November 2026

Insights

What Your Bank Cannot See, It Cannot Govern:

Model Risk in the Middle East



Executive Summary

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Every bank uses models. What has changed, dramatically and irreversibly, is the scale, the complexity, and the consequences of getting them wrong.

Ten years ago, a bank's model inventory was largely a list of internal ratings-based (IRB) credit models, a handful of market risk engines, and some International Financial Reporting Standards (IFRS) provisioning tools. Today, the same institution may be running machine learning (ML) classifiers making real-time credit decisions, vendor-supplied tools embedded in digital lending journeys, generative artificial intelligence (AI) assistants fielding customer queries, and climate scenario models built with limited historical data. Each of these carries risk. Most of them are not governed with the same rigor as the models that came before them.

Banks in the Middle East are firmly part of this shift. As regional banking systems grow in sophistication, and as leading institutions pursue digital transformation, international expansion, capital market transactions, and internal model approvals, their dependence on models is rising faster than the governance built around it.

Model risk management (MRM) is the discipline that closes that gap. Done well, it is not a compliance function that slows the business down. It is the mechanism by which a bank understands what its models are doing, and catches the problems before they become losses, regulatory censures, or customer harm.

The regulatory backdrop is moving in parallel. The Central Bank of the UAE (CBUAE) already requires all UAE banks to comply with dedicated Model Management Standards. The Saudi Central Bank (SAMA) is expected to issue dedicated MRM guidelines. And in April 2026, US regulators replaced the guidance that has shaped model risk practice well beyond the United States for fifteen years.

Regulatory Update: SR 26 2 Replaces SR 11 7

On April 17, 2026, the Board of Governors of the Federal Reserve System (the Federal Reserve), the Office of the Comptroller of the Currency (OCC), and the Federal Deposit Insurance Corporation (FDIC) issued revised model risk management guidance, published by the Federal Reserve as Supervision and Regulation (SR) letter 26-2. It supersedes SR 11 7, the 2011 guidance on which most model risk programs were built.

SR 26 2 does not bind Middle East banks directly. It matters because SR 11 7 has long served as a reference point for model risk practice internationally, and its revision will shape what supervisors, auditors, and international counterparties regard as good practice.

This paper is written for the banks that have started, or are about to start, the MRM journey. It does not restate regulation for its own sake. It explains what is different about model risk in the Gulf Cooperation Council (GCC), which challenges banks should expect, and how to sequence and execute the work so that it produces a working capability and not a policy that sits on a shelf.

The core argument:

The banks that will struggle most in the next supervisory cycle are not those with the wrong validation methodology. They are those that have let their MRM scope fall behind their actual model footprint, where AI systems and vendor tools are making consequential decisions that no one has formally reviewed, where the validation function lacks the standing to slow down a product launch, and where the board's model risk reporting tells a story that is tidier than reality.

For Middle East banks, the opportunity is to build the right framework now, ahead of maturing regional regulation, rather than remediate later.

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We hope you find this publication valuable and welcome further discussion.



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1. Why GCC Banks Cannot Wait

1.1 A Model Footprint that has Outgrown its Governance

A decade ago, a GCC bank's model list was short. It held a few credit scorecards, a market risk engine, and the first IFRS 9 impairment models. Today the same bank runs models in almost every function, many of them built by third parties and a growing number built on machine learning.

Business Area	Typical Models in a GCC Bank	Why the Consequence Is High
Credit and provisioning	IFRS 9 probability of default (PD), loss given default (LGD), exposure at default (EAD), staging and significant increase in credit risk (SICR), corporate and wholesale credit rating and underwriting models, macroeconomic forecasting, post-model adjustments	Directly drives reported profit, provisions, and capital
Capital and stress testing	Internal Capital Adequacy Assessment Process (ICAAP) stress models, Basel III reform calculations, concentration, operational risk and climate scenario models	Shapes capital buffers, dividends, and supervisory dialogue
Treasury and balance sheet	Interest rate risk in the banking book (IRRBB), liquidity forecasting, behavioral models for current accounts and savings, funds transfer pricing (FTP), asset-liability management (ALM), value-at-risk (VaR), derivative pricing and fair value valuation, cash and ATM demand forecasting	Drives margin, pricing, and liquidity decisions

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Retail and SME lending

Business Area

Typical Models in a GCC Bank

Credit underwriting models, application and behavioral scorecards, income verification and affordability calculators, pricing and limit models, collections strategies, collateral and property valuation, customer churn and propensity models

Why the Consequence Is High

High volume, direct customer outcomes, conduct exposure

Financial crime

Business Area

Typical Models in a GCC Bank

Transaction monitoring, sanctions screening, fraud detection, customer risk rating

Why the Consequence Is High

Regulatory censure and financial penalties

Islamic banking

Business Area

Typical Models in a GCC Bank

Profit rate and rate of return models, underwriting and eligibility models for Shariah-compliant financing, pricing of Shariah-compliant products, behavioral models for Islamic current and investment accounts

Why the Consequence Is High

Combines model risk with Shariah governance

AI and generative AI

Business Area

Typical Models in a GCC Bank

ML underwriting, chatbots, document review, credit memo drafting, agent-based automation

Why the Consequence Is High

Fastest growth, least mature governance

Illustrative. The actual mix varies by bank size, business model, and whether the bank operates Islamic windows or subsidiaries.

