THE INFLUENCE OF E-COMMERCE USER EXPERIENCE ON USER SATISFACTION

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ABSTRACT

User Experience plays an important role in the platforms of various industries, including that of e-commerce. User Experience helps indicate how strong overall users feel towards a given platform's features, and whether or not they provide benefits to the user, be it facilitating user goals, providing quality services, or clearly communicating important information to users. This study aims to delve deeper into the relationship that User Experience might have with User Satisfaction, specifically among that of e-commerce application users. This relationship is investigated by testing efficiency, consistency, and communication functions of e-commerce platforms according to the answers of respondents. Upon being analyzed with the multiple regression test, findings indicate that proper user experience aspects, when combined, provide significant positive impact to users, with efficiency having the most significant impact on user satisfaction. The contribution of this study is to determine what factors in User Experience influence the overall satisfaction of users, specifically those of Gen-Z that are currently residing in the Jabodetabek area. This paper can be used by developers, researchers, and designers alike to find out which features in User Experience improve user satisfaction.

Keywords: *Satisfaction, User, Experience, E-Commerce, Gen-Z, Indonesia*

1. INTRODUCTION

The e-commerce industry is known to have experienced a significant amount of growth over the past few years. Many users have come to adopt e-commerce into their daily lives, both consumers and sellers alike, to support their needs and fulfill their wants. Gen-Z, especially, have become accustomed to the utilization of technology in their daily lives. Having been raised in the turn of the century, Gen-Z frequently utilize technology in the form of different applications and sites, including e-commerce platforms. According to a study in 2019, 19.32% of Indonesia's total population is Gen-Z, and among 100 million active smartphone users, the vast majority were around the ages of 15-19, which effectively puts them in the Gen-Z range. [1]

E-commerce, like most industries, rely on providing high quality services to support good user experience. Customer satisfaction is a component of user experience, which is shown to be a psychological result of experiences despite the initial expectations that one might have and whether the actual experience matches said expectation (e.g., purchasing an item touted as high quality, only for it to break after a few uses, is a disappointing experience to many customers). [2] Certain user experiences can enable users to invoke a series of feelings–including cognitions and behavioral responses–that transpire upon interacting with or undergoing these experiences. [3]

Aside from this, it is also imperative for e-commerce applications and websites to maintain a good user interface (GUI) that can provide a higher quality user experience. As a digital platform that generally utilizes a GUI, the elements of a given GUI can impact the perceptions and judgments of users. [4] A combination of pictures and aesthetical appearance is important for the appeal of web pages in term of interface, where first impression of the GUI itself is a very important factor for the user to continue using it. [5] For e-commerce, this means companies should care about giving customers a pleasant shopping experience, so they will develop a larger repurchase intention which increases sales.

Thus, it can be said that one of the factors

from providing a seamless user experience to the users of a given platform.

A good user experience enables customers to keep coming back, while a bad one can have a negative impact on a business. Research done by Zippia.com, a job-seeking expert site showed that 88% of online customers won't be back to the site after having a bad experience. Some of the most common cause of bad user experience are bad aesthetics (52% customers will not return), long loading time (39% customers stop engaging), and unattractive layout or content (38% customers do not engage). [6]

Online transactional success in e-commerce industry includes not only consumer's initial purchasing goals, but also emotional factors influenced by the existing online environment. Negative emotions that may be invoked by a bad user experience will reduce the likelihood to buy for consumers. Hence, trust and brand loyalty can be actively promoted. One of the ways is through good website design and providing a good user experience for the consumers. It is also a fact that for every dollar spent on providing a good user experience, businesses receive $100 in return, which is a 9,900% ROI (Return on Investment). Better UX design will also increase a website's conversion rates by up to 200%. [7]

This study aims to analyze the impact that different user experience components on e-commerce websites and applications have on user satisfaction. It is meant to be a complementary study to that of Ariansyah et. al, which observes how user experiences factor into how each different individual experience customer satisfaction. [8] While Ariansyah and company's study focuses more on how e-commerce adoption is affected by its users perceived satisfaction from their respective platforms, this study serves to delve into what aspects of user experience are catered to satisfy their needs and goals.

