

Publication date

August 10, 2023

Author

Philip Benton, Principal Analyst, Financial Services

Ouliana Smith, Senior Research Analyst, Financial Services

Omdia Universe: Cloud-based Core Banking, 2023



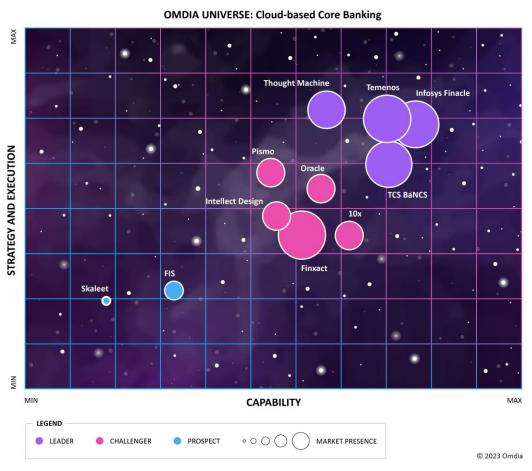


Summary

Catalyst

Despite the digital 24/7 nature of today's society, many banks still rely on legacy, monolithic core banking systems that are ever more expensive to maintain. Cloud infrastructure has enabled a new wave of modern cores to emerge that are flexible, customizable, and drive product innovation. This report will help C-level executives and core banking heads learn which vendors and solutions they should be shortlisting when replacing their legacy core banking system.

Figure 1: The Omdia Universe for Cloud-based Core Banking



Source: Omdia



Omdia view

Digital transformation is a long-running concern of banks. Most financial institutions have heavily invested in their digital capabilities and front-to-back modernization of systems. However, there is still much progress to be made, and investment in modernizing legacy systems remains a key theme in 2023. The shift to cloud-based applications across financial services has been swift, and none more so than in core banking systems which have seen a number of new digital banks emerge. This has forced incumbent banks to accelerate plans to upgrade their core banking systems.

Banks are fully aware of the need for digital transformation and shifting legacy applications to the cloud in order to remain competitive, but enacting it across the entire banking value chain in a unified manner is not a simple task. Omdia's 2023 IT Enterprise Insights Survey, for instance, shows that most retail banks have made some inroads into digital transformation, with respondents most likely to have made progress in adopting cloud services, but just 30% state that they have made significant progress. Many banks have taken a phased approach to digital transformation, often working with multiple product vendors. But there is a growing recognition that this approach brings its own challenges in terms of managing numerous vendors and roadmaps. As such, there is a shift in demand for integrated SaaS banking services, particularly from Tier-2 and -3 institutions.

The next-generation of core banking systems have emerged over the past five years, which have been built leveraging cloud-native functionality, open-source languages, and modern coding standards to enable continuous integration and continuous deployment and, ultimately, accelerate the ease and speed of bringing new products to the market. The architecture of these platforms is microservices-led and event-driven in their nature to enable financial institutions to embrace a new world of composable banking. Composable banking is about giving the bank the freedom to deploy modules independently, without vendor lock-in, and easily integrate multiple external systems driven through APIs.

Some newer vendors to enter the cloud-based core banking market have taken the approach of enabling composable banking through a "thin core," whereby they provide a narrower set of functionalities but make it easier to integrate broader capabilities through a wider partner ecosystem of niche solution providers. This approach is viable as long as the vendor is able to provide a "golden" source of truth whereby data is easily shareable across the banking group, and the core banking solution can provide real-time transaction processing, settlement, and performance at scale. The first generation of core banking systems was generally only used by incumbent financial institutions with complex needs, whereas today, cloud-based core banking systems need to cater to both the simpler needs of neobanks and the more complex requirements of larger institutions. For smaller Tier-2 and -three institutions, which do not have the technical resources of larger Tier-1 providers, the ability to run new services out-of-the-box is also key.

For all financial institutions, one of the biggest challenges is keeping pace with constant change. To capitalize on new opportunities and be ready for the unexpected, banks need to have systems in place to support a flexible and agile approach to product development that allows for speed-to-market. At a market level, there are a number of significant changes to market infrastructure: the proliferation of real-time payment schemes—which look set to reach a tipping point in 2023—and the rise of open banking are two cases in point. The ability to readily scale is also key, given that the



03



developments in market infrastructure are expected to drive significant growth in transaction volumes. Cloud-based services—specifically cloud-native offerings—and composable banking are recognized as essential enablers in satisfying these requirements.



