



Services

Create a Modern and Integrated Architecture for Banking Success

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Challenges of the banking industry

Most banking and financial services organizations today are the result of growth, mergers, acquisitions and divestitures. And their technology, too, is a mix of acquired IT, custom, and improvised and rewritten applications, legacy systems and third-party support.

This disparate technology footprint has resulted in limitations in scalability, poor performance, inflexibility and an inability to meet growing customer requirements or adapt technologies quickly to embrace new business trends. Banking IT solutions can also be expensive to deploy and manage, and result in longer

deployment cycles — affecting time to market and further increasing costs.

The challenges that banks face can be viewed from the standpoints of executive level challenges, technology challenges and customer service.

Executive-level challenges:

- **Revenue compression:** Inability to attract new customers and facing stiff competition due to lack of agility, extensibility and flexibility of the technical architecture; revenue leakages due to non-modular structures and absent licensing mechanism for products
- **Cost pressure:** Increased time and effort to implement new products; inefficient product functionality, affecting margins
- **Future innovation:** Lack of a standard future roadmap for products
- **Regulatory compliance:** Inability and inefficiency to meet industry- and region-specific regulations, including audits and reporting, because a solution is not reconfigurable
- **Poor risk management:** Inability to meet enhanced risk management prerequisites of data analytics techniques in credit checks and fraud screening

Banking solutions and technology challenges:

- **A complex and inflexible core system:** Complex product/channel core system configuration; inflexible core system; inability to provide strategic information for decision making
- **Lack of standardization and integration:** Lack of standard unified internal and external integration and extensibility of modules; lack of a mature customer relationship management (CRM) module and business intelligence and dashboard features
- **Poor application functionality:** Lack of communication between applications and the database; not web enabled; inability to support internal or external integration due to lack of service-oriented architecture (SOA)
- **Time-consuming processes:** Tedious, ineffective and time-consuming release support, deployment and maintenance of banking products/solutions

- **Poor business process management (BPM):** Inability of the existing BPM system to analyze processes and execute a strategic plan to streamline and optimize performance

Customer challenges:

- **Poor modularity and configuration:** Inflexible and non-configurable; too tightly coupled or disconnected with the business
- **Lack of omnichannel experience:** Inability to provide a seamless customer experience across banking channels
- **Poor availability:** System is not easily accessible, especially at critical times when the business is closed like after hours or on holidays



Banks today are looking for services and solutions that help them:

- Reduce costs and increase operational excellence
- Streamline internal business processes
- Increase straight-through processing through automated and reduced manual interventions
- Integrate distributed services across multiple global operational centers
- Standardize and optimize product portfolios
- Engage customers via multiple channels and expand their business
- Integrate traditional and new online real-time channels through mobile devices to provide an omnichannel experience for customers
- Meet the challenges of new competitors, including financial technology services and institutions like PayPal, Google, Paymate, Skrill and Payza

Addressing today's market challenges

Opting for SOA and ESB

SOA is based on distributed computing, where the application's business logic or individual actions are presented as independent self-contained services for external clients or consumers. This modular approach using SOA integration can accommodate a wide variety of technologies. By achieving interoperability, solutions can exchange information more efficiently and securely across platforms and business units. This also ensures a secure, seamless and flexible integration of systems (internal and external) constructed on multiple technologies like .NET, JEE and other enterprise platforms.

An enterprise service bus (ESB) model is also critical as it provides a mechanism that makes it easier to add new applications, and reuse and manage existing applications. In such a model, every application is connected to and communicates with each other via the ESB. An ESB provides a wide variety of integration functionalities, workbenches and management environments out of the box, making the implementation

of a new integration flow between applications quick and easy. Like SOA, the ESB model provides a secure, seamless and flexible integration of systems. ESB implements information sharing and process automation, while reducing an organization's IT complexity and increasing system agility. It also enables auditing, logging and monitoring of all data transfers and integration between various layers. The ESB seamlessly integrates with:

- BPM systems
- Legacy modules
- External services and systems (inbound and outbound)
- Cloud services
- CRM systems
- Data management systems
- Commercial off-the-shelf products

Choosing the right integration software

Choosing the right banking software is very critical but not always easy or straightforward. Organizations should consider getting help from an expert who can evaluate their existing technology architecture, business needs and future initiatives to help them choose the right integration solution.

At Dell Services, we have helped banks across the globe find the right solution for their unique environment and goals. Our robust methodology includes:

- A customized technology questionnaire that helps us understand a business's IT environment, staff and customer information in detail
- In-depth analysis of the current state to create a dynamic plan that includes a vision for future business and technology as well as architecture specifications
- A core team, comprised of executives and central managers, to protect key technology and business interests

We can also customize the latest technical reference models based on industry standards to help us assess software solutions. Our assessment takes your business needs into account — from cost and support to security and performance — to make a final recommendation.

Sample technical reference model

This diagram shows how we evaluate the latest ESB products based on a variety of criteria to find the right software for a business.





Simplifying enterprise integration

Organizations that have their own ESBs for existing applications and products but need to migrate to other applications, products or integration solutions for better application functionality or business requirements would benefit greatly from our integration simplification services. These services facilitate the development of and migration between different integration engines from the same or different integration families and ensure increased productivity and efficiency, and reduced costs by promoting pattern-based development and migration for defined project architecture. The services also include:

- **As-is upgrades** for businesses that need to use all existing functionalities without making any changes to their current integration tools (for example, IBM WebSphere Message Broker 7.0 to IBM Integration Bus 10.0)
- **Enhanced upgrades** for businesses that need to use the latest or a later version of their existing integration tools (for example, IBM WebSphere Message Broker 7.0 to IBM Integration Bus 10.0 on a new framework)
- **Cross-family migration** for businesses that need to migrate an integration tool from the same family (for example, Java CAPS to Oracle SOA Suite)

Why a modernized and integrated core banking system is the need of the hour

Banks today need to evolve and transform their current platforms to succeed in today's competitive environment and should focus on simplifying and modernizing their core banking system.

Organizations with a robust and modernized core banking system will be able to adopt new technologies quickly — ensuring increased revenue and visibility. A modernized core can also ensure better integration between IT and the business, improving staff productivity, efficiency and the ability to offer the right product to customers. More importantly, core banking modernization can set the stage for multichannel and omnichannel adoption, ensuring happier customers while paving the way for business growth.

Modernized core banking can help organizations:

- **Increase revenue:** New business and technical architecture with a licensing model for individual components based on customer requirements will reduce revenue leakage and enhance sales.
- **Increase cost effectiveness:** Reusable processes, data and infrastructure as well as reduced product maintenance and support costs will help optimize overall costs.

- **Increase competitiveness:** An integrated and robust banking core can help companies launch products quickly in both existing and emerging markets.
- **Expand product offerings:** With a robust and comprehensive core solution, banks can expand product offerings on demand and stay ahead of the competition.
- **Configure bundled product suites:** The modular nature of modern solutions allows organizations to easily configure bundled product suites that cater to the growing and varied demands of customers.
- **Increase productivity of frontline staff:** Automation and ease of operations will ensure higher staff productivity; while enhanced information flow will improve speed and accuracy of decision making.
- **Easily scale for growth:** A robust core can ensure scalability and support a business as they grow.
- **Reduce application maintenance cost:** An integrated platform will eliminate the need for disparate point-to-point solutions, ensuring easy maintenance at lower costs.
- **Improve business and process performance:** The ability to rapidly configure new processes and services without coding changes will improve process and, ultimately, business performance.

Visit our [Enterprise Business Integration website](#) or write to application_services@dell.com to learn how we can help you create an integrated and modernized banking core.



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