Refaat 2011 Credit Card Model

Refaat 2011 Credit Card Model v1.0

Model Development Documentation

Draft

# Executive Summary

## Introduction

## Model Scope and Model Use

## Materiality

## Model Structure and Specification

## Main Assumptions and Limitations

## Impact Analysis

## Approval Committee Findings and Recommendations

## Implementation Considerations

# Model Development Overview

## Model Scope

## Model Use

# Data Preparation

## Data Sources

The dataset for this example model is taken from [Refaat 2011]. The dataset seems to be randomly generated, or partially real but anonymized. The dataset has only 1200 rows. As the dataset is public for fair use, it is appropriate for examples for credit scoring models.

## Model Development Population

Due to the small size of the dataset, all samples are utilized in model development, as well as for validation.

## Risk Drivers

### Target Output

The target output of the model is an estimation of the probability of default. The dependent variable to train the model is the actual default flag which is denoted by the status variable in the dataset.

### Imputation

A separate bin is created for missing data values.

### Preprocessing

During the preprocessing phase, preprocessing of numeric predictors consists in applying equal frequency binning, with the initial number of bins set to . The preprocessing of categorical predictors consists in sorting the categories according to the 'SortCategories' criterion (the default is to sort by odds in increasing order). Sorting is not applied to ordinal predictors.

### Splitting

## Validation Samples

# Model Development

## Model Specification

## Model Estimation

## Model Calibration

## Final Model

# Model Validation

## Summary

## Model Stability

## Sensitivity Analysis

## Impact Analysis

# Appendix