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The Perceived Risk Influence on the E-Loyalty of Online Shoppers in Using Internet of Things

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***Abstract*— The development of technology has made the need for e-commerce increasingly high. The growth of e-commerce, as one of the applications from the internet of things, in Indonesia has also become more rapid; thus, it brings changes in choices in transactions, from offline purchases to online. One of the essential things in e-commerce is the customer's perception of the security of online transactions. This study analyses the role of e-satisfaction and perceived security risk on e-trust and e-loyalty. The research model is examined in 395 e-commerce users in Indonesia. The results show that e-trust is able to mediate the relationship between e-satisfaction and perceived security risk to e-loyalty. Customer confidence that transactions conducted on e-commerce are safe will increase e-loyalty more than the effect of risk on e-trust. Satisfaction in online purchases dramatically affects the amount of customer confidence in e-commerce. This research contributes to e-commerce actors in Indonesia to understand the importance of maintaining security in transactions.**

Keywords—e-commerce; internet of things; perceived security risk; e-satisfaction; e-trust; e-loyalty.

I. INTRODUCTION

E-commerce has changed the way companies execute their business, including consumers shopping habits. With a simple touch of a gadget or smartphone, it is not a surprise that e-commerce became very popular and easy for consumers around the world. Euromonitor International announced that e-commerce is anticipated to develop into the world's biggest retail channel by 2021, outpacing revenues through retail outlets such as supermarkets, grocery stores, and others. Within the same year, e-commerce will contribute 14% of aggregate retail sellings. However, e-commerce has already become a dominant retail channel in Asia-Pacific since 2017 supported by growth in South Korea and China [1]. China has led the e-commerce market in the world by generating more than 40% of e-commerce transactions globally in 2017 according to [2].

E-commerce in Indonesia is also developing rapidly. As one of the most avid users of digital technology in the world, [3] reported that there are currently more than 30 million Indonesians who transact online and are creating an online market of at least $8 billion which continues to grow until it is estimated to reach more than $40 billion by 2022. Having the biggest number of billion-dollar technology startups in Southeast Asia, including Tokopedia, Traveloka and Bukalapak also encourages the rise of e-commerce in Indonesia. 70 percent of online sales in Indonesia are generated from fashion, electronics, health and beauty products which are the most popular product categories. The existence of e-commerce has an enormous effect in Indonesia and even the world by providing consumers more decisions, easier accessibility, and more competitive prices [3].

As e-commerce evolves, consumers' preferences have shifted from offline shopping to online shopping. Hence making e-loyalty one of the more important issues in e-commerce since customers can effortlessly compare popular items in various online stores and change from one online store to another [4]. As a result, it will be difficult for online stores to survive in the long run if customer loyalty is low [5]. The concept of e-loyalty is described as one's commitment to visit or repurchase products from the same store [6]. The growth of e-loyalty can be caused by several factors, such as e-satisfaction, e-trust, and perceived security risk.

Customers who are satisfied when transacting with an online shop will be more interested to interact further with the online shop in the future until it generates loyal customers [7]. This is supported by previous studies which found a significant connection between e-satisfaction and e-loyalty [8; 9; 10; 11]. Furthermore, e-satisfaction was also found to influence e-trust [6; 9]. Trust in an online store can develop from someone's experience that feels satisfaction when interacting with the online shop. Although e-trust is affected by e-satisfaction, e-trust can also determine e-loyalty of consumers. Reference [10] stated e-trust is a crucial foundation for building long-term relationships with customers. E-trust may develop if the online shop has appropriate security system to protect customer's personal information [12]. According to [13], perceived security risk is one of the most crucial aspects that influences customer trust. In addition, perceived security risk also has the

ability to impact e-loyalty as discovered by [14]. Previous investigation on the direct relation between perceived security risk and e-loyalty is still rarely found.

At the moment, e-commerce has become a major phenomenon affecting human life in various aspects. Hence, it is essential to acknowledge and understand the important role of e-loyalty in e-commerce in order to be able to prepare ourselves to face the challenges. Based on the background of the research and the prior literature review, the research questions formulated in this study are as follows:

RQ1. Does e-satisfaction affect e-trust positively?
RQ2. Does perceived security risk influence e-trust positively?
RQ3. Does e-satisfaction have a positive impact on e-loyalty?
RQ4. Does perceived security risk influence e-loyalty positively?
RQ5. Does e-trust affect e-loyalty positively?

