



**Independent validation &
checking of the Rating
models for Corporate portfolio
in a mid-sized bank in US**

The Client

Had \$94Bn in banking assets, \$4.56 trillion in assets under custody and \$704Bn in assets under management. The client is involved in investment management, asset and fund administration, fiduciary and banking services through a network of 85 offices in 18 U.S. states and 12 international offices in North America, Europe and the Asia-Pacific region.

Scope and Approach

The bank required Aptivaa's help in Statistical PD model development for the overall Corporate portfolio and calibration of the PD model to the master rating scale (MRS). The entire process was well documented and validated in both out of time and out of sample scenarios. This rating model was recalibrated to a PD and applied to an MRS which helped the bank for lending purposes in its portfolio. Aptivaa also created a prototype of the bank's vended models which helped the bank in further validation and recalibration efforts in the future.

Results

The Client implemented the PD models which were fully calibrated and operational."

Deliverables

- + Documentation of the PD models developed for the corporate portfolio
- + A new calibration framework for the PD models
- + A working prototype of the vended models to aid model implementation and update

Level1	Level2	Factor	Contribution	Mid-Market (Develop)	Internal Study	Data Drive Validation
Company/Chosen	Company standing	Risk of adverse events	10%		✓	✓
	Ownership structure	Legal status			✓	✓
	Economic conditions	Business sensitivity			✓	✓
Industry Risk	Industry performance	Industry sensitivity	30%		✓	✓
		Industry sales trend			✓	✓
	Industry stage			✓	✓	
	Production conditions	Capital sensitivity			✓	✓
	Regional factors	Competitiveness			✓	✓
		Environmental concerns		✓	✓	

Model Prototype

Model Structure
Model Weights Simulation
Add Factors
Simulate Model

Level1	Current weights	Revised weights	Financial Metric Level1	Current weights	Revised weights
Business Analysis	Financial Coverage	30%	Current PDA	30%	30%
	Business Analysis	30%	Forecast Default PDA	30%	30%
Financial Metrics	Financial Coverage	30%	Interest Coverage	30%	30%
	Financial Feasibility	30%	Debt/Equity	30%	30%
			Total Debt/Equity	30%	30%
			% EBITDA	30%	30%

About Us

Aptivaa is a dedicated risk and compliance consulting firm delivering risk management solutions to the financial services industry.

We offer risk consulting, solutions and analytical services to banks, insurers, as well as asset management and other financial services companies. Our domain expertise covers risk and compliance across credit risk, market risk and operational risk.

