



AI-Powered Credit Modeling & Decisioning

Boosting Revenue while Cutting Compliance Costs

Alida Popescu - Sr Manager Risk Practice, SAS

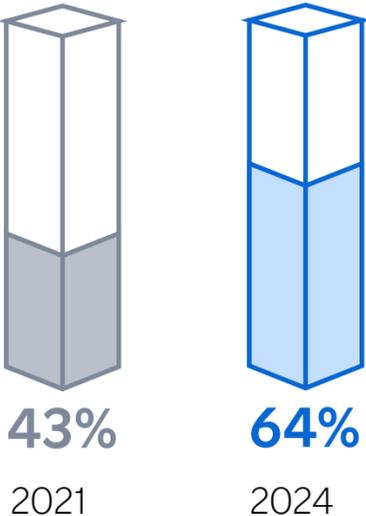
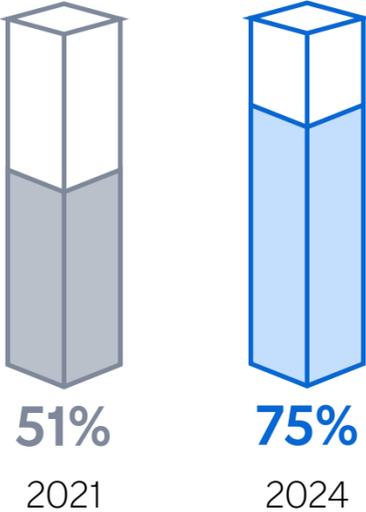
Anselmo Marmonti - Vice President, Risk Fraud and Compliance Solutions, SAS



Key survey findings

Banks are increasing their spending on risk management

More intend to increase investment in technology infrastructure for risk



More plan to scale up spending on third-party software



Risk modeling: modernizing how, rethinking why

18% are very satisfied with the models they use for ALM and liquidity risk

plan to modernize risk modeling during the next two years, up from **67%** 54% in 2021



Balance sheet management: toward integration

77% plan to invest in integrated balance sheet management

less than a quarter are highly satisfied with their approach to ALM and liquidity risk



