

Agentic Risk & Compliance Platform

High-Level Architecture Concept

Draft for Discussion

February 13, 2026

1 Objective

Design a general platform that can:

- ingest internal bank documentation and relevant regulatory material,
- assess current-state practices against obligations, KPMG best practices, prior deliverable patterns, and stakeholder/expert input, and
- build a defined stakeholder deliverable for each selected workflow, with evidence traceability and reduced manual processing/drafting effort.

2 Concept Summary

The platform is built around a reusable core with explicit functionality for regulation, KPMG internal methods/deliverables, and expert judgment:

- **Document processing foundation:** normalize and organize source material into a searchable evidence base.
- **Regulatory intelligence layer:** ingest applicable regulations and guidance, decompose them into atomic obligations, and maintain requirement-to-citation traceability.
- **KPMG knowledge layer:** operationalize KPMG best practices, prior deliverable patterns, and internal methods into reusable templates, scoring lenses, and quality checks.
- **Expert judgment layer:** capture stakeholder and SME inputs as explicit assumptions, challenge points, and approval decisions.
- **Workflow orchestration:** run deterministic and agent-driven workflows that combine these inputs into consistent, review-ready deliverables.

Core value proposition: automate manual data processing and first-draft writing so KPMG risk experts can spend more time on expert challenge, judgment, and decision support.

The feedback path is a **continuous update cycle:** new evidence, client feedback, and monitoring signals flow back into the core to refresh assessments and keep deliverables current.

3 High-Level Architecture

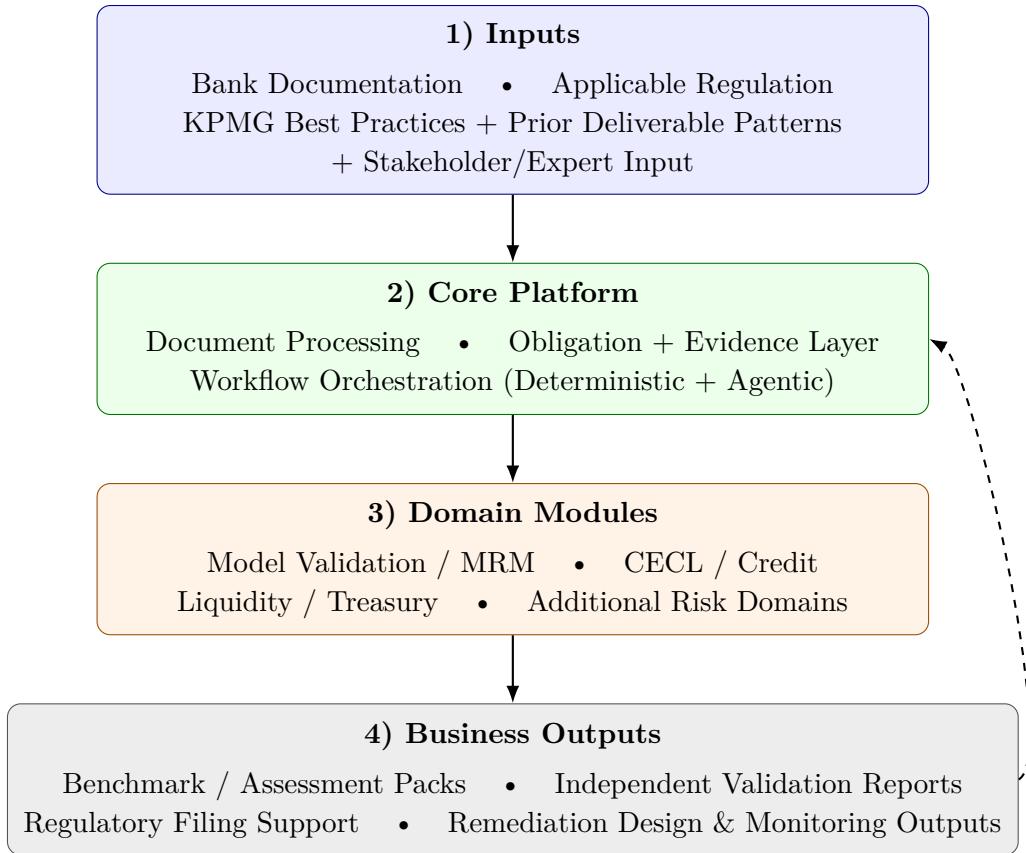


Figure 1: Platform flow from source inputs to repeatable business outcomes, with a continuous update cycle back into the core.

