

Optimizing Financial Systems



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EXECUTIVE SUMMARY

Over the last decade CFOs have been pressured by a supersensitive market and a hyper-vigilant SEC. Riddled with a series of regulatory changes that have affected how the Finance & Accounting function records, reports and analyzes financial information, CFOs are struggling to guarantee compliance, protect market value, and still maintain or lower the cost of finance to the organization. In addition, CFOs have been simultaneously attempting to transform finance into a valuable business partner to the entire enterprise.

Even though companies have invested vast amounts of capital in new Financial Systems such as ERP systems, data warehouses, best-of-breed packaged financial applications and regulatory/compliance packages; the struggle to meet these increased demands seem just as daunting and unsatisfied today as it did prior to this significant investment.

A major reason for this apparent paradox is that this new technology has not been aligned and configured appropriately to leverage its inherent capabilities and functionality while avoiding the corresponding limitations. To do this, CFOs must take a fresh look at how technology is used to capture, store, and report on financial information.

This paper will provide an overview of this fresh approach and evidence the many benefits that may be achieved. It will also discuss a practical approach to how CFOs can begin the process of implementing these innovative concepts.

THE FAT GENERAL LEDGER (GL)

"If you need to report on something, put it in the

General Ledger." This has been the historical mantra people have lived by when configuring financial systems. The nature of the requirement did not matter. It could be tax driven, management's "whim du jour," or the most detailed operational requirement. Whatever it was, it was addressed by adding it into the chart-of-accounts (COA). Thus, for most organizations the General Ledger doubled as a data warehouse and the financial book of record – a scenario that can be described as "The Fat GL."

Twenty years ago this was understandable as corporations had to deal with mainframe based, non-integrated systems with limited reporting capabilities. Fast forward to the late 1990s as ERPs began to enter their heyday. These systems (e.g., SAP, Oracle, etc.) provided an integrated platform based upon increasingly flexible client/server architectures and promised greater reporting functionality. Unfortunately, they did not enable organizations to eliminate their "Fat GLs" for 3 primary reasons:

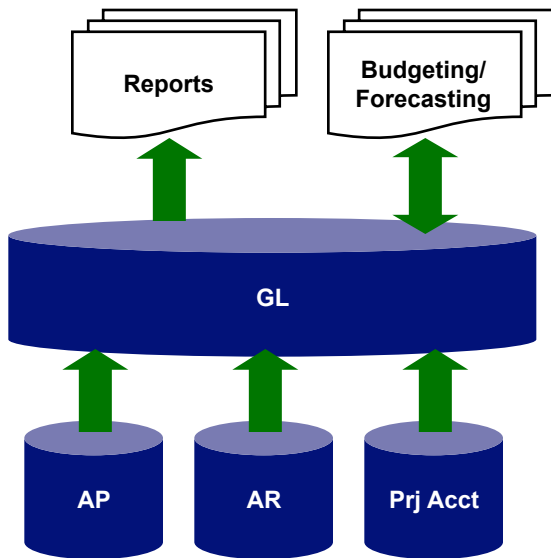
1. *Paving of the cow paths* – Many organizations implemented ERPs on tight timeframes due to Y2K requirements. As a result, more often than not, organizations recreated (aka mapped) their existing COA into the new system.

2. *Transactional data structures* – ERPs are built to process transactions. Even though they are far more integrated than their predecessors, their underlying data structures are complex, limiting the ability to report on data that exists in the system. As an example, to do basic expense reporting from PeopleSoft you would need to pull data from two modules and potentially over 25 separate tables. Organizations responded to this limitation by putting more detail into the GL so that all the data was in one module.

3. **New reporting requirements** – As with most things in the world, reporting requirements are a moving target. Organizations began to have additional regulatory and operational requirements placed on them due to globalization, investor activism, etc. They took advantage of the more flexible ERP systems to build these requirements into their ledgers.

Figure 1 shows the resulting financial systems architecture. A “Fat GL” with limited reporting and virtually no inherent analytic capability.

The implications of this architecture include:



- Elongated close cycle times
- Inability to easily accommodate new requirements
- Shadow reporting systems
- Manual Excel driven budgeting/forecasting

CORPORATE PERFORMANCE MANAGEMENT (CPM) TO THE RESCUE

After the ERP wave in the 1990s, the next technology panacea was CPM systems. These systems were specifically designed to support the reporting, planning and analysis functions. Their architectures offered high flexibility and very robust reporting functionality. Best-of-Breed application vendors such as Hyperion, Business Objects and Cognos quickly became stars in this marketplace and subsequently were acquired by the Tier 1 ERP/Technology vendors.