The AI gold rush begins

17% report widespread use of generative AI

a lack of skills is the top barrier to adoption

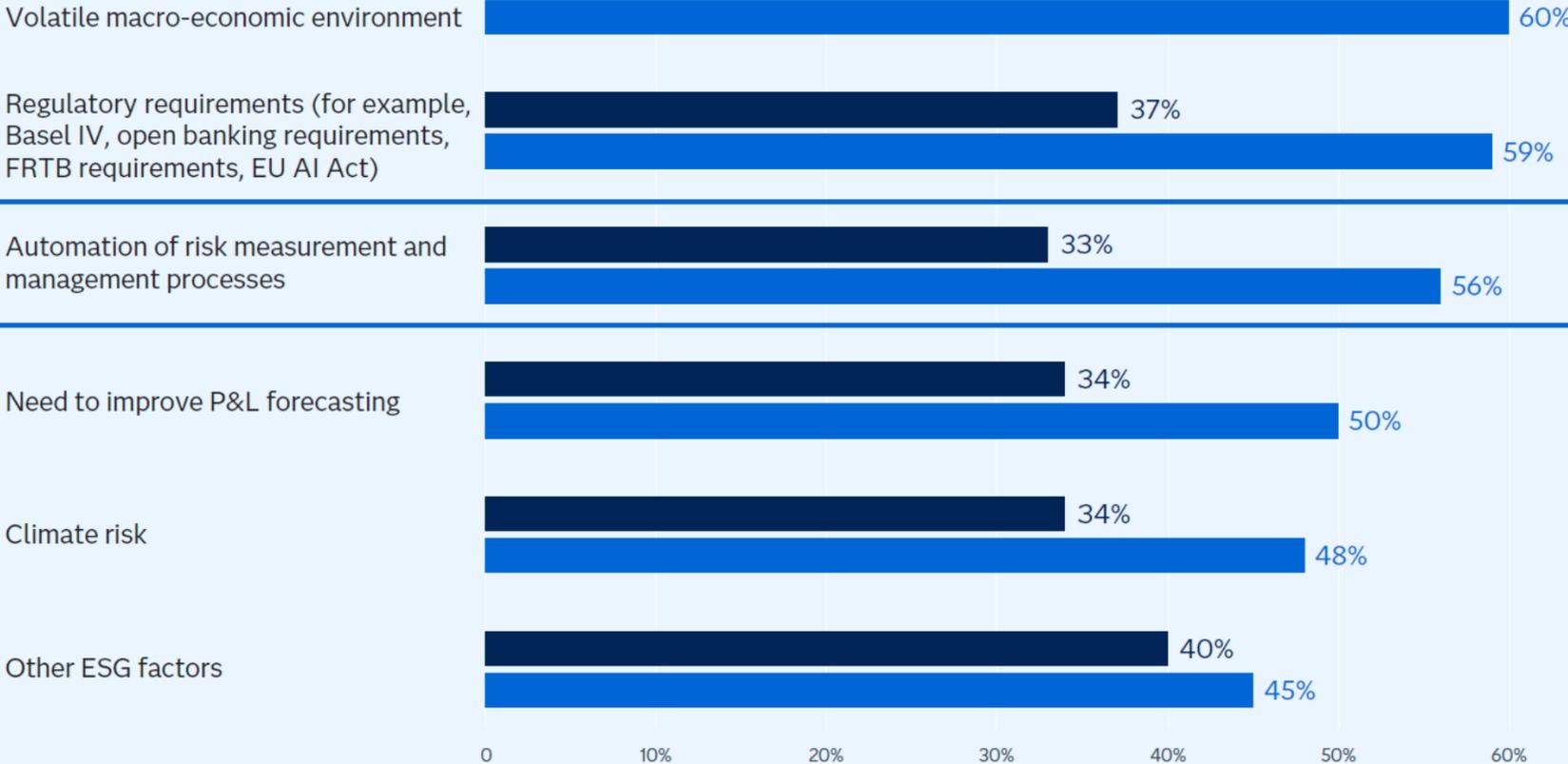
Risk Modeling

The factors influencing Risk Modeling has increased

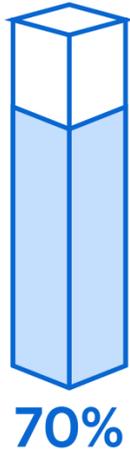
KEY INSIGHT

More and more factors are affecting risk modeling

■ 2021 ■ 2024



70% of respondents from retail banking say that this is considerably influencing their organization's approach to risk modeling



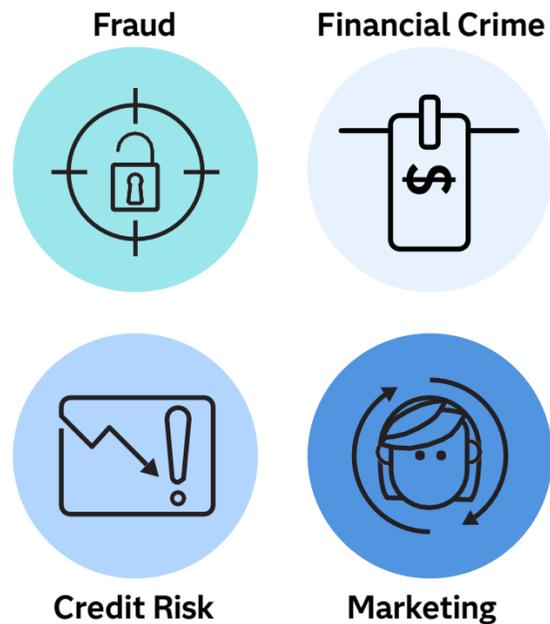
Question: To what extent are each of the following factors influencing your organization's approach to risk modeling?
Answer: "A lot" or "To a great extent."

Finding common ground where innovation thrives

The IT push to rationalize vs the businesses need for best of breed

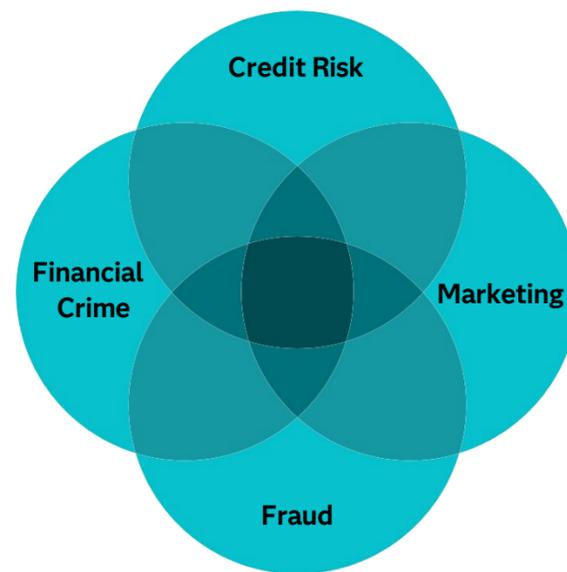
Legacy Approach to Technology Within Banking

