The demand for core banking packages is expected to grow in 2020 as banks deliver on digitalization strategies while facing the consequences from the COVID-19 pandemic. Bank CIOs should consider evaluating both long-standing and emerging vendors, especially when pursuing public cloud installations.

**Strategic Planning Assumption**

By YE23, public or private cloud will each account for 5% of commercial off-the-shelf core banking installations.

**Market Definition/Description**

Gartner defines a core banking system (CBS) as a back-end system that processes daily banking transactions and posts updates to accounts and other financial records. CBSs typically include deposit, loan and credit processing capabilities, with interfaces to general ledger systems and reporting tools. This Magic Quadrant assesses CBS vendors based on the multicurrency products they offer in support of a bank’s financial transaction management in the retail banking market.

Gartner has chosen to keep the scope of this year’s Magic Quadrant consistent with those of previous years that are based on the global and retail focus of the software, although selecting criteria have become more restrictive. For this reason, we’ve excluded Islamic banking vendors — many of which don’t support standard retail banking capabilities — and other vendors whose offerings don’t meet Gartner’s established criteria. In addition, this report is strongly focused on the global capabilities of CBS providers. It does not address, nor make justice of, the localization capabilities that are instead treated in the set of reports presented in the “Research Index: Core Banking Selection Criteria That Matter” and whose titles are also available in the Recommended by the Authors section.

The definition of a CBS hasn’t changed significantly over the years. However, CBS offerings are evolving from autonomous islands of functionality to collaborative, open-banking-enabled platforms. Moreover, the shift to open-banking platforms is integrating all of the stakeholders in a bank’s value chain: financial technology providers (fintechs), technology partners, bank employees, customers, regulatory authorities and other banks.
The resulting gaps with conventional CBS capabilities are driving advancements, including:

- Migration to component-based systems
- Embryonic use of microservices
- Use of cloud computing with both cloud-based and cloud-native core banking components
- Embedded analytics
- Artificial intelligence (AI)

All of these trends are expanding the market’s boundaries to include unconventional CBS vendor entrants such as leading front-office solution providers and startup CBS vendors.

This is precisely why CIOs need to assess their CBSs and corresponding vendor landscapes — based on the capacity to adapt to these trends — and deliver robust, scalable and relevant products to their customers. The areas of differentiation that Gartner has identified, which are detailed below, are:

- API marketplaces
- Cloud
- Ecosystems
- Analytics and AI

API Marketplaces

APIs are not new, but their importance to bank CIOs should not be underestimated. APIs are at the apex of aspirational digital business strategy, but banks are increasingly contending with countless vendors that lay claim to possessing the solution for their API deficit. More importantly, poor API design can cause higher maintenance, revenue losses and missed business opportunities (see “A Guidance Framework for Designing a Great API”). Standards remain elusive, but RESTful APIs are the prevailing interface style that is more web-friendly.

So how should bank CIOs determine the best way forward to find the right fit for their digital bank requirements?

As with any complex IT investment, there isn’t one simple response that’s relevant for every bank. Gartner research explores the question of how to decide whether it’s better to deploy an API marketplace with a do-it-yourself approach or leverage vendor solutions (see “Digital Disruption Profile: APIs and the API Economy”).

Banks that turn toward vendor solutions find there are two basic alternatives: (1) partner with a well-established horizontal industry vendor such as those mentioned in the “Magic Quadrant for Full Life Cycle API Management” or (2) explore core banking vendor offerings. One issue is clear — this is not a pure numbers game; the vendor with the most APIs is not necessarily the best solution for every bank.
Gartner evaluates vendors’ API strategies within this Magic Quadrant, but banks can independently leverage a Gartner decision framework that outlines six assessment criteria for API marketplaces:

- **Breadth** — the range of functionality (discrete to broad)
- **Aspect** — the scope of coverage (internal to external)
- **Geographic** — the expanse of applicability (limited to global)
- **Monetization** — the financial opportunity (expense to revenue)
- **Communal** — the extent of collaboration (private to public)
- **Openness** — the range of accessibility (closed to open)

API marketplaces are increasingly becoming the center of gravity for digital banks, and bank CIOs need to carefully assess solution scope and parameters to ensure correct fit for purpose.

**Cloud**

Cloud-only CBS strategies are on the rise and accelerating among a broad range of banking segments and geographies. Within a recent Gartner legacy modernization survey, more than 65% of bank respondents stated that public cloud deployment was an objective within their core banking modernization program (see “Magic Quadrant for Global Retail Core Banking”). According to the results we see from Gartner’s “Toolkit: Digital Maturity Assessment for Banking and Investment Services Firms,” 15% of bank applications are already running on the cloud.

Definitionally, there are clear distinctions between cloud solutions. The one most commonly understood lies within the notion of private cloud and public cloud infrastructure offerings. Most CBS cloud offerings are processed within private clouds, although these clouds do not bring any benefit deriving from the ecosystem as this ecosystem is usually integrated within a public cloud.

As with the above reference to API marketplaces and core vendors’ capacity to support them, there isn’t any shortage of core vendor assertions that their CBSs are either cloud-ready or cloud-native. Simply put, Gartner defines CBS public cloud offerings as either **cloud-based** or **cloud-native**:

- **Cloud-based** — ported to the public cloud, largely intact. This is the so-called “lift and shift” strategy, easier and faster to be pursued.
- **Cloud-native** — designed for the public cloud, able to effectively leverage ecosystems and IoT using hybrid, multicloud and edge computing. This is a SaaS approach that fully integrates with the cloud. More complicated and longer to be deployed, especially with legacies that need to be migrated. Moreover, cloud-native applications can truly bring the advantages of metered subscription models to the banks, either for the core system or for any application of the ecosystem they wish to purchase.

Containers and Kubernetes play an important role in enabling a robust cloud-native infrastructure. The technology evolution lies in service mesh, the convergence of serverless iPaaS on Kubernetes.
and on bare-metal containers and microVMs (see "Top Emerging Trends in Cloud-Native Infrastructure").

Bank CIOs need to discern the connection between their banks’ digital business objectives and their CBS cloud strategies. In particular, banks that aim to deploy over the cloud need to reduce the risk of vendor lock-in and provide higher levels of application portability. A hybrid cloud and multicloud approach can help.

The promise of distributed value creation lies in cloud-native solutions. The hybrid cloud uses both private and public cloud by reserving the former for the most sensitive functional areas (and data) and the latter to the least sensitive. Multicloud is about vendor strategy. To mitigate the risk of vendor lock-in, banks can leverage multiple cloud vendors for different areas of cloud adoption so they can switch from one to the other in case of any problem. Some regulators demand that the bank have this risk management strategy.

Ecosystems

Digital business is causing banks to rethink many aspects of their business models, and ecosystems are vital to this end. Banks can connect to new sales channels, increase the type and value of customer interactions, and expand digital business platform model choices.

Although many of the changes reside within the business, the underlying CBS plays a distinct role in extending functions and capabilities beyond the four walls of the bank. CIOs can’t execute effectively on digital business strategies and business models without a CBS that has the necessary agility to open and securely expose back-office business services to both known and unknown partners.

The future for ecosystems lies in third-party support for containers, support for stateful applications, and maturing projects beyond Kubernetes by introducing standards in the way APIs are created.

Analytics and AI

Basic descriptive analytics in CBSs are today quite normal, and most systems don’t even charge for them. Nonetheless, the focus on more advanced analytics embedded into the core systems is becoming a popular way to differentiate products and functions otherwise commoditized. The availability of typical back-office data — such as credit scoring or customer address — straight into the front office enables banks to respond to the challenges posed by digital-native clients that want real-time authentication or real-time loans. This can be achieved by embedding this data in microservices or by using data lakes that make specific data views available in real time. Also, the ability to provide further data analysis requires advanced analytics and tools to elaborate them. Today, most CBSs can provide such tools with predictive and prescriptive functions.

