SAP Fioneer

The finance data problem

Replacing generic ETL/ BI with audit-ready, multi-domain data foundations

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Introduction

Banks and insurers are under sustained pressure to deliver **faster close cycles, more responsive regulatory reporting** and **near-real-time risk visibility**, without increasing operational risk or compliance cost. Yet many institutions still rely on generic or legacy ETL and BI tooling that was designed for broad enterprise analytics. These tools can move and visualize data, but they struggle to provide the **finance semantics, end-to-end lineage, control frameworks and multi-domain consistency** demanded by CFO, CIO and CRO stakeholders.

This whitepaper explains six structural limitations of generic data tools in financial services, spanning **auditability, flexibility, usability, real-time integration, cross-domain consistency (finance–risk–regulatory–ESG) and fragmented governance**. The practical outcome is likely already familiar: slower change cycles, heavy IT dependency for business updates, reconciliation breaks between domains and increased exposure during audits and supervisory reviews.

A modern, industry-specific finance data solution addresses these gaps by embedding finance-aware metadata and regulatory content, enabling configuration-driven change and delivering unified controls across data quality, lineage, reconciliation and reporting. The result is a more resilient foundation that helps leaders:

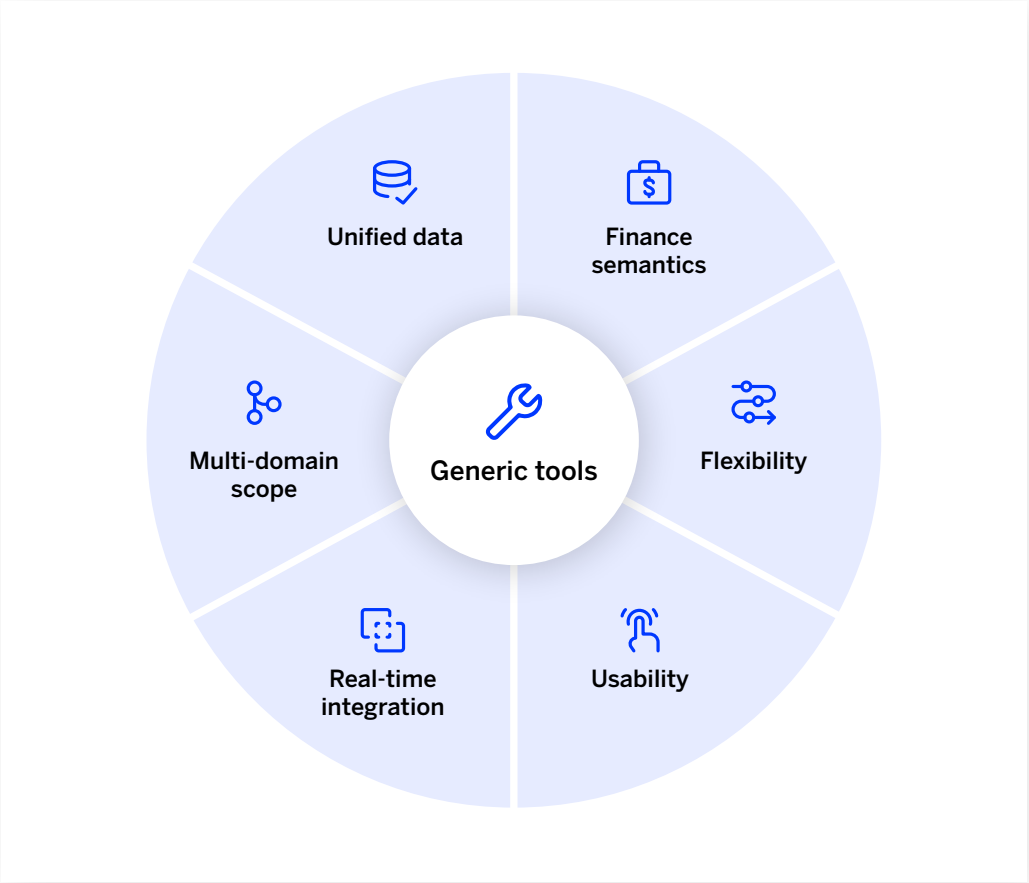
- **Reduce close and reporting friction** through standardized finance semantics and automated controls.
- **Lower compliance risk** with traceable source-to-report lineage and consistent validation rules.
- **Improve intraday decisioning** by minimizing latency and eliminating replication-driven drift.
- **Align CFO/CRO views** with a shared model that reconciles accounting, risk and regulatory outputs.