Analyzing the cloud-based core banking universe

How to use this report

Omdia is a proud advocate of the business benefits derived through technology, and digital banking platforms are at the forefront of realizing benefits to front-office staff across the globe. The Omdia Universe report is not intended to advocate an individual vendor but rather to guide and inform the selection process to ensure all relevant options are considered and evaluated efficiently. Report findings gravitate toward the customer's perspective and likely requirements while taking into consideration the varying states of digital transformation occurring in financial institutions throughout the world. There are many vendors in the cloud-based core banking solutions market, and all vendors included in this report are deemed to be of high merit and worthy of consideration for shortlisting purposes.

Market definition

This report looks at the key trends, market activities, and solutions in the cloud-based core banking sector. Omdia defines core banking as the central ledger system that processes and records financial transactions and posts updates to accounts and other financial records. Traditionally, core banking systems were developed in-house and operated on mainframes on the bank's premises. In the past decade, cloud infrastructure has advanced significantly and now has the compute power to handle the vast numbers of transactions that a bank processes in real time. Although increasingly core banking platforms are developed utilizing cloud-native functionality, many of which feature in this report, Omdia defines "cloud-based" as a core banking platform that is deployable on multiple cloud environments (i.e., private cloud, public cloud, SaaS, etc.). Participating vendors complete a questionnaire, and they are scored based on their responses. The capabilities are divided into core platform capabilities and broader platform capabilities.

Core platform functionality

- Product support. The essential capabilities provided for traditional and alternative banking
 products (i.e., transactional accounts, loans, digital wallets, etc.). It also incorporates basic
 functionality around origination, automation, and customer information, as well as the
 suitability of the platform for multi-entity deployment.
- Platform architecture. Technology design and approach of the core banking platform and its ability to enable a "single source of truth" and composable banking.



- Banking platform configuration. Orchestration capabilities, ability to enable real-time transaction and settlement as well as the platform approach during design and user experience configuration stage.
- **Business process management.** How the platform manages business processes, including tools available to IT and business user staff and the business process standards the vendor adopts.
- Solution integration. An assessment is made of the approach to data migration, deployment, updating, and upgrading, with a focus on tools, automation, and deployment options. This category also looks at the ability to analyze, optimize, and change the platform in terms of the complexity of the change process and the extent of changes possible.

Broader platform capability

- **Security/compliance.** An assessment of the techniques used for enhancing security, API, and code standards, plus how the platform supports banks in complying with regulatory requirements such as data privacy and data protection.
- **Cloud deployment.** The various options for deployment are covered in this category: which public clouds are supported, whether there is an on-premises or SaaS options, database support and cloud security (including how data sovereignty is included in application development), plus scalability and performance once deployed in the cloud.
- Analytics/reporting. Evaluating the core banking platform's ability to support analytics and
 reporting in terms of ease of collecting data and what level of AI/ML is used to support hyperpersonalization of end users.

Market dynamics

While most banks have invested heavily in their digital capabilities and front-office modernization, some have increasingly shifted their focus to accelerating back-office transformation to improve their existing capabilities. Cloud-based core banking developed as real-time, API-first and cloud-native solutions can bring flexibility and scalability benefits, thereby meeting the on-demand requirements of banks. At the same time, the robustness and flexibility of modern core banking platforms offered by specialist providers today have prompted banks to consider utilizing vendors to upgrade their core banking systems, which has warranted a review of the current vendor landscape.

In the Omdia Universe, out of 12 vendors in this report, 11 were evaluated—each providing a differentiated solution addressing specific technological needs and requirements of banks, with most applicable to all types of banks as well as those looking to tap into the banking-as-a-service (BaaS) market. Infosys Finacle, TCS BaNCS, Temenos, and Thought Machine are the leaders in this report, providing best-of-breed core platform functionality. Finxact, Intellect Design, Oracle, Pismo, and 10x are the challengers: all have invested heavily in their platforms, which will help them expand their market presence. Skaleet and FIS are prospects in this report, with well-defined strategies and roadmaps providing them with significant scope to grow.



