

FACTORS AFFECTING SELLER LOYALTY IN BUSINESS E-MARKETPLACE : A CASE OF INDONESIA

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ABSTRACT

The development of e-commerce in Indonesia, especially e-marketplace is very fast. The number of e-marketplaces operating in Indonesia continues to increase over time. This condition makes the competition in e-marketplace business becomes more competitive. To survive, e-marketplace must be able to maintain and increase their number of customers. Basically, customers in the e-marketplace business are not just buyers, the sellers who market their goods and / or services in the e-marketplace are also customers of the e-marketplace. Some constraints experienced by the seller can cause the seller to leave the e-marketplace, this can be a serious threat for the e-marketplace that only acts as an intermediary. Although many studies have been conducted to determine the factors affecting buyer loyalty, but differences in objective and technical experience of buyers and sellers cause studies conducted on buyers can not be applied directly to sellers. Based on these backgrounds, then conducted research to find the factors that affect the loyalty of sellers in e-marketplace business. The research model was established and developed based on some previous research. Some factors such as efficiency, security and privacy, communication, reliability, information, value added services, image, cost, and promotion are examined to obtain answers to research objectives. The sample in this research is taken from the seller in e-marketplace in Indonesia. The method of analysis used in this research is Structural Equation Modeling (SEM). The results of this study found that the satisfaction, image, cost, promotion and value added services have a positive impact on the loyalty of the seller. Satisfaction is a factor that has the greatest influence on seller loyalty.

Keywords: *E-marketplace; E-commerce; Factors; Seller Loyalty; Structural Equation Modeling*

1. INTRODUCTION

The Internet has become a part of everyday life and has influenced how people communicate, work and spend their free time. Another significant change caused by the growth of the internet is how the company runs its business. The Internet not only has the potential to change the way to run a business, it also has the potential to create new ones and new business (Afuah and Tucci, 2001). Running a business through the internet is generally known as electronic commerce (e-commerce).

There are many type of e-commerce, one of them is e-marketplace. E-marketplace is a type of e-commerce site that connects sellers that is people that provide products or services with buyers that is people looking for products or services to buy. In Indonesia, examples of e-commerce portals that have e-marketplace models are Tokopedia, Bukalapak, Lazada, Mataharimall, Shopee, and Blanja. This e-marketplace business model has an

advantage in terms of inventory, operational and margin efficiencies so it becomes very popular and enthused by many companies. Many new e-marketplace emerge every year, this condition makes the competition in e-marketplace business becomes more competitive. To survive, e-marketplace must be able to maintain and increase their number of customers. As mentioned earlier, the seller is one of the main components of the e-marketplace business, with many e-marketplace options available, sellers will have the freedom to choose and can easily switch to another e-marketplace if they experience even the most minor inconvenience (Hyperwallet, 2017).

This can be a serious threat, especially for the e-marketplace that have C2C (customer to customer) business model because the e-marketplace do not selling its own merchandise but only provide intermediary platform for members to conduct exchanges. When C2C platform's members switch to another C2C platform, they will take them with

their merchandise and their social networks, both of which are competitive resources of C2C platform providers (Chen et al., 2009).

There are many studies that learn about the loyalty of buyers but still a few who learn about the loyalty of the sellers, whereas buyers and sellers has some fundamental differences.

First, sellers and buyers have different primary goals. Sellers have the primary goal of gaining long-term profit through selling as many products as possible to as many buyers as possible to earn as much money as possible with the lowest possible transaction costs. In contrast to buyers who have a primary goal to meet their needs through the purchase of appropriate products from the right seller with the least amount of money and the lowest possible transaction costs (Sun and Finnie, 2004).

Second, sellers and buyers visit different website pages as well as follow the processes designed for different functions which is selling and buying products. As a buyer, the main activity is to search products and do check out processes of their shopping cart, while the seller interacts mostly with the website pages designed to facilitate online sales (Sun, 2010).