Moreover, CBSs typically pair the provision of basic analytics capabilities with their use in the deployment of AI tools. The use of AI, especially in the front office, is increasingly required by the business, which wants to replace human labor with machines that cost less and can lead to increased automation. This can be done, for example, by virtual personal assistants that can handle customer calls and support complex requests about account balance, payments and other
instructions while learning from those interactions and ultimately improving their understanding and the overall service. In addition to replacement, most conversations Gartner is having are about automating processes to supplement human decision making, for example, making data more accessible to the front line or to back-office decision makers like credit analysts.

Also, AI can bring better quality in repetitive tasks that can be easily automated. In this regard, the front-to-back process for accounts or loans is an ideal place to apply such intelligent automation. This makes a number of AI-based technologies very attractive to CBS vendors. This is especially true for the customer onboarding process and the tasks associated with it that are extremely structured and repetitive but still deserve some “intelligence” in decision-making points in order to respond appropriately. Examples include chatbots that converse with clients, robotic process automation (RPA) that leads to more efficient and convenient processes, and machine learning business engines that can instantly analyze specific processes like credit scoring and risk.

All of these capabilities can be eased by modern CBSs and the way they interface with the data collected on the origination front end and are managed throughout the process. In the past year, Gartner has seen a solid and consistent trend in adopting such algorithms within commercial off-the-shelf (COTS) core systems by all major vendors, and Gartner expects this trend to accelerate in the coming years.

In the following section detailing each vendor’s strengths and cautions, all data and information are considered current as of the 31 December 2019 cutoff date. The structure of the vendor profiles is the same for all vendors, with:

- A descriptive introduction that examines the company history, latest version of the product, installation base, type of banks purchasing this product, geographic focus (see “Research Index: Core Banking Selection Criteria That Matter”), some technology compatibility, and alternative delivery models such as on-premises and direct presence
- A variable number of key strengths that motivate the positioning in the graphic
- A variable number of key cautions that influence the positioning in the graphic

(Note: The analysis contained in this research is accurate as of 31 December 2019. However, due to the dynamic nature of the market, Gartner clients should use standard inquiry processes for the most up-to-date information on specific vendors and products.)
Vendor Strengths and Cautions

**EdgeVerve Systems**

EdgeVerve Systems is a Leader in this Magic Quadrant; in the last iteration of this research, it was a Leader. The company is an Infosys product company headquartered in Bangalore, India. It launched
its Finacle Core Banking Solution in 2000 — the surveyed version as of the cutoff date, v.11.8, was released in April 2019. Gartner estimates that Finacle Core Banking Solution has more than 480 installations worldwide, and about 25 in progress, with India the country with the most installations. EdgeVerve’s customer base is mainly universal banks in the small-to-midsize segment, although the company has customers in every segment, including a few global banks. The emerging Asia/Pacific (APAC) region has the highest share of existing implementations.

EdgeVerve’s product is coded with C/C++ and Java and is offered on UNIX/Oracle, as well as Linux/Db2 (z/OS)/EnterpriseDB. In addition to on-premises implementation, Finacle has been deployed as a hosted solution via ASP (notably, for a high number of rural banks in India) and private and public cloud SaaS (in partnership with AWS). EdgeVerve’s go-to-market strategy is hub-based, with a direct presence in 46 countries, but the company sells and services in 96 countries worldwide and leverages its local partner network.

The Finacle App Center is the app marketplace, with 60 third-party APIs diversified across many categories. This marketplace had a 25% increase in the number of APIs over the previous year, although it does not feature any end-user apps.

Strengths

- Finacle app marketplace is one the most advanced, with more than 60 banking-dedicated apps across 24 different categories. This has shown a positive evolution from the last year.
- Finacle is among the most componentized core banking products considered in this Magic Quadrant. It has 36 independent market components, with new components in the Finacle Digital Engagement Hub and more than 1,200 business services that provide increased agility in an increasing number of cloud-native components.
- Innovation is a solid differentiator for the Finacle offering. EdgeVerve has demonstrated its innovation from inside with R&D investments in its product and from outside with unconventional sources of innovation such as key partnerships, hackathons (for example, it ran one of the largest hackathons ever) and innovative pilots.

Cautions

- EdgeVerve still goes to market with two distinct versions of Finacle (10.x and 11.x). Finacle 11.x is backward-compatible and was launched in September 2013. EdgeVerve did not succeed at migrating clients from the previous version to this latest one (Gartner estimates that 85% of the client base is still in production with Finacle 10.x.). Gartner believes that the current release policy, though customer-friendly, increases complexity, has impacted implementation satisfaction and limits the investments that EdgeVerve can do on each version.
- Sales execution looks weak for EdgeVerve. The number of new wins is low compared to the actual installation base, likely due to the low number of sales representative resources.
Client's main negative feedback still regards human resource issues that range from lack of senior resources and lack of knowledge for local regulations to scarcity of resources allocated to multiple projects.

Intellect Design Arena

Intellect Design Arena is a Challenger in this Magic Quadrant; in the last iteration of this research, it was a Challenger. The company is headquartered in Chennai, India, and its CBS product, Intellect Digital Core, was launched in 2005. The surveyed version as of the cutoff date, v.19.1, was released in July 2018. Gartner estimates that Intellect Digital Core has more than 100 installations worldwide, of which about a dozen are in progress. India is the country with the most installations. Intellect Design Arena’s customer base is mainly universal banks in the small-to-midsize-bank tiers, including a few global clients for which it provides selected components of its CBS. These installations are prevalent across the emerging APAC region, followed by Western Europe and the Middle East and North Africa (MENA).

Intellect Digital Core is coded in Java and runs over UNIX (HP, IBM and Sun), Linux and Windows on Oracle Databases. Along with on-premises implementation, the product has been deployed via SaaS and in hosted environments. Intellect Design Arena partnered with AWS for public cloud services.

Intellect Design Arena’s go-to-market strategy is hub-based. The company has a direct presence in 24 countries, but sells in more than 80 countries worldwide.

As of the cutoff date, Intellect Design Arena featured an embryonic app marketplace and keeps investing in that.

Strengths

- Operations are another bright spot for Intellect, as maintenance fees are the lowest across the examined vendors in this Magic Quadrant, and minor releases (issued twice a year) consolidate patches and services packs.
- Intellect Digital Core shows a greater than the average number of exposed microservices, according to the list provided to Gartner, and a moderate commitment to microservices architecture.

Cautions

- Intellect Design Arena had the highest decline in overall customer experience across the examined vendors in the evaluation of 2018 through 2019 project deliveries, with a significant drop in the implementation experience.
- The cloud offering is very limited for this vendor, which has previously installed its product on some private clouds and a few installations in public cloud.
Intellect’s deployment ecosystem is considered weak by Gartner. The company delivers projects largely autonomously by consultants traveling from its few hubs to clients’ sites and supports them from India.