(Mambu is considered a non-participating vendor because it declined to participate or did not complete the questionnaire in time and has, therefore, not been evaluated or compared against other vendors in this report.)

The vendor landscape is constantly evolving, with providers aiming to strengthen their position through M&A activity, fundraising, or partnerships and, thus, capitalize on expected growth in demand for modern core banking platforms. Fiserv acquired Finxact in 2022 in order to accelerate the modernization efforts of their clients and prospects and appeal to a broader client base. Most recently, in June 2023, it was announced that Visa is to acquire Pismo, which will expand the vendor's global footprint by leveraging its modern technology for the benefit of the companies' existing and prospective clients. A growing number of banks are also investing in these vendors as they look to shape the overall direction of core banking software and innovation.

Figure 2: Vendor rankings in the cloud-based core banking universe

Vendor	Product(s) evaluated
Leaders	
Infosys Finacle	Finacle Core Banking Solution
TCS BaNCS	TCS BaNCS™
Temenos	Temenos Banking Cloud
Thought Machine	Vault Core
Challenger(s)	
10x	10x SuperCore®
Fiserv Finxact	Finxact Core as a Service
Intellect Design	Intellect Design Core
Oracle	Oracle Cloud Banking Services
Pismo	Pismo Core Banking
Prospect(s)	
FIS	Modern Banking Platform
Skaleet	Skaleet Core Banking SaaS Platform
	© 2023 Omdia

© 2023 Omdia

Source: Omdia



Market leaders

Infosys Finacle has the widest solution breadth with the broadest platform capability and achieved one of the highest scores for core platform capability by providing a wide range of capabilities out-of-the-box that would suit complex deployments. As an established vendor, it is well-placed to maintain its leadership position in the future, supported by its M&A activity and partnerships strategy and its impressive roadmap dedicated to continuous improvement and innovation.

TCS BaNCS is a very strong core banking product from leading vendor TCS that meets the needs of a diverse range of banks, particularly a universal bank managing multiple lines of business. Its end-to-end banking services and a focus on its partnership ecosystem contributed to high scores in both its broader platform capability and partners & ecosystem. It achieved strong scores for innovation, strategy & roadmap, and its geographical coverage due to the evolving functionality and technological capabilities whilst also being adaptable for specific markets.

Temenos, a high performer across the board, achieved the highest scores in the report for market alignment and innovation, as well as performing strongly for its broader platform capabilities allowing banks to evolve and address new market trends quickly. The solution offers innovation in the areas of open products for the creation of highly configurable financial products (i.e., smart products) and ESG (focusing on science and measurement-based ESG metrics), as well as providing access to a comprehensive network of pre-integrated third-party solutions.

Thought Machine cemented its position as a leader, achieving higher scores than other newer entrants (founded post-2010) because it offers a unique solution with an option to build and own banks' financial product offerings by utilizing its smart contracts framework. Its Vault Core solution scored highly across almost all areas, particularly for its core platform capability, solution breadth, and vendor execution. It has a flexible roadmap strategy driven by customer demand, giving banks the opportunity to provide inputs to the technology roadmap to continuously evolve the solution with client needs, and will appeal to banks as part of their group-wide digital transformation goals.

Market challengers

10x scored strongly across most categories but achieved particularly high scores for platform architecture, banking platform configuration, and solution breadth thanks to the flexibility of the product and the high number of capabilities provided out-of-the-box. 10x—which has a strong UK and European heritage, focusing on breadth, integration, and the support of core components of its platform—is now becoming more versed in a variety of deployments (hence opening an office in Australia) and has a well-defined growth strategy which will ensure it will continue to grow its customer base.

Finxact, a Fiserv company, scored the joint highest score for platform architecture, with the product allowing users to extend the core banking platform as required to support new products, add new fields, and develop any integration required. Finxact benefits strongly from Fiserv's wider ecosystem of capabilities and partners, which contributed to high scores for solution breadth, implementation services, and partners & ecosystem. It has a well-developed roadmap strategy, which will significantly enhance its offering going forward.



