NPL (Non-Performing Loans) Analytics Platform

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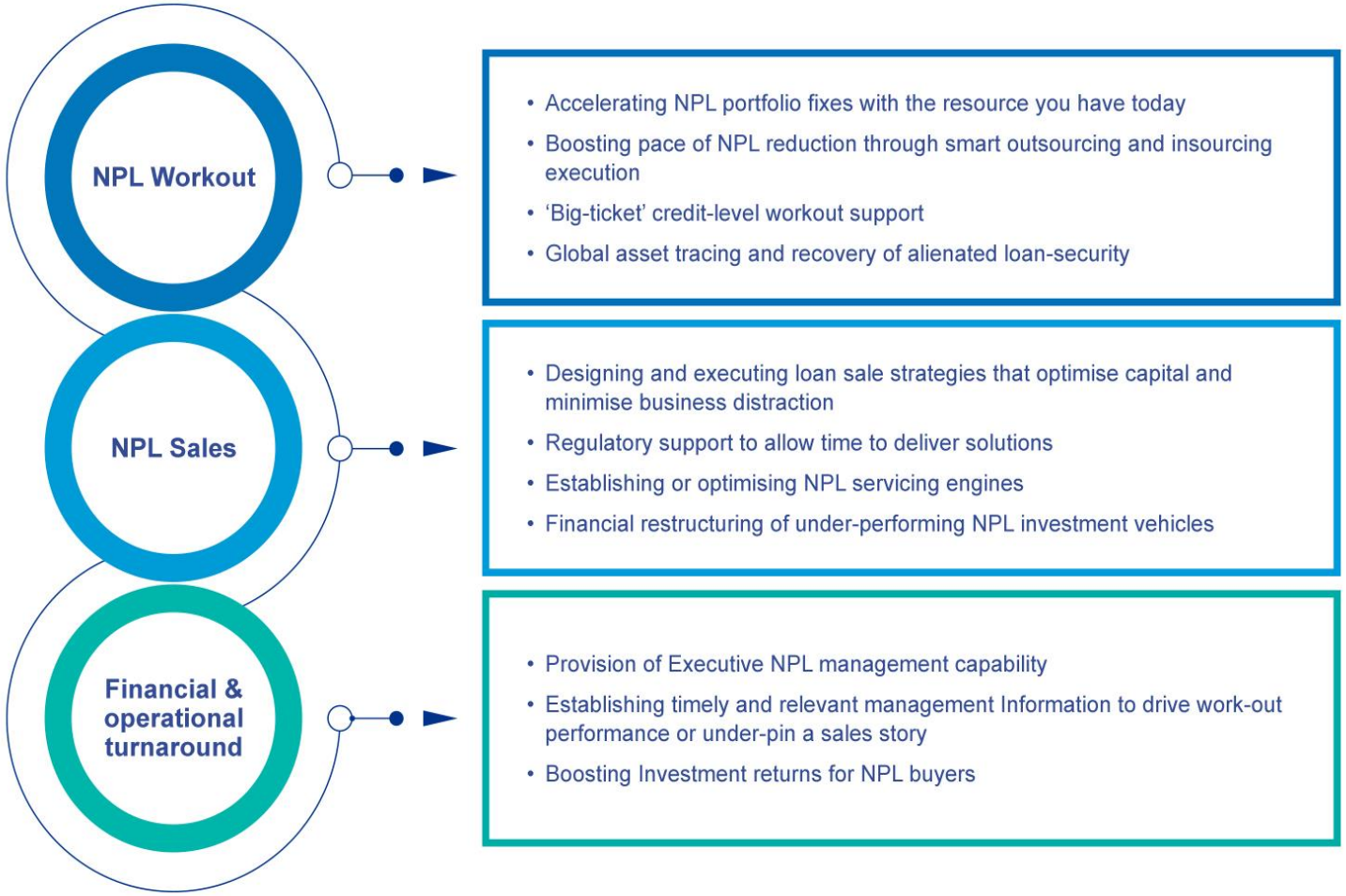
NPL Business Management



Reference - NPL Business Management (3 Phase Cycle) - KPMG

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NPL 1.0 - Risk Assessment of Loans

Re-alignment of Portfolio GRC

- Empower recovery and collections functions with advanced portfolio governance

Re-Valuation & Insights

- Tools to create NPL portfolio value - data capture, analysis and visualization techniques to create and refine user-friendly NPL portfolio information and insight

