

REPORT

The data architecture that empowers AI

Executive summary

AI has changed the role of enterprise data, from explaining past performance to enabling future decisions. Many organizations struggle to realize the full potential of AI insights because their operational and financial data remain disconnected. That disconnect forces teams to spend more time reconciling information than turning it into actions. A connected, governed and traceable data architecture ties business activity to financial outcomes in a central foundation for AI insight. That is how organizations use AI to move beyond traditional reports, developing automations and driving outcomes that improve agility, confidence and business performance.



Systems were designed for reports

Most of today's business solutions have data architectures and models that were designed to support reporting. Those architectures were built to store, manage, query and analyze data for the programmatic needs of the business.

AI can provide insight based on data in these architectures, but there is an opportunity for expanded value and intelligence from data architectures that are designed to empower AI.

AI moves beyond programmed reporting to dynamically understand, assess and interpret information. It adapts to answer unplanned questions, follow-up questions and analysis that traditional reporting structures never anticipated. To support those capabilities, data needs to be connected, current and auditable.

However, most organizations have a fundamental data disconnect. They have developed two ecosystems that intersect only periodically for reporting purposes:

- Operational systems capture detailed business activity.
- Financial systems aggregate and summarize information for reporting and oversight

These data structures often evolved independently in response to different business requirements, stakeholders, technologies and timelines. This creates increasingly fragmented data ecosystems that become difficult to reconcile, govern and leverage effectively across the enterprise. "Each application might have its own reporting technology on top of it," said Grant Thornton Technology Modernization Partner Matt Lavery. "So, it becomes a spider web of data."

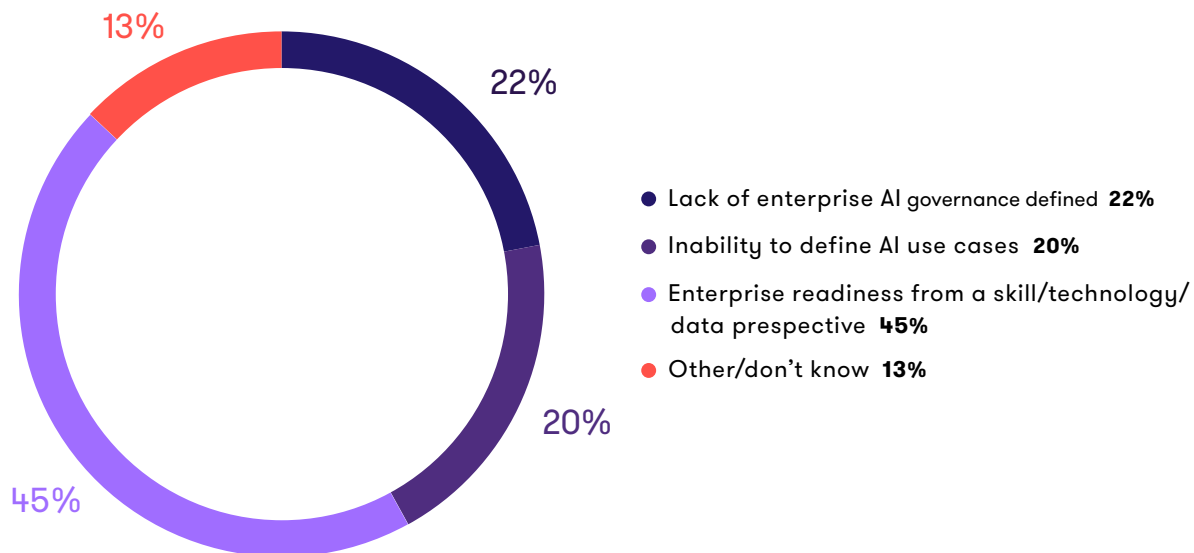
Data disconnects are one of the top factors slowing AI adoption. In a recent Grant Thornton webinar with more than 2,000 attendees, respondents indicated that enterprise readiness from a skills, technology and data readiness perspective is slowing AI adoption more than a lack of AI governance or AI use cases.

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Matt Lavery,

Partner, Technology Modernization,
Grant Thornton Advisors LLC

Q: Which of the factors are the largest impediment to AI adoption?





The gaps between operational and financial data are a significant challenge for many organizations. These gaps block organizations from deploying AI tools and capabilities to generate real-time, actionable insights that connect business drivers with performance outcomes.

