

## Cyber Security Behavior of E-Commerce Application Users

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### **Abstract**

E-Commerce technology is a business mechanism that works electronically by focusing on online business transactions and has the opportunity to build more human and personalized relationships with customers without depending on space and time. The purpose of this study was to determine to what extent, the influence of Cyber Crime behavior on users of e-commerce applications that affect the level of trust of users of E-Commerce transaction services. The data used in this study is primary data. The data analysis method used is quantitative using a Likert scale. The population in this study was 30 respondents as the research sample, using google form. The results based on the analysis showed that e-commerce users bear a lot of the risk is added to the level of trust of E-Commerce users, making Cybercrime behavior is still very difficult to anticipate by users of E-Commerce transaction services, has a negative and significant effect

Keyword : *Cyber Crime, E-Commerce, Application Users*

### **Introduction**

The progress and development of information technology today is one of the references in assessing the success or failure of a form of modern human behavior in almost all areas of life [1]. With regard to the progress and development of the needs of the community, of course it cannot be separated from the development of information technology through the internet (Interconnection Network). The use of the internet for business transaction activities is known as Electronic Commerce (E-Commerce). E-Commerce can occur between business organizations and consumers, including the use of the Internet and the World Wide Web to sell products and services to consumers. E-Commerce technology is a business mechanism that works electronically by focusing on online business transactions and has the opportunity to build more human and personalized relationships with customers without depending on space and time.

According to clear, Tawfik, Enders, Albrecht (2008, p.4) E-Commerce is more specific than E-Business and is considered to be the last thing. Theory of E-Business and M-Commerce (Mobile Commerce). E-Commerce technology is a business mechanism that works electronically by focusing on online business transactions and has the opportunity to build more human and personalized relationships with customers without depending on space and time .

E-Commerce itself is related to transaction facilities, selling products and services online via the internet or other telecommunication networks. E-Commerce is electronic commerce that displays the goods or services it sells digitally. E-Commerce includes all the steps of commerce such as: online marketing, online ordering, online payments, digital goods and services and online

distribution. Applications in E-Commerce are oriented to external activities which have 2 sides, namely:

Buy-Side: Activities or purchasing processes to suppliers or suppliers. Sell-Side: Activities or sales processes to customers or resellers.

Types of E-Commerce according to O'Brien (2005, p.384) are as follows:

1) Business-to-Consumer (B2C)

This B2C explains that companies must develop attractive electronic marketplaces to sell various products and services to customers. For example, many companies offer E-Commerce websites that provide virtual displays and multimedia catalogs, interactive order processing, secure payment systems and online customer support.

2) Business-to-Business (B2B)

This B2B involves the E-Business market and direct market relationships between companies. For example, many companies offer secure websites containing E-Commerce catalogs over the internet or extranets for the company's customers and suppliers.

3) Consumer-to-Consumer (C2C)

This C2C explains the great success of online auctions such as amazon, eBay, olx, KaskusFJB, etc. which are places where customers as well as companies can buy and sell to each other in the process of auction websites, making C2C an effective E-Commerce business strategy. important.

This study aims to determine the effect of cyber crime behavior on users of e-commerce applications. The questionnaire that will be used is the Use Questionnaire which has several aspects according to efficiency, effectiveness and satisfaction. This questionnaire was made in the form of a five-point score using a Likert scale model.

## Method

### Population and Sampling

Research that has certain standards, in accordance with research objectives, Respondents involved in this study were 30 respondents, from a population namely, teachers, civil servants, employees and students.

### Data collection technique

Primary data: obtained by distributing questionnaires through google forms to obtain data, and in this study using a Likert scale. The Likert scale is a psychometric scale that is commonly used in questionnaires and is the most widely used scale in survey research. When responding to questions on a Likert scale, respondents determine their level of agreement with a statement by selecting one

of the available options. 5 (five) options are provided in a format such as: 1 = Strongly Disagree, 2 = Disagree, 3 = Doubtful - Doubtful, 4 = Agree, 5 = Strongly Agree

Table 1. Scoring Scale

<b>PK</b>	<b>STS</b>	<b>TS</b>	<b>RR</b>	<b>S</b>	<b>SS</b>
<b>1</b>		<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

To get data that is ordinal and scored as follows:

Description

PK	: Question
STS	: Strongly Disagree
TS	: Disagree
RR	: Doubt
S	: Agree
SS	: Totally Agree

## Results and Discussion

In this study, researchers distributed questionnaires to teachers, ASN, employees and students which contained 11 questions that represented the assessment aspect using google forms media. Users fill out questionnaires that have been distributed based on their experiences when using E-Commerce transactions. Each question from the questionnaire aims to determine the effect of cyber crime on E-Commerce applications, which will then be assessed using a Likert scale. From the questionnaires that have been given to the respondents, the data were analyzed using a Likert scale model.

