A Platform Approach to Banking Transformation: You Can Have It All

WHITE PAPER
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IN THIS WHITE PAPER

This White Paper discusses the renewed interest among Asia/Pacific banks in modernizing their core banking systems. We discuss how pending core banking projects should strive for a balance in the principles of openness, efficient integration, and modern application capabilities – representing a clear shift in preference among banks that favored one principle over others in previous core banking projects. This document also presents practical advice for banks as they embark on their own journey towards core banking renewal.

SITUATION OVERVIEW

IDC Financial Insights predicts that 2011 will see a buildup in the number of core banking projects among banks in the Asia/Pacific region. This reverses the trend of a decline in the number of deals that we started to observe in 2006, and which persisted through the global financial crisis.

Within the next three years, we expect about 42 of the top 150 Asia/Pacific (excluding Japan) banks to undertake substantial changes in their current core banking systems (See Figure 1). These include not only whole-of-core transitions, but also significant changes to key components of their core systems such as chart of accounts, general ledgers, as well as loans and deposit systems. Moving beyond the big players, some mid-tier banks have realized how their old core banking systems have made them lose their competitive advantage through the years and impeded them from aggressively pursuing the opportunities in a revitalized economic environment. As such, they will be investing in core banking systems accordingly. We also expect whole-of-core deals to emerge from the ranks of new banks coming into the industry or entering new markets.
The following trends define core banking in Asia/Pacific's main sub-regions:

- **China.** Scalability is the name of the game. Outside the big state banks that are going for in-house solutions that might or might not be based on large vendors' core banking frameworks, the mainland's city-based banks will invest in core solutions that are easy to deploy and that will provide significant capabilities in throughput and transaction volumes. Thanks to newly issues banking licenses, foreign banks are quickly setting up operations in the country, and are thus eager to roll out core banking systems expeditiously, albeit with some customization to align with Chinese banking practices. Meanwhile, rural cooperative banks are keen to invest in utility-based solutions.

- **Singapore and Hong Kong.** The Asia/Pacific financial powerhouses are competing to be the IT and operational hubs of emerging Asia/Pacific super-regionals, and will thus seek core banking platforms that can serve multiple operations across multiple countries. Banks will be looking for a base set of applications that will be the platform for country-specific overlays for risk management, currencies, products and pricing. Meanwhile, the dominant domestic players (three homegrown banks in Singapore; and fewer than ten banks in Hong Kong) will need to map out their respective core banking systems for the future.

- **Emerging ASEAN.** The momentum for core banking renewal will come from either the top-tier domestic players (Vietnam, Malaysia, Cambodia) or from the mid-sized banks (Indonesia, Philippines, Thailand) that want to use modern core applications to
propel them to the big leagues. Aggressive market share competition is expected within the ASEAN markets, and a new core banking system is tied closely to the organization's ability to compete, and rise above its peers.

- **Australia and New Zealand.** Huge core banking deals come in cycles, and the recent surge in core banking spending will not be sustained. Smaller banks, however, will still need to modernize their legacy platforms.

- **North Asia.** Core banking deals will be signed by banks that have recently or will soon finalize their strategic IT master plans. These master plans are built on the banks' views of how banking will be undertaken in the future, reflecting the forward-looking mindset of only the strongest, most sustainable banking organizations in South Korea and Taiwan.

### What Makes It Different This Time

Why is there such ripe need for change? The increasing focus on core banking system transformation reveals a great urgency for banks to deal with the pro-growth cycle that has emerged in Asia, a positive trend that is believed to be sustainable despite economic volatilities in the U.S and Europe. Secondly, banks also see technology advances made by both the core banking players and supporting solution providers, so that core banking projects can be perceived to be less daunting and less risky than previously.

What also makes today's core banking market different from that of years past is how various drivers of core banking system transformation have shifted in relative importance. In particular, risk management and regulatory compliance requirements are driving demand significantly. More than ever, banks would like to see greater ease with which their core banking systems help them cope with the onslaught of new regulations, and the new reporting requirements that come along with new rules.