The limitations of generic data tools in financial services

A recent FCA-reported study found that 92% of UK financial-services firms still rely on legacy technology stacks, with 78% of their data on-premise rather than in modern cloud-native solutions.

That suggests many institutions continue to use generic or legacy extract, transform and load (ETL) and business intelligence (BI) tooling rather than specialized, integrated finance data solutions.

While these solutions work for broad enterprise use cases, they fall short in the highly regulated world of banking and insurance where finance, risk and compliance functions depend on **consistent, traceable data**. The limitations of generic tools fall into six key areas—finance semantics, flexibility, usability, real-time integration, multi-domain scope and unified data—which we explore below:



01. Lack of finance semantics limits auditability

Generic ETL tools are designed for broad enterprise use, not for the specific accounting and regulatory logic required in financial services. They lack built-in financial semantics such as chart-of-accounts hierarchies, posting logic or predefined mappings to accounting and supervisory frameworks. Every reporting structure—such as IFRS or US-GAAP provisioning, amortization schedules or supervisory risk metrics—and each regulatory template (e.g., FINREP or COREP-style reporting forms) must be manually coded and maintained because the system lacks native financial metadata.

This opens up financial institutions to greater operational risks. Each change in a reporting rule or accounting standard requires new code, tests and reconciliations, often across multiple systems. Without embedded finance logic or metadata, there is no consistent data lineage from source transactions to regulatory output. That weakens audit trails and increases the likelihood of **inconsistencies between accounting, risk and finance reports.**

As a result, audit teams spend more time tracing adjustments and validating calculations that a finance-specific solution would handle automatically. This means slower close cycles, a higher cost of compliance and greater exposure to supervisory findings.

02. Built for batch-first, restricting flexibility

Most generic data tools were designed for collecting and transforming data at scheduled intervals rather than continuously, known as *batch-first processing*. In financial services, this design limits flexibility. Schema changes (the structure or format that defines how data is stored) and pipeline updates often require full redevelopment, making adaptation to new regulatory or business needs slow and resource-intensive.

Because of this rigidity, even minor regulatory changes like new ESG data points or revised FINREP or COREP reporting structures can take weeks of reengineering and testing. This delays compliance and prevents real-time analysis for decision-making.

Updating these systems also adds complexity. Each modification may involve multiple connectors, third-party tools and custom workflows. Every added layer increases friction, **making reporting pipelines slower and harder to maintain.**

Some analytics frameworks compound the issue by locking users into predefined data models. Adjusting hierarchies, mappings or business rules demands extensive technical work, often requiring IT teams to rebuild components that a modern, finance-aware system could update through configuration.

03. Limited business usability increases IT dependency

Most generic data tools are developer-centric. Their interfaces are built for coding and command-line configuration. This means business users cannot adjust pipelines, reporting rules or data mappings without technical support, which creates constant reliance on IT teams.

This dependency slows critical workflows. For example, when a regulator changes a disclosure template or a business line needs to reclassify product hierarchies, finance users must request IT to rebuild or remap the data pipeline. Each change triggers a new development cycle, testing and deployment window. What could be a one-day configuration in a finance-aware solution **becomes a multi-week technical task.**

The impact is both operational and financial. Delayed responses increase the risk of missing reporting deadlines and inflate compliance costs through overtime and rework. IT teams, already burdened with maintenance, spend disproportionate time supporting routine business adjustments rather than modernizing systems.

Predictive and advanced features, such as automated reconciliation, data lineage tracking or scenario modeling, also require heavy manual configuration in generic tools. This means each model or rule has to be hard-coded and re-tested whenever data structures or regulations change. Without low-code or business-friendly interfaces, firms struggle to scale these capabilities efficiently.

04. High complexity and weak real-time integration increase compliance risk

Generic ETL and BI tools require constant customization to connect new data sources or update existing ones. Over time, this creates a patchwork of scripts, connectors and partner utilities that must be maintained separately. Each modification adds complexity, increasing the chance of errors and slowing down data delivery.

Many of these solutions still depend on SQL Server or similar legacy databases, which restrict flexibility in mixed or cloud environments. Integrating data from risk, finance and customer systems often requires workarounds or additional middleware, raising both cost and operational risk.

Real-time integration is another weak point. Instead of streaming data directly between systems, many BI solutions rely on *replication* (periodically copying data into staging areas or data marts). This approach **introduces latency and can leave reports or dashboards out of sync with source systems.** For regulated processes such as liquidity reporting or intraday risk monitoring, even small delays increase compliance exposure.

Because these tools **cannot natively integrate multiple remote systems into a single control framework,** FSIs struggle to maintain consistent validation, security and audit rules across their environments. This means higher maintenance costs, slower reporting and greater supervisory scrutiny of data accuracy and timeliness.