Index formula  $\% = \text{Total Score} / Y \times 100$

Y = Highest score likert x number of respondents (Highest Number 5) "Pay attention to the weight of scores"

X = lowest score likert x number of respondents (lowest number 1) "Pay attention to the weight of scores"

Table 2. Value Percentage

Jawaban	Keterangan
0% - 19,99%	Strongly Disagree
20% - 39,99%	Dissagree
40% - 59,99%	Doubt
60% - 79,99%	Agree
80% - 100%	Strongly Agree

The highest score for the STRONGLY AGREE item is  $5 \times 30 = 150$ , while the strongly disagree item is  $1 \times 30 = 30$ . So, if the respondent's total score is 150, then the assessment of the respondent's interpretation of the Android operating system is the result of the highest score. generated using the Index % formula. After distributing the questionnaires given to 30 respondents, then a recap is made of the results of the questionnaires obtained.

Table 3. Result

No	Pernyataan	Persentase	Ket
1.	Doing E-Commerce Transactions	78 %	
2.	E-Commerce facilitates communication between producers and consumers	76,6 %	
3.	E- Commerce makes it easy to promote goods and services	81,3 %	
4.	E-Commerce process is easier to do to sell or buy goods	81,3 %	
5.	E-Commerce process is easier to make payments	74,6 %	
6.	Safe E-Commerce Transactions To make payments	64 %	
7.	Frequent Online Fraud / Fraud	80 %	
8.	When purchasing and transferring money, but the item doesn't match / the item doesn't arrive	66,6 %	
9.	The occurrence of a crime such as carding or someone using someone else's credit card to make online transactions	65,3 %	
10.	Crimes occur such as spreading a virus to an E-Commerce system or application	71,3 %	
11.	Law on Information Technology	88,8 %	

In the table above shows the value of each item asked questions. It can be seen that for the convenience of conducting E-Commerce transactions, having a percentage value of 78% means that E-Commerce can be easily carried out. Adjusted to the table, the data says that the influence of Cybercrime on users of E-Commerce applications, this is indicated by various factors:

Percentage Value "When Purchasing and Money Transfers, but the goods do not match / goods do not arrive, 66.6%, Indicates that the Financial Risk is very large, namely the possibility of financial loss and Time Risk, namely the possibility of feeling time loss due to the online purchase process, as well as Risk Performance, which is the possibility of a product or service not as expected. "Online Fraud / Fraud often occurs" 80%, indicating that Cyber Crime greatly affects users, and "Crimes occur such as spreading viruses to the system or E-Commerce Applications" 71.3%, causing losses to the system.

Percentage Value. "The E-Commerce process is easier to make payments" 74.6% and "The E-Commerce process is easier to do to sell or buy goods" 81.3%, indicating that Physical Risk, namely the possibility of physical loss is still less.

Percentage Value "E-Commerce facilitates communication between producers and consumers" 76.6% indicates Psychological Risk, namely the possibility of feeling psychologically comfortable, feeling comfortable because meeting sellers, being closer to various communication facilities.

Percentage Value "The occurrence of crimes such as carding or someone using someone else's credit card to conduct online transactions" 65.3%, indicating that the Privacy Security Factor, namely the possibility of loss due to misuse of personal information by someone who is not responsible, and "Act - Act on Information Technology" 88.8% which indicates that every user needs clear and firm legal protection to follow up crimes in E-Commerce transactions.

## Conclusion

E-Commerce transaction systems used by users/buyers to get the desired goods must bear a lot of risk plus the level of trust of E-Commerce users, making Cybercrime behavior still very difficult to anticipate by users of E-Commerce transaction services. The obstacles faced in the implementation of e-commerce are the lack of human resources who understand the use of e-commerce so that it cannot be used optimally, and there are still many buyers who still do not believe in the level of security of online shopping / E-Commerce and find it difficult to change habits to buy e-commerce. transact online.

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