Organizations that have implemented these systems have garnered tremendous benefits from automat-

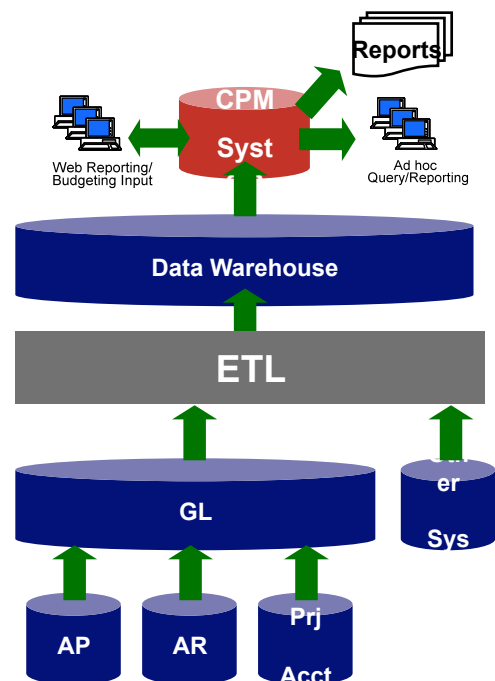
ing manual planning/reporting processes and providing greater analytical capability to drive decisions.

Ironically, these benefits have prevented most organizations from fundamentally readdressing their overall architecture to fully leverage CPM and ERP technology.

Instead, most organizations that have implemented CPM applications, simply implemented the applications on top of their preexisting “Fat GLs.” What resulted was a complex data load process containing large amounts of logic to extract, transform, and load (ETL) the data into the CPM application. Further, some organizations had to carry over complexity from their GL to their CPM application because it was far too difficult to address through the ETL process. Many organizations, especially environments with multiple GLs, have even had to implement a data warehouse, to stage the data, prior to loading data into their CPM application. Figure 2 updates our “Fat GL” architecture to reflect the landscape with the addition of CPM technology.

The implications of this architecture include:

- Untimely data (especially during the close process)
- Decreased usability and user confusion
- Significant data reconciliation and maintenance efforts
- Lack of achieving full system functionality



SYMPTOMS OF A SUB-OPTIMIZED FINANCIAL SYSTEM ARCHITECTURE

If you are unsure if either of the prior scenarios describes your organization's Financial System architecture, here are some specific symptoms to look for:

- Multiple systems serving the same purpose
- Large amount of time spent reconciling data across systems
- Shadow reporting systems
- Large number of segments and members in your COA
- Inconsistent data definitions within and across your Financial Systems
- Inability to easily "slice and dice" financial information based on business needs
- Inability to easily "drill down" to transaction level detail from summary financial information

FINANCIAL SYSTEMS – GOALS & COMPONENTS

As we begin to transition away from discussing the current state of Financial Systems to understanding how to optimize those systems we must set the stage by addressing two foundational questions:

1. What are the goals of Financial Systems?
2. What are the components of a Financial Systems Architecture?

What are the goals of Financial Systems?

There are four major goals of Financial Systems (in no particular order):

GOAL	DESCRIPTION	DRIVER
Integrity	Control of financial transactions & data	Regulatory requirements
Speed	Timely, meaningful financial information to key stakeholders	Regulatory requirements
Flexibility	Support evolving/changing management structure	Management
Scalability	Expand as the organization grows & develops	Acquisitions, New business ventures

At first, these goals may seem to naturally conflict. After all, how can one offer integrity and scalability while being fast and flexible? This is not necessarily the case, especially if one views the Financial System Architecture as a multitude of layers each with its own primary purpose and functions.

What are the components of a Financial Systems Architecture?

