

Financial services subledger accounting Driving the finance function to a lower common denominator



The challenge

Despite investments in financial, management, and risk accounting platforms, a number of challenges continue to plague even high-quality financial services institutions around the world. In attempting to solve for these challenges and accommodate demands from a broad set of stakeholders, many organizations have established data quality as their number one priority to address. Although, the new processes, tools, and reporting abilities provide improvement, without clean, trusted, and reconciled data, the chain breaks down and the value of strategic investments is limited.

Examples of how these challenges manifest themselves are outlined below. These challenges are forcing organizations to look at their underlying data and establish ways to increase its integrity, management, and strategic value.

Regulatory demands

The volume of regulatory demands show little sign of abating, with organizations forced to represent information at more and more granular levels, often with new and high-quality rules by jurisdiction. These requirements fall into categories of trade, operational, and financial reporting with each request type coming with complex dependencies to show reconciled and consistent views and disclosure for underlying operational and statistical information.

Environment complexity

As organizations have evolved through time, so has the complexity of their technology and operations, with integration of the front, middle, and back office representing a labyrinth of solutions and patterns to maintain and control. As even minor changes are required, a cottage industry is typically brought to life to unravel the spaghetti and patch the environment, highlighting aging systems, manual effort, Excel-based solutions, and control risks.

Subledger accounting is about strengthening the integrity and value of financial information by preserving its connection to underlying core business events and transactions”

— Mark Shilling
Financial Services Principal
Deloitte Consulting LLP

New business and products

In search of revenue growth and competitive edge, finance is often expected to rapidly integrate new businesses and products and create a core financial accounting infrastructure where none currently exists. This often places great strain on already scarce resources and generates friction with business partners who worry their time to market will likely be delayed and economic opportunity diminished.

Cost reduction

In parallel with meeting more demands than ever, Finance is faced with the contradictory task of significantly reducing its own operating costs, and providing transparency to efficient opportunities across the enterprise. These tasks require both an operating model change and a reduction of manual effort, in conjunction with increased capabilities to efficiently assess more granular information including underlying cost drivers.

Customer centricity

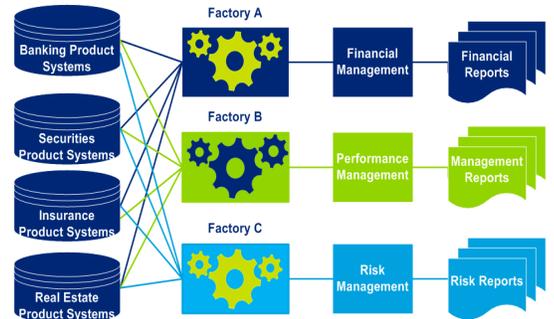
In the post crisis world, the industry battlefield has shifted to the customers' "share of wallet". This requires a more detailed understanding of customers across products. These integrated views are just not available in the current siloed environment. Organizational strategies require a change in thinking.

Finance and risk integration

With the 2008 crisis, the world was made acutely aware that financial services organizations needed to do a significantly better job of managing performance relative to risks. While much focus has since been applied to improved valuation accuracy, capital adequacy, stress testing, scenario analysis, and implementing change in accounting rules — much of the integration of risk parameters into financial management still needs to be undertaken. Chief financial officers and chief risk officers are now acknowledging that a union of their investments creates an opportunity to reduce costs and create a competitive edge, but few have yet established models to capitalize on this opportunity. It requires convergence of common data at a lower level of granularity.

The root cause

Some organizations have traditionally sourced, transformed, stored, processed, and reconciled data in silos. While these efforts have likely delivered benefits, they have also created factories within Finance that represent varying degrees of overlap, redundancy, and inefficiency.



Traditional factory environment

Simply put, every time data is moved from one finance repository to another, or independently sourced, breaking points are introduced into the supply chain that requires continuous monitoring and reconciliations. Additionally, these core information technology infrastructure problems are only exacerbated when the targets do not share the same data model and do not share the same tools and rules to exchange the data.

These factories represent operating complexity and are problematic to maintain due to a number of breakpoints.

Breakpoint 1: Inconsistent data standards and accounting treatments

Sourcing and transforming data repeatedly results in inconsistent and often times inefficient data standards and accounting treatments.

