



# Credit Risk Management Framework

Open Analytics

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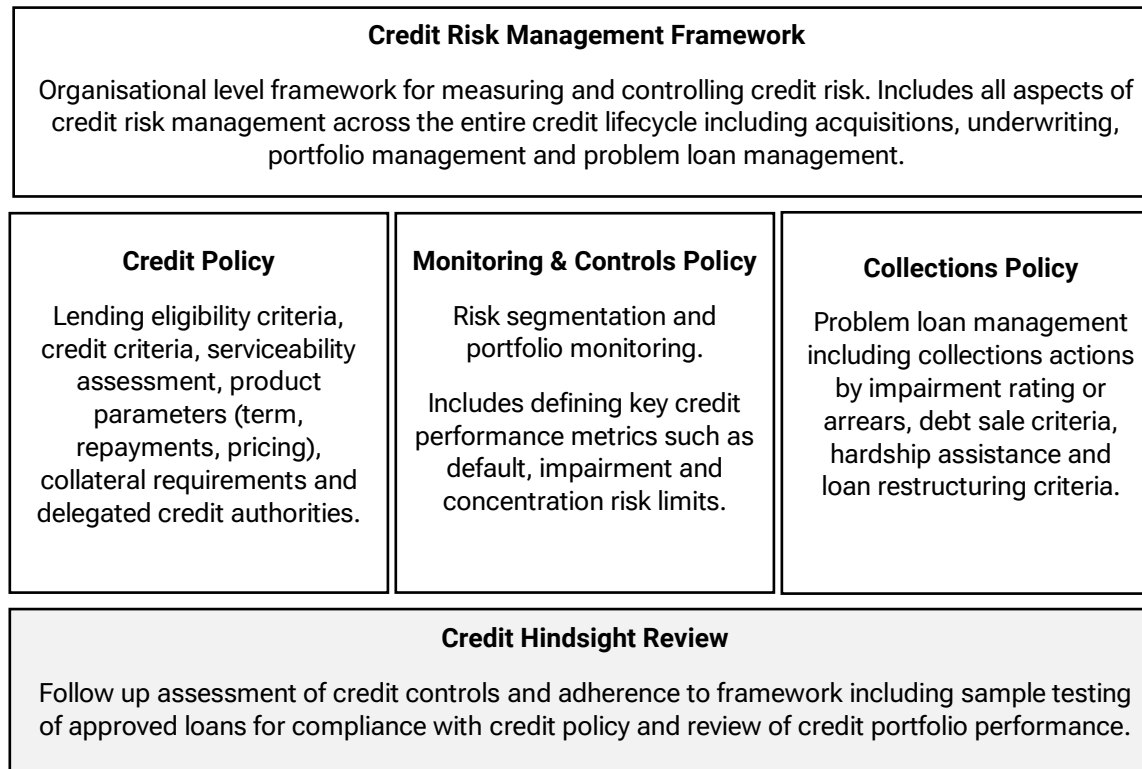
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## Overview

Open Analytics' Credit Risk Management Framework service is designed to help creditors establish an end-to-end credit risk management capability. This service was developed for start-up and emerging credit providers who are either just starting their ACL or RADl accreditation journey or who are looking to expand their product set and customer base to take on an increased level of credit risk.

Our Credit Risk Management Framework encompasses all aspects of credit risk management needs including credit risk management strategy, acquisitions screening, underwriting (decisioning), portfolio management, collections, risk segmentation and risk appetite setting. The framework consists of four core components and an optional credit hindsight review.

