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Evolution or Revolution: Either Approach to Core Banking Investment Requires Proper IT Risk Mitigation

WHITE PAPER

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October 2008

The banking industry in North America and around the world is reeling from the financial crisis. To change and adapt quickly, institutions recognize that large-scale IT investment and realignment will be required, with core banking investment on the agenda for banks of all sizes. Yet to meet project goals and achieve the promised benefits, most institutions do not have the rigorous approach to enterprise IT management (EITM) that such a "bet the bank" investment requires. To mitigate the risk of refreshing or replacing core banking systems, institutions must first review their approach to IT management and ensure they have the tools in place to succeed.

Situation Overview

Despite all the financial turmoil in the banking industry, investment in core banking remains a high priority. To prepare for the future and compete effectively, banks need to reduce their costs associated with core banking maintenance and integration efforts, but they must also invest to take advantage of new technologies and to increase flexibility in their own service offerings. Financial Insights estimates that core banking consumes more than 12% of an average bank's IT budget. U.S. banks are projected to spend more than $8 billion on core banking systems in 2009. Given this significant expenditure — largely spent just to keep the lights on — banks are looking for relief from this ongoing expense, much of it associated with applications that are old and unable to provide the flexibility and time to market that modern banks require.

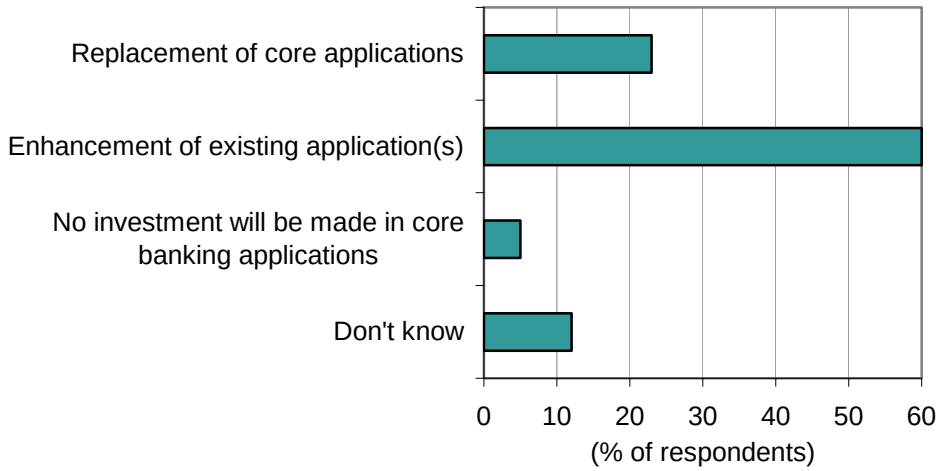
While banks see that replacing or refreshing core applications is the right course of action, the risks associated with such a move are still a large barrier to change. CIOs and COOs are not willing to bet their future (or the bank's) on an investment as large as core banking if the risks are too high. Just refreshing core applications requires millions of dollars and years of time. As Figure 1 illustrates, North American banks have embraced the idea of core banking investment — with the evolutionary path more attractive to these banks than the revolutionary path of replacement. Around the globe, particularly in India, China, and Asia/Pacific, core replacement has been the preferred strategy, and

major banks either have completed their replacement projects or have them well under way. As these transformed banks look to expand operations globally, it sets up a potential "showdown" between the evolutionary and revolutionary strategies for core banking, with survival at stake for many established banking institutions.

