Credit Portfolio Manager

Risk Estimation, Provisions and Portfolio Quality Monitoring

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Open Analytics

open-analytics.com.au

Introduction

Open Analytics' Credit Portfolio Manager (CPM) solution provides core risk measurement, credit provisions and portfolio quality monitoring for banks, non-bank lenders and other credit providers. The service provides a foundation for credit portfolio management by taking care of risk estimation and portfolio monitoring for you, including IFRS-9 compliance, portfolio risk profile monitoring, financial reporting, annual model recalibration and support through financial audits.
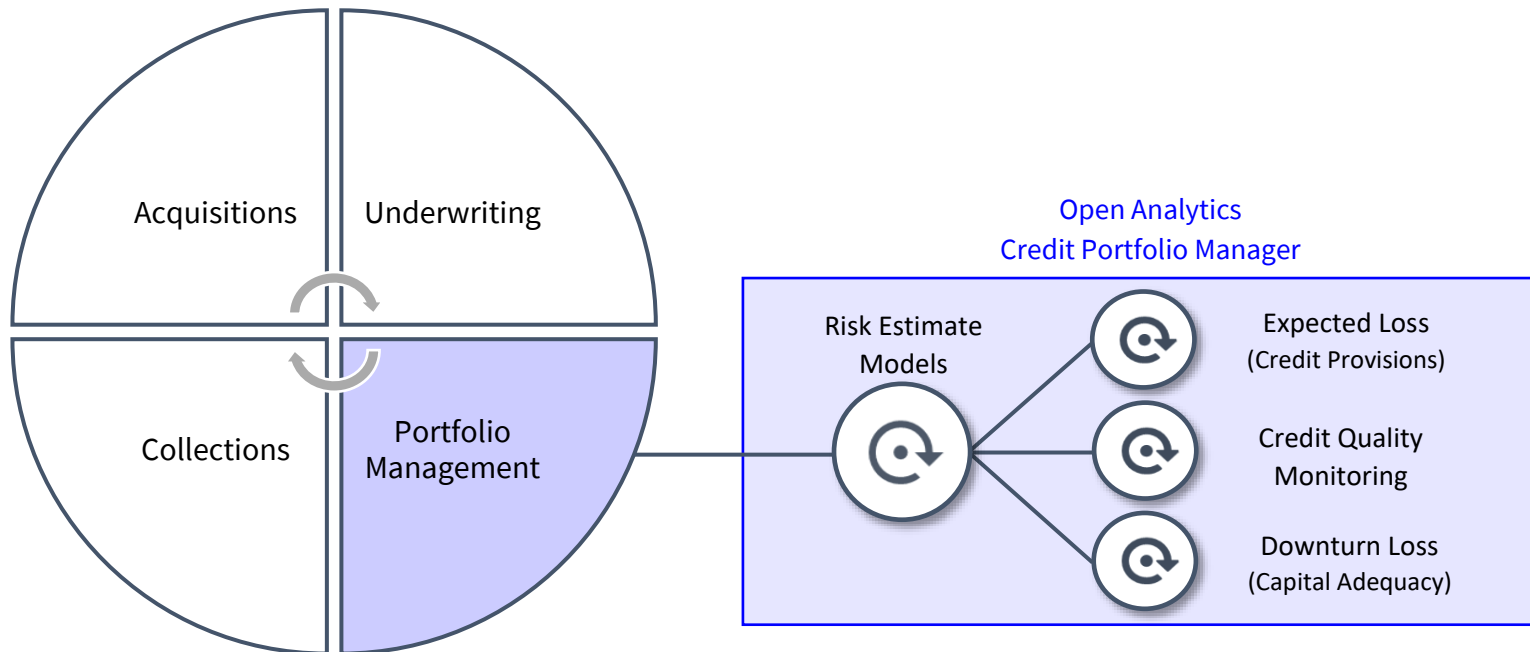
The solution is adaptable to any portfolio type and any level of data maturity. For established lenders with significant data assets, risk estimates are calibrated to internal performance data to best reflect your customer base and risk profile. For startups or lenders with limited data, customers can take advantage of Open Analytics' industry models, fine-tuned with decades of experience developing and managing risk estimate models for the full spectrum of credit providers in Australia and New Zealand. Our industry benchmark models provide a sound foundation for credit risk estimates and provisions for new lenders which evolves as your data assets grow.