Another current driver: data structures and data management. As banks vigorously pursue single customer views and other enterprise-wide consolidated views, banks are reviewing how data structures are organized within their core systems. In the process, they discovered that data structures in and around the core banking systems are far from ideal – multiple silos exist, the same customers have multiple customer information files (CIFs), product systems cannot be reconciled, among many other issues. A gradual and iterative re-architecting of data will be in order. This effort should align with banks' strategies vis-à-vis the phenomenon of Big Data, which points to how the information that banks are able to gather from their customers, products and operations have exploded in both quantity (larger sets and volumes of data) and type (new types of data, including unstructured social media interactions). Together with the systems' capabilities to process data more quickly and efficiently, Big Data will call for strategies on how organizations will collect, store,
manage and make sense of data in and out of core banking systems. Such strategies will serve to further deepen customer interactions, develop new products, better manage risks, and optimize operations.

Another relatively new driver is the push by many Asia/Pacific banks to create multi-country technology platforms in support of their super-regional strategies. In the past two years, IDC Financial Insights has pointed out the emergence of Asia/Pacific "super-regional organizations", defined as rapidly regionalizing Asia-based institutions that have built a pan-Asia presence, typically choosing to manage regional units that are close in proximity or limited to one specific part of the region. We have highlighted ten such super-regionals, namely ANZ Bank (Australia), Commonwealth Bank of Australia, DBS Bank (Singapore), Oversea-Chinese Bank Corporation (Singapore), United Overseas Bank (Singapore), Maybank (Malaysia), CIMB Bank (Malaysia), Sumitomo Mitsui Banking Corporation (Japan), Tokio Marine (Japan) and Sumitomo Mitsui Insurance (Japan). We have also noted similar super-regional propositions from four other institutions: RHB Bank (Malaysia), Hong Leong Bank (Malaysia), Korea Development Bank, and Industrial and Commercial Bank of China.

The unique technology strategies of these super-regionals will include hubs in IT and operational hubs in key countries (typically either Singapore or Hong Kong) as well as a standardized core banking platform that will be used across the organization's various operations in the region, albeit with country or market-specific overlays. The real and ultimate goal would be a common core platform for the organization across different geographies.

Still, the long-held drivers of cost management, scalability, and product-to-market are as relevant as ever. Banks would like to bring down the costs of maintaining and managing hardware, middleware, database as well as software that make up their legacy core infrastructures. Through time, the rest of the industry has seen the costs of these components go down, and banks with old cobbled-together systems can see significant costs being taken out when they migrate to more modern systems. Banks, of course, still see the old issues of how core systems prevent them from scaling quickly enough, or to manufacture and bring to market many new products. Modern core banking systems with improved configurability, superior parameterization and intuitive user interfaces can help resolve these issues.

**The Evolution Continues**

Core banking, while global in relevance, is bank-specific in practice. That means that every core banking project is unique to the requirements and context of every institution. Market-level or region-level trends are however notable, especially in how banks prefer several core banking vendors over others, as well as how banks in a market align with one architecture or design principle over other alternatives.
Over the decades, Asia/Pacific banks have undergone evident shifts in their preferences vis-à-vis how their core banking systems are designed. The journey has taken the industry from their initial preference for closed-proprietary, typically mainframe-based systems, towards "open" core banking systems (here, IBM's AS/400 and its subsequent iterations gained considerable clout in the market), and now towards a modern platform approach to core banking renewal.

**Leaving Legacy Behind**

Much of what the industry calls "legacy systems" were core banking investments made thirty or more years ago. These legacy systems have proven themselves to deliver some of the highest availability and performance levels – much of the growth in revenue and profit in the past decade can be attributed to systems that worked as promised. We still see several big banks choosing to remain on legacy systems (and we take a broad definition of legacy here; which includes mainframe-based systems still prevalent in large banks, as well as old applications cobbled on associated IT components like middleware, database as well as hardware).