FIGURE 1

Investments in Core Banking Applications Are Being Planned

Q. What types of investments is your bank planning to make in its core banking applications over the next three years?



n = 40

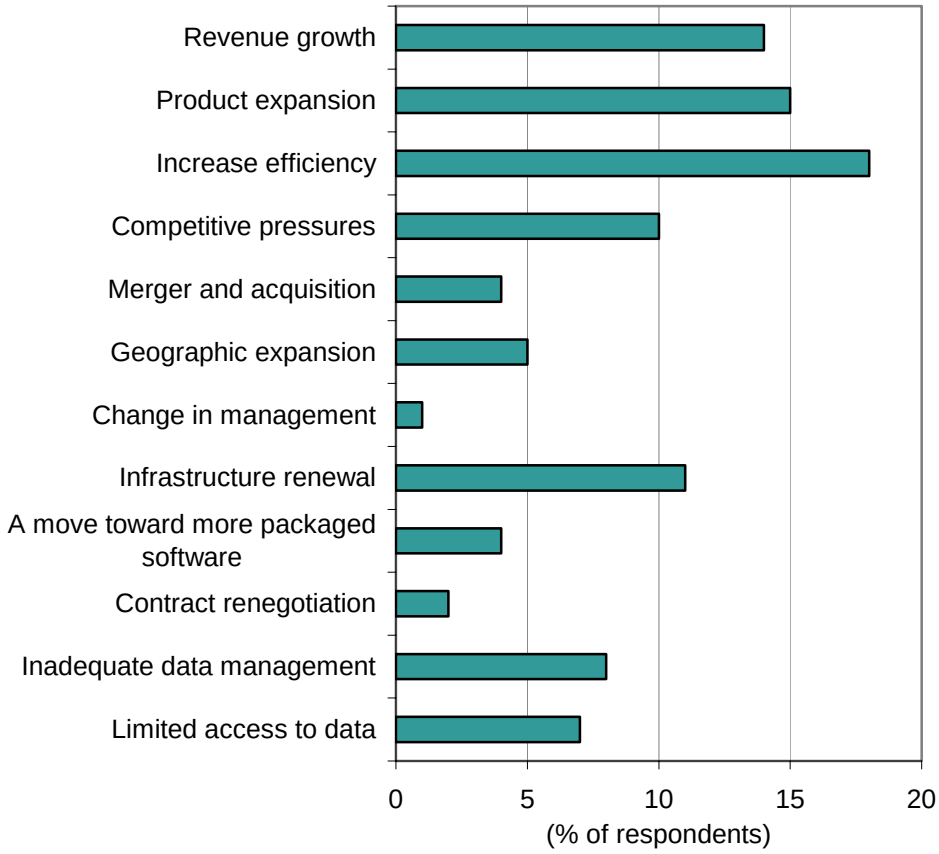
Source: Financial Insights, 2008

Regardless of the path to change, banks report similar drivers to investment, and these drivers are of perennial concern to the industry. Despite the current climate of capital preservation, these drivers remain well-aligned with the needs of institutions today and in some cases are even more important than they were prior to the financial crisis. As Figure 2 shows, increasing efficiency is the main reason to invest in core banking. With more efficient processing, institutions can do more with less, helping to reduce expenses. But banks now are faced with not just increasing the efficiency of their current businesses but also introducing new products and services, and quickly, to bring new revenue opportunities online fast. As revenues associated with trading and lending are drying up, IT budgets become more heavily scrutinized, and consolidation forces investment to rapidly integrate acquired institutions, banks are investing in core banking to save money today as well as position for future growth.

FIGURE 2

Drivers of Investment in Core Banking Technology

Q. What is driving this investment in core banking technologies?



n = 134

Source: Financial Insights, 2008

The anticipated benefits of core modernization are forcing change, so banks are looking for ways to mitigate risk — whether they choose an evolutionary or a revolutionary path to change.

The Building Blocks for Success

Financial Insights views four key requirements as necessary elements before any bank pursues a core banking investment or really any large IT investment. Three of these requirements are organizational approaches; the fourth focuses on building strong enterprise IT management to mitigate implementation risks. The four building blocks for success are:

1. **Organizational support.** Any investment in core banking requires that other investments be delayed or eliminated, so consensus must be reached that this is the appropriate IT investment. With some institutions, a charismatic and determined CIO can champion the cause and bring organizational alignment. With others, the process is more systematic and a matter of proving return on investment. Regardless of the approach used to gain support, throughout the implementation process, individuals shift responsibilities, macro-economic conditions can change, and an institution's business priorities change. It is vital that organizational support be strong and deep so that support remains in place throughout the multiyear implementation period.

2. **Expectations aligned with reality.** Just as it is important to gain organizational support, it is also important not to overpromise results. Core banking can meet many goals, but successful organizations will ensure that there are no misconceptions about what will and will not be achieved in each phase of the project.

3. **A clear road map.** To maintain support and meet expectations, banks will develop project timelines and transparency regarding project progress or lack thereof. Only with transparency and a detailed plan will a project as complex as core banking find success.

4. **Enterprise IT management.** Implementation risks must be mitigated by investing in IT management tools to support the project. These IT management tools can support all stages of core revolution or evolution — including design, deployment, operations, and optimization.

By focusing on enterprise IT management, banks can pursue aggressive IT projects with a strong foundation that will increase their chance of success. This foundation has various components that are directly linked to project success and the ability to measure that success. By investing in EITM, before undertaking a core transformation effort, banks can get a view of their current state, assess where inefficiencies are, and then have the facts at hand to measure improvements as technology investments are made.

EITM Components

Design and Development Phases

One of the first steps with any IT investment is to understand and document current business requirements — IT must be well aligned with the needs of its business partners. This requires a detailed understanding of the processes behind each business requirement and then a further reduction of each process into its components:

- Inputs — the data necessary to support the process
- Activities — the steps or business rules applied to the inputs to arrive at a specific output or decision
- Outputs — the outcome (data or products) of a process activity
- Controls — policies and practices governing process operations
- Measurements — Metrics used to determine whether or not a process is meeting established requirements

Once the current state is known, IT governance, in particular demand management, allows the benefits and goals of the planned investment to be mapped against those business requirements to determine what the end state should be. Additionally, proper demand management allows rational investment choices to be made by funding well-aligned projects at the expense of excessively costly or badly aligned projects. Finally, a project plan charts the necessary steps, dependencies, and resources required to achieve the end state.

