



# Prometeia Model Risk Management Solution



# Prometeia is recognized as Nr. 1 vendor in the the Model Governance space as the only solution with highest score in all core set of functionalities

Vendor	Model coverage	Governance	Data management	Model inventory	Dashboarding	Visualization
Appian	**	***	***	***	***	***
BCT Digital	***	****	***	***	****	***
CIMCON Software	**	***	**	***	**	***
Evaluesserve	****	****	***	***	****	***
Genpact	***	****	***	***	***	***
IBM	***	****	****	****	***	****
MathWorks	****	***	***	****	***	****
MetricStream	***	****	***	***	****	***
Mitratesh	***	****	***	***	***	***
<b>Prometeia</b>	<b>****</b>	<b>****</b>	<b>****</b>	<b>****</b>	<b>****</b>	<b>****</b>
PwC	***	****	****	****	****	****
RiskLogix	**	***	***	***	***	***
RSA Archer	**	***	***	***	***	***
SAS	***	****	****	****	****	***
TCS	****	****	****	****	***	***
Wipro	**	***	**	***	***	***
Wolters Kluwer	***	***	***	***	***	***
Yields.io	***	***	***	***	***	***

Key: \*\*\*\* = Best-in-class capabilities; \*\*\* = Advanced capabilities; \*\* = Meets industry requirements; \* = Partial coverage/component capability

According to the **2023 edition of Chartis Research's RiskTech100®**, Prometeia is the **only company with the highest score in all six dimensions** (Model Coverage, Governance, Data Management, Model Inventory, Dashboarding, Visualization).

**Chartis RiskTech Quadrant®**  
**Category Leader**  
 Model Risk Governance Solutions, 2023

**Chartis RiskTech Quadrant®**  
**Category Leader**  
 Model Validation Solutions (Credit), 2023



## Quotes of the industry analysts about the advantaged of Prometeia solution in respect with main competitors



- **“Part of a more comprehensive and scalable platform for model development / implementation/ validation”**
- **“Easy change management** and easy change requests’ solving thanks to a **zero code approach”**
- **“Immediate view of models status (heat map)** at to prioritize the evolution/ remedy actions”
- **“Model risk evaluation embedded in the solution:** tiering, model management index, scorecards”
- **“Support to model replicability and auditability”**
- **“Specific functionalities designed to cover AI models** in particular for their internal validation”
- **“Possibility to quick upgrading the solution** in case of new regulatory requirements”



# High level overview of the platform

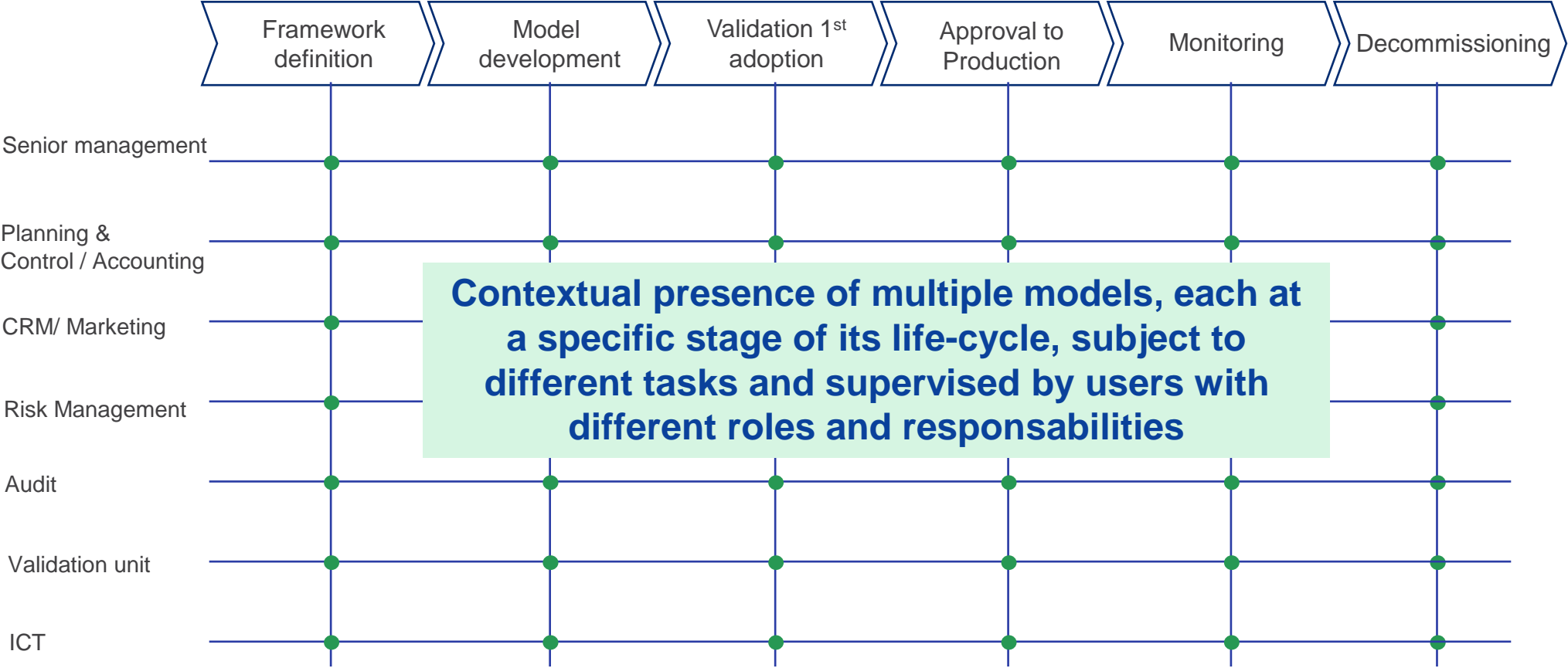
## Models are strategic elements in decision-making and regulatory compliance processes and the management of their life cycle has many elements of complexity