II. LITERATURE REVIEW

A. E-Satisfaction and E-Trust

Based on previous research from [7] and [15], e-satisfaction is the one factor which can increase e-trust. E-trust can be prescribed when other people can be trusted or behave in ways that are ethically and socially appropriate [16]. E-trust take time to be built, not only must the customers feel a positive result, but also, they must have an assurance that this positive result can be continuously happen in the future. According [17], there are other ways to obtain the relationship between these two variables by using closeness brand as a moderator.

According to [18], customer e-satisfaction is a personal reaction and bring down from evaluating services and comparing perceptions with expectations provided by an online shop. Perceptions in theory planned behavior is influenced by three things such as attitudes, subjective norms, and control of behavior. Reference [19] said that the success of transactions on the internet is especially influenced by customer satisfaction in the exchange process within a business relationship. Because of this, e-satisfaction's level also depends on e-trust's level, it will be as well [7]. Therefore, relating to the above explanation, below are the hypotheses:

H1. E-Satisfaction affects E-Trust positively.

B. Perceived Security Risk and E-Trust

In general, electronic data interchange (EDI) is a major element of e-commerce systems. Nearly all transaction operations are conducted electronically, including accepting sales orders, sending invoices, electronic payment systems (e-payment), etc. [20]. Dependence on internet network raises consumer issues about the private data security, credit card information, and the confidentiality of transactions [6]. Therefore, the security system has always been a primary problem for consumers in shopping online [21; 22]. In establishing appropriate safety protection, the process cannot be separated from the role of an accountant and auditor. Accountants and auditors have to know the techniques and technology underlying e-commerce operations in order to develop an efficient accounting systems as well as to safeguard electronic information against undesired risks [20; 23].

If the perceived level of safety satisfies the customer's expectations, customers are more confident in providing personal data and continuing their transactions [22]. In contrast, high security risk will become a barrier for consumers to shop online in compliance with the perceived behavioral control in Theory Planned Behavior (TPB) [24]. Reference [13] claimed that the security system is the main determining factor of customers' trust in e-commerce. This statement consistent with prior research conducted by [25] and [26] who identified the online transaction security becomes the first aspect customers see before trusting the online shop. The safer an online shop, the more confident consumers are to make a transaction within that online shop [27]. Based on the explanation above, the following hypothesis can be concluded:

H2. Perceived Security Risk influences E-Trust positively.

C. E-Satisfaction and E-Loyalty

Measuring the level of customer satisfaction is such a crucial thing because e-satisfaction of a distribution service will affect a customer's decision whether they will use that service again or not. But according to [28], the transformation of customer satisfaction to loyal customers also requires several reasons [29]. According to research conducted by [30] and [31], the level of individual's e-satisfaction depends on the relationship between their initial expectations and the actual results. Additionally, according to Theory of Planned Behavior, perceived behavioral control, alongside with behavioral intentions, can be used straightly to forecast the attainment of behavior [24].

Therefore, it can be concluded that if the results match the expectations, customers will have some kind of control in achieving their level of loyalty which leads them to achieve their e-satisfaction. Among the factors of consumer level, comfort encouragement and buying size were found to be factors that impact of e-satisfaction on e-loyalty, while inertia was found to reduce the impact of e-satisfaction on e-loyalty. Customer e-satisfaction is the basis of e-commerce approach, which states that customer's happiness of purchasing again is the key to produce customer loyalty [32]. E-satisfaction basically can be defined e-loyalty levels and has been constructed to be the most crucial factors that determine loyalty in online and offline sales [33].

Based on previous research history, customer satisfaction can be defined as the global feelings about their buying experience from online shopping companies, which are abstracted reviews of personal emotions [32]. If the customers are satisfied with their web quality, they will buy other products in the future so they can become loyal customers [7; 34]. In addition, e-satisfaction has a real domination on customer's plan to buy again their online purchases, which will lead to loyalty. Customer satisfaction has a specific relationship with customer loyalty in many past studies [32; 35; 36; 37].

H3. E-Satisfaction has a positive impact on E-Loyalty.

D. Perceived Security Risk and E-Loyalty

Transaction security and payment systems are the main factors considered by customers when shopping online [38; 39; 40]. If customers are confident in the current security system, they will not hesitate to make another transaction with the online shop. Many previous studies have found that perceived security indirectly influences a person's loyalty [41; 42]. Reference [6] is one of many researchers who discovered a positive connection between online security and e-loyalty through e-trust. However, there were not any significant direct relationship found between these variables in the research. Furthermore, reference [14] showed contradictory results in which perceived security has a positive impact on e-loyalty directly. With a good security system within the online shop to ensure the safety of electronic data and transactions, customers will feel comfortable and motivated to remain loyal to the online shop. This is in line with TPB [24], in which perceived security will impact attitudes, subjective norms, and perceived behavioral control that promote customer intentions to remain loyal to the online shop. Study about the relationship between perceived security risk and e-loyalty without mediating variables is indeed still rarely conducted. Therefore, the hypothesis formulated in this study is as follows:

H4. Perceived Security Risk influences E-Loyalty positively.