05. Accounting-only focus undermines data consistency across non-accounting and other domains

Generic data tools are often configured for accounting use cases, such as journal entries, balances and financial statement consolidation. They rarely extend to adjacent finance domains such as risk, regulatory reporting or ESG disclosures, which require different data models and validation rules.

As a result, institutions must build and maintain separate data pipelines for each domain. For example, an accounting system might track amortized cost and fair value for IFRS 9, while a separate risk solution calculates expected credit loss or capital exposure. Without a shared data model, reconciling figures across the two systems **requires manual mapping and reconciliation.** This fragmentation leads to reporting inconsistencies and slows regulatory submissions as well as mis-states risk exposures and calculates wrong cash flows.

ESG and climate-risk data present the same problem as generic tools cannot capture qualitative metrics, scenario data or taxonomy mapping required by new disclosure regimes. The outcome is **duplicated effort, higher cost and greater risk** of conflicting numbers between accounting, risk and regulatory reports.

06. Fragmented data quality, integration and reporting weaken control and confidence

Generic tools often leave financial institutions managing a patchwork of disconnected processes: SQL scripts for transformation, Excel for reconciliations and custom-built applications for reporting. Each tool serves a narrow purpose, but none provide a centralized view of data quality.

This fragmentation creates **blind spots across the data lifecycle**. There is no single framework to enforce validation rules, track lineage or monitor accuracy across accounting, risk and regulatory systems. When issues arise, teams investigate separately, producing conflicting results and delaying close and disclosure cycles.

Integration challenges compound the problem. Without a unified solution, data must be moved manually between systems, increasing latency and the risk of mismatched figures. For example, a liquidity report may rely on outdated data compared with the risk or accounting system, leading to inconsistencies in supervisory filings.

Reporting teams face similar challenges. Because data quality checks, integration workflows and report generation occur in separate tools, there is no shared audit trail linking source data to published results. This weakens both compliance assurance and executive confidence in reported numbers.

The outcome is slower reporting, duplicated effort and higher operational cost. But these are issues that a unified, finance-specific data foundation can prevent.

The case for industry-specific solutions vs generic data tools: A comparison

For large banks and insurers, the question now is can data platforms ingest and transform information **in a way that is auditable, explainable and consistent across finance, risk, regulatory and ESG domains?** Generic ETL/BI stacks often require extensive bespoke development to approximate finance-grade requirements, creating fragile pipelines and escalating change costs.

The comparison below outlines where generic and legacy tools typically fall short, and what differentiates **industry-specific finance data solutions** across integration, governance, controls and consumption. The goal is a step-change in **trust, timeliness and supervisory defensibility.**

Dimension	Generic/ Legacy Tools	Industry-Specific Finance Data Solutions	Strategic Impact of Industry-Specific Solutions for C-Suite
ETL / Integration			
Finance semantics and regulatory content	• Broad ETL focuses on pipelines and SQL-based transforms • Lacks native financial objects (accounts, contracts, instruments), IFRS/ Solvency mappings • High bespoke coding	• Pre-built finance semantics and templates • Mappings align to finance/risk/reg frameworks • Native support for posting logic and chart-of-accounts hierarchies	• Fewer custom builds • Faster adaptation to regulatory change • Consistent multi-filing outputs (accounting, risk, regulatory)
Integration architecture and real-time	• Often batch-first • Replication into staging marts • Connectors vary by vendor • Real-time joins across SAP/non-SAP are complex	• Event/stream-aware ingestion with virtualized access where feasible • Deep SAP and core-banking/insurance connectivity • Fewer hops	• More timely intraday insights (liquidity, risk) • Lower latency and fewer reconciliation breaks
Flexibility under change	• Schema or rule changes require redevelopment across pipelines, mappings and data marts • Brittle integrations	• Configuration-driven rules and semantic layers • Business rules externalized from code	• Shorter change cycles • Reduced regression risk and IT backlog
Business usability	• Dev-centric UX • Business users depend on IT for mappings and rule changes	• Role-based UIs, low-code rule/config management tied to finance objects	• Faster closes • Empowered finance teams • IT focuses on modernization not rework
Data lineage	• Lineage is pipeline-level and fragmented across tools • Weak source-to-report traceability	• End-to-end lineage anchored on business objects and postings	• Stronger auditability • Smoother model risk and supervisory reviews