4 Customer, Problem, and Value Case

Primary Customer

The primary customer is the **internal KPMG engagement team** in Modeling, Credit, and Liquidity (for example managers, senior associates, and directors) responsible for producing client-facing and governance-facing risk deliverables.

What The Project Aims To Do

Create a reusable deliverable engine that converts bank documentation, applicable regulation, and KPMG methods into faster, more consistent, and more traceable outputs (for example benchmark assessments, independent model validation reports, and regulatory filing support packages).

Who Benefits

- **Engagement teams:** less manual synthesis, faster draft development, and cleaner handoffs.

- **Reviewers and experts:** stronger evidence traceability, more consistent quality, and more capacity for high-value expert judgment.
- **Partners and account leads:** more predictable delivery effort, improved margin control, and easier scaling across engagements.
- **Clients (indirectly):** clearer, more auditable deliverables and faster turnaround.

Current Workflow (Baseline)

Today, teams typically execute a largely manual workflow per deliverable:

1. gather and read source materials (bank docs, regulation, prior work),
2. map obligations to available evidence and identify gaps,
3. draft narrative and supporting exhibits,
4. run expert/reviewer cycles and rewrite sections,
5. assemble final evidence references and delivery pack.

This baseline is high-effort and repetitive, especially in obligation mapping, citation assembly, and narrative rework. A significant share of team time is spent on mechanical processing and drafting rather than expert interpretation.

Quantified Problem and Opportunity (Team-Calibrated)

In many engagements, the **first month** is heavily consumed by foundational work this platform is designed to automate:

- document ingestion and normalization,
- synthesis and obligation-to-evidence mapping,
- benchmarking against KPMG patterns and expert input,
- stakeholder feedback incorporation and redraft cycles.

The target outcome is a **material reduction in manual effort** on this foundational layer (faster throughput and lower rework), while preserving expert review and final accountability.

Sizing framework (plain-language, team-calibrated):

- Start with the hours your team spends in month one on foundational work.
- Estimate how much of that layer can be accelerated by the platform (for example through faster ingestion, synthesis, benchmarking, and feedback integration).
- Convert recovered hours into internal value using your billing/cost rates.
- Multiply by annual engagement volume for annualized impact.

Example using your reference point:

- Assume a 6-person consulting team and use \$200/hour as a directional rate.
- If that team spends most of the first month on foundational activities, total effort is on the order of **960 team-hours** (6 people \times 4 weeks \times 40 hours).
- At \$200/hour, that month-one baseline is **\$192,000** of team effort.
- If the platform materially accelerates that layer, the same foundational output could be produced with substantially less manual effort, unlocking significant capacity for higher-value expert work and faster deliverable turnaround.

How The Platform Addresses The Problem

- **Manual intake and reading** → structured document processing and reusable evidence indexing.
- **Inconsistent obligation mapping** → standardized obligation-to-evidence layer and scoring logic.
- **Narrative rewrite churn** → automated first-draft generation informed by KPMG best practices and prior deliverable patterns.
- **Review bottlenecks** → explicit quality and approval gates.
- **One-off outputs** → continuous update cycle for refreshed deliverables as evidence changes.

5 Detailed Deliverable Architecture

The diagram below shows a single end-to-end delivery flow. For each engagement, the team selects one primary deliverable objective and executes one corresponding workflow from the shared core.