Broadly speaking, sellers and buyers have different goals and technical experience related to the transactions they do on the e-marketplace. Therefore, research conducted on buyer loyalty can not be applied directly to the seller loyalty.

The objectives of this research are identifying the factors that influence loyalty of sellers in e-marketplace business in Indonesia. It will benefit the e-marketplace's owner to improve their company performance by adjusting their strategies related to sellers as their customers. The result of this research is only valid for the e-marketplace in Indonesia and may give different result if it's done in a different country.

2. LITERATURE REVIEW

2.1 E-Marketplace

E-marketplace is part of e-commerce. According to Turban et al. (2008) e-marketplace is a virtual marketplace where buyers and sellers meet and conduct various transactions. Marketplace (electronic or other) has three main functions, that is:

- [1] Meet buyers and sellers.
- [2] Facilitating the exchange of information, goods, services and payments related to market transactions.
- [3] Provide institutional infrastructure, such as legal and regulatory frameworks that enable efficient functioning of the market.

2.2 Service Quality in E-Marketplace

E-service quality can be defined as extent to which a website facilitates efficient and effective shopping, purchasing, and delivery of products and services (Zeithaml et al., 2000)^[11]. According to the literature study conducted by Janita and Miranda (2013)^[12], it is found that most researchers use the dimensions of efficiency, security and privacy, communication, reliability, and information as a component of e-service quality. In addition, one dimension is added, called value-added services, which in the field of e-marketplace, this dimension can be a distinguishing element that will provide a competitive advantage for the company.

1) Efficiency

The efficiency dimension refers to four aspects related to accessibility, usability, design, and system availability. Accessibility indicates a user's ability to access the information provided on the website. Usability is defined as the ability of the customer to find information or make transactions with least amount of effort. Design is a related aspect of website's overall layout, i.e., that is well organized and structured. System availability refers to the good technical operation of the website. The company may not have full control over this dimension because it may be affected by the customer's equipment or connection to the Internet (Janita and Miranda, 2013)^[11].

2) Security and Privacy

Some authors use the terms security and privacy as the same term. Privacy on e-service quality is the degree to which the site is safe and protects customer information. Privacy can be differentiate into two types, that is financial and non-financial. Financial security deals with online information communication (eg credit card numbers), and non-financial security related to maintaining personal information (eg telephone numbers) (Janita and Miranda, 2013)^[11].

3) Communication

Communication is defined as keeping the client properly informed in a language that they can understand. Communication on e-services consists of online communication (e-mail or chat) and traditional communications (telephone, fax, and conventional mail). A quality website should offer many forms of contact (Janita and Miranda, 2013)^[12].

4) Reliability

Reliability is the ability to provide consistent and reliable service, or it may be interpreted as performing right services for the first time and in accordance with the promise given, eg accuracy in billing, keeping records correctly, and performing the service right at the designated time (Parasuraman et al., 1985).

5) Information

Information is a dimension that is provided to users to establish a perception of the quality of a service. In particular, the information provided must be sufficient, secure, on time, relevant, easy to understand, with a high level of both detail and depth, and in an appropriate format (Janita and Miranda, 2013)^[12].

6) Value Added Services

The value-added service dimension is complementary of the usual transactions of e-marketplace transactions and facilitate the completion of those transactions by delivering the product to the buyer and facilitating the seller reception of the corresponding payments. Value added services provided by e-marketplace can be financial services, which include payment services such as electronic cards or cards, logistics services that complement transaction processing such as transportation, storage, insurance, and so on. These resources can reduce the costs involved in the overall process and allow the seller to provide quality, speed and proper delivery (Janita and Miranda, 2013)^[12].

2.3 Image

Image or corporate image is an important factor in the process of a thorough evaluation of a service. Corporate image is a perception or view of how an organization is held in the customer's memory, and works as a filter that influences how a company's operations are perceived by the customer. Positive experiences received over time will lead to a positive image (Janita and Miranda, 2013)^[12].

