

Platform-Driven Finance Architecture

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Abstract

Change has always been a constant in the financial industry but the recent financial crisis triggered an unprecedented rise in that rate of change. Today, increased regulation, greater demands for transparency, and new business channels require financial institutions to constantly be in reactive mode.

Financial institution executives realize the increasing pace of change is not temporary. They understand that this is a “new normal” that they must plan and prepare for. And they know that proactively developing a sound strategy for dealing with constant change begins with an honest look at the institution’s ability to deal with change.

The only way to improve change capacity is to build a strong foundation based in technology that is specifically designed to manage constant transformation.

The Pitfalls of Tactical Change Management

The combination of frequent regulatory changes and mounting business pressures can result in short-term, shortsighted decision-making. A longer-term project that could eventually transform the institution often takes a back seat to the urgent issue of the day.

The unfortunate side effect of this focus is that financial institutions end up developing an independent, stand-alone solution for each issue. In the moment, it may seem prudent to spend only what is needed and to deliver solutions quickly. But, there are several longer-term consequences of that approach that may not be immediately apparent:

- Building a system for a single problem often leads to duplication of effort. While the solution may appear to ad-

dress a unique issue within a particular department, there will invariably be overlap with existing and possibly future systems. Financial institutions end up duplicating entire application infrastructures—at a high cost.

- The end result of multiple, one-off solutions is a rapidly growing collection of applications. These numerous point-solution applications become increasingly complex to maintain and support, adding significantly to operating costs.
- Point solutions, created to solve one particular problem without regard to other issues, are also often closed systems. Because open interfaces are not able to work effectively with these systems, information extraction is very difficult. As a result, any data or process captured by the point system is not readily available to other applications. The only way to extract informa-

tion is through cumbersome copy or database manipulation routines. These procedures inevitably jeopardize data quality, create timing issues, and invite processing nightmares.

- Applications that solve a single problem also fragment business data across the enterprise. This fragmentation has given rise to a category of integration applications (e.g. Enterprise Service Bus and traditional Enterprise Data Integration) whose only purpose is to copy, cleanse, and stage data. It is a significant undertaking, with the simple purpose of enabling departments within an institution to access and use the same data.

While integration applications can be helpful, they are expensive. And, as the pace of change accelerates, they can fail to keep pace with the demand for

Figure 1: Point Solutions → High Complexity, High Maintenance & Support

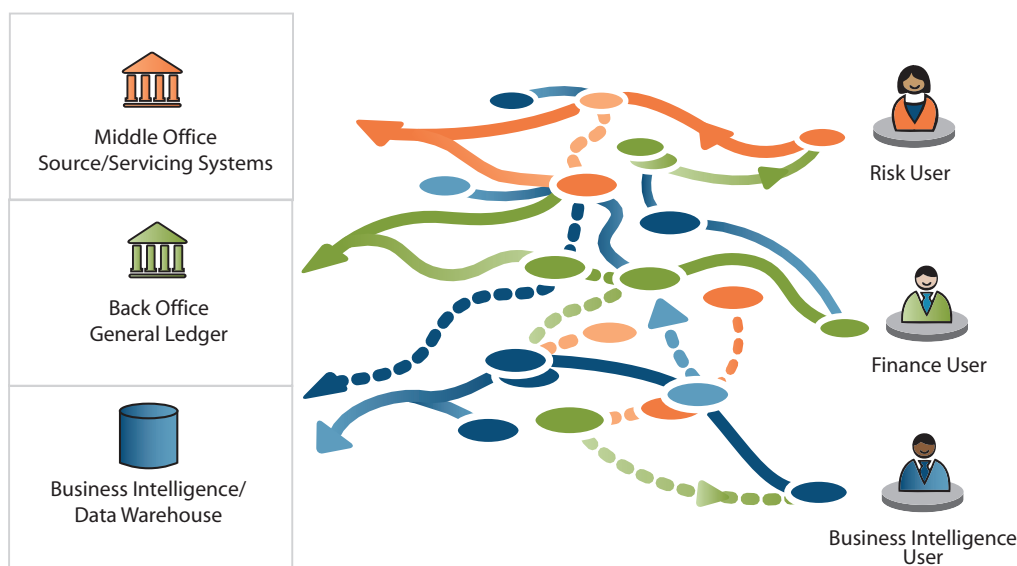
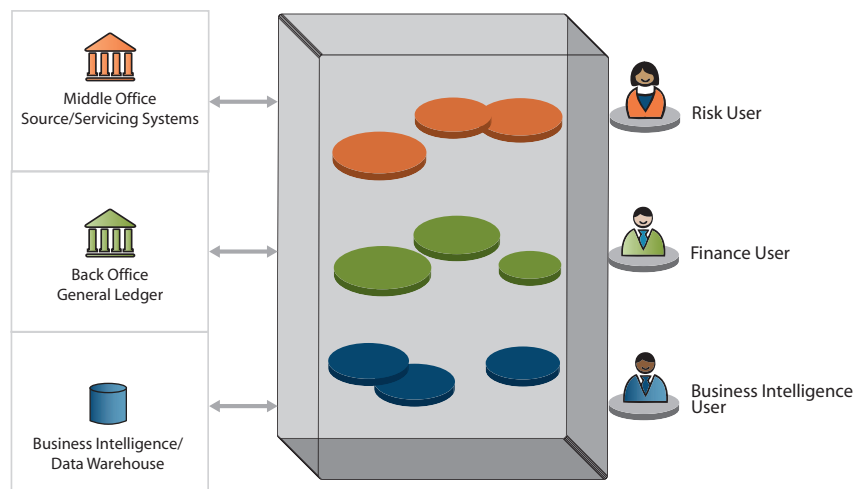