Two features of this footprint matter for governance. First, models increasingly feed other models. A macroeconomic scenario drives expected credit loss (ECL), which feeds the stress test, which feeds the capital plan. An upstream error travels a long way before anyone sees it. Second, a large share of the footprint was built or supplied by someone else. The bank owns the outcome even where it did not write the code.

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1.2 Where Model Risk Comes From

Model risk is the potential for adverse consequences, including financial loss, regulatory capital misstatement, poor business decisions, or customer harm, arising from decisions based on incorrect, misused, or inappropriately applied models. Its magnitude depends on a model's inherent risk, its exposure, its purpose, and its use. Even a fundamentally sound model can present high model risk if it is misapplied.

Model risk arises from two primary sources:

- **Model error:** Flawed assumptions, incorrect data, or a methodology that does not adequately represent the phenomenon being modeled, including errors in design, specification, or software implementation.
- **Model misuse:** A technically sound model applied to situations for which it was not designed, or relied upon despite known weaknesses. This is particularly common with vendor models, where users lack visibility into the underlying methodology.
- A newer risk, still part of model error but worth calling out on its own, is uncontrolled self-modification in AI systems. When an AI agent is allowed to adjust its own code, prompts, parameters, or configurations without human approval, it can optimize for the wrong objective or find shortcuts that meet a narrow metric but defeat the real purpose. Because such a system can change daily, a periodic validation may not catch the drift in time.

> **Key Insight:**
> The consequences of model risk are asymmetric and potentially severe. The 2012 "London Whale" trading losses at JP Morgan Chase were partly attributable to a flawed VaR model that understated risk. IFRS 9 ECL model errors can materially misstate reported capital and provisions. Algorithmic credit models embedding biased training data can expose institutions to fair lending liability. In each case, the model itself was the source of risk.

1.3 Rising Complexity and Uncertainty

Complexity is increasing from two directions at once. The models themselves are becoming harder to understand, as ML, vendor platforms, and AI agents replace transparent regression. At the same time the environment those models were calibrated for is becoming less stable. Each of the following puts direct pressure on model assumptions:

- **Geopolitical uncertainty.** Regional conflict, sanctions, and trade disruption create shocks with no precedent in the development sample. Models built on calm years understate tail outcomes.
- **Commodity and fiscal cycles.** Oil price swings feed through government spending, liquidity, and corporate cash flows. Many a macro models rely heavily on a single driver.
- **Interest rate cycles.** Most GCC currencies are pegged to the US dollar, so local rates follow US policy. Rapid rate moves test deposit behavior, margin, and repricing assumptions.
- **Real estate and credit growth.** Rapid lending growth and cyclical property markets expose collateral and LGD assumptions.

The practical result is visible in the validation room. Backtests that passed for years begin to fail. Risk sensitivities embedded in assumptions, such as the link between oil price and default rates, move. Banks respond with overlays and manual adjustments to keep results sensible. Overlays are often the right short-term response. Left ungoverned, they become the largest and least validated part of the provision.

Why This Matters for IFRS 9 and Stress Testing

IFRS 9 requires forward-looking, unbiased estimates. When scenarios, weights, and overlays are set by judgment under uncertainty, the quality of the process matters as much as the quality of the model. An MRM framework that stops at the statistical core of the ECL engine will miss where most of the uncertainty now sits. The same applies to ICAAP stress tests, where scenario design and model chain dependencies determine whether the result is credible.

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1.4 Why the Stakes Are Rising

Several converging forces have elevated model risk from a technical concern to a strategic priority for boards and senior management:

Decision velocity

Banks now rely on models for a very large volume of daily decisions, including credit approvals, fraud flags, trading executions, and capital calculations. Failures at this scale propagate rapidly.

Algorithmic bias

ML models that learn from historical data may encode biases that produce unfair outcomes in lending and pricing.

Model chain dependency

Models increasingly feed other models. An upstream error amplifies through downstream decisions in ways that are difficult to trace. SR 26 2 now expressly asks banks to assess model risk in aggregate, not only model by model.

Third-party opacity

Banks often have limited visibility into vendor-supplied models, yet remain fully accountable for the decisions those models inform.