2.4 Cost

Cost has several meanings depending on the context used. Mulyadi differentiates costs in a broad sense and narrow sense. In a broad sense, cost is the sacrifice of economic resources measured in units of money, which have occurred or may occur to achieve a particular goal. In a narrow sense, cost is part of the cost of goods sacrificed in an attempt to earn an income (Mulyadi, 2012).

Some of the costs that exist in e-marketplace according to Petrescu (2007) is transaction fees, membership or license fees, advertising, professional service fees, and value-added service fees.

2.5 Promotion

Promotion is a form of direct persuasion using various incentives that can be regulated to stimulate the purchase of products immediately and increase the amount of goods purchased by customers (Swastha and Irawan, 2003). This activity covers about how an e-marketplace can attract new visitors and make the old visitors back. The number of visits made by customers on an e-marketplace can be one indicator to see how well the e-marketplace is being used as a sales media. Sales promotions can be used to attract attention and provide information that leads consumers to do purchase transactions (Reza, 2016).

2.6 Satisfaction

Satisfaction in general can be expressed as a result of customer evaluation after they consume products or services. Satisfaction only occurs when perceived performance of the product or service meets or exceeds the customer's expectations. It can be concluded that customer satisfaction is the ratio between the expectation of the product or service provided by the company with the customer's perception of the product or the performance of the service itself (Daikh, 2015).

2.7 Loyalty

Customer loyalty is defined as an attitude that shows the relationship between a customer and a business or company (Godwin J. et al, 2010). Rauyruen and Miller (2007) distinguish loyalty into two types of behavior: "the desire of the average customer to repurchase services or products from service providers and to maintain relationships with

service providers or suppliers. Second, attitudes that reflect: "the level of psychological attachment and customer advocacy attitude toward service providers or suppliers."

2.8 Satisfaction and Loyalty

Before making a purchase, the customer will develop an expectation of quality standards that will be compared to the actual quality of the product or service. This expectation will be continued with the purchase of the product or service. During the use of the product or service, the customer will feel the function of the real product or service. After using the product or service, customers will compare between their expectations with the actual function of the product or service. From the comparison process, the results will be obtained whether the customer is satisfied or not satisfied with the product or service used. Satisfaction indicates a positive attitude and feel for the product or service that then develops into loyalty (Azizah dan Widayastuti, 2013).

2.9 Previous Research

A literature study related to previous research was conducted to take into account all relevant factors for analysis of this work. Janita and Miranda (2013)^[12] in her journal entitled "The antecedents of client loyalty in business-to-business (B2B) electronic marketplaces", conducted a study to determine factors affecting client loyalty in the business-to-business electronic marketplace (B2B). Factors that allegedly affect client loyalty are the perceptions of quality, satisfaction, and image of the e-marketplace. Where the perception of quality is assessed based on six dimensions of efficiency, security and privacy, communication, reliability, information, and value added services. The results of this study found that satisfaction does not have a direct impact on client loyalty, but the image of e-marketplace, the perception of quality and value is the antecedent of client loyalty.

Napitupulu and Aditomo (2015) in his journal entitled "Factors Affecting Customer Loyalty in Business E-Commerce: A Case of Indonesia", conducted a study to determine the factors that affect customer loyalty in e-commerce business in Indonesia. Customer loyalty is influenced by customer satisfaction and customer satisfaction itself is influenced by several factors such as perceived usefulness, perceived ease-of-use, customer risk perception, customer support, customer trust, promotion, information quality,

transaction guarantee, and brand image of e-Commerce. The results of this study found that customer satisfaction is affected by transaction guarantees, perceived usefulness, brand image of e-commerce, quality information, promotion, customer trust and customer support. From the results of this study also found that customer satisfaction affects customer loyalty significantly so that factors that affect customer satisfaction will indirectly affect customer loyalty.

Sardinha (2015) in his research entitled "E-loyalty in e-commerce: A study at GIRISSIMA.COM" conducts research to determine customer behavior and factors affecting e-loyalty in e-commerce GIRISSIMA.COM. The results of this study found that e-loyalty is influenced by e-satisfaction, e-trust, price and web design.