IFRS-9 Compliant Provisions

The Credit Portfolio Manager solution covers all IFRS-9 credit provisioning needs. We provide expected loss estimation under a range of economic scenarios with management control over portfolio provisions through interactive scenario weights and overlays. Results are delivered each reporting period via web-based reports with functionality to export tables and charts and generate pdf reports for distribution to internal and external stakeholders.

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Portfolio Credit Quality Monitoring

As part of the Credit Portfolio Manager service, we provide extensive portfolio credit quality monitoring. Monitoring covers industry, geographic risk, dynamic LVR, arrears, optional external credit ratings and portfolio single-name concentrations.

TCE ($m) by Collateral Type
December 2023; TCE ($m)

CreditorWatch RiskScore; Exposure Weighted
December 2023; TCE (%)

Home Loans; TCE ($m) Exposure by DLVR Band
March 2024; TCE ($m)

TCE ($m) Exposure by Remoteness Area
March 2024; TCE ($m)

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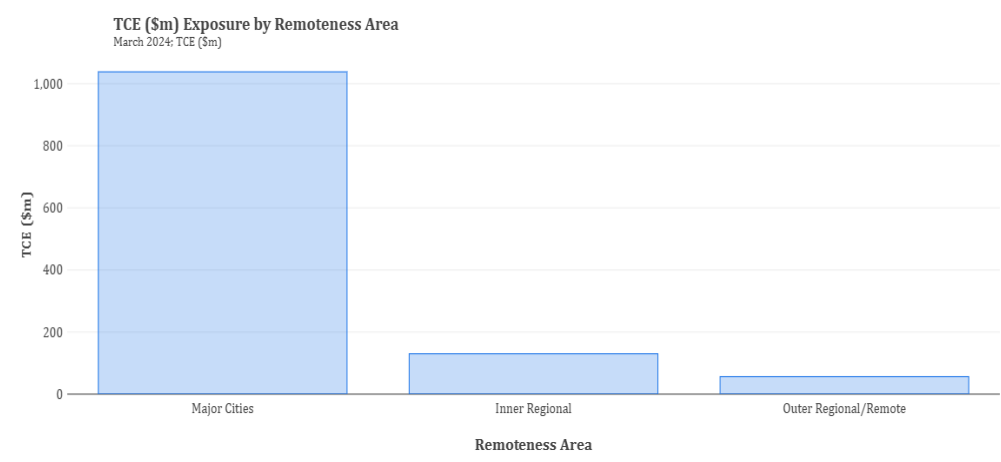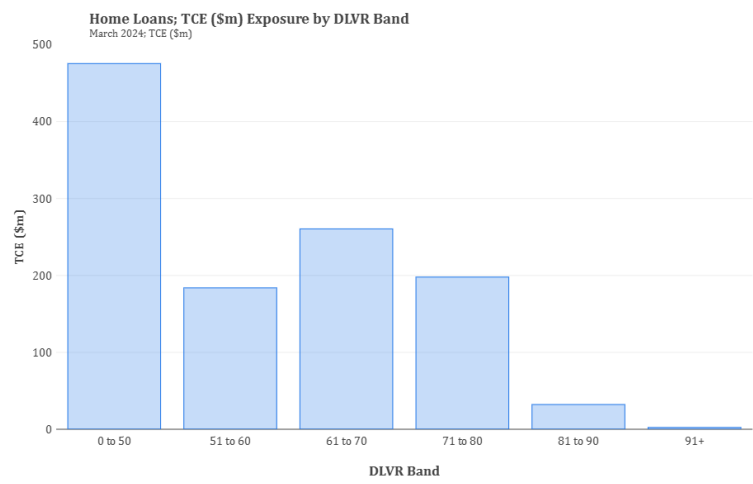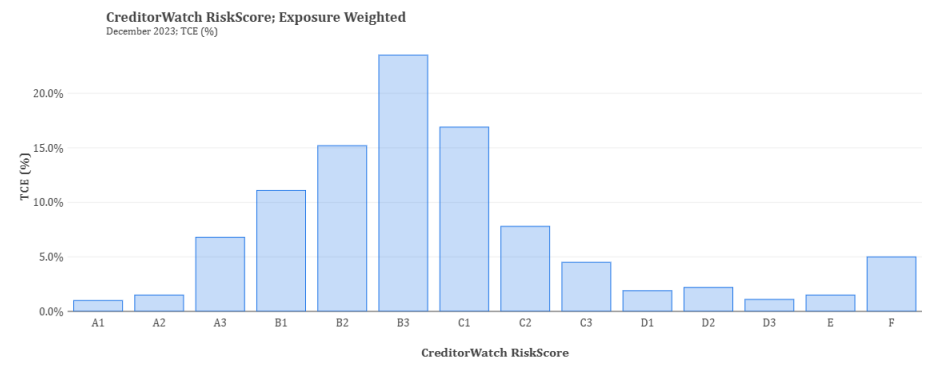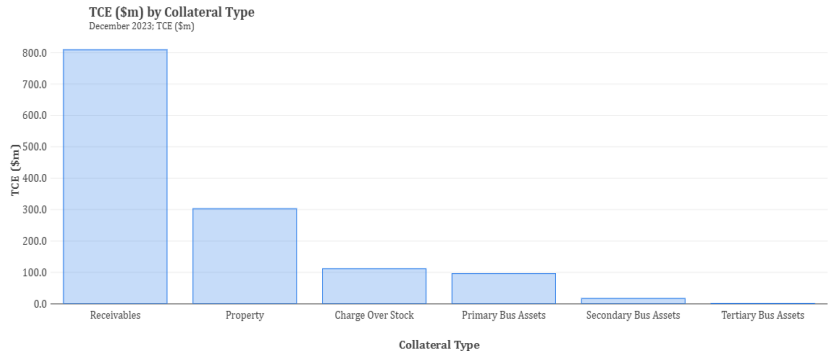
Portfolio Back Testing