Mambu

Mambu is a Challenger in this Magic Quadrant; in the last iteration of this research, it was a Challenger. Mambu is a German company that was launched in 2011 and grew rapidly to today’s solid customer base of more than 200 installations worldwide. Mambu’s CBS product is Mambu Banking Engine. The surveyed version as of the cutoff date, v.9.3, was released in September 2019. However, Mambu’s cloud product gets updated on a weekly basis, and therefore, a versioning paradigm is not strictly applicable. In fact, Mambu is delivered exclusively via SaaS, often using the AWS public cloud, although the company recently signed partnerships with both Google Cloud and Microsoft Azure. While historically Mambu has sold its product to microfinance institutions, it is now largely focused on fintechs, challenger banks and larger banks launching spinoffs. Its installation base is spread mainly across Western Europe, Latin America and sub-Saharan Africa. The country with most installations is the U.K.

Mambu Banking Engine is written entirely in Java, but other languages are used for other services. It runs primarily on AWS, where Mambu mainly uses MySQL database. As this core system usually runs on the public cloud, hardware platform compatibility is of minimal importance. Mambu’s go-to-market strategy is based on a network of offices in nine countries where Mambu has a direct presence that enables it to support more than 200 installations across 66 countries.

Mambu Marketplace has 26 third-party vendors that support the development of complementary applications.

Strengths

- Mambu’s capability in core banking operations is the best across the examined vendors. It leverages the cloud delivery model to its best with continuous updates that are streamlined to clients. Mambu is the sole vendor of those included in this research to have improved its operations score.
- Mambu’s customer experience is among the highest with its implementation experience the highest of the vendors in this Magic Quadrant. Its deployment model enables faraway installations and remote support that is quite unique and allowed the company to deliver around the globe with a minimal workforce.
- Mambu’s pricing model is still a very strong differentiator as it is truly pay-as-you-go. This model is inclusive of everything — such as maintenance fees and hardware support.

Cautions

- Mambu — despite its efforts — has a limited process-oriented methodology for market understanding. The company has grown opportunistically by word of mouth, which has been
very powerful so far and has saved money through reduced investment in market intelligence. Nonetheless, a more planned approach is required for truly global growth.

- During 2019, Mambu didn’t demonstrate the same commitment for innovation that it did in past years. Gartner didn’t see any effective acceleration in the app marketplace and in the development of innovative pilots or use cases in innovation labs or center of excellence.

- Sales execution is average at Mambu. While it has demonstrated its ability to sell to small banks, it hasn’t yet successfully taken on large transformational projects for larger bank tiers. This situation hampers its credibility in delivering larger projects.

**Oracle**

Oracle is a Leader in this Magic Quadrant; in the last iteration of this research, it was a Leader. Oracle acquired 75% of i-flex from Citigroup in 2005, and renamed it Oracle Financial Services Software (OFSS). OFSS is headquartered in Mumbai, India. The company’s main CBS product is Oracle FLEXCUBE, which over the last two decades, has evolved to become one of the most-adopted COTS CBS products in the world. Gartner estimates that FLEXCUBE — the surveyed version as of the cutoff date, v. 14.3, was released in May 2019 — has more than 800 installations worldwide. Approximately 50 of those are in progress, with India the country with the most installations. FLEXCUBE’s customer base is mainly universal banks in the midsize segment, but there are customers in every segment, including a few global banks. The majority of FLEXCUBE installations are in the sub-Saharan Africa region and across emerging Asia/Pacific.

FLEXCUBE is written in Java and runs over UNIX (IBM AIX, Oracle Solaris and HP-UX) and Linux OS, and only on an Oracle Database. Apart from on-premises implementations, FLEXCUBE has been deployed as a hosted solution via ASP. Private and public cloud projects are usually delivered on Oracle Cloud Infrastructure (OCI). Oracle’s go-to-market strategy for FLEXCUBE is extremely hub-based. Oracle leverages its huge worldwide network of offices, although only 29 of them are effectively selling and supporting FLEXCUBE across more than 150 countries.

The Oracle Cloud Marketplace, although having only 50 third-party APIs directly related to banking, has more than 1,500 APIs that might be leveraged by a bank in sync with Oracle FLEXCUBE.

**Strengths**

- Oracle FLEXCUBE was the most-sold product from 2018 through 2019, among vendors in this Magic Quadrant. It had more than a hundred new installations.

- While Oracle FLEXCUBE has an average number of market components (21), its number of business services (about 2,000) related to core banking is the highest across the vendors in this Magic Quadrant. This shows extreme parametrization of the core system, which provides great flexibility to meet local requirements.

- Oracle FLEXCUBE’s number of exposed microservices is the highest across the vendors in this Magic Quadrant (128), and Oracle has demonstrated commitment in delivering against its roadmap by increasing this number while transitioning into cloud-based components.
Cautions

- Oracle FLEXCUBE is weak in customer experience. In fact, it has been evaluated with the lowest score across the vendors in this Magic Quadrant for overall customer experience. Moreover, its score for customer support and the ability to respond to customer service issues across project deliveries from the past two years had a major drop compared to the previous time frame.

- Oracle FLEXCUBE runs solely on an Oracle Database, and usually on the Oracle stack of technologies. Gartner is not aware of any cloud installations on providers other than Oracle Cloud, and this would be an issue in pursuing multicloud strategies.

- Oracle FLEXCUBE’s maintenance fees are among the most expensive, compared to the other vendors in this Magic Quadrant.

TCS

Tata Consultancy Services (TCS) is a leader in this Magic Quadrant. In the previous iteration of this research, it was a Leader. The company is headquartered in Mumbai, India. The company launched its TCS BaNCS CBS in 2007 — the surveyed version, current as of the cutoff date, is v.17.1, released in October 2018. The current TCS BaNCS is the result of the functional and technical evolution of the original product and expansion with homegrown components. Gartner estimates that TCS BaNCS has almost 400 installations worldwide, of which 30 are in progress, with India the country, and emerging APAC the region, having the most installations. Its customer base is mainly retail and cooperative banks (TCS BaNCS has more than 100 such small clients in India via a joint venture with State Bank of India called C-Edge Technologies) and in the small to midsize segment. It also has several large clients worldwide.

TCS BaNCS contains components written in either Java or COBOL. Approximately 25% of its installations use Java components exclusively, while the rest use one or more COBOL components. While a number of existing customers use COBOL components, the TCS BaNCS solution is increasingly being offered and implemented with full Java components. This evaluation refers only to the Java components of the product, and not to the COBOL part. The product runs over UNIX (IBM, HP and Sun), z/OS, Linux (z/OS) and Windows on Oracle, Db2 and SQL Server databases. TCS BaNCS is mainly installed on-premises, although many clients use a hosted solution via ASP. Although TCS is a formal partner of public cloud vendors, and TCS did report that it has few ongoing implementations on public cloud — in addition to its deployments on private cloud — Gartner is aware of only one installation on Microsoft Azure. TCS BaNCS’ product support is hub-based, with a direct presence in 10 countries, but TCS sells its product in 57 countries worldwide.

TCS launched its API marketplace — TCS BaNCS Marketplace — in 2018, and it has 35 APIs with a 250% increase from the previous year.

Strengths

- The overall customer experience score for TCS BaNCS is still the highest across Magic Quadrant vendors in this research for a few years in a row.
Vertical/industry strategy is strong, with a strong infrastructure of center or excellence and innovation labs dedicated to the banking industry around the world.

TCS BaNCS has a high number of components and business services, while the architecture is slowly moving toward exposing microservices and an increasing number of APIs.

Cautions

- TCS BaNCS’ geographic strategy remains very conservative — its installation base has the lowest country penetration across this Magic Quadrant assessment — as the focus is limited to existing countries of installations. This strategy is hurting sales execution, and TCS BaNCS had the fewest new client wins across the examined vendors.

- The partner certification program for system integrators remains very limited for a large core banking company such as TCS BaNCS. Partnerships with relevant system integrators are minimal in the delivery of projects, and almost all CBS projects are delivered exclusively by TCS, its parent company, which may limit the expansion of the installed base.