Generative AI hallucination

Generative AI produces outputs that are plausible but potentially wrong, without any internal signal of failure.

Climate model uncertainty

Climate stress testing demands methodologies for which historical data is sparse and time horizons are multi-decade.

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2. The Regulatory Landscape in Brief

There is no single GCC standard for MRM. Supervisory posture differs by jurisdiction, and a banking group operating in several markets meets a different expectation in each. The table summarizes our reading of the position at the time of writing. Banks should confirm current requirements with each regulator.

Jurisdiction	Key Guidance	Uniqus Reading of Maturity
UAE (CBUAE)	Model Management Standards and Guidance, issued December 2022, mandatory for all UAE banks. Banks submitted gap assessments and remediation plans. AI and machine learning guidance note issued February 2026, covering consumer protection and responsible use of AI.	Most advanced. Standards cover governance, data, development, implementation, use, and monitoring across all models. Technical guidance covers rating, PD, LGD, macroeconomic, IRRBB, and net present value models.
Saudi Arabia (SAMA)	Model requirements tied mainly to internal-model capital approvals and IFRS 9. Dedicated MRM guidelines are widely expected but, to our knowledge, not yet issued.	Developing. Large banks have progressed on their own initiative. The window to shape frameworks before guidelines arrive is open.
Bahrain (CBB)	Rulebook expectations on internal models for capital, stress testing, and risk modules. We have not identified a dedicated MRM module.	Developing. Requirements are linked to capital and risk management modules.
Qatar (QCB)	Artificial Intelligence Guideline, issued September 2024, for QCB-licensed entities. Requires an AI register, risk classification, and prior QCB approval for high-risk AI. No dedicated MRM instruction identified.	Developing, with an AI lead. AI governance is ahead of general model governance.
Kuwait (CBK)	IFRS 9 ECL under CBK guidelines, with provisions at the higher of ECL and CBK's own provisioning rules. No dedicated MRM instruction identified.	Developing. Expectations concentrate on credit provisioning.
Oman (CBO)	IFRS 9 implementation circular (2017), including periodic model validation. No dedicated MRM instruction identified.	Developing. Expectations concentrate on IFRS 9 models.

Sources: CBUAE, QCB, and regulator publications as summarized by industry commentary. Entries for Bahrain, Kuwait, and Oman reflect a review of public rulebooks.

2.1 Three Signals Banks Should Read Correctly

- **The UAE has set the regional reference.** Its standards apply to all models, not only capital models. A bank with UAE operations cannot adopt a narrower definition for convenience. Regional peers are likely to be measured against it.
- **AI rules are arriving ahead of general MRM rules.** The UAE and Qatar have issued AI-specific expectations. AI governance can no longer wait for the wider MRM program to mature.
- **Dedicated guidelines are coming elsewhere.** SAMA is expected to issue guidelines. Banks that build now will be adjusting a working framework when they arrive. Banks that wait will be starting a project against a deadline.

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2.2 Global Reference Points

Supervisors and counterparties are increasingly looking to international practice. The UK Prudential Regulation Authority's SS1/23 and the US SR 26-2 are the established benchmarks. Newer frameworks are converging on them: the Monetary Authority of Singapore's final AI risk management guidelines (October 2026), and the Hong Kong Monetary Authority's supervisory guidance on responsible AI adoption. Together they broadly share the same architecture: enterprise-wide scope, risk-based tiering, independent validation, lifecycle control, and explicit treatment of AI and third-party models. Within the region, the CBUAE Model Management Standards and AI Guidance Note, the QCB AI Guideline, and the joint UAE guidelines on enabling technologies issued with the DFSA and ADGM's FSRA point the same way.

Uniqus Perspective

In our view, GCC banks aspiring to regional leadership or international capital market participation should adopt good global practice rather than wait for domestic rules to mature. Early adopters gain regulatory standing, stronger counterparty relationships, and lower remediation cost.

The practical benchmark is simple. Meet the CBUAE standards on scope and governance. Adopt the risk-based validation logic of SR 26-2 and SS1/23. Add GCC-specific overlays described in this paper.

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3. Where Banks Should Focus, and Why

Talking to risk leaders across the industry, we find a striking consistency in what keeps them up at night: not the models themselves, but the governance around them. The credit scoring engine and the IFRS 9 provision model sit inside the inventory and the validation cycle. The exposure lies elsewhere, in new ML models the data science team deployed through an informal IT ticket, a vendor underwriting tool embedded in the digital lending journey that nobody has formally reviewed, and a climate scenario model built in a hurry for a regulatory submission that has sat in a spreadsheet ever since.

This is the real MRM problem most banks face. Not a lack of policy documents, but a gap between what the framework says and what is happening across the institution. The areas below are where that gap is most often found, and where closing it matters most.

