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Community Readiness for the Use of the Cash on Delivery (COD) Application Without a Marketplace Using an SPSS-based Likert Scale

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Abstract

This study aims to analyze the community's readiness for the Cash on Delivery (COD) without marketplace application as a payment method in online shopping transactions. Questionnaires were distributed to 30 respondents aged 18 to 25 years with various levels of education. The results of the questionnaire were analyzed using the SPSS statistical software, and the data obtained included age, gender, education level, and responses to several questions that were relevant to community readiness for COD services. The results of the analysis show that the majority of the community shows a high level of readiness for the COD application, with around 50.0% to 60.0% of respondents belonging to the ready and very ready categories. The diverse age range of respondents indicates that the COD application can reach young age groups, and the varying levels of education indicate that this application attracts interest from various walks of life. The gender of the respondents did not show a significant difference in the level of interest in COD services. Even though the majority showed high readiness, there were some respondents who showed a lower level of readiness. Therefore, a special approach is needed to provide further information and education to this group to increase their readiness to use COD services. In conclusion, the COD application has great potential to become a popular and reliable choice for users to make purchases online. However, effective marketing, education and product development efforts need to be continued to reach the full potential of COD services and provide better benefits to potential users. By focusing on good user experience, data security, and the right marketing strategy, COD applications have a chance of success in a competitive market.

Keywords: Cash on Delivery (COD) Applications, E-commerce, Community Readiness, Questionnaire Analysis, SPSS (Statistical Package for the Social Sciences)

1. Introduction

E-commerce or online buying and selling has experienced significant growth to date, with many consumers switching from conventional shopping to online shopping, many factors make buyers switch shopping to e-commerce such as convenience, a wider choice of products, lower prices. competitive, easy to pay and buyers don't have to bother going to the store to make a purchase. In addition to making it easier for e-commerce buyers, it also makes it easier for sellers, such as saving costs by not renting places to sell, such as shophouses or the like(Syuhada and Gambett, 2013; Sfenrianto et al., 2018; Farki and Baihaqi, 2016).

In e-commerce, the payment method is one of the most important aspects that both sellers and buyers need to pay attention to, efficient, safe and convenient payments are the key to successful online transactions. A good payment method not only provides convenience for buyers, but also ensures consumer trust and satisfaction. There are various payment methods commonly used in online shopping, such as credit or debit cards, bank transfers, e-wallets or electronic wallets and cash or cash payments of delivery (COD) (Aqil et al., 2022; Lumaris and Paulus, 2021; Ilham and Muzakir, 2022).

However, not all payment methods run smoothly, there are several payment methods that have many drawbacks, one of which is payment via cash of delivery or cash payments, where buyers transact via couriers or package delivery. Here are some of the problems that often occur in cash payments of delivery (COD) payments:

1) There are frequent purchases that are not in accordance with what has been ordered, for example a buyer orders certain goods but what comes is not the right goods or goods of a very different type.

- 2) Sometimes, the buyer is not present or not at the location when delivering goods, even though he has ordered and agreed to use the cash payments of delivery (COD) payment method. This causes difficulties in the shipping and payment process, as the seller has to arrange a resend or try to contact the buyer to make new arrangements.
- 3) Cash payments of delivery (COD) payments are also at risk of order cancellation by the buyer. Some buyers may order goods with no intention to purchase or change their mind after the order is shipped. This can cause losses for the seller, especially if the goods are already packed and ready to be shipped.
- 4) Not all buyers prepare exact money, often buyers give money with a nominal amount that is more than the price, therefore the courier must prepare change money.

Of the several risks above which will be discussed in this study, at point no stau, there are many cases of fraud committed by irresponsible people. Therefore this journal aims to investigate and analyze the community's readiness for cash of delivery applications without a marketplace. In order to achieve this goal, we used the questionnaire method to collect data from 30 respondents who are within the targeted age range. The questionnaire included questions about age, gender, education level, and responses to using the COD application(Rihidima et al., 2022; Firmandani et al., 2021).

2. Literatur review

One issue that frequently arises in cash of delivery applications (COD) transactions is the risk of keamanan that is associated with the shipping process. Activities involving penipuan frequently go unreported, such as reselling goods that don't match customers' orders or replacing products with more expensive alternatives. Such a tinda might lead to financial difficulties for both buyers and sellers. In order to reduce the risk in question, (Gentleman et al., 2004) analysis recommended using a secure and convenient cash of delivery applications (COD) payment application.