Generally, one can decompose any Financial Systems Architecture into four distinct layers:

LAYER	PRIMARY PURPOSE	EXAMPLE APPLICATIONS
Transactional	Process large volumes of transactions quickly, accurately and efficiently	GL, AP, AR, Project Accounting, Fixed Assets
Data Integration & Organization	Rapidly bring together and organize financial data to support internal, management reporting & analysis	Data Warehouse, Data Marts, Metadata Management

Modeling & Analysis	Enrich, model, & analyze the data to improve the management decision process	Budgeting/Forecasting, Business Modeling, etc.
Presentation	Provide intuitive, easy access to financial information on demand	Dashboards, Ad-hoc Reporting, etc.

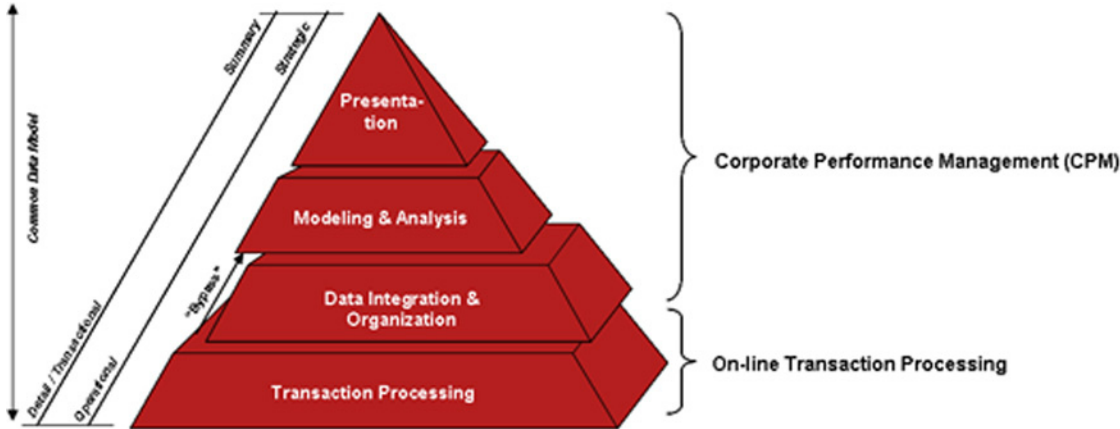
If you map the strengths & weaknesses of each of these layers back to the previously defined goals of Financial Systems, you will see that certain layers align better with certain goals:

		GOALS			
		Integrity	Speed	Flexibility	Scalability
LAYERS	Transactional	●	◐	◑	●
	Data Integration & Organization	●	◐	◐	●
	Modeling & Analysis	◐	●	●	◑
	Presentation	◐	●	●	◑

The transactional layer (e.g. ERP systems) is best tooled to provide integrity and scalability but, of all layers, it is the least flexible. Contrast that with the modeling & analysis layer (e.g. business modeling) which provides great flexibility; but is much less scalable. A key takeaway should be that when assessing and implementing financial systems, companies should align their processes and configure these systems in order to best leverage their strengths and avoid their weaknesses. For example, you would not want have the entirety of your management reporting coming directly from your ERP. Management reporting requirements can change frequently and the transactional layer is not flexible enough to easily respond to such changes.

A NEW, OPTIMIZED MODEL

We can take this “layers” concept and construct a new model for Financial Systems, represented in Figure 3 below:



The DNA of every ERP system is its “code block” structure and set-up. The “codes” include all numbering schema for each type and classification of data contained in the system. They are not simply the GL Chart of Accounts as most companies believe. Rather, it includes the numbering for; legal entity, country code, region code, office number, branch number, GL account, vendor number, product ID, UPC code and so on. These codes or code-block are usually carried over from previous systems with little regard for the capabilities and functionality enhanced by upgrading to ERPs over older mainframe environments. This carryover was “short-sighted” and usually not considered important enough to take time at system requirements definition or configuration to change. Most ERP configurations contain older “code-block” which is different from CPM systems, CRM systems, and HR systems. This is where the incongruity between the systems appears. Each new configuration was deemed as its own chance to improve the “codes”; however, it only complicated the issue dramatically.

The core of this model is that financial systems should be organized as an overall infrastructure to record, stage and organize financial data, enrich and model that data, and present it to the business/stakeholders.

You cannot view any specific financial system (e.g., GL, AP, Budgeting tool, dashboard) as a distinct, stand alone application. On the contrary, all financial systems in an organization must be viewed and designed based on a holistic view of a “Financial Systems Infrastructure.”

