Global Research
& Risk Solutions

CRISIL
An S&P Global Company

Quantitative Services

Leveraging deep **regulatory knowledge and proprietary accelerators**

to deliver **high quality** quantitative model risk assignments

at **significantly reduced** turnaround time and cost

CRISIL model risk: Model development, validation, benchmarking, and monitoring capabilities

MRM

Modelling	Validation	Model governance	Stress testing
• Model development and remediation • Pre-implementation testing • User acceptance testing • Ongoing performance monitoring • Model development documentation (SR 11-7, SR 12/7, ECB TRIM / EGIM, PRA SS 1/23)	• Full scope validation • Partial or change validation • Periodic validation • Benchmarking and testing • Model validation report	• Regulatory interpretation • Model risk policy and procedure design • Model inventory management • Model risk aggregation • Risk appetite	• Development and validation of models – PPNR, loss forecast-ing, time series, etc) • Scenario design, expansion, execution, and reporting • Development of stress testing platforms

Data lineage, quality, and governance practices

Experience and scale of capabilities

650+
model risk headcount globally

75+
FI clients (including top 15 global)

25,000+
models since 2015

30+
active MRM engagements

Our products

Model Infinity SL — Centralised Inventory & MRM Workflow

SΣM Scenario Expansion Manager — Scenario Design & Expansion

Experience across models

Model type	Modelling details	
Credit risk/decision scorecards/IFRS9/ CECL	• PD, LGD and EAD models (retail, wholesale portfolios, including LDPs) • Charge-off rate and prepayment models • Obligor and facility risk rating models • Credit conversion factor (CCF) models • Sovereign/country risk rating models	• IFRS 9/CECL models • Model-related margin of conservatism • Machine learning models • Scorecards models (application, behavioural, collection, early warning, hybrid, fraud)
Market/traded risk and CCR	• VaR and SVaR models • Economic capital and expected shortfall models • RNIV, IRC, DRC, NMRF, and FRTB SA models	• Collateral haircut models • Counterparty credit risk models (IMM and SA-CCR) • SIMM, initial margin, and guarantee fund sizing models
Pricing and valuation across asset classes	• Derivatives pricing models for vanilla and exotics • Curve construction and term structure-based models • Volatility surface and calibration models • Basis calculation and arbitrage modelling • XVA (CVA, DVA, FVA) models	• Trade reserves and funding models • Regulatory charge calculation models • Securitised products models – i.e. CLO, CDO, ABS, MBS, non-agency RMBS
Stress testing (DFAST/CCAR, EBA, FINMA)	• Scenario expansion and generation models • PPNR models • Loss projection models • Global market shock models	• Scenario computation models (GMS, LPA, FDSF, internal scenarios) • Liquidity and gap risk models • Scenario path generation • Dynamic hedging models
Treasury/liquidity risk	• Liquidity stress-testing models • Recovery and resolution planning (RRP) models • QRM - NII and EVE models • ALM - Behavioural models • Secured/unsecured funding models	• PPNR net interest income forecasting • AFS bond and other comprehensive income forecasting models • ILAAP submission
Financial crime	• AML transaction monitoring (high risk geography, hidden relationships, behavioural anomalies, cash transactions, rapid movement, cash structuring, AML money movement) • Trade surveillance (market abuse, insider trading/ phishing, trade allocations, wash trades, settlement reporting)	• Sanctions rule verification • Threshold tuning using ATL/BTL • Customer segmentation • Fraud models (money movement, wire/payment fraud, dormant accounts, ID/card frauds)
Other models	• Asset and wealth management models (yield book, Morningstar, Barra, Barclays Point, Bloomberg models, IDC BondEdge, ITG Pre-trade, ValueSearch) • Operational risk VaR models • Algorithmic trading models across asset classes	• Business risk models • Pillar II economic risk capital models • Marketing analytics • Portfolio management

CRISIL is recognized as a solution category award winner for model validation tools and accelerators in Chartis STORM50 2024 report. Click here to know more.

Contact us

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Chartis RiskTech100 2024 #49

Chartis RiskTech100 2024 CRISIL Model Validation

For the second consecutive year.

Argentina | Australia | China | Colombia | Hong Kong | India | Japan | Poland | Singapore | Switzerland | UAE | UK | USA
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CRISIL
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Credit and Lending Solutions

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Credit and Lending Solutions

Accelerate your credit risk and lending transformation with CRISIL's automation tools, and credit and loan data analytics to streamline workflows

Leverage CRISIL's expertise in credit risk platforms and harness the potential of offshoring

The CRISIL advantage

Established partnership with S&P Global since 2005

Intelligent automation
Full digitalisation of processes and systems

Rich experience
20+ years of experience in credit risk and lending offshoring

Strong talent with scalability
Access to a global talent pool

By the numbers

10,000+	credit memos executed per year
5,000+	risk rating scorecards reviewed and updated
1.2mn+	EWI triggers evaluated to ascertain red flags
15,000+	facilities tracked and updated for covenant monitoring
30,000+	end-to-end loan deals processed and migrated in LMS
300,000+	loan data attributes enhanced/remediated
10+	financial spreading databases and credit monitoring frameworks digitalized for banks
10+	credit benchmarking and policy redesigning exercises concluded in 2022
10+	regulatory MRAs and consent orders addressed since 2020

Services provided

Policy and data architecture: Policy simplification, risk data architecture streamlining, and large-scale risk data remediation

Credit origination and underwriting: Originations and KYC, underwriting, risk rating, periodic reviews, and ESG assessments

Portfolio monitoring support: Limit and exposure management, EWI/NNA, covenant monitoring, collateral monitoring, and portfolio analytics

Loan operations and processing: Loan architecture streamlining and upgrading, LMS implementation/migration, loan data creation and remediation, loan processing and servicing, reconciliation, and regulatory reporting

Controls and assurance: Strengthening quality assurance across LoDs and transformation of controls testing frameworks

Transformation: GenAI-assisted credit memos, automated financial spreading, data management reassessments, model enhancements, technological upgrades, and process optimization

Portfolios covered

Portfolio nuances covered	Project finance	Commercial and industrial	Commercial real estate	Financial institutions	Infrastructure finance	Asset-based lending
Sector nuances covered	Real estate	Retail	Technology	Automotive	Food and beverage	Healthcare
	Power and utilities	Oil and gas	Education and NFPs	Media and entertainment	Transportation	Diversified industrials

Benefits

- Cost savings up to 50%
- Enhanced credit and loan data quality
- Reduced turnaround time
- Active surveillance support
- Regulatory compliance

Who we serve

- 40+ global, regional and commercial banks
- 5+ multilateral development banks
- 5+ insurance firms

Contact us

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About Global Research & Risk Solutions

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 8 research centers in Argentina, China, Colombia, India, and Poland, and across several time zones and languages.

About CRISIL Limited

CRISIL is a leading, agile and innovative global analytics company driven by its mission of making markets function better.

It is India's foremost provider of ratings, data, research, analytics and solutions with a strong track record of growth, culture of innovation, and global footprint.

It has delivered independent opinions, actionable insights, and efficient solutions to over 100,000 customers through businesses that operate from India, the United States (US), the United Kingdom (UK), Argentina, Poland, China, Hong Kong, Singapore, Australia, Switzerland, Japan and the United Arab Emirates (UAE).

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