IT Management Tools

Strong design and development set the foundation for any IT project, and introducing the right tools can increase the strength of that foundation. CA's approach to EITM consists of building blocks of tools that can address each project phase. For design and development, CA Clarity Project and Portfolio Management (PPM) is a tool that offers a unified approach to project and portfolio management, including project and resource management, automated portfolio planning, finance management, and integration into a bank's existing applications. Clarity PPM is also adjustable based on an institution's current level of IT maturity, avoiding the one-size-fits-all dilemma that many institutions face as they look at packaged applications and try to fit them into existing processes.

Deployment Phase

It is often only with user acceptance testing and deployment that software bugs, hardware configuration, security/compliance, and scalability issues arise. Financial institutions operate complex IT environments already. With the growth of SOA, Web 2.0, and composite applications, and heightened security/compliance concerns, the need for change and configuration management (CCM) and identity access management (IAM) tools will only increase. In a large initiative such as a core banking replacement, identifying the source of problems within a heterogeneous environment requires a rigorous approach to change and configuration management. Similarly, automated identity provisioning and role-based access control ensure that users have access to the new applications and services being deployed, without violating compliance requirements. Misidentifying

the source of problems can result in weeks of delays as ineffective fixes are tried. To avoid unnecessary application outages, institutions with a mature approach to EITM deploy a unified set of tools to manage application deployment and ongoing change in their data centers, as well as user provisioning, IAM, and compliance.

IT Management Tools

In a heterogeneous IT environment, a heterogeneous set of management tools leads to more staffing overhead to manage incomplete and often conflicting reports. Managing IT assets in a fragmented, domain-based approach breaks down the integration between IT and business processes. Problems are harder to identify and resolve, leading to delays in implementation with new projects, and resulting in service-level degradation for production environments. To succeed in today's environment, IT managers need to take a broader view and be able to support complete business processes, not just IT tasks and jobs. CA Data Center Automation Manager (DCAM) allows banks to deploy new applications, provision users, and manage ongoing change based on fully automated policies without costly human intervention.

Operations and Optimization Phases

In the day-to-day processing environment, IT must be able to support ongoing processes and meet service delivery requirements. Many financial institutions follow the Information Technology Infrastructure Library (ITIL) approach to IT operations management. According to the ITIL concepts, supporting business processes requires a structured approach to configuration management (tracking and documentation of all the IT assets within an organization), incident management (restoring normal operations as quickly as possible after an outage), problem management (finding and resolving the root cause of incidents), change management (using standardized processes to reduce service disruptions), and release management (planning implementation processes and training associated with introduction of any new software releases).

Additionally, meeting service-level agreements (SLAs) requires disciplined approaches to service-level management (monitoring and review of IT and process requirements set forth in service-level agreements), availability management (ensuring adequate IT service availability in a cost-effective way), capacity management (optimizing provisioning of IT assets), and IT financial management (determining cost of services and providing data to support financial accounting applications).

In addition to ITIL, there are other approaches to IT service management, but regardless of the approach, IT organizations must have IT management tools in place to monitor environments and measure performance against goals.

IT Management Tools

IT operations within any large financial institution are typically disaggregated with siloed data and multiple dependencies involved in every process. To decrease costs, financial institutions are adopting SOA, rapidly embracing virtualization, and consolidating data centers. These efforts to reduce expenses only increase complexity and further support the need for an enterprisewide approach to IT management. Institutions considering core banking replacement and all the interrelated changes that such an effort will bring must have a state-of-the-art approach to service management to succeed without undue costs and disruptions. Successful institutions are introducing automation to enforce compliance and improve their ability to manage across physical and virtual environments. CA DCAM automates complex, high-volume workloads that are common in financial institutions. It can also optimize use of assets to reduce costs and increase staff efficiency.

CA Service Availability Management (SAM) integrates standalone, low-level domain management tools (e.g., application, network, system, and database management tools) into a comprehensive view of a service," which can be monitored and managed by both the business community and the IT community to mutually satisfactory SLAs. SAM also provides for end-to-end financial transaction management across loosely coupled composite Web application architectures being implemented as a result of core modernization. However, service availability management cannot be successful without a strong application performance management (APM) foundation in place to begin with. CA Wily APM has been adopted by many banks undertaking core modernization to monitor the end-user customer experience and also to provide a detailed road map of the overall business transaction flow and performance across multiple architecture tiers, platforms, and services. Wily provides the ability to monitor the new or enhanced core banking services from development through production, mitigating migration risks by detecting performance problems in the new runtime environment before they become application outages.