- Different levels of financial information and inconsistent data usage opens up data for interpretation.
- Reconciling and piecing back information becomes difficult, cumbersome, and time consuming.
- Varying standards result in an increased and extended chart of account segments, data mappings, and a proliferation of alternate hierarchies.

Breakpoint 2: Black box architecture with multiple points of control

Point-to-point solutions can make it difficult to see all the process components end-to-end within the information supply chain; from how the data was sourced to how it was enriched, calculated, and aggregated.

- One-off enhancements to aging systems create a spaghetti of black box architecture with a limited capability for data drill back, and data lineage, which precludes establishing a single provision point.
- MS Excel- and Access-based ecosystems grow throughout the organization as processes become labor-intensive and unsustainable.
- Drilling down or through to the transaction itself can be a very labor-intensive process, which may require multiple system access for an individual or help from other departments.
- Lack of a common provision point also creates a complex governance structure impacting day-to-day operations and stakeholder alignment.

Breakpoint 3: Granularity and timing differences

Inconsistent application of the business rules, data sourcing, and transformation create varying levels of data granularity on a daily basis, which creates a snowball effect of data issues.

- Timing of stratification for each transfer point becomes critical as reconciliation and granularity of the data starts varying through the transfer points redundant business processes become an inevitable byproduct of this occurrence.

Breakpoint 4: Data models with limited traceability

Generally, there is no unified finance data model that integrates all finance applications. It can be difficult to consistently obtain full data synchronization and definition without a standard data model.

- Lack of a common finance data model creates no common, trusted, reconciled source of truth increasing overall cost to maintain point to point solutions.
- Master data management becomes a challenge as the referential integrity is unknowingly compromised.
- A cottage industry of alternate, manual intensive solutions inevitably arises.
- Most importantly, an effectively deployed integrated reporting solution relies upon a common data model underpinning; fragmented data definitions result in soaring efforts to reconcile and piece together the reporting information required for complying with regulatory reporting standards.

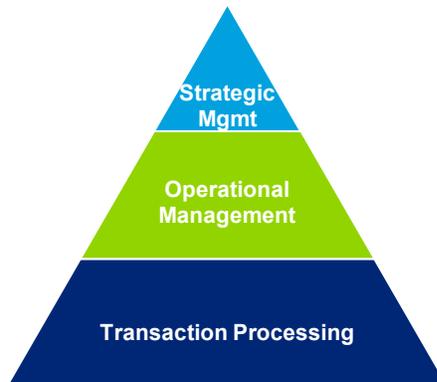
Breakpoint 5: Unclear organizational boundaries

The pieces of these solutions are distributed among front office, back office, and middle office operations creating ambiguous and inconsistent ownership, accountability, and control.

- The bite-size view of the data creates complex stakeholder management as the lines of businesses, finance, and risk organizations start reaching out across functions to get a complete and integrated view of the data.
- Changes from one function sometimes triggers a "spiral chase" across other functions of information reconciliation, quality, and lineage, and often results in information being out of synch.
- Additionally, fragmented data governance that spans across the organizations often creates unintended communication gaps and unrealized dependencies.

The implications

A suboptimal operating environment creates material efficiency and effectiveness constraints. As a result, organizations spend more time on operational management and transaction processing at the expense of more value-added analysis that supports the business.



Implication 1: Cost gaps

Nonstandard integration and accounting rules constrain the centralization and specification of the processes into more efficient organizational structures, such as shared services and centers of knowledge.

- Duplication and redundancy of solutions drive some of the key cost ratios higher in what is already a current low margin/declining environment. These ratios include operational and transactional processing times versus analysis times, cycle times, and manual effort (in hours).
- Operational costs increase due to the patch-work and maintenance of aging financial systems and interfaces.

Implication 2: Control gaps

The traditional approach to data management consists of a large number of alternate ways of information sourcing and transformation. As a result, environmental complexity increases the operational risks associated with the inability to enforce controls and trace data lineage.

- Suboptimal and very tactical solutions emerge that proliferate non-rationalized alternate hierarchies, non-standard code block mappings, and inconsistent reporting methods resulting in varying control gaps.
- Risk of failure increases in specific finance processes due to manual and Excel-based reporting and analysis, and heightened compliance and control requirements.

