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Analysis of the Level of Public Satisfaction on the TikTok Application as an E-Commerce

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Abstract: Online shopping is one of the alternatives used by people today. This happens because shopping online saves a lot of time. There are many online shops in Indonesia and are used by many people. But now there is an application that initially only acted as a social media platform, but now also doubles as an E-commerce application, namely TikTok. TikTok has now become an E-commerce application. The prices given are also very cheap and there are lots of promotions given to customers. But there are still some people who don't want to shop online on TikTok on the grounds that the goods are not good. So from these 2 things, research needs to be made to determine the level of public satisfaction with the TikTok application as an E-commerce. The aim of this research is to see how many people are satisfied shopping on TikTok. This research was carried out using a classification model in data mining using the K-Nearest Neighbor (kNN) method and the Decision Tree method. The classification results obtained were 119 community data (for representation of 96.74%) and for people who were dissatisfied with the TikTok application as an E-commerce it was 4 community data (for representation of 3.25%). These results provide the conclusion that many people are satisfied shopping on the TikTok application as E-commerce.

Keywords: Confusion Matrix; Decision Trees; E-commerce; K-Nearest Neighbor (kNN); ROC Analysis; TikTok App

INTRODUCTION

E-commerce, or e-commerce, has fundamentally changed the business landscape. This is a phenomenon where business transactions, both purchases and sales, occur online via the internet. E-commerce has enabled customers to access a variety of products and services from around the world quickly and easily, without having to go to a physical store. This has given consumers more choice and convenience in shopping. On the other hand, e-commerce also provides a great opportunity for entrepreneurs to create their own online shops, connecting them with global markets and reducing operational costs associated with brick-and-mortar businesses. E-commerce has created a broad ecosystem, including large platforms such as Amazon, eBay, and Alibaba, as well as many small and medium businesses that run their own online stores and many other platforms that have become E-commerce and are in demand by Many people, students and even children, such as Shopee, Tokopedia, Lazada, have quite affordable prices. This is a growing trend, with the latest technologies such as artificial intelligence, data analysis and digital payments continuing to enhance e-commerce capabilities to provide a better and more efficient shopping experience for all parties involved.

Now there is an application that initially appeared as a social media application that presents various short videos. But now this application has become part of E-commerce. This application has entered and become a platform as an online shopping application. The application is TikTok. The TikTok application

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is an application that was originally known as a short video sharing platform, and has become a force to be reckoned with in the world of e-commerce. Through the integration of innovative shopping features, TikTok has enabled users to explore the products and services they love without having to leave the app. In an environment full of creativity, TikTok users can discover various products, from clothing to cosmetics, by following its interesting videos. Many brands and sellers have tapped into the huge market potential on TikTok by collaborating with influential users to promote their products. The live streaming feature also allows sellers to interact directly with potential customers, explain products and answer questions in real-time. As TikTok's shopping features continue to expand, the platform has become an attractive place for e-commerce businesses to reach a wide audience and interact with consumers in unique and engaging ways. TikTok has expanded the definition of e-commerce by combining entertainment, creativity and shopping in one all-in-one platform.

Product sales on TikTok often offer very competitive prices and sometimes even very cheap. Not only that, TikTok also provides quite big promotions to customers who shop online on the TikTok application. This can conclude that the TikTok application is very good in terms of E-commerce because the prices offered are very cheap. So there are definitely many people who are interested and satisfied when shopping on the TikTok application. But in reality there are still many people who don't want to shop on the TikTok application. This is because the goods sold on the TikTok application are of poor quality. That's why there are still many people who don't want to shop on TikTok. From these two explanations, it is necessary to carry out research to see and determine the level of public satisfaction with the TikTok application as an E-commerce. This is done in order to determine the quality of the TikTok application as an E-commerce. From the research results, it will be seen how many people are satisfied and dissatisfied with shopping on the TikTok application as e-commerce. This research will be carried out in the data mining process using 2 classification methods, namely K-Nearest Neighbor (kNN) and Decision Tree.