Points solutions that are siloed and different technologies



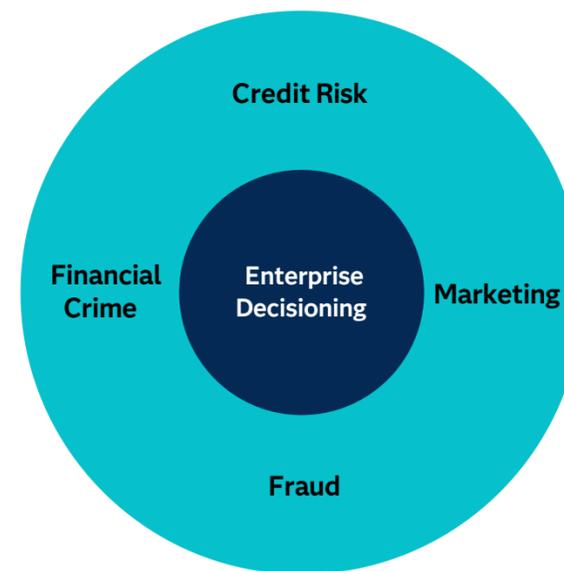
Typical Digital Transformation Approach

Efforts to find synergies between technologies can yield some results



A Common AI Decisioning Platform

The whole is greater than the sum of the individual parts



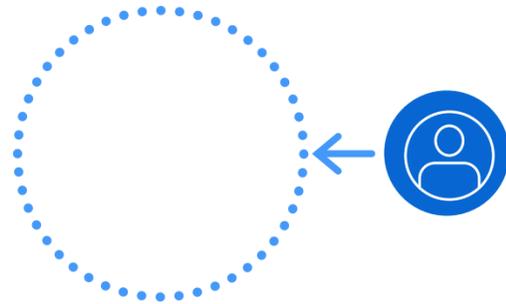
- Increase granularity and accuracy
- Improved customer journey and outcomes
- Democratise your data
- Productivity gains through collaboration
- Higher AI/ML project success rates
- Lower total cost of ownership

Transforming Credit Customer Journeys with GenAI

Customer Journey	 Acquire / Customer Targeting	 Originate / Customer Origination	 Protect / Fraud Prevention	 Engage / Customer Operations	 Grow / Customer Management
Gen AI Use Cases	<ul style="list-style-type: none"> Use chatbots to offer 24/7 customer support Improve targeting strategies analyzing unstructured data 	<ul style="list-style-type: none"> Automated Document Processing Generate synthetic data for the training of machine learning models 	<ul style="list-style-type: none"> Detect patterns of new fraudulent activities Use GenAI to improve biometric authentication, voice recognition, and facial recognition 	<ul style="list-style-type: none"> Automate responses to frequently asked questions Automate the generation of standard documentations 	<ul style="list-style-type: none"> Automate generation of collector scripts for personalized and more productive collections Enhanced Early Warning indicators, synthesizes internal and external data