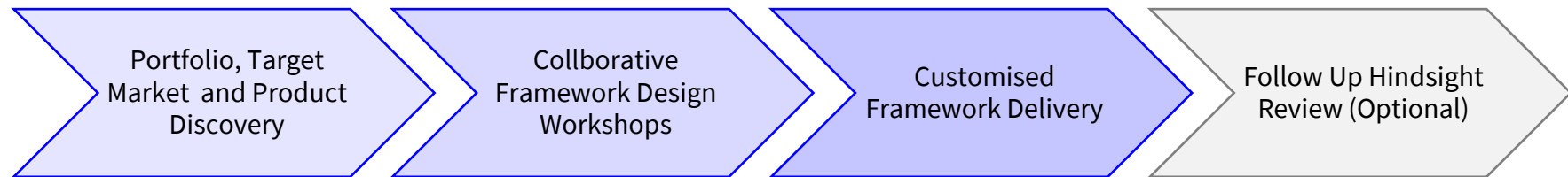


## How it Works

We have a set of “out-of-the-box” credit management frameworks with associated policies designed for consumer and commercial lending.

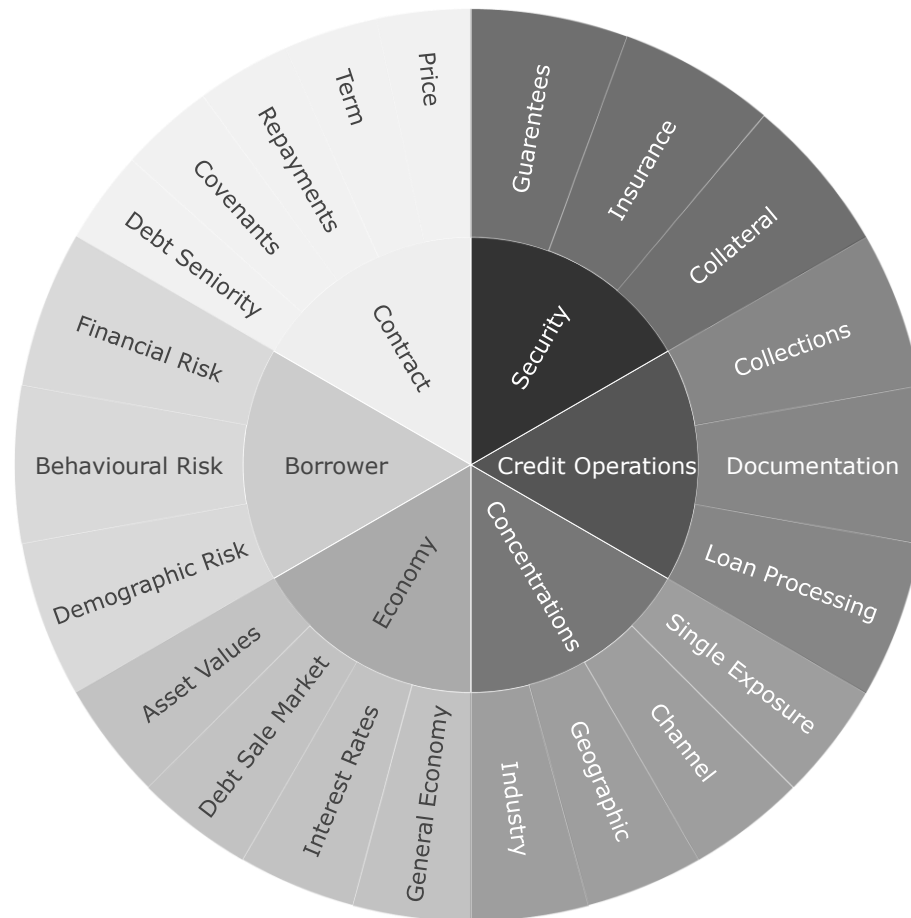
Our standard framework and related policies are customised to each individual lender’s business model and risk appetite through a series of collaborative workshops with the customer. The whole process typically takes 6-10 weeks depending on the complexity of the lender’s portfolio (number of products) and nature of the organisation (ADI or non-bank lender).

We also offer an optional credit hindsight review service conducted on a quarterly or bi-annual basis by an experienced credit manager, providing an additional control and independent assurance that credit risk management is executed in line with the framework and the organization’s risk appetite.