LITERATURE REVIEW

Data Mining

Data mining is a process carried out to extract valuable information from large and complex datasets (Yulianto, Triayudi, & Sholihati, 2020) (Mantik, Nababan, Khairi, & Harahap, 2022). Data mining is carried out using statistical, mathematical and artificial intelligence techniques which can make it possible to explore insights that cannot be found easily manually (Sumiah & Mirantika, 2020) (Kurniawan & Saputra, 2019). Data mining is widely used as a process for classifying or clustering certain datasets. In research (Sari, Yanris, & Hasibuan, 2023) data mining can be used to carry out the process of classifying people's purchasing interest in Pertamax fuel. The results of this research gave good results. In research (Hasibuan, Dar, & Yanris, 2023) data mining was used to carry out data classification to determine the level of consumer satisfaction at the Brastagi Supermarket. From the results of this research, data mining also provides a good system for carrying out classification. However, when applying data mining, you must also use methods that suit your needs. So data mining cannot be applied without a method.

Metode K-Nearest Neighbor (kNN)

The K-Nearest Neighbor (kNN) method is a technique used in data mining and machine learning to carry out classification and regression based on observations of the nearest neighbors of data (Waliyansyah & Fitriyah, 2019) (Sanjaya & Fitriyani, 2019) (Fitri et al., 2021). The K-Nearest Neighbor (kNN) method is a very simple but effective method for predicting or grouping data based on similarities to data that already exists in the dataset (Pattnaik & Parvathi, 2022) (Kurniadi, Mulyani, & Muliana, 2021) (Nugraha & Herlina, 2021). The K-Nearest Neighbor (kNN) method is a method with a classification model that is easy to understand and realize (Prasetio, 2020) (Supriyadi, Safitri, Amriza, & Kristiyanto, 2022). The K-Nearest Neighbor (kNN) method is a good classification method and has good accuracy. In research (Munazhif, Yanris, & Hasibuan, 2023) using the K-Nearest Neighbor (kNN) method to determine the class of outstanding students had very good accuracy, namely 91%. These results state that the K-Nearest Neighbor (kNN) method has very good accuracy. (Violita, Yanris, & Hasibuan, 2023) conducted research to determine the level of visitor satisfaction using the K-Nearest

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Neighbor (kNN) method and the accuracy results obtained were also very good, namely 86%. Even though the accuracy results obtained are not greater than the research conducted in (Munazhif et al., 2023), the accuracy obtained from the K-Nearest Neighbor (kNN) method still has very good accuracy. Therefore, in this research the author used the K-Nearest Neighbor (kNN) method.

Metode Decision Tree

The Decision Tree method is a technique used in data mining, machine learning, and data analysis to make decisions based on a tree structure that describes the consequences of various decisions and conditions (Somantri & Dairoh, 2019) (Arowolo, Adebiyi, Ariyo, & Okesola, 2021). Decision trees are a very intuitive algorithm and are often used because of their ability to make decisions that are easy to interpret (Alsaadi, Khlebus, & Alabaichi, 2022). The Decision Tree method can also provide very good classification results, this is because the accuracy of the Decision Tree method is also very good. (Maizura, Sihombing, & Dar, 2023) conducted a study on student interest in higher education. So in this research, the accuracy results obtained were 97%. The accuracy results are very good because they almost reach 100%. This provides good accuracy results.

Confusion Matrix

Confusion matrix, or confusion matrix, is an evaluation tool commonly used in classification analysis and machine learning (Krstinić, Braović, Šerić, & Božić-Štulić, 2020). It helps in measuring the performance of a classification model by comparing the model predictions with the actual classes of the tested data (Waliyansyah & Fitriyah, 2019). The confusion matrix consists of four different cells, namely:

a) ***True Positives (TP) :*** This is the number of observations that actually belong to the positive class and are also predicted as positive by the model. In other words, it is the number of cases where the model correctly predicted a positive outcome.
b) ***True Negatives (TN) :*** This is the number of observations that actually fall into the negative class and are also predicted as negative by the model. This is the number of cases where the model correctly predicted a negative outcome.
c) ***False Positives (FP):*** This is the number of observations that actually fall into the negative class, but are incorrectly predicted as positive by the model. This is also known as a type I error.
d) ***False Negatives (FN) :*** This is the number of observations that actually belong to the positive class, but are incorrectly predicted as negative by the model. This is also known as a type II error.

Confusion matrices can help to understand model performance in more depth than just measuring accuracy alone. With this information, we can evaluate the model more holistically and make improvements if necessary to improve the predictions and decisions made by the classification model. The confusion matrix can also provide accuracy of the method used. In research (Cantika, Yanris, & Hasibuan, 2023) regarding public interest in Telkomsel cards using the decision tree method. The accuracy results obtained with the confusion matrix widget are 100%. This means that the accuracy of the decision tree method provides perfect results. And in research (Triani, Dar, & Yanris, 2023) about public interest in Yamaha motorbikes. The method used is the K-Nearest Neighbor (kNN) method. The accuracy results obtained using the confusion matrix widget gave results of 100%. These results are the same as research conducted by (Cantika et al., 2023). The results obtained were perfect, because they achieved 100% results.