A CIO we spoke with for this white paper remarked that while banks can enjoy the advantages (enumerated below) of the alternatives to these legacy system, CIOs like him have to ensure that these supposedly new systems can deliver similar or better performance, have high availability, and will be as dependable as the "old reliable" systems that have been in place for many years.

However, market changes that confront the banking industry make proprietary systems less appealing – and especially so in recent years, since the pace of change has accelerated markedly. Furthermore, these changes have occurred on multiple fronts – requiring banks to deal with new channels and new channel types, new products with unique parameterization requirements, new pricing models, new customer relationship management (CRM) strategies, risk management-oriented management information system (MIS) activities, and so forth. Increasingly, banks have to work with new tools and software across a wide range of areas.

The previous closed-but-integrated alternative was to develop the required functionalities on the legacy platform the bank was on. This obviously got more complicated if the bank worked on proprietary hardware and software infrastructure. Integrating legacy applications with modern software technologies was, and continues to be, a challenge. Also, a declining pool of skilled resources to effect necessary changes is a clear constraint, resulting in significant expenses for the bank. There would also be an unacceptably long period of time for the necessary changes and integration to be completed – and probably long after more agile, more flexible institutions have caught on and completed their response.
The Virtues of Open

Through time, and especially in the past decade, banks saw the virtues of modern systems that are built on open technology and hardware. With open systems, a bank could bring together best-of-breed solutions that respond to multiple and disparate business requirements. Banks do not have to develop specialized solutions on the proprietary platform, or force-feed these into the legacy system. With rigid technology frameworks, legacy systems typically make it difficult for banks to change or enhance business processes, introduce new product features, or come up with new customer relationship strategies – essential requirements for innovation in financial services. Now, with an approach that is inclusive and takes advantage of the quality of functionalities that modern third-party tools bring, the entry-level cost of innovation, as well as the time to innovation can drop significantly.

The cost issue is, of course, cited to be the major drawback of the previous focus on closed, proprietary (but well integrated) systems. These systems typically resulted in high maintenance cost – yearly licenses for old application and operating system software do not usually come down quickly enough; and since hardware and database are typically old, a bank has to pay a lot more for incremental power or processing speed. As a result, running legacy systems are several times more expensive than running an open system with similar configurations. Indeed, the cost of implementing an open core system can very quickly be covered by an immediate cut to license and maintenance costs.

In the practical terms of pricing and procurement, open core banking systems do end up as a much cheaper alternative for banks. This is because there are more open application providers available that can compete for the bank's business, and thus can reasonably bring their costs down. Banks can expect even lower cost because of competition.

The principle of "open" is almost religion now – for example, out of the 42 banks that we expect to shift towards a new system, more than two-thirds are likely to go for open platforms.

... But Open Systems Can Quickly Become Legacy, Too

Banks on open systems can however be victims of the legacy problem too. After all, the dynamics of change that has rendered closed systems deficient has persisted. Banks know that adopting a steady-state mindset in their core banking systems regardless of how new and open these systems may be, quickly makes them obsolete.

The approach to effecting these changes to core systems has unfortunately been far from ideal. Experience has shown that through the years, open systems become inflexible as banks piled on changes and enhancements. Each of these changes typically required adjustments to the interlace of systems and applications that made up the core system. The benefits of an open system – flexibility, scalability, and ease in making changes – have diminished.
IDC Financial Insights research also reveals another issue (see Table 1). Core system implementations in the past five years (2006 to 2010) have lengthened in duration compared to those of implementations in the five years prior (from 2001 to 2005).

On one hand, stretching core banking project deployments was useful because this allowed banks to phase out investments and risks, and ensured that project teams broke down a major core banking system replacement project into digestible, manageable segments. On the other hand, much longer projects resulted in modern application functionalities being brought to market less quickly. By the time they were rolled out, they often had to go through another round of enhancements – they were neither modern nor differentiating for the bank. Ultimately, the lesson here is simple: open is not good if it takes too much time.