To ensure risk estimates are appropriately calibrated to your portfolio, we provide extensive risk estimate back testing. Back testing also provides insight into portfolio performance by key segments, identifying opportunities for tightening of credit policy, prioritising collections or opportunities for growth in high-performing customer segments.

Predicted vs Actual Default Rate by PD Segment
PD Back-testing

GSA Secured Term Loan
EAD Back-testing

Total Performing Portfolio (Stage 1 & 2)
PD Back-testing

Collateral Type: Tertiary Business Assets (Stage 1, 2)
LGD Observed vs. Expected; Defaulted Population Back-testing

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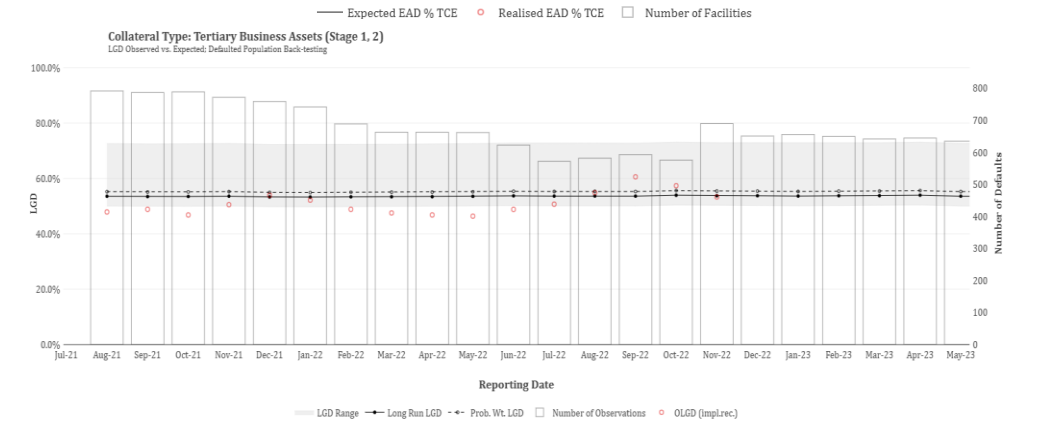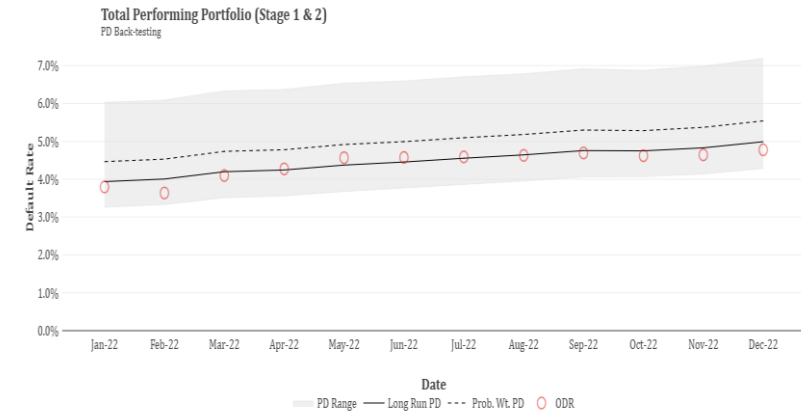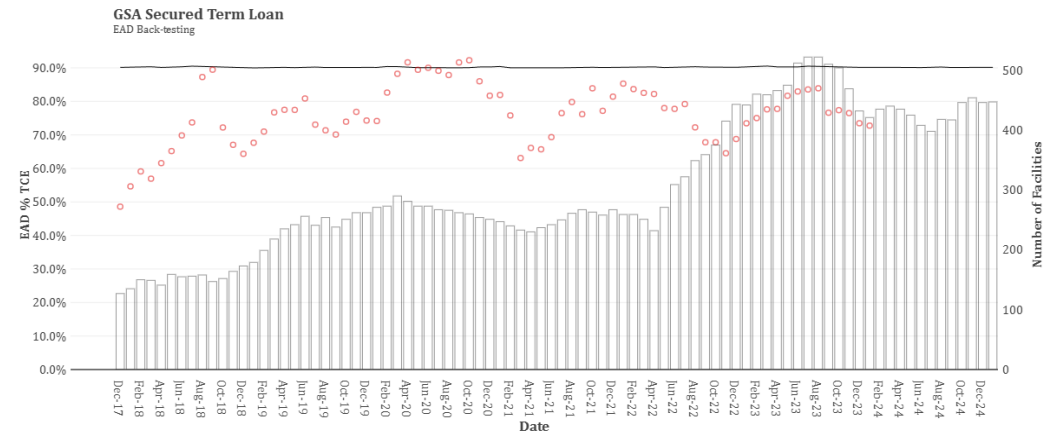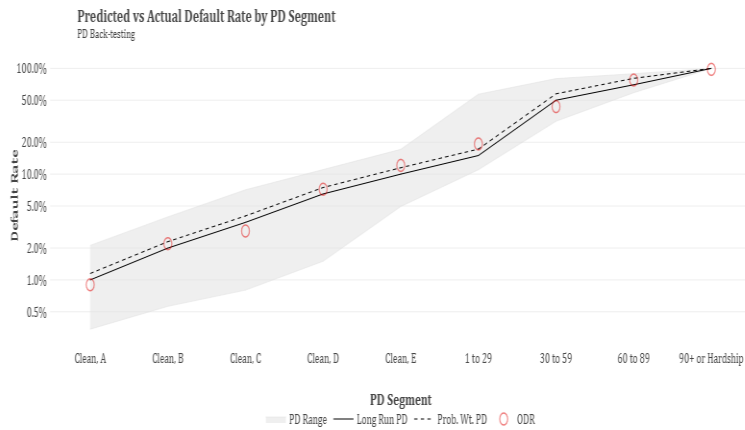
Peer Benchmarking and Industry Data

Credit Portfolio Manager customers have access to benchmarking of your portfolio's observed default rates and other risk metrics relative to peers. Benchmarking allows lenders to understand their risk profile and performance relative to competitors offering similar credit products.

BENCHMARKING