METHOD

To classify data using the K-Nearest Neighbor (kNN) method and the Decision Tree method in data mining. In order for the classification process to run well, it requires a flow or stages that can be used well. So the author creates a plot like the following.

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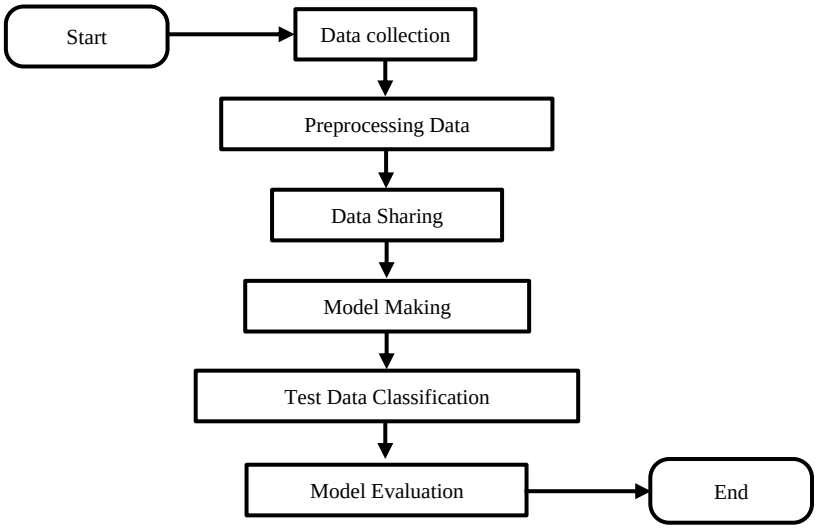

Fig 1. *Flow of the Stages of the Classification process in Data Mining*

The following is the flow in carrying out classification using the K-Nearest Neighbor (kNN) method and the Decision Tree method:

a) ***Data Collection***

The first step is to collect data that will be used to carry out classification. This data should consist of relevant attributes and appropriate class labels. So at this stage, a process will be carried out to collect data which will be used as sample data and training data in this research. This stage also determines the attributes that are appropriate to the research problem and research objectives. So sample data is obtained with attributes that are appropriate to the research problem. This is done so that research can provide good answers to existing problems.

b) ***Preprocessing Data***

At this stage the data will be selected and determined which data is suitable for use and if it is not suitable for use, the data will be deleted. This is because not all data obtained can be used as research sample data. At this stage, the data will be arranged into a table. This is so that the data used is well structured.

c) ***Data Sharing***

At this stage the data will be divided into two subsets: training data and testing data. Training data is used to train the model, meaning that the training data will help the classification process that occurs in data mining. Meanwhile, test data is used to test the performance of the designed widget pattern model. So this test data is research sample data that is used to determine the classification of the research carried out.

d) ***Model Making***

At this stage, it is a process carried out in data mining to design widget patterns that will be used to carry out data classification using the K-Nearest Neighbor (kNN) method and the Decision Tree method.

e) ***Test Data Classification***

At this stage, the classification process is carried out using widget patterns designed in data mining. So at this stage the classification process is carried out to determine the classification results. So sample data or testing data will be classified in data mining using a predetermined method.

f) ***Model Evaluation***

At this stage, it is carried out to determine accuracy, precision, recall, F1-score, and others which will be used to see the efficiency of using the K-Nearest Neighbor (kNN) method and the Decision Tree method. The evaluation carried out will provide accuracy results from the method used. So if the

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accuracy obtained is above 90%. It can be concluded that this method is very good to be used as a method with a classification model.

RESULT

Data Analysis

The table below is community data which will be the research sample data. The research sample data used is 123 community sample data which will be used to determine the level of community satisfaction with the TikTok application as an e-commerce. However, in research for sample data, the author will not include all existing sample data. This is because the table data will be too long. So only some sample data is included in order to understand the concept of the sample data that will be used.

