Developing a Tool to Manage the Credit Risk using Data Mining

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Declaration

We declare that this thesis is our own work and has not been submitted in any form for another degree or diploma at any university or other institution of tertiary education. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.

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Abstract

Ceasing vehicles are affecting to the credit liquidity of the leasing company. This research has been conducted to develop a tool to manage credit risk in leasing companies using data mining. This tool will predict the ability of recoverability of the loan and determine the most suitable plan for the customer. It is hypothesis that, using data mining technology, the credit risk of leasing companies can be managed. Past dataset from the leasing company has been used to create the data mining model. When a customer comes to lease a vehicle, decision maker will get the information from the customer and enter to the system as inputs then the system will predict the tendency of recoverability of the loan and will give the suitable plans for the customer after evaluating with the previously generated model. This system generated details will support the decision maker to take his decision. The overall design includes frontend software and it is connected to the WEKA API which issued under the GNU General Public License.

The data model that is used in this tool to manage credit risk in leasing companies has been tested by considering a data collected from the medium scale leasing company in Sri Lanka.

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