E. E-Trust and E-Loyalty

Based on past analysis from [43], it was shown that service quality has a positive effect on customer loyalty. Likewise, customer's e-trust has become a factor that affects customer loyalty. Reference [44] and [45] explained that there is a reciprocal correlation among e-trust and e-loyalty, where e-trust has not only a straight effect, but also indirect crash on loyalty through customer satisfaction. Customer's trust can be obtained from a sense of comfort and confidence while shopping at related online shops.

Meanwhile, based on the theory of planned behavior, individual attitudes towards behavior includes one's trust of an action, such as evaluation of behavioral outcomes, subjective norms, normative beliefs and motivation [24]. Customer loyalty can decrease expenses and increase gain because the expense of raising new customers is five times bigger than the expense of protecting customers, therefore overall e-trust has a very important role [36; 46]. If a customer trusts an online shop, the customer must be more satisfied with that relevant online shop [47].

H5. E-trust affects E-Loyalty positively.

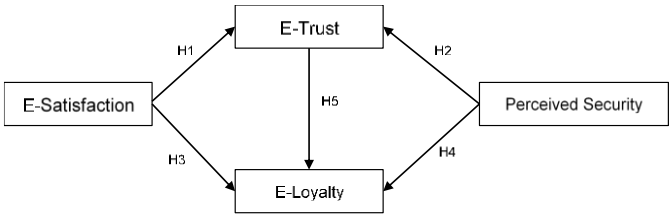

Fig. 1. Research Model

III. RESEARCH METHOD

This research applies *probability sampling* in which the sample collecting gives the same chances for each element to be chosen as sample. Specifically, this research employs *purposive judgment sampling* which is a sample collecting method on specific response that can supply information related to the desired criteria [48]. Researchers distribute questionnaire to users of online shop from Indonesia within the demographic of students, college students, professional workers, entrepreneurships, housewives and freelancers. It is expected that this research can help in acknowledging what factors influence e-loyalty, so online shops can choose the right strategy in obtaining consumer loyalty.

F. Population and Sample

Respondents of this research are the user of online shop from Indonesia. They were collected from various ages and professions such as students, college students, professional workers, entrepreneurships, housewife and freelancers. In the interest of meeting the minimal sample size (n), the researchers send out 395 questionnaires online to various ages and professions in 2019. All data are confidentially and anonymously saved and used for the exclusive goal of this research.

G. Variable and Measurements

This study employs Likert Scale as the measurement tool in collecting data. Respondents are asked to fill out on five points Likert Scale (from 1= strongly disagree to 5= strongly agree) on how much they approve about the given statements. The employed data type is quantitative or numerical data which are analyzed with WarpPLS. The Likert Scale, developed by Rensis Likert, urges the respondents to state either their agreement or their disagreement on particular statement [49].

H. Instrument and Questionnaire

The first part of the questionnaire contained a summary of respondents' demographics consisting of gender, profession, age, budget, and the most purchased products. The next part is six questions about E-Trust, where the questions are adapted from [50], which is related to respondents' knowledge that the online shop is honest, pay attention to their customers, not opportunistic, maintaining commitments, can be trusted, and all transactions will be successful. Questions relating to E-Satisfaction have been modified from previous studies conducted by [6; 10; 11]. There are four questions asking about whether the respondent is happy with the experience of buying

products from an online shop, whether the decision in choosing an online shop is correct, whether the respondent is not happy transacting with an online shop, and whether the respondent is satisfied with the products and services provided. Four questions related to Perceived Security Risk were adjusted from the research of [6; 51; 52] which consists of respondents' beliefs regarding the online shop's capability to settle problems from hackers, the presence of an adequate security system to protect private and financial information, having adequate technical ability to secure data from third parties modification, and if there are security procedures for protecting online purchases. The last part is five questions on E-Loyalty, which inquire respondents' intention to not switch to another online shop, whether the online shop is the first choice, intention to continue buying products from the online shop, willingness to give positive judgment, and giving recommendation to others. The E-Loyalty question is a combination and modification from previous researchers, specifically [6; 10; 11; 50]

I. Method Analysis

The data analysis of this research consists of validity test, reliability, and hypothesis employing WarpPLS. WarpPLS is used to analyze variance-based and factor-based structural equation modeling (SEM) using the partial least squares and factor-based methods.