According to DataIndonesia, users in Indonesia obtain the most satisfaction from services, which overall play into user experience. This shows that there is a correlation between user experience and user satisfaction that needs to be further observed.

contributing to user satisfaction is obtained [9] The user experience components count as the independent variables, where the user satisfaction counts as the dependent variable. The statistical method to test the relationship between dependent and independent variable is called regression method. Since this study has more than one independent variables, the method used is the multiple regression method, which provide insights on how each of the independent variables affect the dependent variable. [10]

The second chapter will give a background review on the topic at hand. The third chapter highlights the methods used for gaining information pertaining the subject matter, as well as what questions will be asked to respondents. The fourth chapter will detail the findings of the research. The fifth chapter aims to discuss the acceptance of the hypotheses, and lastly, the sixth chapter will conclude the study.

2. THEORETICAL BACKGROUND

2.1 E-commerce

E-commerce websites are, according to Britannica, sites that enable vendors or sellers to maintain relationships as well as conduct business transactions with customers and vice versa. This includes sharing information, such as by leaving inquiries and/or reviews, and trading goods or services. [11]

In Indonesia, e-commerce is notably the fastest-growing sector of the country's digital economy. As of 2019, e-commerce accounted for approximately 50% of Indonesia's digital economy, which was boosted during the pandemic. [8] E-commerce is perceived to provide advantages to customers that traditional commerce cannot offer, including saving time and money. In addition to this, with 203 million users in 2021, 73.7% of Indonesia's population has adopted the internet in some shape or form, which further indicates the nation's openness towards e-commerce. [12] In addition, as of 2020, it is proven that Indonesians spend an average of 7 hours and 59 minutes surfing the internet daily. The number of growth in internet users annually has also increased up to 17%. This indicates that the country is experiencing a growth in internet adoption. [13]

2.2 User Experience

User experience is used to describe

how users interact with a product. The user interface, among other things, is a key component of user experience. A user interface is a medium upon which users can interact with, and is commonly presented in a digital manner. According to a study conducted in 2020 by Pratama and Cahyadi, the appearance of an application is shown to largely influence the opinions that users may hold on to the application. This is because the UI is a key component of user experience

designs, Pratama and Cahyadi discovered that applications with graphically appealing interfaces attract more potential users and gain more downloads as a result. Similarly, applications with more straightforward functions are rated as being more useful and having an easier learning curve.

A different study conducted by Nissen for The University Duisburg-Essen also led to a similar conclusion. In her study, she found that different color combinations provide different stimuli to users, most notably in GUI designs. For example, websites designed with predominantly reddish colors are perceived as being more unpleasant compared to websites with bluish colors. [15] In contrast, websites with predominantly greyscale or bluish color schemes are perceived as being more aesthetically appealing. This shows that different UI designs, in conjunction with UI color schemes, can impact how users perceive applications.

2.3 Consistency

Consistency is the usage of information and graphics in a uniform and coherent way. A consistent interface is able to provide a reliable standard for information and graphics, such as interfaces, word usage, actions, and layouts in a fashion that makes sense to users. According to a previous study, consistency ties into the effectiveness of a given graphical interface in helping users fulfill their respective user goals. [16]

2.4 Communication

Communication indicates how the graphical interface provides information to users. Communication can be done in two ways: from the application to the user; and from the user to the application. [16] A graphical interface with good communication can provide sufficient context and information to

in applications that is not only utilized, but also viewed by users, which leads to it playing a role akin to that of packaging in most physical products. [14]

When users open the application, the first thing that they see is the UI in the form of the visual design of the application itself, before focusing more on the application's features. Upon comparing two applications with different UI

users without creating confusion while clearing up any ambiguity that might exist. The information provided must be clear and concise, without containing too much information. Communication in a graphical interface is key to assisting users in completing their user goals.