Risk Analysis & Warning Models

- Early-warning and forward-looking models draw on predictive analytics to improve credit portfolio quality and increase repayment rates

Recovery Monitoring

- Recovery monitoring through various options

Reach Out System

- Configurable contact process management along with communication channels- E-mail/ Phone/Letter aided by templates for standard notices

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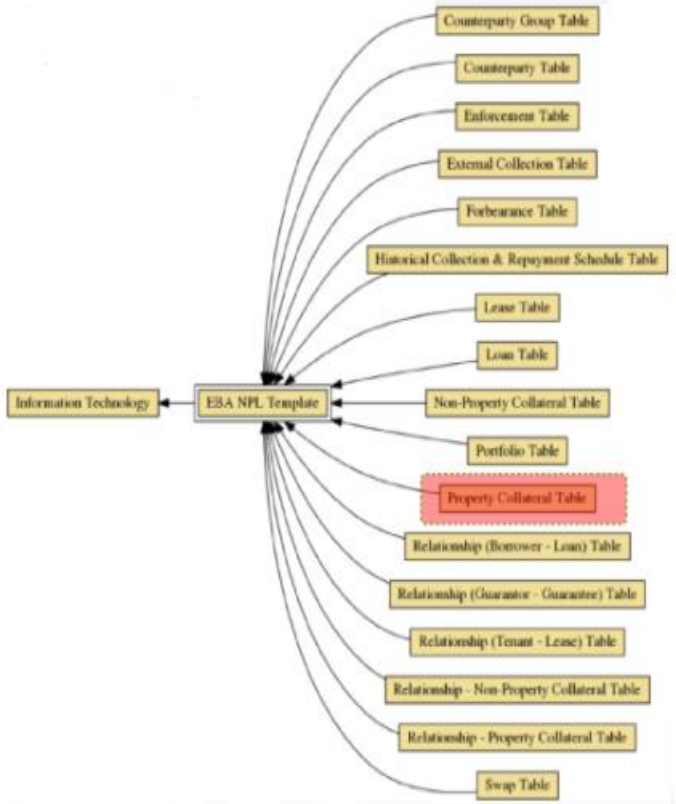
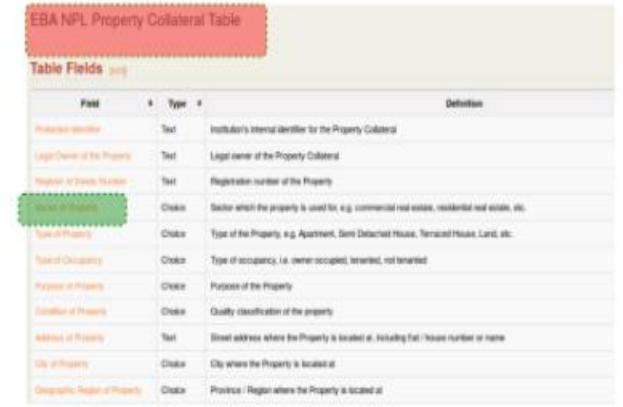
NPL 1.0 - Risk Assessment of Loans

Table Name	Purpose
EBA NPL Counterparty Group Table	Data Fields relating to Counterparty Groups
EBA NPL Counterparty Table	Data Fields relating to Counterparties
EBA NPL Loan Table	Data Fields relating to Loans
EBA NPL Relationship (Borrower - Loan) Table	Data Fields connecting Loans to Counterparties
EBA NPL Lease Table	Data Fields relating to Leases
EBA NPL Swap Table	Data Fields relating to Swaps
EBA NPL Property Collateral Table	Data Fields relating to Property Collateral backing the Loans
EBA NPL Non-Property Collateral Table	Data Fields relating to Non-Property Collateral backing the Loans
EBA NPL Relationship - Property Collateral Table	Data Fields connecting Property Collateral to Loans
EBA NPL Relationship - Non-Property Collateral Table	Data Fields connecting Non-Property Collateral to Loans
EBA NPL Enforcement Table	Data Fields relating to Enforcement
EBA NPL External Collection Table	Data Fields relating to External Collection
EBA NPL Forbearance Table	Data Fields relating to Forbearance
EBA NPL Historical Collection & Repayment Schedule Table	Data Fields documenting historical collections
EBA NPL Relationship (Guarantor - Guarantee) Table	Data Fields connecting guarantees to counterparties
EBA NPL Relationship (Tenant - Lease) Table	Data Fields connecting leases to counterparties





