

CELENT

XCELENT Awards 2021

CORPORATE DIGITAL BANKING PLATFORMS: NORTH AMERICA EDITION

2021 xCelent Awards, Powered by VendorMatch

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This is an authorized reprint of an excerpt from a Celent report profiling and evaluating 12 solutions from 10 vendors in North America. The full report is more than 180 pages long. The report was not sponsored by Oracle in any way.

The reprint was prepared specifically for Oracle, but Celent retained full control of the content. For additional information please contact info@celent.com.

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REPORT METHODOLOGY

Approach

To analyze the capabilities of corporate digital banking platform solutions active in the marketplace, Celent invited more than 25 software vendors worldwide to participate in this research. There was no cost for vendors to participate.

Celent sent a detailed RFI to the participating vendors, accompanied by a product briefing and solution demonstration. The RFI sought information about key functionality, preintegrated products, customer base, pricing model, customer feedback, and implementation and support. In some cases, vendors revised their RFI responses following detailed discussions.

Celent used its unique [VendorMatch](#) platform to gather RFI data from each vendor. VendorMatch is the world's largest vendor and solutions data store—combined with analytical tools—to help financial institutions find, evaluate, and select a solution. Each profile contains a link to the solution's VendorMatch profile.

The Corporate Digital Banking Platform RFI gathered information across multiple dimensions:

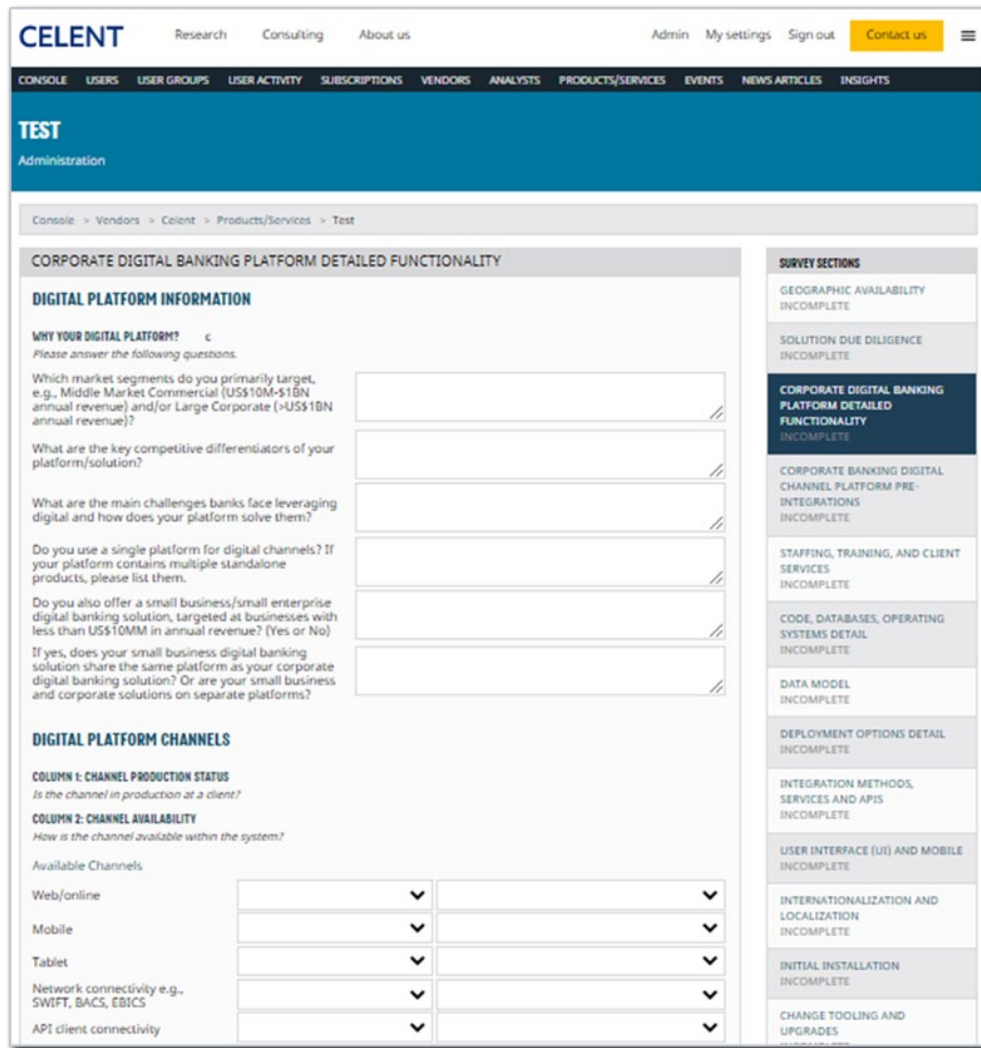
- Company overview
- Company information
- Product overview
- 17 drill-down categories
 - Geographic availability: Regions and countries where you market or supply this solution
 - Solution due diligence: Annual revenue, release history, and future roadmap
 - Detailed functionality: Digital channels, user interface, product features, customer interaction mechanisms, partnerships, and integration of technology capabilities
 - Preintegrated solutions: Vendor specific products pre-integrated with your solution for each geographic region
 - Staffing, training and client services: Professional services staff and client support, accreditations and certifications, and user conferences/committees
 - Code, databases, operating systems supported: Platform, servers, operating systems, code language, desktop applications, and core code modifications
 - Deployment options detail: Deployment option availability, client base by deployment option, and hosting options
 - Integration methods services and APIs: Integration approach and API details,

