# COMPARATIVE ANALYSIS OF e-ADVERTISEMENT BETWEEN TOKOPEDIA AND SHOPEE

# ANALISA KOMPARATIF IKLAN ELEKTRONIK ANTARA TOKOPEDIA DAN SHOPEE

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Abstract: The emergence of internet technology has created online advertising as the significant approach of commercial communication all over the world. Advertising has been defined as any paid form of non-personal communication of ideas and information about products in the media with the objective of creating brand image. The development of e-commerce in Indonesia has mushroomed based on MMX Multi-Platform on 2017 showed top 10 e-Commerce in Indonesia. The aim of this study is to analyze the difference of e-Advertisement between 2 big e-Commerce in Indonesia which are Tokopedia and Shopee. This research is a quantitative research and uses independent sample t-test. The sample size of this research is 100 customers of both e-Commerce. The results showed that there are 3 variables that there is no significant difference in e-Advertisement between Tokopedia and Shopee, and the rest were has a significant differences, by referring to the results of observations of online advertising between Tokopedia and Shopee, it was found that there is no difference, so the two big e-commerce companies should maximize their online marketing by determining the right segmentation, so that the direction of marketing is more measurable.

**Keywords**: e-Advertisement, independent sample t-test, website design effectiveness, website security and privacy effectiveness, of information quality, brand recognition, demography.

Abstrak: Munculnya teknologi internet telah menciptakan iklan online sebagai pendekatan signifikan komunikasi komersial di seluruh dunia. Periklanan telah didefinisikan sebagai segala bentuk komunikasi non-pribadi dari ide dan informasi tentang produk di media dengan tujuan menciptakan citra merek (Kotler, 2010). Perkembangan e-commerce di Indonesia telah menjamur berdasarkan MMX Multi-Platform pada 2017 yang menunjukkan 10 e-Commerce terbaik di Indonesia. Tujuan dari penelitian ini adalah untuk menganalisis perbedaan iklan elektronik antara 2 e-Commerce besar di Indonesia yaitu Tokopedia dan Shopee. Penelitian ini adalah penelitian kuantitatif dan menggunakan uji-t sampel independen. Ukuran sampel penelitian ini adalah 100 pelanggan dari kedua e-Commerce. Hasil penelitian menunjukkan bahwa ada 3 variabel yang tidak ada perbedaan signifikan dalam e-Iklan antara Tokopedia dan Shopee, dan sisanya memiliki perbedaan yang signifikan.

**Kata kunci:** iklan elektronik, uji tes t, efektivitas desain situs web, keamanan situs web dan efektivitas privasi, kualitas informasi, pengenalan merek, demografi.

#### INTRODUCTION

### Research Background

The emergence of internet technology has created a plenty of opportunities for marketer and all which are involved in vertical environment to carry on their business based on web advertisement. With the rapid growth of the Internet and the globalization of the world, companies have accepted and adopted new information and communication technologies in performing their activities It is not only to support their traditional activities, but also to support the new opportunities that have arisen from the Internet. At the moment, the most stands out opportunities are electronic or online advertisement.

Most companies established their Website as new channels for business transactions and advertisement, which enable customers to make online purchases through the Web. At the same time, a company who has a website able to access the global market at a low operating cost. In addition, websites provided by the companies usually offer information at depth while providing customers electronic services (e-services) of superior quality by means of Internet interactivity, which has served to boost up competition among companies Online advertising business used electronic commerce (EC) tools to build marketing strategy, establish customer relationships, theories on advertisement and customer purchase behavior because of potential market segmentation. Likewise, online advertising include contextual ads on examine banner ads, rich media ads, social network advertising, online classified advertising, and marketing email like spam.

In online advertising market factors, security, privacy and consumer perceptions are important in affecting consumer's purchase decision in the purchase. However, consumers may be dealing with remote salespersons, they have never met and products that cannot be touched and felt. Likewise, consumers tend to be unwilling to conduct businesses based only on the information provided by EC merchants in market because some information may not be reliable. Traditional marketing theory continued fundamentally relationship with concept of consumer trust to purchase because it increases the high quality of product with opportunistic behavior by the seller. Therefore, consumer trust has been recognized with both conceptually and empirically dimension to positively impact on customer purchase behavior.