### TABLE 1

<table>
<thead>
<tr>
<th>Tier</th>
<th>Average Duration of Project, in Years (Across number of banks) from 2001 to 2005</th>
<th>Average Duration of Project, in Years (Across number of banks) from 2006 to 2010</th>
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<tbody>
<tr>
<td>Tier 1 – More than US$10 billion in assets</td>
<td>3.5 years (12 banks)</td>
<td>4.2 years (18 banks)</td>
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<tr>
<td>Tier 2 – Between US$5 billion and US$10 billion in assets</td>
<td>2.4 years (18 banks)</td>
<td>4.1 years (11 banks)</td>
</tr>
<tr>
<td>Tier 3 – Between US$1 billion and US$5 billion in assets</td>
<td>3.6 years (9 banks)</td>
<td>3.3 years (15 banks)</td>
</tr>
</tbody>
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Source: IDC Financial Insights, 2011

Of course, it can be said that lengthened project times were caused by a much longer list of functionalities and solutions being built into the core banking project. Indeed, for a few banks that we reviewed, core banking projects introduced much richer functionalities than the previous system. Oracle Financial Solutions’ FLEXCUBE Core Banking Solution references Bank Danamon International in Indonesia and Philippine National Bank, among those interviewed for this white paper, are examples of these institutions.

The general trend in the five years from 2006 and 2010, however, was increasingly lower investments in point solutions and functionalities. As we track the number of single-product, point solution and module-specific sales among core banking vendors, we saw particularly steep declines in 2008 and 2009. These declines reflect tight IT budgets at the height of the crisis, causing investments in additional module replacements to be more thoroughly scrutinized, and forcing IT teams to "make do with what we have." The number of deals has since increased in 2010 and 2011, but at least for the most part of the past few years, the story was that of fewer modern functionalities being
introduced. In other words, many supposedly new systems among Asia/Pacific banks are, in fact, not that new.

On the vendor side, there have been notable changes in their approach to the market. Support by solution providers for open systems has increasingly become inconsistent or unreliable (or both). While certain core banking providers have scaled up their list of functionalities and modules in support of open systems, more vendors have brought down investments in application development on these open systems. Instead, the approach taken by vendors is for a more highly involved, robust application development on their own platforms, with a clear preference of selling whole-of-core systems outright. For banks moving forward, it might not be so much about various best-of-breed solutions being brought together and integrated, but it will be about going with the core banking platform of choice.

### A Platform Approach to Core Banking Renewal

The story thus far has been that while closed-proprietary systems have their own share of issues, the shift towards more open systems has itself unfurled a whole new set of problems as well (see Table 2). We do not however lay blame on the openness principles to core banking renewal. Rather, we underscore the evolution core banking systems has to continue.

#### TABLE 2

<table>
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<th>Key Issues of Closed-Proprietary and Traditional Open Core Banking Systems</th>
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<tr>
<td><strong>Proprietary-Closed Systems</strong></td>
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<tr>
<td>• Banks slow to develop new functionalities to respond to new market dynamics.</td>
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<tr>
<td>• Banks generally find it difficult to work with new tools and software across a wide range of functional and business areas.</td>
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<tr>
<td>• A declining pool of skilled resources to effect necessary changes is a clear constraint, resulting in significant expenses for the bank.</td>
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Source: IDC Financial Insights, 2011

A shift towards a new approach to core banking systems has to be under way industry-wide. It has to be an approach that is not so much
a choice between full integration of solutions and thus reliability on one end (the main benefit of proprietary systems) and openness and thus flexibility on the other (the main benefit of open systems in the past). It has to strike a balance between the principles of integration and openness, together with the requirements of quick time-to-deployment, ease of implementation, and richness in applications and functionalities.

