For banks, the core banking system is the underlying system of record for credits and debits that maintains transactions, histories and balances. The core platform is both the map and the compass that link a bank’s operations, clients and correspondents together as they transact.

When core banking systems were originally put in place, they were considered ideal for the function they were tasked to perform – recording transactions on an account. In today’s banking environment, however, core platforms are expected to do much more than just act as the system of record for credits and debits, and many are challenged to keep up.

Today, technological advancements, ever-changing regulatory requirements and the entry of nontraditional service providers are coupled with continuously evolving performance and client expectations. These factors are causing banks to evaluate their existing, monolithic-based core banking technology architecture and seek alternative, more surgical approaches to decomposing capabilities.
Ripping out old infrastructure and replacing this with a newer, more efficient solution for routing and executing transactions is an undertaking that requires fundamental transformation across core processes, data flows and architectures. A full core banking replacement is a multiyear transformation that can cost hundreds of millions of dollars depending on the size and complexity of the financial institution, scope of implementation and the deployment approach. It’s no small endeavor.

**Examples of core banking replacement duration and cost***

<table>
<thead>
<tr>
<th>Bank</th>
<th>Duration</th>
<th>Deposits</th>
<th>Consumer/ business loans</th>
<th>Mortgages</th>
<th>Credit cards</th>
<th>M&amp;A</th>
<th>Estimated cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank A</td>
<td>6 years</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>$450m</td>
</tr>
<tr>
<td>Bank B</td>
<td>4 years</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>$360m</td>
</tr>
<tr>
<td>Bank C</td>
<td>4+ years</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>$350m+</td>
</tr>
<tr>
<td>Bank D</td>
<td>5+ years</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td>$200m</td>
</tr>
</tbody>
</table>

*EY analysis

Using outdated banking technology makes it hard for some banks to make strides forward when it comes to providing their customers with faster, more advanced banking services. In order for a bank to be successful when it comes to core renewal, it needs to look at decomposed business capabilities, rather than the technology itself.

In our dynamic banking environment, modernization is not always the right answer. Core banking system renewal must move banks toward a more vertical architecture that provides a modular approach to progressively enabling the bank to deliver fit-for-purpose business capabilities; a set of services that support these capabilities; and a significant uplift to speed, efficiency and data delivery. The ultimate target should be establishing a list of required capabilities and determining a mix of current systems and new modular banking technology to reach this target state in the most effective way possible.
The challenge of core banking replacement

For some, a core banking replacement simply presents too much cost and risk. Decisions to replace core platforms are repeatedly being delayed or deferred due to the high cost of implementation, a lengthy delivery cycle, the risk that potential system disruption poses to client experience or the danger that banking technology will already be outdated by the time the system is replaced.

For those banks which have not yet begun their core transformation journey, the complexity, risk, cost and duration of this change can be daunting. Although the reward for core banking replacement is high, for some institutions the risk involved is often perceived to be higher.

Irrespective of the risks involved, the objectives of core banking replacement — delivering a flexible infrastructure that will allow banks to meet ever-changing performance improvement goals, client expectations, regulatory requirements and demands for efficiency — need to be addressed. There are ways to achieve these objectives without tackling all the obstacles and complexities of a traditional replacement.

A surgical approach to core banking system renewal – progressive enablement

A new approach to core banking replacement breaks the core into components and enables the capabilities one at a time. This surgical approach allows for a more modular process for core enhancement that can reduce cost and complexity. Individual components can be modified and enhanced one at a time, which allows the bank to work towards a more efficient and advanced core without the large-scale investment needed to complete a full core banking replacement.

One example of this surgical approach is microservices-based architecture, which takes the component approach to the next level by further breaking down the coarse-grained components into deployable, atomic services, each with their own data of records. These atomic services are then aggregated into larger services through rules-based orchestration. This aggregation gets recursively applied to define new operating models and address evolving market and client expectations.

How will your internal environment influence your core renewal approach?

- Have you already modernized components of your core?
- Do you have a common data environment across systems? What middleware is already in place?
- Is your legal entity structure multilayered? Does it cross multiple jurisdictions?
- Do you have a rationalized product offering? Or are there variations by business line, region, segment, etc.?
- Does your core banking system need to support multiple distribution models? Or will it focus on one or two channels?

How will your future-state vision influence your core renewal approach?

- Is it clear what the fundamental driver of your transformation is? Increasing market share? Growing profitability? Staying compliant?
- Where are your competitors with their core modernization?
- What pathway to core renewal aligns to your vision? Gradual renewal? Enhancing existing platforms?
- Will your new core support all product groups? Or focus on target products, e.g., deposits and loans only?
- How can a new core enable your strategic plan (e.g., distribution enhancements, pricing strategies, M&A)?
Strategic options to core banking replacement

Do nothing and build around the existing core

Replace surgically in an agile fashion, by decomposing core capabilities

Execute a full replacement of core

Renew gradually with modular or fit for purpose replacement

Run a parallel core alongside the legacy core

A spectrum of alternate pathways to core renewal

Laser focus on performance and shareholder value

The ability to show strong earnings on a consistent basis has been a struggle for banks and has resulted in slimmed-down organizations, layoffs and branch closings. In order to continue to grow revenue, banks will need to find a way to lower the cost of doing business and to sustain those efficiencies as revenue grows.

