CELENT



CRM PLATFORMS: NORTH AMERICA WEALTH MANAGEMENT EDITION

ABCD Vendor View

Ashley Longabaugh | Awaad Aamir

July 19, 2021

This is an authorized reprint of a Celent report excerpt granted to NexJ Systems Inc. The report was written by Celent and was not sponsored by NexJ Systems Inc. For more information, please contact Celent, info@celent.com.

CONTENTS

Executive Summary	4
Introduction	5
Market overview	7
Report Methodology	11
Criteria for Inclusion	11
Evaluation Process	11
Celent's ABCD Vendor View	13
The XCelent Awards	15
2021 North America CRM Platforms ABCD Results	15
NEXJ Systems: NexJ CRM for Wealth Management	17
Company	17
Celent Opinion	19
Overall Functionality	22
Internationalization	24
Customer Base	25
Customer Feedback	25
Lines of Business Supported	27
Technology	28
Integrations	30
Security	30
Disaster Recovery	31
Partnerships	33
Implementation and Support	33
Training	34
Pricing	35
Looking forward	36
Leveraging Celent's Expertise	38
Support for Financial Institutions	38
Support for Vendors	38

Related Celent Research

EXECUTIVE SUMMARY

This report examines the leading vendors in the North American CRM wealth management market and provides detailed profiles of each vendor, followed by comparisons and rankings. This study uses the Celent ABCD Vendor View, which shows at a glance the relative position of vendors in the following categories: Advanced Technology, Breadth of Functionality, Client Base (number of clients), and Depth of Client Services on two separate X/Y scales.

Starting in March 2021, Celent conducted a study on the North American CRM market for wealth management. Celent focused on technology vendors that offer stand-alone solutions that service the advisor market. Our research identified major trends, CRM technology and functionalities, and client preferences. Table 1 shows the vendors with a CRM solution in the North American wealth management market that are included in this report. This list is by no means exhaustive, but it is a good representation of the main players in the CRM for wealth management space.

INTRODUCTION

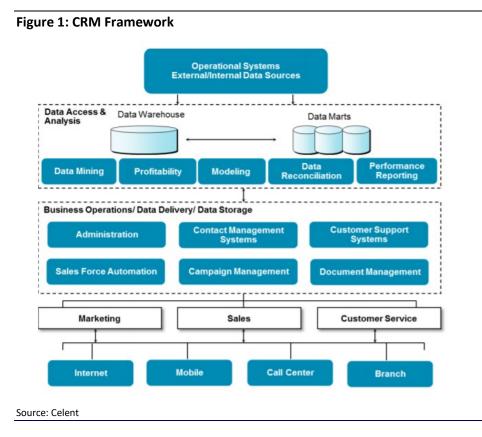
Client relationship management (CRM) is one component of the overall client lifecycle management process. CRM solutions facilitate the prospecting, acquisition, management, and servicing of clients. Clients' experience in adjacent industries, such as tailored solutions and engagement, serves as a prism for their expectations within the wealth management space. Analyzing millions of data points to deliver actionable insights to the advisor is the difficult task at the heart of a successful CRM solution.

A robust CRM tool encompasses a multitude of business functions that span sales, marketing, and client relationship management. To achieve this, an efficient CRM strategy will include the following steps with regards to client data:

- Acquisition: collecting data from multiple sources
- Analysis: developing an understanding of client needs
- Delivery: using the results of the analysis to increase sales and client satisfaction
- Storage: archiving important documents and electronic communication related to the client

At a basic level, CRMs represent an effort to streamline the advisor's workflow into a logical hub that integrates across disparate data silos. Despite taking in multiple data points, a strong CRM manages to avoid infoglut through organization and thoughtful design.

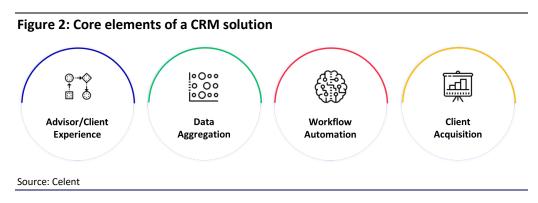
Advanced functions of CRM include AI-driven capabilities that use natural language processing (NLP) for sentiment analysis, call-to-action recommendations, and predictive analytics. Compliance is another area CRM vendors have been focusing on, helping wealth managers meet regulatory requirements through audit log systems, email tracking features, and document management/storage. Lastly, leading CRM providers feature flexible deployment models that fit their FI clients' needs. These include web-based solutions that support on-prem, cloud, or hybrid deployment options.



© CELENT

MARKET OVERVIEW

The North American (NA) Wealth Management CRM market is fragmented and crowded, making integration with the non-CRM and legacy systems is vital. Wealth managers need platforms that can integrate multiple best-in-breed solutions; they do not seek single-point solutions that create silos and duplicate data. Most solutions serve multiple industries ("horizontal") or are "light vertical" with a wealth management template on top of a horizontal core. The few vertical solutions that do exist are geared towards the RIA market. In comparing the North American and European markets, wealth managers serve a breadth of clients (UHNW-MA) whereas European wealth managers primarily focus on the higher end of the market. The European approach, however, is shifting towards the NA approach, as described in Celent's 2021 report: Front-to-Middle Office Platforms: North American Wealth Management Edition. Celent has identified four core elements of a successful CRM solution from profiling vendors in this report, as listed below:



Opportunities exist for technologies that support compliance requirements and increase productivity. The European market leads in regulation, including recent legislation against AI uses, the SFDR, GDPR, ePrivacy Regulation, MiFID II, and the RDR, to name a few. In terms of regulation and ecosystem, the Canadian and the US markets are similar, though there are fewer RIAs in Canada. Canadian regulators have eased and now allow more technology solutions (i.e., e-signature) to be used by wealth managers. While regulation is relatively less stringent in the North American market than in Europe, regulatory assessments are still crucial to a CRM and/or onboarding system. FI investment is up across all segments of the market, from wirehouses down to individual RIAs. In the US, financial advisors have taken on the role of a household's "financial coach," meaning that advisors are often working across generations and financial planning needs. As such, additional areas of WealthTech expansion include specialized planning (e.g., retirement, estate, tax,

student loan, and elder care) across a breadth of clients. The incorporation of ESG considerations, tracking, measuring, and reporting is also increasingly important.

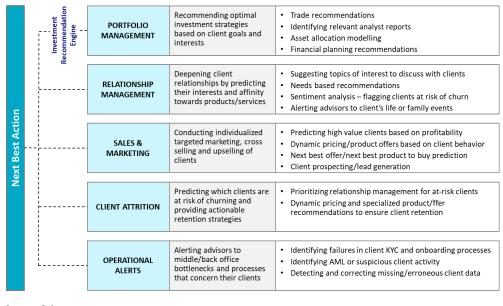
The COVID-19 pandemic forced FIs to reassess their approach toward client management and emphasized the importance of enabling a "remote" advisor with one powerful and centralized source for a 360-degree client view. While the transition from a product-centric strategy to a service-centric one was underway prepandemic, client behavior coupled with remote working accelerated the need for solutions that enable advisors to engage with clients more efficiently. The value of a financial advisor was highlighted during the pandemic, as a CRM platform that facilitated strong advisor-client engagement was a cornerstone for strengthening the relationship during and hopefully after the pandemic. The client, rather than the product, is the foundation underpinning today's leading initiatives, such as digitization and automation. There is also more demand for compliant marketing activities such as client segmentation and interest tagging.

One of the only differentiators in today's wealth management market is the client experience, including hyper-personalization and delivery of a contextual experience. Many products are commoditized, although this is changing through Direct Indexing. Therefore, FIs have turned their efforts towards perfecting the client lifecycle journey. Of key importance are differentiated client experiences that improve meaningful client-advisor engagement, automate onboarding processes, and facilitate hyper-personalization, especially through the application of AI and next best actions. Clients' experience in adjacent industries, such as tailored solutions and engagement, serves as a prism for their expectations within the wealth management space. Analyzing billions of data points to deliver actionable insights to the advisor is the difficult task at the heart of a successful CRM solution.

Differentiated client experiences that improve meaningful advisor engagement, automate onboarding processes, and facilitate hyper-personalization—especially through the application of AI—are critically important.

CRM providers may come pre-packaged with next best action (NBA) capabilities. Celent has summarized these capabilities into five core feature sets as shown below:

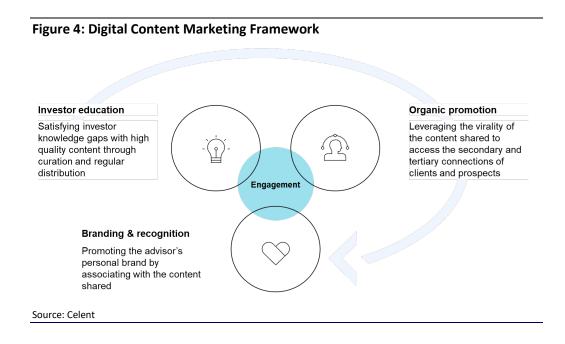
Figure 3: Next Best Action Summary



Source: Celent

Enabling advanced capabilities such as portfolio management and client attrition prevention require laborious amounts of investment in terms of model training and operationalization. Pre-packaged next best action capabilities as part of a CRM suite excel at producing call-to-actions associated with basic NBA capabilities like operational alerts and sales/marketing.

Lastly, digital content marketing is another key differentiator for CRM providers. Remote work restrictions have deprived advisors of direct engagement with their clients. Coupled with the market/societal uncertainties brought on by the pandemic, clients are dedicating more time than ever to bridging a widening knowledge gap through knowledge consumption. Digital content marketing provides clients and prospects with educational material that they would organically share, expanding the advisor's reach in the process. At its core, the value of a marketing campaign is as good as the content shared, and the content shared is as good as the educational utility provided to the reader. CRM platforms with content aggregation and distribution capabilities are poised to take advantage of this critical need amongst advisors.



REPORT METHODOLOGY

This report uses Celent's ABCD Vendor View, which shows at a glance the relative position of vendors in the following categories: **A**dvanced Technology, **B**readth of Functionality, **C**ustomer Base (number of clients), and **D**epth of Client Services. Celent grants XCelent Awards in each of the four categories. The XCelent Award winners received the highest ratings in Celent's analysis for each category, but financial institutions should consider which factors among functionality, technology, experience, and client service are most important to them.

Criteria for Inclusion

Celent's objective is to include major CRM platforms being used or actively sold to North America.

Celent's ABCD Vendor View analysis is used to highlight vendors that have attained success selling their systems. Even if a vendor is not included in the ABCD Vendor View presented, Celent also profiles all vendors who are new entrants to the market as well as those with re-architected products.