3. RESEARCH METHODOLOGY

This research is conducted to find the main factors that influence the loyalty of the seller in e-marketplace business. The identification of factors to be studied is formed based on literature such as journal, text book, and other sources on the internet which then formed into a research model shown in Figure 1 below.

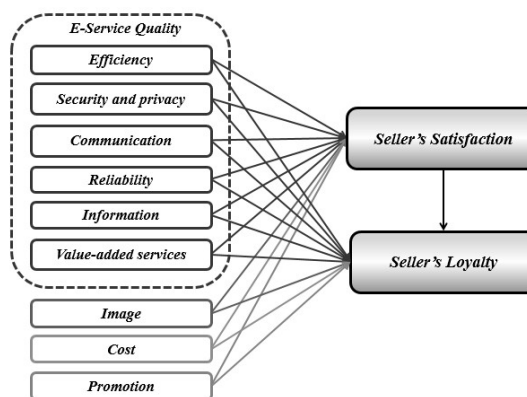


Figure 1 Research Model

The variables and indicators used in this study were adapted from previous research and adjusted to the research topic. Efficiency will be measured using items adapted from Parasuraman et al. (2005). Security and privacy, communication, information, value added services, image, satisfaction and loyalty will be measured using items adapted from Janita and Miranda (2013)^[12]. Reliability will be measured using items adapted from Omar et al (2015). Cost will be measured using items adapted from Saputro (2013). Promotion will be measured using items adapted

from Napitupulu and Aditomo (2015). Relation of satisfaction and loyalty developed based on Azizah and Widyastuti (2013). The measurement for these conceptual or latent variables was based on a five-point Likert scale with scale anchors from “1” – strongly disagree to “5” – strongly agree. To test the validity of the questionnaires, a pilot survey of 10 respondents was first conducted to ensure that the questionnaire was uniformly understood.

This study takes a population of people who ever do selling through e-marketplace website portal in Indonesia. The instrument that used for data collection in this study is questionnaires. Questionnaire was given to respondents who were sampled from the study population. Questionnaires were conducted via electronic media (www.docs.google.com). Data were analyzed using Structural Equations Modeling (SEM) method which will be divided into 5 stages: model specification, model identification, model estimation, model evaluation, and model respecification.

The first stage is the model specification will be done by creating the path diagram to show the relationship pattern among the variables studied. The path diagram of a model consists of a measurement model and a structural model.

Measurement model describes the relationship between latent variables with the indicators while the structural model describes the relationship between latent variables. The following is the equation of the measurement model to be used which can similarly be expanded for the other latent variables as well:

$$EF11 = \lambda_1 EF1 + eEF11$$

$$EF12 = \lambda_2 EF1 + eEF12$$

$$EF13 = \lambda_3 EF1 + eEF13$$

Where,

EF11, EF12, EF13 = efficiency Indicators

$\lambda_1, \lambda_2, \lambda_3$ = factor loadings

eEF11, eEF12, eEF13 = error terms

Equation of the structural model developed based on research model on Figure 1 is:

$$[1] SAT = \beta_{10} + \beta_{11} EF1 + \beta_{12} SEC + \beta_{13} COM + \beta_{14} REA + \beta_{15} INF + \beta_{16} VAS + \beta_{17} IMG + \beta_{18} COS + \beta_{19} PRO + eSAT_4$$

$$[2] LOY = \beta_{20} + \beta_{21} EF1 + \beta_{22} SEC + \beta_{23} COM + \beta_{24} REA + \beta_{25} INF + \beta_{26} VAS + \beta_{27} IMG + \beta_{28} COS + \beta_{29} PRO + eLOY_4$$

$$[3] LOY = \beta_{30} + \beta_{31} SAT + eLOY_4$$

Where,

SAT = seller satisfaction

LOY = seller loyalty

$\beta_{10}, \beta_{20}, \beta_{30}$ = constant

$\beta_{11}, \beta_{12}, \dots, \beta_{31}$ = coefficient

EFI = efficiency

SEC = security and privacy

COM = communication

REA = reliability

INF = information

VAS = value-added services

IMG = image

COS = cost

PRO = promotion

e = error term

The hypotheses for the study are as follows:

Hypotheses 1: Efficiency will have a positive influence on e-marketplace seller satisfaction.