Dimension	Generic/ Legacy Tools	Industry-Specific Finance Data Solutions	Strategic Impact of Industry-Specific Solutions for C-Suite
TCO and skills	• Multiple point tools (integration server, schedulers, scripts) • Scarce specialist skills per product	• Consolidated stack with shared metadata and controls	• Lower TCO via consolidation • Less vendor sprawl
Data Quality and Governance			
Validation model	• Rule checks scattered in SQL/ ETL/Excel • Limited reuse across accounting, risk, regulatory domains	• Centralized, reusable rule catalogue aligned to finance objects (contract, instrument, ledger) and regulatory templates	• Higher trust in numbers • Reduced late-cycle surprises
Controls and stewardship	• Issue management and SLA tracking sit outside pipelines • No single control plane	• Built-in stewardship (assign, remediate, certify) with audit trails • Policy-to-rule traceability	• Clear ownership; faster remediation • improved assurance to auditors/ regulators
Lineage and reconciliation	• Reconciliations are manual or siloed • Lineage gaps between domains cause mismatches	• Automated reconciliations (sub-ledger++GL, accounting++risk) with explainability	• Fewer breaks • Accelerated close and reporting
Usability and change	• Quality rules hard-coded • Every schema tweak forces re-engineering and re-testing	• Parameterized rules • Versioning and test harnesses for rapid change	• Agility under evolving standards (e.g., ESG fields, FINREP/ COREP updates)
Scope across domains	• Accounting-only bias • Weak coverage for risk, regulatory, ESG	• Multi-domain coverage with shared canonical model	• Consistent KPIs across CFO/ CRO/Reg • Reduced duplication
Consumption and Reporting			
Semantic readiness	• Generic BI excels at visualization but requires heavy mapping to finance/ regulatory models	• Finance-aware consumption layer with pre-defined KPIs (e.g., liquidity, provisions), hierarchies and regulatory layouts	• Faster time-to-insight • Less engineering before value
Live connectivity	• Replication to BI data marts adds latency and drift from source systems	• Live connectivity/ virtualization where applicable • Minimizes copies	• Near-real-time dashboards for CFO/CRO • Reduced reconciliation lag
Enterprise workflows	• Dashboards are isolated from control and quality processes	• Embedded workflows: drill-back to lineage, quality issues and postings	• One version of truth • Actionable analytics

Dimension	Generic/ Legacy Tools	Industry-Specific Finance Data Solutions	Strategic Impact of Industry-Specific Solutions for C-Suite
Extensibility	• Model changes require refactoring datasets and reports across tools	• Configurable content packs aligned to the canonical finance model	• Lower run-costs • Quicker roll-outs to new entities/ products
Executive experience	• Great visuals, but limited finance-specific narratives (close, variance, regulatory views)	• Purpose-built finance storyboards (close management, risk-finance reconciliation, regulatory packs)	• Clearer decisions • Reduced meeting friction

The contrast between generic and finance-specific solutions underscores that financial institutions require data solutions that understand finance.

Finance-grade data is now a control requirement

Generic data tooling can be effective for broad analytics, but in banking and insurance it repeatedly fails at what matters most, such as **trusted numbers, consistent definitions and defensible reporting under change**. When finance semantics are missing, lineage is fragmented and quality and reconciliation live in spreadsheets and scripts, institutions discover the true cost of poor data is **time, cost and risk.**

By contrast, a unified, finance-specific data foundation is designed to operationalize control and consistency at scale. It embeds the structures finance and risk teams actually work with (i.e., accounts, postings, instruments, contracts, hierarchies), and connects them to governance, validation, lineage and reporting so that change becomes **configurable** rather than **re-engineered**.

For CFOs, CIOs and CROs, the differentiator is measurable:

- **Faster close and disclosure cycles** with fewer late-stage breaks.
- **Lower remediation and audit effort** through end-to-end traceability and explainability.
- **Reduced IT bottlenecks** by shifting routine mapping and rule updates from code to configuration.
- **More consistent management and supervisory views** by reconciling accounting, risk and regulatory outputs on a shared model.

The next step is to define the capabilities that matter most for your institution, based on your operating model, regulatory footprint and target-state architecture, and use them as a blueprint for modernizing the finance data stack with confidence.

If you'd like to benchmark your current source-to-report landscape against this framework, contact us to identify the highest-impact opportunities to improve control, auditability and change agility.

SAP Fioneer

About Fioneer

SAP Fioneer provides software solutions for banks and insurance companies: built on rock-solid technology and bold creativity.

In 2021, a group of financial services experts at SAP realized their clients needed a faster, more flexible partner that could move at their pace, adapting to the fast-changing landscape. Joining forces with entrepreneurial investor DEDIQ, SAP Fioneer was born – a start-up with the weight of a global software company behind it.

Get in touch

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