It will also be important for banks to deliver on their value proposition and to provide a superior client experience that grows and maintains revenue generation. In order to do this, banks, and banking technology, need to be able to target the right clients with the right products and segments and to continually develop new strategies to cross-sell to existing...
clients, gathering a larger share of each client’s financial assets. Segmenting out products and services in a modular, vertical architecture allows the bank to take a more customized approach for each client group and to quickly and easily change those groups or strategies, as needed.

**Using banking technology to exceed client expectations**

Meeting the ever-increasing demand for bespoke banking products and services is a challenge that many banks face. To compete in the new environment, banks must expand the choice and proposition they provide to customers: faster payment channels, easier-to-use platforms (mobile, online) and the ability to link all aspects of one’s financial life are all high on the list of client demands. Mobile payment services (e.g., PayPal, Apple Pay) have a distinct advantage over banks when it comes to ease of use and speed at which money can be moved; however, they cannot provide a complete financial experience for the client. Those banks that can move away from generic “one size fits all” product offerings and use their core banking system to allow each client to have a custom-made experience will set themselves apart from others and gain a much-needed competitive advantage.

Banks must know what their clients want and deliver solutions to meet those needs. They should allow the client to piece together different products to fit their requirements, while allowing faster creation and launch of new products and services. Products and services should be flexible, configurable and scalable.

**Focus on performance and shareholder value**

- Delivering shareholder value remains the number one objective
- Lowering the cost of business and sustaining efficiencies are essential in order to grow profitability
- Segmented marketing to cross-sell products to existing clients will provide a superior client experience

**Exceeding client expectations**

- Clients need to be provided a choice when it comes to their banking products and services
- Ease of use and speed are high on the list of client priorities
- Banks must find a way to understand the breadth of client needs and provide the complete financial experience

**Risk, regulation and compliance as a competitive advantage**

- Legacy core systems are unable to keep up with a constantly changing regulatory environment
- Banks must be able to explain products and services in a clear, consistent manner
- The document retention process must be consistent and fail-safe

**Risk, compliance and regulation as a competitive advantage**

Banks have spent several years under increased regulatory scrutiny and have found their core banking systems unable to keep up with changes in the regulatory environment. Developing a technical infrastructure that can be used to quickly and efficiently meet regulatory requirements is essential in order to keep costs down, remain compliant and mitigate risk. An essential part of that is developing a Recovery and Resolution Plan (RRP) and embedding this in the bank’s operations. The RRP provides a simplified operating structure, allowing minimal disruption should the bank come under extreme financial stress. Banks must have this system in place, and build this into business as usual systems and processes, or risk paying the penalties.

One area of high scrutiny is client onboarding. Regulators are looking for banks to be able to explain their products and services in a clear and consistent manner so the client can fully understand the scope of what they are signing up for. The bank must gather and retain documentation of the client’s decision, a process that must be done correctly. Many banks still use paper to collect a client signature, which makes the process lengthy for the client and creates inconsistent documentation. A new core banking system needs to quickly move the client through the process with easy-to-understand language and a document retention process that is fail-safe. Focusing on building out data infrastructure around the core, and moving to e-capture (e.g., e-signature, enhanced document management software), will help support regulatory reporting and expand the scope of data beyond transactions.
Achieving sustainable efficiencies through core banking systems

While client expectations and regulatory response are extremely important in a core banking replacement decision, many banks often defer a core banking replacement due to the high cost. However, the challenge of continually reducing the cost of operations to compete with new entrants and meet shareholder expectations must be solved.

While a traditional core banking replacement offers a significant efficiency lift at the end, the payback is often too long given the volume of competing priorities. Seeking alternate opportunities for short-term gains, including identifying and rationalizing platforms that are high-cost/low-benefit and replacing these with more modern components that can efficiently integrate with the legacy core, is another lever to pull on in support of this lift.

Banks should address the problem of core from the outside in and progressively build the services needed to renew their core banking system. This allows for a bite-sized transformation: banks can build the services needed to support specific products or capabilities (e.g., the Client Information File) and gradually incorporate the rules to utilize these services more broadly. This surgical approach mitigates the risk of core transformation by reducing delivery time, restricting the scope of data and process conversions, and minimizing the risk to the legacy bank. It also enables core platform renewal without the need for the bank to make the massive investments required to fund a full core banking replacement.

Thinking around the obstacle of core banking systems

New approaches to core banking replacement should allow for a quick evolution from a tangled and inefficient architecture to a flexible, optimized and future-fit technology and business model that removes the concept (and obstacle) of “core” altogether, effectively meeting the objectives of a core banking replacement while reducing the risk and cost of large-scale implementation.

Banks must continue to focus on maximizing their ability to meet the needs of their clients, regulators and shareholders. For those banks contemplating a core modernization journey, or considering alternative approaches to an existing replacement, a thorough and independent diagnosis of strategic choices available will support effective decision-making and identification of the right course of action, in line with the individual company’s budget, risk appetite, strategic direction, technical infrastructure and operational readiness for change. Careful planning and prioritization upfront are critical to success with core banking replacement and, once agreed, can support that strategies for core are embedded in longer-term financial, operational and cultural objectives.

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