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NPL 1.0 - Mathematical Representation of Loans

Loans

+ Add Loan

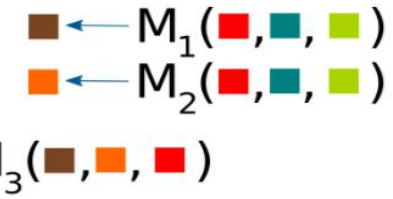
6 total

Filter

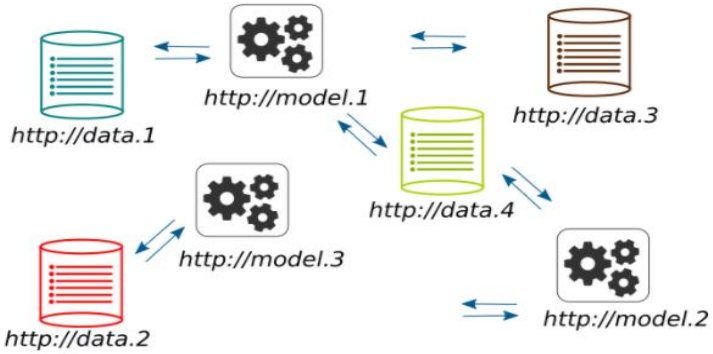
Contract identifier	Asset class	Channel of origination	Loan covenants	Current maturity date	Date of default	Final bullet repayment	Subsidy amount
Loan_yUjXzLreBi	Resi	(c) Broker	(c) Debt Service Coverage Ratio (DSCR) is the ratio of annual net operating income to debt obligations owed in the last 12m	Aug. 23, 2005	July 8, 2009	679	624
Loan_VKMb3cEfxq	Resi	(b) Internet	(a) Loan to Value (LTV) is the ratio of a loan to the value of the collateral purchased	May 26, 2011	July 14, 2005	957	162
Loan_q4osg92KER	SME/Corp	(d) Other	(b) Interest Coverage Ratio (ICR) is the ratio of earnings before interest and tax to the interest expense in the same period	April 16, 2006	April 16, 2001	225	988
Loan_9rszXlu720	Resi	(d) Other	(a) Loan to Value (LTV) is the ratio of a loan to the value of the collateral purchased	Jan. 22, 2006	Aug. 17, 2016	632	86
Loan_w7ktEYihEm	SME/Corp	(d) Other	(a) Loan to Value (LTV) is the ratio of a loan to the value of the collateral purchased	Aug. 2, 2015	April 23, 2014	173	661
Loan_Vr0cr4E2Vt	SME/Corp	(a) Branch	(a) Loan to Value (LTV) is the ratio of a loan to the value of the collateral purchased	Nov. 7, 2003	Jan. 1, 2011	467	567

6 total

Mathematical Representation



Network Representation



- NPL 1.0 is built on top of the Python Django framework
- NPL loan template recommendations of the EBA are implemented as distinct models in the database
- The UX uses built-in Django forms as those are rendered by the Grappelli skin
- The backend database is currently sqlite