IDC Financial Insights believes that banks looking to renew their core system have to work towards a core banking "platform" approach. This platform will typically operate on and/or interact across three major dimensions of the application architecture: line-of-business applications, enterprise applications (e.g., general ledger and HR), and infrastructure (servers, storage and database). These dimensions would be able to incorporate best-of-breed vendor components. However, the main focus should be in plug-and-play integration – that the three dimensions are engineered to work well together.

This platform approach brings to mind the advantages of the Oracle FLEXCUBE Solution. FLEXCUBE's open architecture facilitates seamless integration with best-of-breed solutions available in the market. Furthermore, FLEXCUBE not only has one of the most solution-rich suite of applications among core banking system providers, but also opens up the bank to best-in-class Oracle assets across applications (Siebel, PeopleSoft, Hyperion among the most prevalent applications in the banking space), middleware, databases and servers.

Furthermore, the roll out of Oracle's Exadata V2 credibly swings back the conversation to a prepackaged, hardware-and-software-optimized option for banks. On Oracle's Exadata V2, FLEXCUBE can offer banks the ability to meet the rigorous processing needs, consolidate databases and eliminate the management cost and complexity of multitudes of servers. In the end, banks are able to see rich solution features, computing power, and optimized costs that can ease the risks and pains of a core banking transformation to make the journey worthwhile.

Here, we note that Oracle has recently released benchmarks for Oracle FLEXCUBE on Exadata V2 of 100 million accounts successfully processed in 4 hours and 23 minutes. Coverage included processing interest accrual, interest liquidation and statement handoff for all accounts, accrual for 60% of loan accounts and liquidation for 40% of loan accounts.
FUTURE OUTLOOK

A Roadmap to Truly Open and Modern Systems

CIOs of banks are in need of truly reliable models that would ease their migration process from legacy core banking systems to the modern platform approach to core banking renewal. Here are some considerations as they complete their migration, based on the experience of some of the most successful core banking projects in the Asia/Pacific region.

Building a Case for Transformation: Be Honest

Before a bank undertakes a core banking project, it has to sit back and really understand its justifications for taking on a huge project such as core banking. This introspection is necessary not only for those migrating from a legacy system to an open platform – any core banking project, regardless of platform choice, needs to be thoroughly examined, as it is one fraught with risks and requires significant investments in technology dollars, management mindshare and IT resources.

The bank should face up to the articulated (easy to admit) and the unarticulated (difficult to admit) drivers of the endeavor. It is the latter set of reasons that reveal a lot about the real problems of the institution, and it is in the examination of these issues that will mitigate project failure.

An example of this relates to the concept of "time to market", which is often cited as a justification for core system replacement. While there may be infrastructure issues that are hindering the ability of the bank to operate in a timely, effective manner, more often than not, the issues at stake are not of this nature. How is this "time" component measured? Where is the "time" issue? Is it something within the core processing system or is it found within the channel or process? More importantly, is the "time" constraint linked to the core system sufficiently important to justify a new core system? If the majority of the time to market problems lies within the channels, processes, policies and procedures, an institution needs to rethink its core banking transformation strategy. If, as in this case (and in an increasing number of banks), the limitations banks are facing with their core systems exist in areas outside the core processing engine, the focus of service providers and internal bank teams needs to be on these areas.

Taking a step back from the previous tendency to rip and replace everything, banks must objectively assess the existing systems to pinpoint where the faults lie and address these first, before tackling the core engine. In short, core system replacement projects have to become more and more akin to a comprehensive business process re-engineering program. Here, the institution will understand the process and data gaps and find out how best-of-breed applications will help resolve these gaps and inefficiencies. CIOs need to thoroughly investigate the application options available to the bank; and with an
open mindset, think about how these integrate and align with the institution's vision of a modern core system.

Of course, this vision has to be aligned with what the bank aspires to achieve in the long term. The core banking steering committee has to look into the five-year growth plans of key business units, as well as make a strategic call on how banking will be done in the near future – how the bank will create products, relate with customers, operate channels, deal with its staff, and so on.