The use of cash of delivery applications (COD) payment applications without dependence on the marketplace platform poses its own challenges. One of the main challenges is how to deal with security risks, given the many cases of fraud that have occurred in cash of delivery applications (COD) transactions. In addition, it is also necessary to pay attention to how to provide a safe, comfortable and easy payment experience for buyers who transact with different sellers (Fernando et al., 2022).

Implementation of a standalone cash of delivery applications (COD) application must consider the required technological infrastructure as well as integration with logistics and order management systems. The ability to integrate with POS (Point of Sale) systems and inventory management systems can help optimize the payment and delivery process (Le et al., 2019)

3. Methodology

In this journal there are two methods, telling students about the user interface (UI) and the advantages of cash of delivery (COD) applications without a marketplace, and giving questionnaires to see how prepared the student or students are for cash of delivery applications (COD) without marketplaces.

3.1. Introduction of the user interface of the cash of delivery (COD) application without a marketplace

At this stage the author gives an overview to students or students via short messages by providing photos of several user interfaces (UI) in the cash of delivery (COD) application, along with some of the user interfaces (UI) that have been shared:

➤ Main page feature

The main page is one of the sections that first appears after logging into the application, this page has several footers such as product selection, sending messages to sellers, selecting the type of product you want to search for and posting products to sell. for the main page view is as follows (Zott, 2000).



Figure 1. The main page of the application

User profile feature

On the user's profile page a photo of the user will be displayed which can be changed and uploaded as desired, there is also a message feature to continue the transaction after finding an agreement on the seller's post. Not only that, there is also a report user feature that can be used when a buyer or seller commits a violation. For more clearly can be seen in the following figure.



Figure 2. User profile page

Messaging feature

The message page is used to communicate between the user and the seller to determine where to proceed with the purchase transaction. Sellers and buyers will determine the closest location to make transactions until both of them find an agreement on where to transact.



Figure 3. User message page

Reporting feature

The "Report User" footer is part of the main page or user profile page within the application. This section provides quick access for users to report behavior or content that other users find suspicious, against the rules, or inappropriate in the app.

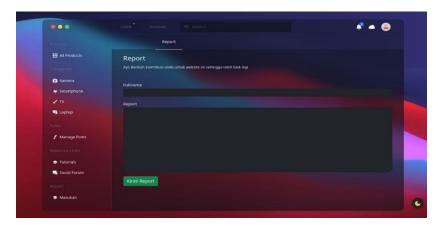


Figure 4. Report footer

3.2. Questionnaire

Respondent:

- Age
 - 1) 17-18
 - 2) 19-23
 - 3) 24-30
- Gender
 - 1) Male
 - 2) Female
- Level of education
 - 1) SMA
 - 2) S1
 - 3) S2

Questionnaire Filling Instructions:

- 1) Put a checklist on the answer
- 2) Each question requires only one answer.
- 3) Fill in the following answers by placing a checklist in the column provided. This questionnaire uses a Likert scale with the following information:
 - a. Scale 1 = Strongly Disagree (STS)
 - b. Scale 2 = Disagree (TS)
 - c. Scale 3 = Neutral/Indecisive (N)
 - d. Scale 4 = Agree(S)
 - e. Scale 5 = Strongly Agree (SS)

	Table 1. Questions asked									
No	Question	Sts	S	N	Ks	Sk				
1	I'm interested in trying the Cash on Delivery application without going through the marketplace.									
2	I feel this application can provide convenience in the product buying process.									
3	This application will provide more freedom in dealing with direct sellers.									
4	I think that this application can offer more affordable prices than through the marketplace									
5	Has a guaranteed refund system because it has been prepared by the seller.									
6	I feel that with this application it will be safer to purchase goods, because I met with the seller directly.									
7	I feel that having an easier user interface (UI) feature will make transactions easier.									
8	With the purchase meeting directly with the seller, it will reduce fraudulent acts of goods not in accordance with the order									

4. Results and Discussion

4.1. Results

The following are the results of the questionnaire given to students via short messages:

Table 2. Questionnaire results											
Res. Age	Gender	Level of education	P1	P2	Р3	P4	P5	P6	P7	P8	Total

