

Demography, Motivation, and Satisfaction of E-Commerce Customer on OLX.co.id and Tokopedia.com

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Abstract—E-commerce industry is increasingly promising in line with the rapid development of technology in Indonesia. OLX.co.id and Tokopedia.com are two of the e-commerce sites in Indonesia. The problem that analyzed in this study is the low of customer satisfaction on OLX.co.id and Tokopedia.com. There are several factors examined such as demographics and online purchasing motivation allegedly influential in formulating marketing strategy on OLX.co.id and Tokopedia.com. The purpose of this study was to investigate and analyze how demographics, motivation, and customer satisfaction in OLX.co.id and Tokopedia.com, as well as a comparison of purchase motivation and customer satisfaction in both e-commerce sites. The subjects of this study is the netizen who ever shop online using sites of OLX.co.id or Tokopedia.com. From the results of the analysis of Mann-Whitney U test, there is no significantly difference of motivation and customer satisfaction between sites OLX.co.id and Tokopedia.com.

Keywords—Demography, Motivation, Customer Satisfaction, E-Commerce

I. INTRODUCTION

INTERNET development in Indonesia continues to increase. In 2013, there were 74.6 million Internet users in Indonesia (the highest in Southeast Asia), a rising up 22 percent from a year earlier. This figure is expected to exceed 100 million in 2015 (Marketeers, 2014). The increase in internet users has an influence on consumer behavior changes significantly. One of the changes in consumer behavior is in online shopping. The current Internet-based commercial transaction (e-commerce) is an essential element in the business life. With the number of internet users that is about 30% of the total population of Indonesia, Indonesian e-commerce market has a high potential in the future.

The Minister of Communications and IT mentions that the value of e-commerce transactions in 2014 has successfully exceeded 12 billion US dollars. The figure is much higher than in 2013, which only reached 8 billion US dollars. It is estimated that in 2015 e-commerce transaction value will reach 20 billion US Dollars (Obsession News, 2015). Possessed great potential, e-commerce sector is also getting some challenges that must be taken to ensure that it is able to be better and more stable. Current phenomenon shows that there is still a lack of information and research in the field of e-commerce in some countries, especially regarding

demographics and market segmentation of e-commerce (Bigne et al, 2005). In addition, there are some other obstacles, which decreases the motivation of consumers to shop online, and there are some dissatisfactions felt by consumers on e-commerce.

To find out more about e-commerce customer satisfaction, this research conducted a pre-study to the 30 respondents who have ever shopped online through e-commerce sites. Respondents who are subscribers of OLX cover 40%. The rest cover Tokopedia (23%), bukalapak (3%), Zalora (10%), Lazada (13%), and Other (10%). However, the pre-study survey later showed the highest rate of dissatisfaction actually experienced OLX customers (50%) and Tokopedia (36%). Dissatisfaction perceived by e-commerce customer can vary, as shown below.



Fig. 1 Dissatisfaction Perceived By E-Commerce Customer (Pre Research, 2015)

The relatively small percentage value for OLX and Tokopedia in the poll could be due to the strategy of the sites that is not maximal. Consequently, they do not achieve customer satisfaction resulting in customers' confidence and choice to shop online (low motivation to shop online).

II. THEORITICAL FRAMEWORK

Internet-based commercial transaction (e-commerce) is an essential element in today's business life. The digital era demands everything to be completely effective and efficient. According Jiradilok et al (2014) e-commerce is conduct business via the Internet relating to information retrieval activities, share information, purchase, or exchange of products and services; it also maintain customer relationships without face-to-face meetings as like in the traditional transactions. E-commerce is a business activity that is carried out electronically via an Internet network or an activity of

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buying and selling goods or services through digital communication channels.

Veronika (2013) in an article entitled Motivation of Online Buyer Behavior describes the purchase decision process that involves overall consumer behavior where there is a demographic dimension (input), motivation (process), and customer satisfaction (output).

According to Sumarwan (2014, p. 251), demography describes the characteristics of the population. Sumarwan explains that Indonesia's demographic characteristics includes age, religion, ethnicity, foreign-descent Indonesian citizen, income, gender, marital status, type of family, occupation, geographical location, type of household, and social classes. Bigne et al (2005) also examine the socio-demographic characteristics of Internet users that comprises sex, age, social class, population, time use of the internet and online shopping experience.

Karim (2013) further investigates the motivation or reason for consumers to make online purchases. According to the research, the motivation of consumers to make purchases online is due to several factors, namely time saving, information availability, less stress, less expensive, best offers, helpful for old and disabled people, service quality, easy ordering system, and shopping fun.