The five key criteria for inclusion in Celent's ABCD analysis are:

- All vendors must have a product that fits into the CRM definition outlined in the previous section.
- Participating vendors must provide a CRM solution that is sold on a standalone basis. Wealth management vendors offering CRM capabilities integrated into a wealth management platform have not been considered for this report.
- Existence of live clients. All participating vendors must have at least two clients (one in beta and one live, at minimum). Since this report focuses on the North American market, vendors must have at least one North American client.
- Target advisors and retail end users. All vendors must target advisors and retail end clients with their CRM tools, though participating vendors may also target institutional clients.
- Web-based capability. All participating vendors must have web-based tools.

Evaluation Process

Celent sent a detailed request for information (RFI) to 51 vendors selling CRM platforms in North America. Five responded to the invitation. After Celent received the completed RFIs from the vendors, each vendor was evaluated for meeting the

criteria for inclusion in the ABCD Vendor View analysis. Each vendor included in Celent's ABCD evaluation provided a briefing and demo for Celent. The demo concentrated on the product dashboard, workflow management, usability, rules configuration, customization, and product-specific functionality.

Celent also asked at least two vendor-provided reference customers to complete an online survey to obtain their feedback on the system's business and technology value. These references were only obtained for vendors eligible for inclusion in the ABCD view. The RFIs, the demos/briefings, and the reference surveys provided quantitative and qualitative data that was used in the ABCD analysis of these vendors. This process is described in the ABCD Vendor View section.

In addition, data from the RFIs received from every vendor was included in the system profiles presented in this report. All vendors had an opportunity to review their profile for factual accuracy, but they could not influence the overall evaluation of the system or the vendor's placement in the ABCD Vendor View charts.

Celent has retained final authority over the content of the published profiles. Some of the vendors profiled in this report are Celent clients, and some are not. No preference is ever given to Celent clients either for inclusion in a report or for the subsequent evaluation.

Not all data gathered from the detailed RFIs, vendor briefings and demos, and reference surveys/interviews has been included in the profiles. Celent has attempted to capture key points and values about each vendor at an appropriate level. Unpublished information remains in the Celent knowledge base and is available to Celent's subscription or consulting clients.

CELENT'S ABCD VENDOR VIEW

Celent's framework for evaluating vendors is called the Celent ABCD Vendor View. This is a standard representation of a vendor marketplace designed to show at a glance the relative positions of each vendor in four categories: Advanced technology, Breadth of functionality, Customer base, and Depth of client services. The Celent ABCD Vendor View shows the relative positions of each solution evaluated. Each vendor solution is judged relative to the others in the group. Although this is a standard tool that Celent uses across vendor reports in many areas, each report defines each category slightly differently. For this report, the factors used to evaluate each vendor are listed in Table 5.

ABCD Categories	Factors	
Advanced Technology	Code, databases, operating systems detail	
	Integration methods, services, and APIs	
	Deployment options	
	Mobile capabilities	
	Internationalization and localization	
	Upgrade automation	
	Client feedback	
	Demo rating	

 Table 5: Examples of Possible Factors Used in North America CRM Platform ABCD

 Analysis

ABCD Categories	Factors		
Breadth of Functionality	Administration		
	Customer relationship management		
	Financial planning		
	Plan generation/asset allocation		
	Portfolio management		
	Asset classes/product support		
	Trading and compliance		
	 Other functionality (AI, collaboration, self-directed, mobile) 		
	Client feedback		
	Demo rating		
Customer Base	Users supported at largest deployment		
	Number of clients with current version (regional)		
	Number of clients with current version (global)		
	 New clients in past two years (regional/global) 		
	• Total live clients, year by year		
	• Number of countries where clients are in production		
Depth of Client Services	FTE providing professional services/client support		
	Average years of experience		
	Regional professional services staff available		
	Types of training offered		
	User conferences		
	Service level agreement (SLA) scope		
	Mechanism to obtain and track service tickets		
	SLA features available		
	Client feedback		
Source: Celent			

Source: Celent

The XCelent Awards

Within this framework, the top performers in each of the ABCD dimensions receive a corresponding X_{CELENT} Award:

- XCELENT Technology for the leading Advanced Technology score
- XCELENT Functionality for the leading Breadth of Functionality score
- XCELENT Customer Base for the leading Customer Base score
- XCELENT Service for the leading Depth of Customer Service score

The ABCD Vendor View provides an easy-to-understand picture of a complex marketplace. Unlike with a simple four-quadrant map, there is no one best for all cases. Wealth managers should consider which factors in breadth, technology, experience, and client service are most important to them and use this report to generate their own shortlists.

2021 North America CRM Platforms ABCD Results

Figure 5 represents Advanced Technology and Breadth of Functionality measures, and Figure 6 represents the vendors' Customer Base and Depth of Customer Service. The figures position the platform vendors on two X/Y scales. It should be noted that for all measures, all vendors scored well, so scaling reflects small differences, not an absolute scale.

Table 6: Award Winners		
Award	Vendor	
CELENT Technology 2021	NexJ Systems Inc.	
Source: Celent		



Figure 5: Advanced Technology and Breadth of Functionality

Source: Celent

Figure 6: Customer Base and Depth of Customer Service



NEXJ SYSTEMS: NEXJ CRM FOR WEALTH MANAGEMENT

Company

NexJ Systems is a public company headquartered in Toronto, Canada. The company has 167 employees, most of whom are located in Toronto, and 26 of whom are available to provide professional services/client support for their NexJ CRM for Wealth Management solution. 25 of the 26 employees who provide professional services are physically located in North America.