- The overall score for customer experience declined for the first time with the highest drop in implementation experience, largely due to lack of local programmers (and language barriers), lack of support in responding to client queries, and generic technical issues.

Temenos

Temenos is a Leader in this Magic Quadrant; in the previous iteration of this research, it was a Leader. The company, headquartered in Geneva, Switzerland, launched its Temenos Transact product in 1993 under the name Temenos T24. The surveyed version, which is now called Temenos Transact, current as of the cutoff date, is v.19. It was released in April 2019. Gartner estimates that Temenos Transact has more than 800 installations worldwide, of which more than 100 are in progress, with the U.K. being the country with the most installations. Its customer base is distributed across banks of all sizes. The largest number is universal banks in the small to midsize segment, although in the last few years, the company has signed some large new clients. Temenos Transact’s installation base is mostly located across sub-Saharan Africa, Emerging Asia/Pacific and Western Europe.

Temenos’ product is coded in a domain-specific language and is used to generate Java, JavaScript and XML. It runs on UNIX (HP, IBM and Sun), Linux and Windows on Oracle, Db2, Microsoft SQL (Server and Azure) and NuoDB databases. Temenos Transact’s installations are mainly deployed on-premises. However, since 2011, Temenos has been deploying on private and public SaaS (in partnership with Microsoft Azure), and Temenos Transact now has a growing number of installations on the public cloud with all three main IaaS providers. Temenos’ go-to-market strategy is hub-based, with a direct sales presence in 40 countries and sales in 148 countries, with installations that reach 800. Where Temenos doesn’t operate, partners provide both installation and postsale support.

Temenos’ app marketplace, called Temenos MarketPlace, has 122 third-party APIs.
Strengths

- Temenos has the best hub strategy for sales among vendors in this research, with the largest dedicated core banking office network, the largest sales force and the largest installation base, with more than 40 country model banks.

- Temenos Transact’s offering in the public cloud is strong. It has the largest installation base of vendors in this research. It has been judged by reference banks as a very important reason for choosing this vendor in 25% of the cases, and it has many cloud-native components (especially open APIs) that keep growing year over year.

- Temenos’ partner ecosystem remains one of the best, with a well-organized certification program. There is considerable participation from global companies, as well as from midsize regional players that span the list of partners. Temenos has invested in acquiring companies such as Avoka, hTrunk, Logical Glue and Kony to procure specific technologies such as data lakes, analytics and explainable AI (XAI) that map to ecosystem requirements, as well as expand its customer base and enter new markets.

Cautions

- Although improved in the last two years, Temenos customer experience score remains one of the lowest across this Magic Quadrant’s list of vendors. This is largely due to implementation experience by partners, for which Temenos is not always responsible. Nonetheless, issues with the scarcity of senior key roles at projects are still mentioned by clients as an issue.

- On the componentization front, Temenos Transact’s number of components didn’t increase significantly from the past assessment. Overall, the efforts that Temenos is doing to “break the core,” to expose microservices and standardize the APIs are still low compared to customer expectations.

- License and maintenance fees for Temenos are still reported as “more expensive than others” according to anecdotal feedback from clients and from the many RFPs that Gartner examined in the past year.

Vendors Added and Dropped

We review and adjust our inclusion criteria for Magic Quadrants as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant may change over time. A vendor’s appearance in a Magic Quadrant one year and not the next does not necessarily indicate that we have changed our opinion of that vendor. It may be a reflection of a change in the market and, therefore, changed evaluation criteria, or of a change of focus by that vendor.

Added

No new vendor has been added to the list of existing vendors from the past iteration of this Magic Quadrant report.
Dropped

Finastra was dropped from the 2020 Magic Quadrant because its products did not meet the current inclusion criteria (see the Inclusion and Exclusion Criteria section for more detail):

- **Market Penetration Criteria**: Finastra Fusion Essence didn’t meet the first criterion for market penetration as it didn’t have at least two installations across 10 different countries at the time of the survey.
- **Active Market Presence Criteria**: Finastra Fusion Essence didn’t meet the inclusion criteria for the minimum net new client wins and the minimum net new production clients going live between 1 January 2018 and 30 September 2019. All criteria applied only to retail core banking installations, evaluated with a tier analysis and excluding simple updates (see next section for further detail.)

Inclusion and Exclusion Criteria

Inclusion Criteria

As in the past year’s assessment, exclusion/inclusion criteria have been focusing on two areas:

- **Market penetration**, which considers the overall installation base of the vendor’s product in the market.
- **Active market presence**, which takes into account the actual activity of the vendor in the market in terms of sales execution.

For the sake of transparency, Gartner has decided to disclose in detail the reasoning behind such criteria and provide a clearer and more satisfying response to the majority of the questions that might arise.

As said, we have — as in the past — divided the criteria into two equally weighted categories:

- **Market penetration**, in terms of minimum number of installations by country and by region
- **Active market presence**, in terms of minimum number of new clients and go-live installations

Moreover, in order to be included in our report, a vendor had to support multilingual and multicurrency capabilities, plus global retail core banking functionality, for at least five of these six services:

- Current accounts
- Savings
- Fixed-term deposits
- Consumer loans
- Commercial loans
Mortgage loans

Finally, as in the past year’s assessment, we have improved these requirements by better refining them as follows.

Market Penetration

Market Penetration by Country

The installation base of each product has been segmented by country.

The minimum number of countries with active installations has been set to 10, as in the past year’s assessment. And one country has been considered as a valid count only if a minimum number of two installations have been recorded in that country.

So, for example, a product with 10 installations, in 10 different countries, respectively, would count as zero for this requirement, while installations evenly distributed over five countries (e.g., two installations each) would count as five.

This change has been necessary to account for any opportunistic approach to the market, compared to more consistent go-to-market strategies that consider entering a country market for further penetration.

Market Penetration by Region

The installation base of each product has been also segmented by region, according to Gartner’s taxonomy of 10 regions in the world (Western Europe, Eastern Europe, Eurasia, MENA, sub-Saharan Africa, North America, Latin America, Emerging APAC, Mature APAC, Greater China).

The minimum number of regions with active installations has been set to four, as in the past year’s assessment. And one region has been considered as a valid count only if a minimum number of five installations have been recorded for that region.

So, for example, four installations in Western Europe would not suffice to demonstrate a solid footprint in this region, and therefore, this region would not be counted.

This change is intended to exactly reflect the same philosophy as the previous requirement: global footprint. In fact, we have found that, while a large number of vendors can claim a sporadic presence in multiple regions, fewer can effectively guarantee a continued presence that a bank would require during implementation and in postimplementation support.
Active Market Presence

New Client Wins

A minimum number of net new client wins in the past seven rolling quarters — that is, from 1 January 2018 through 30 September 2019 — have been set to five as in the past year. This threshold reflects the market activity that Gartner could evaluate according to data that Gartner has collected from vendors, as well as from its own client interactions. On the other hand, a much stricter screening of such client counts has been enforced by focusing exclusively on:

- Retail installations only — excluding wealth and corporate banking deployments.
- Replacements and greenfield projects — excluding any update/major upgrade deployment. Only deployments with new clients have been considered as a valid count.

Moreover, Gartner has introduced a new subcriterion in order to evaluate such new client names in relation to the bank tiers (see the Gartner IT Glossary for the definition of bank tiers or the report “Research Index: Core Banking Selection Criteria That Matter”).

