



Model Risk Management Services

As organizations increasingly rely on models for critical decision-making—whether regulatory, operational, or strategic—the need for strong Model Risk Management (MRM) has become paramount. CoreAi delivers comprehensive MRM services that ensure compliance with regulations like SR 11-7 and OCC 2011-12 while improving model quality, transparency, and trust. We combine deep regulatory expertise with AI/ML innovation to help clients build resilient model ecosystems.

Why Model Risk Management?

In today's complex and regulated environment, reliance on models—whether for credit risk, market risk, fraud detection, or strategic forecasting—carries significant operational and compliance risks. Regulatory frameworks such as SR 11-7, OCC 2011-12, and Basel guidance demand that organizations establish formal MRM frameworks that address model development, validation, governance, and ongoing monitoring.

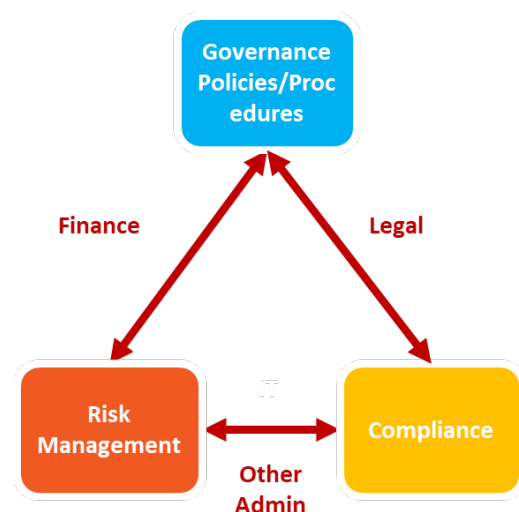
Without proper governance, models may produce unreliable results, embed systemic bias, or lead to financial misstatements and regulatory violations. CoreAi's MRM services

ensure your models are **robust**, **transparent**, and **compliant**.

Challenges

Organizations today face multiple hurdles in implementing effective MRM:

- **Fragmented Model Inventory:** Lack of centralized visibility into all models used across business units.
- **Inadequate Governance Structures:** Poorly defined ownership, approval workflows, and documentation practices.
- **Validation Bottlenecks:** Limited resources and inconsistent methodologies delay independent model reviews.



WHITE PAPER

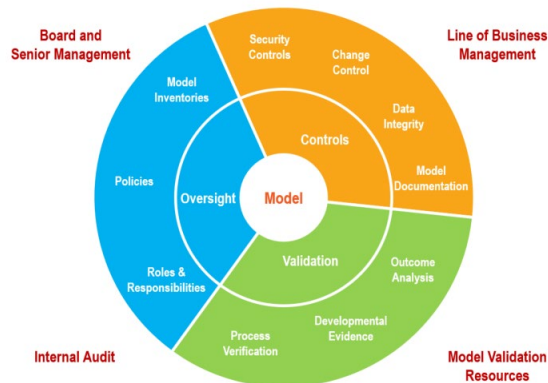
- **Bias and Explainability Issues:** AI/ML models often operate as black boxes, raising regulatory concerns.
- **Performance Monitoring Gaps:** Post-deployment tracking is often reactive, failing to detect early drift or deterioration.
- **Manual Reporting and Audits:** Heavy dependence on manual processes slows compliance and increases audit risk.

Our MRM Services

1. Model Governance

We design and operationalize governance frameworks aligned with OCC 2011-12 and SR 11-7:

- Model inventory & tiering
- Ownership matrices and documentation templates
- Governance committee setup and reporting protocols



2. Model Development Advisory

We support teams in building compliant, auditable models using industry best practices:

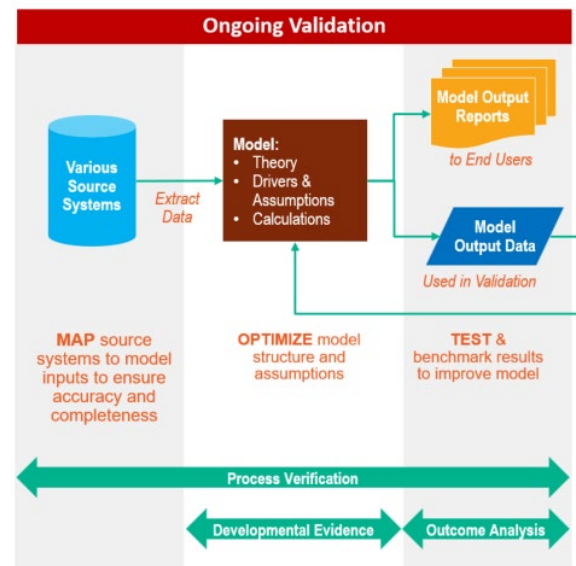
- Transparent model design
- Documented development rationale