2.5 Efficiency

Efficiency refers to how quick the users are able to accomplish their goals and how accurate it is. Efficiency indicates how much ease the user can have while navigating through the graphical interface. In an efficient website, users can easily maneuver between pages and sections to find any information that they require. [17] A graphical interface that is efficient allows users to fulfill their user goals as fast as possible without compromising the information that they receive while doing so.

3. METHOD

This study is classified as quantitative research, where the data is collected from questionnaires sent to respondents. This study focuses on e-commerce users in the Jabodetabek area from the Gen-Z (11-26 years old) demographic since this generation is confirmed to be the largest consumers of e-commerce. [18] Hence, why the eligible respondents are those who are in the Gen-Z age range. In addition to this, Indonesia's increasing growth of internet adoption combined with its thriving e-commerce scene make the country a prime scene for conducting this study. Thus, why this study will be conducted in Indonesia.

Data for the questionnaire will be conducted through online surveys, which are spread on various social media platforms. These surveys will be distributed among members of Gen-Z with sufficient experience in making purchases with e-commerce applications.

3.1 Model Building

This research utilizes a model based on the theory of planned behavior. This is because the theory shows that the behavior of an individual is generally influenced by their intentions. These intentions are, in turn, influenced by different factors: attitudes, subjective norms, and perceived behavioral control. Based on the research of Moczarny et al. for the South African Institute for Computer Scientists and Information Technologists, user experience, namely user satisfaction, is influenced by consistency, communication, and efficiency. [17]

Based on this, there are 3 hypotheses that can be surmised, which are further illustrated in the research model below:
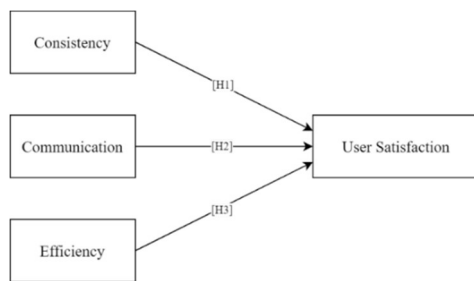

Figure 1: Research Model

3.2 Population and Samples

In this research, the data collection method used is the questionnaire method. There are two different types of questions: multiple choice questions and open-ended questions.

The scale used for the multiple-choice types is the Likert Scale, in which every answer is being limited to 1-5 scale options, with the detail listed below:
1) Highly Agree, scale 5
2) Agree, scale 4
3) Neutral, scale 3
4) Disagree, scale 2
5) Highly Disagree, scale 1

Based on the previous assessment, around 19.32% of Indonesia's population is Gen- Z added with the fact that Indonesia has 100 million active smartphone users. This can be used to calculate the sample size. The sample size can later be calculated with the following formula:

- **Hypothesis 1 (H1)**: The consistency of the website or application has a significant effect on user satisfaction.
- **Hypothesis 2 (H2)**: The communicativeness of the website or application has a significant effect on user satisfaction.
- **Hypothesis 3 (H3)**: The efficiency of the website or application has a significant effect on user satisfaction.

The testing hypotheses used the Multiple Linear Regression method, in which will determine the effect of the independent variables (consistency, communication, and efficiency) and the dependent variable (user satisfaction). The research model is listed in Fig. 1 below.

$$n' = \frac{n}{1 + \frac{z^2 \times \hat{p}(1-\hat{p})}{\varepsilon^2 N}}$$

In which:
- z is the z score
- ε is the margin of error
- N is the population size
- $\hat{p}$ is the population

Based on the assumption that the confidence level is 85% and the margin of error is 4.48%, the sample size is 161.

3.3 Data Collection

The primary data for this study is collected from members of Gen-Z residing in the Jabodetabek area who are familiar with e-commerce applications and websites. To obtain information, a self-administered questionnaire will be distributed to respondents. The questionnaire is divided into 3 sections, which details as follows: (1) a series of questions designed to profile respondents and provide insight into their backgrounds; (2) a set of questions that will be used to measure each respondent's respective user experience in shopping on e-commerce platforms; and (3) a series of open-ended questions for users to answer based on their personal experiences. [17]

In this research, the data collection method used is the questionnaire method. The questionnaire is spread on different social media platforms that target respondents who fit the criteria. To ensure its validity, the respondents' answers are collected and checked if they fulfill all the necessary criteria, such as:

1) lives in Jabodetabek area, 2) is a gen-Z, and 3) have used an e-commerce app/site before.