Customer satisfaction is an important part that cannot be ignored in business continuity. Amru et al (2007) reveals that customer satisfaction is built by six latent exogenous variables. Each of the six dimensions has several dimensions studied. They are, among other, dimensions of usefulness, Ease of Use, Entertainment, Complementary Relationship, Customer Service (CS), and Buyer Seller Interaction.

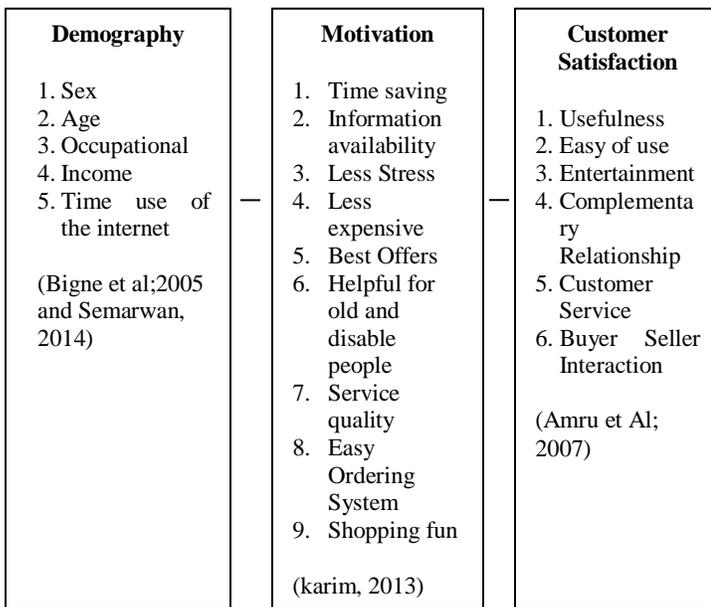


Fig. 2 Research Paradigm

III. HYPOTHESIS

The hypothesis is that there is a significant difference between demographic, motivation, and customer satisfaction on OLX.co.id and Tokopedia.com.

IV. RESEARCH METHODS

Object of this study consists of three independent variables, namely Demographic (X1), motivation (X2), and Customer Satisfaction (X3). The method used in this research is descriptive and verification with a design to test the variables comparison between two objects to obtain a real difference (significant difference) by using the studied samples.

The population of this research is the customers of OLX.co.id and Tokopedia.com. The population size is unknown because there are no data on how many purchases or customers in OLX.co.id and Tokopedia.com. The sample calculation is based on Ariestonandri (2006: 29). The obtained number of samples is 97 people for each site so that the total overall sample is as many as 194 people. The method used is based on the ease (convenience sampling).

In this study, the data distribution is not normal. Therefore, non-parametric statistics are employed. To test the hypothesis, this study used Mann Whitney U-Test. Sugiyono (2014: 275) argues that the U-Test is the best test to test the hypothesis involving two independent samples comparatively, when the data shape is ordinal.

V. RESULT AND DISCUSSION

A. Research Result

On demographic variables, based on the gender indicator, it is obtained information that 60 respondents out of 97 respondents of OLX.co.id customers are male, while 56 respondents, which are Tokopedia.com's customers, are female. This study is mostly male respondents (OLX) and female (Tokopedia.com) respondents.

On the age indicators, employment and income, customers of OLX.co.id and Tokopedia.com show no significant differences. The majority of the respondents are between 20-24 years (60 respondents out of the total 97 respondents at each site). This is because the users of 20-24 years are active users of the Internet that support the e-commerce transactions. Indicator of job shows that the majority of respondents are students, with the revenue of Rp. 1,000,000 to Rp. 4,000,000. This indicates that students are the largest potential market for e-commerce type of C2C as in OLX.co.id and Tokopedia.com within the middle-income range.

At the indicator of the Internet usage time, the majority of respondents (92%) use the internet every day. The differences of respondents found on both sites (OLX.co.id and Tokopedia.com) can be seen from the respondents' experience in shopping online based on the category of product purchased. The majority of OLX.co.id's respondents purchase gadget product categories more frequently than the majority of Tokopedia.com's respondents that are more likely to buy fashion product category.

Based on the motivation variable, the results show that the dimensions of time saving is the highest motivation as the reason of the respondent in making a purchase on OLX.co.id

and Tokopedia.com by the same score of 388 for each site. These results indicate that the biggest reason for respondents in making online purchases is to save time so that they can be more effective and efficient than having to come to the real store.