# **Research Objective**

Based on the research problem above, it can be stated formulation of the objective in this study are as follows:

To find out if there is a significant difference in e-advertisement between tokopedia and shopee based on

- 1. Website design effectiveness
- 2. Website security and privacy effectiveness
- 3. Information quality
- 4. On brand recognition
- 5. Demography.

# THEORETICAL REVIEW

# **Theories**

# **Marketing**

Marketing is all about the entity goods, services, experiences, events, people, places, properties, organizations, information and ideas". According to Kotler (2009), there are two types of definitions of marketing, which is a social and managerial. Social definition game show marketing role in society, which can aim as: "Marketing is a social process in which individuals and groups obtain what they need and want through creating, offering, and freely exchanging products and services of value with others".

### e-Advertisement

The emergence of internet technology has created online advertising as the significant approach of commercial communication all over the world. Advertising has been defined as any paid form of non-personal communication of ideas and information about products in the media with the objective of creating brand image (Kotler, 2010).

### **Website Design Effectiveness**

The design of business to customer websites plays a significant role in grabbing attention and delivering good perception of advertisement to stimulate purchase intention of E-customers. The design of a website is as important as the content of the website (Ranganathan, 2002).

# **Website Security and Privacy Effectiveness**

The threat of security has been defined as a certain circumstance and situation, or event with the potential to cause economic hardship to data or network resources in the form of damage, distraction, disclosure, and modification of data, rejection of service, fraud, waste as well as abusive (Seyed, 2013).

### **Information Quality**

In assessing the contribution and the significance of information systems in any sort of organization, (Hyejeong, 2009), has paid close attention on the process itself, which is a productivity model for computer systems. On the other hand, other (Seyed, 2013) researchers have developed multiple measures of system quality.

### **Brand Recognition**

Majority of the companies have recognized the value of brand recognition such as McDonalds has their arches, Goodyear has its blimp and AOL has its distinctive pyramid. Brand recognition will help people to lean towards the product when given the choice between well-known product and one a person never heard of. At the same time, be remembered that the competitors are also working on brand recognition, which means their brand could be more recognizable. Continue to differentiate the product and be sure to add value to product in order to get to the next stage (Suranga, Seyed 2012).

# **Demography**

Actually, the difference of demographic in terms of computer user and the Internet are critical because having the ability to use these technologies has become increasingly significant to economic success (demographic differences in the use of computers and the Internet are important because ability to use these technologies has become increasingly critical to economic success (Ono, 2002).

# **Previous Research**

This study aims to analysis the differences of e-Advertisement between Tokopedia and Shopee.

### **Hypothesis**

The hypothesis of this research are:

There is a significant difference in e-advertisement between tokopedia and shopee based on

H<sub>0</sub>: Website design effectiveness.

H<sub>1</sub>: Website security and privacy effectiveness.

 $H_0$ : There information quality.

H<sub>2</sub>: Brand recognition.

H<sub>0</sub>: Demography.

### RESEARCH METHOD

### Research Approach

This is a quantitative research and using comparative analysis method to conduct the research. Comparative analysis is the item-by-item comparison of two or more comparable alternatives, processes, products, qualifications, sets of data, systems, or the like. This research will analyze the difference of e-Advertisement between Tokopedia and Shopee.

### **Population**

The population in this research are all the customers that have already purchase or member of Tokopedia and Shopee.

### **Sampling Technique**

The sampling technique used in this research is convenience sampling method.

### Sample

Sample used in this research is 100 customers of Tokopedia and Shopee.

### **Data Collection Method**

This research uses primary data from the respondent which is the customers of Tokopedia and Shopee, and secondary data from books and journals.

# Operational Definition of Research Variables

# **Table 1. Definition of Research Variables**

Variables	Operational Definitions		Indicators				
e-Advertisement	A notice or announcement through electronic platform promoting a product, service, or event or publicizing a job vacancy.	1. 2. 3. 4.	Website Design Effectiveness Website Security and Privacy Effectiveness Information Quality Brand Recognition Demography				

Source: Author's, 2019.

