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# Finance Transformation Meets Post-Crisis Risk Management: The Need for a Unified Platform Architecture

## Executive Overview

Globally, financial institutions are faced with ever pressing challenges to enhance their business models, while simultaneously having to comply with a plethora of new regulations. Through these changes they have realized a more integrated 'finance and risk' architecture is essential. Historically these different business elements had been addressed using a silo based approach and invariably led to a manually driven architecture being embedded within a financial institution. This is not conducive to a streamlined financial closing cycle and creates a misalignment between financial, management and regulatory reporting. Mindful of this strategic challenge facing the industry, this whitepaper explores the case for a transformative architecture aligning 'risk and finance' functions to deliver tangible efficiencies across reporting processes and ultimately empower an improved strategic decision making framework.

## Introduction

The purpose of this document is to outline the reasons why finance and risk are moving together and the relevant implications from a business and operational point of view. While this has been a long awaited process, the speed of this transformation and its complexity is catching many financial institutions off-guard, as it requires a truly integrated, or rather, unified approach to data and IT architecture.

This process entails the progressive integration of risk and finance data in order to accomplish, among others, a much faster and reliable financial close process while ensuring that risk and finance data are consistent in order to produce risk adjusted measures. The supporting architecture is generally known as finance transformation and risk adjusted performance (FTRAP) and the development or refinement of what already in place is impacting all financial institutions. Although business and functional requirements may vary depending on the size and complexity of the financial institution, the overarching objective intends to maintain an acceptable level of profitability in this ever-changing and challenging business and regulatory environment.

The key objectives of FTRAP are:

- Implement an efficient and error-free financial reporting and closing process that seamlessly handles multiple accounting regulations
- Provide consistency in management and financial reporting through a complete and highly interactive reporting & analysis process
- Leverage a single, unified analytical repository for risk, finance and accounting

## Regulatory Drivers

Strong pressures from regulators are driving institutions to provide a more integrated view of “risk & finance,” to produce reliable results and to demonstrate to external parties the soundness of their financial structure. Regulators are demanding for more information, but more importantly, they are asking financial institutions to demonstrate that all relevant financial & risk information pertaining to performance, liquidity and capital are produced in a manner that is consistent, transparent and are based on agreed upon metrics and methodologies in a controlled environment. Key relevant regulations that are impacting financial institutions are:

- **Basel II and Basel III**
  - Capacity to measure accounting capital vs. regulatory capital and quantify relevant shortage/excess capital
  - Basel III Accord prescribes banks to meet new requirements for monitoring and managing liquidity risk, controlling overall leverage, raising the quality of its capital base, broadening the risk coverage of the capital framework and introduce a capital buffer mechanism. Bank’s non-compliance with these new requirements could be viewed as a critical weakness by investors, regulators & the financial markets. Basel III is particularly emphasizing the requirement for greater transparency, granularity, auditability, and detail of a bank’s business operations.
  - Disclosure of accounting and risk information together (Pillar 3)
  - Reconciliation of data between operational risk losses and accounting
- **IFRS – specifically IAS 39 and then IAS 9**
  - Individual and collective impairment calculation to be managed on ongoing basis (IAS 39)
  - Allocation and rebalancing of provisions between good and bad assets (IAS 9)
  - Increased disclosure on risk and valuation issues (IAS 7)
- **Dodd Frank Act**
  - New rules on provisioning and reporting
  - New rules on accounting for risk, including netting
- **Sarbanes Oxley**
  - True and fair representation of the capital, economic and financial standing of the organization
  - Adequate internal control systems and procedures for accounting and financial information with proven efficiency
- **MiFID (Markets in Financial Instruments Directive)**
  - More specific allocation of fees and commissions

- **COSO report**

- The types of risk and relevant level of controls in place in the production of financial statement data need to meet COSO standards

Regulators are systematically asking for consistency between risk policy and management decisions; whether it is provisioning, hedging, scoring system or risk assessment banks need to prove that managerial decisions are translated into risk governance in a consistent manner. This requirement can be accomplished only through consistent reporting across the entire organization; the financial information provided needs to demonstrate with hard numbers and explanatory notes, the extent and degree of this consistency, eventually identifying timely cases and reasons for misalignment.