IV. Results And Discussion

A. Demographic Data Respondent

The questionnaire in this study has been distributed online to online shop users which generated a sample of 395. All respondents were Indonesian shoppers. Based on surveys, fashion products are the most frequently purchased online. Most respondents are women with an average age between 20-29 years. In addition, more than half of the respondents spent an average of Rp1,000,000 to Rp10,000,000 to shop online each year. Overall demographic information of the respondents is displayed in the following table:

TABLE 1. Demographic Summary

Character	Category	Frequency	Percentage
Gender	Woman	302	76.46%
	Man	93	23.54%
Profession	Freelance	9	2.28%
	Housewife	3	0.76%
	College Student	321	81.27%
	Professional Workers	36	9.11%
	Student	4	1.01%
	Entrepreneurship	22	5.57%
Age	<20	46	11.64%
	20-29	335	84.81%
	30-39	9	2.28%
	40-50	5	1.27%
Budget	<Rp1.000.000	150	37.97%
	Rp1.000.000 – Rp10.000.000	208	52.66%
	Rp10.000.001 – Rp20.000.000	20	5.06%
	Rp20.000.001 – Rp30.000.000	8	2.03%
	>Rp30.000.000	9	2.28%

B. Descriptive Statistics and Measurement Model

Table 2 presents the loadings and cross loadings value which exceeds the standard value of 0.5 and has a P value lower than 0.05 which is also acceptable within the specification available. Combined loadings and cross-loadings are provided in a table with each cell referring to an indicator-latent variable link. Since loadings are from a structure matrix, and unrotated, they are constantly within the -1 to 1 range [53]. Other than that, the loadings value which are shown within the parentheses are as expectedly larger than the loadings value alongside.

As referred from the questionnaire responses, E-Satisfaction is such a vital factor in a shopping experience and is something that needs to be highly paid attention to. This can be seen by its highest mean that achieved the value of 3.92.

Table 3 presents the effect size of this research with 0.372 for ESAT on ETRS, 0.271 for ESAT on ELYL, 0.115 for ETRS on ELYL, 0.213 for PRISK on ETRS, and 0.084 for PRISK on ELYL. Whereas these values meet the standards which must exceed the value of 0.02. Average variance extracted (AVEs) is also provided for all latent variables; and are utilized in the evaluation of discriminant legitimacy [53]. The benchmark for discriminant validity assessment is that for each latent variable, the square root of the average variance extracted should be higher than any of the correlations associating that latent variable [53].

This result can be seen by the diagonal value of each latent variable as can be seen in table 4, which has proven to meet the criteria. Additionally, composite reliability and Cronbach's alpha coefficient can be utilized to assess reliability, whereas one of the two coefficients should be equivalent to or greater than 0.7 [54]. Both respective values in the table have surpassed the standards which means the available data are proved to be reliable.

TABLE 2. COMBINED LOADINGS, CROSS LOADINGS, AND DESCRIPTIVE STATISTICS

	ESAT	ETRS	PRISK	ELYL	P value	Mean Total	Standard Deviation
ES1	(0.835)	-0.189	-0.059	0.037	<0.001	3.9	0.863
ES2	(0.872)	-0.031	0.075	-0.015	<0.001	3.9	0,77
ES4	(0.822)	0.225	-0.020	-0.022	<0.001	3.9	0,746
TR1	-0.200	(0.764)	-0.038	-0.066	<0.001	3.7	0,899
TR2	-0.321	(0.771)	-0.016	0.008	<0.001	3.7	0,831
TR4	0.017	(0.816)	0.113	-0.044	<0.001	3.7	0,771
TR5	0.057	(0.819)	-0.074	0.085	<0.001	3.7	0,801
TR6	0.430	(0.790)	0.013	0.013	<0.001	3.9	0,789
SC2	-0.010	0.004	(0.876)	0.049	<0.001	3.6	0,936
SC3	0.011	-0.013	(0.892)	-0.032	<0.001	3.6	0,944
SC4	0.216	-0.019	(0.783)	-0.110	<0.001	3.9	0,849
SC1	-0.224	0.031	(0.763)	0.095	<0.001	3.2	1,021
EL1	-0.182	-0.164	0.084	(0.608)	<0.001	3.2	1,128
EL2	-0.150	-0.125	0.083	(0.803)	<0.001	3.3	1,175
EL3	0.095	-0.090	-0.084	(0.804)	<0.001	3.7	0,94
EL4	0.025	0.122	0.016	(0.818)	<0.001	3.7	0,827
EL5	0.174	0.223	-0.082	(0.775)	<0.001	3.9	0,884