Reconciling but not analyzing

Many companies have tried to bridge data gaps with integrations, reconciliation processes, reporting layers or targeted solutions. Yet, these approaches usually address the symptoms rather than the root cause: operational and financial data remain disconnected at their core, and they have different levels of detail.

“When you have a big chasm in the level of detail, it’s hard to say that what you’re reporting from a financial perspective actually aligns to the operational systems,” Lavery said.

“How do you get back to that detail? How do you connect what you’re seeing from financial metrics to what’s happening in operations and get those deeper key insights?”

“When data is coming from different sources, at vastly different levels of detail, it is very difficult to reconcile those,” Lavery said. “So, what we hear a lot is, ‘We’re not analyzing our data, we’re trying to reconcile it.’ You spend more time reconciling than on actual analysis.”

The result is a common frustration across finance organizations: Instead of focusing on strategic decisions, teams must focus on determining whether the numbers can be trusted.

The challenge becomes even greater when organizations introduce AI. If users cannot confidently trace data to its source, they are unlikely to trust AI-generated insights derived from that data. The problem is not with the capabilities of the technology. The problem is with the architecture supporting it.



Bridge the gaps

When organizations try to bridge data gaps with custom solutions or processes, they often accrue additional maintenance costs and create complexity that limits future transformation initiatives.

Instead of creating “black box” solutions that solve individual gaps, organizations should consider how one unified architecture empowers AI-driven insight across finance and operations. “The idea here is to remove all the black boxes,” Lavery said. “Have data managed by the business, so people can see exactly how the data comes in, how to account for it and how to map it, all in one place that’s visible to functional finance users.”

“You should be able to actually drill into a data set and see the different attributes that are being captured from those operational source systems,” said Grant Thornton Technology Modernization Director Chloe Harfield.

Harfield said the [Grant Thornton Connected Ledger](#) framework connects operational activity to the financial transactions recorded in the general ledger through a structured data model. This connection provides visibility into how data is captured, transformed, accounted for and reported.

A clear connection

Once organizations establish a clear, traceable connection between operational activity and financial outcomes, they create a foundation that can be understood by both users and AI models, such as generative AI powered by large language models (LLMs).

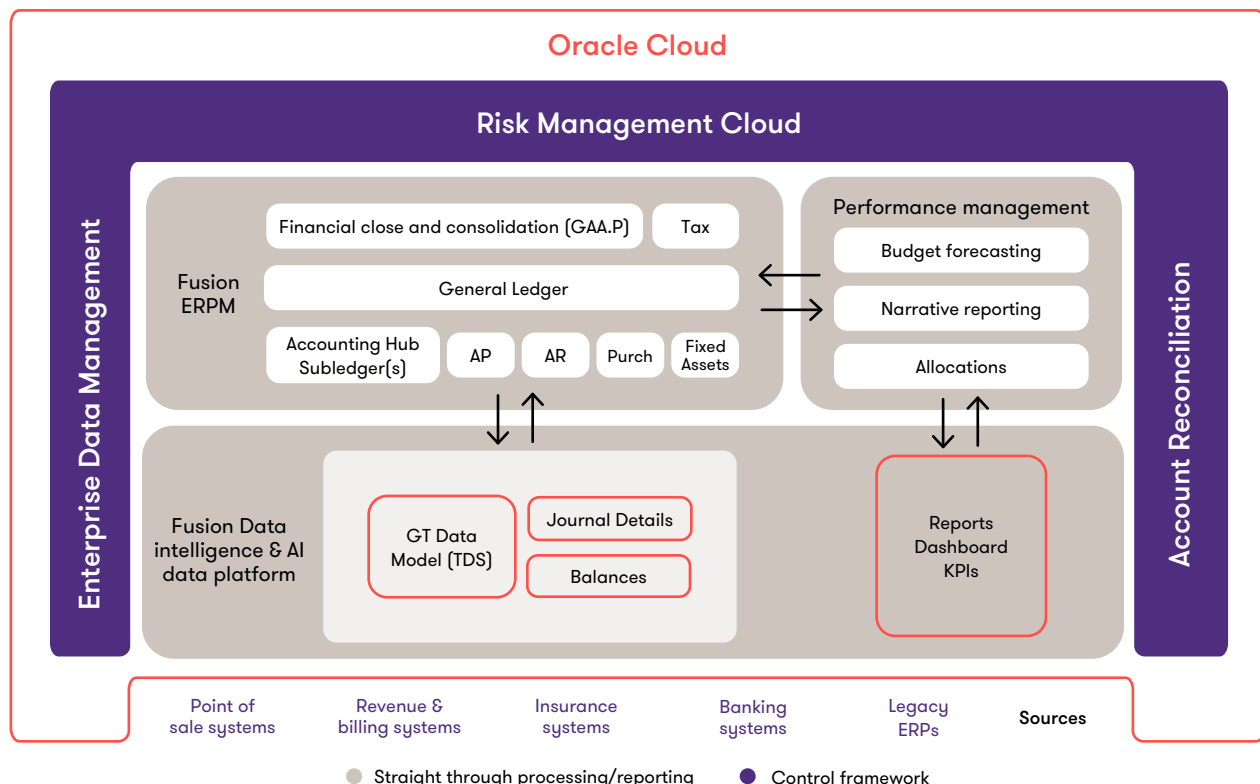
“That’s where we start to bridge the gap,” Harfield said. “You’re going to be able to see that, against a journal batch is a detailed transaction ID, associated to an aggregated transaction ID, associated to an accounting date. That’s the connective layer from the operational data, where we’re able to see the debits and credits and accounting date associated. You can start teaching the system how you want to connect with it and speak to it.”

