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## Determination of the Bank's Customer Risk Profile: Data Mining Applications

Authors: Taner Ersoz, Filiz Ersoz, Seyma Ozbilge

**Abstract :** In this study, the clients who applied to a bank branch for loan were analyzed through data mining. The study was composed of the information such as amounts of loans received by personal and SME clients working with the bank branch, installment numbers, number of delays in loan installments, payments available in other banks and number of banks to which they are in debt between 2010 and 2013. The client risk profile was examined through Classification and Regression Tree (CART) analysis, one of the decision tree classification methods. At the end of the study, 5 different types of customers have been determined on the decision tree. The classification of these types of customers has been created with the rating of those posing a risk for the bank branch and the customers have been classified according to the risk ratings.

**Keywords:** client classification, loan suitability, risk rating, CART analysis

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