Table 1. Community Sample Data

Full name	Gender	Interface	Seller Response	Price of Goods	Quality of Goods	Delivery Time
Achmad Ardiansyah	Man	Good	Very friendly	Cheap	Not Good	Fast
Ade Daniaty Ritonga	Woman	Just Normal	Very friendly	Cheap	Not Good	Fast
Ade Sondang Pangaribuan	Woman	Good	Very friendly	Cheap	Not Good	Fast
Agus Putra Solihin	Man	Good	Very friendly	Cheap	Not Good	Normal
Ahmad Fadly Lubis	Man	Not Good	Very friendly	Cheap	Good	Normal
Aldi Fransiska	Man	Not Good	Indifferent (Not responded)	Expensive	Just Normal	Slow
Aldy Kurnia	Man	Good	Very friendly	Cheap	Not Good	Normal
Ali Marwan Pane	Man	Not Good	Very friendly	Cheap	Just Normal	Fast
Andi Yansah	Man	Not Good	Indifferent (Not responded)	Expensive	Just Normal	Slow
Apri Julianda	Man	Good	Very friendly	Cheap	Not Good	Fast

The data in table 1 is sample data obtained from a questionnaire distributed to the Rantauprapat community. This data will be analyzed to determine the level of public satisfaction with the TikTok application as an E-commerce.

Data Training

Training data is one of the important components in the data mining process. The function of data training is to provide data mining models or algorithms with the information needed to understand patterns in the data. In training data, the author will not include all the training data that will be used, this is the same as what happens with sample data or testing data. There was too much data, so only a few were included so that we could understand the concept of training data in this research.

Table 2. Data Training

Full name	Gender	Interface	Seller Response	Price of Goods	Quality of Goods	Delivery Time	Category

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Alex Simatupang	Man	Not Good	Indifferent (Not responded)	Expensive	Just Normal	Slow	Not satisfied
Darmin Nasution	Man	Good	Very friendly	Cheap	Not Good	Fast	Satisfied
Desi Ariyanty	Woman	Just Normal	Very friendly	Cheap	Not Good	Fast	Satisfied
Dodi Agus salim	Man	Good	Indifferent (Not responded)	Expensive	Good	Fast	Satisfied
Fransiska Sinaga	Woman	Not Good	Indifferent (Not responded)	Expensive	Just Normal	Slow	Not satisfied

The data in table 2 is training data used to assist the classification process that will be carried out in data mining. Having training data can help the data mining process in the Orange application using the K-Nearest Neighbor (kNN) method and the Decision Tree method.

Table 3. Column Data Attributes

No	Attribute	Type	Role	Values
1	Full Name	Text	Meta	-
2	Gender	Categorical	Feature	Man, Woman
3	Interface	Categorical	Feature	Good, Just Normal, Not Good
4	Seller Response	Categorical	Feature	Indifferent (Not responded), Very friendly
5	Price of Goods	Categorical	Feature	Cheap, Expensive
6	Quality of Goods	Categorical	Feature	Good, Just Normal, Not Good
7	Delivery Time	Categorical	Feature	Fast, Normal, Slow
8	Category	Categorical	Target	Satisfied, Not Satisfied

The data in table 3 is a column data attribute that is used to classify several attributes so that classification can be carried out on community sample data regarding analysis of the level of community satisfaction with the TikTok application as an e-commerce. Each attribute has been given a type, role and values so that each existing attribute can be easily understood. To be able to properly classify the roles in the category attributes, they are changed to targets, so that people can determine who are satisfied and dissatisfied with the TikTok application as an E-commerce.

Data Selection Process (Preprocessing)

Preprocessing in data mining is a critical stage that involves a series of techniques and data transformations designed to clean, prepare, and optimize raw data before the analysis process. The goal is to ensure that the data used in data mining is high quality and ready to be used to generate accurate insights. Preprocessing involves actions such as removing missing or duplicate data, handling outliers, normalizing data values, and encoding categorical variables into a form that can be processed by algorithms. In addition, preprocessing also includes selecting relevant attributes, dimensionality reduction if necessary, and splitting the data into subsets for model training and testing. Efficient and thorough preprocessing is a crucial step in the data mining cycle, as it can have a major impact on the quality of analysis results and the model's ability to produce accurate predictions.

Data Mining Process

This data mining process will be carried out using 2 different methods, namely the K-Nearest Neighbor (kNN) method and the Decision Tree method with a classification model. So in the classification model, sample data will be categorized and grouped according to their respective groups,

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namely people who are satisfied and dissatisfied with the TikTok application as an E-commerce. The category process uses the K-Nearest Neighbor (kNN) method and the Decision Tree method.