Key elements of this new model are:

- The GL is “thin” and focused on capturing the minimal information needed to close the books and create regulatory financial statements
- At the transaction layer, data is captured once and data redundancy is kept to an absolute minimum
- Data warehouses/marts now bring together sub-account detail, project/product costing details, and GL data to support management reporting and analysis
- Modeling, projecting & analytical tools then enrich that data via various business models
- End users then access reporting & analysis via

on-line tools to support production and ad-hoc reporting

Benefits of this architecture include:

- Streamlined processes
- Increased flexibility and control
- More analytic/reporting power

Let’s now delve into more detail regarding each layer of our new model for Financial Systems.

Transaction Processing

This layer is focused on processing large volumes of transactions quickly, accurately, and efficiently. It also must help drive operational efficiencies by providing a simple, easy-to-use means of running the “back-office” by automating repetitive processes and eliminating data redundancy.

Example applications that belong here are traditional General Ledgers and Sub-ledgers (e.g. Payroll, AP, AR, and Project Accounting) that are typically part of an ERP system.

Best practices to optimize your Financial System Architecture include:

- One global ERP with a common data model (chart-of-accounts, vendor master, etc.)
- Coupled with Packaged Consolidation tool (the “Bypass”) in environments with multiple ERPs, high volume acquisition strategies, and/or conglomerates
- General Ledger and Consolidation tool structured and focused on external Financial Reporting requirement(s) – Legal Entity, Natural Account
- Limit functionality (e.g. allocations) to items required to support external, regulatory reporting
- Details remain in sub-ledgers (AP, AR, FA, PA, etc.)
- Used for operational reporting only

Data Integration & Organization

The goal and purpose of this layer is to rapidly bring together and organize financial data to support internal management reporting and analysis. Also, this will provide a centralized, flexible source for financial information to the business.

Example applications that belong to this layer are data warehouses, data marts, meta data management and management reporting.

Best practices to optimize your Financial System Architecture include:

- Combining financial details stored in sub-ledgers with summary GL data to provide “slice/dice” and “drill down” capability organized based on analysis needs (by Product, Customer, Market, etc.)
- Common data model keep data transformations to a minimum
- Updated at least on a nightly basis
- Manage structural changes via a metadata management tool

Modeling & Analysis/Presentation

The final two layers are focused on:

- Driving more accurate & timely projections by providing an easy-to-use means of capturing and modeling data from users throughout the organization
- Easily modeling “what-if” scenarios and other financial analyses (e.g. sensitivity analysis, trending, etc.)
- Providing executive management with key performance indicators that provide actionable information

Example applications that reside here are Budgeting & Forecasting tools, Dashboards, Scorecards, and Financial models, etc.

Best practices to optimize your Financials System Architecture include:

- Same base structures (e.g. hierarchies, dimensions, etc.) as management reporting
- Multiple presentation means organized by user preferences and nature of requirements (e.g., ad-hoc request, standard income statement, etc.)
- Integrated long-range planning: Incorporate long- range strategic planning and operational planning
- Continuous budgeting across a longer time horizon: Eliminating the annual budget process and continuously budgeting across a longer time horizon
- Proactive alerting on scorecards/dashboards

IMPLEMENTATION CONSIDERATIONS

As you contemplate your existing Financial Systems Architecture and how you could achieve full optimization, here are a few important things to consider:

- Assess your situation and define a vision up front
- Create a road map based on that vision and implement incrementally
- Leverage major Financial System upgrades to take larger steps towards your vision (e.g. Lawson required upgrade)
- Design your data model initially irrespective of the specific system in which it will be housed
- Set performance targets (e.g. cycle time targets) and measure progress
- They are many, many ways to start to simplify your environment

CONCLUSION

The benefits, from the significant investment in technology over the past 10 years, have not been fully realized.

Properly aligned and configured Financial Systems will enable organizations to leverage the inherent capabilities while avoiding the current corresponding limitations.

CFOs will need to reevaluate how to take full advantage of the technology used to capture, store, and report on financial information.

Only in this way will the true benefits will be fully realized.

Finance organizations that can re-focus on the full advantages of the technology will gain a competitive edge for their businesses to relentlessly pursue excellent and meaningful decision support in financial, operational and strategic decision-making areas.

This renewed focus on finance technology will provide many companies with the ability and opportunity to further enhance their finance transformation efforts, increasing the value finance brings to the company overall.