].

This study aims to find out the best e-marketplace in the sale of animal health and care products through a case study at an online store that markets its products through different e-marketplaces.

II. MATERIAL AND METHOD

This research is a case study on the online store www. dokterternak.co.id which markets its products through the three most popular e-marketplaces in Indonesia, namely Shopee, Tokopedia, and Bukalapak. The study was conducted for 100 days from 24 October 2019 to 31 January 2020.

This research compares data on the number of sales from day to day in three e-marketplaces. The data analysis process in this research begins with the collection of sales data from each e-marketplace. The results of the data collection will then be tested for normality and homogeneity tests as a parametric test requirement. If the test results show normal and homogeneous data then a statistical test is then performed with ANOVA[10]. However, if the data show abnormal and not homogeneous then the statistical test used is the kruscal wallis test. The results of the ANOVA test or the Kruscal Wallis test are in the form of hypotheses from the research :

H0: There are no differences in sales of animal health and care products between the three favorite e-marketplaces in Indonesia.

H1: There are differences in sales of animal health and care products between the three favorite e-marketplaces in Indonesia
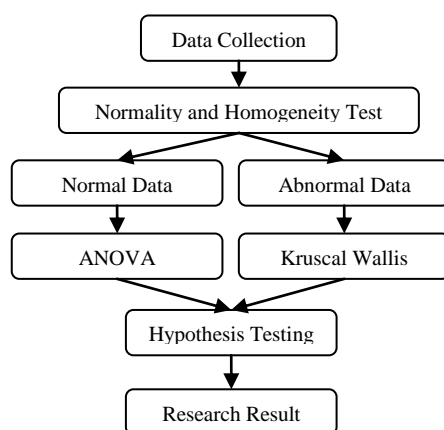

Fig. 2. Data Analysis Process

III. RESULT DISCUSSION

In this study, sales data from three different electronic markets were then tested for normality as a prerequisite test with ANOVA. The use of parametric statistical tests and non-parametric tests are based on the distribution of data used as one of the basic assumptions. If the data is normally distributed then parametric statistics can be used, but if the data distribution is not normal then non-parametric statistics can be used. Population data will be normally distributed if the average value is the same as the mode and the same as the median and some values / scores accumulate in the middle position[11].

The results of the normality test data with Kolmogorov-Smirnov can be concluded by comparing probability values or Asymp numbers. Sig (2-tailed) with a significance level of 0.05 or 5% with decision making if the significance value is less than 0.05 or 5%, then the data distribution is not normal. And if the significance value is greater than 0.05 or 5%, then the data distribution is normal. Based on table I, it can be concluded that the Shopee, Tokopedia and Bukalapak variable data are not normally distributed because of the Asymp value. Sig (2-tailed) 0.00 is smaller than 0.05 (Bedoya-Marrugo et al., 2017). Therefore, further testing is carried out using non-parametric statistics, namely using the Kruskal wallis test.

TABLE I. Table Tests of Normality

	Marketplace	df	Kolmogorov-Smirnov[a]		Shapiro-Wilk	
			Statistic	Sig.	Statistic	Sig.
Sales	Shopee	100	.350	.000	.491	.000
	Tokopedia	100	.253	.000	.718	.000
	Bukalapak	100	.279	.000	.760	.000

Crucial Wallis test begins with measuring the average ranking to see the level of sales results. The table below illustrates the type of e-marketplace being tested and the number of samples. The number of samples in each e-marketplace is the same, which is 100 samples which represent the number of days used in monitoring sales of products.

TABLE II. Table Mean Rank Kruskal-Wallis Test

	Marketplace	N	Mean Rank
Sales	Shopee	100	248.60
	Tokopedia	100	132.77
	Bukalapak	100	70.14
	Total	300	

In table II, it can also be seen that e-marketplace shopee is ranked first, followed by e-marketplace, Tokopedia, and Bukalapak. However, this is not enough to establish a hypothesis because it is not yet known whether there is a statistical difference between sales data from the three e-marketplaces.

In the statistical test table with Kruskal walis can be seen Asymp.Sig <0.05 so it can be concluded that statistically there are significant differences between the results of selling of three e-marketplaces [12]. Then if correlated with the mean rank

table, it is concluded that the e-marketplace shopee is the e-marketplace that has the best sales of animal health and care products compared to the e-marketplace of Tokedia and Bukalapak.