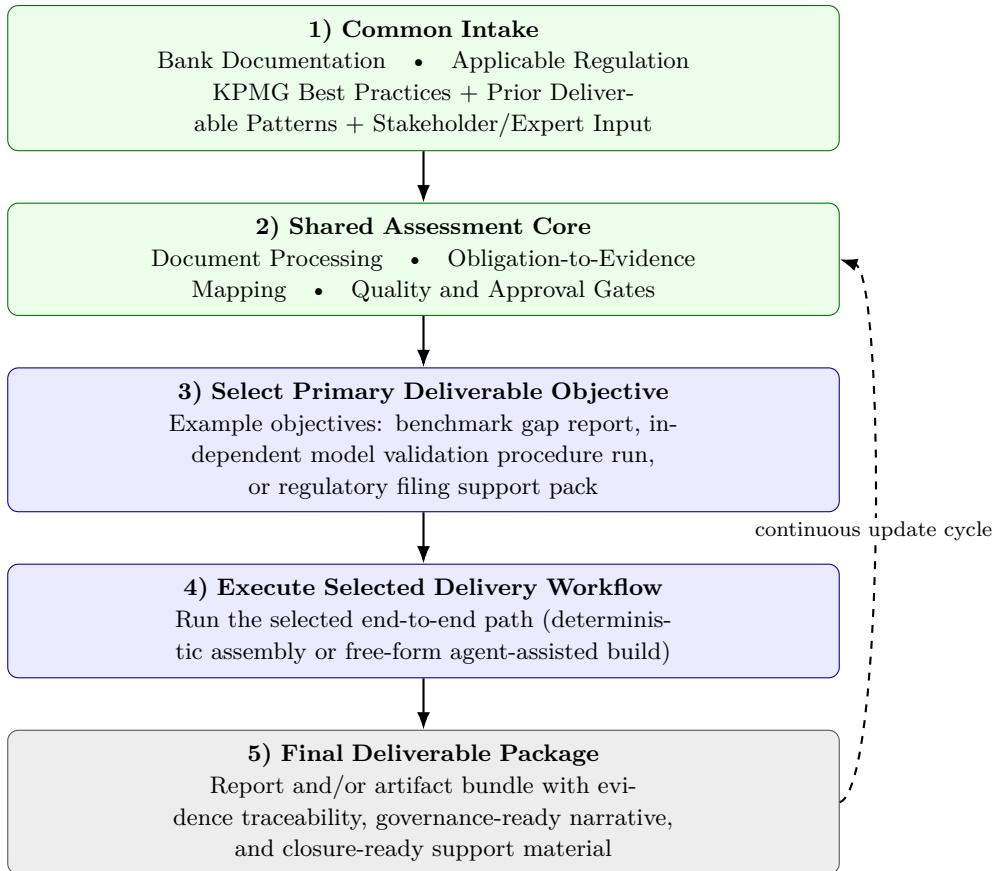


Figure 2: Detailed end-to-end delivery flow using one selected deliverable objective per engagement.

6 Use Cases and End-to-End Deliverables

Each use case follows the same core platform flow but answers a different business question. The sections below specify the analysis performed, how expert time is leveraged, and the concrete deliverable produced.

Common workflow pattern used across all use cases

- Build a context package from applicable regulation, KPMG prior deliverable patterns/best practices, stakeholder input, and client documentation.
- Use that context package to drive domain-specific analysis or technical procedures.
- Assemble a stakeholder-ready deliverable with explicit evidence traceability.

Example Workflow-to-Deliverable Mapping

- **Controls assessment workflow** → benchmark gap report, prioritized findings register, and requirement-to-evidence appendix.
- **Independent model validation workflow** → validation report, technical procedure run pack, and reviewer sign-off evidence set.

- **Regulatory filing support workflow** → filing-support dossier, requirement-to-evidence matrix, and open-items tracker.
- **Findings closure workflow** → closure memo set, closure evidence bundle, and disposition summary.

1) Controls Assessment Accelerator (Detailed Example)

Business question: Where is current-state control design and execution below regulatory expectations and KPMG benchmark standards, and what should management prioritize first?

Higher-level analysis performed

1. **Context package assembly:** gather regulatory requirements, KPMG controls-assessment collateral from prior deliverables, stakeholder scope calls, and client evidence sources.
2. **Applicability analysis:** determine which obligations and supervisory expectations apply to the scoped processes, entities, and products.
3. **Coverage analysis:** map obligation → control → evidence and classify each obligation as covered, partially covered, or not evidenced.
4. **Design versus operation analysis:** distinguish design gaps (control is missing or weakly designed) from operating gaps (control exists but evidence of execution is insufficient).
5. **Benchmark analysis:** compare current-state structure against KPMG patterns from prior controls engagements (issue taxonomy, maturity lens, and expected artifact set).
6. **Risk and prioritization analysis:** apply SME calibration to convert raw gaps into severity-ranked issues and pragmatic action paths.