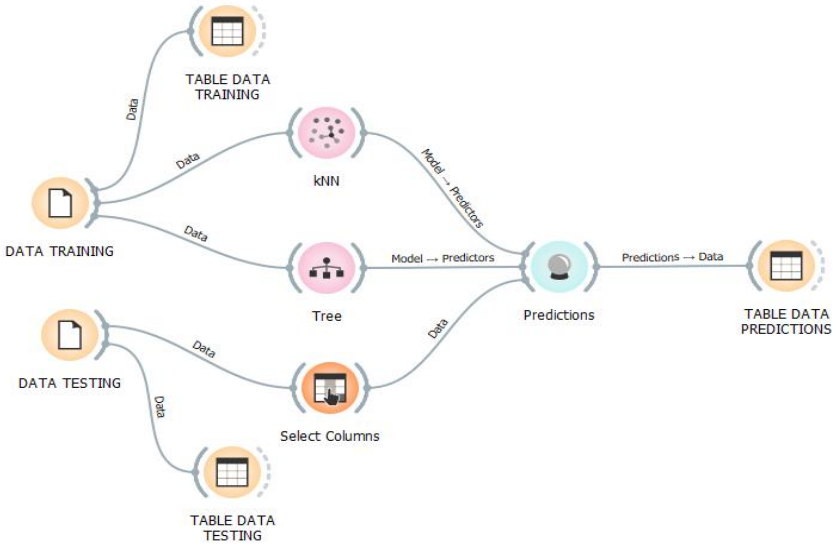

Fig 2. *Widget Pattern Design in Data Mining*

Figure 2 is the process of designing widget patterns that will be used in data mining to classify community data using the K-Nearest Neighbor (kNN) method and the Decision Tree method.

Classification Model Testing Process

This process is a process of reviewing widget patterns that have been previously designed. This is done so that community sample data can be classified properly and correctly using the K-Nearest Neighbor (kNN) method and the Decision Tree method. Testing of this widget pattern will be carried out in the data mining process and applied to the Orange Application.

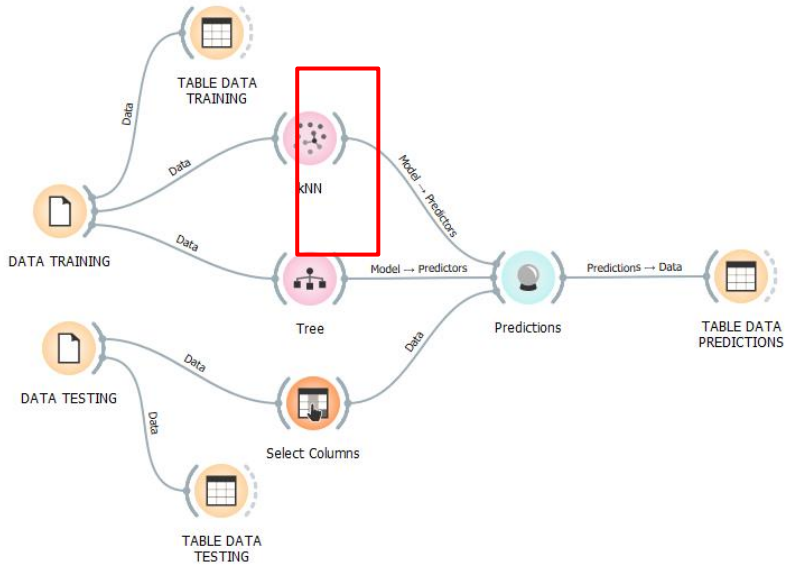

Fig 3. *Prediction Process with Classification Models in Data Mining*

Figure 3 is the process of predicting sample data in data mining to obtain classification results using the K-Nearest Neighbor (kNN) method and the Decision Tree method. The widgets in the red box are the K-Nearest Neighbor (kNN) method and the Decision Tree method which are used to make

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predictions with the classification model. With this process, the data will be classified based on each class and group. In this research, the classification carried out was to determine the level of public satisfaction with the TikTok application as an E-commerce. So the data will be grouped into groups of people who are satisfied with the TikTok application as E-commerce and groups of people who are not satisfied with the TikTok application as E-commerce.

Classification Model Predictions Process

At this stage, the results of the classification have been carried out using the K-Nearest Neighbor (kNN) method and the Decision Tree method. The classification results can be seen in the table below.