The tables below provide a comparison of Banksmart's observed external administration rates, business failure rates and 90+ default rates to benchmarks from a variety of portfolio types. Banksmart actuals are based on the March 2023 snapshot. Banksmart's performance is most comparable to mixed lending non-bank lender pool.

Table 23.1: Comparison of Observed External Administration Rates

Pool	External Administration Rate	External Administration or Involuntary Strike-Off or Deregistration	90 Days Past Due Default Rate Benchmarks
Banks (ADIs)	redacted	redacted	redacted
Asset Finance Only Non-Bank Lenders	redacted	redacted	redacted
Mixed Lending Non-Bank Lenders	redacted	redacted	redacted
Unsecured Non-bank Lenders	redacted	redacted	redacted
Banksmart Observed Mar-23 Snapshot %	-.-%	-.-%	-.-%

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Table 23.2: Pool Benchmarks

Mixed Lending Non-Bank Lenders	External Administration Rate	External Administration or Involuntary Strike-Off or Deregistration
Pool Minimum	redacted	redacted
Pool Mean	redacted	redacted
Pool Maximum	redacted	redacted
Banksmart Observed Mar-23 Snapshot %	-.-%	-.-%

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Bank voluntary deregistration rates are impacted by a larger proportion of entity restructures than other lenders. External administration rates are a better reflection of relative risk of banks compared to other pools.