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- **Proliferation of models** (specialised risk models, regulatory / accounting / management models, ....) at different stages of their life cycle with the need for specific actions
- **Proliferation of stakeholders** each with different prerogatives (differentiated according to life cycle phases) and subject to specific processes
- Increasing **links among models requiring orchestration** in the design and execution of the model pipeline
- Gradual shift from 'standard' methodologies to **advanced analytics** components based on **machine learning** techniques

# Each model has specific owners and stakeholders according to its current life-cycle stage

## Model Life Cycle Phases



**Contextual presence of multiple models, each at a specific stage of its life-cycle, subject to different tasks and supervised by users with different roles and responsibilities**



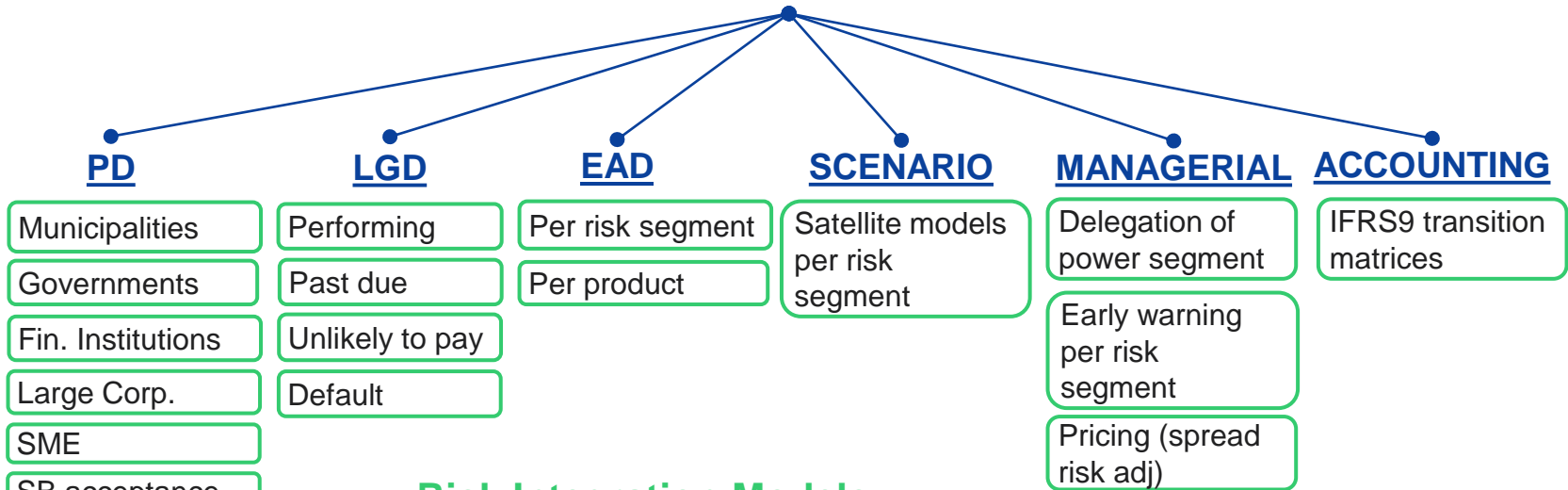
*It is necessary to manage the movement of models along different stages, through different owners and stakeholders, and the impacts related to model connections.*

