

# Risk Scorecard

Risk scoring is a statistical means of providing a quantifiable risk factor to a given customer or applicant. It evaluates and rates the creditworthiness based on the credit history and mitigates loss which greatly improves overall performance and secure a competitive advantage. Similar techniques can be used for building collection scorecard, cross-sell and upsell models, customer acquisition and retention strategies.

## Key Business Questions

Credit Risk Management consulting covers the entire spectrum, including risk identification through diagnostic review analysis, risk assessment through corporate and retail scoring model development, risk measurement through estimation of Probability of Default (PD), Loss Given Default (LGD), Exposure at Default (EAD) and Credit VaR models, as well as overall risk management, including collateral management, risk-based pricing, and reporting frameworks.

How to identify customers who can potentially default?

How to support data governance with end-to-end transparency in the process?

How to automate the credit score check process to increase efficiency?

How to perform drill down analysis on ratings data to drive better business decision making?

## Advantages

- Strengthen enterprise-wide compliance programs by implementing effective governance and risk management frameworks
- Cross sell additional products based on different risk bands in the customer portfolio
- Enable decision making at different stages of customer lifecycle
- Clear understanding of denial or approval reasons leading to sound business approach
- Reduce credit losses

## Our end-to-end approach

### Monitor Model Performance

- Review Model Approach
- Assess model Implementation
- Validate monitoring plan
- Improve the results and KPI's being tracked based on results and with additional data and variables available
- Use Population Stability Index(PSI)
- Use Characteristic Stability Index(CSI)

### Risk Scorecard Validation

- Carry out Scorecard Validation and out of time validation
- Perform Reject inferencing, if needed

### Model Fitting And Validation

- Model methodology specification
- Model implementation
- Build machine learning risk scoring classifier model
- Enhance and refine model by tuning the parameters of the model and/or creating additional features
- Evaluate models (Built on multiple learning algorithms) to identify the best Model



### Business Objective

- Identify key business objective
- Capture requirements from stakeholders

### Data Sourcing and Data Preprocessing

- Understand the data schema and data dictionary
- Understand the present analytics processes and systems
- Assess data quality gaps and data sufficiency
- Missing value treatment
- Outlier treatment
- Generation of model input
- Choose sampling window, performance window and Target Definition as per the data provided.
- Perform Vintage and Roll-Rate Analysis if needed.

### Data Transformation

- Perform variable transformation
- Correlation tests for multicollinearity
- Perform coarse and fine binning, if required based on trend analysis.
- Feature selection based on variable significance and information value.

## About TransOrg Analytics

TransOrg Analytics is a Big Data and machine learning solutions and services company transforming businesses. Our solutions and products encompass advanced analytics, data engineering, data science, machine learning, artificial intelligence and smart data visualization. We come with tenured experience of 11+ years across North America, Middle East, APAC and India and have delivered millions of dollars in incremental top line revenues via 300+ projects of varying complexities for 60+ clients including Fortune 500 companies.