There are two different types of questions: multiple choice questions and open-ended questions. The scale used for the multiple-choice types is the Likert Scale, in which every answer is being limited to 1-5 scale options, with the detail listed below:

1) Highly Agree, scale 5
2) Agree, scale 4
3) Neutral, scale 3
4) Disagree, scale 2
5) Highly Disagree, scale 1

The user experience of respondents in the second section will be measured using a Likert scale with a range of 1-5, where 1 = "strongly disagree" and 5 = "strongly agree." The measurements in question are detailed in Table 1. The variables used in the study are considered valid as the independent variables (consistency, communication, and efficiency) are user experience components listed at previous study, and user satisfaction acts as the dependent variable that suits the study's title and content.

*Table **1**: Variables and Indicators*

Variable	Indicator		Ref
Consistency	Coherent theme in color palette	Using a consistent color theme/palette	[13]
	Coherent interface measurements in font, images, etc.	Consistent interface	[13]
	Coherent appearance throughout different platforms	Using a consistent design in website and application forms	[13]
	Clear and concise graphical interface	Graphical interface provides clear and concise context	[13]
Communication	Information provided on website and application is clear	Provides information that is understandable with sufficient context	[13]
	Attractiveness to users	Website or application attracts user attention without being overwhelming or underwhelming	[13]
Efficiency	Efficient navigation through website or application	Users can easily navigate through different menus, pages, or sections in a way that makes sense to themselves	[13]
User Satisfaction	Overall satisfaction	Users can easily identify what basic feelings (e.g. happiness, discomfort) they experience while utilizing e-commerce platforms	[13]
		Users can identify whether or not the visual appeal and aesthetics of e-commerce platforms impact their overall satisfaction	[13]
	Value of content provided to users	Users think that e-commerce platforms are able to tailor its products, services, and transactional environment to individual users	[13]

4. FINDINGS

4.1. Overall User Experience

204 responses were collected in the survey. Of those responses, the data that was unfit for this research was deemed invalid and further cleansed, with 161 answers left that were determined to be qualified for this research. The 161 answers will be used for analysis, which fit the following requirements:

1) lives in Jabodetabek area,
2) member of gen-Z, and
3) uses e-commerce app/sites.

The demographic profile of respondentsis listed in the table that follows.

Table 2: Demographic profile of respondents

Variables			
Gender	Female	103	63.98%
	Male	58	36.02%
Age	< 18	4	2.48%
	18-22	122	75.78%
	23-26	35	21.74%
Domicile	Jakarta	112	69.57%
	Bekasi	12	7.45%
	Bogor	4	2.48%
	Depok	6	3.73%
	Tangerang	27	16.77%
Device	Mobile device	158	98.14%
	PC/Laptop	3	1.86%
E-commerce app/site	Lazada	5	3.11%
	Shopee	107	66.46%
	Tiket.com	1	0.62%
	Tokopedia	40	24.84%
	Traveloka	4	2.48%
	Zalora	4	2.48%

Based on the answers of respondents, it can be seen that certain people have both positive and negative outlooks on e-commerce platforms, which in turn impacts their overall user satisfaction. Below entails the overall user satisfaction that users perceive from utilizing e-commerce platforms.
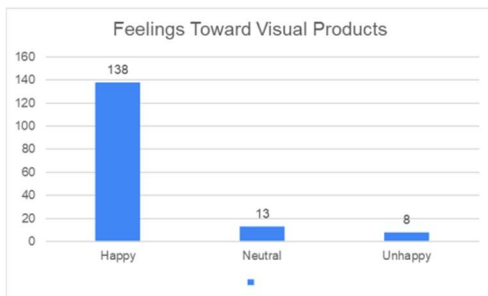

Figure 2: Percentage of respondents' feelings towards Visual Products

When asked for basic feelings towards seeing visual products (background patterns, colors, and graphics used by website/application), 86,79% of the respondents feel happy. They statedthat the color of e-commerce platforms is vibrant and the interface structure is easy on the eyes, making them have positive outlooks on using the sites/applications. In contrast, only 8,17% of the respondents feel neutral, while 5,03% feel unhappy. Some have stated that they found the number of videos and promotional content within the platforms to be irritating. Certain e-commerce platforms use a very distinctive vibrant color with a cluttered and crowded interface, leaving a few respondents unhappy with the experience.