The Grant Thornton Connected Ledger can use Oracle Fusion Data Intelligence (FDI), AI Data Platform, Oracle Fusion Cloud ERP and EPM capabilities to bring operational activity, accounting logic, reporting detail and controls into a more unified structure.

This framework can provide several advantages that include the following:

- Straight-through processing automates the flow of data from source systems through accounting processes, reducing manual intervention and reconciliation effort.
- End-to-end traceability provides seamless drill-back from general ledger balances to detailed source transactions to improve transparency and auditability.
- A single technology platform standardizes data, integrations, AI services and business processes across Oracle's cloud platform to reduce complexity, minimize custom development and lower ongoing support costs.
- Stronger controls & governance embeds structured data pipelines and controls to improve data integrity, compliance and financial oversight.
- AI-ready data foundation structures and harmonizes operational and financial data within FDI to support advanced analytics, predictive insights and embedded Oracle AI capabilities.
- Reduced architectural debt minimizes dependency on custom reporting layers, bespoke integrations and independently developed AI solutions, enabling organizations to respond more quickly to acquisitions, reorganizations, regulatory changes and evolving business strategies.

Grant Thornton Connected Ledger





Empower answers

In a traditional model, source data can move through extraction, enrichment, validation, summarization, accounting and account-mapping processes that are managed through black-box integrations. That can leave finance teams with high-level financial reporting, limited drill-back capabilities, inconsistent accounting treatment and time-consuming reconciliations.

Platform for answers

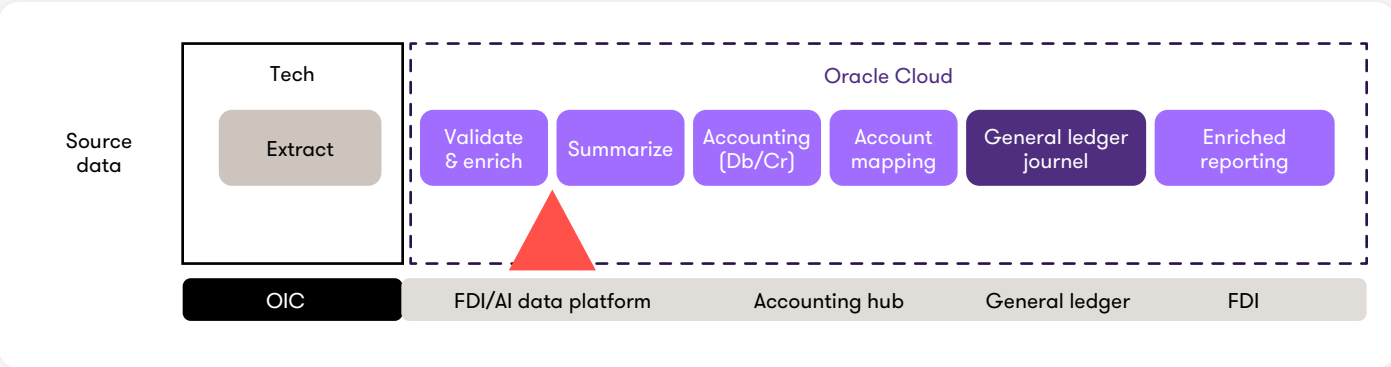
In the Grant Thornton Connected Ledger, source system data can be ingested at a granular level, aggregated, enriched, and validated in the data layer of FDI and processed through Accounting Hub before posting to the general ledger.