Annual Default Rate Midpoint Benchmark Comparison

Legend: Non Bank Lenders — ADIs ✗ < Lender > ODR
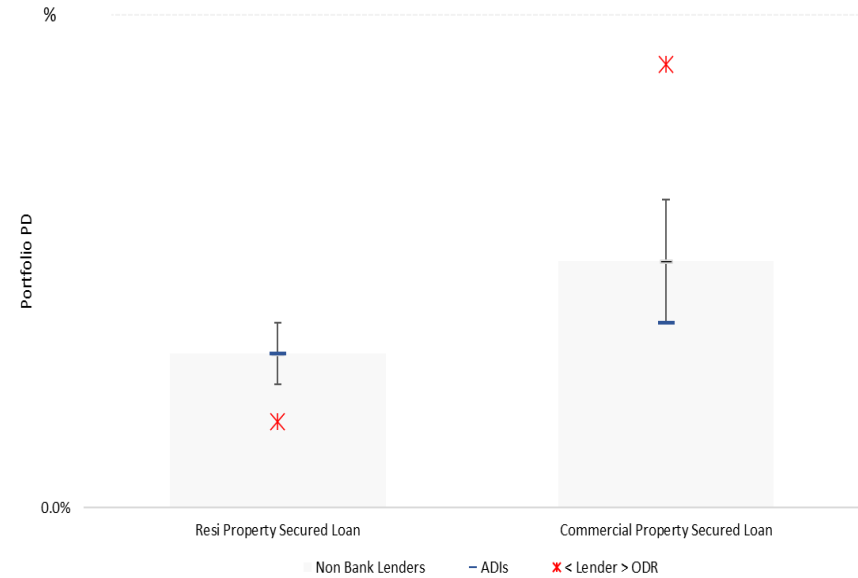
Benchmarking comes in a variety of forms including long-term average performance by lender type and asset class and for some asset classes dynamic reporting of rolling monthly default rates for opt-in data contributors on a give-to-get basis.

Open Analytics Credit Portfolio Manager

Benchmarks vs Internally Calibrated Risk Estimates

The risk estimates we deliver for you are tailored to your portfolio based on your data and your design preferences. Our extensive data pool and benchmarks can fill the gaps where your data is lacking. As a lender's portfolio and data assets grows, the mix of internally calibrated versus benchmarks typically evolves. Where do you fit on the scale below for Australian lenders?

Maturity, Size and Data Available			Source of Risk Estimation					
Organization Type	Age of Portfolio	Defaults Recorded	Long Run Probability of Default	Long Run Exposure at Default	Long Run Cure Rate	Collateral Haircuts and Dynamic LVR	Economic Effects (Point in Time)	Tail Risk (VaR Capital)
Start-Up	0 to 3 Years	Under 100	Industry Benchmark Model	Industry Benchmark Model	Industry Benchmark Model	Industry Benchmark Model	Industry Model + Judgement	Industry Model Or None
Emerging	3 to 7 years	100 to 500	Mix Internal + Benchmarks	Mix Internal + Benchmarks	Mix Internal + Benchmarks	Industry Benchmark Model	Industry Model + Judgement	Industry Model Or None
Established	8+ Years	500 to 2,000	Internal Data	Internal Data	Internal Data	Industry Benchmark Model	Industry Model + Judgement	Industry Model Or None
Large 2nd Tier	20+ Years	2,000 to 10,000	Internal Data	Internal Data	Internal Data	Mix Internal + Benchmarks	Industry Model + Judgement	Industry Model (F-IRB)
A-IRB Bank	50+ Years	10,000 - 100,000	Internal Data	Internal Data	Internal Data	Internal Data	Mix Internal Model + Industry Model + Judgement	Industry Model (A-IRB)

All lenders require some external data points and benchmarking. Even the largest banks in the world draw on global databases and industry benchmark models for aspects of credit risk quantification. Our solution allows you to use the right mix of internal and external data and offers flexible design choices for portfolio segmentation and intuitive drivers of credit risk.

Open Analytics Credit Portfolio Manager

Product Feature Summary

Go beyond compliance with a comprehensive solution covering provisioning and portfolio monitoring needs. Open Analytics CPM delivers a core risk management capability at a fraction of the cost of comparable alternatives available in the market.