Table 4
Classification Model Prediction Results

Method	Category	
	Satisfied	Not satisfied
K-Nearest Neighbor (kNN)	119	4
Decision Tree	119	4

Table 4 is the result of classification that has been carried out using widget patterns designed in previous data mining using the K-Nearest Neighbor (kNN) method and the Decision Tree method. From the classification carried out using 2 different methods, the same results were obtained, namely for people who were satisfied with the TikTok application as E-commerce, 119 people's data (for representation was 96.74%) and for people who were dissatisfied with the TikTok application as E - commerce of 4 Community data (for representation of 3.25%).

Classification Model Evaluation Results

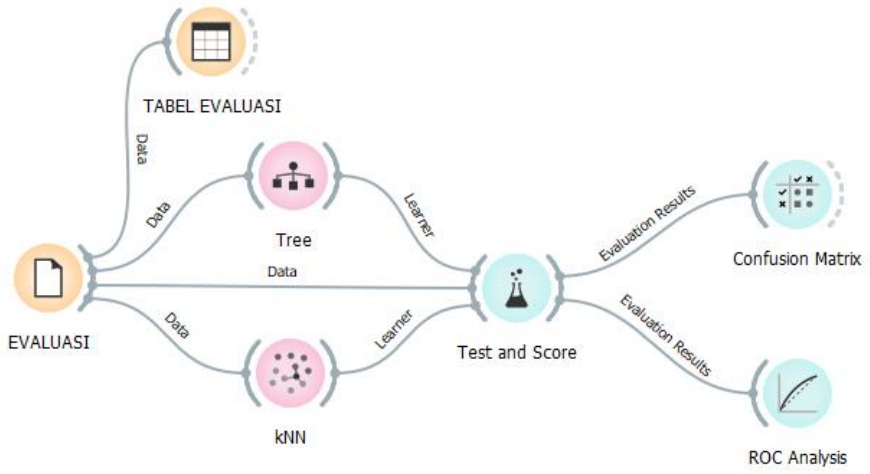

Fig 4. *Widget Pattern Design used to carry out Evaluation*

Figure 4 is a process carried out to evaluate the method used from the classification results that have been carried out previously. To be able to carry out this evaluation process, the author also needs to design the widget pattern that will be used to be able to evaluate the method used. To determine the evaluation results of the method used, the author uses the confusion matrix widget to obtain accuracy, precision and recall results from the two methods that have been used in the previous classification process. The author also added a ROC Analysis widget which will be used to determine graphs from the results of the two methods used previously to carry out classification.

Evaluation Results with Test and Score

Table 5. Results with Test and Score

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Model	AUC	CA	F1	Precision	Recall
kNN	0.875	0.967	0.951	0.936	0.967
Tree	0.498	0.967	0.951	0.936	0.967

After the author carried out an evaluation with a classification model using the K-Nearest Neighbor (kNN) method, the Test and Score results for AUC were 0.875, CA results were 0.967, F1 results were 0.936, Precision results were 0.936 and Recall results were 0.936. 0.967. Meanwhile, the evaluation results with the classification model were obtained using the Decision Tree method, the test and score results for AUC were 0.498, the results for CA were 0.967, the results for F1 were 0.951, the results for Precision were 0.936 and the results for Recall were 0.967.

Evaluation Result with Confusion Matrix

Confusion matrix is a widget that is used as a measuring tool for classification techniques by calculating the correctness of data that has been classified using the K-Nearest Neighbor (kNN) method and the Decision Tree method.

Table 6. Confusion Matrix results using the K-Nearest Neighbor (kNN) method

		Predicted		
		Satisfied	Not Satisfied	∑
Actual	Satisfied	119	0	119
	Not Satisfied	4	0	4
	∑	123	0	123

Table 6 shows the confusion matrix results obtained from evaluating the classification model. The results of the confusion matrix are True Positive (TP) is 119. True Negative (TN) is 4, False Positive (FP) is 0 and False Negative (FN) is 0. So the values for accuracy, precision and recall are as follows:

$$\boldsymbol{Accuracy} = \frac{\mathbf{119+4}}{\mathbf{119+4+0+0}} \times \mathbf{100\%}$$ Then the Accuracy value = 100%

$$\boldsymbol{Presisi} = \frac{\mathbf{119}}{\mathbf{119+0}} \times \mathbf{100\%}$$ Then the Precision value = 100%

$$\boldsymbol{Recall} = \frac{\mathbf{119}}{\mathbf{119+0}} \times \mathbf{100\%}$$ Then the Recall value = 100%

