

Model
InfinityTM

A robust, centralized and regulations-compliant platform for model inventory capture and workflow management for model development, documentation, validation & reporting



for the third consecutive year

Global Research & Risk Solutions

Centralized Model Activity Tracking >>

Powerful Workflow Engine >>

Intelligent Reports & Fragility Identification >>



A model is no longer a piece of computation that transforms inputs. Banks and regulators Across the world agree that it is now the **cornerstone of risk management activity** and the central unit of risk management activity.

With dedicated teams and defined processes to develop, test, validate, and review models, the activity around a model and its documentation has significantly increased, rendering home-grown and static **spreadsheet-based systems ineffective and unmanageable**. Regulators expect detailed audit trails, certified sign-offs on key model assumptions and behavior, and incorporation of model limitations and exceptions in a bank's model management activity.

CRISIL's Model Infinity™ platform is a solution that comprehensively addresses management and regulatory challenges around model governance and lifecycle practices.

The platform creates a **centralized store of all model activities** and creates a pivotal and customized interface for various teams responsible for a model, including model risk managers, quant development teams, model validation teams, and even auditors.

The solution ensures that model data, documentation and any exceptions are captured within the workflows, and **allows enterprise-wide reporting on model inventory and associated processes**.

The platform is designed to **incorporate guidance from various global regulations** including Comprehensive Capital Analysis and Review (CCAR), **Solvency II**, Targeted Review of Internal Models (TRIM), IFRS 9, **IFRS 17**, Supervision and Regulation Letter 11-7 (SR 11-7), and Basel III, making it an effective and powerful way of addressing modern model risk needs.

A centralized, customizable inventory of models and model activity is a gateway to a robust, competent and a regulator-ready Model Risk function

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Model Infinity™ Features



Detailed yet customizable validation workflows capturing the entire model lifecycle

Regulatory-ready captures guidance from global regulatory expectations

Integration with existing processes at banks easily possible through APIs and adapters/models

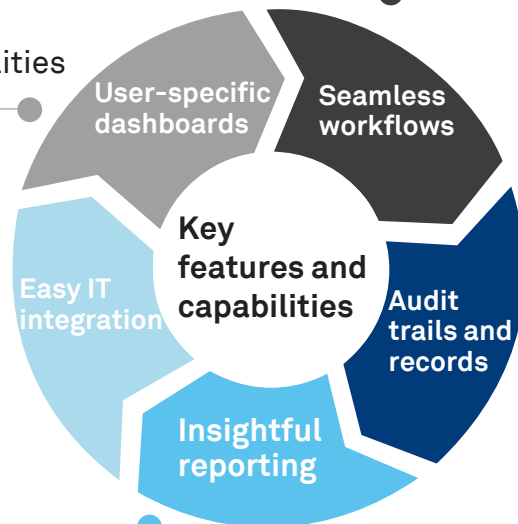
Easy to create additional workflows such as model vetting and verification

Role-based access levels

Customized dashboard highlighting pending workflows

Activity tab that lists history of associated models

Deep searching capabilities



Signoff and checklist features incorporated

Integrated document management system

Can be linked to model engines and monitoring systems

Maintains a detailed log of activity across the model lifecycle

Customized reports across models and workflows

Allows aggregation of model metrics

Intelligent reports such as model network analysis embedded

Auto-weekly/monthly reports can be set-up

Database agnostic: based on CRISIL's Fulkrum platform and can be deployed on any database

Hosted within a bank's environment, with identical security policies as per other applications

Login credentials can be linked to bank's SSO authentication

Allows API-accesses for easy integration

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Activity dashboard

Neat, material design for the platform for various model activities

Easy import allows one-click uploading of existing models on to the platform

Recent activity on models associated with this user indicated for quick reference

The screenshot shows the CRISIL Activity dashboard. On the left is a red sidebar with navigation icons. The main area is divided into 'Models' and 'Workflows' sections. The 'Models' section has buttons for 'Add New Model', 'Create Workflow', 'Export', 'Import', and 'Add Restrictions...'. Below these are three model entries with columns for Model Id, Model Name, Gr. Name, Contact Per., Role, Sector Type, Status, Validity Status, and History. The 'Workflows' section has a 'Show All Workflow' button and a table with columns for Workflow Id, Workflow Name, Workflow Status, Last Note, Key Contact, Validation Status, and Action. On the right, an 'Activity' panel shows recent user actions like 'RobG added a document...' and 'SarangB submitted Model RPS...'. A user profile icon at the bottom left is annotated with 'Dashboard is customized for the user depending on his role and his models involvement'. A 'Model audit trail and workflow history at a click of a button' annotation points to the 'History' column in the Models table.