- User interface (UI) and mobile: Internal business UI, developer and configurers UI, user interface styles, mobile/tablet support, and native app support
- Internationalization and localization: Multiple currency support, multiple language support, and local conventions support
- Initial installation: Timing, development approach, implementation staffing, and third-parties/relevant partnerships
- Application and cybersecurity: application security support, authentication capabilities, audit trail, workflow, and cybersecurity
- Commercial terms: Pricing models, pricing factors, third-party software fees,
- Service-level agreements: SLA service scope and features, and service and support tracking
- Customer base: Customers by asset tier, customers in production with recent version, new clients, and named clients
- Customer base by country: Total in production clients and new clients
- Customer references: Reference contacts by region

As part of the VendorMatch RFI process, Celent gathered much more information about each solution than is reflected in this report. Subscription clients can leverage analyst access to connect with the author and to learn more about the vendors.

Figure 1 illustrates one of the VendorMatch RFI data collection screens. In this example, it is the primary Corporate Digital Banking functionality tab.

Figure 1: Celent VendorMatch RFI Data Collection (anonymized)



Source: Celent VendorMatch

As part of the data gathering process, Celent asked about feature availability and implementation status, providing the vendors with the following response options shown in Table 1.

Table 1: RFI Functionality Response Options

Implementation Status	Feature Availability
At least one client in production	Available out of the box
Supported but no live clients in production	Configurable using simple tools targeted for a business user
Not supported	Configurable using tools targeted for an IT user
	Configurable through a scripting language/coding

Available with integration to a third party solution
Available with integration to a separate module provided by this vendor
Under development / On road map
Could develop—would be considered customization
Not available / Not applicable

Source: Celent analysis

Customer Reference Feedback

Celent also surveyed client references provided by each vendor to obtain client views of the solution’s business and technology value and assess the vendor’s customer service. The survey also asked each client what it liked best about its vendor and asked for suggestions for improvement. Anonymous results of the client surveys are reflected in the profiles.

Customer reference feedback is presented in the profile, including a diagram that displays the average ratings given to the vendor in six categories. Each average rating includes up to 23 underlying ratings, as shown in Table 2, scored by the customer on a scale of 1 to 5, where 1 means poor and 5 is excellent.

It is advisable to keep in mind that the evaluations and comments may vary according to the specific needs of each reference client.

Table 2: Customer Feedback Ratings

Diagram Average (Questions Asked)	Ratings Included in Average*
How would you rate the TECHNOLOGY of this solution in the following areas?	Ease of system maintenance Flexibility of the data model Configurability of the solution Ease of UI design across devices (Web) and in-app without coding Overall satisfaction with the technology
What has been your experience INTEGRATING this platform with the following?	Overall integration Core banking platform External data sources Internal data sources Third party (nonpartner) products Payments systems
Thinking back to when you first IMPLEMENTED this platform, how would you rate this	Project management (estimations, scope creep, etc.) Implementation completed on time Implementation completed on budget Knowledge of your business

vendor in the following areas?	Knowledge of their solution and relevant technology Continuity with the implementation team—did the core team stay engaged through to implementation? Overall project success
How would you rate this vendor’s ongoing POST-IMPLEMENTATION support for the following?	Responsiveness (handling and speed of issue resolution) Communication—proactive communication of issues and changes Staff turnover Consistently meeting SLAs Road map delivery Customer feature requests heard and responded to Overall quality of professional services
How would you rate the COST of the vendor’s solution?	Implementation costs (if recent) Costs to integrate third party (nonpartner) systems Overall costs (includes all costs associated with maintenance, licenses, integrations, etc.)
How would you rate UPGRADES of this system?	Ease of the overall upgrade Speed of the upgrade Cost of the upgrade Other (please specify)
Additional questions	What has been your EXPERIENCE in MAKING SIGNIFICANT CHANGES to the PLATFORM? This could include adding a new product, changing processes, etc. Please consider how long and how many resources it takes to make a significant change. What are the ADVANTAGES to using this platform? What would you CHANGE about this platform? Vendor? What OVERALL GRADE would you give this platform on a rating scale from 0 to 10, 0 being extremely poor, 10 being exemplary?

*Scale 1 to 5, where 1 is poor and 5 is excellent. “No Opinion” not included in average.

Source: Celent

About the Profiles

Each profile is structured the same way, presenting information about the company, the solution, and Celent’s view. Charts provide more detailed information about target segments, key functionality, technology approach, deployment options, etc. For those solutions with client references, we provide a graphical representation of the resulting feedback. The profiles are presented in alphabetical order.

Vendors had an opportunity to review their profiles in this report for factual accuracy. Some of the vendors profiled are Celent clients, and some are not. We present vendor information objectively, regardless of commercial relationship.