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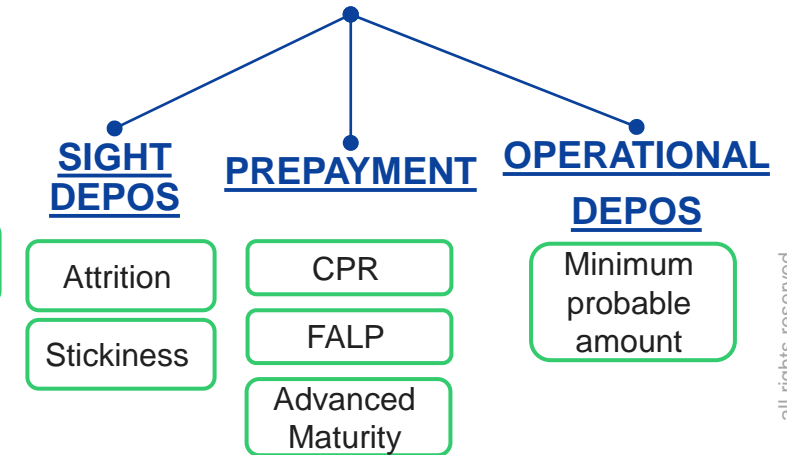
Model governance should take into consideration all models that are relevant for decision making and for regulatory purposes according to tiering criteria (e.g. impact on capita, P&L, ...)