TABLE I
RESULT OF TRANSACTION MOTIVATION DIMENSIONAL ONLINE

Nr.	Transaction Motivation dimensional online	Websites	
		OLX	Tokopedia
1	time saving	388	388
2	information availability	340	245
3	less stress	330	336
4	less expensive	309	323
5	best offers	342	337
6	helpful for old and disable people	335	366
7	service quality	294	293
8	easy ordering system	345	370
9	shopping fun	345	337
	Total	3028	3095

Source: Data Processing, 2015

On the variable of customer satisfaction, the results show that the dimensions of usefulness is the dimension with the highest satisfaction felt by respondents of OLX and Tokopedia with a score of 1661 for OLX.co.id and 1722 for Tokopedia.com. These results show that the highest satisfaction felt by respondents is usefulness.

TABLE II
RESULT OF DIMENSIONS OF CUSTOMER SATISFACTION ON ONLINE SHOPPING

Nr.	Dimensions of Customer Satisfaction on Online Shopping	Websites	
		OLX	Tokopedia
1	Usefulness	1661	1722
2	Easy of Use	1059	1013
3	Entertainment	1247	1319
4	Complementary Relationship	951	990
5	Customer Service	638	663
6	Buyer Seller Interaction	1306	1355
	Total	6862	7062

Source: Data Processing, 2015

Overall, customer satisfaction on Tokopedia.com (7062) is higher than the OLX.co.id (6862). This research is consistent with the results of pre-study revealing that 50% of respondents of OLX.co id are dissatisfied; whereas only 36% of respondents of Tokopedia.com express dissatisfaction.

Normality assumption test is aimed to analyze and to determine whether dependent and independent variables, consisting of statements, are normally distributed or not. Normality test is performed with SPSS 20.0 for Windows. The ordinal scale data is previously transformed into an interval scale data by using Method of Successive Interval (MSI). Below is a table of normality test with the Kolmogorov-Smirnov test, the results of statistical data processing.

TABLE III
NORMALITY TEST WITH KOLMOGOROV-S MIRNOV

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Motivasi	.107	194	.000	.973	194	.001
Kepuasan_Pelanggan	.084	194	.002	.972	194	.001

a. Lilliefors Significance Correction

Source: Data Processing by Using SPSS 20.0 for Window, 2015

As can be seen in Table III, the significant value of the motivation variable scored 0,000, and the variable of customer satisfaction scored 0.002. Therefore, the entire significance for all variables is smaller than 0.05. It can be said that the data on the variables of motivation and customer satisfaction is not normal.

Mann Whitney U-Test

In this study, the data distribution is not normal or not homogeneous, so non-parametric statistics are employed. To test the hypothesis, this study used Mann Whitney U-Test. U-Test was used to test the hypothesis involving two independent samples comparatively.

Here are the results of the calculation of the motivation variable u-test by using SPSS 20.0 for Windows.

TABLE IV
SUMMARY OF HYPOTHESIS OF MANN WHITNEY U-TEST FOR THE VARIABLE OF MOTIVATION

Hypothesis Test Summary

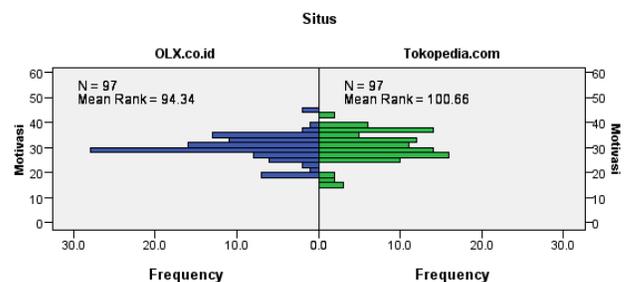
	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Motivasi is the same across categories of Situs.	Independent-Samples Mann-Whitney U Test	.433	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Source: Data Processing by Using SPSS 20.0 for Window, 2015

From the output of Mann Whitney U-test for motivation variable, the value of sig 2-tailed is 0.43. The value is greater than the critical limit of 0.05 (0.43 > 0.05). Therefore, there is no significant difference between OLX.co.id and Tokopedia.com. Thus, the test result is not statistically significant; the null hypothesis can be accepted. This means that there is no significant motivation difference between OLX.co.id and Tokopedia.com

Independent-Samples Mann-Whitney U Test



Source: Data Processing by Using SPSS 20.0 for Window, 2015

Fig. 3 Output Sample Independent Mann Whitney U-Test For Motivation Variable

From the output of rank, it can be seen that the mean value for the customer of OLX.co.id (0) is smaller than the mean value for the customer of Tokopedia.com (1) amounted to 94.34 < 100.65. This means that in terms of purchasing motivation, Tokopedia.com is superior to OLX.co.id. Here are the results of the calculation of u-test for customer satisfaction variable by using SPSS 20.0 for windows.