The case for transformation should not be developed haphazardly, and some of the most successful core banking projects took over a year to put together a case prior to board approval. Furthermore, the bank has to consider renewal dates for licenses of current core systems, so that they do not miss out on an opportunity to make a switch at the right time, or do not force the hand of the board to make hasty decisions on what could be a very disruptive technology project for the organization.

**Gap Analysis: Cover All Bases, Avoid Bias, Ask the Right Questions**

Each core banking platform in the running should be evaluated for "fit" against future business requirements as well as the current system. The usual practice however, has been for fit tests to focus mainly on future requirements, but we believe an assessment vis-à-vis the current system is fundamental.

A bank needs to have a thorough system study that assesses the incumbent core banking system, and look at indicators of usage and utilization, as well as patterns of use within key units of the organization. It is also crucial to have a documentation of current business practices (for example, accounting, transaction processing, how products and product fields are defined, etc).

Ultimately, the current system should be one of the contenders for the core banking project. Using the current platform as a benchmark, the alternatives being evaluated should provide demonstrably significant advantages in cost, operational efficiency, ease of use, and so on.

On the other hand, future business requirements need to be identified, not only by the current line of business executives but also based on requirements of the bank's peer institutions. This ensures that the business requirements are based not just on the current bias of business executives, but also on the directions being taken by the rest of the industry. A lot of waste has been seen in the implementation team's frantic effort to meet business requirements, only to realize that the technology decision maker has since left the organization. Furthermore, requirements have to be based on a medium- to long-term plan for the organization – the series of five-year business plans for key business units as well as of the organization as a whole, will define scalability requirements.
Each business requirement should be assessed further against different criteria – the possibility of this requirement changing in the short- to medium-term, what will cause the change, and whether the requirement is more a good-to-have item on the list, rather than a very crucial requirement. In the list of business requirements, it is also important not to ask for everything. It is advisable for banks to keep just 80% of what they initially stated as requirements – and introduce the remaining 20% as enhancements after the project's completion. Here, we recall one of the key advantages of open systems: that open systems make such enhancements easier to effect down the line.

One thing we need to underscore is that banks should avoid the temptation to customize too much, striving to fit the new system to meet current processes. These processes are typically legacy too, and are so institutionalized because of the legacy system that is supposed to be replaced. Banks have often changed the new system to match the old, leading to the loss of new functionality and to a painful "death by customization." Core banking leaders need to evaluate each change request to see if there is merit in keeping old processes once the new system is in place.

**RFP Best Practices**

In the request for proposal (RFP) stage, the bank has to know how to structure questions. On one hand, a comprehensive checklist of functionality requirements will sway scoring and decisioning to a tick-the-box exercise, when what is needed are thorough explanations of how functionalities work and how the solution completes certain processes or activities. On the other hand, if the evaluation team opts for general questions, these questions can be subject to interpretation by the vendor. After all, there are definitions and taxonomies that are market- or bank-specific that would not be served well by vendors' tendencies to use template responses.

The goal for banks doing the evaluation should be a process-based understanding of how each alternative system works, especially for key activities like lending, deposit taking, pricing and accounting. This will require teams of business analysts to look beyond marketing literature and response templates. For each vendor in the shortlist, these teams should come up with manuals of how the future system will look like – and map these "manuals" against each other.

**The Migration Approach: Big Bang, Progressive, or Iterative?**

The principle of openness in core banking system transformation implies not only a multi-vendor, multi-solution approach to core banking renewal, but also a process that is incremental and iterative. The new system should allow for enhancements to key areas, as well seamlessly integrate new solutions that will together become part of the core banking platform.

Modern core banking system projects should not necessarily mean long, drawn-out projects because proper project management
Methodologies will do a lot to shorten the cycle, reduce errors, and bring costs down. Of course, the length of the core project can vary, depending on a wide array of conditions: from the complexity of the solution design, to specific applications involved, vendors’ presence in the country, and to the experience of internal IT teams in handling major projects.

