

Core Banking System Selection: Criteria That Matter

Gartner Industry Research Note G00212087, Don Free, 27 April 2011, RA20 08032011

Many banks become entangled in the core banking system selection phase, misdirecting scarce resources and resulting in poor choices. Decision makers must fixate unwaveringly on criteria with the highest bank impact.

Key Findings

- A flexible core banking system is a significant contributor to a bank's ability to respond quickly to changing market conditions, including compliance with changing regulations.
- Some seemingly obscure design elements of a vendor's core banking offering – such as service-oriented architecture (SOA) – are often profiled as technical elements and thus overlooked as a critical area of review by the business.
- Mapping current business processes to prospective applications is a critical step in core banking system discovery efforts. However, there are other, more-important areas of discovery, such as the core application's strategic alignment with future marketing and business initiatives.

Recommendations

- Determine which standards (that is, messaging and service) are supported by the core banking system. Vendor products with proprietary integration, absent a standards basis or alignment, are a high-risk choice for the long term. Adoption of these systems carries much higher than average integration costs for future technology projects.
- Review the program management methodologies and embedded quality programs in the implementation service. Technologies that support continuous-improvement project approaches, such as project management repositories, are a positive sign that the vendor learns from its mistakes.
- Scrutinize core banking vendor programs for system integration partners. Ensure that continuing-education programs exist and that resources are certified on the targeted core banking system release.

ANALYSIS

Massive investments of time, resources and capital are injected into core banking system selection efforts to ensure the realization of the business and technology goals that justify a core banking system replacement strategy. Still, many banks will fall short of this goal.

Competing interests as well as a lack of experience in efforts usually performed just once in a few decades are the primary issues that cripple the core banking system selection phase. Directing critical, limited investments in the most efficient and effective way for a program of this magnitude is a challenge for any bank executive, regardless of his or her background.

Key Evaluation Criteria

A change in core banking systems can have a significant impact on banks and can be a career-altering event for CIOs. Not unlike other high-visibility projects, the success or failure of core banking system replacement projects can often be traced back to the due diligence efforts performed during the evaluation process.

Just as a bank has unique characteristics and a distinctive culture, the requirements for a core banking system will differ among banks. So, while there isn't a single evaluation weighting or scoring method that works for every bank, there are common areas on which to focus additional time and resources to ensure a proper vendor and product fit.

Many important aspects of vendor and product assessment should be reviewed, such as a best-of-breed approach versus a suite approach, as well as the operating system, hardware and database. However, drawing from Gartner's extensive research of bank requirements and core banking system selection projects, we have identified eight key criteria that have the most impact on core banking system decisions:

1. Functionality
2. Flexibility
3. Cost
4. Viability
5. Operational performance
6. Program management
7. Partner management
8. Customer references

This analysis explains the details of the eight key selection criteria.

Criterion 1: Functionality

Although mapping current business processes to the functionality of prospective applications is a critical step in core banking system discovery efforts, there are other equally important areas of discovery – such as the core application's capacity to align with future marketing and business initiatives. Bank executives should ask for marketing participation and, at a bare minimum, review the marketing plans that span the next three years – if they exist.

Another vital issue associated with ensuring adequate functionality for the business (in the present and the future) is the application's ability to adapt to the business, not the converse. Banks must focus on the application's capability to quickly provide efficiency and effectiveness that will empower business process improvement throughout the enterprise.

Apart from product configuration or "product factories" that provide real value in reducing the time to market for new products, bank executives should look for systems and near-term product road maps that provide a library of business components that can be reused to accelerate technology support for new products being introduced to the market and to effect changes to similar business processes.

For example, credit authorization processes may have definable differences that previously justified separate technology applications in several lines of business (LOBs). However, component-based systems remove technology constraints by using reusable building blocks residing in a single application for a common look and feel, while rule-based workflow enables unique differentiation – for example, on dollar amount, geography, loan type or customer. This enables the centralization of credit function processing, while maintaining the unique characteristics of each LOB or product.

Criterion 2: Flexibility

A flexible core banking system is a significant contributor to a bank's ability to respond quickly to changing market conditions (including compliance with changing regulations). Specifically, core banking solutions should provide flexibility that includes application connectivity and data integration, workflow, and component-based architectures.

Application Connectivity and Data Integration

Application connectivity and data integration can contribute to virtual centralization and rationalization of enterprise data. Banks should avoid systems that use proprietary integration methods and don't support data transformation for evolving banking standards, such as Interactive Financial eXchange (IFX), ISO 15022 and UNIFI/ISO 20022 standards, or the Mortgage Industry Standards Maintenance Organization (MISMO) standards.