# Data Analysis Method Validity Test

To analyze the validity of questionnaire, Pearson Product Moment is used. An instrument measure is valid if the instrument measure what ought to be measured.

### **Reliability Test**

Reliability test is established by testing for both consistency and stability of the answer of questions. Alpha Cronbach is reliable coefficients that can indicate how good items in asses have positive correlation one another (Sekaran and Bougie, 2013:162).

### **Independent Sample t-test**

T-test compares the means of two variables. This test is done by comparing the t-value with t-table. The level of significance is 5% ( $\alpha = 0.05$ ). If t-value is greater than t-table hypothesis is accepted.

# **Normality Test**

Normality test is used to determine weather the distribution of data follows normal distribution or close to.

# RESULTS AND DISCUSSION

# Results

**Table 2. Validity Test** 

•			Correlations					
		Website_ design_e ffectiven ess	Website_s ecurity_an d_privacy_ effectivene ss	Informatio n_quality	Brand_rec ognition	Demogra phy	Total	
website design effectiveness	Pearson Correlation	1	.629**	.569**	.546**	.699**	.723**	
	Sig. (2- tailed)		.000	.000	.000	.000	.000	
website security and privacy effectiveness	N Pearson Correlation	100 .629**	100 1	100 .635**	100 .529**	100 .616**	100 .850**	
אווימטן פוופטנויפוופסס	Sig. (2- tailed)	.000	KNOLOG	.000	.000	.000	.000	
information quality	N Pearson Correlation	100 .569**	S 100 .635"	100	100 .558**	100 .551**	100 .781**	
	Sig. (2- tailed)	.000	.000		.000	.000	.000	
brand recognition	N Pearson Correlation	100 .546**	100 .529**	100 .658**	100	100 .732**	100	
brand recognition	Sig. (2- tailed)	.000	.000	.000	.000	.000	.782 <sup>**</sup> .000 100	
demography	N Pearson Correlation	100 .599**	100 .616**	100 .551**	100 .732**	100 1	.854 <sup>**</sup>	
	Sig. (2- tailed)	.000	.000	.000	.000	0.000	.000	
Total	N Pearson Correlation	100 .723"	100 .850**	100 .781"	100 .782**	100 .854**	100 1	
	Sig. (2- tailed)	.000	.000	.000	.000	.000		
** Correlation is signific	N	100	100	100	100	100	100	

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Source: Output SPSS, 2019

Can be seen from the sig. (2-tailed) the data is valid.

**Table 3. Reliability Test** 

# **Reliability Statistics**

Cronbach's Alpha	N of Items
.856	5

Source: Output SPSS, 2019

Table 3 shows the reliability test result and the data is reliable .856.

Table 4. Normality Test

		Shapiro-Wilk				
Subject		Statistic	df	Sig.		
website design	Tokopedia	.972	50	.289		
effectiveness	Shopee	.965	50	.140		
website security	Tokopedia	.976	50	.387		
and privacy effectiveness	Shopee	.965	50	.142		
information	Tokopedia	.971	50	.256		
quality	Shopee	.974	50	.325		
brand	Tokopedia	.962	50	.108		
recognition	Shopee	.962	50	.105		
Demography	Tokopedia	.964	50	.125		
	Shopee	.958	50	.074		

<sup>\*.</sup> This is a lower bound of the true significance.

Source: Output SPSS, 2019

Table 4 shows that the data is normal as can be seen from Sig. the results is > 0.05.