In this data layer, companies can capture operational details that are not required for accounting but can be enriched with accounting entries from the general ledger.

This enriched data returns to FDI upon journal posting, where it establishes a stronger connection between the operational event, the accounting treatment and the reported outcome.

That connection gives finance teams and AI tools a more useful foundation for answering “why,” because the underlying data remains connected from the source through the ledger.

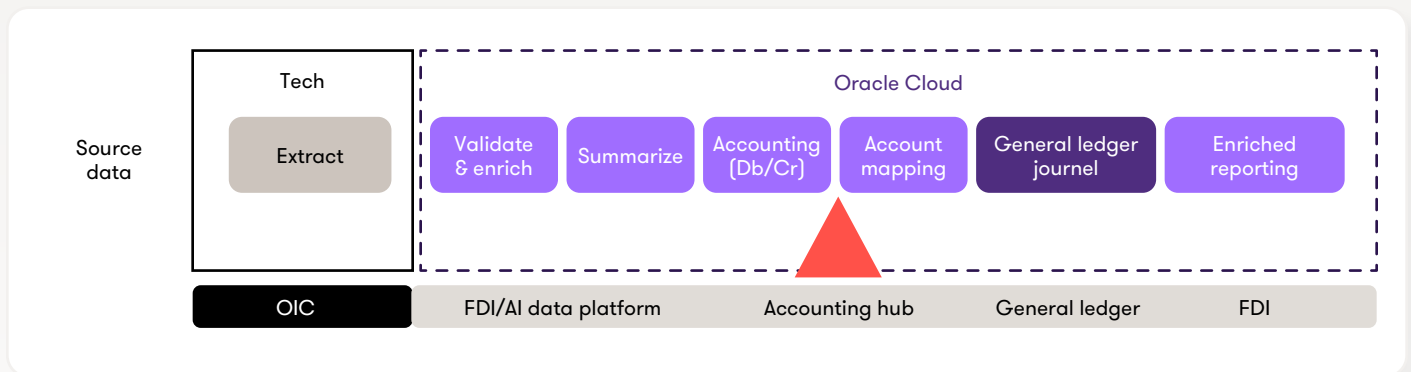
Data platform



Oracle FDI and the Fusion AI Data Platform play an important role in this architecture. Rather than treating analytics as a separate layer sitting above financial systems, these capabilities help place data, analytics and AI at the center of the finance architecture. FDI becomes the data layer that captures operational data and supports summarization and aggregation into the format consumed by Accounting Hub.

This is where the core concept of connection becomes operational. A connected, traceable data foundation helps AI move beyond static reports by giving it comprehensive and current data that ties operational drivers directly to financial results. The Grant Thornton Connected Ledger builds a foundation that empowers AI by preserving detail, connecting accounting logic and enabling drill-through from balances to journals, subledgers and source transactions.

Accounting hub



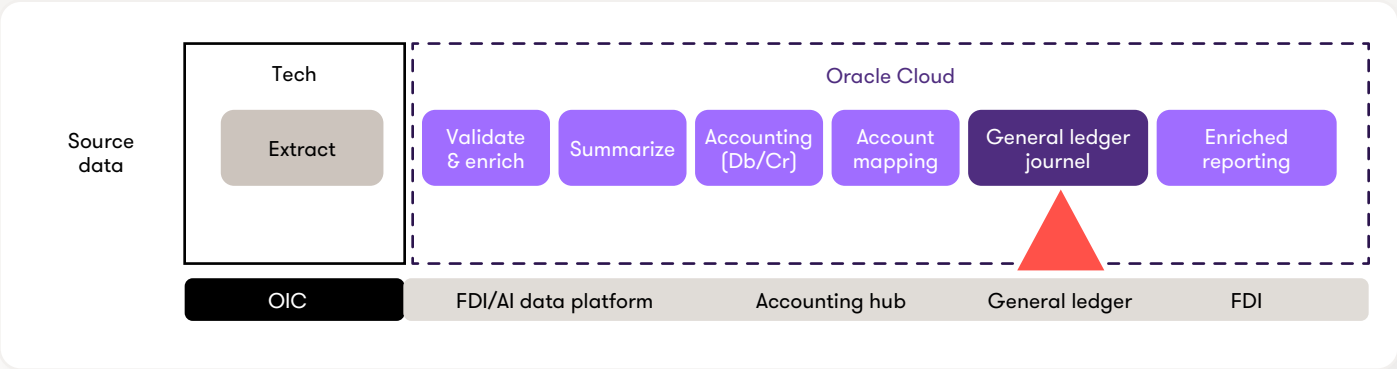
Accounting Hub serves as the accounting transformation layer within the Grant Thornton Connected Ledger framework, and serves as the bridge between operational and accounting data. While operational systems capture the activity of the business, Accounting Hub is where organizations apply the accounting policies, rules and governance necessary to transform that operational activity into accounting entries.