This approach has been necessary to take into consideration the fact that the complexity of core banking deployments varies greatly between banks of different sizes. In general, large client deliveries are much more difficult than small microfinance institution projects. Therefore, based on data about the average duration of core banking projects, we have established a “conversion table” that considers eight projects at Tier 5 banks to be comparable in duration to one average large project at a Tier 1 bank. Projects in other bank tiers have a proportional duration. In this fashion, for example, Gartner has considered as two valid counts either one project with a Tier 1 bank or eight smaller projects with Tier 5 banks or two projects with two Tier 3 banks (see Note 1).

Clients Going Live

A minimum number of clients going live in the past seven rolling quarters — that is from 1 January 2018 through 30 September 2019 — have been reduced from 10 to eight. The softening of this requirement has been necessary to reflect market changes (according to data that Gartner has collected). To enforce a much stricter screening of such client count, the same criteria on counting as the previous section for “new client wins” has been enforced.

Exclusion Criteria

Many core banking vendors were invited to participate in the initial screening process, but most of them were not selected because they didn’t meet the Magic Quadrant inclusion criteria.

Market Penetration by Country — The following vendors (and products in parentheses) did not provide sufficient evidence for the minimum number of live product deployments spanning 10 or more countries, with a minimum of two installations per country:

- Apak Group (Aurius)
- Ares International (eAresBank)
Asseco Group (Asseco Core Banking)
Azqore (S2i)
Bank Soft Systems (Digital2Go)
Bankware Global (BX CBP)
Bankware Global (BX PF)
Bantotal (Bantotal Core)
BML Istisharat (Integrated Computerized Banking System [ICBS])
Crosskey (Crosskey)
DIE SOFTWARE (OBS Banking Engine)
Enterprise (EGBS Platone)
Finastra (Fusion Essence)
Finastra (Fusion Phoenix International)
Finastra (Fusion Phoenix)
FIS (Profile)
Fiserv (Cleartouch)
Fiserv (DNA)
Fiserv (Portico)
Fiserv (Precision)
Fiserv (Premier)
five degrees (Matrix accounts)
five degrees (Matrix lending & leasing)
Infopro (eICBA)
InfrasoftTech (Finairo Core Banking Solutions)
Intertech (inter-Face)
INTRASOFT International (PROFITS)
Nelito Systems (FinCraft CBS)
Oracle (Oracle Banking Platform)
Profile Software (FMS.next)
Technisys (Cyberbank Core)

Thought Machine (Vault)

**Market Penetration by Region** — The following vendors (and products in parentheses) did not provide sufficient evidence for the minimum number of product-live deployments spanning four or more regions, with a minimum of five installations per region:

- Apak Group (Aurius)
- Ares International (eAresBank)
- Asseco (Asseco Core Banking)
- Azqore (S2i)
- Bank Soft Systems (Digital2Go)
- Bankware Global (BX CBP)
- Bankware Global (BX PF)
- Bantotal (Bantotal Core)
- BML Istisharat (Integrated Computerized Banking System [ICBS])
- COBIS (COBIS UFS)
- Crosskey (Crosskey)
- Datapro (e-IBS)
- DIE SOFTWARE (OBS Banking Engine)
- Enterprise (EGBS Platone)
- Finastra (Fusion Phoenix International)
- Finastra (Fusion Phoenix)
- FIS (Profile)
- Fiserv (Cleartouch)
- Fiserv (DNA)
- Fiserv (Portico)
- Fiserv (Precision)
- Fiserv (Premier)
- five degrees (Matrix accounts)
- five degrees (Matrix lending & leasing)
- ICS Financial Systems (ICS BANKS)
- Infopro (eICBA)
- InfraSoftTech (Finairo Core Banking Solutions)
- International Turnkey Systems (ETHIX-Core)
- Intertech (inter-Face)
- INTRASOFT International (PROFITS)
- Nelito Systems (FinCraft CBS)
- Oracle (Oracle Banking Platform)
- Profile Software (FMS.next)
- Silverlake Axis (Silverlake Axis Integrated Banking Solution [SIBS])
- Sopra Banking Software (Sopra Banking Amplitude)
- Sopra Banking Software (Sopra Banking Platform)
- Stefanini (Topaz Core Banking)
- Technisys (Cyberbank Core)
- Thought Machine (Vault)

**New Client Wins** — The following vendors (and products in parentheses) did not provide sufficient evidence for the minimum number of net new clients between 1 January 2018 and 30 September 2019:

- Apak Group (Aurius)
- Ares International (eAresBank)
- Asseco (Asseco Core Banking)
- Avaloq (Avaloq Banking Suite)
- Azqore (S2i)
- Bank Soft Systems (Digital2Go)
- Bankware Global (BX CBP)
- Bankware Global (BX PF)
- Bantotal (Bantotal Core)
- BML Istisharat (Integrated Computerized Banking System [ICBS])
- Capital Banking Solutions (CapitalBanker)
- COBIS (COBIS UFS)
- Crosskey (Crosskey)
- Datapro (e-IBS)
- DIE SOFTWARE (OBS Banking Engine)
- Enterprise (EGBS Platone)
- ERI (OLYMPIC Banking System)
- Finastra (Fusion Equation)
- Finastra (Fusion Essence)
- Finastra (Fusion Phoenix International)
- Finastra (Fusion Phoenix)
- FIS (Profile)
- FIS (Systematics)
- Fiserv (Cleartouch)
- Fiserv (Portico)
- Fiserv (Precision)
- Fiserv (Signature [International])
- Fiserv (Signature [U.S.])
- five degrees (Matrix accounts)
- five degrees (Matrix lending & leasing)
- ICS Financial Systems (ICS BANKS)
- Infopro (eICBA)
- International Turnkey Systems (ETHIX-Core)
- Intertech (inter-Face)
- INTRASOFT International (PROFITS)
- Nelito Systems (FinCraft CBS)
- Oracle (Oracle Banking Platform)
- Profile Software (FMS.next)
- Sopra Banking Software (Sopra Banking Platform)
- Stefanini (Topaz Digital Banking)
- Technisys (Cyberbank Core)
Thought Machine (Vault)

**Clients Going Live** — The following vendors (and products in parentheses) did not provide sufficient evidence for the minimum number of production customers for global retail core banking functionality going live between 1 January 2018 and 30 September 2019:

- Apak Group (Aurius)
- Ares International (eAresBank)
- Asseco (Asseco Core Banking)
- Azqore (S2i)
- Bank Soft Systems (Digital2Go)
- Bankware Global (BX CBP)
- Bankware Global (BX PF)
- Bantotal (Bantotal Core)
- BML Istisharat (Integrated Computerized Banking System [ICBS])
- Capital Banking Solutions (CapitalBanker)
- COBIS (COBIS UFS)
- Crosskey (Crosskey)
- Datapro (e-IBS)
- DIE SOFTWARE (OBS Banking Engine)
- Enterprise (EGBS Platone)
- ERI (OLYMPIC Banking System)
- Finastra (Fusion Equation)
- Finastra (Fusion Essence)
- Finastra (Fusion Phoenix International)
- Finastra (Fusion Phoenix)
- FIS (Profile)
- FIS (Systematics)
- Fiserv (Cleartouch)
- Fiserv (DNA)
- Fiserv (Portico)
Evaluation Criteria

Ability to Execute

The evaluation criteria for this axis focus on market traction, and on how the vendor and product are positioned to sustain support for near-term banking market requirements and commitments.