How the platform leverages expert capacity

- Automates document ingestion, citation extraction, and first-pass requirement mapping.
- Produces draft findings tables and narrative blocks in KPMG reporting format.
- Keeps experts focused on challenge, materiality calls, and recommendation quality.

Deliverable package produced

- Stakeholder-ready controls assessment report with benchmarked gaps and prioritized actions.
- Findings register with severity, rationale, and evidence traceability.
- Requirement-to-evidence appendix and management action tracker.

2) Independent Model Validation Procedure Execution

Business question: Does the model meet validation standards for conceptual soundness, implementation integrity, and outcome reasonableness, and what issues require disposition?

Higher-level analysis performed

1. **Context package assembly (before test execution):** compile applicable regulation, KPMG prior model-validation deliverables/playbooks, stakeholder scoping input, and client model documentation into a validation baseline.
2. **Scope and use analysis:** define model purpose, decision use, materiality, validation depth requirements, and the initial test plan from the context package.
3. **Methodology analysis:** evaluate conceptual design, assumptions, and known limitations against policy and regulatory expectations.
4. **Implementation and procedure analysis:** once context and test plan are approved, execute deterministic checks and free-form agent-assisted technical procedures on the provided model container (for example custom harnesses, challenger tests, and evidence extraction utilities).
5. **Outcome analysis:** assess results, explain variance versus challenger views, and document residual model risk.
6. **Issue analysis:** convert test outcomes into clear findings, required actions, and closure criteria.

How the platform leverages expert capacity

- Runs repeatable procedures and captures execution evidence systematically.
- Uses coding agents for bespoke, non-template technical work where needed.
- Accelerates translation of technical outputs into governance-facing conclusions.

Deliverable package produced

- Independent model validation report with conclusion, findings, and recommendations.
- Technical procedure run pack (scripts, check outputs, challenger analysis results).
- Reviewer sign-off evidence bundle with traceable links to each conclusion.

3) Regulatory Filing Support Package

Business question: Is each filing statement supportable with complete, consistent, and review-ready evidence?

Higher-level analysis performed

1. **Context package assembly:** compile filing-relevant regulation, KPMG prior filing-support deliverables/templates, stakeholder filing priorities, and client filing evidence sources.
2. **Requirement decomposition:** break filing requirements into atomic support statements and expected evidence types.

3. **Support sufficiency analysis:** map available evidence to each statement and identify completeness or quality gaps.
4. **Consistency analysis:** test narrative, table, and control evidence for alignment and unresolved contradictions.
5. **Readiness analysis:** classify items as submission-ready, conditionally ready, or blocked pending additional evidence.

How the platform leverages expert capacity

- Automates large-scale requirement matching and traceability assembly.
- Generates first-pass filing-support narratives with citation discipline.
- Preserves expert time for judgment on unresolved or high-exposure items.

Deliverable package produced

- Filing-support dossier with requirement-to-evidence traceability matrix.
- Draft narrative inserts and supporting control statements.
- Open-items and evidence request list with accountable owners.

4) Liquidity Risk Framework and Reporting Readiness (LCR/NSFR/Stress)

Business question: Is the liquidity framework governance-ready and reporting-ready under supervisory scrutiny?

Higher-level analysis performed

1. **Context package assembly:** gather applicable liquidity requirements, KPMG prior liquidity-readiness deliverables/playbooks, stakeholder risk priorities, and client liquidity governance artifacts.
2. **Framework analysis:** evaluate alignment of policy, procedures, controls, and governance forums.
3. **Assumption governance analysis:** assess assumption ownership, challenge process, approval trail, and change controls.
4. **Reporting control analysis:** assess process reliability for recurring liquidity metrics and stress reporting.
5. **Readiness and risk analysis:** convert observations into prioritized readiness gaps and management decisions.

How the platform leverages expert capacity

- Extracts assumptions, control owners, and evidence across fragmented documents.
- Produces standardized readiness views and issue clustering.

- Enables experts to focus on supervisory implications and target-state decisions.

