# **Predict Loan Defaults**

With Machine Learning

## The problem

#### Expensive

Manual screening of potential loan applicants is **costly** in terms of man hours.

#### Knowledge

Screening of loan applicants requires specific domain expertise and experience. Have to send staff for rigorous training before they can perform the role.

#### Subjective

Human judgement of whether a company will default on its loans is sometimes biased and subjective.

#### Inaccurate

Human judgement of whether a company will default on its loans is only correct ~68% of the time

## Solution

Leverage machine learning to predict loan defaults

### Benefits

#### Cheap

The machine learning model is capable of returning each decision in less than a second.

#### Knowledge

The machine learning model is able to learn automatically from historical data.

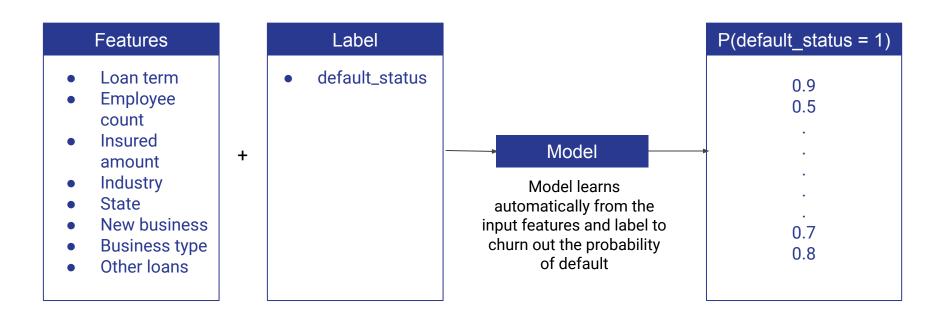
#### Unbiased

The machine learning model is **unbiased**. It makes decision solely based on the data presented to it.

#### Accurate

The machine learning model is **more accurate** than a trained human analyst. Based on back testing, the machine learning model is able to achieve an accuracy of **90**%. In comparison, human accuracy is only 68%.

## How it works



### **Use Cases**

#### **Potential Loans**

The machine learning model can be deployed for use during loan request to decide whether to loan to the applicant company

#### **Existing Loans**

The machine learning model can be used to detect potential companies with existing loans, that are highly likely to default, so that the bank staff can engage in the necessary follow up actions early