Table 7. Confusion Matrix results using the Decision Tree method

		Predicted		
		Satisfied	Not Satisfied	∑
Actual	Satisfied	119	0	119
	Not Satisfied	4	0	4
	∑	123	0	123

In table 7 are the results of the confusion matrix obtained from evaluating the classification model. The results of the confusion matrix are True Positive (TP) is 119. True Negative (TN) is 4, False Positive (FP) is 0 and False Negative (FN) is 0. So the values for accuracy, precision and recall are as follows:

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$$\boldsymbol{Accuracy} = \frac{\mathbf{119+4}}{\mathbf{119+4+0+0}} \times \mathbf{100\%}$$ Then the Accuracy value = 100%

$$\boldsymbol{Presisi} = \frac{\mathbf{119}}{\mathbf{119+0}} \times \mathbf{100\%}$$ Then the Precision value = 100%

$$\boldsymbol{Recall} = \frac{\mathbf{119}}{\mathbf{119+0}} \times \mathbf{100\%}$$ Then the Recall value = 100%

Evaluation Result with ROC Curve

ROC Analysis is obtained from the evaluation results with a classification model. ROC Analysis is carried out to look at the graphs of the two methods used previously to carry out data classification. With ROC Analysis, each method will have a graph of the results of the evaluation that has been carried out.

ROC Evaluation Results Analysis using the K-Nearest Neighbor (kNN) Method

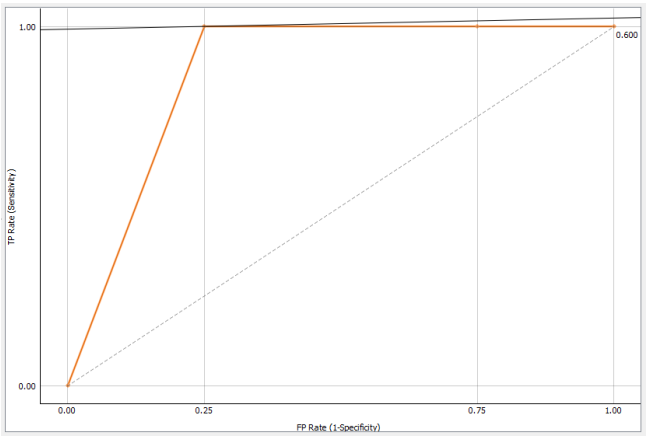

Fig 5. *ROC Analysis People are Satisfied with the TikTok Application as E-commerce*

Figure 5 is the result of ROC Analysis of People Satisfied with the TikTok Application as E-commerce using the K-Nearest Neighbor (kNN) method. The results obtained were 0.600.

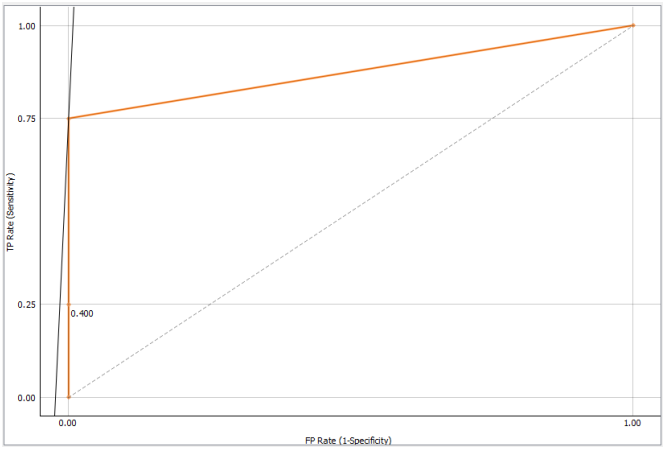

Fig 6. *ROC Analysis People are Satisfied with the TikTok Application as E-commerce*

Figure 6 is the result of ROC Analysis of People Dissatisfied with the TikTok Application as E-commerce using the K-Nearest Neighbor (kNN) method. The results obtained were 0.400.