Gartner has analyzed and compared 26 variables for each vendor's CBS product, for a total of 156 data points, to map the vendors based on their Ability to Execute. Gartner also believes there's no better way to assess the ability of a vendor to execute projects than asking end users themselves. For this reason, Gartner formally and extensively surveys vendor references. This enables us to assess all steps of execution: sales and contract negotiation; the value of the product capabilities;
and support of installation, customer experience and postsales. This year we have formally excluded “Marketing Execution” from these criteria. It had a very low weight in previous assessments, and we noted it was of no importance for banks in their core banking selection process.

In addition to these annual reference surveys, reference interviews were conducted with, or information was derived from, Gartner clients during the past eight rolling quarters in the course of Gartner’s usual interactions with its clients.

This Magic Quadrant axis places high stress on the following criteria, which means these criteria have increased importance and value for banks that are selecting CBSs:

- **Product or Service:** This element of a vendor’s ability to execute is concentrated on:
  - The capabilities and roadmap of the product
  - Technical aspects, including the level of SOA, component orientation, business services reusability and real-time capacity of the system, as well as more specific compatibility with DBMSs, OSs, hardware platforms and programming languages adopted in the core system itself
  - The professional services offered in association with the product that support it along its life cycle with new releases, service packs and patches due to environmental changes

- **Overall Viability:** This focuses on business unit, financials, strategy and organization. It relates to a vendor’s financial stability and is mainly calculated based on the company’s financial performance according to Gartner’s Financial Statement Scorecard for public companies (see “Understanding the Methodology Behind Gartner’s Financial Statement Scorecard for Public Companies”). Financial changes since the previous year are also taken into account to track the trend direction and take into account improvements or declines in the rating.

- **Customer Experience:** This element includes a focus on customer interactions linked to:
  - Customer support and the ability to respond to customer service issues
  - SLAs and the ability to meet them
  - Implementation experiences
  - Feedback on product support and servicing

- **Operations:** This area of evaluation centers on how the vendor organization is equipped to provide infrastructure mechanisms or resources for the consistent attainment of business goals, including:
  - Program and project management structures and initiatives
  - Maintenance and major release practices
  - Partner programs
The following criteria have lower importance in this specific assessment:

- **Sales Execution/Pricing**: This element includes the customer’s overall experience with the contract negotiation and sales process, based on the references’ feedback, as well as an analysis of the pricing model and the new client wins.

- **Market Responsiveness/Record**: This element describes the ability of the vendor to respond to changes in, and upcoming challenges of, the market in terms of the impact from:
  - New customer segments
  - New business lines
  - Regulatory changes
  - Organizational structure and resources that support flexibility

We do not consider the marketing execution relevant for CBS selection any longer from this year.

**Table 1. Ability to Execute Evaluation Criteria**

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product or Service</td>
<td>High</td>
</tr>
<tr>
<td>Overall Viability</td>
<td>High</td>
</tr>
<tr>
<td>Sales Execution/Pricing</td>
<td>Medium</td>
</tr>
<tr>
<td>Market Responsiveness/Record</td>
<td>Low</td>
</tr>
<tr>
<td>Marketing Execution</td>
<td>Not Rated</td>
</tr>
<tr>
<td>Customer Experience</td>
<td>High</td>
</tr>
<tr>
<td>Operations</td>
<td>High</td>
</tr>
</tbody>
</table>

Source: Gartner (August 2020)

**Completeness of Vision**

The evaluation criteria for this axis are based on the effectiveness of vendor product strategies linked to the market. Gartner has analyzed and compared 39 variables for each vendor’s product, leading to a total of 234 data points, in order to map the vendors’ Completeness of Vision.

This research gives high weight to the following criteria, which means that these criteria have increased importance for banks selecting CBSs:
- **Market Understanding**: This element of a vendor's Completeness of Vision centers on the vendor's ability to respond to anticipated and unanticipated market requirements, and on the process that supports that ability. This demonstrates how closely connected the vendor is to the banking industry.

- **Offering (Product) Strategy**: This element corresponds to the organizational effectiveness of the vendor or product group's development and delivery capabilities. Consistency and quality are key attributes. This criterion also explores the vendor's product componentization strategy, as well as its product roadmap's focus on developing microservices. Practical examples and use cases provided by the vendors have been also evaluated and considered in the assessment.

- **Innovation**: This element focuses on the vendor's ability to enable innovation in its standard product, nontraditional or differentiating partnerships, and associated market delivery. Many aspects of innovation have been considered, including:
  - Use of innovation labs (innovation from inside)
  - Innovation by collaboration (innovation from outside) with partners (e.g., fintechs, system integrators, universities and end users)
  - Creation of innovation use cases (vendors were asked for a sample of use cases and pilots around the main technology areas of innovation)
  - App marketplace capability (the app marketplace has been duly reviewed and examined)
  - Participation in competition and hackathons
  - Focus on innovative technology trends in the industry (for example, blockchain, AI, microservices and cloud)

- **Geographic Strategy**: This element of the strategy demonstrates the ability of the vendor to directly service the bank customers and follow its global strategy by providing support across multiple geographies. Key factors that are taken into consideration include:
  - Penetration rates at regional and country levels in terms of installations
  - Direct sales strategy and office presence
  - Sales workforce and sales reps by geography
  - Specific sales and marketing initiatives

We have weighted the following criteria as medium, which means that they have regular importance for banks selecting CBSs:

- **Sales Strategy**: This element evaluates the strategy of the vendor in terms of marketing and sales network, inclusive of an app marketplace, as well as the developed methodology to support the business development process. Also, we recognize the importance of partners in the sales and support activity for CBS projects by analyzing the type of partners available for each vendor and the role they have in CBS deliveries.
- **Vertical/Industry Strategy**: This area of the evaluation is associated with banking industry commitment to broader initiatives (for example, participation in standards organizations and other industry groups), the vendor’s focus in terms of CBS investments and dedication. This area also focuses on unique hiring practices, training and other means of maintaining close industry relevance, such as specific areas of research.

We do not consider the marketing strategy and the business model relevant for CBS selection.

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Understanding</td>
<td>High</td>
</tr>
<tr>
<td>Marketing Strategy</td>
<td>Not Rated</td>
</tr>
<tr>
<td>Sales Strategy</td>
<td>Medium</td>
</tr>
<tr>
<td>Offering (Product) Strategy</td>
<td>High</td>
</tr>
<tr>
<td>Business Model</td>
<td>Not Rated</td>
</tr>
<tr>
<td>Vertical/Industry Strategy</td>
<td>Medium</td>
</tr>
<tr>
<td>Innovation</td>
<td>High</td>
</tr>
<tr>
<td>Geographic Strategy</td>
<td>High</td>
</tr>
</tbody>
</table>

Source: Gartner

**Quadrant Descriptions**

**Leaders**

Leaders in the global retail core banking market tend to possess a high-order market understanding that helps in lead generation and, ultimately, in achieving more sales. In addition, they make it their business to monitor market trends and funnel progressive innovation into their product roadmaps. Most of them possess software development quality certifications (such as Capability Maturity Model Integration [CMMI]) or are pursuing them. The Leaders are also, without exception, “thinking small” or targeting component-based architecture as a gateway to providing increased accessibility to the granular functionality that banks need to drive the basis for differentiation.

Leaders have high viability and great customer feedback, even though lately the increase in the number of sales has brought challenges in supporting customers at high standards. Leaders also focus on innovation — and the innovation trends that affect this particular market. They especially focus on trends with visionary capability in managing the ecosystem for open-banking platforms by fostering open banking with their products and services in a collaborative environment with their ecosystem partners. They also leverage the cloud opportunity by gradually making their products...
more cloud-friendly with “APIfication” of the components and by introducing cloud-native components at extent.