NexJ demonstrates its ongoing commitment to the solution by prioritizing software enhancements and incorporating them into future releases as part of its standard software development process. The prioritization is based on customer requirements and broad market applicability of new enhancements. Future development plans include:

- Driving better, smarter, and more personalized engagement with a Next Best Action solution that drives advisors to interact with the right client at the right time; NLP insights for discovering life events, product opportunities and interests from emails and notes; and the ability to send clients personalized news and research
- Continued focus on deep vertical-specific capabilities to drive efficiency and enhance the client experience
- Creating an improved comprehensive view of the client for improved insights and analytics
- Enriching functional capability with strategic product partnerships

R&D expenses over the past two years have been 57% of total revenue attributed to this solution. No annual conference or customer event is offered.

Table 7: Company Snapshot		
Year founded	2003	
Number of employees	167	

Revenues (USD)	Product revenue: 10,238,000	
Financial structure	Company financial structure: Public company	
	TSX:NXJ	
Source: Vendor RFI		

Table 8: Product Snapshot

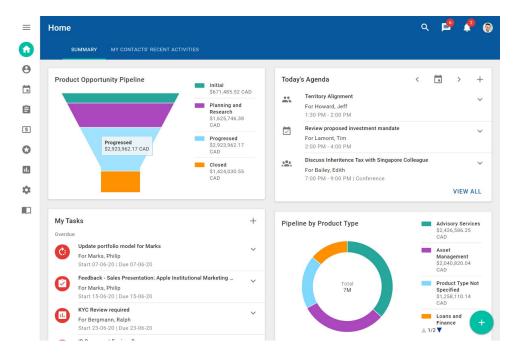
Name	NexJ CRM for Wealth Management
Year originally released/deployed	2006/2006
Current release and date of release	9.7/2020
Upgrades	Client can skip multiple versions, e.g., go directly from version 4.0 to version 7.0 They support current versions and up to two prior major versions
Target market	Wealth management and private banking firms anywhere across the globe.
Installed base	15
Notable clients	Wells Fargo Advisors, RBC, UBS
Revenue from product/service	10,238,000
FTEs providing professional services for product	26
User conferences/product working groups	No annual conference or customer event is offered
ource: Vendor RFI	

Celent Opinion

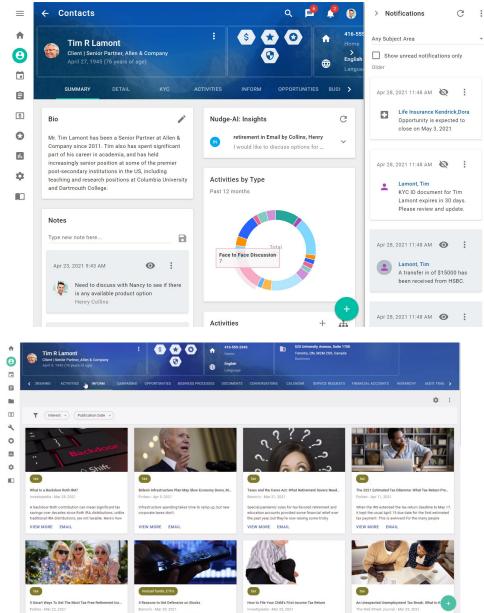
NexJ offers a proactive CRM platform for wealth management advisors and FIs. The solution's integration capabilities are of note, as is how it was architected from the beginning at its core foundational layer, enabling it to build out its business model over time. For example, NexJ is the only CRM vendor running on the FS IBM Cloud. FI investment is up across all FI types, and NexJ is making its solution available to smaller firms through partnerships with cloud vendors like IBM and to individual RIAs through partnerships with advisor-specific vendors such as Bill Good Marketing.

NexJ is unique in that it has a vertical solution that can meet the needs of both large wirehouses (50% of wirehouses use NexJ) and the RIA market through partnerships with vendors such as AdvisorStream. Additionally, it can meet the different service models required by the UHNW/HNW and MA clients, with the higher end requiring a white glove or concierge services while the wider market focuses on investment advice and trades.

The UX is completely responsive on whichever device the end-user chooses to access it. The platform was designed using the same code and same application, so there is no need for double coding or double application.



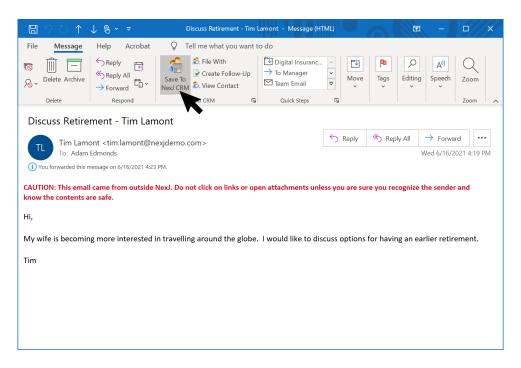
The solution is robust. In particular, Celent highlights the engagement features available through NexJ's "Nudge-AI Suite," such as its internal collaboration capabilities and the "Inform" module, which automatically provides advisors with articles of topical interest for clients based on clients' listed interests in the system, or Next Best Actions/recommendations.



