

ABSTRAK

Design of Prediction Model for Customer Churn Segmentation and Classification in E-Commerce Mall in Mall

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The churn classification is motivated by the threat to e-Commerce companies, namely losing customers who unsubscribe or churn. Efforts made by marketing specialists to maintain market share have shifted from a focus on acquiring new customers to retaining existing ones to reduce Customer Churn. In this study the authors are based on the increase in the churn rate that occurred at PT XYZ.

One way to find churn patterns is to use data mining techniques. Therefore, this study proposes a CRM-Data Mining model which is to predict customer behavior and the results of processing are used as suggestions for improvements and company strategies in retaining customers by using segmentation and classification. There are several variables used including Session, Interaction with Application, Actions made in Interaction, Purchasing, Claim and Discount. In addition, this study uses a clustering technique based on the Recency, Frequency and Monetary (RFM) model, each of which is the period since the last visit, the number of visits, and the Total Amount issued by the customer.

Based on the comparison of two classification algorithms, namely decision tree and Support Vector Machine, the decision tree algorithm is the most accurate classification algorithm. The best level of accuracy of the classification decision tree model is 87% in classifying customers. The variable model that has a significant effect on customer churn after being processed with the most accurate classification decision tree model is the product category, type of device, session and claim reason. where these four factors are in the service characteristics of the company. This research also does not only focus on churn customers, for customers who are categorized as non-churn, segmentation is carried out again to measure customer loyalty. The results of the segmentation can be used as a reference as a marketing strategy according to each segment.

Keywords: CRM, data mining, RFM model, churn, e-Commerce Mall in Mall