Figure 2: Aligned Platform Approach



*Platform approach brings point solutions together

The Pitfalls of Tactical Change Management (cont'd)

information. To keep up, older applications must be re-built or completely new applications need to be developed. In the case of packaged software, new features, if available, require onerous development and upgrade efforts.

The rate of change in the financial services industry has increased to the point that technology departments are perpetually running behind. They cannot change, build, or buy solutions fast enough to satisfy the increasing need for information. When stand-alone systems combine with manual and ad hoc solutions to solve a problem, the result is an expensive, time consuming and sub-optimal solution that increases the risk of errors.

Managing Change Strategically with a Platform

To deal with the ongoing change management crisis effectively and efficiently, financial institutions must focus on a strategic solution, rather than tactical measures. The current approach enlisted by many institutions doesn't scale with change and is, in fact, at risk of outright failure. Instead, financial institutions must adopt a new paradigm - one that begins with determining the architectural characteristics required of a foundational "platform." This platform must have the ability to host the wide range of functionality embedded within today's financial institution application suite, and also be able to accommodate inevitable changes to come. Off-the-shelf, technology-only toolsets such as rule engines and business workflow systems, within the financial institution's application suite, are the underlying components from which a

platform is architected. A foundational platform provides the organizational system structure for all these components to work in concert. An effective foundational platform must have the following characteristics:

- **Domain Aware Architecture:** The platform architecture must be "domain aware," meaning it works effectively within a specific department, discipline, or function. For example, back-office functions like accounting or risk management need to be architected differently than front-end processes.
- **An Open and Extendable Data Model:** Data must be able to flow into the platform from a wide array of systems. As data comes in, it must be applied to a coherent domain-specific data model. The architecture must support multiple avenues of data flow, both in and out of the platform. No data should be trapped within a system. All data must be trans-

parent, understandable, and transferable to other systems as needed.

The data model should include all attributes of the instruments it stores, so that it can support all work streams. This includes credit, contractual, reporting, and accounting attributes.

- **Flexibility and Extensibility:** The platform must be able to add to its existing functionality. An inflexible system—one without the ability to accept new features, work streams, and data elements—runs the risk of driving users and IT departments to build time-consuming and expensive manual processes.
- **A Single Operating Model:** The platform must offer a logical, consistent operating model. Even though it must support a broad array of functions within its operating domain, it must be a single system. General IT operations on systems such

as data and exception management, error and troubleshooting, backups, monitoring, and executions are performed consistently across the platform. A singular model allows the financial institution to keep operating costs relatively flat, even as they add or change functionality within the solution

- **Support:** Point solutions and desktop office tools from disparate vendors may be individually supported, but their often home-grown integrations are not. A platform with built-in integration infrastructure increases efficiency by ensuring all business functions are fully supported, even as they mature.