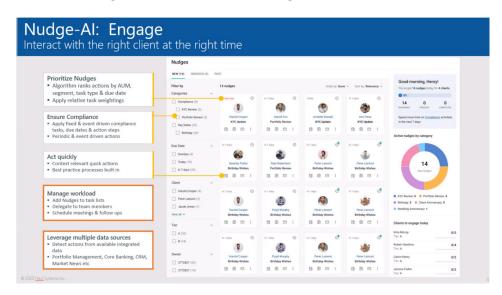
5 Smart Ways To Get Th

How to File Your





The "Nudge" feature is flexible in its configuration of nudge type; Next Best Action can be sent as needed either a few days or weeks before it is due. The module also takes external signals to create actionable insights in real-time.



NexJ also has low code platform capabilities. NexJ's "Model-Driven Engineering" and "Model-Driven Design" are practices that abstract the knowledge and activities of an application domain to create software applications. Model-Driven Engineering removes manual implementation and allows for direct deployment and execution of the design, without intervening development decisions and effort. It effectively makes the application designers the developers.

Overall Functionality

The figure below shows NexJ's functionality and the production status of key features for Customer Relationship Systems (CRM).

Figure 7: Key Functionality

Source: Vendor RFI

	IN PRODUCTIC WITH CLIENTS		RTED BUT NOT IN		DRTED
Contact Management					
Lead Management	-				
Campaign Management		-			
Document/Content					
Scheduling / Calendar / Diary					
Reporting/Analytics					
Social Media					
Workflow					
Multi Channel/Mobile					
Call Center					*
Al Capabilities	0				
Available out of the	box Configu	rable via scripting languag	e Integration via an	other module by this vendo	Could dev
Configurable by a b	usiness user Coding	required	Under developme	ent	Not availa
Configurable by IT	Integrati	on via 3rd party solution	On the roadmap		Not applic

Artificial Intelligence Capabilities

Capabilities	Availability
Machine learning	Available via integration with a third party solution
Deep learning	Available via integration with a third party solution
Unsupervised learning	Available via integration with a third party solution
Supervised learning	Available via integration with a third party solution
Feature extraction	Not available
Machine vision	Not available
Natural language generation (NLG)	Not available
Natural language understanding (NLU)	Built into the solution (without the need for integration with another solution)
Speech recognition	Available via integration with a third party solution
Speech generation	Not available
Conversational capability	Not available
Al workflow	Built into the solution (without the need for integration with another solution)
Predictive analytics	Built into the solution (without the need for integration with another solution)
mage recognition	Not available
	Not available

Table 9: AI Capabilities

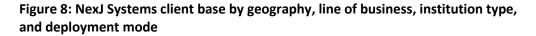
Internationalization

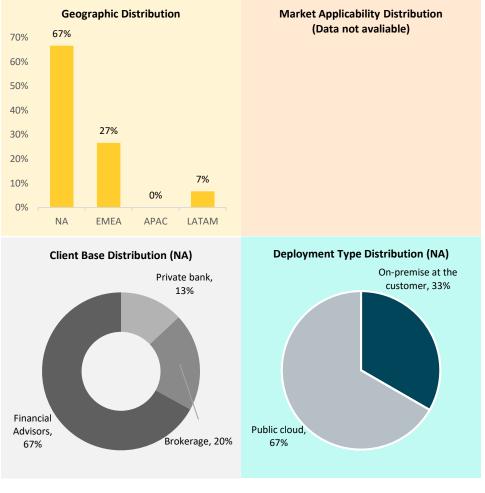
NexJ Systems can support multiple currencies, with Argentine peso (ARS), Australian dollar (AUD), Brazilian real (BRL), British pound sterling (GBP), Canadian dollar (CAD), Chinese yuan (CNY)*, Czech koruna (CZK), Danish krone (DKK), euro (EUR), Hong Kong dollar (HKD), Hungarian forint (HUF), Indian rupee (INR), Japanese yen (JPY), Mexican peso (MXN), New Taiwan dollar (TWD), New Zealand dollar (NZD), Norwegian krone (NOK), Polish zloty (PLN), Russian ruble (RUB), Singapore dollar (SGD), South African rand (ZAR), South Korean won (KRW), Swedish krona (SEK), Swiss franc (CHF), Thai baht (THB), and US dollar (USD) currently in production.

NexJ Systems can support multiple languages, with English (plus variants), French, Italian, and Spanish currently in production.

Customer Base

NexJ Systems has 15 total customers globally.





Source: Vendor RFI

Customer Feedback

Two clients provided feedback on NexJ. Both clients are based in North America. The system is deployed on-premise at the vendor/software provider for one system, and for the other system, it is deployed on-premise at the client's company. One client has been using the system for 14 years, and the other client has been using it for nine years. Clients are predominantly using the system with the following groups:: mass market: less than US\$250,000, mass affluent: US\$250,000 to US\$1 million, high net worth: US\$1 million to US\$10 million, ultra high net worth: more than US\$10 million.

Clients rated NexJ favorably overall. For functionality, respondents appreciated the contact management features, while reporting/analytics was not rated as favorably. Within the technology category, vendor's timing in improving technical performance through new releases and fixes was scored the highest, and ease of system maintenance was seen as weaker.

Clients felt the solution integrated most easily with their external data sources and integrated less well with analyst provided other choices. Regarding their implementation experience, the vendor received the highest marks for its knowledge of clients' businesses, while responsiveness (handling of issue resolution) received the lowest score. Finally, in the area of ongoing system support, knowledge of the clients' businesses received the highest score while staff turnover was seen as an area of relative weakness.