Implication 3: Reporting models

The alignment of the data and reporting models provide environments across the infrastructure that can be uniquely configured at each point in the process to support the organizational (management, regularity, and tax) reporting requirements.

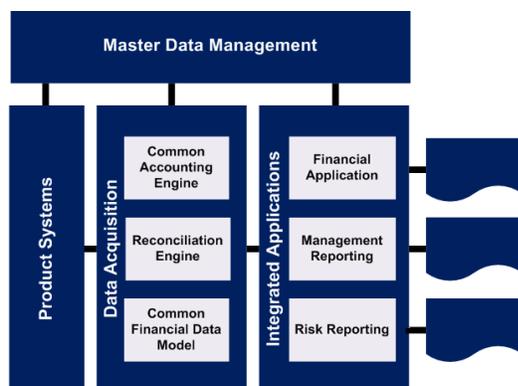
- Subledger alignment allows the segmentation of reporting into categories of trade, operational, and financial where targeted solutions deriving key performance indicators (KPIs), volumes, and exposure positions can be developed at the applicable stage of the accounting life cycle.
- Simplifying the back end “one size fits all” approach to reporting, and establishing a more structured approach with standard requirements by stage.
- Inconsistent finance and risk chart of accounts and hierarchies provide varying results that impact daily operations as well as strategic analytical capabilities.

Implication 4: Capability gaps

Lack of controls and increasing maintenance costs impact an organization’s information analysis and review capabilities, and eventually ability to generate economic value.

- Spending a majority of the time processing transactions and performing operational management, makes strategic management that helps move from “what I need to do” to “what I need to know” suffer.
- Speed of decision making slows down an organization's responsiveness to key events and changing priorities.

The solution



Finance has increasingly recognized the importance of the challenges and their root causes. Finance is moving to an integrated factory environment by removing specific information technology and operational infrastructure weaknesses. This is due to finance recognizing inefficiencies, complexity of supporting multiple factories, motivation to establish more integrated architecture, and converging granular subledger data for straight through processing, analytics, and reporting. Although, no individual components give a silver bullet, a combined solution presents an end-to-end approach.

Integrated strategic components for this approach include:

Component 1: Data acquisition

Data acquisition can take a more modular, service orientated approach. Business process modeling can have a larger role, as business events and valuation triggering events from source systems will be captured at the contract level.

- Data acquisition component is designed to extract the subledgers embedded within other factories and consolidates into one integrated layer with atomic level contract and instrument information.
- Financial, operational, statistical, and derived data is delivered regularly, consistently, and potentially “near time” depending on the new capabilities of in-memory processing.

Component 2: Common accounting and reconciliation engine

The solution incorporates the accounting engine as the control and validation point for the enterprise resource planning (ERP) and analytical platforms.

- Business and systems events are efficiently translated into accounting transactions through a standard gateway and accounting rules engine, thereby

providing consistent rules application and data integrity. A common set of data gets treated uniquely, as required, based on the respective events (e.g., International Financial Reporting Standards (IFRS), regulatory reporting, etc.).

- It also enforces data capture requirements for other accounting methods, downstream processes, and reporting areas at this juncture.
- Rules are proactively managed and externalized from the source systems and data transformation programs to promote ownership, transparency, and a full audit trail.
- An industry standard accounting rules library provides a standard set of KPIs, measurement criteria, and decision support processes resulting in integration of Finance, Performance, and Risk management functions eventually making global standardization a reality.
- Reconciliation processes are streamlined as a result of the underlying information granularity and linkage, and standardized accounting rules.
- Having a standard provision and point of control allows to streamline control and governance throughout the architecture and operating model.

Component 3: Common financial data model

Using a common financial data model and data store facilitates simplifying and rationalizing the overall architecture. This capability allows transactions to be reconciled with the source systems as well as new products, business, and apply various accounting treatments e.g., IFRS, regulatory changes, etc. to be integrated as necessary.