Standardized Data Models

The concept of standardized data models is an area of interest among some large banks, such as IBM's Information FrameWork (IFW). However, the adoption of this standard is slowing. The high cost and the scope of extended core development in connection with core system banking replacement are causing it to fall out of favor with most banks, and the number of core banking vendors supporting this standard is dwindling. Other core banking vendors use packaged integration systems, such as SAP with NetWeaver and Oracle with Fusion, to standardize their integration layer. This can be especially important for banks that are adding new applications, such as CRM, and that want to minimize integration puzzles.

Event-Driven Technologies

Many core banking solutions are promoting workflow technologies or event-driven technologies to better support multistep business processes that often cross LOB boundaries or technology platforms. Vendors build this into the product or acquire those capabilities through partnerships, such as with business process management suite (BPMS) vendors. Standards, such as Business Process Execution Language (BPEL), are gaining momentum to support these systems.

Gartner's architecture survey also showed some consolidation of BPM vendors and tools. There are distinct issues with application-specific approaches vs. BPMS approaches in terms of creating new islands of distinction that introduce architecture inconsistency.

New-account opening is a good example of a multistep process. Those steps consist of:

- Gathering customer information
- Performing anti-money-laundering checking, know-your-customer compliance and fraud detection
- Authorizing credit
- Establishing the back-office account
- Accepting an initial deposit
- Providing account fulfillment (that is, a debit card or automatic teller machine card, and product disclosures)

When manual processes persist, or technology performance falters, the bank misses the opportunity to make a good first impression with a new customer, making future cross-selling efforts difficult.

When examining core banking systems, bank executives should seek workflow capabilities that emphasize ease in administration and plan to build internal skill sets to centrally support these systems. In outsourcing models, bank executives should consider the differential cost of the outsourcer performing this maintenance versus managing this internally.

Service-Oriented Architecture

Valuable design characteristics include component-based systems or SOAs. In effect, the system should be able to break down application functionality to the simplest levels and make these objects accessible across the enterprise. This component concept reduces complexity and promotes fast product development. SOA also promotes the ability to integrate across various vendor solutions with the use of industry standards, such as the emerging Banking Industry Architecture Network (BIAN) standards.

Bank executives should be aware that core banking vendor SOA strategies differ between legacy wrappers that expose legacy functionality and pure-play SOA services that are more versatile and more effective for the long term.

Criterion 3: Cost

Core banking system cost is not an insignificant aspect of the selection process. Business case justification using only return on investment is an increasingly rare approach. It's an important criterion, but it does not solely define the true value of IT investments. A more practical measure is the business value of IT, which takes into consideration ROI, as well as other important factors, such as strategic alignment, architecture, risk and business process impact.

Typically, core banking system costs can cover a broad range of pricing methods. This is dependent on a number of factors, including bank size, region, number of customers or accounts, customization requirements, and vendor motivation. Although license fees are often the initial target of negotiation, maintenance fees, which can range from 18% to 22%, can be a prime area for obtaining savings over the long term. Also, customization requirements that are regulation-related or are applicable to local requirements should be looked at. These development efforts can often be shared with the vendor by up to 50%.

Training, implementation and other resource-related costs usually are not good candidates for negotiation, because they are related to time and materials.

Criterion 4: Viability

Selecting a core banking product should not be a tactical, point-driven, decision-making effort. It's entirely strategic and vital to the long-term health of the bank. So, the viability of a vendor is a crucial element in the search for a replacement system. In this consolidating core banking system market, it is especially important that banks assess the likelihood that a given product will survive

an acquisition – How likely is it that the new owner will keep supporting and investing in that particular package?

Here are some potential signs that product viability is at risk:

- *Lower sales* – Year-over-year sales are trending downward over a multiyear period. This is an especially important area of focus when the product target market is in the Tier 2 to Tier 4 range.
- *Poor design or architecture* – The use of proprietary integration is evident, and either the product has no discernible road map to adopt SOA, or product road map execution credibility is suspect.
- *OS, hardware and database dependency* – As the core banking market moves to OS-, hardware- and database-neutral core banking systems, the dependency-based core banking systems will experience increased levels of competition in their home markets.
- *Decreased customer satisfaction* – Product support is flagging, resulting in lower customer retention.

In addition, bank executives should analyze a vendor's viability, not just through assessing its financial stability, but also by scrutinizing its technical competence, development capability, quality of support, marketing and sales reach, alliances and partnerships, and management performance.

Criterion 5: Operational Performance

Some seemingly obscure design elements of a vendor's core banking offering are often profiled as purely technical elements and thus overlooked as a critical area of review by the business. However, design elements associated with scalability, resilience, data centralization and real-time enablement have true business value and merit special attention.