Limitations

Celent believes that this study provides valuable insights into current offerings in corporate digital banking platforms. However, readers are encouraged to consider these results in the following context. Although we viewed a system demonstration, we could not confirm all of the solution details and client base information self-reported by participants. The initial data collection commenced in 2020, and the vendors have had the opportunity to update their profile information since that initial outreach.

CELENT'S ABC VENDOR VIEW

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To help financial institutions better understand the vendor landscape and compare providers, Celent developed its ABC methodology, which positions vendors across three dimensions.

Advanced Technology

Breadth of Functionality

Customer Base and Support

While this is a standard tool that Celent uses across vendor reports in many different areas, each report will define the ABC categories slightly differently. The final rating is determined by Celent's score of these factors as well as Celent's view of the relative importance of the factors as they apply to both the solution and vendor's capabilities.

Advanced Technology Scoring

Celent compared the underlying technologies used in each of the vendor applications. Celent's aim in comparing technology attributes is to differentiate solutions in ways that would be useful to most institutions. We scored each vendor's technology platform based on the seven factors shown in Table 3 below, assigning a weight to each attribute based on our view of its importance. As a last step, we normalized the scores into a 10-point scale. we normalized the scores into a 10-point scale.

Table 3: Advanced Technology Attributes

	Oracle
Normalized Advanced Technology Score	
Code, Databases, Operating Systems	Scores favor broad platform, OS, and database support and low incidence of code modification

Integration Methods, Services, and APIs	Scores favor larger number of integration mechanisms
Deployment Options	Scores favor larger number of deployment options
User Interface (UI)	Scores favor browser-based end user and bank administrator interfaces
Mobile Capabilities	Scores favor support for responsive design or mix of responsive design and native mobile apps
Internationalization and Localization	Scores favor multiple language and currency support
Customer Feedback	Average feedback score from direct customer input

Key: ● = highest score, ○ = lowest score. Specific metrics vary by category.
Sources: Vendor RFIs, Celent analysis

Breadth of Functionality Scoring

The majority of Celent’s breadth of functionality score is derived from Celent’s functionality questions about channel support, dashboard, information reporting, liquidity management, and payables. Receivables, fraud, and customer interaction methods. The analysis also favored those who have a larger portion of functionality in production and live at a client, as opposed to supported functionality not in use by clients or on the road map. As a last step, we normalized the scores into a 10-point scale. Table 4 contains Celent’s overall breadth of functionality score as well as its three components.

Table 4: Breadth of Functionality Attributes

	Oracle
Normalized Breadth of Functionality Score	
Detailed Functionality	Analysis of each vendor’s capabilities across Celent’s cash management solution taxonomy (Error! Reference source not found.)
Digital Channel Support	Support for attended (Web, mobile, tablet) and unattended (file-based network connectivity, APIs) digital channels
Solution Demo	Celent’s rating of the solution based on a guided demonstration

Key: ● = highest score, ○ = lowest score. Specific metrics vary by category.

view of its importance. As a last step, we normalized the scores into a 10-point scale.

Table 5: Customer Base and Support Attributes

		Oracle
Normalized Customer Base and Support Score		
Corporate Banking Customer Base	Scores favor larger client counts across large, midsize, and small financial institutions	
Number of New Deals in Past Two Years	Scores favor larger number of new deals in the past two years	
Number of Clients with Most Recent Version	Scores favor larger number of clients in production with most recent version of the solution	
Global Distribution of Clients	Scores favor broad geographic distribution of clients in production	
FTE Providing Professional Services / Client Support	Scores favor larger number of professional services staff	
Average Years of Experience	Scores favor longer years of service of professional services staff	
Regional Professional Services Staff Available	Scores favor onshore professional services staff in multiple geographic regions	
Types of Training Offered	Scores favor a broader array of training offerings	
User Conferences	Scores favor vendors that conduct a user conference in the last 12 months	
Client Reference Feedback: Implementation	Average client reference feedback score for implementation. If Celent received fewer than 2 client reference surveys, there was no score for this attribute.	
Client Reference Feedback: Post-Implementation	Average client reference feedback score for post-implementation support. If Celent received fewer than 2 client reference surveys, there was no score for this attribute.	
Key: ● = highest score, ○ = lowest score. Specific metrics vary by category. Sources: Vendor RFIs, Celent analysis		

Additional Considerations

Stating some qualifications around scoring corporate digital channels platforms will provide perspective. Celent recognizes that the strength of any digital platform is somewhat dependent on the bank involved. A platform ranked low in Celent's rankings may be a perfect fit for a number of institutions for various reasons: price, business-specific functionality, target customer base, existing technology environments, etc. For this reason, these rankings are purely the opinion of Celent. Individual banks should use them in the context of their own specific situations.

Additionally:

- Celent's ABC methodology uses a normalized scale. In some cases, this can exaggerate quantitative differences, but its purpose is to make the graph easier to read.
- Celent is awarding multiple solutions in each ABC category. This reflects that many scores were close and that they could be affected by small changes in the weight of components.
- A vendor's suitability comes down to the needs of the institution compared to the insight offered by this analysis.
- The mix of vendors and platforms include Celent subscribers and nonsubscribers. We make no distinction between how either is presented, nor does it affect our ratings.