Product Feature
Quarterly or monthly reporting cycle frequency
Expected Credit Loss: Estimated credit losses for AASB-9 compliant credit provisions refreshed on a quarterly or monthly reporting cycle
Management Control over Provisions Client selects their own scenario probability weights, overlays and has flexibility to adjust downturn scenario severity each reporting cycle
Probability of Default: Estimated likelihood of a facility entering default (90 days or more in arrears) in the future
Exposure at Default: Estimated outstanding balance at time of default, should a credit facility enter default
Loss Given Default: Estimated loss as a percentage of exposure at default, should a credit facility enter default
Downturn Credit Loss: Estimated credit losses under severely stressed economic conditions, suitable for stress testing and capital adequacy
Geographic Risk Model: Location risk classifying risk associated with the borrower's postcode
Portfolio Credit Quality Monitoring: Comprehensive monitoring including distribution by key segments, migrations and portfolio concentrations
Back Testing: Risk estimates and portfolio performance monitoring provided on a quarterly or monthly cycle
Peer Benchmarking: Portfolio PD, EAD, LGD and ECL benchmarks including non-bank lending and banking peer comparison
Models are calibrated to your internal performance data (where available) including arrears roll-rates (for PD) and cure rates (for LGD)
Extensive documentation for all aspects of the ECL models and provision calculations
Annual model recalibration
Audit support (support through annual or biannual reviews by financial auditors) including access to
Customer support for report queries including 1 business day SLA for response.

Pricing

Pricing for our Credit Portfolio Manager solution is provided below. All prices are in Australian dollars and exclusive of GST. Implementation costs are a one-off fee paid on completion of solution deployment whilst the annual subscription is payable in quarterly instalments.

Reporting Frequency	Implementation Fee*	Quarterly Recurring Fee	Annualised Recurring Fee
Quarterly Reporting Cycle	25,000	17,500	70,000
Monthly Reporting Cycle	25,000	22,500	90,000
Additional Fee for Additional Product Segments (4 or more)	-	+3,000 per segment	+12,000 per segment

*Free implementation for new lenders, low volume portfolios and for long-term commitments

Free implementation is offered for creditors with limited data history. Conditions for free Implementation are:
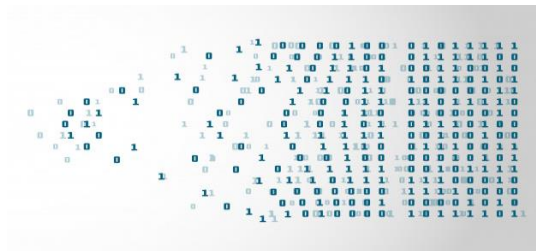
- Benchmark models only (no calibration to creditor's internal back-history);
- Client completes all tasks related to conforming data to data templates; and
- Minimum commitment of 6 months.

We also waive the implementation fee for those willing to commit to a 24-month term and we waive 50% of the implementation for those willing to commit to a 12-month term.

About Open Analytics

Open Analytics is an Australian financial services consulting company founded on a vision to modernise and strengthen underwriting, risk management and customer engagement for banks and credit providers. We offer a unique design methodology and holistic approach to implementing pro-active, efficient and ethical credit risk management and decisioning processes with a strong emphasis on long-term sustainability and optimized risk-reward outcomes.

Credit Data Architecture and Data Enrichment	Predictive Modelling and Machine Learning	Credit Risk Management and Underwriting
Expertise in structured data-model implementation, designed to enrich the value of lender's data assets by increasing interpretability, traceability and consistency of data.	Specialised in advanced predictive modelling and machine learning methods which maximize the use of a broad range of data types to predict and mitigate credit risk.	Credit policy and automated decisioning process design including acquisitions strategy, underwriting policy, marketing, credit line management, risk-based pricing and collections.

Open Analytics provide a combination of credit risk and data science expertise required to deliver our client's objectives. Our blend of traditional credit risk management and advanced technical modelling capabilities makes us unique in our ability to develop best in market credit models and automated data-driven credit processes. We have a unique skillset in designing the complete pipeline to manage all aspects of building, implementing and managing predictive models. We deliver complete solutions covering data sourcing, data preparation, data quality control, feature engineering, model development, model deployment, validation and model monitoring.

Contact

For any questions regarding our hosted risk estimates and provisioning solution, please contact our team by emailing us at: contact@open-analytics.com.au