Banks globally have focused on customer-facing innovation since 2010. Digitization and more agile competition have driven the need for financial institutions to transform the way business is done, from the experiences delivered to customers — retail, small and medium-sized business, and corporate clients — to the ability of the infrastructure to be agile and responsive to market trends.

**Achieving Immediate Benefit from Core Transformation**

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**Introduction**

New digital-native enterprises, challenger banks, fintechs, and nonbanking organizations are leading the way in providing new engaging experiences that are forming the basis for what consumers now demand from their financial service providers.

In response to the digitization of customer expectations, banks have modernized and launched front-office technologies such as online and mobile banking to improve the customer experience. However, having a more compelling experience for retail banking consumers, or a more intuitive application process for lending to businesses, does not alter the ability of the institution to change its products and services and take advantage of new opportunities in an increasingly digital market. To join the digital world and further engage with customers, banks must make changes to their back-office, enterprise infrastructure, particularly the collection of systems that banks call their "core banking system." However, given the complexity and age of most core banking systems, this is typically a very difficult task. In fact, a 2016 IDC survey found that 76% of banks globally identified the cost to modernize their IT infrastructure as the biggest challenge to digital transformation (see Figure 1).
Nonetheless, the pressures to transform those very legacy systems are more compelling than ever:

» Comply with new regulations
» Create innovative financial services to keep pace with customer expectations
» Deliver more holistic financial products through open banking
» Compete with nimble fintech firms offering point solutions
» Monetize internal data
» Increase privacy and security requirements

To respond to these drivers, banks must modernize their core banking systems while minimizing the costs and risks associated with such a large initiative.

For many banks, migrating to a complete, packaged, preconfigured core banking platform is a viable and efficient approach for fast modernization with minimum risk and costs. When considering this approach to modernization, banks should have one or more of the following characteristics:

» Less complex operations
» Relatively smaller geographic distribution
» Relatively limited budgets
» Shortage of IT staff that can modernize and maintain existing technologies

This is not an exhaustive list, but it represents common characteristics shared by many banks worldwide. For these banks, the ability to replace their core systems with a modern packaged solution built on open architectures creates opportunities to quickly benefit from a prebuilt digital infrastructure. In these cases, such banks can actually leapfrog larger institutions in their ability to innovate and disrupt in the market.
Definitions
According to IDC, digital transformation in financial services is the use of 3rd Platform technologies (cloud, big data/analytics, mobility, and social networks), along with innovation accelerators (next-generation security, Internet of Things [IoT], artificial intelligence/machine learning [AI/ML], etc.), to enable an institution not only to innovate but also to disrupt its market. Digital transformation is as much a modernization of the enterprise's culture, operations, knowledge, and work staff as it is a modernization of the enterprise's technologies, and it applies to the entire organization.

In the context of this analysis, the modernization of the core banking system is a critical component of the institution's digital transformation. Many banks can implement a complete, packaged, preconfigured core banking platform and, over a relatively short period of time, migrate data and customers from their old systems to the new platform. Given the characteristics outlined previously, and including individual and bank-specific characteristics and motivations not listed, the risks and costs normally associated with a "big bang" approach to modernization are minimized, while the benefits associated with a modern core are captured almost immediately after the core transformation.

Benefits
The immediate benefit to migrating to a packaged solution for core modernization is speed. By replacing the legacy core system in this way, an institution can leverage the following opportunities in a much quicker time frame relative to larger global banks undergoing progressive transformation:

» Improve customer engagement through better products and services
» Improve agility and speed to market
» Accelerate revenue growth
» Manage operational risk and costs
» Participate in digital marketplaces

In addition to speed, the most immediate benefit is improving the ability of the bank to respond to market needs and quickly create new products and services more easily compared with legacy core systems. IDC predicts that line-of-business managers will be the primary developers of products and services in a modern core system framework that abstracts business functionality into API libraries that can then be aggregated in novel ways to suit market needs.

But arguably, the most significant, long-term benefit of core modernization is the ability of the bank to partner with external organizations and bring more value to its customers. In IDC's 2017 Digital Transformation Leader Sentiment Survey, "participation in digital marketplaces" was the top key performance indicator (KPI) reported by banks to measure the success of a digital transformation initiative (see Figure 2). In a concept IDC calls connected banking, the future of the banking industry will be built on the institution's ability to offer aggregated value to customers through partnerships (based on open API connections). An example is offering home ownership (an experience) as opposed to a mortgage (a product). By partnering with external entities such as estate agents, inspection services, and geomapping solutions, banks can support the customer's end-to-end search for and acquisition of a home.
For banks choosing a packaged strategy for core system modernization, the ability to partner for solutions in a connected banking environment is a competitively differentiating quality — solutions that will be delivered faster than at the larger banks, which will approach these capabilities at a slower pace.