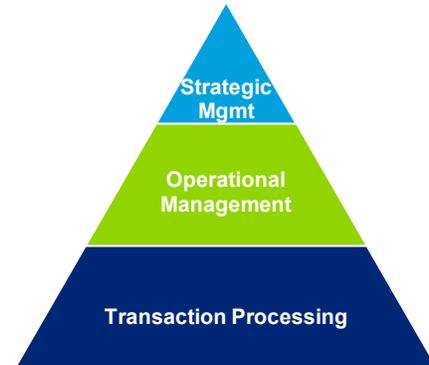
- The common financial data model enables the accounting rules engine to apply different rules on the same events, for different accounting methods since the transactions carry the required attributes and characteristics.
- Storing the results at a transactional and contract/instrument level enables comparability and transparency between the accounting methods and results.
- Transactions between the ERP, analytical, and reporting platforms are linked, end-to-end, to enable drill down and drill through capabilities with full audit trail down to the transactional level, if necessary.

Component 4: Master data management

A standard master data management tool and processes are utilized across the spectrum of Finance applications and accounting methods to support data consistency and referential integrity.

- One expansive, but singular, data model has an exponential effect. Master data maintenance is easier to manage and there is less cause for data definitions and lineage to get out of sync.
- Linkage of the master data repository with the accounting rules engine helps enable the implementation of the global chart of accounts as well as specified and rationalized primary and alternate hierarchies.
- The approach requires data management and RACI* collaboration across the organization resulting in streamlined workflow processes and version control.

Component 5: Target operating model



Integration of the data acquisition, applications, analytics, and reporting in the solution enables a shift in the organization's focus to increased strategic management.

- The approach provides the opportunity to reduce reconciliations, adjustments, and manual efforts
- It also enables a shift in the operating environment to utilize expanded shared services, centers of excellence, business process outsourcing, and, as a result, improve overall processing efficiencies.
- System costs can be reduced as the infrastructure and support systems gets rationalized and cost improved.
- The final result is a responsive and agile finance function, with greater ability to predict and respond to change.
- Appropriate infrastructure sizing enables holding, processing, and publishing information fast enough to meet business needs. Considerations for specifying performance include use of in-memory based processing and switching from batch based processing to event-based processing to enable data consumption ready in a "near real time" environment.

*RACI - RACI is an acronym that was derived from the four key responsibilities most typically used: Responsible, Accountable, Consulted, and Informed.

Critical success factors (CSF)

CSF 1: Prioritization and Cost/Benefit

Current market conditions are requiring organizations to act on multiple priorities simultaneously. With constant regulatory and global economic, political, and strategic changes, undertaking a complete reestablishment of infrastructure becomes almost an impossible task.

- Establishing an ownership and accountability model leveraging leading industry practices, forming long-term vision, and sizing implementation according to an organization's appetite helps to gain a competitive advantage.
- Evaluating longer-term cost/benefit of atomic data granularity and linkage serves as a sound measurement technique.
- Considerations such as having an agile finance function or ability to provide rapid response to changing market and regulatory conditions or capability to introduce new products or integrating a brand new business effectively allows organizations to measure cost/benefit and prioritize initiatives.

CSF 2: Implementation strategy

Establishing a common data-sourcing environment for straight-through processing and contract level accounting to increase data quality is sometimes seen as an amorphous and intimidating topic, and as a result, many clients are unclear where to start.

- One important aspect to consider at the beginning is to establish pragmatic improvement targets versus boiling the ocean.
- Implement a foundation first, standardize sourcing, accounting, and reconciliation engines and prioritize migrations onto the foundation over time, in a phased approach, as resources and priorities warrant.
- Build a strong business centric foundation, as well as, increase the overall stakeholder buy-in by revalidating what the business needs to know and how it can make decisions that matter at the outset.
- Consider creating additional data acquisition areas and accounting engines by functional areas or lines of businesses to perform other analytical functions than regulatory, management, and risk.

CSF 3: Organization and stakeholder alignment

Organizations are still evolving from the economic crisis and in process of establishing strategies that support front, middle, and back office integration and integrating finance and risk functions.

- The key to having a more holistic view of an organization's product offering is to establish an integrated strategy and supporting contract-linked architecture.
- As the organization shifts to a cohesive infrastructure, legacy roles and responsibilities require correlation. Aligning stakeholder responsibilities simultaneously is critical.

CSF 4: Data standards and governance

Data is the common denominator for the line of businesses to make decisions that matter and have a greater ability to perform holistic analysis on product offerings.

- Organizations should define data standards, governance, quality, thresholds, and tools.
- Data standards enable increasing usage of a common finance data model, standardized accounting rules library, reconciliation processes, and analytical KPIs.
- The overarching governance processes allows streamlining the number of chart of account mappings, values, and alternate and primary hierarchies with an end-product being a data sourcing and transformation approach that has ability to expand as necessary.