99,37% of the respondents agreed that the visual appeal and aesthetics of e-commerce platforms is important. This indicates that respondents think the aesthetics of e-commerce

platforms impact their overall satisfaction. Based on user responses, the designs of e-commerce platforms that are deemed to be more interesting provide a more captivating appearance, which in turn boosts the happiness of users and makes them more engaged in browsing. Among all other questions pertaining to overall user satisfaction, this one in particular has the most amount of people being satisfied.

On one hand, 98,75% of the respondents agreed that e-commerce website/application tailors its products, services, and transactional environment to individual users. Different users have different personal taste, which means that e-commerce platforms do have to tailor each users' experience to be unique and personal.

4.2. Pre-Condition Test

To ensure that the Multiple Linear Regression model is working as intended and the results are valid, there are pre-condition tests that has to be done. The pre-condition test includes normality test, heteroskedasticity test, and multicollinearity test. [10]

After cleaning the data in Excel, the data is compiled into CSV form. Using the SPSS software, the data are put into tables: CN(Consistency), CM (Communication), EF (Efficiency), and US (User Satisfaction). The value inside each table is the mean from all of the respondents' answers combined for

each category. The SPSS has a linear regression function, in which US is inputted as the dependent variable, while CN, CM, and EF are inputted as the independent variables.

4.2.1. Normality test

A good Regression model has a normal distribution when the plotting data in the probability plot forms a diagonal line. SPSS offers a built-in normal probability plot when generating the linear regression analysis (standardized residual plots = normal probability plot). The result of the normality test can be seen in the figure below.
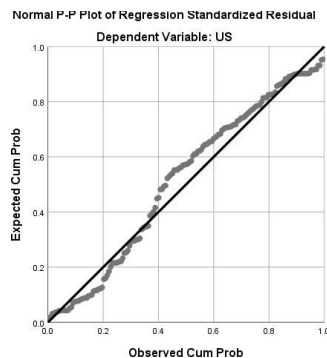

Figure 3: Normal P-Plot Regression Standardized Residual of User Satisfaction

The dots, which represent points of data, are very close to the diagonal line, which represents the expected values of a given distribution, in the probability plot diagram.

The proximity of dots in a probability map to the diagonal line is in indicator of how datapoints follow the normal distribution. This alignment with the diagonal line implies that the regression model is performing superbly at adhering to those standards It implies that the regression model's residuals are roughly normally distributed, which is a desirable property for many statistical tests. Overall, this means that the regression model has a normal distribution.

4.2.2. Heteroskedasticity test

Heteroskedasticity test ensures that the variable variants in the regression model do not have the same values. To check for heteroskedasticity, a scatter plot is examined. If there are no patterns and the plots are scattered above and below the 0 value on the Y axis, then it can be assumed that the regression model does not have heteroskedasticity. In other words, a heteroskedastic model shows different points in a scatterplot as opposed to closely ranged points.

With SPSS, while generating the linear regression analysis, SRESID is inputted into the Y axis and ZPRED is inputted into the X axis at the plot option to generate the scatter plot.
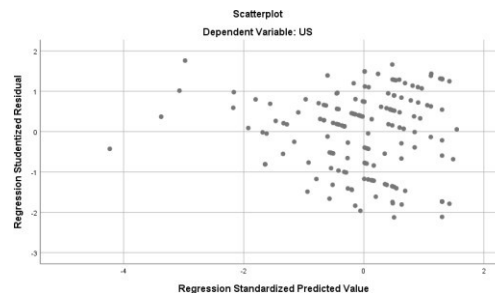

Figure 4: Scatterplot Map of User Satisfaction

From the scatterplot result, it can be seen that there are no clear patterns, and the plots are scattered below and above the 0 value in the Y axis. The results show that the plots have no tendency to have consistent values above or below the 0 value.

