

# **IMPROVING EFFICIENCY OF DEBT COLLECTION USING PREDICTIVE ANALYSIS**

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## Abstract

Debt Collection is a large industry in developed countries where buying on credit is a way of life. Consumer companies engage their energies on sales or products rather than collection of invoices. Debt collection companies provide services such as sending invoices, sending reminders and processing unpaid claims through legal processes. The fees chargeable by Collection agencies are strictly controlled by the government legislations. Therefor collection agencies in this industry face severe competition to attract customers. Targeting and focusing on claims which have a higher likelihood of being paid, and applying the correct techniques, provides them to gain higher ROI. A predictive model trained with existing data in the databases, provide the managers, insight into which claims are most likely to be paid, further which methods of communication to adopt with different types of claims.

The project proposes to investigate the data stored in the system regarding collection to identify which factors play a role in the likelihood of collection. Then it will use data in the ascertained format to create a prediction model to be used for predicting if a claim is likely to be paid. The research objective of selecting data elements to be used for prediction was achieved. The results obtained from the research project shows promising evidence that the prediction model can predict which claims are likely to be collected. This prototype can be expanded to be automatically trained during actual production runs of collection, where the learning would be fed back into the system as an updated model to predict collection of new claims.