Hypotheses 2: Security and privacy will have a positive influence on e-marketplace seller satisfaction.

Hypotheses 3: Communication will have a positive influence on e-marketplace seller satisfaction.

Hypotheses 4: Reliability will have a positive influence on e-marketplace seller satisfaction.

Hypotheses 5: Information will have a positive influence on e-marketplace seller satisfaction.

Hypotheses 6: Value added services will have a positive influence on e-marketplace seller satisfaction.

Hypotheses 7: Image will have a positive influence on e-marketplace seller satisfaction.

Hypotheses 8: Cost will have a positive influence on e-marketplace seller satisfaction.

Hypotheses 9: Promotion will have a positive influence on e-marketplace seller satisfaction.

Hypotheses 10: Efficiency will have a positive influence on e-marketplace seller loyalty.

Hypotheses 11: Security and privacy will have a positive influence on e-marketplace seller loyalty.

Hypotheses 12: Communication will have a positive influence on e-marketplace seller loyalty.

Hypotheses 13: Reliability will have a positive influence on e-marketplace seller loyalty.

Hypotheses 14: Information will have a positive influence on e-marketplace seller loyalty.

Hypotheses 15: Value added services will have a positive influence on e-marketplace seller loyalty.

Hypotheses 16: Image will have a positive influence on e-marketplace seller loyalty.

Hypotheses 17: Cost will have a positive influence on e-marketplace seller loyalty.

Hypotheses 18: Promotion will have a positive influence on e-marketplace seller loyalty.

Hypotheses 19: Seller satisfaction will have a positive influence on e-marketplace seller loyalty.

The second stage is model identification. Model identification can be performed by calculating degree of freedom (df) value. The model is said to be under-identified if the value of $df < 0$ is said to be just-identified if the value of $df = 0$, and is said to be over-identified if the value of $df > 0$. A model is qualified to be tested if the model is over-identified and df value is known (Santoso, 2011).

The third stage is to choose the model estimation that will be used. The SEM model estimation used in this research is Maximum Likelihood (ML) estimation. In general, Maximum Likelihood (ML) estimates are the most popular and most used estimates in SEM research. Maximum Likelihood (ML) model estimates were chosen because they were able to provide unbiased results when multivariate normality was met.

The fourth stage is to evaluate the model. Model evaluation is divided into two types, namely measurement model evaluation and structural model evaluation. The measurement model evaluation will consist of validity and reliability test. The structural model evaluation will consist of normality test and goodness of fit criteria index test.

The fifth stage is the model respecification if the test results of goodness of fit criteria indicate that the model used is not fit.

4. RESULTS

4.1 Descriptive Analysis

Out of 407 respondents, 175 (43%) of the respondent are females and 232 (57%) of the respondent are males. A majority of the respondents 197 (48%) is from Tokopedia, 63 (16%) is from Prelo, 43 (11%) is from Elevenia, 27 (7%) is from Shopee, 20 (5%) is from Lazada, 18 (4%) is from Carousell, 14 (3%) is from Blanja, 13 (3%) is from Bukalapak, 8 (2%) is from Qoo10, 3 (1%) is from Blibli, 1 (0%) is from Mataharimall indicated have a monthly sales frequency 229 (56%) 0-50 orders, 155 (38%) 51-1000 orders, and 23 (6%) >1000 orders.

4.2 Measurement Model Evaluation

The measurement model evaluation consist of validity and reliability test. Validity test using Item to Total Correlation was conducted to ensure the validity of measurement used. According to Sarwono and Budiono (2012) the correlation between two variable is a strong correlation if the correlation is greater than 0.50. From 11 research variables can be seen that all the variables have Item to Total Correlation over 0.50 so it can be used for this research.