Intellect Design is a challenger in this report, achieving its highest score for strategy and innovation for its innovative eMACH.ai platform approach, as well as its Accelerated Implementation Methodology (AIM), enabling easy transition from legacy cores. It has invested heavily in the platform that appeals to a wide range of banks, including the universal bank, with its strong corporate banking and Open Finance platform capabilities, and can be provided as a complete end-to-end solution.

Oracle's new solution, Oracle Banking Cloud Services (OBCS), stands out for its ability to offer a more integrated approach to both retail and corporate segments. It provides many capabilities and breadth out-of-the-box, including open banking and embedded finance, scoring highly for strategy and innovation. The vendor is also noteworthy as a growing cloud infrastructure provider through Oracle Cloud Infrastructure, which is used to deliver OBCS, and as one of the largest technology companies in the world, it is well placed to capitalize on a shift in demand for integrated SaaS banking services.

Pismo is a challenger in this report providing an off-the-shelf solution for both core banking and payments processing capabilities, which allows for direct connection (through its partner ecosystem) to Brazil's PIX and UK's Faster Payments real-time payment networks. It has scored strongly across most areas but particularly well for vendor execution and market momentum, partially driven by the success of its scalable solution in Latin America. It has had wins further afield (North America, Europe, and Asia & Oceania), and the recent announcement of an investment by Visa will see Pismo accelerate its international expansion.

Market prospects

FIS scored solidly across most categories, with its core platform functionality and solution breadth being its strongest scores—thanks to the vendor's ability to serve multiple types of financial institutions. Its Modern Banking Platform is a complete revamp of its legacy systems and leverages its vast experience in core banking, resulting in a functionality-rich and extensible solution. FIS has a forward-thinking strategy and ambitious roadmap, which will ensure stronger alignment with the marketplace allowing the vendor to grow into a significant player in cloud-based core banking.

Skaleet is quickly gaining traction with neobanks and electronic money institutions, achieving high scores for its market momentum as a result of its growth in revenue, customer acquisition, and geographical coverage, and received its highest score for vendor execution largely due to its customer experience score and its partner ecosystem. It is investing significant resources into R&D, which will expand the breadth of its solution and appeal to a broader range of financial services providers, and it already has some clients in the embedded finance space.

Mambu, considered a non-participating vendor in this report, set out to service the microfinance space in emerging markets, but its ability to provide a low-cost cloud-native SaaS platform with rapid deployment had also translated well to the startup banking sector. It is now thought to have over 280 customers, ranging from Tier 1 banks and even non-traditional financial institutions, including Orange Bank and Solaris (formerly known as Solarisbank). Mambu's cloud-native-based core banking platform is built on a single-code base across all customers, with the vendor having the ability to build code in 72 hours and deploy in just two weeks.



Opportunities

Modernizing the core banking system can be costly, time-consuming, and complex; however, anecdotal evidence suggests that banks are spending 85% on maintaining their existing core banking and the remainder on launching new products, which can be flipped once they have fully modernized their core providing them with enormous scope to innovate. As the world becomes increasingly digitally-focused, core banking systems are required to shift from batch processing to real-time offerings, and banks need to put systems in place to improve their existing capabilities and take advantage of payment innovation. Externally, banks are faced with a rapidly changing market with developments such as real-time payments, embedded finance, and open banking providing an abundance of opportunity, but also threat, which means banks must explore new business models to remain competitive.

Threats

Some banks (typically Tier 1 or fintech startups) will still choose to build their own or select a platform that provides a framework for building and maintaining their financial products over packaged solutions, even though it can be a time-consuming, costly, and complex process. Although there are different routes to modernization, and some will choose to partner with middleware providers offering Agile product and service development on top of legacy systems, the longevity of such solutions needs to be scrutinized, given the rapid advancement in technology. Therefore, financial institutions must focus on vendors that are best placed to meet their current needs but also be able to evolve in a manner that will allow for Agile development and expansion into more capable solutions in the future. Those that continue to rely on legacy systems will struggle to adapt to the rapidly evolving demand from customers for new products and services and risk high customer churn and market relevancy.