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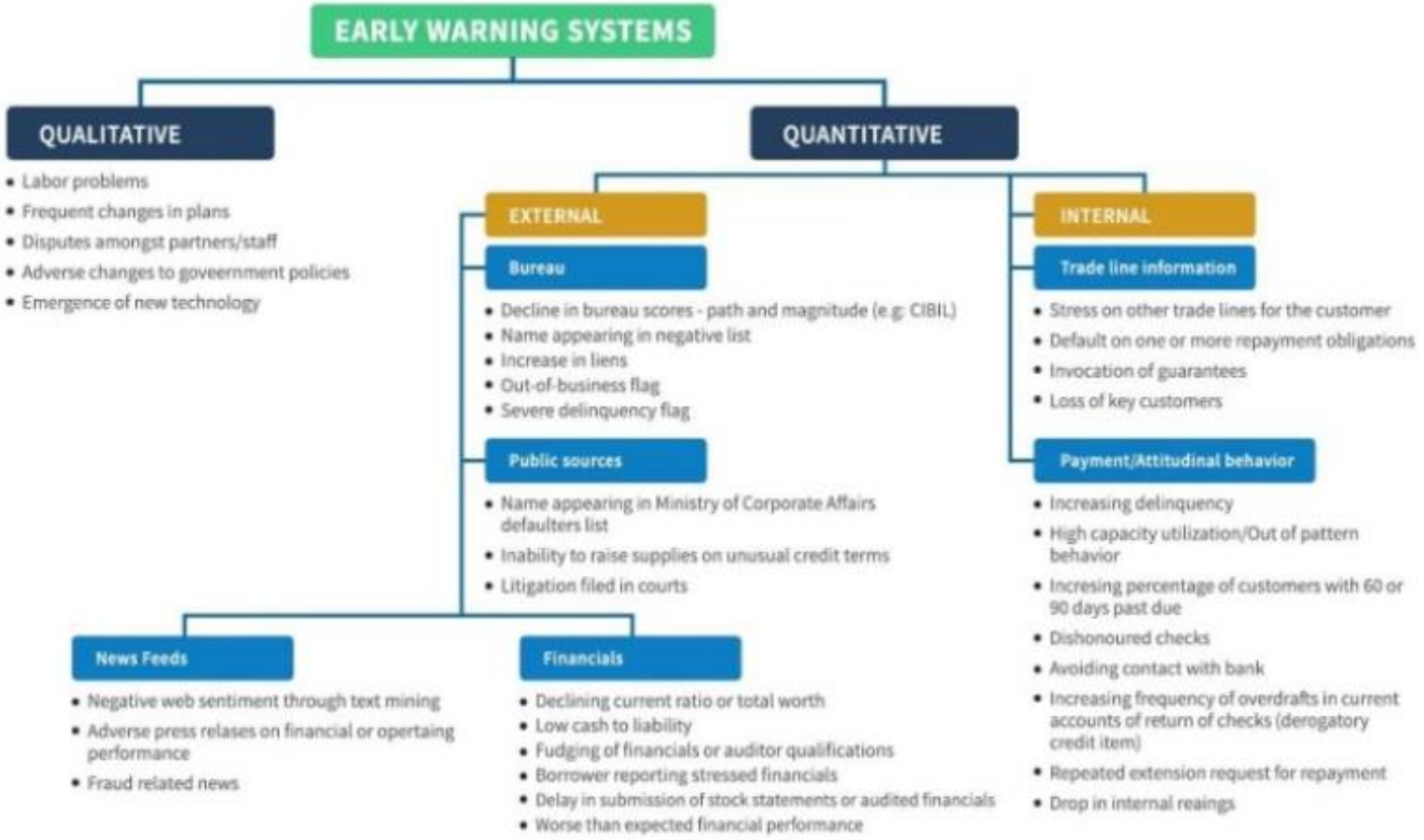
NPL 1.0 - Early Warning Systems