## Business Drivers

Currently the ‘supply chain’ of financial information continues to rely on fragmented data and processes. Over time, businesses have ended up with multiple sets of general ledgers (GL) with differing charts of accounts, inconsistencies with accounting rules and overly cumbersome GL structures. This has also led to considerable manual intervention in the form of adjustments and compounded the problems of reconciliation and control. Operationally the number of stakeholders in the accounting process is rapidly increasing due to the complexity of the tasks and the progressive erosion of margins for errors.

This fragmented approach means management reporting and analysis remains segregated from core financial processing causing a misalignment in internal business performance reward mechanisms with external results. Very often, an inordinate amount of time is spent in reconciling management with financial books creating a culture of “lack of trust” in management reporting; this ultimately has a corrosive effect on the way the financial institution is run.

Furthermore continued economic underperformance and capital concerns are likely to result in additional regulatory requirements and demands for information. This underscores the need to have a responsive infrastructure that can support ad-hoc requests and provide proof points for use-tests to regulators that are consistent with financial reports.

## Business and Functional Requirements for Finance Transformation & Risk-Adjusted Performance

Identified regulatory and business drivers can translate into the following business and functional requirements:

### Comprehensive accounting process and financial reporting control

The FTRAP process should support a complete and efficient multi-GAAP accounting for all financial transactions. Complex financial institutions are usually operating with many core systems, each with varying levels of capability in accounting for transactions. The finance process often has to bear the burden of these inadequacies by providing a robust accounting platform based on business transactions.

Controlled, manageable and timely updates to the GL are required and best support management by providing transparency and auditability. The design of this flow has to be done with careful consideration of the chart-of-account complexity; leveraging core system's embedded GLs where appropriate and focusing on the speed of support for the financial close.

The process should support error correction and adjustments with seamless integration into accounting workflows. Recognizing that top level, timing related and accounting adjustments will indeed be necessary, a reliable process that can provide for the necessary controls and traceability with support for reversals is essential. In addition, a method to verify approvals and demonstrate controls for all financial adjustments in an automated manner is integral to the broader process.

The architecture and data flows should accommodate accounting that is driven by valuations rather than by accounting rules alone, as IFRS and other emerging standards will need robust support in the accounting flow.

### Seamless and transparent consolidation and close process

Financial institutions require support for an efficient, timely & accurate monthly close; the closing process still requires significant manual intervention in most cases, while regulatory and business needs are trending towards a faster and more controlled process. Moreover, the system should be able to support a well managed explanation and notes process; this currently remains significantly un-automated and is prone to inefficiencies and quality issues.

Current and incoming regulations: Basel 2, Basel 3 and IAS 9 require an increasing amount of reference and reconciliation as an integral part of financial reporting. Financial institutions must demonstrate the practical connections between risk appetite, policy and accounting approach to be compliant with these and other regulations.

A typical example of a common reconciliation challenge faced by financial reporting teams is provided by the management of suspense accounts, which might have a significant impact on the financial and management reporting process. When substantial un-reconciled suspense account balances occur, this can be an indicator of an ineffective controls process or of a poorly designed chart of accounts structure, with serious consequences on the entire financial close process and overall financial reporting.

To overcome this challenge a harmonized integrated view of risk & finance requires a formal well articulated reconciliation framework to be in place, thus reducing the reliance on the manual journals process.

### Consistent financial and management reporting including risk-adjusted performance

Financial institutions require timely availability of all relevant financial information at the GL level and at the required granularity. This includes the GL at a management reporting level of detail as well as the individual customer and account level data as required to support the management reporting process. Enforcement of consistency across financial and management reporting has to be exercised at the data level with a robust capacity to manage top-line adjustments.

The financial and management reporting process must provide the ability to incorporate risk information into the management results. All data structures and computational methods must provide for the risk and finance actions to be performed on data concurrently and to support a unified data flow to reporting. Figure 1 below demonstrates this process.