Increase Analyst and Internal User efficiency

← Agentic AI →



Human out of the Loop

Act on behalf of humans



Human in the Loop

Engage humans when needed



Human on the Loop

Require human oversight

Complexity

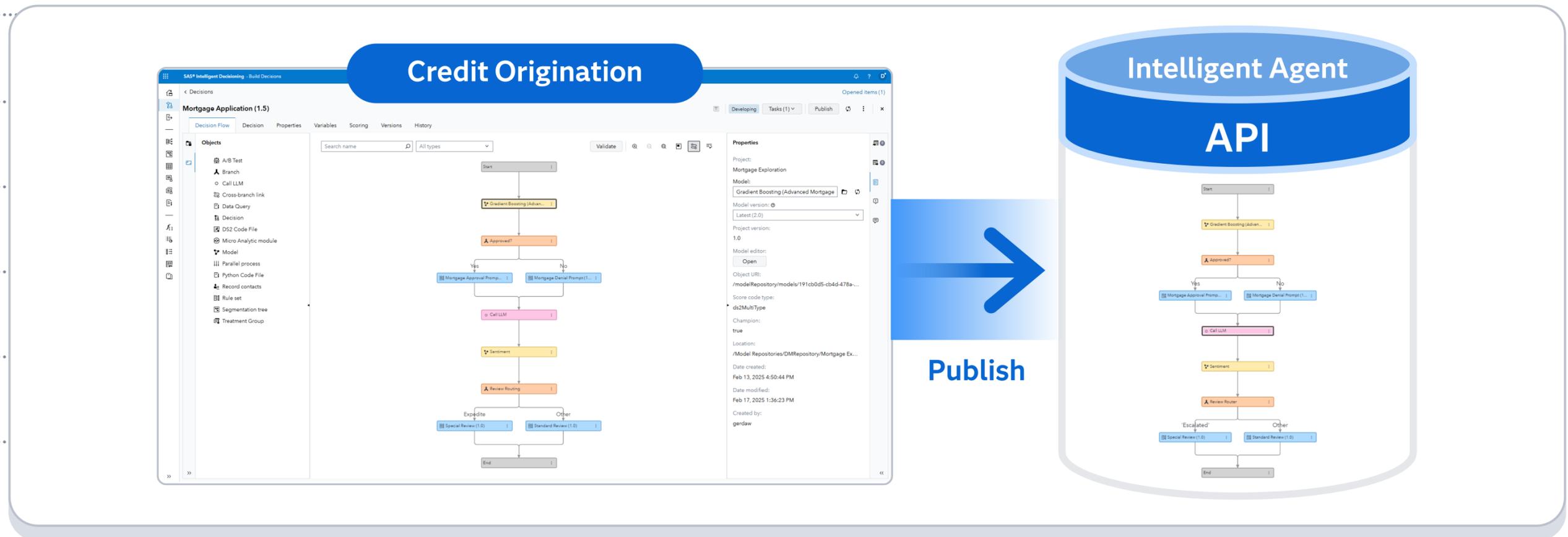
Determinism

Speed

LLM Integration

Tool Selection

Governance



(AI) Model Governance & Validation

SAS Approach


MODEL GOVERNANCE & VALIDATION

AI/Model Repository

Workflow Management

Flexible Configuration

Automation Validation

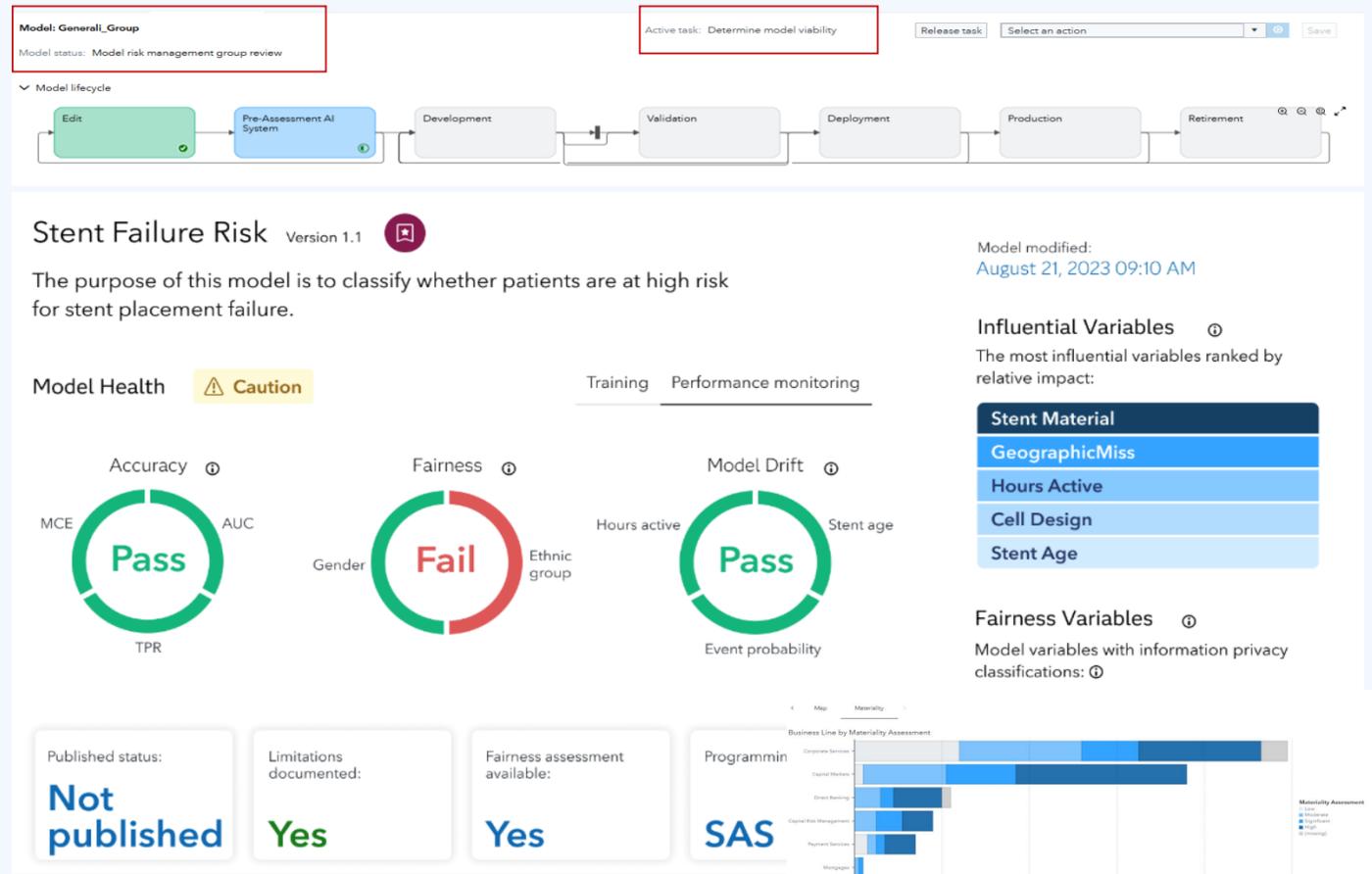
User and Role Management

Automation Documentation

Define Assessment

Manage AI Act & Model Risk

- Automated Model Documentation & Tracking
- Automated Risk Assessment
- Bias & Fairness Validation
- Robustness Testing
- Explainability & Interpretability
- Human-in-the-loop
- BCBS 239 Governance



Managing the Obligations and the Requirements for High-Risk AI Systems
Internal Conformity Assessment

REST-API

Open Source Environment Integration



Major UK Bank

Transform AI Model Governance



Challenge: increased number of models and increased level of scrutiny due to new regulations like EU AI ACT, MRM from PRA

Approach: Remove the siloes and centralize in a single system the governance of traditional and AI models, independently from the technology, across the Bank

Reduction in regulatory Risk Exposure

Mitigating financial penalties and legal challenges

Increased AI Adoption

Governance reassures executives, customers and regulators – fostering trust

Operational Efficiency

Automated monitoring and retraining reduce model drift and performance degradation



Unified Repository and **Workflow** to facilitate the collaboration across functions (model dev, internal validation, IT, Audit, ...)



Ethical Risk Assessment aligned with the EU AI Act requirements



Executive Dashboard with clear understanding of the impact and the status of each model (findings, action plans)

Beyond compliance: see the competitive advantage

AI Governance isn't just about meeting regulations...

It enhances trust, reduces bias, improves model performance and accelerates innovation.

Proactively govern AI to gain a first-mover advantage.

Differentiate your organization through responsible AI adoption.



European Bank

Challenges