Reliability test using Cronbach's Alpha was conducted on most variables to measure the interreliability. According to Gliem et. al. (2003) an instrument has an acceptable level of reliability when Cronbach's Alpha is greater than 0.70. From 11 research variables can be seen that all the variables have Cronbach's Alpha coefficients over 0.70 so it can be used for this research.

4.3 Structural Model Evaluation

The structural model evaluation consist of normality test and goodness of fit criteria index test. Normality test in this study using residual normality test. The result of normality test can be seen at Figure 2, 3, 4 below, can be seen that data is normally distributed.

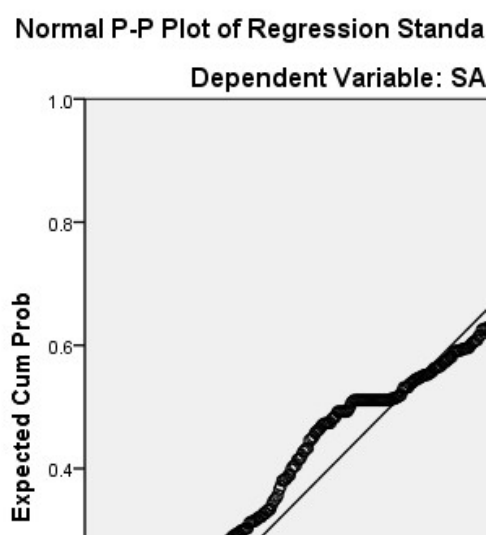


Figure 2 P-Plot Equation [1]

Normal P-P Plot of Regression Standard
Dependent Variable: LOY

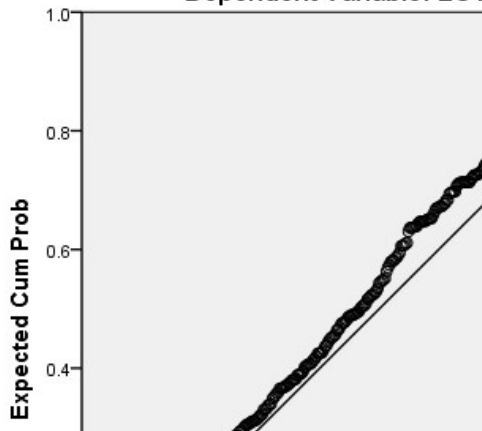


Figure 3 P-Plot Equation [2]

Normal P-P Plot of Regression Standard
Dependent Variable: LO

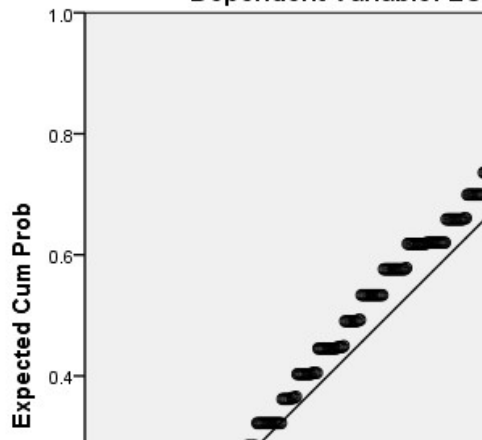


Figure 4 P-Plot Equation [3]

Goodness of Fit test aims to investigate to what extent the hypothesized model fit with the data. The result of goodness of fit test can be seen at Table 1 below.

Table 1 Result of Goodness of Fit Test

Goodness of Fit Index	Cut of Value	Results	Conclusion
Chi-Square (χ^2)	Expectedly small	1199.380	Good Fit
Degree of Freedom (df)	Expectedly big	444	Good Fit
Goodness of Fit (GFI)	≥ 0.90 is Good Fit, $0.80 \leq$ GFI < 0.90 is Marginal Fit	0.846	Marginal Fit
Adjusted Goodness of Fit (AGFI)	≥ 0.90 is Good Fit, $0.80 \leq$ AGFI < 0.90 is Marginal Fit	0.806	Marginal Fit