Market outlook

Demanding customer expectations, competition from fintech, and increasing regulatory pressures (such as data privacy and open banking) will continue to play a part in the transformation of financial services. Despite macroeconomic uncertainty and cost-cutting pressures, investment in technology will continue to be the utmost priority for the industry, with banks looking to increase their IT spending. According to Omdia's *Financial Services Technology Spending Forecast*, global spend on core banking (back-office function) by retail and corporate banks will reach \$90.6bn by the end of 2023, and is expected to grow at a CAGR of 5% over 2021–26 period to reach \$104.8bn, proving there is plenty of market share available for core banking vendors.

Many banks remain wary of embarking on transforming their core banking system due to fear of the significant time and investment required before generating a return. However, many vendors look to overcome this obstacle by supporting a "side car" approach, thereby enabling for the new core to run parallel to the existing core by migrating certain products, locations, customers, or lines of business. Banks are expected to de-risk from a "big-bang" approach by adopting this low-risk phased strategy, which will be an important tactic in the near-future. However, every bank's needs are different and, thus, a one-size-fits-all approach will not be suitable for all. Banks should assess their



10



existing capabilities, customer needs, operational risk and, in relation to market trends, select the vendor and platform most relevant to their business and technical goals.



Vendor analysis

Temenos (Omdia recommendation: Leader)

Temenos should appear on your shortlist, particularly if you are seeking a platform that enables rapid new product launches and innovation

Overview

Founded in 1993 with headquarters in Geneva, Switzerland, Temenos is a specialist in enterprise software for banks and financial services, offering front- to back-office solutions to clients across five continents. Temenos Banking Cloud, launched in 2020 (with the latest release R23 (2023)), is a cloud-native and cloud-agnostic composable microservices-based offering, enabling banks to compose, extend, and deploy banking capabilities at scale via cloud and SaaS. The solution was built to serve retail, corporate, SME, wealth, inclusive finance/microfinance, neobanks, BaaS, and embedded finance segments. Temenos Banking Cloud provides comprehensive functionality, and as well as core banking, it can also support payments, financial crime mitigation (FCM), (X)AI, wealth, and advanced analytics. The solution is complemented by Temenos Exchange, a network of third-party providers that focuses on pre-integrated solutions, such as payment cards, regulatory and compliance, and open banking with its partners, including Marqueta, Paymentology, HID, and Formpipe. The solution is supported by Temenos Banking Cloud's self-service portal that allows banks to add or remove services and capabilities, including ones from third parties, based on business needs.

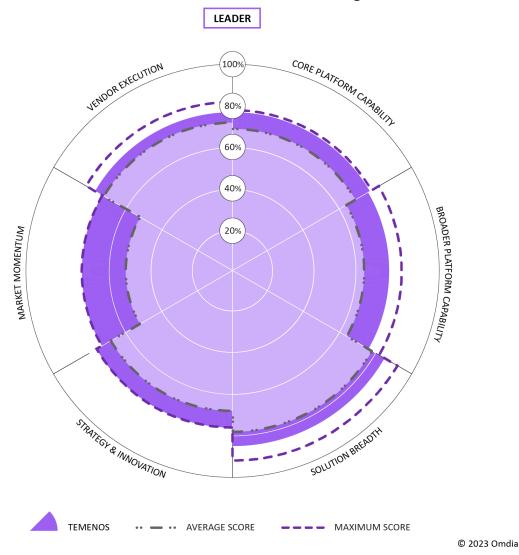
The solution offers innovation in the areas of open products for the creation of highly configurable financial products (i.e., smart products), AI, and ESG. Temenos Open Products allows the orchestration of features from front- to back-office and for one or more cores, allowing for the creation of hybrid banking products. It embedded (X)AI-enabled analytics capabilities throughout the platform to support banks that want to pre-empt potential future AI regulations and proactively enhance trust with their customers. The platform is ESG-enabled by design (by focusing on science and measurement-based ESG metrics), with its Carbon Emissions Calculator helping clients track and measure their carbon footprint. It offers extensive tooling capabilities, including the Extensibility Framework, Adapter Framework, and Temenos Workbench to support clients and provide them with flexibility (and pre-integrations to the wider community). Its Innovation Hub can provide support to clients through access to expertise, helping banks accelerate their modernization projects. Temenos was a high performer across the board, achieving the highest scores in the report for market alignment and innovation, as well as performing strongly for its broader platform capabilities.