When asked what they liked best, one client appreciated that the system was very tailored to the wealth management industry and that it was easy to integrate with other applications.

Suggested improvements from clients included simpler upgrade paths.

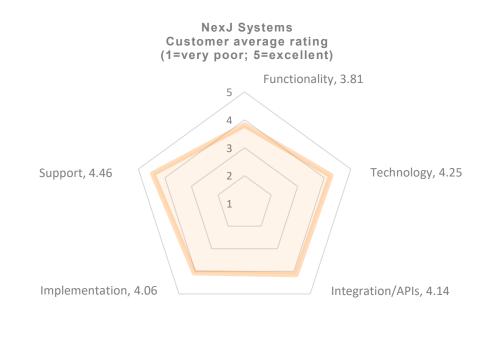


Figure 9: Customer Feedback

Source: Vendor RFX

Lines of Business Supported

Table 10: LoB Support for Wealth Management

LoBs	Availability for North America
Retail bank	×
Private bank	✓
Brokerage	✓
Bank-affiliated brokerage	θ
RIA	Θ
Family office	×
Trust companies	×
Financial advisors	✓
Others	×

Legend: ✓= Supported and in production; ⊖ = Supported but not in production; **#** = Not supported

Source: Vendor RFI

Technology

The technical architecture is a three-tier model-driven engineering architecture that can be configured for large scale and high availability with deployment options for on-prem and public or private cloud. Nudge and other applications - Micro-services style architecture are deployed to an API first cloud platform.

The primary UI for business users is 100% browser-based (HTML) with touch screen capability; for developers and configurers it is 100% browser-based (HTML), with a thick client installed on a desktop. The vendor plans to change the framework in the future.

Technology details for NexJ CRM for Wealth Management are provided in the table below.

Integration methods	Available 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, native messaging, other integration methods
	Public API integrations: Typically, they integrate with customer's internal (or cloud-based) systems. These include integrations for authentication, security entitlements, back- office systems such as account or portfolio management, CTI, etc. They also have integration with services such as Google Maps for address visualization. They have the ability to integrate with client-requested systems as well, on-premise or in the cloud.
	The vendor does provide training for API integrations
Mobility	The system uses responsive design and is tested on mobile devices.
	Native application support is not available.
	UI and process flows have been designed to be device-independent.

Table 11: Technology Options

Deployment models

On-premise at the customer, on-premise at a partner, private cloud, public cloud (global)

NexJ provides a fully managed service on IBM's cloud. NexJ Cloud offers a secure hosted service on cloud infrastructure and supported by NexJ's managed services team. New features and capabilities are rapidly made available with a seamless release process that allows organizations to retain control and manage change.

NexJ cloud managed services:

- Platform and database management
- Managed Kubernetes services include the provisioning and systems management of Kubernetes clusters in NexJ's Cloud environment
- Monitoring the container platform and taking corrective actions to restore services
- Backup and restore management for containers platform and database
- Provide storage configuration for container platform
- Standard application support services
- 7 x 24 help desk and email support provides customer support for application issues and questions regarding functionality, operation, or administration of NexJ products
- Provides incident resolution and management, based on documented SLA and support processes
- Extended application support services
- Dedicated resource to provide application support including support for application configuration and integrations
- Extended application issue resolution and management, based on the private deployed solution

Public cloud options supported: Microsoft Azure, Amazon AWS, IBM Cloud/Bluemix, other

Source: Vendor RFI

Public cloud options

Integrations

NexJ Systems provides 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, native messaging, and other integration methods.

API details for the vendor are as follows: The API is documented. External systems can trigger an event in the system which can be responded to by a workflow or business rules system. API management supports local or global standards such as ACORD application creation and rendering. API sample codes are available to clients. An API developer portal is available for support and descriptions. API testing portal and the ability to use scripts on website is available. The system allows API publishing in SOAP, REST, JSON, and XML style services as APIs. API version management is available. Access to the APIs is managed and use of APIs is tracked by developers. Training in extending the system is offered.

NexJ Systems provides documentation and training for API integrations. External systems can trigger events in the system which can be responded to by a workflow or business rule.

Training for API integration is self-serve online or via PDF, as well as instructor-led classroom (or remote videoconference) training.

Security

NexJ's flexible enterprise security model includes different levels of security to ensure data and user security. The security model is based on industry-wide standards that allow NexJ to map directly to existing security models.

NexJ has already been implemented in Tier 1 financial and healthcare organizations with a large focus on security. The NexJ security model has passed all tests within these organizations and is subject to frequent audits by third party ethical hacking vendors (penetration testing) as part of a standard software delivery process.

The NexJ Application Framework uses the following security-related standards:

- Java authentication and authorization service (JAAS) in the Java EE infrastructure
- Secure socket layer (SSL) to protect the communications over a network

The NexJ framework has been built as an open, standards-based application and hence can take advantage of all security standards that are available to that environment. Bi-directional, strongly authenticated X.509 certificates can be used for secure message transport as well as SSI/TLS to secure the communication across the tiers of the architecture.

The rules that govern the privacy rules and consent module are defined in the NexJ business domain layer. The NexJ Application Framework uses a single business domain layer, so these rules are defined once, by a central administrator. Once the rules are defined, all methods of accessing the application and data automatically subscribe to the defined rules. This centralizes the process of changing and deploying privacy rules and consent modules as required.