Root Mean Square Error of Approximation (RMSEA)	≤ 0.08 is Good Fit, < 0.05 is Close Fit	0.065	Good Fit
Tucker Lewis Index (TLI)	≥ 0.90 is Good Fit, $0.80 \leq$ TLI < 0.90 is Marginal Fit	0.907	Good Fit

4.4. Regression Results

The regression was carried out to determine the relationship between efficiency (EFI), security and privacy (SEC), reliability (REA), information (INF), value-added services (VAS), image (IMG), cost (COS), promotion (PRO) and satisfaction (SAT) with seller loyalty (LOY). The results of the regression models are given in the following equations.

$$\text{SAT} = 0.184 \text{ VAS} + 0.318 \text{ IMG} + 0.153 \text{ COS} + 0.266 \text{ PRO} \dots\dots\dots (1)$$

$$\text{LOY} = 0.284 \text{ IMG} + 0.111 \text{ COS} \dots\dots\dots (2)$$

$$\text{LOY} = 0.568 \text{ SAT} \dots\dots\dots (3)$$

Further detail of the result of the regression is presented in Table 2, including standard errors (SE) and significance of the standardized coefficient of the regression in terms of *p*-value (*p*).

Table 2 Standardized Regression Results

	Estimate	S.E.	P
SAT <- EFI	-.023	.049	.666
SAT <- SEC	.020	.059	.736
SAT <- COM	.055	.176	.760
SAT <- REA	.005	.232	.980
SAT <- INF	.082	.125	.491
SAT <- VAS	.184	.084	.025**
SAT <- IMG	.318	.082	***
SAT <- COS	.153	.035	.001**
SAT <- PRO	.266	.053	***
LOY <- EFI	-.010	.055	.865
LOY <- SEC	.112	.067	.097
LOY <- COM	.016	.197	.935
LOY <- REA	-.156	.264	.502
LOY <- INF	.258	.142	.057
LOY <- VAS	-.157	.096	.094
LOY <- IMG	.284	.098	.002**
LOY <- COS	.111	.040	.044**
LOY <- PRO	-.003	.064	.965
LOY <- SAT	.568	.103	***

**significant at significant level 5%

***significant at significant level 1%

It can be seen from Table 2 that efficiency does not significantly influence seller satisfaction with p-value $p = 0.666$ and also does not significantly influence seller loyalty with p-value $p = 0.865$. These findings is different with the results of research conducted by Janita and Miranda (2013)^[12]. This may be caused by the way to sell goods in various web portals e-marketplace is similar, so it does not give a significant impact on the satisfaction and/or loyalty of the seller

Security and privacy does not significantly influence customer satisfaction with p-value 0.736 and also does not significantly influence seller loyalty with p-value $p = 0.097$. This finding is in line with the results of research conducted by Mustafa (2011)^[14] which says that security is more related to trust or customer trust but can not be an indication of customer satisfaction. But this finding different from the results of research by Janita and Miranda (2013)^[12] which says that security affects customer loyalty. This may be caused the security of the existing e-marketplace web portal is already good because the e-marketplace providers may already understand the importance of security to gain the trust of their customers (sellers and buyers).

Communication does not significantly influence customer satisfaction with p-value 0.760 and also does not significantly influence seller loyalty with p-value $p = 0.935$. This finding is different with the results of research conducted by Hussain et al. (2014) and also Kumar and Srivastava (2013). This is probably because most e-marketplace is able to provide good communication facilities so it does not give a significant impact on the satisfaction and/or loyalty of the seller.

Reliability does not significantly influence customer satisfaction with p-value 0.980 and also does not significantly influence seller loyalty with p-value $p = 0.502$. These findings differ from those of Omar et al. (2015) where reliability has a direct positive effect on perceive service quality and satisfaction. This is probably because most of the existing e-marketplace is able to provide reliable service so it does not give a significant impact on the satisfaction and/or loyalty of the seller.