- Use of regulated and explainable AI/ML techniques

3. Independent Model Validation

CoreAi's validation approach is rigorous, risk-based, and regulator-aligned:

- Conceptual soundness and methodology testing
- Input/data quality and transformation reviews
- Benchmarking, backtesting, and stability testing
- Stress testing, scenario analysis, and bias evaluation



4. Ongoing Monitoring & Lifecycle Support

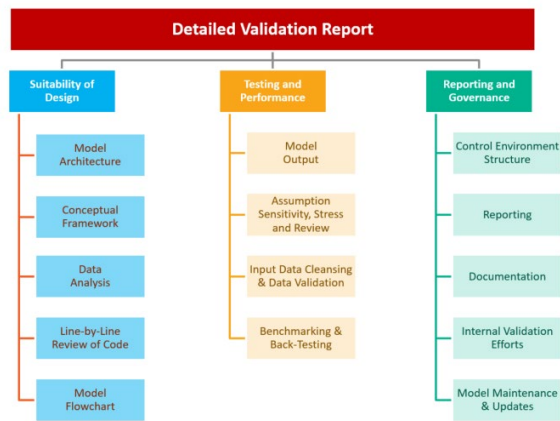
We enable continuous compliance and performance assurance:

- Drift detection and revalidation schedules
- Monitoring dashboards with alerts
- Change management and documentation tracking

5. Compliance Automation & Reporting

CoreAi reduces the manual burden of compliance through automation:

- Dynamic dashboards and validation reports
- SR 11-7 audit packages
- GRC system integration (Archer, MetricStream, etc.)



False data can lead businesses to make poor decisions, such as overinvesting in ineffective campaigns or misallocating resources.

Businesses must employ both management tools, behavior analytics, and other measures to mitigate these risks, ensuring their web traffic reflects genuine user behavior and supports data-driven growth strategies.

Differentiators of CoreAi's MRM Services

- Deep expertise in both AI/ML models and traditional financial models
- Alignment with regulatory frameworks, including SR 11-7,

OCC guidance, and CCAR/DFAST

- Domain knowledge across banking, insurance, and fintech
- AI-powered tooling for model inventory, documentation, and validation automation
- End-to-End Lifecycle Support: From inventory to governance to retirement — we support the full MRM lifecycle.
- Proven delivery models for rapid assessments and long-term governance

ITERATIVE PROCESS
Model Validation Process is iterative and may require multiple passes before documentation is complete.

Case studies

Case Study: Mid-Size U.S. Bank – In-House Built CECL Model First-Time Validation

Challenge: A mid-size U.S. bank with \$3 billion in assets built an in-house CECL model using cohort and DCF methods. Lacking CECL expertise, the model risked inaccurate loss estimates and regulatory scrutiny due to insufficient validation.

CoreAi Solution: We conducted a first-time review per SR 11-7 guidelines, assessing model design, data integrity, and economic forecasts.

WHITE PAPER

Sensitivity analysis and external peer data gaps were addressed, while internal controls ensured ongoing monitoring. Two critical findings related to model design and a minor one related to the lack of a monitoring plan were identified.

Impact: Validation resolved two critical weaknesses, reducing ACL misstatement risk by 10%. The bank passed its first post-CECL exam with no major findings, and enhanced documentation boosted confidence. Annual revalidation costs also dropped by 15%.

Case Study: Regional Mortgage Lender – AI Credit Scoring Model

Challenge: A regional lender's proprietary AI credit scoring model faced FDIC scrutiny for potential fair lending violations and a lack of explainability, risking regulatory penalties and reputational damage.

CoreAI Solution: CoreAI conducted a comprehensive bias audit to identify and mitigate disparities in model outcomes across protected groups. Surrogate interpretable models were developed to enhance transparency, enabling clear explanations of AI-

driven decisions. CoreAI also documented the model's lineage, ensuring traceability of data and algorithms to meet regulatory standards.

Impact: The lender avoided regulatory penalties, with the revised model passing the FDIC review. Enhanced explainability increased stakeholder trust in the model's fairness and reliability. The optimized model improved loan approval rates by 12%, boosting operational efficiency and customer satisfaction while maintaining compliance.

Conclusion

CoreAI is a premier AI and model risk consulting firm, combining regulatory insight with deep machine learning expertise. We specialize in delivering secure, compliant, and high-performing AI/ML solutions across financial services, healthcare, manufacturing, and government..



At CoreAI, we tap into the dynamic power of generative AI, machine learning, and model risk management to propel businesses across diverse industries toward transformative growth. Our mission is to craft bespoke AI solutions that align seamlessly with each client's unique challenges and strategic goals. With years of experience serving Fortune 100 companies, our team delivers cutting-edge AI and MRM services that enhance organizational agility, ensure regulatory compliance, and accelerate innovation with confidence.

Contact us at - contact@coreaiconsulting.com