TABLE 3. EFFECT SIZE

	ESAT	ETRS	PRISK	ELYL
ESAT				
ETRS	0.372		0.213	
PRISK				
ELYL	0.271	0.115	0.084	

TABLE 4. CORRELATION AMONG LATENT VARIABLE WITH SQRTS OF AVES, COMPOSITE RELIABILITY AND CRONBACH'S ALPHA

	ESAT	ETRS	PRISK	ELYL	Composite Reliability	Cronbach's Alpha
ESAT	0.843	0.699	0.469	0.640	0.881	0.797
ETRS	0.699	0.792	0.606	0.584	0.894	0.852
PRISK	0.469	0.606	0.830	0.472	0.898	0.848
ELYL	0.640	0.584	0.472	0.766	0.875	0.820

C. Hypothesis Testing

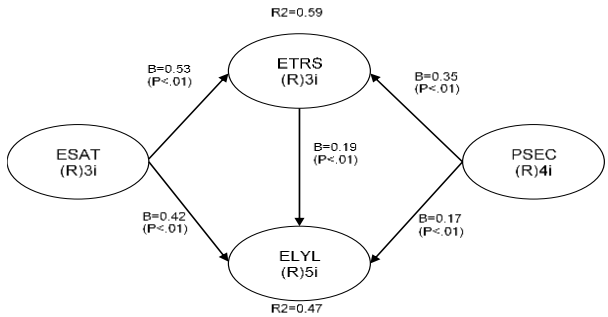

Fig. 2. Results from Research Model Testing

The figure above shows β and P value used to measure the significance of the hypotheses. Based on the result, all the hypotheses in this research are shown to be accepted. The significant result of H1 and H2 demonstrates how customers will confide in the online shop more when they were satisfied with their transaction (β=0.53, p <0.01) and/or when they felt a great security system (β=0.35, p <0.01). H3 and H4 was supported with β=0.42, p <0.01 and β=0.17, p <0.01 consecutively. This implies that e-satisfaction and perceived security is the two crucial factors in determining the e-loyalty. Aside from that, H5 shows how e-loyalty is directly influenced by e-trust with β=0.19 and p <0.01. From this result, it can be concluded that e-trust is a mediator between the relation of e-satisfaction and perceived security with e-loyalty. The coefficient of multiple determination in this research model is R2 = 0.59 for e-trust and R2 = 0.47 for e-loyalty which shows that the variables can be explained well through the model used in this research.

TABLE 5. INNER MODEL RESULT

	Direct Effect	Indirect Effect	Total Effect
ESAT → ETRS	0.531 (p < 0.001)		0.531 (p < 0.001)
ESAT → ELYL	0.423 (p < 0.001)	ESAT → ETRS → ELYL 0.103 (p = 0.002)	0.526 (p < 0.001)
ETRS → ELYL	0.194 (p < 0.001)		0.194 (p < 0.001)
PRISK → ETRS	0.351 (p < 0.001)		0.351 (p < 0.001)
PRISK → ELYL	0.170 (p < 0.001)	PRISK → ETRS → ELYL 0.068 (p = 0.027)	0.238 (p < 0.001)

D. Discussion

In this research, it has come to realization how perceived security risk of an online shop can influence the e-loyalty of online shoppers in Indonesia. The purpose of this research itself has been reflected into 5 hypotheses. Where it has been concluded that each variable will have a significant impact for one to another. As can be seen from the model used in this research, customer's loyalty in making a transaction through e-commerce is heavily affected by the other four variables. The perceived security risk itself, has become one of the most influential factors in deciding the trust and loyalty of a customer, where a high security system from one online shop can achieve a higher value of online trust and a better review of website features including payment procedures, privacy issues, and quality information [33].

According to what we can see in Table 1, this research was done on Indonesian e-commerce users with the majority respondents of female university student within the age range of 20-29 years old. It has been recorded that a total of 56 percent from the total population in Indonesia browses the web, with its majority users in the age of 19-34 years old spending a consequential amount of time on the internet. They moderated 8 hours and 36 minutes online per day, much more than the global average of 6 hours and 42 minutes [55]. Furthermore, despite its relatively low percentage of internet users, Indonesia has risen as the worldwide leader of online shopping with over 86 percent of internet users in Indonesia having made purchases through e-commerce, highlighting a massive potential growth in this sector [56].