TABLE III. Table Test Statistic^{a,b}

	Sales
Kruskal-Wallis H	219.866
df	2
Asymp. Sig.	0.000

a Kruskal Wallis Test
b Grouping Variable: Marketplace

Shopee E-Marketplace

Shopee is an online Marketplace application for buying and selling on mobile phones easily and quickly. Shopee offers a variety of products ranging from fashion products to products for everyday needs. Shopee comes in the form of a mobile application to make it easier for users to do online shopping without having to open a website through a computer. Shopee began entering the Indonesian market at the end of May 2015 and Shopee only began operating at the end of June 2015 in Indonesia. Shopee is a subsidiary of SEA Group (formerly called Garena) based in Singapore. Shopee has been present in several countries in Southeast Asia such as Singapore, Malaysia, Vietnam, Thailand, the Philippines, and Indonesia. Because the mobile element is built according to the concept of global electronic commerce, Shopee is one of the "5 most disruptive e-commerce startups" published by Tech In Asia. Shopee Indonesia is located at Wisma 77 Tower 2, Jalan Letjen. S. Parman, Palmerah, Special Capital Region of Jakarta 11410, Indonesia [7].

Shopee E-Marketplace Strategy

In facing e-commerce competition in Indonesia, Shopee provides an online shopping platform that carries a social concept, where consumers are not only focused on buying and selling, but also can interact with other consumers through the instant messaging feature directly [13]. Strategy at Shopee also carries a platform that offers a wide range of 79 products, complemented by a secure payment method using a verification code. Shopee also provides delivery services that are integrated directly with shipping services such as JNE, JNT, TIKI and many more as well as innovative social features such as the messenger feature in the Shopee application to make buying and selling more enjoyable, safer and more practical.

The Advantages of E-Marketplace Shopee

This digital era, the e-commerce business is indeed growing in Indonesia. Various conveniences and all the amenities offered by online shopping sites have become a magnet for buyers, including Shopee. The uniqueness and advantages of shopping at Shopee have been felt directly by buyers, these include:

1. Massive promotion

Marketing strategies to win the competition include knowing the market and consumers. One strategy that can be done by companies is to use promotional strategies. Promotion is a controlled and integrated program of communication methods and materials designed to bring the company and its products to potential customers [14]. Shopee became one of the most commonly promoted marketplaces. There are various types of promotions available ranging from discounts up to 99%, cashback, and free shipping. Shopee is known to provide convenience to buyers. Free shipping provided can be used every day, the amount is by applicable regulations. Also interesting is the Shopee cashback promotion. Often Shopee gives cash back starting from Rp. 25,000 to Rp. 50,000 To use this promotion, it must fulfill the applicable provisions. But if it is successful, the buyer will automatically get cashback which is quite large. On several occasions such as when Shopee's birthday, discount promotions are usually available. The discount is quite large, even up to 99%. Promotions that make buyers can benefit from shopping at Shopee.

2. Good communication with consumers

Communication is a social process that occurs between at least two people where someone sends a certain number of symbols to another person[15]. The e-marketplace shopee conversation (chat) feature allows conversation between the seller, buyer, and shopee admin. This feature is used in transactions to avoid misunderstandings between sellers, buyers and shopping admins. This conversation feature is often used, among others, to inquire about stock and product specifications, correct ordering errors and report violations committed by the seller or buyer to the e-marketplace shopee admin so that it can be mediated and taken solutions.

3. Flash sale feature

Flash sale is a promotional activity in the form of Flash sale or also called "daily deal", part of a sales promotion that gives customers special offers or discounts for certain products for a limited time [16]. Flash sale services provided by Shopee always attract the attention of buyers because the price is very cheap. Flash sale is also used as an opportunity for traders to resell items purchased during flash sale at a higher price.

4. There are many sellers with a variety of products and prices

Product variation is the company's strategy by diversifying its products with the aim that consumers get the products they want and need [17]. The number of products available at Shopee is an impact of the many sellers. One product, generally not only sold by one seller. Different seller prices will also be different. This opportunity can be used to compare prices to find the cheapest prices. The seller who offers the cheapest goods is usually known as the main supplier [18]. They want to provide low prices because they have their stock of goods. Shopping at the supplier immediately feels safer. If the items purchased are not appropriate, it will be easier to apply for a return of goods. This will anticipate losses when the goods do not match those offered by the seller.

5. Multiple payment methods

The rapid development of technology influences the development of payment systems in business transactions, especially in maintaining the sustainability of the parties' business relationships [16]. The payment system, which is one of the pillars supporting the stability of the financial system, has developed, which initially only used cash, has now penetrated the digital payment system or can be referred to as electronic

280

money (e-money) with a variety of applications used by the public as a means of non-cash payment. The purpose of the application is to facilitate transactions in various activities [19]. Multiple Payment Methods are really needed by the buyer. Many of them do not want to be complicated when they want to make a transaction. Shopee itself has many payment methods ranging from bank transfers with various bank options, credit cards, Indomaret, Alfamart, COD, and others. With many payment methods, buyers do not need to pay admin fees when transferring.