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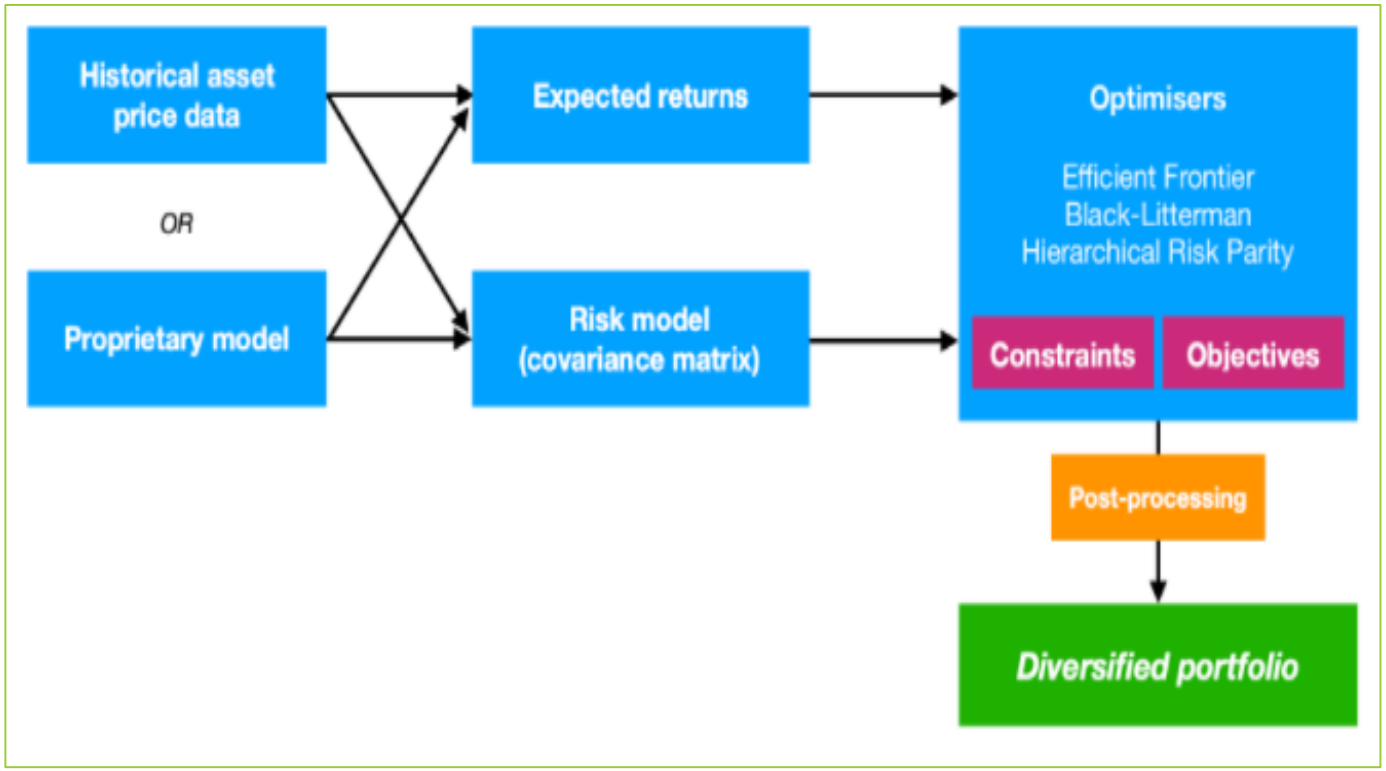
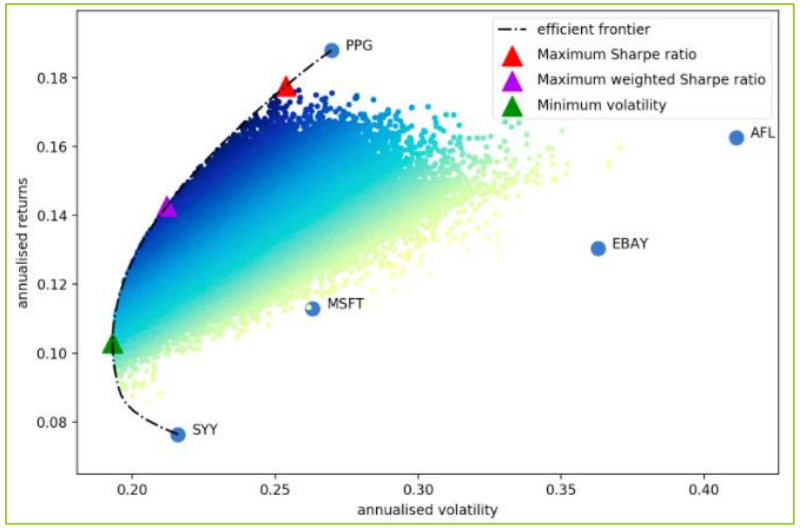
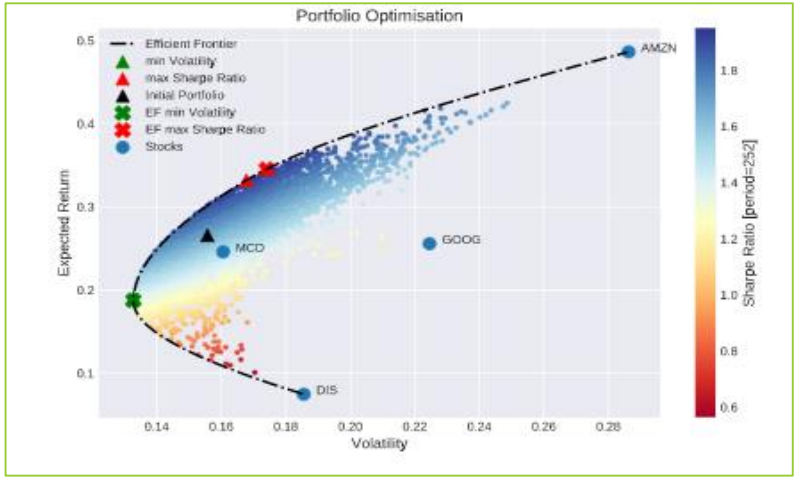
NPMS 1.0 - NPL Portfolio Risks Analysis