## Drivers of Credit Risk

There are six broad categories of drivers of credit risk within our standard framework with 22 sub components which vary by the type of lending offered. Each of these drivers are accounted for in the Credit Risk Management Framework with consideration for the lender's product set, target market and risk appetite.



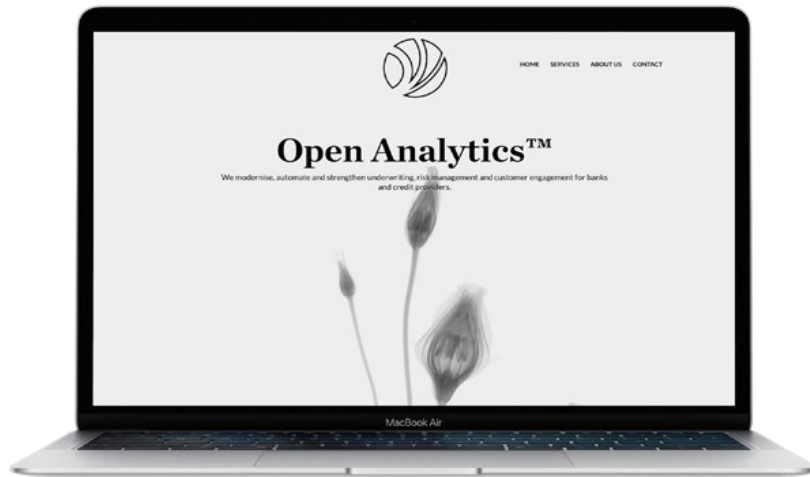
# Pricing

Standard pricing for our Credit Risk Management framework is provided below. All prices are in Australian dollars and exclusive of GST.

<b>Item</b>	<b>Cost</b>
Customised Credit Risk Management Framework – Bank	75,000
Customised Credit Risk Management Framework – Non-Bank Lender	55,000
Credit Hindsight Review	10,000

## 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 decisioning processes with a strong emphasis on long-term sustainability and optimized risk-reward outcomes.



### **Credit Risk Management**

Credit policy and automated decisioning process design including acquisitions strategy, underwriting policy, marketing, credit line management, risk-based pricing and collections.

### **Machine Learning and Predictive Modelling**

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 Data Architecture and Data Enrichment**

Expertise in structured data-model implementation, designed to enrich the value of lender's data assets by increasing the range, interpretability, traceability and consistency of data.

Open Analytics provides support to financial institutions and creditors of all shapes and sizes, ranging from FinTech non-bank lenders to big-4 banks.

## Contact Details

For any questions regarding the Credit Risk Management Framework service, please contact James O'Donnell, Managing Director Open Analytics.

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## Appendix – Credit Risk Management Framework Contents

Example Credit Risk Management Framework contents are provided below. Note that these are contents for our out-of-the-box standard framework and policies which are customised for each lender.

### **Credit Risk Management Framework Contents (Commercial)**

1. Purpose of Document
2. Credit Lifecycle
3. Target Market
4. Products
5. Organizational Structure
6. Credit Risk Appetite
7. Credit Risk Management Strategy Overview
8. Credit Risk Drivers
9. Acquisitions Strategy
10. Underwriting
  - 10.1. Segmentation
  - 10.2. Credit Contract Parameters
  - 10.3. Credit Criteria
  - 10.4. Non-Financial Risk Assessment
  - 10.5. Financial Risk Assessment
  - 10.6. Security and Risk Mitigants
    - 10.6.1. Collateral
    - 10.6.2. Insurance
    - 10.6.3. Guarantees
11. Portfolio Credit Risk Management
  - 11.1. Concentration Risk Limits
  - 11.2. Industry Risk
  - 11.3. Portfolio Monitoring and Management Information
  - 11.4. Core Credit Portfolio Monitoring
  - 11.5. Default Definition
  - 11.6. Probability of Default Estimation Requirements
  - 11.7. Exposure at Default Estimation Requirements
  - 11.8. Loss Given Default Estimation Requirements
  - 11.9. Credit Provision Requirements
  - 11.10. Stress Testing
12. Credit Operations
  - 12.1. Loan Processing
  - 12.2. Collections
  - 12.3. Loan Documentation and Settlement
14. Risk Based Pricing
15. Credit Data and Documentation
  - 15.5. Loan Documentation and Settlement
  - 15.6. Credit Data
  - 15.7. Data Retention
16. Roles and Responsibilities
  - 16.1. Key Credit Risk Management Roles
  - 16.2. Delegated Credit Authorities
  - 16.3. Board Responsibilities
17. Credit Committee (Credit Risk Oversight)
18. Validation and Independent Review of Credit Processes
  - 18.1. Credit Hindsight Review