VENDOR SUMMARIES

ORACLE CORPORATION: ORACLE BANKING DIGITAL EXPERIENCE

With more than 380,000 customers—including 100 of the Fortune 100—and with deployments across a wide variety of industries in more than 145 countries around the globe, Oracle offers a fully integrated stack of business hardware and software systems. Oracle engineers hardware and software to work together in the cloud and client’s data center—from servers and storage to database and middleware, to applications. Oracle Financial Services, majority-owned by Oracle, provides clients in more than 140 countries with an integrated, end-to-end suite of intelligent software and powerful hardware.

Table 6: Company Snapshot (as of 05/31/21)

Year Founded	1977
Headquarters	Austin, TX
Number of Employees	140,000
Annual Revenue (USD)	US\$40.5 bn
Company Financial Structure	Public company (NYSE: ORCL)
Merger and Acquisition Activity	2005: Acquired Peoplesoft 2006: Acquired Siebel Systems 2008: BEA Systems 2008: AdminServer 2010: Sun Microsystems 2014: MICROS Systems 2016: NetSuite

Source: Vendor RFI

Table 7: Product Snapshot

Name	Oracle Banking Digital Experience
Product Revenue	Oracle does not share product specific revenue
VendorMatch Link	https://www.celent.com/solutions/939989450
Year Originally Released/Deployed	1999/2000

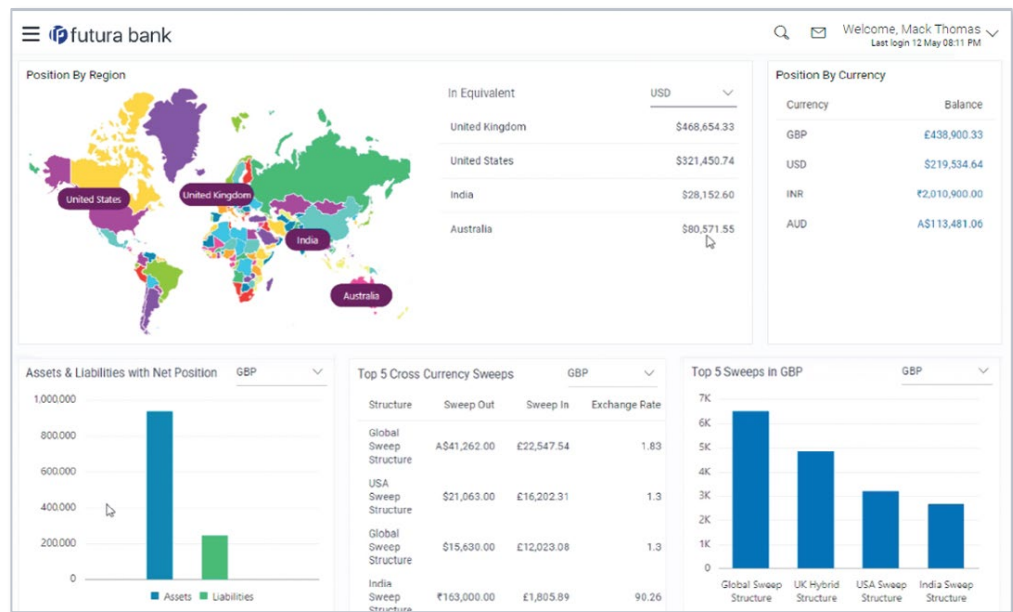
Current Release and Date of Release	20.1.0.1. /2020
Target Geographic Market	Global (North America, South America, Europe, Asia Pacific, Africa, Middle East)
Target Client Segments	All markets and segments across all geographies.
Installed Base	209
Named Clients	Not provided

Source: Vendor RFI

Solution Overview

Oracle Banking Digital Experience is a single platform solution for retail, SME, and corporate banking. Oracle positions its Oracle Banking Cash Management platform as enabling banks to offer corporate customers a comprehensive 360-degree view of real time cash positions across its global account structures. Corporate customers can forecast a detailed cash flow for various periods, with options to include or exclude countries, accounts, and invoices. In addition, to analyze future cash flows, customers have the flexibility to adjust various criteria.

Figure 3: Dashboard



Source: Vendor

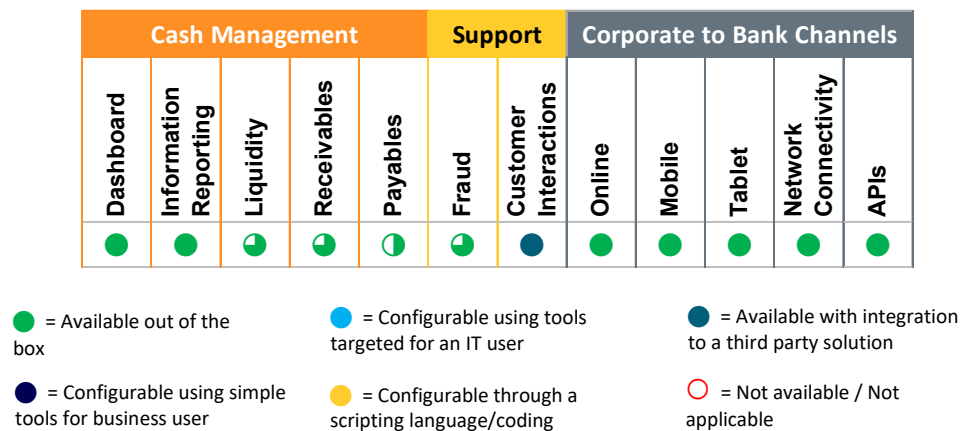
Additional features include flexible collections and receivables management, including local and upcountry cheque, home transfer, and virtual account collections. Also, Oracle Banking Cash Management offers a wide range of intuitive dashboards for bank staff. These intuitive dashboards empower bank staff to serve customers quickly and provide innovative solutions.