Rather than embedding accounting logic in “black boxes” across disparate applications and integrations, organizations can centralize accounting treatment in a single, controlled environment that promotes consistency, traceability and transparency.

This approach provides more than accounting efficiency. It creates a direct relationship between the operational event and its resulting financial impact. Every accounting entry can be traced back to the detailed business activity that generated it, creating visibility into how transactions were classified, summarized and reported.

Finance teams gain confidence that accounting policies are being applied consistently, while auditors and regulators benefit from stronger transparency and explainability.

General ledger



The General Ledger remains the authoritative record of enterprise financial performance. Within the Grant Thornton Connected Ledger framework, trial balances and journal entries are no longer the end of the reporting process. Instead, they become a gateway to deeper business context.

Because operational transactions, accounting treatments, and journal entries remain linked, organizations gain the ability to move seamlessly from a financial result to the activities driving that outcome.

A reported revenue balance can be connected to underlying contracts, transactions and customer -level activity. An expense trend can be traced back to the business events and line items that generated the cost. Finance teams are no longer limited to asking whether a number is correct. They can begin investigating why a result occurred and what actions may influence future performance.

Strong controls and data governance

A modern finance architecture needs more than connected data. It needs governance, reconciliation and risk management processes that help ensure this connection remains reliable and controlled as it moves across systems.

Oracle controls capabilities support a platform approach that reduces dependence on bespoke processes while strengthening visibility into how information flows through the organization. For AI, that means the architecture supports more than data availability. It supports data integrity, accountability and confidence in the results being generated.

With complete lineage from source through the ledger, Oracle Account Reconciliations can apply automated reconciliation of source systems to ledger data.

Oracle Enterprise Data Management centralizes the management and propagation of changes to financial structures, hierarchies, master data and mappings. It also provides visibility into how data is organized and accounted for across the business.

This visibility clarifies the complexity that often surrounds legacy reporting environments, while making it easier to adapt and analyze changes in business structure, acquisitions, new products and evolving reporting requirements.

Analytics and AI-driven insights

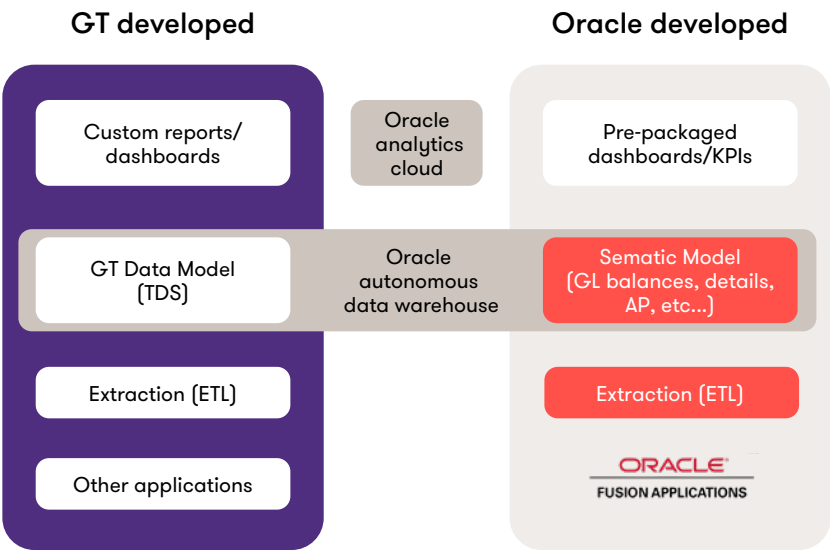
Traditional financial reporting often sacrifices operational detail in exchange for summarized results. While this approach supports compliance and financial statement preparation, it can limit an organization's ability to understand the operational drivers behind business performance.