	10	-	2									- 22
1	19	1	2	5	3	4	3	4	4	5	5	33
2	17	2	1	5	5	1	4	4	4	5	1	29
3	20	2	2	4	2	4	4	3	2	1	4	24
4	17	2	1	1	5	5	3	3	5	3	1	26
5	22	1	2	3	2	3	4	5	1	2	4	24
6	19	2	2	5	1	3	4	1	4	4	4	26
7	18	1	1	4	2	3	4	2	4	2	3	24
8	21	2	2	1	3	4	1	4	5	5	5	28
9	20	1	2	4	2	1	2	3	1	1	5	19
10	20	1	2	5	1	4	1	3	5	5	4	28
11	18	2	1	4	5	1	1	1	2	4	4	22
12	25	2	3	2	1	5	4	4	2	5	1	24
13	18	1	1	3	2	3	1	5	5	2	5	26
14	17	2	1	3	3	3	2	1	5	1	4	22
15	22	2	2	5	3	3	2	3	3	4	5	28
16	21	1	2	3	2	1	5	4	5	1	1	22
17	21	2	2	2	4	4	3	4	1	5	3	26
18	23	2	2	1	1	3	4	5	1	1	4	20
19	18	1	1	4	5	3	1	2	5	5	5	30
20	20	2	2	1	5	1	4	1	1	3	1	17
21	19	2	2	3	5	4	1	4	4	3	4	28
22	22	2	2	5	2	1	5	1	2	1	3	20
23	21	1	2	4	5	1	4	3	2	5	5	29
24	22	2	2	5	3	4	4	4	1	5	2	28
25	24	2	3	3	2	2	2	4	5	4	3	25
26	22	1	2	1	2	1	5	1	2	5	2	19
27	19	1	2	2	3	5	3	2	1	5	3	24
28	19	1	2	2	4	5	2	2	3	5	2	25
29	21	2	2	1	5	5	3	2	4	3	4	27
30	24	2	3	1	5	2	5	3	3	2	2	23

4.2. Discussion

4.2.1. Entering questionnaire data into the SPSS application

After the data collection process is as shown in table 2, the next step is to enter data into the SPSS application. Figure 5 is part of the variable view. This view is used to manage variables in the dataset and Figure 6 is part of the working data view. This view displays data that has been entered into the dataset.

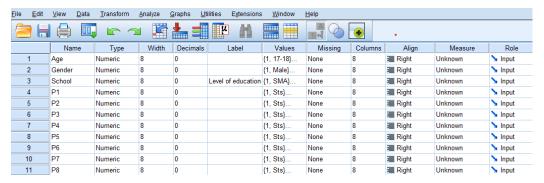


Figure 5. View variables in spss

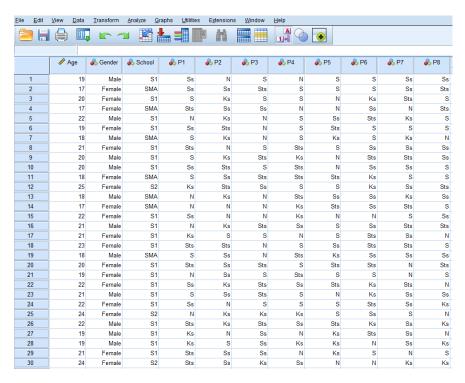


Figure 6. Data view on spss

4.2.2. Analysis results

 Table 3. Statistical table

Statistics								
				Level of				
		Age	Gender	education				
N	Valid	30	30	30				
	Missing	0	0	0				

Explanation:

- 1) Age:
 - N Valid: The number of valid (non-missing) data for the age variable is 30. This means that there are 30 respondents who provide information about their age.

	Level of education										
					Cumulative						
		Frequency	Percent	Valid Percent	Percent						
Valid	SMA	7	23.3	23.3	23.3						
	S 1	20	66.7	66.7	90.0						
	S2	3	10.0	10.0	100.0						
	Total	30	100.0	100.0							

• Missing: The number of missing data for the age variable is 0. There is no missing data for this variable, meaning that all respondents provide information about their age.

2) Gender:

- N Valid: The number of valid (non-missing) data for the gender variable is also 30. This means that there are 30 respondents who provided information about their gender.
- Missing: The number of missing data for the gender variable is 0. There is no missing data for this variable, meaning that all respondents provide information about their gender.

3) Level of Education:

- N Valid: The number of valid data (non-missing) for the education level variable is also 30. This means that there are 30 respondents who provide information about their level of education.
- Missing: The amount of missing data for the education level variable is 0. There is no missing data for this variable, meaning that all respondents provide information about their level of education.