Validation workflow

Lifecycle includes all components from Model Initiation to Model Retirement

The screenshot shows the 'Model Details for ID: IICP030' page. At the top, it displays 'Model Name: Benesure' and 'Business Line: Retail Insurance'. Below this is a horizontal workflow diagram with steps: Model Usage Approval, Model Development, Model Vetting, Spot Check, Technical Validation, Remediation, Monitoring, and Retirement. A legend indicates 'Completed' (green), 'In Progress' (orange), and 'Not Initiated' (grey). Below the workflow are four tabs: '1 Model Details', '2 Usage & Linkages', '3 Analytics & Measures', and '4 Contracts'. The 'Analytics & Measures' tab is active, showing a table of 'Analytical Technique' with columns for Technique, Description, Added by, and Added on. The table lists two entries for 'Mortality Standardization' with 'Standardized Tables Used' as the description, both added by 'David Lok' on '22-Jul-2018'. There is an 'Add' button and an 'Add More Technique' link at the bottom of the table.

Model information and meta-data are organized in distinct categories as per industry best-practices

Analytical techniques for pricing models have standardized categorizations, making aggregated reporting streamlined

Validation workflow - model ranking and limitations

Model Ranking & Tiering

Exposure Type: ■ High | Exposure Amount: US\$ 3,246,112 | As of Date: US\$ 3,246,112

Model Tiering: ■ High | Model Complexity: ■ Medium | Prime Score: ■ 7.2 | Calculate

Model Linked workstreams: 1313-Model Validation, 1534-Model Vetting, 1536-Model Vetting Spot Che

Model Limitations

Buttons: Add New, Edit, Add Documents

Limitation Id	Limitation Description	Limitation Score	Status	Severity	Compensating Control Status	Compen. Control Type	Document
LX-130	USNA Standardized Population 18-70	Mortality Tables	Permanent	■ Medium	None	N/A	USNA Mort J....xlsx
LX-079	Max 20 year contract	Technical	Temp - Exception Granted	■ Medium	Implemented	Add-on	Benesure Tech....pdf

Callouts:

- Model Ranking and Tiering is a critical component and can have customized definition, as per business lines
- Model Risk Score can be calculated based on materiality, complexity and use
- Limitations are separately managed and have strict classification structures, making aggregated regulatory model risk reporting effective
- Limitations and Compensating Controls can be directly linked to Bank's monitoring systems through APIs

Model network and linkages report

Reports

Pre-set and customized Reports are accessible from a quick, drop-down menu

Model Network Analysis | Global Market - Commodities | Submit

Model Network Analysis Graph:

- Component-155 (Yellow)
- Component-088 (Yellow)
- Component-015 (Yellow)
- Component-101 (Yellow)
- Component-012 (Yellow)
- USDCurve-11542 (Red)
- NG1-E011 (Red)
- OilBaseM-E3342 (Red)

Callouts:

- Model linkage network clearly indicates the interconnectedness of models and identifies critical models
- Rule-based report outputs can be configured for effective model administration

About CRISIL Global Research & Risk Solutions (GR&RS)

CRISIL GR&RS is a leading provider of high-end research, risk and analytics services. We are the world's largest provider of equity and fixed-income research support to banks and buy-side firms. We are also the foremost provider of end-to-end risk and analytics services that include quantitative support, front and middle office support, and regulatory and business process change management support to trading, risk management, regulatory and CFO functions at world's leading financial institutions. We also provide extensive support to banks in financial crime and compliance analytics. We are leaders in research support, and risk and analytics support, providing it to more than 75 global banks, 50 buy-side firms covering hedge funds, private equity, and asset management firms. Our research support enables coverage of over 3,300 stocks and 3,400 corporates and financial institutions globally. We support more than 15 bank holding companies in their regulatory requirements and submissions. We operate from 7 research centers in Argentina, China, Colombia, India, and Poland, and across several time zones and languages.

About CRISIL

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CRISIL is recognized as a solution category award winner for model validation tools and accelerators in **Chartis STORM50 2024 report**. CRISIL named Category Leader in **Chartis RiskTech Model Risk Management 2024 Quadrant Reports**. [Click here to know more.](#)



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