Built on a microservices architecture, the solution enables banks to extend functionality to address customers, market, and regulatory requirements. By interfacing with Oracle Banking APIs, the solution offers APIs across cash flow, receivables, and payables management. Additionally, with prebuilt interfaces with Oracle Banking Digital Experience, the solution allows banks to offer self-service features.

Celent Analyst Opinion

Celent’s assessment of Oracle Banking Digital Experience functionality is summarized graphically in Figure 4. The solution delivers strong functionality out of the box.

Figure 4: Oracle Capabilities across Corporate Digital Banking Platform Taxonomy



Source: Vendor RFI

Oracle targets banks of all types and sizes and all client segments across its broad geographic footprint. The solution supports differentiated persona-based dashboards by role or business size. APIs and microservices enable full omnichannel capabilities.

Oracle offers Oracle Banking Liquidity Management as a stand-alone module, stating that it supports graphical elements and offers simulation of various scenarios. The vendor supports various on-premises, private cloud, and public cloud deployment options across regions.

At a time when agile development and customer cocreation are best practices, Oracle gathers future requirements based on discussions with Oracle Customer Advisory Boards, Strategy Council, CIO Advisory, user groups, and industry analyst feedback. Current road map items include omnichannel onboarding, personalized business banking, and host-to-host integration.

When asked about system advantages, clients said all banking services (e.g., retail, corporate, card management) are on a single platform. Suggested improvements were payments portal ease of use and a change to the frequency of patch sets, as the existing three-month schedule requires available resources.

Table 8: Celent’s View

Strengths and Differentiators	Distinctive Features
Single omnichannel platform for retail, small business, and commercial customer	Numerous dashboards based on personas (e.g., treasurer view) available out of the box
Fully API-enabled with microservices architecture out of the box	
Broad geographic availability	

Source: Celent analysis

Corporate Digital Platform Channels

Table 9: Channels Supported

Channel	In Production with Clients	Supported but Not in Production with Clients	Not Supported
Web/Online	●		
Mobile	●		
Tablet	●		
Network connectivity (e.g., SWIFT, BACS, EBICS)	●		
API client connectivity	●		
Wearables (e.g., Apple Watch)		●	

- = Available out of the box
- = Configurable through a scripting language/coding
- = Under development / On road map
- = Configurable using simple tools for business user
- = Available with integration to a third party solution
- = Could develop—would be considered customization
- = Configurable using simple tools for IT user
- = Available with integration to a separate module provided by this vendor
- = Not available / Not applicable

Source: Vendor RFI

In support of mobile and tablet channels, Oracle uses a hybrid approach for mobile apps. Apps and browsers use responsive design for various devices and are adaptive to the transaction/task and form factor. Additionally, the solution uses a device’s native features like geolocation and camera to provide a personalized user experience.

Oracle Banking Digital Experience offers a full range of omnichannel capabilities, supporting channel switching, viewing host-to-host and API transaction details in attended channels (Web, mobile tablet), and allowing clients to approve payment batches via the web portal that have been submitted via APIs. Omnichannel is supported through Oracle Banking APIs.

Overall Functionality

The table below shows Oracle Corporation's functionality and production status of key features for Corporate Digital Banking Platform Solutions.

Table 10: Key Functionality

Function	In Production with Clients	Supported but Not in Production with Clients	Not Supported
Dashboard/Home Page			
End user customization by user persona	●		
Differentiated views for small business vs. commercial/corporate users	●		
End user selection of start page (e.g., reports, payments, account details)			●
Display marketing/training messages		●	
Display commercial loan accounts and balances	●		
Display commercial card accounts and balances	●		
Display investment accounts and balances	●		
Availability of graphical elements/charts	●		
End user selection of differing views (e.g., legal entity, product, currency, country views)	●		
Information Reporting			
Filters for displaying accounts, balances, and transactions	●		
Multibank reporting	●		
Multicurrency reporting	●		
Real time balance and information updates from back office systems	●		
Liquidity Management			
Cash concentration / physical pooling	●		
Notional pooling	●		
Sweeps	●		
Target/zero balance accounts	●		
Cash flow forecasting		●	
Intercompany lending			●