Moreover, this research has implemented Theory of Planned Behavior (TPB) where TPB can be utilized to test and predict the behavior of one individual in the use of e-commerce in which needs some planning. The culture dimension was used as an indicator in the TPB model to support the testing, motive prediction, and one's behavior in using the e-commerce.

The result of H1 shows that E-Satisfaction has a positive influence on E-Trust which is also aligned with the previous research done by [6; 57]. There were also some studies which included the relation between both variables, whereas trust and satisfaction are two very connected elements that cannot be separated [58; 59] furthermore, as [60; 61] have mentioned, one's trust has been shown as a significant factor in influencing a consumer's behavior. Other than that, seeing the direct effect of E-Satisfaction on E-Trust which can be considered high with a value of 0.531, there is a significant positive effect where if a customer is certain that their decision in choosing to use the online shop was correct, their level of trust in online shop will be significantly increased as well. Moreover, this research shows that H2 is also supported with its result showing how a good perceived security risk will increase e-trust. This result is also in line with the previous studies done by [41; 62; 63]. Additionally, in this research, it has been confirmed that ensuring the user that online shop has a sufficient technical capacity to make sure that the data of one's use cannot be modified by a third party is the most effective way to escalate a customer's trust on online shop.

According to the theory of planned behavior, perceived behavioral control, alongside with behavioral intention, can be used directly to anticipate one's behavioral achievement [24]. This can be connected to one's intention in choosing whether they want to become a loyal customer to an online shop or not. As we can see from the result of H3, e-satisfaction has a positive relation to e-loyalty. Moreover, as mentioned in Table 5, e-trust can also become a mediator or indirect effect between connection e-satisfaction and perceived risk on e-loyalty. The result also shows how e-trust's impact level on e-satisfaction is confirmed to be much higher than its effect on perceived security risk, which is noticeable and proven by its higher coefficient value, and a lower P value. With these findings, it can be understood that e-trust is a very vital component in increasing e-loyalty, as also perceived in the discovery for H5, where in order to increase the customer's trust, the e-commerce administrator can achieve that more effectively by increasing the customer's e-satisfaction in comparison to perceived security risk. However, this doesn't justify ignoring perceived security risk, as it was also mentioned in H4 how perceived security risk has a positive effect and is able to significantly boost e-loyalty. In fact, perceived security risk itself has become a must for every online shop or e-commerce to provide.

E. Conclusion, Limitation, and Implications

With the growing interest of e-commerce in Indonesia, the topic for this research became very interesting to examine how buyers behave in conducting transactions through online shops. As found in this research, the ability of online shops to ensure that data sent is not modified by third parties is an effective way to increase the likelihood of buyers saying positive things about online shops to their relatives and others which is a sign of consumer loyalty. However, in reality, online shop providers still fail to fulfill this, and the customers are in fact still doubtful about it.

In addition, increasing e-trust to buyers has also proven to significantly increase customer loyalty in online store purchases. E-commerce providers should strive to continue to increase the level of buyer trust and confidence on online shops by increasing e-satisfaction as well as perceived security risks for buyers.

This research with no exception, certainly has some limitations. Despite its remarkably important contribution, the results of this study cannot be generalized into a different and broader context. For example, this study has a sample that is mostly female (76.46%) and a dominant profession of a student (81.27%) so that it can provide different results when compared to other studies with other sample demographics. Demographics from the sample can certainly affect the results of the research given that each person has a different character and different online shopping behavior and habits. In addition, as this study talks about perceptions, they are inevitably highly dependent on the demographic status of the respondents, in which the research itself is dominated by female respondents. So, if further research has different respondents' demographics, it can produce different results. In addition, because perceptions can develop over time, time framing in research should be given more attention, given that the results of this study are taken based on the current conditions in Indonesia. So that in subsequent studies, the use of the same model and respondents can produce different results due to different research times and the dynamic nature of the business and economic environment. Then, the research model in this study focuses on e-satisfaction and perceived security with e-trust as a mediating variable in influencing consumer e-loyalty. However, there are actually other factors that can influence e-loyalty, such as delivery efficiency, website design, customer service, brands, and so on which is interesting to be considered in a future study. Future research can be broaden and can complement the proposed research model by including a number of these factors in order to get a more complete picture of how to grow and establish consumer e-loyalty.

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