

Qinetic Analytics LLP: Comprehensive Model Risk Management Solutions for FRTB, Market Risk Analytics, Trading Book Assets, and CVA

Qinetic Analytics LLP provides a robust and comprehensive **Model Risk Management (MRM)** solution to assist banks in navigating the intricate challenges of financial risk management, regulatory compliance, and operational efficiency. Our solutions focus on delivering streamlined frameworks and advanced tools for **FRTB, market risk analytics, trading book assets, and Credit Valuation Adjustment (CVA)**, ensuring that banks meet evolving regulatory standards and business objectives.

Key Offerings in Model Risk Management

1. Fundamental Review of the Trading Book (FRTB)

- **End-to-End Model Risk Management:**
 - Build, validate, and deploy models for **Standardized Approach (SA)** and **Internal Model Approach (IMA)** in compliance with **BCBS D457** guidelines.
- **Model Validation and Governance:**
 - Rigorous validation of FRTB models, ensuring alignment with regulatory expectations for sensitivity calculations (Delta, Vega, Curvature).
- **Trading Desk-Level Model Risk Framework:**
 - Design and implement models tailored for trading desks, addressing eligibility, performance, and capital adequacy.

2. Market Risk Analytics

- **Risk Factor Sensitivities (FS) Management:**
 - Develop and validate models for calculating **Delta, Vega, and Curvature** sensitivities across asset classes.
- **Scenario Analysis and Stress Testing:**
 - Advanced modeling frameworks to simulate extreme market conditions and evaluate their impact on capital and P&L.
- **Risk Aggregation Models:**
 - Implement aggregation models for risk classes (GIRR, FX, EQ, Commodities) and factor-level analyses, ensuring compliance with FRTB and market risk standards.
- **Backtesting and Benchmarking:**
 - Support backtesting methodologies to validate model performance against historical data and regulatory requirements.

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3. Trading Book Assets

- **Modelling for Trading Book Eligibility:**
 - Define and validate models to classify **trading book assets** and determine their eligibility for regulatory capital calculations.
- **P&L Attribution Models:**
 - Enable robust P&L attribution analysis to meet the **Trading Book vs. Banking Book boundary rules** under FRTB guidelines.
- **Capital Impact Assessment:**
 - Perform model-driven assessments to quantify the capital impact of trading book assets on a bank's balance sheet.
- **Advanced Risk Models for Asset Classes:**
 - Develop models to address complex exposures, such as structured products, exotic derivatives, and illiquid assets.

4. Credit Valuation Adjustment (CVA)

- **CVA Calculation Models:**
 - Build and validate CVA models for pricing and valuation adjustments, including **Debit Valuation Adjustment (DVA)** and funding costs.
- **CVA Risk Capital Models:**
 - Support compliance with **SA-CVA** and **BA-CVA** frameworks under Basel III/IV, ensuring proper alignment with regulatory standards.
- **Dynamic Hedging Models:**
 - Provide tools to develop and validate hedging strategies for CVA risk, including interest rate swaps, CDS, and other derivatives.
- **CVA Sensitivity Models:**
 - Enable granular attribution of CVA sensitivities to underlying risk factors, improving transparency and decision-making.

How Qinetic Analytics LLP Helps Banks Streamline Model Risk Management

1. **Model Development and Customization:**
 - Design and develop risk models tailored to the specific needs of banks, ensuring compliance with global and local regulatory requirements.

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- Integrate advanced technologies such as **machine learning** and **AI** for enhanced accuracy and predictive capabilities.
- 2. **Model Validation and Governance:**
 - Conduct thorough validation processes for all models to meet regulatory standards and reduce the risk of model failure.
 - Establish robust governance frameworks to monitor model performance and ensure transparency.
- 3. **Gap Analysis and Model Infrastructure Review:**
 - Identify gaps in data quality, model design, and infrastructure to ensure a solid foundation for risk management and compliance.
 - Recommend enhancements to existing systems for improved efficiency and scalability.
- 4. **Data Integration and Regulatory Mapping:**
 - Map internal data sources to regulatory requirements, including FRTB, CVA, and market risk standards, ensuring seamless integration and consistency.
- 5. **Automation and Reporting:**
 - Automate model-driven workflows for faster, more accurate reporting to internal stakeholders and regulators.
 - Enable real-time insights into model performance, risk exposure, and capital adequacy.
- 6. **Scenario-Based Impact Analysis:**
 - Use advanced scenario modelling to assess the impact of market events, regulatory changes, and strategic decisions on capital, P&L, and risk exposure.

Benefits of Qinetic Analytics LLP's Model Risk Management Solutions

- 1. **Regulatory Compliance:**
 - Ensure full compliance with **BCBS D457**, Basel III/IV, and local regulatory standards through robust models and frameworks.
- 2. **Improved Decision-Making:**
 - Provide actionable insights into risk concentrations, capital adequacy, and profitability through advanced analytics and reporting.
- 3. **Operational Efficiency:**

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- Streamline workflows and reduce manual effort by automating data integration, calculation processes, and reporting requirements.
- 4. **Cost Optimization:**
 - Minimize capital charges through optimized models and accurate sensitivity calculations.
- 5. **Enhanced Transparency:**
 - Build trust with internal and external stakeholders through clear documentation and governance of model risk processes.