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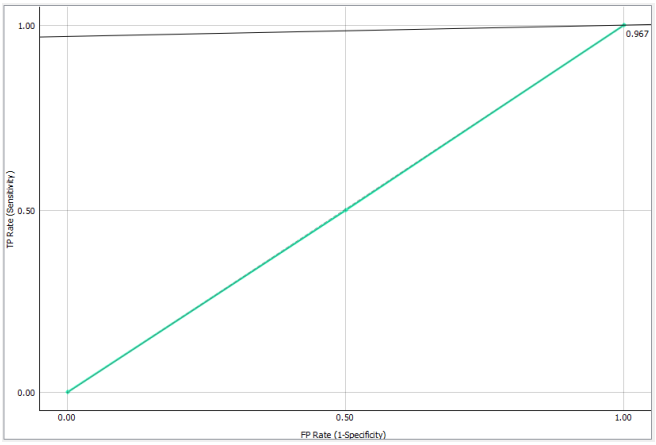

Fig 7. *ROC Analysis People are Satisfied with the TikTok Application as E-commerce*

Figure 7 is the result of ROC Analysis of People Satisfied with the TikTok Application as E-commerce using the Decision Tree method. The results obtained were 0.967.

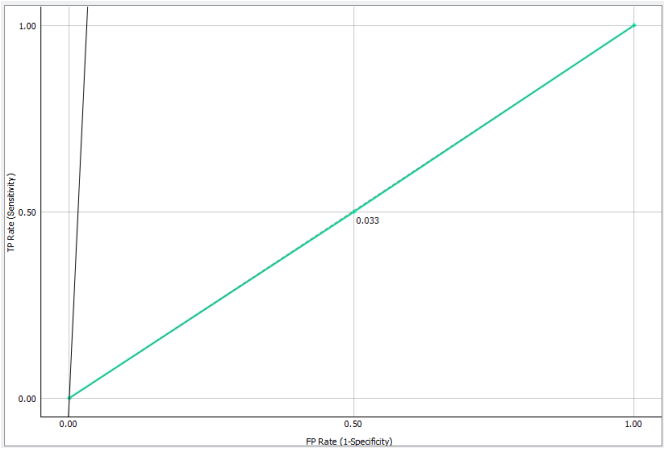

Fig 8. *ROC Analysis People are not satisfied with the TikTok application as an e-commerce*

Figure 8 is the result of ROC Analysis of People Dissatisfied with the TikTok Application as E-commerce using the Decision Tree method. The results obtained were 0.333.

DISCUSSIONS

To determine whether an E-commerce is developing or not is by looking at the number of consumers or customers who buy from the E-commerce. So now the author wants to see whether or not many people are interested in TikTok as E-commerce. This is done because currently TikTok is no longer just a social media that presents various short videos. But TikTok has also developed and become an E-commerce. So research needs to be carried out to determine whether or not many people are satisfied with the TikTok application as an E-commerce. What is done is to classify data on people who have done online shopping on TikTok. The classification is carried out to determine the level of public satisfaction with the TikTok application as an E-commerce. The results of the classification carried out showed that there were 119 community data (for representation of 96.74%) and for people who were dissatisfied with the TikTok application as an E-commerce it was 4 community data (for representation of 3.25%). The classification results were obtained using the K-Nearest Neighbor (kNN) method and

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the Decision Tree method. The results of this classification obtained very good results, this is because the results obtained almost reached 100%.

From the classification results obtained using 123 community sample data, the method used is very suitable for carrying out data classification. The two methods used were also evaluated in order to obtain accuracy results from the two methods. The accuracy results carried out using the confusion matrix widget stated that the accuracy for the K-Nearest Neighbor (kNN) method was 100% and the accuracy results for the Decision Tree method obtained from the evaluation process were 100%. A comparison between the two results both gives perfect results. The comparison of the two methods is 1:1. This happens because the results are perfect.

CONCLUSION

From the data mining process with a classification model which was carried out using 123 community sample data. This classification was carried out to determine the level of public satisfaction with the TikTok application as an E-commerce. This is done so that it can be seen how many people are satisfied with online shopping on the TikTok application or, on the contrary, many people are not satisfied with online shopping on the TikTok application. Classification is carried out using the K-Nearest Neighbor (kNN) method and the Decision Tree method. The results obtained from the classification carried out in data mining were 119 community data (for a representation of 96.74%) and for people who were dissatisfied with the TikTok application as an E-commerce it was 4 community data (for a representation of 3.25%). These results indicate that many people are satisfied with online shopping on the TikTok application. From the problem formulation previously explained in the introduction section, the prices of goods in the TikTok application are very cheap. So the research that has been carried out shows that it is true that the prices of goods on TikTok are very cheap. This is because from the classification results, many are satisfied with the TikTok application as E-commerce and the public's answers also state that the prices of goods on TikTok are cheap. Furthermore, there are people who state that the quality of goods on TikTok is not good, but in reality, from the classification results, the quality of goods on TikTok is good.

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