Deliverable package produced

- Liquidity readiness assessment report with prioritized gaps.
- Assumption governance register with challenge and approval traceability.
- Governance-ready evidence appendix for review committees.

5) Credit Model Lifecycle Assurance (PD/LGD/EAD/CECL/IFRS9)

Business question: Is the credit model lifecycle operating as a coherent, policy-aligned system from development through monitoring and change management?

Higher-level analysis performed

1. **Context package assembly:** combine relevant regulatory expectations, KPMG prior credit-model deliverables/frameworks, stakeholder portfolio priorities, and client lifecycle artifacts.
2. **Lifecycle completeness analysis:** test whether required lifecycle components (development, validation, monitoring, change governance) are present and linked.
3. **Portfolio and methodology analysis:** evaluate whether segmentation and model approaches are aligned to portfolio risk characteristics.
4. **Performance and threshold analysis:** review monitoring design, trigger logic, and escalation rules.
5. **Governance alignment analysis:** identify where lifecycle execution diverges from policy standards and expected artifacts.

How the platform leverages expert capacity

- Integrates lifecycle evidence from multiple functions into one assessment view.
- Supports targeted agent-generated technical artifacts where needed.
- Reduces manual stitching so experts can focus on model risk interpretation.

Deliverable package produced

- Credit model lifecycle assurance report with prioritized findings.
- Supporting technical artifacts and evidence pack.
- Draft governance updates (roles, triggers, and monitoring expectations).

6) Model Inventory, Tiering, and Revalidation Scheduling

Business question: Is the model inventory complete and correctly tiered, and is revalidation planning risk-aligned and executable?

Higher-level analysis performed

1. **Context package assembly:** gather model-governance requirements, KPMG prior inventory/tiering deliverables, stakeholder planning constraints, and client inventory sources.
2. **Inventory integrity analysis:** reconcile model records across sources and identify missing or inconsistent metadata.
3. **Tiering logic analysis:** apply policy criteria to test consistency of risk tier assignments.
4. **Revalidation planning analysis:** evaluate schedule feasibility against policy frequency, model criticality, and review capacity.
5. **Exception analysis:** identify unresolved classification issues and scheduling risks requiring governance decisions.

How the platform leverages expert capacity

- Automates normalization and rule-based tiering checks at scale.
- Generates explainable exception logs with rule and evidence traceability.
- Frees experts to resolve complex tiering and sequencing decisions.

Deliverable package produced

- Inventory integrity and quality assessment report.
- Tiering rationale file and exception decision log.
- Revalidation schedule package for governance planning cycles.

7) Validation Findings Closure Factory

Business question: Which findings are closure-ready now, which are not, and what evidence is still required for defensible closure?

Higher-level analysis performed

1. **Context package assembly:** align closure requirements from regulation/policy, KPMG prior closure deliverables, stakeholder closure criteria, and client finding evidence.
2. **Closure criteria analysis:** translate issue statements into explicit closure tests and required artifacts.
3. **Evidence adequacy analysis:** test whether submitted artifacts satisfy closure conditions and are internally consistent.
4. **Residual risk analysis:** evaluate whether proposed closure leaves material residual risk or control weakness.

5. **Disposition analysis:** classify findings as close, partial-close, or remain open with targeted next actions.

How the platform leverages expert capacity

- Structures closure work into repeatable evidence checklists and review packets.
- Produces draft closure memos and disposition summaries.
- Keeps experts focused on closure quality and governance defensibility.

Deliverable package produced

- Finding-level closure decision pack with evidence links.
- Documentation and control-test artifact bundle.
- Governance memo set for closure approval decisions.

7 Why This Structure Works

- **Generalizable:** one platform pattern can support multiple risk and compliance domains.
- **Expert-empowering:** automates mechanical processing and drafting so expert time is focused on interpretation, challenge, and recommendations.
- **Traceable:** findings and actions can be tied to source evidence and obligations.
- **Action-oriented:** outputs progress from diagnosis to implementation-ready deliverables and closure support.
- **Lifecycle-ready:** the same architecture supports assessment, remediation planning, transformation design, and monitoring.
- **Scalable:** additional modules can be introduced incrementally.