3.1 Challenges and How to Overcome Them

The difficulties below recur across banks at the start of an MRM journey. Each is stated with what it looks like in practice and a remedy that has worked. Several of them sit outside the technical domain of modeling. They concern definition, ownership, capacity, and behavior.

Challenge	What It Looks Like in Practice	Remedy
1. No shared understanding of what a model is	Credit says a spreadsheet pricing tool is “just a calculator”. Treasury says its behavioral assumptions are “policy”. Technology says a vendor screening tool is “a system”. Each is arguably a model. The inventory ends up holding only what people choose to call a model.	• Adopt a written definition and a three-question test. • Require a documented rationale for every exclusion. • Give the model risk head the final say on classification.
2. A hidden model estate	Discovery finds tools in business units, end-user spreadsheets, vendor modules, and abandoned models still feeding reports.	• Run discovery from three sources: business interviews, IT change logs, and vendor contracts. • Make “no inventory entry, no production use” a control, enforced through change management and procurement.
3. Tiering that follows negotiation, not risk	Model owners lobby for a lower tier to avoid validation. A model drifts from Tier 3 to Tier 1 when the business starts using it for pricing, but no one retiers it.	• Score tiers on objective criteria: exposure, purpose, complexity, and reliance. • Have the second line own the final tier. • Retier on a trigger, such as new use or material change.
4. Validation capacity below demand	A backlog builds. Validations become late, shallow, or are skipped for the models that are hardest to review.	• Replace uniform annual cycles with risk-based frequency. • Co-source specialist areas such as ML and market risk. • Publish a validation plan to the committee and track coverage.

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Challenge	What It Looks Like in Practice	Remedy
5. Pressure to go live before validation	A product launch date is fixed. The model is not validated. The business asks validators to "sign off with comments".	• Allow pre-validation use only through a documented, time-limited exception with named approvers and compensating controls. • Report every such exception to the board committee.
6. Black-box vendor and adviser models	The ECL model was built by an adviser three years ago. The team operates it but cannot explain its logic. The vendor will not share the methodology.	• Build disclosure, documentation, and audit rights into contracts. • Where the model cannot be opened, validate inputs, outputs, and behavior across scenarios. • Track vendor concentration.
7. Assumptions failing under stress	Backtests fail after a regional shock. Overlays grow. Nobody can say which part of the provision is model and which is judgment.	• Set backtesting thresholds and escalation rules in advance. • Treat overlays as governed items: owner, rationale, size, expiry, and independent review. • Run reverse stress tests on key assumptions.
8. AI deployed faster than it is governed	A data science team ships an ML model through an IT ticket. A generative AI assistant drafts credit memos. An agent adjusts its own parameters with no human review.	• Create an AI intake gate and an AI addendum. • Require human approval for any self-modification of parameters, prompts, or code.
9. Fragmented group and Islamic governance	A subsidiary uses a different tiering scale. The Islamic window uses conventional models without review for fit.	• One group framework, one inventory, local overlays. • Joint review protocol between MRM and Shariah governance.
10. Reporting that tells a tidier story than reality	The board sees a heat map showing green. It does not see open findings, models in use ahead of validation, or the size of overlays.	• Standardize a board dashboard that includes the awkward items. • Have internal audit test the accuracy of the reporting.

3.2 The Model Inventory: Finding What You Cannot See

Most banks believe they have a model inventory. What they usually have is a list of the models somebody remembered to register. The difference matters enormously.

When institutions undertake a genuine discovery exercise, sitting down with business units, reviewing IT change logs, and walking through vendor contracts, they often find materially more models than their official count. The extras are not obscure. They are the affordability calculators on the mortgage platform, the pricing tool treasury licensed three years ago, and the churn model nobody formally decommissioned.

Why it matters: Without a complete inventory, a bank cannot allocate validation resources rationally, respond credibly to a supervisory inquiry, or know whether models are being used for purposes they were never designed for. Every other MRM activity depends on it.

What the Inventory Needs to Capture

- Every model in active use, including vendor tools, AI systems deployed by technology teams, and spreadsheet-based models that go beyond simple arithmetic
- A risk tier for each model, based on a genuine assessment of what goes wrong if the model fails, and how bad that failure could be
- The owner, the business decisions the model informs, and the financial statements, regulatory returns, or customer outcomes it touches
- The dependencies between models, including shared data, assumptions, and methodologies, so that aggregate model risk can be assessed
- Current validation status and any outstanding findings, so the bank knows at any moment which models are running with unresolved weaknesses

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> **A word of caution:**
> It is tempting to design a polished inventory taxonomy before starting. Resist that temptation. A complete-but-imperfect inventory that reflects reality is worth far more than an elegant framework that captures only the models people wanted to register. Start with discovery, tighten the taxonomy later.

3.3 Model Tiering and Model Rating

Tiering and rating are often confused. They answer different questions, and a framework needs both.