Challengers
The Challengers in this market typically earn high marks in implementation, customer experience and product support. They also possess better-than-average financial viability, showing solid improvement over the previous year. However, product componentization, market trends and innovation are usually low priorities for these vendors. Challengers also have an opportunistic go-to-market approach, with limited market intelligence and scattered geographic strategy.

Visionaries
Visionaries in the global retail core banking market have a solid focus on vertical industry and geographic strategy, with an extensive network of offices and direct presence in their target markets. They also foster innovation and innovative trends, particularly on componentization, although this forward-thinking approach might not find a receptive market (due to still-low market maturity), which could limit Visionaries’ ability to compete and execute in practice. Vendors in this group have been prevented from entering the Leaders quadrant mainly because of below-average levels in certain important capabilities.

Niche Players
Niche Players usually tend to have operations that are regionally limited and have lower global market penetration than other players. Nonetheless, regional players in our Magic Quadrant do not simply play this game in a few countries. They still need to demonstrate presence elsewhere, despite their deep specialization in one specific regional market. Usually, they are less involved in international trends and sales, while demonstrating great client proximity and intimacy, which are their most important differentiators.

Context
The success or failure of core banking programs can be traced to elements of initial efforts, including the level of clarity of outcomes defined in business cases (see “Building the Digital Business Case for Core Banking Renewal”). Banks need to focus much more on the preselection phase to ensure that their use cases are carefully constructed and transparent, and that their objectives are documented before they issue an RFI or RFP.

In the selection of vendors, bank CIOs need to consider global vendors from this Magic Quadrant side by side with other vendors operating in their own region and country. A good overview of such a list of vendors is available in the banker’s guide reports that are illustrated in “Research Index: Core Banking Selection Criteria That Matter.” In fact, regional expertise and experience with banks of similar size and type are very valuable assets to find in a core banking vendor.
Bank CIOs and other IT and business leaders also need to be introspective, recognizing that their organizations possess unique characteristics and cultures that will impact a program of this magnitude, whether positively or negatively. They also need to conduct a serious self-diagnosis to identify negative traits and reduce, mitigate, avoid or defer risk. Sponsorship, communication and program management are a few examples of areas that banks use to test maturity prior to embarking on core banking renewal (see “Core Banking Renewal: Use This Readiness Maturity Model to Avoid Program Failure”).

For these reasons, Gartner has further improved this year’s methodology by increasing the granularity of the information detected for each CBS vendor/product (see the Evidence section). We’ve also tracked the technology features, as well as the business implications, against the many areas depicted in the Market Definition/Description section above.

**Market Overview**

This Magic Quadrant assesses the suitability of CBS providers and their product offerings to address current market trends. This evaluation uncovers the primary strategies of these vendors and products, reveals their underlying product and service capabilities, and affirms their relevance to the changing conditions of the banking industry.

**Vendor Landscape**

The number of net new deals for core banking replacement increased during the past year, expanding across all banking tiers and geographies by almost 4%. Based on client inquiries, face-to-face interactions and surveys, Gartner still recognizes this growing demand for core banking renewal, driven mainly by digital banking initiatives for which legacy systems prove to be inadequate. Expectations for 2020 are even more positive as these strategic projects will be less affected than other projects by the cost-cutting response of the industry to the economic crisis that follows the COVID-19 pandemic. In fact, Gartner estimates that there will be about a 10% increase in the number of projects, according to the work-in-progress pipeline of the more than 80 surveyed vendors.

Vendor consolidation continues in this market, though at a new pace. Past year’s consolidation activities included: Sopra Banking Software acquired the French provider SAB and the British provider APAK; Temenos acquired Kony; Q2 acquired Lender Performance Group and PrecisionLender in the U.S.; Infosys (i.e., the mother company of EdgeVerve Systems) increased its stake in the Dutch Stater to 75%; FIS acquired Worldpay; and Fiserv acquired First Data. In addition, Tieto merged with EVRY to form a large group across the Nordics with three CBS products. Acquisitions are never easy, and the extent of effective assimilation planning and execution often dictate the success of these well-intentioned pairings. Impacted bank CIOs should expect defined objectives and timelines from vendors within six months of the deal closing.

Demand for unconventional and emerging core vendors such as Finxact, Technisys, Mambu and Thought Machine is growing. This growth is not isolated to independent startups or challenger banks; these vendors are also beginning to be considered in traditional banks for core modernization. Larger banks such as Lloyds are engaging with new core vendors (Thought
Machine) at the trigger stage (no production banks). Their value propositions are cloud-native, fine-grained business service models that promise to fuel collaboration through extended partners and ecosystems. Demand for alternative CBS offerings that support the pace of progressive digital business platform models kept increasing during 2019 and is expected to become the norm in RFPs.

2019 Market Movers

Increased Focus on Componentization and Microservices

The CBS market is continuing its evolution to adapt to changes in the banking industry, especially concerning digital banking. Gartner believes the key to successfully adapting to these changes is to provide enabling technologies designed to address capabilities such as increased business agility, diversified sourcing models and lower operational costs. The leading trend in establishing these capabilities lies in advanced componentization: the decomposition of monolithic or all-in-one CBSs into larger supersets of smaller components with discrete functionality.

As vendors acquire, build or migrate core systems to component-based, SOA-compliant solutions, the repository approach will drive increased demand for industry-level services standardization. Surviving CBS vendors will offer repositories of components, rather than packages and modules. A bank can assemble these components into applications in a standard way (the “factory default”), or in a slightly different way, to create unique applications that meet its specific needs. This approach is consistent with overall industry trends in SOA adoption in financial services — predominantly SOA or SOA combined with event-driven architecture (EDA). Leading vendors are responding proactively by extending their core banking functionality through loosely coupled stand-alone components.

Banks as Platforms

The focus on evolving the digital bank strategy to keep pace with new target market opportunities is leading a CBS technology evolution that exposes open-protocol APIs to external development communities. As banks roll back traditional “do everything yourself” development models, the ability to extend granular APIs to third-party developers is quickly becoming a requirement for CBS vendors. This new open model — open, but not uncontrolled — fosters previously untapped opportunities for the bank to become a digital platform and extend its product and service reach beyond the usual borders of the financial domain. This change in business model can be delivered only by a digitalization change in the bank organization, with the CBS as its foundation.

App Marketplaces

Leading vendors are aggressively developing component-based architecture and exposing functionality with solutions available in app marketplaces. Exposing core system functionality for co-innovation is an evolutionary step toward ecosystem interoperability that lies at the heart of open banking. The apps available in marketplaces — delivered not only by innovation partners of the CBS vendor, but also by end-user clients — can quickly deliver innovation to the bank’s clients and foster
new ideas. This enables CBS vendors to go beyond the simple componentization of their products by leveraging other products and solutions beyond the CBS itself. Most of these vendors are hoping to provide an alternative to well-positioned API players such as MuleSoft and Apigee.

Embedded Data

Once a bank makes the evolutionary step toward the bank-as-a-platform business model, it requires direct and real-time access to its own data, as well as integration with other data sources — structured and unstructured — from external providers. This type of data requires simplification of data structures and management. CBS providers are aware of this trend and are investing heavily in embedded data that can be easily leveraged and consumed by the bank, as well as by its clients.

Alternative Delivery Models

Demand persists for alternative CBS delivery models like SaaS and business process outsourcing. Gartner expects public cloud usage to expand in the near term, at least in those jurisdictions where the regulatory framework permits it. All vendors included in this Magic Quadrant offer alternative delivery models, and can demonstrate capabilities in deploying the CBS beyond traditional on-premises installations. However, only a few of them have proven deliveries and existing partnerships with infrastructure-as-a-service providers such as Amazon (AWS) and Microsoft (Azure).