**Table 5. Group Statistics** 

		15,	0		Std.
		D= 1	57 /	Std.	Error
Subject		N >	Mean	Deviation	Mean
website	Tokopedia	50	19.2800	2.90699	.41111
design effectiveness	Shopee	50	17.9200	2.67902	.37887
website	Tokopedia	50	19.0600	3.03994	.42991
security and	Shopee			(5)	< 5
privacy		50	18.1400	2.98985	.42283
effectiveness					
information	Tokopedia	50	19.2800	2.96262	.41898
quality	Shopee	50	17.4200	3.13043	.44271
brand	Tokopedia	50	18.0200	3.37149	.47680
recognition	Shopee	50	18.9000	3.41814	.48340
Demography	Tokopedia	50	18.3800	3.02972	.42847
	Shopee	50	18.6400	3.08227	.43590

Source: Output SPSS, 2019

Table 5 shows the group statistics results, as can be seen from the mean value there are different of value between the variables.

a. Lilliefors Significance Correction

Table 6. Independent Sample t-Test

# **Independent Samples Test**

		Lever Test								
		Equali Variar	ity of	t-test for Equality of Means						
		Varia	lices			Sig. (2-	Mean	Std. Error	95% Confidence Interval of the Difference	
		F	Sig.	Т	Df	tailed )	Differe nce	Differe nce	Lower	Upper
website design effectivene ss	Equal variance s assumed Equal	.026	.87 1	2.433	98	.017	1.3600	.55907	.25055	2.46945
	variance s not assumed			2.433	97. 354	.017	1.3600 0	.55907	.25046	2.46954
website security and privacy	Equal variance s assumed	.085	.77 1	1.526	98	130	.92000	.60300	27663	2.11663
effectivene ss	Equal variance s not assumed	17	OH A	1.526	97. 973	.130	.92000	.60300	27664	2.11664
information quality	Equal variance s assumed	.084	.77	3.051	98	.003	1.8600 0	.60954	.65039	3.06961
	Equal variance s not assumed	KEME		3.051	97. 704	.003	1.8600	.60954	.65035	3.06965
brand recognition	Equal variance s assumed	.225	.63 6	1.296	98	.198	88000	.67898	2.2274 1	.46741
	Equal variance s not assumed		<	1.296	97. 982	.198	88000	.67898	2.2274 1	.46741
Demograp hy	Equal variance s assumed	.149	.70 0	425	98	.671	26000	.61122	1.4729 5	.95295
	Equal variance s not assumed			425	97. 971	.671	26000	.61122	1.4729 5	.95295

Source: Output SPSS, 2019

Table 6 shows that the results of t-test, as can be seen from the table above, for variable of website design effectiveness and information quality the Sig. (2-tailed) value is below 0.05 which means there is a significant difference. The rest variables have the same value or results which is there is no significant difference

### **Discussions**

### Website Design Effectiveness

Web design has been highlighted as one of the factors which contributed strongly to website quality; therefore online sellers will have to take this critical factor into consideration as it can increase the number of visitors to their websites. As a result, the effectiveness of advertisement can influence on the consumer purchase intention towards that particular product or services. The design of business to customer websites plays a significant role in grabbing attention and delivering good perception of advertisement to stimulate purchase intention of E-customers. The design of a website is as important as the content of the website (Ranganathan, 2002). That is proved by the calculation on independent sample t-test; it showed that there is difference between Tokopedia and Shopee measured by website design effectiveness in e-advertisement. Website Design Effectiveness results showed there is a significant difference by looking at the mean result from table 4.3, the mean value of website design effectiveness in Tokopedia store is higher than Shopee store. It indicates that, website design effectiveness in e-advertisement Tokopedia store is more affected by consumer, rather than Shopee store. This finding discloses that website design effectiveness in Shopee store did not affect the customer equally. The website appearance of Tokopedia and the way of access the menus and how operate it, is more easy based on the primary data that collected from the respondents. But it is not a good result in fact, because the customer is not only the 100 respondents.

### **Website Security and Privacy Effectiveness**

Security is one of the most challenging issues facing the internet and merchants today. It is undoubtedly as the most well-known topic in electronic commerce and has frequently been written about by researchers such as, (Shu, 2008; Choi, 2004). Security of the systems is one of the most important issues, and it is one of the biggest barriers which can prevent consumers from purchasing online. (Choi, 2004) also backed up the idea that online retailers need to build secure websites since internet user's fear and hesitate to purchase products or any services online because of the security concerns. Therefore, applying web based advertisement should consider the security concern while they have intention to approach to their target market via online advertisement (Yu, 2001). Website Security and Privacy Effectiveness results showed that there is no difference between Tokopedia and Shopee measured by website security and privacy effectiveness in e-advertisement. Meaning Website Security and Privacy Effectiveness of both Tokopedia and Shopee store still have the same or not much different or affected equally. It is because both stores have same security and type of customer privacy process to access the website and also the apps itself. It is important for company to keep the security and privacy safely, thus can make customer feel safe and not think twice to buy and order from the website.