Current regulatory and business requirements call for a progressively more integrated approach between risk and finance. This takes places in many areas of the bank, and specifically for:

- Provisioning
- Risk based pricing
- Reconciliation of operational loss with accounting data

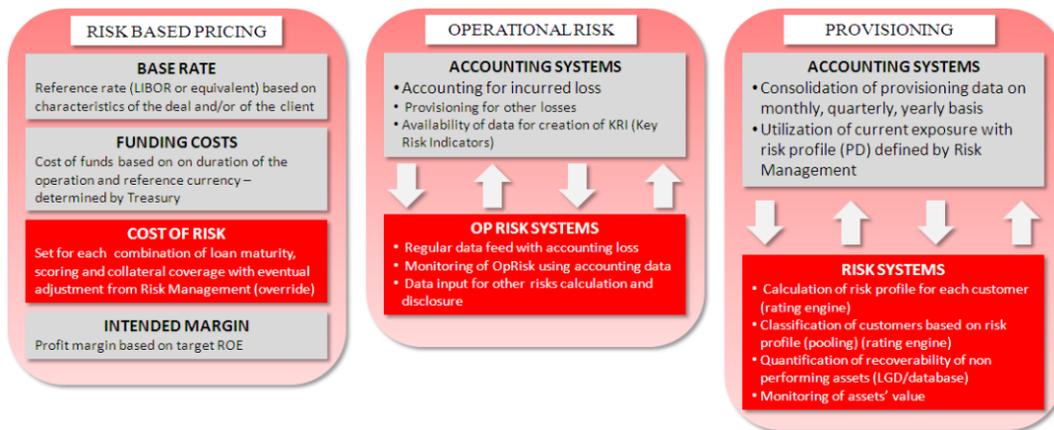


Figure 1. Integrated data feeds for risk and finance

To progress towards this integrated approach financial institutions require relevant systems to work based on the same principles and data; when this is not possible, the system should provide regular reconciliation to prevent additional manual intervention. Manual intervention is to be treated on an individual basis and should be devoted to these cases:

- Large exposures
- Exception to credit policies
- Management decisions

The management reporting process requires flexibility and control in computations for funds transfer pricing, allocations, NII, and P&L for actuals, plans and forecasts. Additionally, the supporting computations for cash flows, RWA, capital required and the derivative computations of RAPM are required. Management reporting ideas vary widely across financial institution types and the system should support this in addition to providing a reporting environment designed for self service use.

Ultimately the architecture should be designed to support the demands of large financial institutions with their high volume, organizational complexity and responsiveness demands.

## Architectural Principles in Design

Based on the practical learning over the years and the transformational nature of the scope, the following principles should guide the design of the architecture:

- **Simplified data flow:** data will flow from sources to results with progressive aggregation designed for responsiveness and efficiency.
- **Reconcile data rather than results:** ensure data is reconciled across all granularities at the outset, so there are no concerns when results are produced.
- **One-time calculations:** calculations, verification and enrichment of data should happen as early in the lifecycle as possible and be held as a single-source result; once calculated the result should be used throughout the environment.
- **Common reference data & quality processes:** all reference data must be commonly sourced and integrity managed accordingly. A common data quality methodology must drive all data (including reference data) and include business quality methods including financial reconciliation.
- **Auditability of results to data:** any result informational element must be traceable to the underlying data via the intermediate aggregations and computations.
- **Architectural flexibility:** the system should be architected as a “living environment” equipped to accommodate change at multiple levels. Minimally, new organizational arrangements, new data granularities and frequencies, new computations and new reporting and analytical demands must be handled within the production process.
- **Design for use & performance:** the system should distinguish many types of uses and workloads and design for those appropriately. Extreme operational performance for the financial close are contrasted with high volume computational workloads, which again are different from ad-hoc and canned reporting.
- **Timely extraction of data and preparation:** the time issue is particularly critical for two reasons: for items subject to mark to market pricing the definition of a consistent in pricing model/data extraction process is fundamental in determining the final price; then for consolidation and netting purposes a timely execution allows to meet regulatory and business reporting requirements.

## Conclusion

The integration of risk and finance is a process, which has recently initiated and will continue in the coming years as one of the key drivers in the financial services industry. This process is going through various phases and is a typical ongoing, improvement process. Starting with a quintessential bottom up approach, from data to strategy, the finance transformation and risk adjusted performance process will force financial institutions to reconsider the entire governance approach and enable a truly risk based decision making approach with much greater transparency and efficiency.

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