Deployment Reality Check

CIOs are frustrated by the high development resource and maintenance spending required for custom integration that does not provide any direct value to end customers. Gartner has been on top of this trend, which is driving the banking industry to provide broader standards for banking architecture.

Under pressure from EU Revised Payment Services Directive (PSD2) mandates, banks are searching for industry-standard organizations to ease integration challenges. BIAN — a consortium of banks, vendors and service providers whose initial ambitions were intently focused on reducing integration complexity — is redirecting efforts to the practicality of applying consistent guidelines and leveraging APIs. The latest deliverable is BIAN Service Landscape 8.0, which contains 89 semantically defined APIs as of June 2020, and has a broader focus on credit card business domains. Gartner is increasingly seeing BIAN questions appearing on vendor RFPs.

Banking Business Power, Drivers and Decision Makers

Core banking renewal has historically been viewed as a high-cost, high-risk undertaking that banks usually take on only when they have no other choice. Although this perspective is changing — and some large banks are already replacing their systems — discussions with Tier 1 and Tier 2 banks reveal decision slowdowns, mainly due to the hurdles involved in gaining approval for large-scale programs and the risks associated with a large migration. In fact, some early large-scale deployments have been troubled by scope changes, cost overruns and unmet bank objectives.

Most banks, instead of undertaking a single large-scale CBS replacement project, are choosing to go with many smaller projects. These projects are of shorter duration — usually less than two years,
more often around one year — and are run sequentially, rather than in parallel. This phased approach usually provides short-term ROI, visible and quantifiable benefits, and less risk of failure. Mapping to these new deployment models is not an easy task for the bank or the CBS vendor. But it is quickly becoming the new reality for banks that hope to reset their technology spending in favor of increased investment in innovation. The margins for large-bank (or Tier 1) core banking deployments are tempting, and vendors’ ability to incrementally deliver smaller solution sets is increasingly becoming a key differentiator for the vendors and a selecting criterion for banks.

A focus on more componentized products that can both reduce the cost of maintenance and testing and leverage reusability, while enabling greater agility and ability to react to business challenges, remains a critical concern for banks.

The main drivers for changing CBSs reported by the more than 98 Magic Quadrant references from 2018 through 2019 were: (1) to “create internal/operational efficiencies” (74%); (2) to “improve business process agility” (63%); and (3) to “reduce time to market” (60%).

These results if compared to the overall sample over more than a decade of installations (n = 381) see a decline for the first and second drivers and an increase for the third.

At the same time, key factors considered by those same reference banks see product as the pivotal area: “product functionality and performance” (87%), “product roadmap and future vision” (62%) and “strong services expertise” (45%). These results show not only an interest in the delivery of the replacement project itself, but also a strong focus on the durability and continuation of the service provided by that product. And this trend grew in the past two years’ sample, compared to the overall sample across the past decade (n = 381). This is because the bank’s use of the CBS will, after all, not end with the implementation, but will likely continue for a decade or more afterward. In this regard, Gartner has noted an acceleration of the public cloud adoption trend. Banks perceive that cloud might resolve the problem of frequent (and expensive and painful) updates so they can support their clients just like fintechs do. In fact, “strong public cloud deployment offering” has been a driver for choosing that vendor in 20% of cases.

Transformation that enables banks to reinvent the way they service customers, embed operational efficiency and provide business change — without long waiting periods — is now a foundational requirement. Many banks view this time period as an opportunity to gain traction in their respective markets and sustain lasting competitive advantage.

As banks increasingly turn to core system modernization to drive change, they should expect a correspondingly higher rate of implementation problems. CBS vendors will be dependent on their system integration partners to extend their bandwidth, to a degree they haven’t experienced recently. As core banking vendors add system integration partners to their networks, concerns about training and certification will drive banks to exercise more due diligence during the core banking selection process. Gartner assesses this capability within the Operations criterion for each of the vendors in this Magic Quadrant.

Core banking technology decisions are firmly within the grasp of business owners and board members, who are gradually recognizing the importance of a solid and modern CBS in underpinning
new winning strategies based on digitalization. The implications for making the wrong decision on CBS will be lasting. That wrong decision could put banks at competitive risk, and candidates should be properly assessed within the bank’s risk management framework.

Gartner Recommended Reading

Some documents may not be available as part of your current Gartner subscription.

“How Markets and Vendors Are Evaluated in Gartner Magic Quadrants”

“Research Index: Core Banking Selection Criteria That Matter”

“A Banker’s Guide to Core Banking Solutions for Western Europe”

“A Banker’s Guide to Core Banking Solutions for the Middle East and Africa”

“A Banker’s Guide to Core Banking Solutions for Mature Asia/Pacific”

“A Banker’s Guide to Core Banking Solutions for the Emerging Asia/Pacific Region”

“A Banker’s Guide to Core Banking Solutions for Latin America”

“A Banker’s Guide to Core Banking Solutions for North America”

Evidence

Gartner surveyed all of the most important CBS vendors operating in the world in September 2019 as part of our 2019 Global Core Banking System Survey. Sixty vendors were surveyed for a total of 87 products actively sold in the CBS marketplace. These products accounted for over 12,000 in-production installations around the globe. Gartner verified more than 5,000 of such installations. The six products (and vendors) presented in this Magic Quadrant have been the result of a huge refinement and skimming work to provide the top global and retail core banking products. Nonetheless, this doesn’t exclude other vendors that might be strong to compete in one region (albeit not globally) or in other subsectors (e.g., private or corporate banking) and therefore worthwhile to be considered in a CBS selection process side by side with these six. For such regional analysis, we remand the reader to our “banker’s guide” reports shown in the recommended reading section.

Note 1 Minimum Number of Net New Client Wins in the Past Seven Rolling Quarters

Large client wins are much more difficult than small microfinance institutions’ projects. Therefore, Gartner has decided to assign a weighting system to new client wins in order to calculate a valid count in meeting the active presence criteria. This change was necessary to adjust for such differences between vendors that claimed 50 new, very tiny installations, while others could only claim one or two large deliveries. For this reason, Gartner has introduced a weighted system to evaluate that net new client count and, specifically, provides the weighting system across different bank tiers.
Evaluation Criteria Definitions

Ability to Execute

**Product/Service:** Core goods and services offered by the vendor for the defined market. This includes current product/service capabilities, quality, feature sets, skills and so on, whether offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

**Overall Viability:** Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood that the individual business unit will continue investing in the product, will continue offering the product and will advance the state of the art within the organization's portfolio of products.

**Sales Execution/Pricing:** The vendor’s capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.

**Market Responsiveness/Record:** Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor’s history of responsiveness.

**Marketing Execution:** The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional initiatives, thought leadership, word of mouth and sales activities.

**Customer Experience:** Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements and so on.

**Operations:** The ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Completeness of Vision

**Market Understanding:** Ability of the vendor to understand buyers’ wants and needs and to translate those into products and services. Vendors that show the highest
degree of vision listen to and understand buyers' wants and needs, and can shape or enhance those with their added vision.

**Marketing Strategy:** A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements.

**Sales Strategy:** The strategy for selling products that uses the appropriate network of direct and indirect sales, marketing, service, and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

**Offering (Product) Strategy:** The vendor’s approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature sets as they map to current and future requirements.

**Business Model:** The soundness and logic of the vendor’s underlying business proposition.

**Vertical/Industry Strategy:** The vendor’s strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including vertical markets.

**Innovation:** Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

**Geographic Strategy:** The vendor’s strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries as appropriate for that geography and market.