## Models network

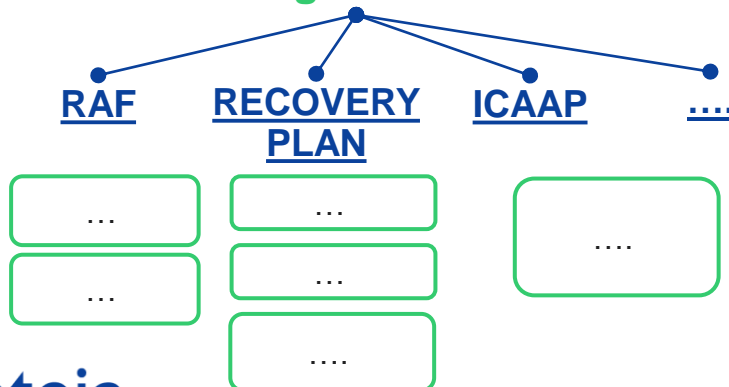
### Credit Risk Models



### Financial Risk Models



### Risk Integration Models



### AML Models

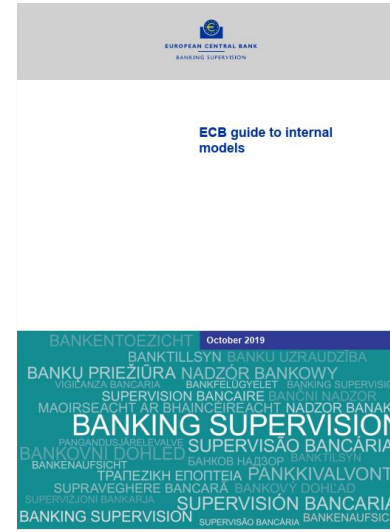
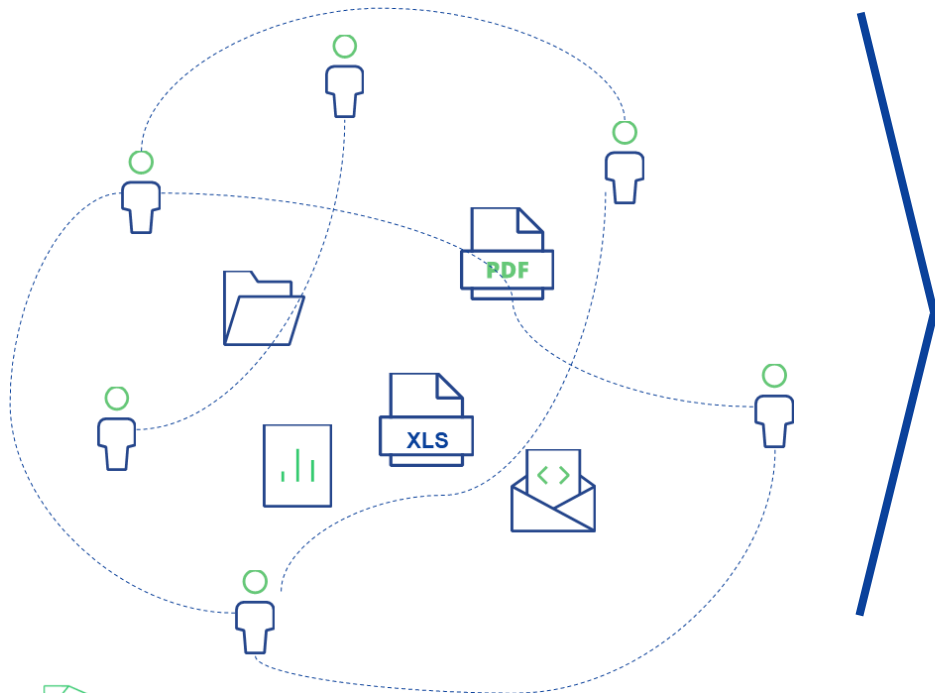


### Operational Risk Models



# Regulatory principles are increasingly pushing for the development of a Model Management framework to minimize model risk and reduce capital add-ons and Margins of Conservatism

Typically risk models are managed through 'point-to-point' communication channels among individual users and with tools that are exposed to operational risks and poor decision-making replicability. Regulatory requirements push forward a structured governance process



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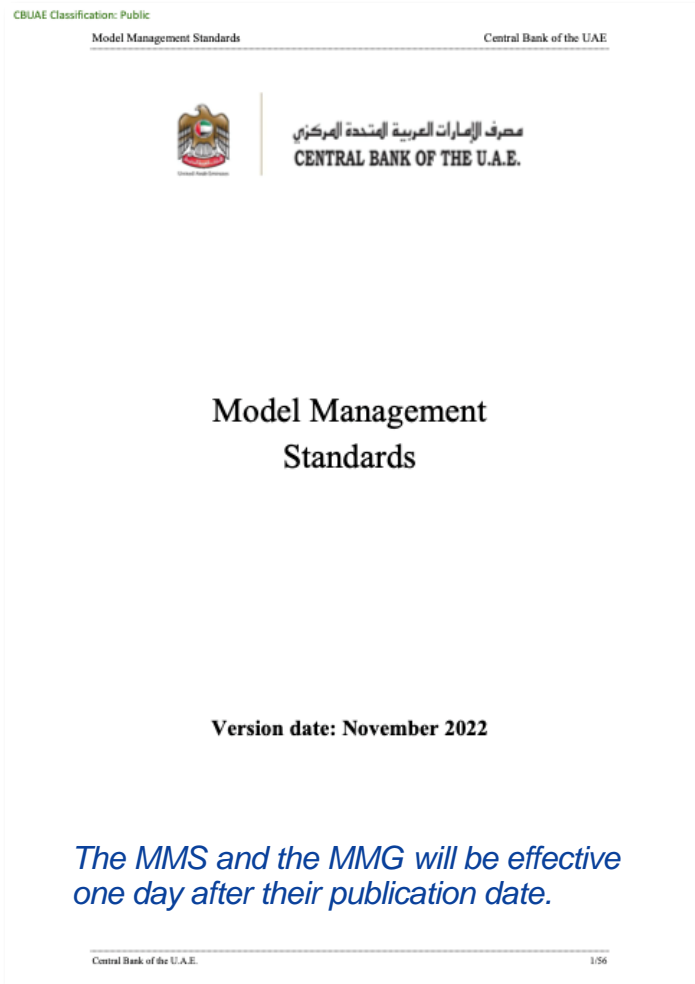
Model Management  
Guidance