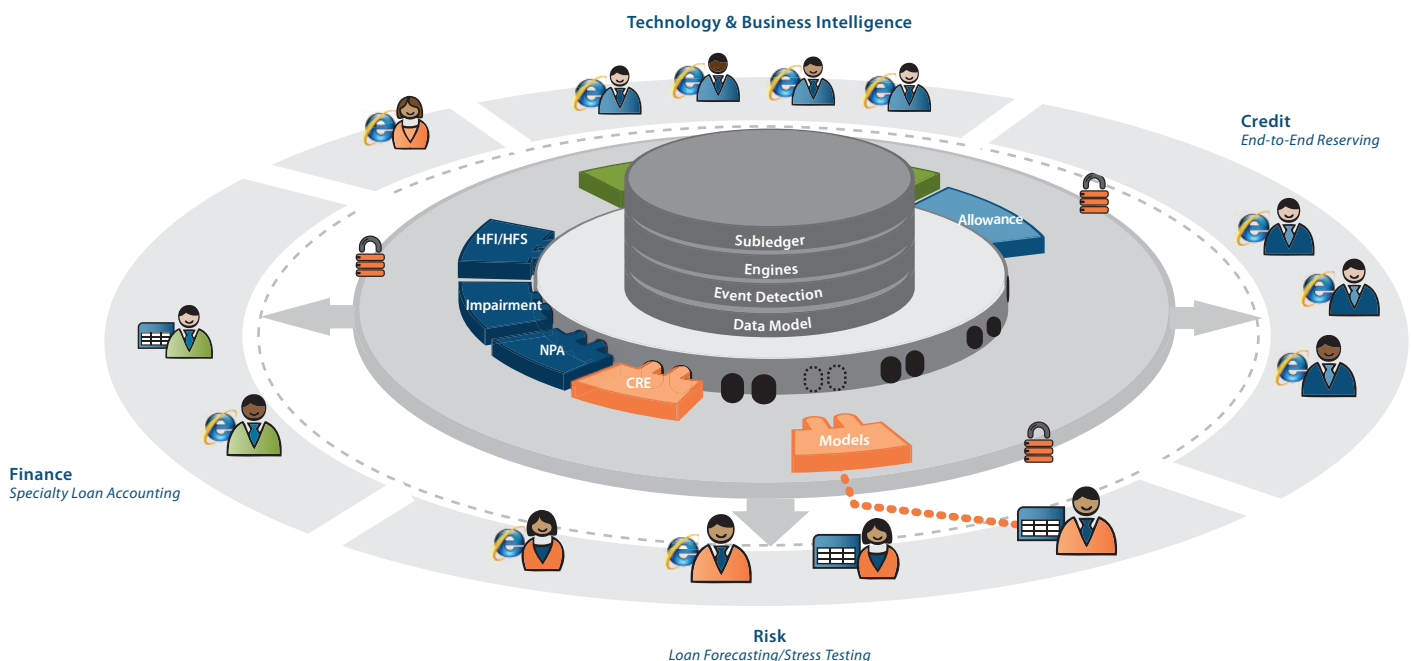
A Platform for Risk and Finance

The Risk and Finance space has seen a great deal of change, primarily due to

an increased emphasis on understanding the impact of credit deterioration on financial institution portfolios and capital. Internally, many institutions have invested in a centralized ability to better forecast credit performance as economic conditions vary. On the regulatory side, multiple agencies have provided guidance: the CCAR and DFAST stress tests, Basel III, greater disclosures on Non-Performing Assets, and specific guidance on impairments and allowances have become common themes over the last few years.

Unfortunately, many recent investments have been purely tactical, and operating inefficiently in response to multiple business needs and stressors. In contrast, “Figure 3” depicts a strategic platform architecture that exhibits the key, desirable characteristics.

Figure 3: Platform-Based Finance Architecture



It is our belief that a strong business foundation based on technology, specifically designed fundamentally to deal with the changes, is the primary way to improve overall change capacity at a financial institution.

The EVOLV® Platform—A Solution Designed for Change

The EVOLV platform provides access to the leading risk and finance solutions built for today, and prepares financial institutions with a framework for tomorrow's solutions. EVOLV is different:

- The emphasis is not on generic technology infrastructure. Instead, the central processing core is aware of the asset categories within the portfolio. In addition, the core contains a set of relevant services that are leveraged to build functionality in order to adapt to changing business needs.
- The central processor contains an extendable data model that represents the assets. Instead of segregating the system structures by data type, the platform attempts to unify them. Modules representing functionality are "plugged in" to the central processor through software interfaces built to allow extension.
- Functions for Risk, Finance and Credit are all unified, providing for a single solution. Note this does not mean that each function has the same view. On the contrary, the central processor is aware that each functional area will leverage different modules, and must be able to support the view required by each functional area.
- The underlying portfolio data viewed by these departmental functions is the same. There is no disconnect among varying instrument

populations seen by different work streams.

- Reporting is consolidated and shares the same dataset. By bringing all of the functional work streams to a single source of normalized data, the enterprise has a single version of the truth that provides for easy reconciliation and population control. As an additional benefit, reporting can span data attributes from different functional areas; accounting results can be cut and viewed by credit attributes, and vice-versa.
- The unification of functionality in one space eliminates the need for expensive back-end data-based integrations, making support easier and less costly.

Conclusion

Today, financial institution executives find themselves at a critical juncture. A tactical approach can address the constant barrage of emergent needs by solving the problem of the day. But it is important to acknowledge that this tide is unlikely to recede, and to develop a strategy that enables institutions to excel in an environment of constant change.

The right approach, particularly as it relates to the risk and finance space in financial institutions, is a wise investment in platform architecture financial institution system technology, which can solve today's problems—and tomorrow's.

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About Primatics

Primatics addresses a financial institution's most complex risk and finance challenges with EVOLV, our open platform with integrated solutions. Built by industry experts, EVOLV uniquely equips financial institutions to efficiently meet changing accounting, risk, compliance, regulatory, market and business needs.

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