CSF 5: Consumption requirements

In the past, many organizations have taken on business process reengineering to meet external and internal information needs. For an organization to truly meet these requirements it should start with what the business "needs to know" followed by supporting data needs, and then reengineering the underlying processes to support those needs.

- This approach solidifies the foundation and provides the ability to inherit changes with reduced rework as the required information model gets defined early on.
- The solution's early focus on regulatory, management, and financial reporting provides the requirements necessary to establish a common financial data model and an appropriately sized infrastructure.

CSF 6: Infrastructure sizing and performance

Many of today's financial services organizations are global in nature and offer products in different segments. An effective solution provides an adequate infrastructure to process a large volume of instrument/contract level information for these product and make it analysis-ready.

- Infrastructure sizing should align with the organization's service-level agreements to preserve or improve cycle times.

How can Deloitte help?

Deloitte has established a specific financial services Subledger Accounting Service Offering to assist clients in assessing their environment, establish strategic plans for enhancement, and support implementation. Deloitte's Subledger Accounting Service Offering consists of the following components and provides strategy, tools and process framework, and physical solutions to reduce solution-enablement time, risk, and cost and at the same time accelerate delivery.

- **Data management** — Ability to meet the demands of finance and downstream constituents (in a common language) via analysis, design, and build of specific financial, operational, statistical, and derived data.
- **Accounting rules** — Leverage an industry standard set of banking, securities, and insurance core product-specific multi accounting principles generally accepted in the United State of America to improve data quality, rationalize reconciliations and manual effort, and standardize results.
- **Financial systems architecture** — Accelerated analysis, design, and build of accounting engine and subledger architectures to provide consistent straight-through processing, and rationalize legacy systems and black boxes.
- **Analytics** — Identify analytics and data required for general accounting, regulatory reporting, performance management, tax, treasury, risk and liquidity, and investments with an industry standard report and KPI catalog.
- **Front to back office integration** — Analyze, design, and build data acquisition approaches and a integration between front office and back office approaches and stakeholders.
- **Regulatory alignment** — Structured analysis of reporting requirements, and appropriate governance models can provide insights that can simplify the approach, reconciliation framework, and need for manual intervention.
- **Operating model** — Ability to establish target operating models for increased efficiency between business, finance, operations, technology, shared services, and centers of knowledge.

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Contacts

Financial Services and Finance Transformation Leads

Mark Shilling (Primary Author)

Principal
U.S. FSI Finance Transformation Leader
Deloitte Consulting LLP
+1 973 602 5218
mshilling@deloitte.com

Toby Menzel

Principal
Global FSI Finance Transformation Leader
Deloitte Consulting GmbH
+49 40 32080 4857
tmenzel@deloitte.com

Steven Ehrenhalt

Principal
Global Finance Transformation Leader
Deloitte Consulting LLP
+1 212 618 4200
hehrenhalt@deloitte.com

For more information

Parth Patwari (Co-Author)

Sr. Manager
Deloitte Consulting LLP
+1 703 251 1650
ppatwari@deloitte.com

North America

Rich Rorem

Principal
Americas Finance
Transformation Leader
Deloitte Consulting LLP
+1 (206) 716-6229
rrorem@deloitte.com

Tom Freas

Principal
Deloitte Consulting LLP
+1 412 402 5220
threas@deloitte.com

LATAM

Claudio Fiorillo

Principal
Deloitte LATCO
+55 11 4320 2700
cflorillo@deloitte.com

APAC

Donal Graham

Partner
APAC Finance
Transformation Leader
Deloitte Touche Tohmatsu
+61 2 9322 7279
dgraham@deloitte.com.au

Yoshiki Tanabe

Partner
Deloitte Tohmatsu
Consulting, Co. Ltd.
+81 80 4363 4770
ytanabe@deloitte.com

EMEA

Marcus Boyle

Partner
EMEA Finance
Transformation Leader
Deloitte MCS Limited
+44 207 007 2966
mboyle@deloitte.co.uk

Eric Callewaert

Partner
Deloitte Consulting LLP
+32 2 749 5717
ercallewaert@deloitte.com

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