- Model tier measures inherent risk: how much harm the model could cause if it is wrong. It is set by exposure, purpose, complexity, and the degree of reliance on the output. The tier decides how much scrutiny the model gets.
- Model rating measures current condition: how well the model is performing and how it has fared in validation. It is set after validation and monitoring, for example Satisfactory, Needs Improvement, or Unsatisfactory. The rating decides what action is needed.

Together, they give a view of residual model risk. A Tier 1 model with an Unsatisfactory rating needs urgent action. A Tier 4 model with the same rating may only need a note.

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Tier	Typical Profile in a GCC Bank	Validation Depth	Frequency (Illustrative)
Tier 1: Critical	IFRS 9 ECL, ICAAP stress models, capital models, large-scale credit decisioning, complex ML	Full independent review: conceptual soundness, data, implementation testing, outcomes analysis, sensitivity, challenger comparison	Annual starting point. Immediate on material change or breach.
Tier 2: Significant	IRRBB, behavioral models, FTP, SME scorecards, fraud and anti-money laundering (AML) models	Core validation with deep dives on the highest risk components	Every 18 to 24 months. Sooner on performance deterioration.
Tier 3: Standard	Operational and reporting models with human review	Focused review of documentation, monitoring, and use	Every 2 to 3 years or on trigger.
Tier 4: Low	Simple calculators and reference tools	Annual owner self-certification. Independent review on trigger.	Event-driven.

Validation depth and frequency for each tier are covered in Section 3.4.

Model Rating	Meaning	Typical Consequence
Satisfactory	Sound for intended use. Minor findings only.	Continue use. Standard monitoring.
Needs Improvement	Material weaknesses that can be managed with remediation and compensating controls.	Time-bound remediation plan. Increased monitoring. Reported to the committee.
Unsatisfactory	Not fit for intended use, or major unresolved findings.	Restrict or stop use unless the committee approves a documented exception. Escalate to the board committee for Tier 1.

Practical control. Retier whenever a model is used for a new purpose or its output starts to drive a more material decision. A pricing input that becomes a lending limit is a different model from a risk standpoint, whatever its code says.

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3.4 Validation across Lifecycle: Before and After Go-Live

Validation is often treated as an event before launch. It should be a sequence of linked controls that cover the full life of the model. Both pre-implementation and post-implementation validation matter, and weak points in one are not repaired by the other.

Stage	Key Controls	Common GCC Pitfall
Development and business case	• Clear purpose and intended use • Data lineage and quality checks • Fairness and bias screening for customer-facing models • Documentation standard	Models are built on whatever data is available. Intended use is not written down, so misuse cannot be tested later.
Pre-implementation validation	• Independent review of conceptual soundness, data, and assumptions • Code and implementation testing, including replication • Parallel run against the existing process • Approval by the right committee for the tier	The launch date is fixed first. Validation is compressed, and conditions are not tracked.
Implementation and approval	• Controlled release and access rights • User documentation and training • Documented limitations shared with users • Explicit, time-limited exception if used before validation is complete	Limitations stay in an appendix. Users do not know what the model cannot do.
Post-implementation review	• Review of early performance against expectations, typically within the first 3 to 6 months • Confirm the model is used as designed	This stage is often skipped. Issues surface only at the next annual cycle.
Ongoing monitoring	• Performance and stability metrics with thresholds • Backtesting, drift, and override tracking • Escalation when thresholds are breached	Metrics are produced but nobody acts on a breach. Thresholds are set loosely so that breaches never occur.
Periodic and triggered revalidation	• Frequency set by tier, as in Section 3.3 • Triggers: material change, new use, breach, or market shock	Revalidation follows the calendar, so triggered events are missed.
Change management	• Change log and materiality test • Revalidation for material change	Parameter updates are made without review. “Material” is never defined.
Retirement	• Planned decommissioning • Archive of documentation and results	Old models keep running quietly in the background.

Independence Must Hold at Every Stage

Independence has to hold at every stage, from pre-implementation review through to ongoing monitoring. The separation, access, and authority described in Section 3.4 apply equally to post-implementation reviews, monitoring escalations, and revalidation. A threshold breach or a deteriorating backtest should be raised by someone outside the team that built the model.

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3.5 AI and Machine Learning: Different Models, Different Risks

Some institutions treat ML models as a more powerful version of regression, and validate them accordingly. That approach misses the most important risks.

A regression model fails in reasonably predictable ways. A gradient boosting classifier or a neural network can fail invisibly until something goes badly wrong. It can perform well on historical data while systematically disadvantaging an under-represented customer group. It can deliver accurate predictions in a stable environment and then collapse when conditions move outside its training data. And there is no single equation to examine to understand why.