Figure 12: Omdia Universe ratings—Temenos

OMDIA UNIVERSE VENDOR SUMMARY

Temenos: Cloud-based Core Banking



Source: Omdia

Strengths

Temenos has an established core banking customer base and extensive expertise boosted by its single code base, Country Model Banks capability, and a strong partnerships ecosystem with a growing list of partners that are carefully curated to help drive innovation and allow banks to evolve and address new market trends quickly. The solution, based on an industry-standard, distributed, event-driven architecture, enables clients to easily and rapidly enhance the platform with additional



capabilities as needed via its Extensibility Framework and Temenos Open Products while allowing banks to consume new offerings safely thanks to Continuous Updates, thus achieving the highest scores for business processes management and solution integration.

Limitations

Whilst Temenos has a rich set of functionality and capabilities available, to benefit fully from the Temenos ecosystem, clients would be required to deploy complementary functionality beyond just the Temenos core banking product. Temenos has a large and wide-ranging customer base spread across multiple geographies, which enables the vendor to provide capabilities for a variety of use cases; however, it may be less suitable for a bank requiring specific needs and looking for a high degree of customization.



Appendix

Methodology

Omdia Universe

Omdia's rigorous methodology for the Universe product involves the following steps:

- Omdia analysts perform an in-depth review of the market using Omdia's market forecasting data and Omdia's enterprise insights survey data.
- Omdia creates a matrix of capabilities, attributes, and features that it considers to be important now and in the next 12–18 months for the market.
- Vendors are interviewed and provide in-depth briefings on the current solutions and future plans.
- Analysts supplement these briefings with other information obtained from industry events and user conferences.
- The Universe is peer-reviewed by other Omdia analysts before being proofread by a team of dedicated editors.

Inclusion criteria

The criteria for inclusion of a vendor solution in the *Omdia Universe for Cloud-based Core Banking* are as follows:

- The ability of vendors to provide their solution across multiple geographies.
- The vendor's cloud-based core banking platform that is evaluated to be fully available in market with active customers for this platform.
- The platform must be deployable on multiple cloud environments (i.e., private cloud, public cloud, SaaS, etc.)
- The platform must support the bank's ledger (deposits, loans, mortgages, etc.) on a real-time processing basis.



• While evaluation will look at the vendor's platform's ability to service the universal bank, the platform will need to actively service at least the retail banking market.

Exclusion criteria.

The vendor solutions are "white labeled" and not sold as a branded solution.

Further reading

Market Landscape: BNPL and the Changing World of Credit (June 2023)

Market Landscape: Real-time Payments (May 2023)

IT Banking Spending Predictor: Corporate and Retail – 2023 (April 2023)

Banking Software Contracts Analytics: Quarterly Analysis – 1Q23 (July 2023)

Authors

Philip Benton, Principal Analyst, Financial Services

Ouliana Smith, Senior Research Analyst, Financial Services

askananalyst@omdia.com

Citation policy

Request external citation and usage of Omdia research and data via citations@omdia.com.

Omdia consulting

We hope that this analysis will help you make informed and imaginative business decisions. If you have further requirements, Omdia's consulting team may be able to help you. For more information about Omdia's consulting capabilities, please contact us directly at consulting@omdia.com.

Copyright notice and disclaimer

The Omdia research, data and information referenced herein (the "Omdia Materials") are the copyrighted property of Informa Tech and its subsidiaries or affiliates (together "Informa Tech") and represent data, research, opinions or viewpoints published by Informa Tech, and are not representations of fact.

The Omdia Materials reflect information and opinions from the original publication date and not from the date of this document. The information and opinions expressed in the Omdia Materials are



subject to change without notice and Informa Tech does not have any duty or responsibility to update the Omdia Materials or this publication as a result.

Omdia Materials are delivered on an "as-is" and "as-available" basis. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in Omdia Materials.

To the maximum extent permitted by law, Informa Tech and its affiliates, officers, directors, employees and agents, disclaim any liability (including, without limitation, any liability arising from fault or negligence) as to the accuracy or completeness or use of the Omdia Materials. Informa Tech will not, under any circumstance whatsoever, be liable for any trading, investment, commercial or other decisions based on or made in reliance of the Omdia Materials.

CONTACT US

omdia.com

askananalyst@omdia.com