Table 4. Age statistics											
Age											
					Cumulative						
		Frequency	Percent	Valid Percent	Percent						
Valid	17	3	10.0	10.0	10.0						
	18	4	13.3	13.3	23.3						
	19	5	16.7	16.7	40.0						
	20	4	13.3	13.3	53.3						
	21	5	16.7	16.7	70.0						
	22	5	16.7	16.7	86.7						
	23	1	3.3	3.3	90.0						
	24	2	6.7	6.7	96.7						
	25	1	3.3	3.3	100.0						
	Total	30	100.0	100.0							

The results of this analysis provide an overview of the age distribution of the 30 respondents. The highest age was in the 19 year old group with a frequency of 5 respondents (16.7%), followed by the 21 and 22 year age group with a frequency of 5 respondents each (16.7%).

	Table 5. Gender statistics									
	Gender									
					Cumulative					
		Frequency	Percent	Valid Percent	Percent					
Valid	Male	12	40.0	40.0	40.0					
	Female	18	60.0	60.0	100.0					
	Total	30	100.0	100.0						

The results of this analysis provide an overview of the sex distribution of the 30 respondents. 12 respondents (40.0%) were male, while 18 respondents (60.0%) were female.

	Table 5. level of education statistics									
Level of education										
					Cumulative					
		Frequency	Percent	Valid Percent	Percent					
Valid	SMA	7	23.3	23.3	23.3					
	S 1	20	66.7	66.7	90.0					
	S2	3	10.0	10.0	100.0					
	Total	30	100.0	100.0						

The results of this analysis provide an overview of the distribution of educational levels of the 30 respondents. A total of 20 respondents (66.7%) had an undergraduate level of education, followed by 7 respondents (23.3%) with a high school education level, and 3 respondents (10.0%) with a Masters degree.

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	Statistics									
		P1	P2	P3	P4	P5	P6	P7	P8	
N	Valid	30	30	30	30	30	30	30	30	
	Missing	0	0	0	0	0	0	0	0	

The results of this analysis indicate that for each variable P1 to P8, there is no missing data because the number of valid data (N Valid) is the same as the total number of respondents.

Table 7. First question

	P1										
					Cumulative						
		Frequency	Percent	Valid Percent	Percent						
Valid	Sts	7	23.3	23.3	23.3						
	Ks	4	13.3	13.3	36.7						
	N	6	20.0	20.0	56.7						
	S	6	20.0	20.0	76.7						
	Ss	7	23.3	23.3	100.0						
	Total	30	100.0	100.0							

The results of this analysis provide an overview of the distribution of categories in the variable "P1" from 30 respondents. The "Sts" and "Ss" categories have the same frequency of 7 respondents (23.3%), followed by the "N" and "S" categories with a frequency of 6 respondents each (20.0%), and the "Ks" category with a frequency of 4 respondents (13.3%).

Table 8. Second question

			P2		
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Sts	4	13.3	13.3	13.3
	Ks	9	30.0	30.0	43.3
	N	6	20.0	20.0	63.3
	S	2	6.7	6.7	70.0
	Ss	9	30.0	30.0	100.0
	Total	30	100.0	100.0	

The results of this analysis provide an overview of the distribution of categories in the variable "P2" from 30 respondents. The "Ks" and "Ss" categories had the same frequency of 9 respondents (30.0%), followed by the "N" category with a frequency of 6 respondents (20.0%), the "Sts" category with a frequency of 4 respondents (13.3%), and the category "S" with a frequency of 2 respondents (6.7%). This distribution provides information about the characteristics and composition of the categories in the variable "P2" which represents a certain status or group in the population represented by the respondents.

Table 9. Third question

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	P3		
			Cumulative
Frequency	Percent	Valid Percent	Percent

Valid	Sts	8	26.7	26.7	26.7
	Ks	2	6.7	6.7	33.3
	N	8	26.7	26.7	60.0
	S	7	23.3	23.3	83.3
	Ss	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

The results of this analysis provide an overview of the distribution of categories in the variable "P3" from 30 respondents. The "Sts" category had the highest frequency with 8 respondents (26.7%), followed by the "N" category with a frequency of 8 respondents (26.7%), the "S" category with a frequency of 7 respondents (23.3%), the "Ss" category with a frequency of 5 respondents (16.7%), and the "Ks" category with a frequency of 2 respondents (6.7%). This distribution provides information about the characteristics and composition of the categories in the variable "P3" which represents a particular status or group in the population represented by the respondents.