Function	In Production with Clients	Supported but Not in Production with Clients	Not Supported
Escrow/subaccounts	●		
Virtual account management	●		
Investment services			●
Receivables			
Electronic collections	●		
Electronic invoicing and presentment		●	
Account reconciliation		●	
Lockbox reporting			●
Check remote deposit capture reporting			●
Integrated receivables	●		
Payables			
Domestic low-value (ACH) payments	●		
Domestic high-value (wire transfer) payments	●		
Real time/immediate payments	●		
Cross-border/international payments	●		
Swift GPI for corporates (g4C) support		●	
Integrated foreign exchange (at payment initiation)			○
Integrated payables	●		
Controlled disbursement reporting			○
For US tax payments: preformatted templates for federal and state tax payments			○
Fraud Solutions			
Check stop pay	●		
Payment validation	●		
Check positive pay	●		
Reverse positive pay	●		
ACH positive pay			○
ACH block			○
ACH debit filters			○
Customer Interaction Mechanisms			
Consolidated, intuitive, searchable online help	●		

Function	In Production with Clients	Supported but Not in Production with Clients	Not Supported
Secure messaging (i.e., through a message center)	●		
Live text chat (with a CSR, in app or online)		●	
Video chat		●	
Screen sharing / cobrowsing		●	
Voice-enabled assistants (e.g., Amazon skills, Google Home, etc.)		●	
Chatbots (rule-based, deployed in messaging apps or social media, etc.)	●		
AI-powered chat bot with virtual assistant		●	

- = Available out of the box
- = Configurable using simple tools for business user
- = Configurable using simple tools for IT user
- = Configurable through a scripting language/coding
- = Available with integration to a third party solution
- = Available with integration to a separate module provided by this vendor
- = Under development / On road map
- = Could develop—would be considered customization
- = Not available / Not applicable

Source: Vendor RFI

Table 11: Other Features

Authentication, Entitlements, Analytics	
Authentication Methods Supported	Platform supports customer authentication using user ID and password on web-based devices. On mobile devices, the platform supports biometric authentication through face ID, touch ID/fingerprint, PIN, and pattern recognition, in addition to user ID and password. The platform also supports multiple two-factor authentication methods (e.g., one-time passwords, secure code app, security Q&A). Out of the box, the platform is integrated with Oracle’s Identity solutions (Oracle Identity Management [IDM] and Oracle Identity Cloud Service [IDCS]).
Authentication for High-Risk Transactions	Supports SCA (secure customer authentication), compliant with global standards like CMA-UK and PSD2. The platform allows latching of additional/multiple authentication options in a configurable manner. Additional authentication methods can be triggered by bank rules or risk engine.
Entitlements Approach	Fine-grained entitlements are configurable by bank admin. Role-based entitlements use granular access management. There are also initiate/approve/view entitlements for functional modules.

Centralized Entitlements Repository That Supports External Services	Centralized, configurable entitlements repository supports all touchpoints.
Usage Analytics	The platform has comprehensive auditing and built-in logging. This raw data is used for generating analytics around usage, trend, risk, and operational efficiencies of different modules/features.

Source: Vendor RFI

Platform Preintegrations

The table below shows available products preintegrated with Oracle Banking Digital Experience.

Table 12: Corporate Banking Preintegrations

Product Segments	
Trade services	Oracle Banking Trade Finance
Supply chain finance	Oracle Banking Supply Chain Finance
Foreign exchange	Oracle Banking Treasury Management
Commercial loan servicing	Oracle Banking Corporate Lending
Commercial card management	Oracle FLEXCUBE UNIVERSAL Banking
Core banking	Oracle FLEXCUBE UNIVERSAL Banking
Payment processing and settlement	Oracle Banking Payments
Account analysis/billing	Oracle Revenue Management and Billing
Know your customer (KYC)	Microblink
Customer relationship management (CRM)	Oracle Customer Experience
Cash Management Features	
Integrated receivables	Oracle Banking Cash Management
Integrated payables	Oracle Banking Cash Management
Virtual account management	Oracle Banking Virtual Accounts Management
Cash forecasting	Oracle Banking Cash Management
Customer Interaction	
Chat bots (rules-based)	Out of the box
Chat bots (AI-powered virtual assistant)	Out of the box
Real time chat	Oracle Customer Experience
Voice-enabled assistants (e.g., Amazon skills, Google Home, etc.)	Out of the box
E-signature systems	Oracle documaker

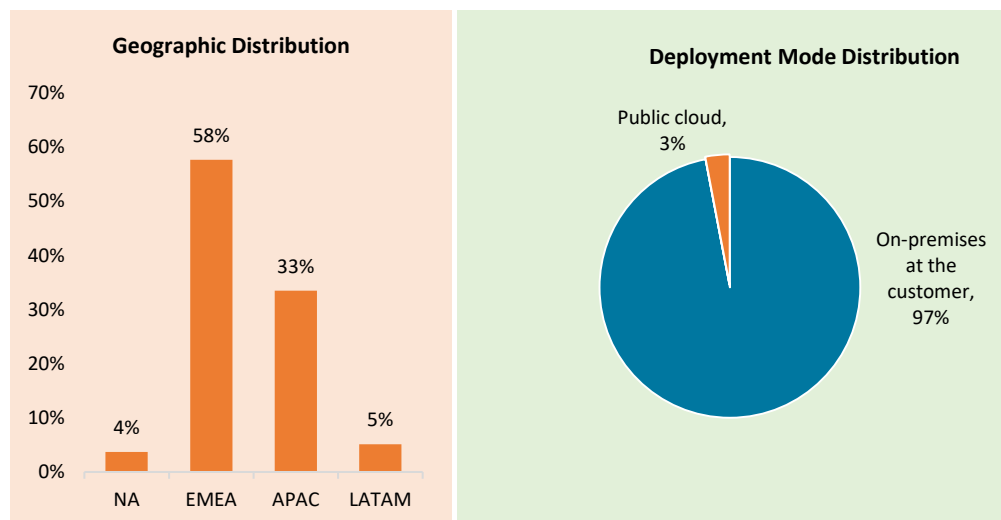
Fraud Prevention	
Customer verification	Out of the box
Payer validation	Out of the box
Bank lookup	Out of the box
Swift lookup	Out of the box
User Security	
Token authentication	Out of the box
Biometric authentication	Out of the box
User Security	
Artificial Intelligence / Machine Learning	Out of the box
Predictive Data / Data Analytics	Oracle Financial Services Analytical Applications
Blockchain / Distributed Ledger Technology	Oracle FLEXCUBE Blockchain Adapter