In switching operations over to the new core system, the bank will have to consider the virtues of doing a big bang approach or a progressive migration completed by branch or by line of business. Table 3 shows high-level considerations for each approach to migration. The big bang alternative can be taken if the old solution is a fully integrated system, since it can be replaced quickly and at one go. However, if the core system replacement project also includes other key systems like tellering and other front-end solutions, the switch should take on a more phased approach. Banks with international presence will have an advantage, since they can choose their foreign branch operations to be switched over first.

### Table 3

<table>
<thead>
<tr>
<th>Migration Approach</th>
<th>Considerations</th>
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<tbody>
<tr>
<td>Big Bang</td>
<td>• Fully integrated systems can be more easily replaced at one go&lt;br&gt;• Smaller institutions will find it easier to replace core banking systems in one main phase&lt;br&gt;• Vendor and system integration experience is crucial</td>
</tr>
<tr>
<td>Branch-to-branch</td>
<td>• Core banking system projects with front-end systems replacement (particularly branch systems) are best rolled out on a per-branch basis&lt;br&gt;• Ease or reconciliation between old and new systems will minimize disruptions&lt;br&gt;• Rolling out the new system will take a longer time, but will allow the bank to fix kinks in the initial stages&lt;br&gt;• For banks with international presence, rolling out the new system in the foreign branch first is another option</td>
</tr>
<tr>
<td>Line of business migration</td>
<td>• Some line of business solutions are close to failing, so attention should be given to these solutions first&lt;br&gt;• Requires the ability of the main vendor to handle various types of solutions&lt;br&gt;• Key business executives will be increasingly convinced of the solution as the benefits accrue over time</td>
</tr>
</tbody>
</table>

Source: IDC Financial Insights, 2011

Prioritizing Systems to Be Fixed and Migrated

Core banking systems will always look different across different types of institutions. In general, in the largest institutions, the core system processes the debits and credits for deposit and loan account transactions and is augmented by point solutions. In the mid-market segment, the core system also typically includes channel systems for call center, Internet banking and ATM, business intelligence, and CRM. Core systems for the smallest institutions provide all systems and technology necessary to run the business, which includes those functions listed previously as well as features such as accounting, fraud management, compliance, and systems architecture.
The order of priority with which core systems are to be migrated ultimately depends on the core banking system design. However, in keeping to the principles that low-risk systems should be moved first, banks can focus on systems surrounding the "core" — systems supporting loan origination, cash management, treasury, trade finance, and credit card payments can be test-beds prior to the major switch in critical systems such as customer information systems, central accounting, and central processing.

In reality however, the bank will most likely have a "system close to the core" that is a "system close to failure." This can serve as a pilot for the main event of replacing the system as a whole. This pilot requires as much management time as the major project, and should be representative of the effort the implementation team has to undertake down the line.

**Migrating with Minimal Disruption**

"Life as usual" should be the foundational principle in undertaking a core banking system switch. The bank will be wise to decide on letting the old and new core systems coexist with an information layer straddling both systems. This strategy will minimize disruptions, particularly branch operations and the customer experience. In reality however, there will always be unintended disruptions and banks must come up with recovery mechanisms should these events arise. Crisis management plans need to be on the ready.

A key element of the core banking replacement journey – from business case to actual implementation is risk assessment and risk mitigation. A committee should be created in this regard, and tasked to understand the key risks faced by the bank in each step of the core banking project. As projects go through cycles of changes, risk assessments and reviews will have to be regular and current.

Banks moving from a proprietary legacy system to modern systems and platforms available to them need to exhibit more care in data migration. They should hire specialized third-party vendors to guide them along this process. Data migration, after all, is a one-time exercise that should never fail.