In addition, the scattering of plots indicates that there exists no relationship between the independent and dependent variables, which means that there exists no relationship between the independent and dependent variables. A relationship between independent and dependent variables can be problematic during a regression

analysis as it can result in false positives. Thus, the lack of patterns and scattering of the plots means that the regression model does not exhibit heteroskedasticity.

4.2.3. Multicollinearity test

A regression model should have no multicollinearity, which means that the multiple independent variables should be not correlated. To know that there is no multicollinearity in the model, there are two parameters that need to be determined. The tolerance should be bigger than (>) 0.100 and the VIF value should be less than (<) 10.00. The result of the multicollinearity test can be seen in the figure below.

*Table **3**: Coefficients of User Satisfaction*

Coefficientsᵃ

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.997	.435		4.588	.000		
	CN	.215	.120	.171	1.796	.074	.587	1.705
	CM	-.115	.113	-.102	-1.019	.310	.527	1.897
	EF	.363	.110	.348	3.314	.001	.482	2.073

a. Dependent Variable: US

For Consistency (CN), the tolerance is 0.587 (> 0.100) and the VIF is 1.705 (<10.00). This means that the Consistency variable does not exhibit multicollinearity. For Communication (CM), the tolerance is 0.527 (> 0.100), and the VIF is 1.897 (< 10.00). This means that the Communication variable does not exhibit multicollinearity. For Efficiency (EF), the tolerance is 0.482 (> 0.100), and the VIF is 2.073 (< 10.00). This means that the Efficiency variable does not exhibit multicollinearity. All of the independent variables do not have multicollinearity.

4.3. Analysis of Model Summary

*Table **4**: Quantitative Findings – Model Summary*

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.408ᵃ	.166	.150	.53204

a. Predictors: (Constant), EF, CN, CM

The following table shows the value of the coefficient of determination, which is indicated in the Adjusted R Square, with a value of 15%. The Adjusted R Square value shows that efficiency, consistency, and communication have some correlation with user satisfaction. Because of this, all three hypotheses pass the model summary analysis,

4.4. Analysis of Variance

*Table **5**: Quantitative Findings – ANOVA*

ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.873	3	2.958	10.448	.000ᵇ
	Residual	44.441	157	.283		
	Total	53.314	160			

a. Dependent Variable: US
b. Predictors: (Constant), EF, CN, CM

The following table shows the Analysis of Variance (ANOVA) between the independent and dependent variables. The ANOVA shows the relationships and variances that independent variables have between dependent variables. If the independent and dependent variables contain significant differences from each other, then the independent variables can be determined

to have some sort of statistical significance upon the dependent variables.

Based on the ANOVA, it can be inferred that the p-value of the regression is 0.000, which means that the regression model is fit. This also means that the independent variables are jointly significant to the dependent variable. An f-test can also be conducted by comparing the f-value with the f-table, which can be calculated as follows:

f-table = $(k\ 1; n - k)$
f-table = $(3 - 1; 157 - 3)$
f-table = $(2; 154)$
f-table = 3.05

Furthermore, with an F value of 10.448, the independent variables pass the F-test, as said value is greater than the F-percentage distribution value of 3.05. The three variables contribute to the variation that exists in user satisfaction, which indicates that consistency, communication, and efficiency have a tangible combined effect on user satisfaction. So, it can be inferred that all three hypotheses pass the F-test.