Table	10.	Fourth	question
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			P4		
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Sts	6	20.0	20.0	20.0
	Ks	5	16.7	16.7	36.7
	N	5	16.7	16.7	53.3
	S	10	33.3	33.3	86.7
	Ss	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

The results of this analysis provide an overview of the distribution of categories in the variable "P4" from 30 respondents. The "S" category had the highest frequency with 10 respondents (33.3%), followed by the "Sts" and "N" categories with a frequency of 6 respondents each (20.0%), the "Ks" category with a frequency of 5 respondents (16.7%), and category "Ss" with a frequency of 4 respondents (13.3%). This distribution provides information about the characteristics and composition of the categories in the variable "P4" which represents a certain status or group in the population represented by the respondents.

Table 11. Fifth question

			P5		
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Sts	6	20.0	20.0	20.0
	Ks	5	16.7	16.7	36.7
	N	7	23.3	23.3	60.0
	S	9	30.0	30.0	90.0
	Ss	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

The results of this analysis provide an overview of the distribution of categories in the variable "P5" from 30 respondents. Category "S" has the highest frequency with 9 respondents (30.0%), followed by category "N" with a frequency of 7 respondents (23.3%), category "Sts" with a frequency of 6 respondents (20.0%), category "Ks" with a frequency of 5 respondents (16.7%), and category "Ss" with a frequency of 3 respondents (10.0%). This distribution provides information about the characteristics and composition of the categories in the variable "P5" which represents a particular status or group in the population represented by the respondents.

Table 12. Sixth question

			P6		
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Sts	7	23.3	23.3	23.3
	Ks	6	20.0	20.0	43.3
	N	3	10.0	10.0	53.3
	S	6	20.0	20.0	73.3
	Ss	8	26.7	26.7	100.0
	Total	30	100.0	100.0	

The results of this analysis provide an overview of the distribution of categories in the variable "P6" from 30 respondents. The "Ss" category had the highest frequency with 8 respondents (26.7%), followed by the "Sts" category with a frequency of 7 respondents (23.3%), the "Ks" category with a frequency of 6 respondents (20.0%), and category "N" with a frequency of 3 respondents (10.0%). This distribution provides information about the characteristics and composition of the categories in the variable "P6" which represents a certain status or group in the population represented by the respondents.

Table 13. Seventh question

P7							
					Cumulative		
		Frequency	Percent	Valid Percent	Percent		
Valid	Sts	6	20.0	20.0	20.0		
	Ks	4	13.3	13.3	33.3		
	N	4	13.3	13.3	46.7		
	S	4	13.3	13.3	60.0		
	Ss	12	40.0	40.0	100.0		
	Total	30	100.0	100.0			

The results of this analysis provide an overview of the distribution of categories in the variable "P7" from 30 respondents. The "Ss" category had the highest frequency with 12 respondents (40.0%), followed by the "Sts" category with a frequency of 6 respondents (20.0%), the "N" and "S" categories with a frequency of 4 respondents each (13.3%), and category "Ks" with a frequency of 4 respondents (13.3%). This distribution provides information about the characteristics and composition of the categories in the variable "P7" which represents a certain status or group in the population represented by the respondents.

Table 14. Eighth question

	P8							
					Cumulative			
		Frequency	Percent	Valid Percent	Percent			
Valid	Sts	5	16.7	16.7	16.7			
	Ks	4	13.3	13.3	30.0			
	N	5	16.7	16.7	46.7			
	S	9	30.0	30.0	76.7			
	Ss	7	23.3	23.3	100.0			
	Total	30	100.0	100.0				

The results of this analysis provide an overview of the distribution of categories in the variable "P8" from 30 respondents. Category "S" has the highest frequency with 9 respondents (30.0%), followed by category "Ss" with a frequency of 7 respondents (23.3%), category "N" with a frequency of 5 respondents (16.7%), category "Sts" with a

frequency of 5 respondents (16.7%), and the "Ks" category with a frequency of 4 respondents (13.3%). This distribution provides information about the characteristics and composition of the categories in the variable "P8" which represents a certain status or group in the population represented by the respondents.

5. Conclussion

Based on the results of the questionnaire that has been analyzed, it can be concluded that the majority of people show a high level of readiness for the Cash on Delivery (COD) application. The "S" and "Ss" categories (ready and very ready categories) have a significant frequency, reaching around 50.0% to 60.0% of the total respondents, indicating that most of the respondents are interested and ready to use COD services.

This high level of interest and readiness was followed by a variation of responses in the "Sts" and "Ks" categories (prepared and unprepared categories) of around 20.0% to 30.0%, as well as a small number of respondents in the "N" category (not ready category) of approx. 10.0%. However, the proportion of respondents who were not ready was still relatively low.

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