1. End-of-life support across a number of legacy solutions in Marketing, Credit Risk and Fraud.
2. Executive level desire to consolidate technologies and data on to a single cloud native decisioning platform.

Solution

Consolidation of marketing automation, credit originations, application fraud, and collections on to a single AI decisioning platform

Benefits

- 1 **Lower costs**
Infrastructure and operating costs have been reduced due to the deprecation of multiple siloed technologies.
- 2 **Reduced Vendor Dependency**
Our focus on easy to use, low code/no code capabilities has resulted in significantly lower reliance on vendor support
- 3 **Improved Decisions**
Streamlining customer acquisition and onboarding on to a single platform allows marketing, credit risk and fraud to utilise all of the available data during each decision point, resulting in high acquisition volumes and lower bad debt

Large Asian Bank

Enhancement of risk decision engine and integration of acquired customer portfolio

Challenges

- Acquired a large retail portfolio from an international bank in 2022
- CPM (Credit Portfolio Program) solves the integration of two businesses onto a single decision engine
- Risk appetite of the two business are similar, however client is weighted towards secured lending which is less automated, while other bank is weighted towards unsecured lending which is heavily automated

Approach

- Initial modular deployment into Thailand, replacing legacy decision engine from *Global Player*.
- Introduce advanced modelling and analytics capabilities; deployment of behavioral scorecards.
- Introduce new limit management and collections processes across unsecured and secured portfolios.
- Enhance decisioning through champion-challenger programs and portfolio simulations.

Current Status

- Collections: Increase cure rate in 10%, which results on provisions saving.
- Better classification of risk, therefore 64% reduction on High Risk and better focus on collection resources.
- Shadow Limit 12% compound annual growth rate CAGR increase in Ending Net Receivables (ENR)
- Cash Limit 5% CAGR in ENR.



Grazie!

Anselmo Marmonti
Vice President - Risk, Fraud & Compliance Solutions, SAS

 anselmo.marmonti@sas.com



Alida Popescu
Sr Manager Risk Practice, SAS

 alida.popescu@sas.com