4.5. Coefficient Analysis of the LinearRegression Model

*Table **6**: Qualitative Findings – Coefficients*

Coefficientsᵃ

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.997	.435		4.588	.000		
	CN	.215	.120	.171	1.796	.074	.587	1.705
	CM	-.115	.113	-.102	-1.019	.310	.527	1.897
	EF	.363	.110	.348	3.314	.001	.482	2.073

a. Dependent Variable: US

The following table shows the Analysis of Coefficients in the Linear Regression Model. Based on the t-values, a t-test can be conducted in order to see how independent variables impact dependent variables. The percentage of distribution of this research is calculated as follows.

t-table = $(\alpha; n - k - 1)$
t-table = $(0.05; 161 - 3 - 1)$
t-table = $(0.05; 157)$
t-table = 1.65462

Based on this, it can be seen that the t- values of consistency and efficiency are larger than the t-table of the percentage of distribution, which indicates a positive influence. Meanwhile, the t-value of communication sits in the middle of the bell

curve between the negative and positive values of the t-table. Thus, it can be surmised that between the independent variables, only consistency and efficiency have some form of partial significance upon user satisfaction.

Based on the calculations from the aforementioned table, the tolerance values of all independent variables are greater than 0.100, and all the Variance Inflation Factor (VIF) values are less than 10.00, which indicates that the independent variables pass the multicollinearity test. This means that the independent variables are indeed independent and lack intercorrelation with one another.

However, the significance values of each respective independent variable vary. Among the three independent variables, only efficiency passes the p-value based partial t-test, with a value smaller than 0.05. Consistency and communication have larger p-values, which indicate that they do not show significant influence upon user satisfaction. This means that of the three hypotheses, efficiency has a significant impact on user satisfaction, and hypotheses 1 and 2 are rejected.

5. DISCUSSION

Based on findings from the previous chapter, it can be determined that among the three different aspects of user experience in e-commerce platforms that contribute to user satisfaction,

efficiency provides the most significant impact. The questionnaire indicates that the readability, workflow, and user goal facilitation all rank as important to respondents. Additionally, upon conducting an analysis of the linear regression model, it can be concluded that efficiency significantly impacts user satisfaction.

The previous chapter's findings also indicate that, when combined, all three aspects of user experience are capable of significantly impacting user satisfaction. This is based on the analysis of variance, which shows that the three aspects of user experience pass the F-test. This means that consistency, communication, as well as efficiency can provide a tangible effect on how the overall user satisfaction among the users of e-commerce platforms.

Thus, it can be concluded that among the three hypotheses, Hypothesis 3, which touches on efficiency, is accepted. A previous study conducted in 2020 has also came to a similar conclusion in that the tangible elements of a platform– which includes user interface elements such as readability and visual appeal, among other things– can influence the perceived quality of a given platform to users, especially those in the e-commerce industry. [19]

6. CONCLUSION

User experience (UX) impacts user satisfaction. Notably being the fastest-growing sector of Indonesian digital economy, it is imperative for e-commerce platforms to provide a good user experience, in which details how users interact with a product with the goal to satisfy customers and keep them coming back. The user experience components used in the research are consistency, communication, and efficiency of the websites or applications in general, which based on previous findings, are utilized by well-designed e-commerce platforms. This helps to increase customer satisfaction as a whole by facilitating customer goals, accommodating to customer needs, and providing important information where it is necessary.

While the impact that each respective aspect has on user satisfaction varies, the effect that all factors combined have present a significant amount of impact on the satisfaction that users obtain from the user experience provided by e-commerce services. Meanwhile, among the three different factors individually, only efficiency is shown to significantly affect user satisfaction. Thus, a well-designed and comprehensive UX boosts user satisfaction.

This paper highlights the relationship that UX design choices have with customer

satisfaction. These choices include how the platform shares information to its users, the flow of pages and menus in the platform, and the overall appearance of the platform's different pages and menus, among other

things. This study emphasizes how the visual communication and workflow design of a given platform have an impact on howits users perceive and utilize said platform as well as its features. When compared to previous studies, this study suggests that user experience significantly impacts user satisfaction, which inturn affects the likeliness of e-commerce adoption.A further contribution of this paper is to show the impact that both UI and UX have on customer satisfaction, specifically among e-commerceplatforms.

Future studies can be conducted based onanswers from the survey, namely why users find certain criteria to be lacking in giving them the amount of satisfaction they think they deserve.

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