Model Management  
Standards

All regulatory requirements are supported by the Prometeia's solution that has been designed concisely to the international best practices and guiding supervisory standards



# The Central Bank of UAE. followed the international practices in implementing the new Model Management standards published by the end of 2022



...the Model Management Standards (“MMS”) present modelling practices that **must be implemented** by banks in the UAE, if they decide to employ models for decision-making. These standards are based upon practices deemed appropriate within the financial industry **internationally with consideration of local circumstances**. The MMS therefore represent the **minimum requirements to be met within the UAE**.

Models are an integral part of decision-making within UAE banks for risk management, business decisions and accounting.

The first objective is to ensure that models employed by UAE banks meet **quality standards** to adequately support decision-making and **reduce Model Risk**. The second objective is to **improve the homogeneity of model management** across UAE banks. The third objective is to **mitigate the risk of potential underestimation of provisions** and capital across UAE banks.

Standards are based on international practices applied to local context

Extended to all type of models (accounting, regulatory, managerial)

Set quality standards, model risk reduction, improve homogeneity

# The UAE Model Management Standards apply to all types of models used by financial institutions to support decision-making and regulatory compliance processes

The MMS **cover**, amongst others, **risk models, pricing models and valuation models**. The scope includes, at a minimum, the non-exhaustive list in Table 1 overleaf, that represents the most commonly employed model types in UAE institutions.

Institutions must manage each model according to a cycle that includes, at a minimum, the following steps.

- (i) Development,
- (ii) Pre-implementation validation,
- (iii) Implementation,
- (iv) Usage and monitoring,
- (v) Independent validation, and
- (vi) Recalibration, redevelopment or retirement, if deemed necessary.

Table 1: List of most commonly employed model types in UAE institutions

Field	Model Type	Field	Model Type
Credit risk	Rating and scorecard models	Stress Testing (ST)	Credit risk ST
	Score-to-PD models		Market risk ST
	LGD models		Counterparty risk ST
Provision computation for credit risk	PIT PD term structure models		Liquidity risk ST
	PIT LGD models		Other types of ST models
	PIT EAD models	Operational risk	Ops risk scorecards
	ECL models		Ops risk capital models
Market risk	Macro models	Pricing and finance	Derivative pricing models
	VaR and related models		Bond pricing models
Counterparty risk	Valuation models		RAROC models
	Exposure models	NPV models	
Capital management	xVA models	Asset and Liability Management	EVE models
	Capital forecasting models		EAR and NII models
	Concentration models	Business management	Liquidity risk models
	Funding cost models		Artificial Intelligence
AML	Economic capital models	Budgeting, forecasting	
	Fraud alert and other models	Marketing models	

**End to end Model Management for all types of models**

# The UAE Model Management Standards introduce new concepts, processes and elements of Risk Governance that shall be properly implemented, monitored and communicated



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## End to end Model Management for all types of models