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NPMS 1.0 - Technical Stack

Table Name
EBA NPL Counterparty Group Table
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EBA NPL Relationship (Borrower - Loan) Table
EBA NPL Lease Table
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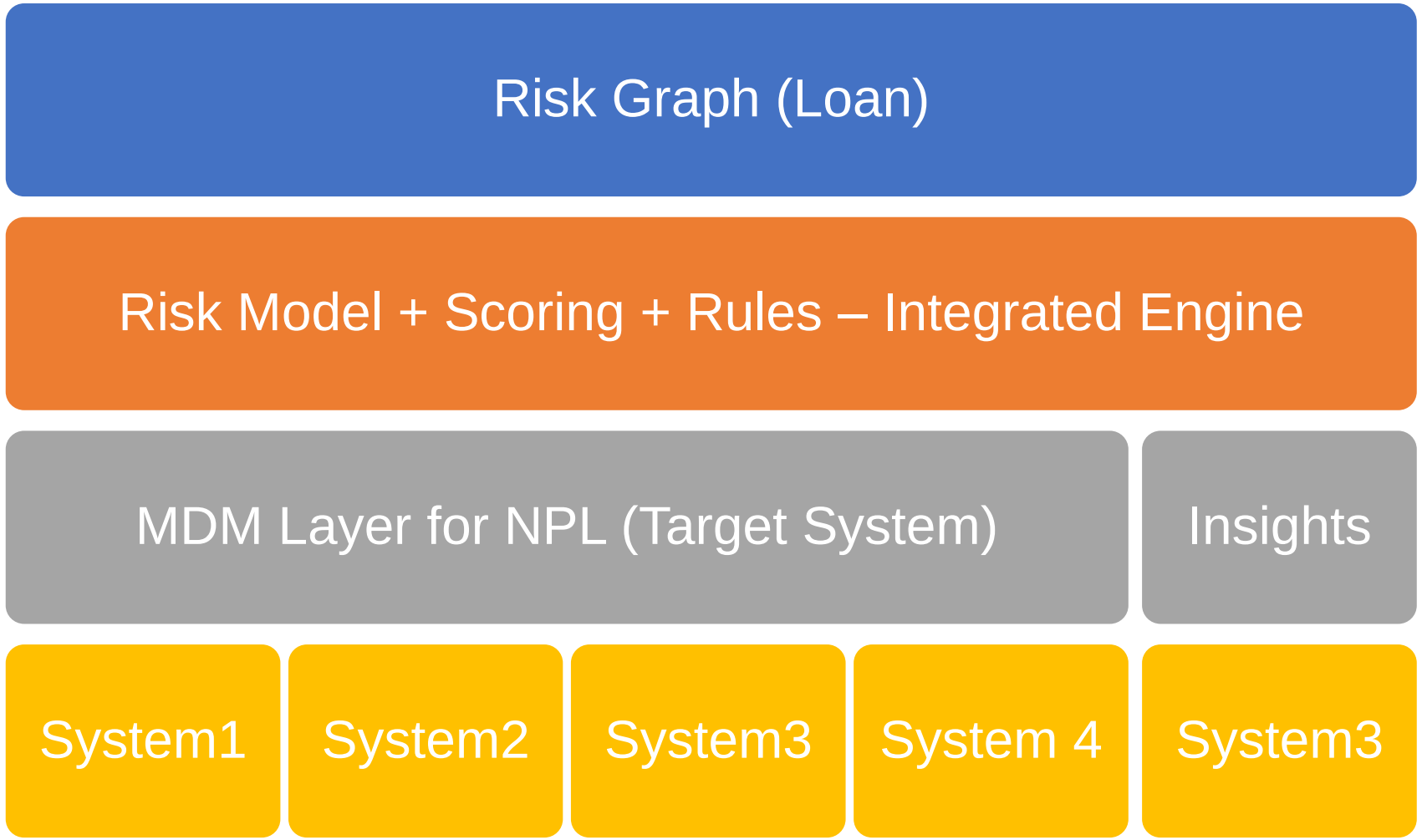

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Thank You

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