IV. LIMITATIONS OF THIS STUDY

1. The data used is the product sales data from the online store www.dokterternak.co.id for 100 days.
2. Research is only limited to using three types of public e-marketplaces namely Tokopedia, Bukalapak, and Shopee.
3. Research is only limited to the number of sales of animal health and care products from the three types of public e-marketplaces studied, namely Tokopedia, Bukalapak, and Shopee.

V. CONCLUSION

The Case study Research at www.dokterternak.co.id can be concluded that Shopee e-marketplace is the best e-marketplace in the sale of animal health and care products compared to other favorite e-marketplaces namely Tokedia and Bukalapak. This could be due to Shopee always providing good service to the buyers. Promos provided, customer support available and various other advantages make Shopee a trusted e-marketplace in Indonesia. These advantages can be beneficial for buyers or can be more economical when shopping. Buyers may spend less than when shopping at other e-marketplaces.

REFERENCES

[1] Asosiasi Penyelenggara Jasa Internet Indonesia. Penetrasi & Perilaku Pengguna Internet Indonesia 2017. *Penetrasi dan Perilaku Pengguna Internet Indones.* 1–39 (2017).

[2] Pradana, M. Klasifikasi Jenis-Jenis Bisnis E-Commerce. *Unirsitas Telkom Bandung* 9, 32–40 (2015).

[3] Ardianti, R. Perkembangan Adopsi e-commerce dan Implikasinya bagi Manajemen Organisasi Bisnis. *Akunt. dan Keuang. Pulit Petra* (2016).

[4] Katadata.co.id. Tokopedia Tetap Memimpin Jumlah Pengunjung e-Commerce TW III 2018. *Katadata* 2018 (2018).

[5] Retzen Lupi, F. N. Analisis strategi pemasaran dan penjualan. 2, 12 (2016).

[6] Yee, A., Chong, L., Lacka, E., Li, B. & Kai, H. Information & Management The role of social media in enhancing guanxi and perceived e ff ectiveness of E-commerce institutional mechanisms in online marketplace. 55, 621–632 (2018).

[7] Jane, G., Santoso, A. & Napitupulu, T. A. Factors Affecting Seller Loyalty In Business E- Marketplace : A Case Of Indonesia. 96, 162–171 (2018).

[8] Febriantoro, W. Kajian Dan Strategi Pendukung Perkembangan E-Commerce Bagi Umkm Di Indonesia. *J. MANAJERIAL* 17, 184 (2018).

[9] Achjari, D. Potensi Manfaat Dan Problem Di E-Commerce. *J. Ekon. dan Bisnis Indones.* 15, 388–395 (2000).

[10] Abubakar, H., Abubakar, H. D. & Salisu, A. One way anova: Concepts and application in agricultural system. *CEUR Workshop Proc.* 2152, 49–53 (2018).

[11] Ananda, L. D. Dinamika Trust pada Pemasaran Online di Media Sosial. *J. Komun. Indones.* 6, (2018).

[12] Bedoya-Marrugo, E. A., Vargas-Ortiz, L. E., Severiche-Sierra, C. A. & Sierra-Calderon, D. D. Kruskal-Wallis Test for the Identification of Factors that Influence the Perception of Accidents in Workers in the Construction Sector. *Int. J. Appl. Eng. Res.* 12, 6730–6734 (2017).

[13] Safanta, A., Shihab, M. R., Budi, N. F. A., Hastiadi, F. F. & Budi, I. Digital marketing strategy for laboratories marketplace. *J. Phys. Conf. Ser.* 1196, (2019).

[14] Iv, G. F. W., Weaven, S., Perkins, H., Sardana, D. & Palmatier, R. W. International Market Entry Strategies: Relational, Digital, and Hybrid Approaches. (2018) doi:10.1509/jim.17.0034.

[15] Kitchen, P. J. Marketing Communications. *Qual. Mark. Res. An Int. J.* 5, (2002).

[16] Ostlere, R. Online marketing. *The Actor's Career Bible* 783–792 (2019) doi:10.5040/9781472585349.ch-009.

[17] Isqo, H. Penjualan Merek Ako Pada Matahari Departemen Store Lembuswana. 3, 470–481 (2015).

[18] Aprilia, L., Cyrilla, L. & Burhanuddin, &. Analisis Strategi Pemasaran Ternak Berbasis E-Commerce di PT X Analysis of E-Commerce Based Livestock Marketing Strategies at PT X. *Oktober* 06, 121–129 (2018).

[19] Kosasi, S. Perancangan Sistem E-Commerce Untuk Memperluas Pasar Produk Oleh-Oleh Khas Pontianak. *Snastia* 2015, 110–119 (2015).