**Key Trends**

For the past three years, IDC has tracked the transformation within vendors of core banking technologies. Considering the need to comply with increased regulation, meet customer expectations, and keep pace with traditional and nontraditional competitors, while maintaining and improving efficiencies and improving agility, core systems providers are modernizing their solutions and platforms using open APIs, agile development, cloud platforms, and advanced data and analytics capabilities.

In another five years, moving to an open architecture will also allow institutions to nimbly deploy their functional services across multiple platforms, depending on their ability to support products or the cost of operations. If there is a function that is not competitively differentiating, banks may decide to partner with a cloud provider to source that function. Ultimately, the ability to aggregate products and services from multiple sources, including external sources, and to deploy across multiple platforms is what will define the modern financial institution.
Considering Oracle

Oracle Corporation has been offering products and services to the financial services industry for decades and has built credibility in various technology areas for the industry. Starting in 2005, Oracle began acquiring an increasing stake in i-flex, a technology division of Citigroup that included a core banking solution called FLEXCUBE. In 2008, i-flex changed its name to Oracle Financial Services Ltd. The FLEXCUBE core product continues to have significant market share, particularly in Asia and developing countries around the world. Oracle FLEXCUBE is used by more than 630 banks that span diverse lines of business, specializations, sizes, and scales in more than 140 countries around the world.

Oracle FLEXCUBE represents a modern, digital, preconfigured, interoperable, and scalable core banking platform that is designed to work off the shelf. The platform is architected to support multiple deployment options and transformation strategies in a heterogeneous environment, which can be customized to the specific requirements of a bank.

Oracle FLEXCUBE offers functional capabilities across multiple lines of business and banking segments (Retail, Corporate, Transaction, Business/SME, Microfinance, Islamic, Central Banks). Oracle FLEXCUBE offers multichannel, multidevice, and multivendor access capabilities coupled with automation-driven intelligent responses and end-to-end product and servicing capabilities. The platform's user interface supports business mobility, product/service innovation, and accelerated time to market. The platform also includes a data source–agnostic machine learning adapter that supports intelligent decision making from any data source.

Oracle FLEXCUBE's open architecture offers secure information exchange using the industrialized standards of ISO 20022, REST API libraries, a blockchain adapter, SAML 2.0, and common integration frameworks. Specifically, the platform's library of RESTful services enables an industrialized development, consumption, and monetization of APIs and enables the cocreation of applications and services internally at the bank as well as with external ecosystem partners that are part of the customer’s value chains.

Oracle FLEXCUBE offers multiple deployment options, which include traditional on-premise as well as private, managed, or public cloud.

Challenges

While the Oracle FLEXCUBE platform is ideally suited to be implemented as a whole to replace aging and unsupported systems at many banks worldwide, Oracle still faces a number of challenges in its penetration of the market:

» Although Oracle FLEXCUBE makes it relatively easier to replace a legacy core system, such initiatives must be executed carefully to negate any inherent risks.

» The migration from a very old core platform to a very modern system such as Oracle FLEXCUBE carries with it a requirement to educate staff and line-of-business executives about its development, operation, and use. Even in the case of the core running in a managed service environment, it is necessary to ensure sufficient training as the new core platform is deployed.

» A new crop of cloud-based, "core banking-as-a-service" vendors are challenging established vendors such as Oracle with new business models based on consumption rather than the traditional licensing and maintenance arrangements. These firms are already gaining the attention of challenger banks because they represent — on a cost basis — a lower risk of doing business.
These challenges are not insurmountable. However, they do represent hurdles of varying degrees that Oracle faces in the market today. In particular, competition from cloud-native vendors will force Oracle to develop strategies that can match the lure of consumption-based core banking.

The advantage Oracle has over these nascent cloud-native core companies is its long-standing credibility in the financial services industry and its ability to go beyond core banking solutions and bring in offerings across the entire banking functional landscape; front-to-back capabilities spanning channels; APIs and product processors; horizontal solutions such as analytics, sales and marketing, and pricing and billing; and the capability to provide consulting expertise in all areas of bank operations. In addition, cloud-based core banking-as-a-service may prove to be too "vanilla," that is, too much of a commodity offering to attract any but the smallest banks or fintechs.

**Conclusion**

For many banks worldwide, and for a variety of reasons, replacing an aging core system in a "big bang" approach is a viable way to accelerate digital transformation, keep pace with larger global banks, and instantly gain efficiencies while managing costs and risk. But the target core platform must be built on modern open principles and be provided by technology providers with long-standing experience in financial services and with a breadth of resources beyond software. Oracle, as demonstrated by its strong global presence in the core banking marketplace, is such a technology partner. Oracle FLEXCUBE, by virtue of its modern functionality and its component-based and open architecture, is a viable core platform upon which many banks have based their transformation journeys.
About the analyst:

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