The Grant Thornton Connected Ledger addresses this challenge by preserving critical operational attributes throughout the financial process and reconnecting them to reported outcomes, all within a single environment.

Grant Thornton Connected Ledger and Oracle

Grant Thornton Connected Ledger and Oracle

- **Minimizes Custom Build** – Transactional Data Store (TDS) is custom but “small” and easily transitioned. Load data as is, so minimal to no transformation is needed to be coded.
- **Maximize Delivered Capability** – FDI provides a delivered reporting data model, subject areas and loads the data from ERP.



FDI unites Oracle’s delivered Fusion data models with Grant Thornton’s preprocessor data models to create a single, connected platform for financial reporting. The result is a richer analytical foundation where finance, operations and AI can work from a common understanding of the business.

Decision-makers can view financial metrics alongside customer activity, product performance, claims, inventory movements, projects, contracts or other operational dimensions. Users gain the ability to move naturally from high-level KPIs to detailed transactional information without relying on extensive reconciliations, spreadsheets or custom reporting environments.

This shift fundamentally changes the role of reporting. Rather than simply describing what happened, reporting becomes a mechanism for understanding causality and identifying opportunities for action. Finance leaders can analyze the operational drivers influencing performance, evaluate emerging trends and investigate anomalies with greater confidence and speed.

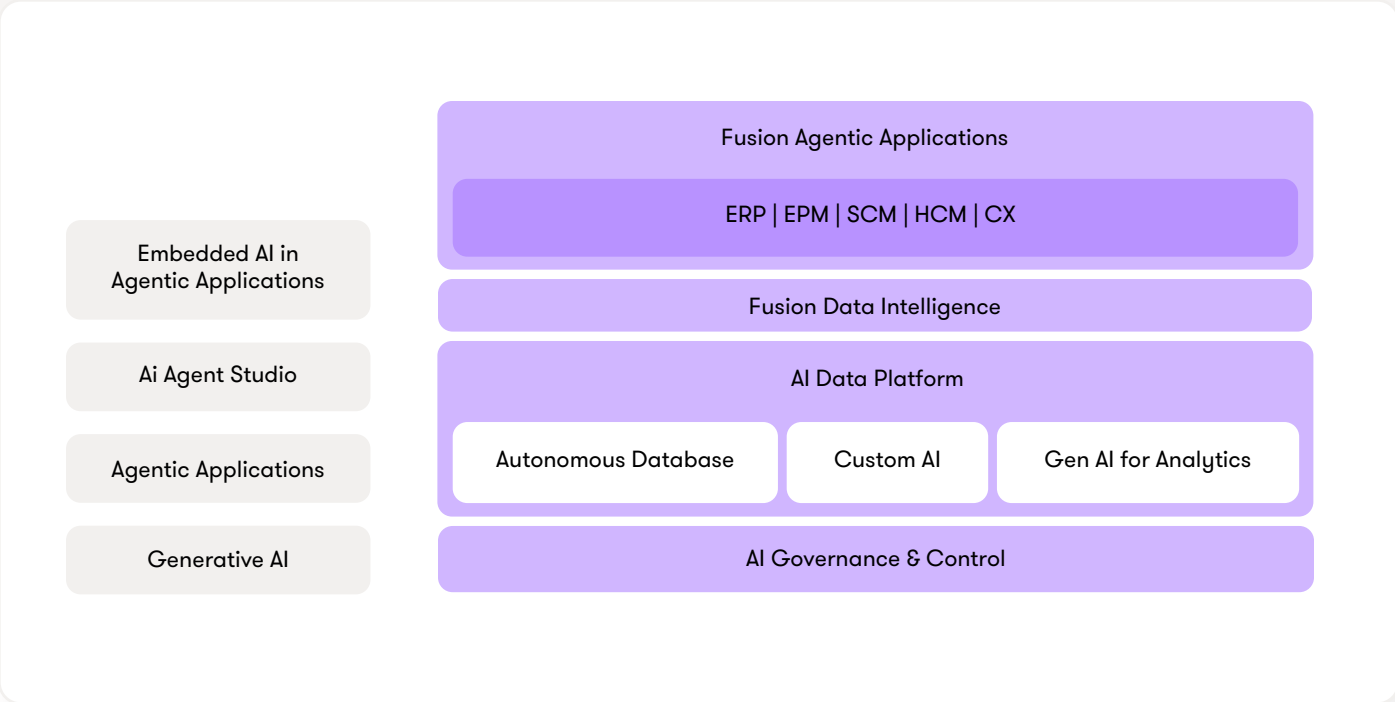
More importantly, this connected context creates the foundation for AI-powered finance. Natural language experiences leverage generative AI to create an interactive experience for users. Predictive analytics, embedded AI capabilities and autonomous agents become significantly more valuable when they operate against a data model that preserves business meaning, accounting context and traceable lineage.