Source: Vendor RFI

Customer Base

Oracle Corporation has 215 total customers globally. In the past two years, two new clients have licensed the system. Oracle’s corporate policy prevents it from providing statistics on clients by asset size or institution type.

Figure 5: Oracle Corporation Client Base by Geography and Deployment Mode



Source: Vendor RFI

Pricing

Table 13: Pricing Models

Pricing Models Available	Perpetual license, enterprise license
Factors Used to Determine Pricing	Usage-based factors: assets under management, number of total or named users, per functional components/modules used, per transaction, per user/seat, policy or account volume, annual premium volumes/revenues

Source: Vendor RFI

Geographic Availability and Internationalization

Oracle Banking Digital Experience is available in Africa, Asia-Pacific, Caribbean, Central America and Mexico, Europe, Middle East, North America, and South America.

Oracle Corporation can support multiple currencies (with AUD, BRL, GBP, CAD, CNY, DKK, EUR, HKD, HUF, INR, JPY, TWD, NZD, SGD, ZAR, THB, and USD currently in production). Multiple languages are also deployed. Some examples include English, French, Spanish, Arabic, Portuguese, Dutch, German, Hindi, Vietnamese, Chinese, Japanese, Albanian, and Romanian.

Technology Approach

As a key enabler of collaboration and integration, API capabilities deserve a closer look. Oracle Banking Digital Experience is fully API-enabled out of the box, with 100% of the system exposed as APIs via Oracle Banking APIs for External APIs (OBAPI). The catalog offered by OBAPI is built using standard Swagger documentation and YAML files. Banks can host this documentation on their developer portals and provide access to their internal developers, partners, third party providers, and fintechs as touchpoints.

The table below provides additional technology details for Oracle Banking Digital Experience.

Table 14: Technology Options

Code Base	Core technology: Java: 100%
Operating Systems	The system uses Java and supports JEE servers. Available operating systems: Unix—Linux, Unix—other, Windows, Mac/OS, other
Servers Supported	Java servers Tomcat, JRun, other Java servers, JEE servers Boss, WebLogic, WebSphere, other JEE servers
Databases	Oracle

Integration Methods	Web services, XML (not through Web services), HTML, HTTP, RESTful HTTP-style services, JSON format, MQSeries, JMS or similar queue technology, custom APIs, flat files Public API integrations: Google Maps, Facebook, CMA-UK, Berlin Group, UPI-India, Alexa, Siri, iMessage and more The vendor provides training for API integrations.
Mobility	The system uses a mix of responsive design and native mobile apps for Apple iOS and Android. UI and process flows have been designed to be device independent.
Access to Core Code Provided to Client	No
Core Code Modification	Core modifications: the exception to the rule % of total cost from core code/development modifications in recent implementations: 5%
Deployment Models	On premises at the customer, on premises at a partner, on premises at the vendor/software provider, private cloud, public cloud Oracle Managed Cloud Service supports cloud deployments.
Hosting Locations	North America, EMEA, APAC, Latin America
Hosting Details	Number of instances: 5 Maximum number of clients running on one instance: 5
Public Cloud Options	Microsoft Azure, Amazon AWS, Google Cloud Platform (GCP), Alibaba Cloud, IBM Cloud/Bluemix, Oracle Cloud

Source: Vendor RFI

Implementation and Support

Table 15: Implementation and Support

Function	Approach
Employees Available / Average Experience Level (Years)	Oracle Corporation has 5,750 staff providing professional services / client support for this solution.
Locations of Employees	Oracle Corporation has employees in North America, EMEA, APAC, and LATAM. If implementation resources need to be sourced from different countries, the vendor applies specific rates by location.
Resource Breakdown (Vendor, Client, System Integrator)	Typical implementation team size: 1 to 5
Use of Third Parties	The vendor does not work with third party system integrators. Client can use vendor or themselves to perform migrations.

