

## **Model for Introducing Products to New Customers through Decision Tree Using Algorithm C4.5 (J-48)**

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**Abstract :** This article is intended to analyze insurance information which contains information on the customer decision when purchasing life insurance pay package. The data were analyzed in order to present new customers with Life Insurance Perfect Pay package to meet new customers' needs as much as possible. The basic data of insurance pay package were collect to get data mining; thus, reducing the scattering of information. The data were then classified in order to get decision model or decision tree using Algorithm C4.5 (J-48). In the classification, WEKA tools are used to form the model and testing datasets are used to test the decision tree for the accurate decision. The validation of this model in classifying showed that the accurate prediction was 68.43% while 31.25% were errors. The same set of data were then tested with other models, i.e. Naive Bayes and Zero R. The results showed that J-48 method could predict more accurately. So, the researcher applied the decision tree in writing the program used to introduce the product to new customers to persuade customers' decision making in purchasing the insurance package that meets the new customers' needs as much as possible.

**Keywords :** decision tree, data mining, customers, life insurance pay package

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