Why it matters: AI is where model adoption is moving fastest, and where governance frameworks are least mature. Governing these models well requires a different set of tools:

- **Explainability:** Techniques such as SHapley Additive exPlanations (SHAP) values and counterfactual analysis allow validators to understand what a model is doing in aggregate, which is essential for customer-facing decisions.
- **Fairness and bias:** Every ML model used in credit, pricing, or collections should be tested for unfair outcomes before deployment and monitored continuously thereafter.
- **Ongoing monitoring:** Many ML models are retrained continuously on live data. Drift monitoring of inputs, predictions, and performance needs to be built in from day one.
- **Generative AI:** Large language models (LLMs) produce fluent, plausible outputs that may be wrong, with no internal signal of uncertainty. They need explicit scope restrictions, mandatory human review for consequential outputs, and audit trails in regulated processes. SR 26 2 places generative and agentic AI outside its scope, so this governance layer is the bank's own to design. In the UAE and Qatar, it must also meet the CBUAE AI Guidance Note and the QCB AI Guideline.

> **Where to start:**
> If your MRM policy does not distinguish between a traditional statistical model and an ML system, that is the first thing to fix. A dedicated AI model risk addendum, setting out what fairness testing, explainability, drift monitoring, and generative AI controls mean in your institution, is a practical and regulatorily sensible next step.

3.6 Vendor Models: Outsourcing the Model Does Not Outsource the Risk

The argument has always been: we cannot validate what we cannot see. The vendor will not share the methodology. The model is proprietary. Each of those statements may be true. None of them changes the reality that when a vendor model drives a credit decision, sets a customer's price, or feeds a capital calculation, the bank owns the outcome and the risk.

Why it matters: Vendor solutions often sit at the heart of core risk processes, such as credit rating, provisioning, and financial crime screening. SR 26 2 reaffirms that the principles of model risk management apply to vendor products, including data, parameter values, and complete models, even where proprietary components limit what the bank can see.

Practical Steps That Work

- Build model disclosure requirements into procurement contracts before signing, when the bank's leverage is greatest.
- Where full disclosure is unavailable, focus validation on what can be observed: the inputs, the outputs, and whether outcomes behave sensibly across the scenarios the bank actually faces.
- Treat vendor concentration as a risk in its own right. One vendor's model driving several lending portfolios is a concentration that would be unacceptable for a single internal model.
- Negotiate contractual rights to challenge, remediate, or replace underperforming models, and document and validate any customization made for the bank.

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3.7 Governance and Culture: What Determines Whether MRM Works

Ask senior risk professionals who have led an MRM transformation what made the difference, and the answer is rarely the validation methodology. It is whether the business took model risk seriously.

A technically excellent framework can still fail if business units routinely override findings, model owners treat registration as an administrative burden, or the board receives a quarterly deck that says everything is broadly fine. Culture shows up in observable behaviors: whether a business head accepts a validation timeline or escalates to shorten it, and whether model limitations are disclosed to users or buried in appendices.

Why it matters: Governance architecture determines who has visibility and who has authority when things get difficult. The structure below reflects what works in practice for mid-to-large institutions.

Governance Body	Who Sits There	What They Are Actually Responsible For
Board Risk Committee	Independent non-executive directors with risk expertise	Setting the tone: approving MRM policy, understanding the institution's aggregate model risk exposure, and making sure the Chief Risk Officer (CRO) is not the only person in the room who can challenge a model risk assessment
Model Risk Committee	CRO (chair), Chief Financial Officer (CFO), Chief Technology Officer (CTO), business heads, Chief Model Risk Officer	The operational decision-making forum: approving Tier 1 validations, ruling on escalated findings, deciding what happens when the business wants to deploy a model the validation team is not comfortable with
Chief Model Risk Officer	Senior leader reporting to CRO, with direct access to the Board	Owning the framework and the culture: setting standards, representing model risk in governance forums, being the person who says "no" when it needs to be said, and being empowered to do so
Model Validation Function	Quantitative analysts, data scientists, credit risk specialists	The technical work: conducting independent validations, issuing findings, maintaining standards, and refusing to sign off on models they do not believe in
Model Owners	Front-line business and risk managers	Accountability without delegation: registering models, ensuring appropriate use, implementing findings, and not treating the validation function as an obstacle to work around
Internal Audit	Independent assurance function	Evaluating whether MRM practices are rigorous and effective and whether policies are implemented as written, without duplicating model development or validation

The test of a healthy MRM culture:

Ask what happens when the validation team issues a finding that would delay a high-profile product launch. If the finding is documented and the business makes an informed decision, with any known limitation formally approved and recorded, that is a healthy culture. If the finding disappears or gets rewritten to be less alarming, that is an MRM program waiting to fail.