Function	Approach
Average Time to Implementation	Initial implementation: 1 to 3 months 2nd and subsequent LOBs: 1 to 3 months 2nd and subsequent states/jurisdictions: 1 to 3 months
Preferred Implementation Approach	Oracle has a well-trained consulting organization that specializes in value-added implementation at client sites for Oracle products/platforms. Based on business conditions, Oracle also has well-defined partner-led implementation programs. Oracle encourages banks to implement the platform themselves as the platform offers the tools and frameworks that enable an in-house implementation by bank staff themselves.
SLA Availability	Service scope included in base SLA: 24x7 service hours, extended service hours (beyond 9 a.m. to 5 p.m.), service during working hours at client location, service during working hours at vendor location Features typically included in SLA: incident resolution time based on priority level of incident; incident status updates based on priority level of incident; metrics and reports; recourse for downtime; regular tune-ups to assure the client is using the system optimally; ticket prioritization; upgrade support; upgrades System availability: 96 to 100%

Source: Vendor RFI

APPENDIX 1: CORPORATE DIGITAL BANKING PLATFORM GLOSSARY

Table 16: Corporate Banking Product Glossary

Corporate-to-bank connectivity channels

Online portal: Web-based corporate banking portal provided by a bank with which employees of a corporate client interacts to retrieve information and conduct financial transactions.

Mobile: Native mobile app or responsive design-driven user interface.

Tablet: Native tablet app or responsive design-driven user interface.

Host to host: File-based connectivity between a bank and a corporate client supporting multiple file formats and integration with ERP/TMS solutions.

Network connectivity: File-based connectivity to dedicated financial messaging and transaction networks such as SWIFT, EBICS, ISABEL, etc.

Open APIs: Availability of open banking APIs and a developer portal to connect with clients and third party developers.

Information reporting

Information reporting: Prior and current day balance information, transaction detail, and standard/customized reports.

Multibank reporting: Comprehensive view of transactions and balances for depository accounts, across banking entities.

Multicurrency reporting: Ability to support reporting in multiple currencies and to convert foreign currencies into a base currency for reporting purposes.

Liquidity management

Cash concentration / physical pooling: Physical transfer of funds from outlying depository locations, often at different banks, to a central concentration bank account.

Notional pooling: All excess and deficit balances in the company's subsidiary accounts are virtually netted each day to calculate net interest earned or due.

Sweeps: A mechanism to transfer excess end-of-day funds from a depository account into an investment account.

Target/zero balance accounts: A type of depository account where the end-of-day balance is maintained at zero or other target balance, typically used for disbursements.

Cash flow forecasting: Calculating a cash forecast using current and previous day cash positions, variance calculations, and projected cash inflows and outflows.

Intercompany lending: Loans and deposits made between corporate treasuries and their affiliates and subsidiaries worldwide.

Escrow/subaccounts (US-focused): Ability to segregate client funds into separate, interest-bearing subaccounts under a main corporate checking account, with year-end interest statements prepared for each client.

Virtual accounts: Enables the segregation of nonphysical, shadow accounts under a single, centralized bank account.

Investment services: Online investment and redemption of money market, fixed income, and mutual fund investments.

Receivables

Electronic collections: Incoming wire transfers, ACH payments, direct debits.

Electronic invoicing and presentment: Electronic invoice presentment and payment, enabling companies to send electronic invoices and receive electronic remittances from customers.

Account reconciliation (US-focused): A bank service that matches check issue information to paid checks, reporting any unmatched or mismatched items.

Lockbox reporting (US-focused): Wholesale lockboxes are used primarily for high dollar, low-volume business-to-business payments with retail lockboxes used to process high-volume, small-dollar consumer remittances.

Check remote deposit capture reporting (US-focused): Ability to view and manage scanned/imaged checks via remote deposit capture.

Integrated receivables: Combined, normalized data from incoming remittances of various types (e.g., lockbox, ACH, electronic collections for streamlined posting).

Payables

Domestic low-value (ACH) payments: Local ACH and market-specific payment systems (e.g., SEPA credit transfers).

Domestic high-value (wire transfer) payments: Domestic electronic transfer of funds using a real time gross settlement (RTGS) system.

Real time/immediate payments: Electronic payment solutions available 24/7/365 and resulting in immediate clearing of the transaction.

Swift GPI for corporates (g4C) support: Enabling clients to initiate and track GPI payments.

Cross-border/international payments: Payments in domestic or foreign currencies made to parties outside of the home country (except in the case of SEPA payments).

Integrated foreign exchange (at payment initiation): Ability to execute foreign exchange flows automatically for international payments as well as collections.

Integrated payables: Allows a company to initiate multiple types of payments in a single submission file.

Controlled disbursement (US-focused): Same-day notification of the amount of checks that will clear against its disbursement account on a given day.

Fraud solutions

Check stop pay: Request to cancel a check that has not yet been processed.

Payee validation: Identifies payee names that may have been altered.

Check positive pay: Disbursement services where the bank matches presented checks against checks issued by the client, with exceptions identified for further analysis.

Reverse positive pay: Disbursement services where the client matches presented checks against checks issued by the client, with exceptions identified for further analysis.

ACH positive pay: Disbursement service where the bank validates outgoing ACH payments against a list of approved vendors and maximum payment amounts.

ACH block: Ability to block all incoming ACH debits to a specific account.

ACH debit filters: Ability to only allow ACH debits from authorized parties.

Source: Celent analysis

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