Users are generating AI-driven reporting against the same financial transactions that are used to audit the books. The outcome is not just better reporting, but a platform for intelligent decision-making that extends beyond traditional analytics and helps organizations determine what should happen next.

The Oracle platform approach supports the convergence of ERP, EPM and analytics. As these technologies become more closely connected, organizations gain new opportunities to apply AI across planning, forecasting, reporting and operational decision-making. Predictive cash forecasting, intelligent reconciliations, master data management and advanced analytics all become more effective when they can draw from a consistent, governed data foundation. Rather than operating as separate applications, these tools work together across the Oracle platform to provide a more connected view of business performance.

Some organizations might begin by establishing straight-through processing to connect source systems and financial outcomes. Others might start by modernizing reporting structures, planning capabilities or data- management processes. The right path depends on the organization's current architecture, business priorities and long-term strategy. What matters most is creating a roadmap that aligns data, processes and technology around a shared foundation.

AI embedded in the Oracle platform



The end goal is a finance data architecture that is simplified, agile and AI-ready. Simplicity requires common technology, connected processes and stronger controls. Agility comes from the ability to adapt to organizational change, add new data sources and maintain visibility from reported results back to operational activity.

AI readiness comes from connected, governed and traceable data that can support forecasting, reconciliation, analysis and decision-making with confidence.

In Oracle Fusion ERP applications, Oracle EPM applications and FDI, AI can help users generate recommendations and automate workflows within the applications where work happens, while interacting in natural language.

- Oracle ERP agents and embedded AI: Ledger Agent, Payables Agent, Payments Agent and other finance-oriented capabilities can help monitor financial trends, identify exceptions, automate standard transactions and guide users toward resolution.
- Oracle EPM and planning intelligence: Predictive forecasting, variance narratives, management reporting narratives and planning-oriented agents can help FP&A move from static reporting toward continuous, connected planning.
- FDI and AI Data Platform: Generative AI and analytics can operate against governed operational and financial data, making insights easier to trace, validate and explain.
- Fusion Agentic Applications: Low-code, no-code and pro-code tools can extend Oracle-delivered business processes and deliver agentic applications while preserving security, governance, workflow and business-object context.

- Developer-enabled extensibility: Oracle Code Assist and familiar developer environments such as Visual Studio Code can support application development and modernization while allowing organizations to align custom extensions to platform standards.

AI is changing the purpose of enterprise data. The objective is no longer simply to report what happened. The objective is to help organizations determine what should happen next.

Leaders are more likely to act on AI-enabled insights when they can validate the data behind them. Oracle ERP capabilities help decision-makers see where data originates, how it has been transformed and how it supports reported outcomes. The Grant Thornton Connected Ledger framework reinforces that capability by enabling drill-back from general ledger balances to detailed source transactions, strengthening transparency and auditability across the enterprise. Controls and data management give those connections enduring strength. Together, these form a foundation for trust, and outcomes that go beyond reports.



Drive outcomes beyond reports

As organizations improve data connectivity, they strengthen one of the most important prerequisites for AI adoption: trust.

When leaders can validate where data originated, how it was transformed and how it supports reported results, they are far more likely to trust and act on AI-generated recommendations. Organizations that establish a connected foundation will position themselves to take advantage of expanding AI innovations such as embedded AI, predictive analytics, AI agents and agentic applications. By maximizing the current and future AI capabilities within Oracle ERP, EPM, FDI and Accounting Hub, organizations can reduce complexity, lower total cost of ownership and accelerate innovation without introducing additional technology layers.

In the AI era, data readiness is no longer about reporting. It is about creating a connected enterprise platform that supports intelligent decisions, intelligent automation and intelligent action.



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