3.8 One Framework Across Borders

For banking groups operating across several GCC markets and beyond, the same model may face different validation, documentation, and approval expectations in each jurisdiction. Separate local programs usually produce inconsistent standards, duplicated effort, and an aggregate picture nobody at group level can see.

Why it matters: A single framework built to the most demanding applicable standard, with documented local overlays, is cheaper to run and easier to defend to every supervisor. The framework is one; the implementation adapts.

- **Harmonize to the highest standard:** Use the CBUAE standards and leading international references such as SR 26 2 and SS1/23 to set the group baseline, taking the more demanding expectation on each dimension.
- **One inventory, multiple views:** Maintain a single group inventory on the broadest applicable definition, with jurisdiction-specific fields for local reporting.
- **Central standards, local execution:** Own validation standards and documentation templates centrally, with local teams responsible for execution.



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The table below places the GCC alongside four other major markets. It is deliberately high-level, and draft or expected guidance may change before finalization.

Dimension	US (SR 26 2)	UK (SS1/23)	EU (ECB / EBA / AI Act)	India (RBI)	GCC (CBUAE / SAMA / CBB)
Board Risk Committee	Yes. SR 26 2 (April 2026)	Yes. SS1/23 (effective May 2024)	Partial. Distributed across multiple instruments	Draft. June 2026 guidance under consultation	UAE only (CBUAE, 2022). Elsewhere, model rules sit in capital, IFRS 9, or AI instruments
Model Risk Committee	Supervisory guidance; sets no enforceable standards	Supervisory statement for firms with internal model approval	Mix of binding regulation and guidelines	Draft, not yet binding	UAE: mandatory. Others: central bank rulebooks and circulars
Chief Model Risk Officer	Narrower. Complex quantitative methods only	Broad	Regulatory internal models; AI Act for AI systems	Broad, including AI and third-party models	UAE: all models. KSA, Bahrain: internal capital models. Kuwait, Oman: mainly IFRS 9 models
Model Validation Function	Non-generative, non-agentic AI in scope; generative and agentic AI excluded	Covered to the extent AI risks apply to models generally	EU AI Act high-risk regime, applying from December 2027	Explicit AI and ML provisions in draft	Qatar: mandatory AI Guideline (2024). UAE: AI Guidance Note (2026) tied to model standards. Others: none identified
Model Owners	Effective challenge; judged by rigor, not structure	Required. Independent and effective challenge	Required for significant institutions under the ECB Guide	Proposed as a second-line function	UAE: CBUAE standards. KSA, Bahrain: capital models. Oman: IFRS 9 models. Qatar: high-risk AI test results to QCB
Internal Audit	Action available for unsafe or unsound practices	High. Prudential Regulation Authority (PRA) enforcement powers	High for significant institutions	Not yet applicable	UAE: gap assessments required. Qatar: prior approval for high-risk AI

- **The UAE is already broad in scope:** CBUAE standards cover all models, so SR 26 2 is no reason to shrink the inventory.
- **AI rules are emerging unevenly:** Qatar and the UAE have issued AI-specific expectations, while other GCC regulators have not.
- **The window is open in KSA and Bahrain:** banks can shape their frameworks before dedicated guidelines arrive.

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4.1 What Makes the GCC Journey Different

Global MRM guidance is a good starting point, but it was written for markets with deeper data, larger quantitative workforces, and more homogeneous regulation. GCC banks face a different set of conditions. Recognizing them early changes how the program should be designed.

GCC Feature	Why It Matters for MRM	Practical Response
Uneven regulation across six jurisdictions	Groups face different expectations in each market and risk running separate local programs.	One group framework built to the highest standard, with documented local overlays.
Concentration in government-related, real estate, and large corporate exposures	Few borrowers and few defaults. Statistical models are thin and expert judgment carries much of the weight.	Treat expert judgment as a model component. Document it, challenge it, and backtest it where possible.
Oil-linked macro environment and USD pegs	Local macro series are short and dominated by a few drivers. Interest rate behavior follows US policy.	Validate scenario design and driver selection. Test sensitivity to the oil price and rate assumptions explicitly.
Islamic finance alongside conventional	Products, profit mechanics, and customer behavior differ. Conventional models are sometimes applied to Islamic books without adjustment.	Test model fit for Islamic products. Align MRM and Shariah governance so that model changes touching Shariah-sensitive features are reviewed by both.
Scarce and mobile quantitative talent	Validators are hard to hire and retain. Nationalization goals add a further dimension to workforce planning.	Decide build, buy, or co-source early. Invest in training programs for local talent.
Heavy reliance on advisers and vendors for model build	Models are handed over with limited knowledge transfer. Owners may not understand what they own.	Make knowledge transfer, documentation, and validation access a contractual requirement.
Rapid digital and AI adoption	Fast deployment, often by technology teams outside traditional risk oversight. Data protection and residency rules shape where models and data can sit.	Create an AI intake gate and an AI addendum to the MRM policy. Involve data protection and technology risk from day one.
Strong, hierarchical decision culture in many institutions	Junior validators may find it hard to challenge senior model owners. Findings may be softened before they reach committees.	Give the model risk head direct access to the board. Track how findings are resolved, not just how many are raised.
Growth, consolidation, and regional expansion	Mergers add model estates. Subsidiaries bring local rules. Inventory and standards fragment.	Make model integration part of merger planning. Maintain one group inventory.

