

SPOTLIGHT ON MODEL VALIDATION

The Fundamentals of Model Validation

A Spotlight on the US
Regulatory Landscape for
Model Validation



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US Regulatory Bodies, Laws, and Guidance for Model Validation

Model validation refers to the process of checking that analytical methods or decision-support systems work correctly and align with their defined goals. This is especially relevant in organizations where such systems influence financial, operational, or safety outcomes.

Regulator	Guidance / Regulation	Focus	Applies To
 Federal Reserve (FRB) Oversees banks, ensures model risk is controlled, especially in stress testing.	SR 11-7: Supervisory Guidance on Model Risk Management (2011)	Enterprise model risk management, governance, validation	Bank holding companies, state-chartered member bank
 Office of the Comptroller of the Currency (OCC) Regulates national banks; aligns with FRB on model governance.	OCC Bulletin 2011-12 (adopts SR 11-7)	Same as SR 11-7; supports validation, independent review	National banks, federal savings associations
 Consumer Financial Protection Bureau (CFPB) Protects consumers in the financial sector by enforcing laws and promoting fair practices.	EOCA, UDAAP, AI/ML interpretive guidance	Fair lending, explainability, non-discrimination in AI/ML underwriting models	Mortgage lenders, fintechs, credit providers
 New York Department of Financial Services (NY DFS) Regulates financial services in New York to ensure consumer protection and stability.	23 NYCRR Part 504	AML models; transaction monitoring and filtering programs for AML compliance	NY-licensed banks, insurers, money transmitters, and virtual currency firms (if licensed under Part 200 or operates under NYDFS supervision)

The Model Risk Management Framework

Model risk refers to the potential for incorrect or inappropriate decisions based on the use of models. This could lead to financial losses, regulatory non-compliance, and reputational harm.

Sources of Model Risk:



Model Design Errors
(e.g. incorrect process)



Model Misuse
(e.g. using a model in unintended scenarios)



Incorrect Inputs
(e.g. erroneous data)



Model Performance Degradation
(e.g. obsolete models)

Model Development, Implementation and Use

Should include disciplined and knowledgeable development and implementation process consistent with the situation, the goals of the model user and the bank policy.

Model Validation Process

Should include processes to verify models perform as expected, meeting design objectives and business uses. All components such as input, processing, and reporting must be validated, whether outsourced or in-house.

Model Governance, Policies and Controls

Should develop and maintain strong governance, policies and controls over the model risk management framework which defines the roles and responsibilities to clearly communicate model assumptions and limitations, as well as clarify the authority of restricting model usage.

Model Risk Management



Model Validation Lifecycle

The model validation lifecycle provides a structured approach to managing model risk, ensuring that business-critical models perform as intended, remain compliant, and adapt to changing conditions.



Pre-implementation Review

Evaluate the model's design, assumptions, and data before deployment to ensure it's fit for its intended purpose.

Ongoing Validation and Monitoring

Continuously track model performance with back-testing, benchmarking, and data checks to ensure ongoing accuracy.

Periodic Revalidation

Regularly reassess the model's effectiveness and alignment with business and regulatory changes.

Key Validation Techniques / Best Practices

Back-testing

Benchmarking

Sensitivity Analysis

Stress Testing



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Model Validation

As regulatory expectations around model risk management grow, organizations must consistently ensure that their models are accurate, reliable, and well-governed. Whether driven by internal policies or external regulatory requirements, Stratis can deliver comprehensive reviews of model assumptions, inputs, and outputs, helping your organization maintain compliance and alignment with evolving regulatory standards.



AML Independent Review

Whether operating as a regulated financial institution or through various bank, payment, or lending partnership models, typically an annual review of your AML and sanctions programs is a requirement. As Stratis serves a portfolio of global regulated and unregulated companies, Stratis can help you with performing your required AML review on a scale and risk-appropriate basis to satisfy your statutory requirement, but also any requirement(s) from your banking partner.



NYS DFS Part 504 Annual Transaction Monitoring and Watchlist Filtering Certification of Compliance

Operating as a NYS DFS regulated institution such as a bank, insurance company, money transmitter, trust company, etc. (or applying for a license) requires an organization to annually certify to maintaining a compliant transaction monitoring (AML) and watchlist filtering (OFAC) program. Stratis can assess the readiness of your organization to submit a certification of compliance prior to the annual April deadline. Providing you and your board with actionable insight to approve the certification.





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