CA's Workload Automation (WLA) tools help to manage integration of new online banking services with legacy applications and batch environments that surround the core banking platform and move toward bridging the online and batch sides of a transaction into a comprehensive service view that can be managed and optimized with tools such as SAM.

Supporting financial analysis and investment planning is CA Clarity for IT Governance, a component of the CA enterprise IT management solution. With Clarity, institutions can recover costs with improved visibility into cost allocations and improve service planning and demand management as well.

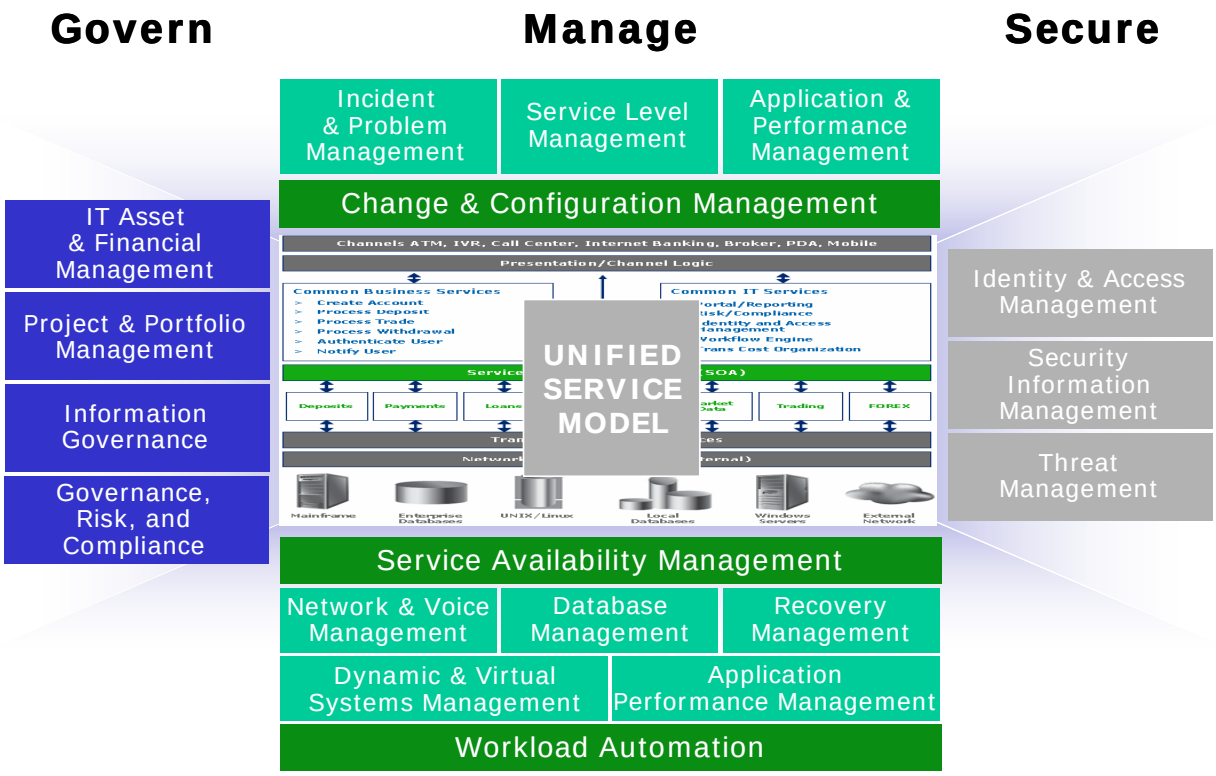
Essential Guidance

Before "betting the bank," institutions need to ensure that risk associated with any IT investment is mitigated as much as possible. Organizational support must be secured, expectations must be aligned with reality, a road map must be developed, and enterprise IT management tools must be in place. CIOs must have accurate and timely information to allocate resources effectively. Customer information must be protected, and channels must be available to meet service-level agreements. To serve customers effectively, the entire life cycle of a service offering must be monitored so that when a problem occurs its impact is quickly identified and mitigated through speedy discovery and resolution.

As shown in Figure 3, CA provides an EITM suite of solutions that provides banks with the ability to govern, manage, and secure their business processes, financial transactions, and upgraded core banking systems and at the same time improve service levels and reduce costs associated with service design, deployment, operation, and optimization.

FIGURE 3

CA's Approach to Enterprise IT Management



Source: Financial Insights, 2008

CIOs who have the appropriate tools are well-armed to serve their business customers and to meet their goals. Those who seek to evolve or revolutionize their core banking applications are undertaking one of the most important projects in which a bank can engage, and there are always significant risks associated with such a large undertaking. Choosing the right partners and building a strong EITM foundation will help to mitigate those risks and allow banks to realize the full potential of core banking modernization, whether through evolutionary or revolutionary approaches.