Scalability

Scalability is an elusive measurement because of the nonstandard nature of database characterization (that is, the number of customers, loans, transactions and fixed-term accounts), concurrent users, and the type and number of online and batch transactions associated with the vendor's benchmark. Each vendor attempts to set up the "typical" configuration; however, banks should always insist on the following:

- A personalized benchmark that is representative of the bank's current customer base and five-year growth projections
- Benchmark hardware and software configurations that match the vendor-supplied proposal

Resilience

Resilience represents the level of certainty that an initiated transaction will be executed in the core banking system. Better-architected systems will support multithreaded messaging with failover characteristics, leading to higher transaction confidence rates and minimum downtime.

Data Centralization

Dependent on the bank's target markets and geographic distribution, other capabilities may prove pivotal in improving service quality and reducing operational costs. Apart from standard functions of multicurrency and multilingual support, bank executives should look for systems that are able to centralize data without regard to time zone or country of origin. These features enable the consolidation of databases or data centers to reduce servicing costs and simplify operational processes, while improving consistency across channels and geographies.

Real-Time Enablement

The industry standard of 24/7 system availability is certainly not a recent technology innovation. However, how the vendor accomplishes this feat is important – especially to support emerging capabilities, such as real-time access. As requirements for financial transparency increase, bank executives should look for systems that leverage database design to enable real-time posting of future-dated transactions. This capability eliminates the mirrored-file process that is often associated with store-and-forward methods (dual files).

Criterion 6: Program Management

One of the most compelling areas of a bank's analysis rests with the implementation practice of the vendor. Failure to perform due diligence regarding vendor project management capabilities can drive up implementation costs exponentially and dispirit bank staff.

All vendors should be able to provide a standard project plan for implementation efforts – but this won't prove that a vendor can manage the bank's project and many others simultaneously. However, reviewing the plan to ensure each project task has definable inputs, a specific process and tangible deliverables will increase accountability and provide an effective measurement of task completion.

Bank executives should determine whether the bank or the vendor controls the project plan. However, best practices show that banks have more success when they maintain control over the project and the corresponding plans.

Bank executives should also look for vendors that have quality assurance programs that effectively manage empirical project implementation data over a long time period. This project database should demonstrate an ongoing learning process that translates the vendor's past project experiences (best practices and problem areas) into more-predictable project events. Bank executives should ask to review the vendor's past projects with banks that have similar profiles (for example, LOB, products, size and region).

In addition, external project management certification, such as Project Management Professional (PMP) from the Project Management Institute (PMI), is a sign that repeatable quality practices will be leveraged.

Criterion 7: Partner Management

As the pace of core banking system replacement increases, properly skilled resources are becoming scarce. Consequently, vendors are increasingly reliant on system integrators or other partners to deploy their solutions to resolve project performance inconsistencies.

Vendor partners are often referred to as "certified," but banks need to evaluate the certification process used to educate project resources. These certifications should be directly aligned with individual resources, not just aligned at the organization level.

Banks should ensure that project staff members have active certification with the targeted core banking system release level. Moreover, because project resource turnover can directly impact the success of a program, Gartner recommends that banks add contractual language to enforce these terms.

Criterion 8: Customer References

It's vital to talk with a vendor's customers to assess "real world" experiences. Vendors will have their targeted list of references for use in the sales cycle. However, banks should be aware that the banks on these lists often receive preferential treatment from the vendor.

Bank executives should review the reference lists to find banks that have similar profiles – in how they use the system and enterprise scale – to gain a more balanced perspective.

Recommendations

Bank executives should:

- Analyze a vendor's viability, not just through assessing its financials, but also by scrutinizing its technical competence, development capability, quality of support, marketing and sales reach, alliances, and management performance.
- Pursue vendors that have quality assurance programs that effectively manage empirical project data over a long time period. This translates the vendor's past project experiences (best practices and problem areas) into more-predictable project events.
- Gather information from the strategy and marketing departments to gain insight on "drawing board" growth strategies that will impact business requirements for core selection criteria.
- Determine which standards are supported by the core banking system. Vendor products with proprietary integration, absent a standards basis or alignment, are a high-risk choice for the long term. Adoption of these systems carries much higher than average integration costs for future technology projects.
- Review the program management methodologies and embedded quality programs in the implementation service. Technologies that support continuous-improvement project approaches, such as project management repositories, are a positive sign that the vendor learns from its mistakes.
- Scrutinize core banking vendor programs for system integration partners. Ensure that continuing-education programs exist and that resources are certified on the targeted core banking system release.
- Talk with reference banks that have similar profiles in terms of system usage and enterprise scale – to gain a more balanced perspective.