NexJ's flexible security model can be configured to comply with any required privacy legislation, such as PIPEDA and HIPPA regulations.

With respect to the requirements of GLBA, SOX, HIPAA, Patriot Act, and WI Records Disposal Law for their applications deployed at customer sites, their practice is to integrate with the existing policies and standards at the client organization. NexJ has done this successfully with other large U.S. customers. The vendor is not PCI compliant. One-time passwords, flexible user permissioning, out of band identification, security tokens/pins, biometric security support, multi-factor authentication, and federated identity support are available as authentication factors for internal and external users.

For cyber security arrangements, The NexJ security model is architected to prevent and eliminate any unauthorized access to data. The NexJ solution can be configured so that any access or attempts to access any detailed provider data are audited, including log-on attempts, client inquiries, detailed client histories, or any integration requests for the same data.

NexJ has undergone and passed an extensive external security vulnerability and penetration test as part of their largest implementation within financial services. NexJ also routinely tests and validates their security model with each NexJ release as part of their software development process. Their in-house QA team follows the testing plan and creates any automated test scripts that require development. QA reports are produced daily and assess project and product quality by functional area in the categories of "market completeness," "implementation completeness," "testing completeness," "feature quality," and "usability." A software update must run in this phase without a release blocking issue for at least one week before testing is complete.

Disaster Recovery

The NexJ solution is designed for organizations that require low system downtime, including planned and unplanned outages. The NexJ CRM solution is deployed using enterprise application servers and databases that can be configured for high availability. During the design phase of an implementation, a DR strategy to address the organizational requirements for disaster recovery is documented in the non-functional design specification. Their clients have successfully implemented a highly available NexJ solution leveraging automated site failover across multiple data centers.

The NexJ platform supports a number of database high-availability patterns. Depending on the specific database used in a particular solution there are several strategies that can be implemented in order to allow for failover to a standby database in a hot/warm configuration. NexJ supports the following vendor specific database high-availability solutions:

- Oracle RAC
- MS SQL server always-on availability
- MS SQL server log shipping
- Regular DB back-ups to an offline DB
- Shared SAN storage for data files

NexJ includes comprehensive monitoring capabilities (listed below) covering the outof-the-box system components and makes the system performance metrics available for consumption over JMX. Additional infrastructure components, such as the web server, the database, etc., can be monitored with the help of a variety of tools typically available to their clients. NexJ has successfully integrated with third party monitoring tools in order to capture these performance metrics, visualize them in dashboards and configure threshold-based alerting.

NexJ is integrated with:

- Splunk
- Elasticsearch Logstash/Fluentd Kibana (ELK/EFK)
- InfluxDB
- Grafana
- AppDynamics
- Dynatrace
- Quest Foglight
- CA Wily Introscope (which has since been rebranded as CA Introscope)
- OpTier (they've since gone out of business).

The NexJ solution is specifically architected for high availability database environments and is based on industry standards which support horizontal scalability and high levels of fault tolerance. NexJ provide s tools for monitoring and managing the system, which complement the many industry standard system monitoring tools to prevent downtime.

The NexJ solution is an n-tier environment with web, application, and database servers. Each tier consists of multiple instances to prevent any single point of failure. The processes in each tier should also contain redundant infrastructure. Optionally, for additional resiliency, the entire solution can be deployed to multiple site, with a single pair of redundant virtualization hosts.

NexJ implementations can be deployed to avoid any single point of failure. This design is typically outlined in the non-functional design document which is created

for an implementation. The NexJ Solution deployment architecture ensures seamless failover from a failed to available server without impacting the user experience.

Regarding data backup, NexJ implementations do not require any planned or scheduled down time. Most database admin functions such as backups and statistic recalculation can be executed without impacting system availability. Additionally, production system upgrades can also be achieved without any server downtime by staggering the propagation of the new deployment on the servers.

Table 12: Partnerships	
Type of Partnership	Partner Vendor
System integrators	HCL, IBM, Cap Gemini
Conversion partners	None
Functionality partners	WalkMe, Grapevine6, eSignLive
Fintech partners	Thomson Reuters, Broadridge, AdvisorStream
Accreditations and certifications	None
Source: Vendor RFI	

Partnerships

Implementation and Support

Table 13: Implementation and Support

Function	Approach
Employees available/average experience level (years)	NexJ Systems has 26 staff with 7.5 average years of experience providing professional services/client support for this solution.
	The average number of customers per professional services/client support staff is 0.48.
Locations of employees	NexJ Systems has 166 employees in North America and one in APAC.
	If implementation resources need to be sourced from different countries, the vendor uses the same rates regardless of the location of the employee.