#### **Information Quality**

For instance, used several items is to measures MIS appreciation among users. However, the items in his study included reliability of the computer system, online response time, ease of terminal use, and a few other factors. Similarly, (Seyed, 2013) stated that several system characteristics and factor should incorporate in the measure of system quality. These system features include the content of the database, aggregation of details, human factors, response time, and system accuracy. Furthermore, Choi (2004), suggested that data currency, response time, turnaround time, data accuracy, reliability, completeness, system flexibility, and ease of use as part of a "formative evaluation" scheme to measure system quality. Although information quality is a slippery subject, evaluating the information quality of a website based on four parameters namely accuracy, integrality, relevant and updates timely. Accuracy: Accuracy describes information that is factually irrefutable. The results showed that there is a difference related to information quality between Tokopedia and Shopee in e-advertisement.

# **Brand Recognition**

While many people maintain that the Internet creates a level playing field with the larger companies, brand recognition is often overlooked. Larger companies do the majority of their advertising offline. Sure, they will reference their web sites in their ads, but are not completely dependent on web advertising. Net based entrepreneurs must also create this brand recognition if they want to succeed. This can be done in a number of ways. Many people, who have local businesses, can promote their web site with their web address on their letter head or business card, but these are not the people that have been discussed in this study. To the people, the web site is simply an offshoot of their existing "brick and mortar" business. This is a good stage to aim for if you do

not have any recognition at all. Brand recognition will help people to lean towards the product when given the choice between well-known product and one a person never heard of.

### **Demography**

People use the Internet in several different ways and for a variety of reasons (Phelps et al., 2000). There are important differences in the view of Information and Communication Technologies (ICT) between different communities in the society. The level of Internet usage is related to gender (Jones, 2009). Further research has also shown that the level of Internet usage is directly linked to such variables as age and income. The motives for Internet use are often found to be culture (Choi, 2004; Taylor, 2008). Several other studies have drawn distinctions between the use of social, leisure, and academic Internet use (Loiacono, 2002). Many vital studies stated that one of the most significant factors having an influence on Internet use is age factor (Taylor, 2008). Actually, the difference of demographic in terms of computer user and the Internet are critical because having the ability to use these technologies has become increasingly significant to economic success (demographic differences in the use of computers and the Internet are important because ability to use these technologies has become increasingly critical to economic success (Ono, 2002).

#### CONCLUSION AND RECOMMENDATIONS

### Conclusion

Based on the research problems, data analysis and discussion, the conclusion of this research as follows:

- 1. There is a significant difference of website design effectiveness in e-advertisement between Tokopedia and Shopee;
- 2. Theres is no a significant difference of website security and privacy effectiveness in e-advertisement between Tokopedia and Shopee;
- 3. There is a significant difference of information quality in e-advertisement between Tokopedia and Shopee;
- 4. There is no a significant difference of brand recognition in e-advertisement between Tokopedia and Shopee;
- 5. There is no a significant difference of demography in e-advertisement between Tokopedia and Shopee.

#### Recommendations

Recommendations of this research are:

- 1. Both Tokopedia and Shopee company should take steps toward improving and maintenance website design effectiveness, website security and privacy effectiveness, information quality, brand recognition and demography for customers in making purchases, as well as provide various design and creative advertisement to encourage purchases from the customer. The generalizability of the result of this study is, however, subject to some limitations. Many of the respondents were unwilling to provide their response. The data for this study was collected from the customers of Tokopedia and Shopee.
- 2. The results of this study can be used as a reference for the development and deepening of knowledge management marketing, especially e-advertisement.
- 3. In this study examined only in terms of e-advertisement of customer Tokopedia and Shopee in Manado. While other factors that have not been revealed how much influence, hopefully in future studies may discuss other factors that have not been examined in this study.

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