Uniqus Perspective

In our view, the most underestimated GCC feature is the combination of thin data and heavy judgment. A model that is statistically weak but governed honestly is safer than one that looks sophisticated and hides its judgment. MRM in the region should be designed to expose judgment, not to disguise it.

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Model risk is not a new problem. Banks have always depended on models, and models have always been capable of failing. What has changed is the speed at which model dependency is growing, and the degree to which that growth is outpacing the governance designed to manage it.

The banks that handle this well will not be those with the most comprehensive MRM policy. They will be those where the inventory reflects what is running in production, where the validation team has the time and standing to review what is deployed, and where the board understands enough about model risk to ask the right questions, not just receive a reassuring summary.

Looking ahead:

Three forces will shape MRM in the Middle East over the next five years: the rapid industrialization of generative AI across banking operations, the continued maturing of regional regulation, and global supervisory expectations evolving at different speeds. Banks that treat MRM as overhead will face each of these reactively. Those that treat it as infrastructure will be better positioned, not because they will avoid every model failure, but because they will have the systems to catch failures before they become something worse.

5.1 Action Points for Middle East Banks

We recommend the following ten actions, sequenced so that the foundations come first.

Build the Foundations

- **Run a genuine model discovery exercise:** Go beyond the official register. Review business units, IT change logs, and vendor contracts, and record for every tool whether it is a model and why.
- **Keep the perimeter broad and document exclusions:** Align to the all-models approach of the CBUAE standards, and revisit each exclusion when the tool's use changes.
- **Tier every model by materiality:** Base tiers on exposure and purpose, and redirect validation effort from uniform annual cycles to the models that matter most.
- **Give the board a true picture:** Have the Board Risk Committee approve the MRM policy and receive aggregate model risk reporting that includes open findings and models in use ahead of validation.

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Strengthen the Core

- **Issue an AI model risk addendum:** Define fairness testing, explainability, drift monitoring, and generative AI controls, including scope restrictions, human review, and audit trails.
- **Bring vendor models inside the framework:** Build disclosure and remediation rights into contracts, apply outcomes-based validation, and track vendor concentration.
- **Give validators real standing:** Provide the authority, seniority, resourcing, and ML skills needed to challenge the models now being deployed.
- **Make pre-validation use an explicit decision:** Require named approvers, documented limitations, and compensating controls whenever a model is used before validation is complete.

Sustain and Lead

- **Benchmark globally, overlay locally:** Set one group framework against the CBUAE standards and leading international references, and get ahead of the guidelines SAMA is expected to issue.
- **Measure culture, not just compliance:** Track how validation findings are resolved. When the validation team issues an uncomfortable finding, it should be resolved, not reworded.



About Uniqus Consultech:

Uniqus Consultech is an AI and global tech-enabled consulting company that specializes in Accounting & Reporting Consulting, Governance, Risk & Compliance, Sustainability & Climate Consulting, Tech Consulting, and Valuations. The Company is co-founded by consulting veterans Jamil Khatri and Sandip Khetan and backed by marquee investors such as Nexus Venture Partners, Sorin Investments, and UST.

Uniqus has a global team of 800+ professionals, led by 100+ Partners and Directors, across 13 offices in the USA, the Middle East, and India. The company serves more than 400 clients, including marquee names in each of the markets it operates in.

Uniqus is committed to leveraging technology and an integrated global delivery model to provide best-in-class consulting services to its clients.

About Our Accounting & Reporting Consulting Services:

In today's dynamic business environment, organizations are continuously required to adapt to the dynamic shifts in accounting & reporting standards and regulations. Enhanced management reporting requirements and accelerated reporting timelines necessitate increased automation within the finance function. Special events, such as preparing for an IPO/capital market transaction or fulfilling the reporting requirements arising from an M&A transaction, introduce additional complexities and challenges for the finance function.

As a result, organizations need to transform their finance functions from time to time with a focus on people, processes, and technology. Our Accounting & Reporting Consulting (ARC) practice is designed to partner with the finance function through these challenges. Our teams function as an extension of your finance teams to execute your plans seamlessly.

We bring the necessary technical expertise, skills, technology, and bandwidth, enabling you to navigate your plans in real time without adding additional manpower costs within the organization.

A Team That You Can Trust To Deliver



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