### Key concepts of the Model Management

Model ownership

Model tiering

Model inventory

Model workflow

### Key processes of the Model Management

Model design

Model implementation

Model validation

Model findings management

### Model Risk and Model Control Framework

Model Risk Quantification

Model Risk Mitigation

Model Replicability and Auditability

Model continuous monitoring

### Model Governance

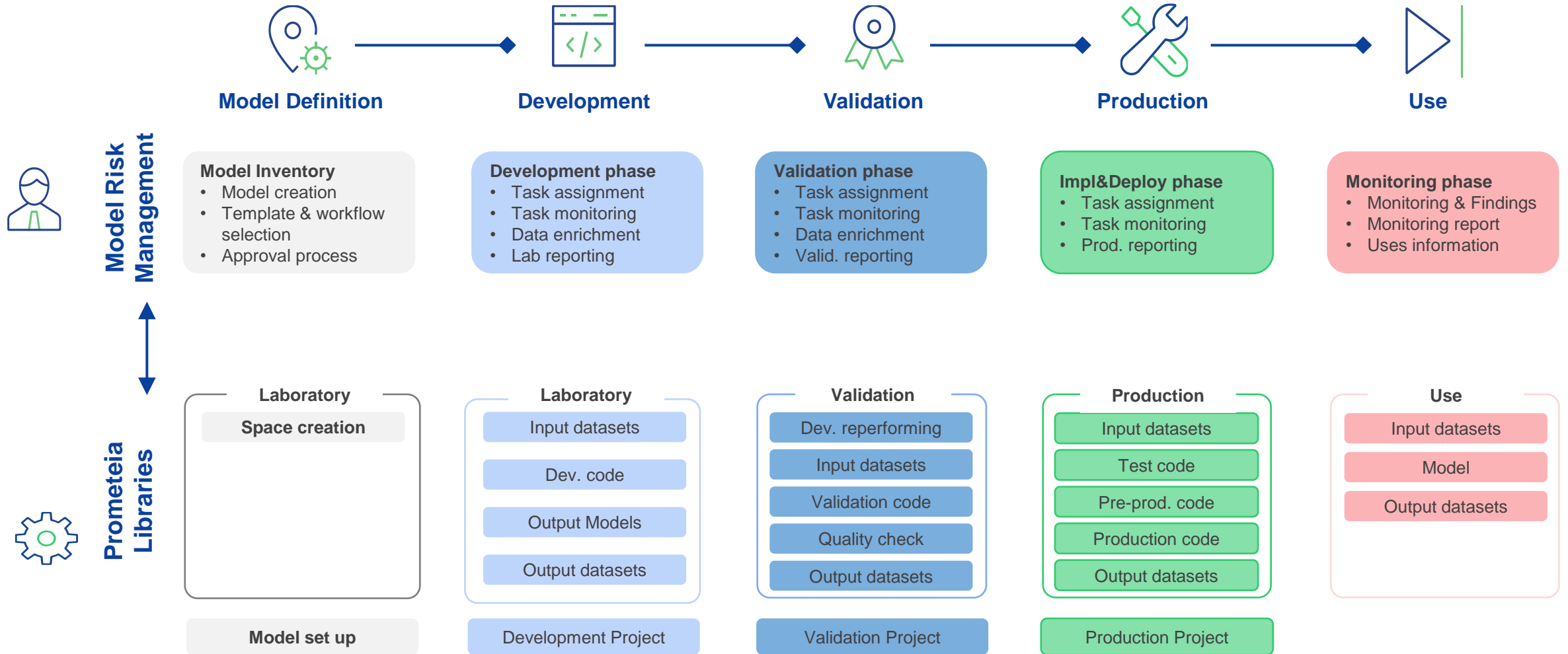
Model Risk Appetite (RAF and Pillar2)