**Do Not Disregard the Human Aspect**

Banks we spoke to indicate that although core banking is fundamentally a technology exercise that will inherently involve the disciplines of system architecture and design, it is still a people-intensive activity. Alongside any technology mapping, there should be a thorough mapping of the architecture, management, technical, system integration (SI) and support resources of the organization. Policies and administrative support procedures to support these critical resources also need to be implemented. In practical terms: how do you deal with work permits for external parties? How will you provide housing for them? How do you prepare for resignations of key personnel?
While banks amidst core banking migration will most likely require a large number of third-party resources (outsourcers, external consultants, independent developers and testers, etc) they should retain significant skill sets within the bank's technology division. Good project governance requires that project leadership has to be from within the institution itself. It is important that before a bank embarks on a project of this size and scope, it tries out internal skills first. The bank can run test projects – in the process allowing the project management office to mature – and let the IT organization attain a certain level of confidence. The bank needs to do both infrastructure-related projects (disaster recovery and business continuity, network projects, wide area networks, IT security, desktop management) as well as projects on satellite solutions circling the core (loan origination, payments systems, among others).

The other component making up this human resource aspect is board engagement. The board should have good project oversight, preferably through a core banking steering committee. One bank in the region cited the benefits of having weekly update calls for this steering committee, so that the board is not only kept abreast of how the project is tracking, but that also the project stays top of mind. The latter will be essential in helping the core banking implementation leaders make and get quick approval for crucial decisions about people, IT vendors, and budgets.

**ESSENTIAL GUIDANCE**

Open core banking systems, as seen in many core banking systems, do have improvements over closed-proprietary legacy systems and over earlier generations of open systems. Access to best-of-breed solutions, tighter coupling to channels, better presentation and user interfaces, and superior parameterization are some of the most often cited differentiating features, and represent something new to many institutions.

One underlying theme of the shift towards open systems is that legacy systems will more often than not hold back banks in their quest for innovation, new business models and greater flexibility in their operations. Taking this theme further, one can see the possibility of banks ending up replacing their proprietary legacy systems with newer legacy systems. Unfortunately, banks can still end up with the old problem they were trying to solve in the first place.

A platform approach to core banking modernization is the latest phase in the evolution of core banking transformation. This approach brings together the principles of openness, efficient integration, and modern application capabilities – and does not force the bank to concede any of these principles, but rather allow the bank to marry all these principles in their next-generation core banking system.

The platform approach recognizes the fundamental importance of the principles of flexibility and openness. The core banking system should
be a dynamic system, and the journey towards modernization should not end after the bank has made the switch and gone live with the new solution. In this regard, it is crucial for banks not to go for "open" alone, but to go for the right partner in this journey towards openness. As banks strive to imbue their next-generation core platforms with the principle of openness, they need to effectively:

- Assess the functional richness of the core banking application or the core banking suite of applications, with emphasis on how modules and point solutions respond to the new ways by which banking will be done in the medium- to long-term.

- More than ever, understand the application roadmap and the innovation strategy of their main core banking application provider. Banks have to assess the current and future solution suite that will make up the core banking offering of their vendor, including product roadmaps and major releases pending. They have to look at the research and development budgets being spent by vendors on future solutions.

- Migrate from disaggregated best-of-breed component solutions to a comprehensive platform ecosystem that effectively integrates all of the components.

- Address customization needs, accommodating institution-specific requirements versus one-size-fits-all solutions; and also accommodate best-in-class third-party solutions that the bank requires to differentiate from its peers.

On the other hand, the core banking platform has to offer seamless integration of components, ensuring that functionalities can be deployed and brought to market quickly, and that the long-standing benchmarks for reliability and scalability are upheld. Keeping these principles of efficient integration in mind, banks looking to create core banking platforms should:

- Assess how line-of-business applications, enterprise applications (e.g., general ledger and HR), and infrastructure (servers, storage and database) can efficiently work well with each other, and as one platform.

- Identify ways to see greater cost efficiencies by taking advantage of better optimization of the core banking application itself to its hardware and infrastructure components.

- Focus on ensuring that the integrated core banking platform meets benchmarks of performance and processing power, so that the bank stays ahead of its competition.

- Ensure that vendors of choice have relevant experience and capabilities to integrate the bank, re-engineer business process improvements, and meet compliance requirements for the local market.
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