Information does not significantly influence customer satisfaction with p-value 0.491 and also does not significantly influence seller loyalty with p-value $p = 0.057$. These findings differ from those of Sadeh et al. (2011). This is probably because most of the existing e-marketplace has been able to provide information that is appropriate and easily

understood by the seller so it does not have a significant impact on the satisfaction and/or loyalty of the seller.

Value added services significantly influence customer satisfaction with p-value 0.025 but does not significantly influence seller loyalty with p-value $p = 0.094$. This finding is consistent with the results of Janita and Miranda (2013)^[12] research which says that value added services affects customer satisfaction but contrary to the result that value added services affect customer loyalty. This might be happen, according to opinion of McIlroy and Barnett (2000)^[15] that customer satisfaction is not an accurate indicator of customer loyalty.

Image significantly influence customer satisfaction with p-value < 0.01 and also significantly influence seller loyalty with p-value $p = 0.002$. These findings are consistent with the results of research conducted by Janita and Miranda (2013)^[12] and Napitupulu and Aditomo (2015). Therefore, image can be a matter of concern in developing e-marketplace business.

Cost significantly influence customer satisfaction with p-value $p = 0.001$ and also significantly influence seller loyalty with p-value $p = 0.044$. This finding is consistent with the results of research conducted by Sardinha (2015) and also consistent with the opinion of Peter and Donnelly (2007) who said that price is the main factor behind satisfaction and loyalty to a product because customers feel happy if they get a lot of benefits from the product compared with the expenditure.

Promotion significantly influence customer satisfaction with p-value < 0.01 but does not significantly influence seller loyalty with p-value $p = 0.965$. This finding is in accordance with the results of Hooi (2012) where customers are more emphasis on product quality compared to promotions offered by the company. This explains why even though the customer is satisfied with the promotions offered but it does not create loyalty among customers with the product or service

Seller satisfaction significantly influence seller loyalty with p-value, $p < 0.01$. These findings are in line with Arokiasamy (2010) and Mohsan et al. (2011) where customer satisfaction has a significant influence on customer loyalty. However, McIlroy and Barnett (2000)^[15] said that customer satisfaction is not an accurate indicator of customer loyalty. Or in other words, we can get customer satisfaction without customer loyalty, but very difficult or even impossible to get customer loyalty without customer satisfaction. Therefore, the e-

marketplace company must ensure its customers (who in this case are the sellers) feel very satisfied.

In other words, 7 of the hypotheses, i.e., H6, H7, H8, H9, H16, H17, and H19 are accepted, and the other 12 hypotheses, i.e., H1, H2, H3, H4, H5, H10, H11, H12, H13, H14, H15, and H18 are rejected.

4.5. Direct, Indirect and Total Effect Analysis

Since hypotheses 19 are accepted, factors that affect seller satisfaction also affect seller loyalty indirectly. So, the direct effect, indirect effect and total effect analysis will be done to measure all factors affected seller loyalty which is value added services, image, cost and promotion variables that has a direct and indirect effect to the loyalty variable.

Table 3 Direct, Indirect, Total Effect

Prioritas	Variabel	Direct	Indirect	Total
1	Satisfaction	0.568	-	0.568
2	Image	0.284	0.181	0.465
3	Cost	0.111	0.087	0.198
4	Promotion	-	0.151	0.151
5	Value added services	-	0.104	0.104

It can be concluded from Table 3, that the factors that have influence from the greatest to the smallest to the seller loyalty is satisfaction, image, cost, promotion, and value added services.

5. CONCLUSIONS

Although customer loyalty is a widely studied topic, most of them are study about customer as a buyer. The study about customer as a seller are still few. In fact, seller has an important role on e-marketplace business.

From the research results, it could be concluded that the factors below in order of the greatest contribution to the very small influence on seller satisfaction in business e-marketplace is : satisfaction, image, cost, promotion and value added services. Satisfaction is the factor that has the greatest influence on e-marketplace seller loyalty. So factors that significantly affect seller satisfaction will indirectly affect the seller loyalty and should always be considered by company in ensuring sustainability of the business as loyalty is the most contributor to sustainability.

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