Model reporting

Model Risk Limits

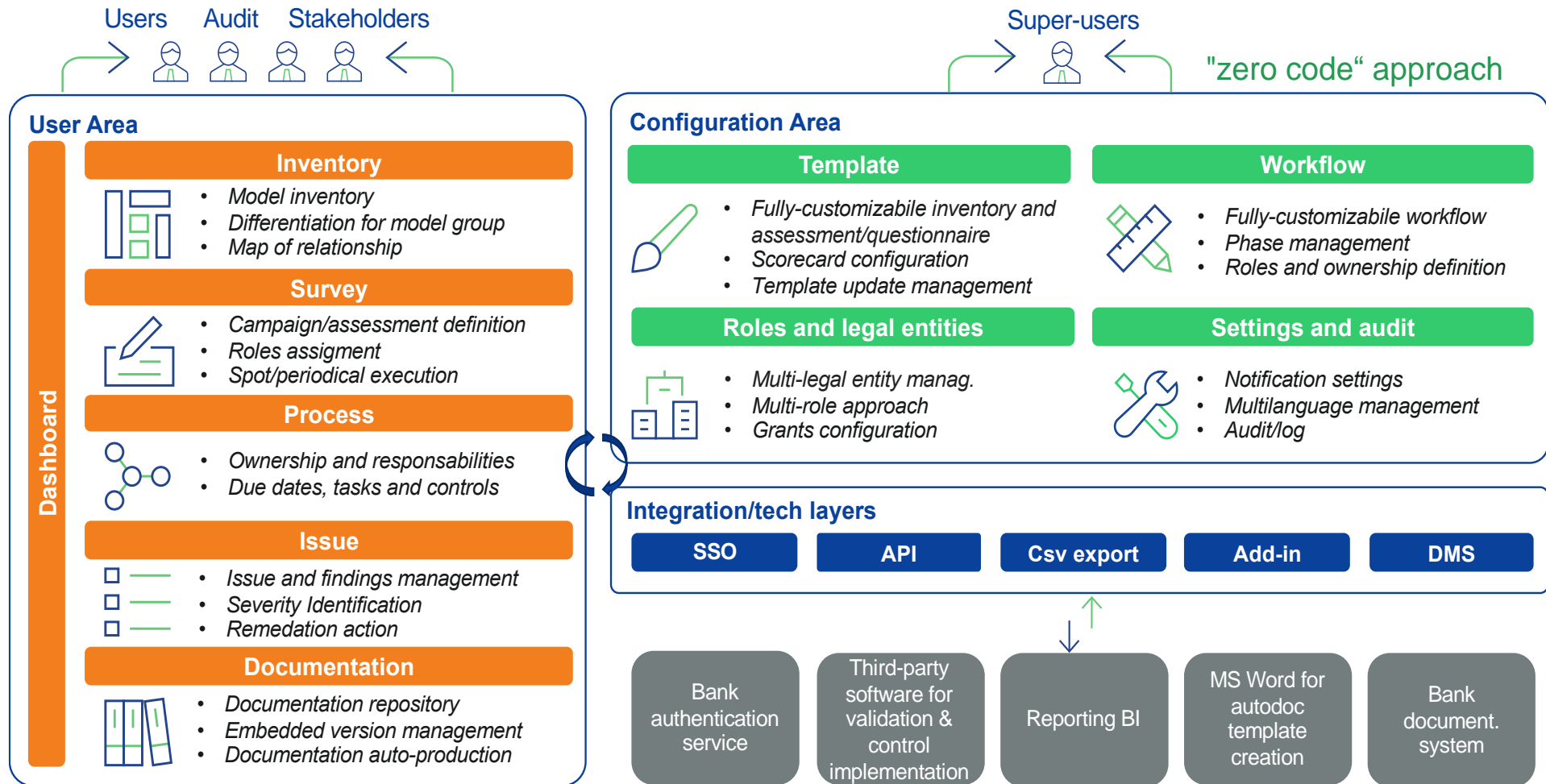
Model Risk Thresholds

# The Prometeia solution has been designed to streamline the Model Management cycle, implement robust controls and ensure a governance consistent with regulatory principles



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# The Prometeia web-based application ensures the maximum flexibility to adapt to the Bank's process and information needs, thanks to user-friendly configuration and embedded engines



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# Contacts

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## Bologna

Piazza Trento e Trieste, 3  
+39 051 6480911  
[info@prometeia.com](mailto:info@prometeia.com)

## London

Dashwood House, 69 Old Broad Street  
EC2M 1QS  
+44 (0) 207 786 3525  
[uk@prometeia.com](mailto:uk@prometeia.com)

## Cairo

Smart Village - Concordia Building, B2111  
Km 28 Cairo Alex Desert Road  
6 of October City, Giza  
[info@prometeia.com](mailto:info@prometeia.com)

## Milan

Via Brera, 18  
Viale Monza, 259  
+39 02 80505845  
[info@prometeia.com](mailto:info@prometeia.com)

## Istanbul

River Plaza, Kat 19  
Büyükdere Caddesi Bahar Sokak  
No. 13, 34394  
| Levent | Istanbul | Turkey  
+ 90 212 709 02 80 – 81 – 82  
[turkey@prometeia.com](mailto:turkey@prometeia.com)

## Vienna

Wiedner Gürtel, 13 – 1100  
[info@prometeia.com](mailto:info@prometeia.com)

## Rome

Viale Regina Margherita, 279  
[info@prometeia.com](mailto:info@prometeia.com)

## Zurich

Technoparkstrasse, 1 – 8005  
[switzerland@prometeia.com](mailto:switzerland@prometeia.com)

 Prometeia

 Prometeiagroup

 Prometeia

[www.prometeia.com](http://www.prometeia.com)