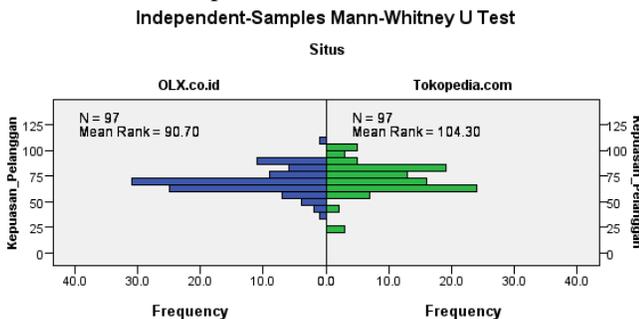
TABLE V
SUMMARY OF HYPOTHESIS OF MANN WHITNEY U-TEST FOR CUSTOMER SATISFACTION VARIABLE

Hypothesis Test Summary			
Null Hypothesis	Test	Sig.	Decision
1 The distribution of Kepuasan_Pelanggan is the same across categories of Situs.	Independent-Samples Mann-Whitney U Test	.092	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Source: Data Processing by Using SPSS 20.0 for Window, 2015

From the output of test results of Mann Whitney U-test for customer satisfaction variable, sig 2-tailed is 0.09, which is greater than the critical limit of 0.05 (0:09 > 0.05). Therefore, there is no significant difference between OLX.co.id and Tokopedia.com. Because the test results are not statistically significant, Thus, the test result is not statistically significant, the null hypothesis can be accepted. This means that there is no significant customer satisfaction difference between OLX.co.id and Tokopedia.com.



Source: Data Processing by Using SPSS 20.0 for Window, 2015
Fig 4. Output Of Independent Samples Of Mann Whitney U-Test For Customer Satisfaction Variable

From the output of rank, it can be seen that the mean value for the customer of OLX.co.id (0) is smaller than the mean value for the customer of Tokopedia.com (1) amounted to 90.70 < 104.30. This means that in terms of customer satisfaction, Tokopedia.com is superior to OLX.co.id.

B. Discussion

Demography of the Customers of OLX.co.id and Tokopedia.com

The majority of respondents from OLX.co.id customers are male, while the majority of respondents from Tokopedia.com customers are women. On the other indicators (age, occupation, income, and Internet usage time) there is no significant difference between the customers of OLX.co.id and Tokopedia.com.

Differences of respondents found on both sites (OLX.co.id and Tokopedia.com) can be seen from the respondents' online

shopping experiences from the category of purchased products. The majority of OLX.co.id respondents more frequently purchase gadget product category than the majority of Tokopedia.com respondents are more likely to buy fashion product category.

Bigne et al (2005) considers the demographic factors as influential in determining the enterprise segment. Thus, the priority segments need to be considered when a company launches a marketing campaign. The campaign must comply with the consumer characteristics. Given that significant difference lies in gender and experiences of respondents in the category of frequently purchased products, we can see that the customers of OLX.co.id are mostly men that often buy products gadgets; while customers of Tokopedia.com are women that often buy fashion products.

Purchase Motivation of the Customers of OLX.co.id and Tokopedia.com

The results show that the dimension of time saving is the highest motivation as the reason of the respondent in making purchase on OLX.co.id or Tokopedia.com by the same score (388) for each site. These results indicate that the biggest reason for the respondents in making online purchases is to save time. Therefore, the purchases can be more effective and efficient than to come to stores.

The reason for purchase on OLX.co.id is service quality. It is important for companies to improve the quality of the services contained on the OLX.co.id site so that the OLX.co.id site can be an option for customers to shop online because of the service quality that make it as purchase motivation.

The reason for purchase on the Tokopedia.com site is information availability. This shows the information availability that can be obtained by customers regarding the products to be purchased, such as color specifications, pricing, product details, etc. cannot be a strong motivation for the respondent to make a purchase on the Tokopedia.com. The company is required to add information about the product and company information so that the information availability can be easily obtained by the customers.

During the final purchase decision, motivation plays a key role; and it is one of the factors that influence consumer's buying behavior. (Schiffman, Kanuk, 2010, pp. 93-94). Motivation can also be used in the strategy of marketing. Two important applications of the theory of motivation is (1) segmentation; and (2) positioning (Sumarwan, 2014, pp. 30-31). Therefore, demography and motivation are equally important in determining market segmentation and positioning the company. For that purposes, the company (OLX.co.id or Tokopedia.com) can use the results of this research as a consideration in determining the STP strategy in the future.