- 18.2. Independent Model Validation
- 18.3. Annual Credit Risk Management Framework Review
- 19. Appendix APS 220 Mapping (banks only)

### **Credit Policy Contents (Commercial)**

- 1. Purpose of Document
- 2. Products in Scope
- 3. Responsible Lending Obligations
  - 3.1. Banking Code of Practice
- 4. Acceptable Loan Purposes
- 5. Eligible Customers
- 6. Industry Exclusions
- 7. Minimum and Maximum Term
- 8. Minimum and Maximum Credit Limit
- 9. Repayment Structure
- 10. Borrower Segmentation
- 11. Lending Criteria
  - 11.1. Age of Business
  - 11.2. Credit Bureau Checks
  - 11.3. Internal Payment Record
  - 11.4. Financial Risk Assessment
  - 11.5. Minimum Bureau Score
  - 11.6. Directors Guarantees
  - 11.7. Security Requirements
- 12. Credit Decision Criteria and Process
  - 12.1. Initial Assessment

- 12.2. Second Stage Assessment (Referrals)
- 12.3. Final Approval
- 13. Delegated Credit Authorities
- 14. Policy Overrides
- 15. Loan Documentation

### **Credit Risk Monitoring and Controls Policy Contents (Commercial)**

- 1. Purpose of Document
- 2. Risk Appetite
- 3. Credit Controls
  - 3.1. Credit Hindsight Review Requirements
  - 3.2. Credit Portfolio Monitoring and Reporting Requirements
- 4. Credit Risk Measures
  - 4.1. Loss Rates
  - 4.2. Arrears and Hardship
  - 4.3. Default Definition
  - 4.4. Risk Estimates
    - 4.4.1. Probability of Default (PD)
    - 4.4.2. Exposure at Default (EAD)
    - 4.4.3. Loss Given Default (LGD)
    - 4.4.4. Expected Credit Loss (ECL)
- 5. Originations Quality Monitoring
  - 5.1. Originations Segments
  - 5.2. Approval Rates
  - 5.3. Override Rates and Override Reasons Monitoring
- 6. Portfolio Performance Monitoring

- 6.1. Risk Segments
- 6.2. Arrears, Hardship and Restructures Monitoring
- 6.3. Risk Estimate Monitoring
  - 6.3.1. PD Monitoring
  - 6.3.2. EAD Monitoring
  - 6.3.3. LGD Monitoring
  - 6.3.3. ECL Monitoring
- 6.4. Collections Monitoring
- 7. Concentration Risk
  - 7.1. Concentration Risk Segments
  - 7.2. Concentration Risk Monitoring
- 6.2. Small Exposure Restructures
- 6.3. Larger Exposure Restructures
- 6.4. Exiting Restructure

#### **Collections Policy Contents (Consumer and Commercial Combined)**

- 1. Scope
- 2. Problem Loans
- 3. Impairment Classification
- 4. Collections and Debt Recovery Actions by Arrears Stage
- 5. Hardship Assistance
  - 5.1. Requests for Further Information
  - 5.2. Making a Decision to Change the Credit Contract
  - 5.3. Informing the Consumer of our Decision
  - 5.4. Notice of Change
  - 5.5. Effect of Hardship Notice on Enforcement Proceedings
  - 5.6. Exiting Hardship
- 6. Restructures
  - 6.1. Restructure Terms and Concessions