Customer Satisfaction on OLX.co.id and Tokopedia.com

The results show that the dimension of usefulness is the dimension with the highest satisfaction felt by both respondents of OLX and Tokopedia with a score of 1661 for OLX.co.id and 1722 for Tokopedia.com. These results show that the highest satisfaction felt by the respondents in an online purchase through OLX.co.id or Tokopedia.com is based on perceived usefulness.

The dimensions with the smallest score for customer satisfaction on OLX.co.id and Tokopedia.com is customer service. It is important for both companies to improve customer service contained on their websites so that both sites can be options for customers to shop online due to outstanding service. Hence, it is possible for the customers of OLX.co. id or Tokopedia.com to re-purchase in the future.

Overall, customer satisfaction for Tokopedia.com (7062) is higher than the OLX.co.id (6862). This research is consistent with the results of pre-study examined by previous authors which as many as 50% of OLX.co id respondents are dissatisfied; whereas only 36% of Tokopedia.com respondents express dissatisfaction.

According to Kotler and Keller (2012, p. 128) satisfaction is someone's feeling of happy or upset arising from comparing the performance of a product (or a result) to their expectations. If the performance fails to meet expectations, customers will not be satisfied. If performance is in line with expectations, customers will be satisfied. If performance exceeds expectations, customers will be very satisfied, or pleased. Therefore, the companies should pay attention to customer satisfaction, because the customer will be dissatisfied, reducing customer loyalty.

VI. CONCLUSIONS

1. Overview of e-commerce customers demography in OLX.co.id and Tokopedia.com is measured by several indicators: namely gender, age, occupation, income, and Internet usage time (Bigne et al, 2005 and Sumarwan, 2014). The majority of OLX.co.id customers are male, while the majority of Tokopedia.com customers are female. For other indicators (age, occupation, income, and Internet usage time), there are no significant differences between the customers of OLX.co.id and Tokopedia.com.
2. Overview of the purchase motivation of customers of OLX.co.id and Tokopedia.com is measured based on nine dimensions that influence consumer motivation in making a purchase. They are time saving, information availability, less stress, less expensive, best offers, helpful for old and disabled people, service quality, easy ordering system, and shopping fun. From the output of rank, we can see that Tokopedia.com is superior to OLX.co.id.
3. Overview of OLX.co.id and Tokopedia.com customers for satisfaction is measured based on six dimensions that affect customer satisfaction in making a purchase via the website of OLX.co.id and Tokopedia.com. The dimensions are usefulness, easy of use, entertainment, complementary relationship, customer service, and buyer-seller interaction. From the output of rank, we can see that Tokopedia.com is superior to OLX.co.id.
4. Based on the test results of Man Whitney U-Test, there are no significant differences between demographics, motivation, and customer satisfaction in OLX.co.id and Tokopedia.com.

Suggestion

1. The results suggest that the majority of OLX.co.id's customers are male. The frequently purchased product category is the gadget products. The majority of Tokopedia.com's customers are female. The frequently

purchased product category is the fashion product. In terms of demography, the companies can determine the right strategy in determining segmentation and positioning. OLX.co.id company is better to advertise gadget products that excel in attracting consumers; while Tokopedia.com can be more favor fashion products to position the company in attracting female customers, or vice versa.

2. The study explains that the OLX.co.id's customer purchase motivation is still under Tokopedia.com. In the overall indicators of motivation, the smallest dimension to be the reason for purchase on OLX.co.id is the quality of service. It is important for the company to improve the quality of the services contained on the OLX.co.id site so that the site can be an option for customers to shop online because of the quality of services that make it as purchase motivation. The company can improve service quality by providing accurate services in responding to customer complaints, increasing the courtesy and friendliness in the service interaction, increasing the speed in facilitating customers to be contacted when the service takes place, and others.
3. The dimension with the smallest score of customer satisfaction on OLX.co.id is the customer service. It is important for the company to improve the customer service contained on the OLX.co.id site so that the site can be an option for customers to shop online because of the satisfactory customer services. Consequently, it is possible for the customers of OLX.co.id to re-purchase in the future. The company can improve customer service by conducting a survey of customers. It is to find out whether there is discontent or not. They also can provide a special training about good service for administrator/moderator, set the standard operation procedures (SOP) of the company in serving customers.
4. For further research, taking online questionnaire respondents, it is suggested to deploy questionnaires via the e-commerce forums in social media such as facebook and twitter. Twitter is the primary since there are many complaints, feedback, and assessment given by the customers directly. It can facilitate researchers to have respondents.

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