Function	Approach
Resource breakdown (Vendor, Client, system integrator)	Typical implementation team size: 16 to 20
	Vendor: 60% Client: 40% SI: 0%
Use of third parties	The vendor regularly works with third party system integrators.
	Conversion options: They can use either option depending on the customer's needs
Average time to implementation	Initial Implementation: 7 to 12 months
	Second and subsequent LOBs: four to six months
	Second and subsequent states/jurisdictions: one to three months
Preferred implementation approach	NexJ recommends a multi-phase approach. The initial phase is to deliver a minimal viable -product (MVP), for the first deployment. At the conclusion of the initial deployment, NexJ recommends following a continuous delivery approach that combines additional capability with enhancements driven by user feedback. NexJ uses an Agile development methodology.
SLA availability	Service scope included in base SLA: 24x7 service hours, extended service hours (beyond 9 am to 5 pm), 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%

Training

NexJ Systems' approach to training is to identify individual client (or partner) technical resources who will become NexJ application experts and develop their expertise through the following progression of activities:

- Self-study training
- Classroom training

- In-team development
- Co-development
- Independent development

NexJ also provides the NexJ Developer Community as a complimentary value-add service to all NexJ clients. The community is a key resource for NexJ clients, developers, employees, and partners to innovate, collaborate, and stay on top of the latest technology. New training modules are periodically added, and online video training is available.

For business users, NexJ uses a "train the trainer" approach, where NexJ provides support to the client's training rollout to the field.

Pricing models available: subscription-based license, perpetual license
Usage-based factors: Number of total or named users, per user/seat
Tier-based factors: Functional components/modules

Pricing

LOOKING FORWARD

Celent's view of the market is based on our data-driven analysis combined with conversations with profiled vendors and wealth management firms. FIs are focused on bridging the advisor-client experiences across digital channels and implementing tools that facilitate meaningful client engagement. An effective CRM solution will reduce overhead and friction associated with ongoing client management and ultimately drive internal efficiency.

FIs seeking to up their CRM game should keep in mind six facets of the client relationship process.

Key areas of improvement and opportunity:

Tools that can automate business processes, increase advisor productivity, and drive better client engagement. Client onboarding and account opening processes have been in the spotlight lately; Celent has explored this topic in depth in our research. Digital, hassle-free, and automated onboarding is one component of business process automation. Compliance and successfully fulfilling regulatory requirements are also crucial.

Client Relationship Modeling and Householding is critical to understanding the complex relationships between households, contacts, and their personal and professional spheres of influence. The hierarchy visualization is one way for advisors to better understand their clients and identify warm referral sources from existing clients connected to unbanked prospects.

Unlocking structured and unstructured data to deliver actionable insights, including next best actions, and therefore encourage client engagement. A fully integrated client view can encourage advisors' effective interaction with clients with an emphasis on hyper-personalized client experiences. Critically, siloed legacy systems are being broken down through an API-first integration strategy which can integrate disparate systems across portfolio management, risk management, and financial planning processes, for example. As such, robust cybersecurity and client data protection policies are essential to a successful platform.

Personalized Client Experiences. News and research recommendations based on a client's profile is one example of personalizing the client journey; advisors need functionality that indexes content and uses AI to match them to customer profiles.

Digital marketing, including content marketing, video chat, became fundamental during the pandemic. There will be a continuation of non-traditional channels, especially with NextGen clients on the horizon.

Low code-no code will play a critical role in the CRM market because it lowers the barriers to who can implement and develop solutions. Firms founded on the low code-no code ideology will be in a better position to thwart incoming competition from market newcomers. As firms look to differentiate themselves from the competition, the ability to easily customize solutions, especially to a new generation of clients, will be important.

The pandemic has accelerated the need for wealth managers to improve how they attract and serve an increasingly demanding client base. Going it alone rarely makes sense; firms should look for CRM partners who can today deliver state of the art technology tailored for this business, and who have the commitment to evolve their offerings as the environment changes.

LEVERAGING CELENT'S EXPERTISE

If you found this report valuable, you might consider engaging with Celent for custom analysis and research. Our collective experience and the knowledge we gained while working on this report can help you streamline the creation, refinement, or execution of your strategies.

Support for Financial Institutions

Typical projects we support include:

Vendor short-listing and selection. We perform discovery specific to you and your business to understand your unique needs better. We then create and administer a custom request for information (RFI) to selected vendors to assist you in making rapid and accurate vendor choices.

Business practice evaluations. We spend time evaluating your business processes and requirements. Based on our knowledge of the market, we identify potential process or technology constraints and provide clear insights that will help you implement industry best practices.

IT and business strategy creation. We collect perspectives from your executive team, your front-line business and IT staff, and your customers. We then analyze your current position, institutional capabilities, and technology against your goals. If necessary, we help you reformulate your technology and business plans to address short-term and long-term needs.

Support for Vendors

We provide services that help you refine your product and service offerings. Examples include:

Product and service strategy evaluation. We help you assess your market position in terms of functionality, technology, and services. Our strategy workshops will help you target the right customers and map your offerings to their needs.

Market messaging and collateral review. Based on our extensive experience with your potential clients, we assess your marketing and sales materials—including your website and any collateral.

RELATED CELENT RESEARCH

Wealth Management Technology Forecast 2022 May 2021

Front-to-Middle Office Platforms: North American Wealth Management Edition: 2021 Vendor Spectrum, Powered by VendorMatch February 2021

Front-to-Middle Office Platforms: 2020 EMEA Wealth Management Edition: Trends in Client Feedback 2016-2020 December 2020

Front-to-Middle Office Platforms: EMEA Wealth Management Edition: 2020 XCelent Awards: Powered by VendorMatch October 2020

European Wealth Management Technology Vendors: Evaluating Front-to-Back Office Vendors August 2019

Client Reporting: The Shift In Delivery From Low-Value Data To High-Value Information May 2019

ePrivacy Regulation: Taking GDPR One Step Further March 2019

GDPR and CRM: Regulating Client Privacy November 2019

Ranking the CRM Technology Vendors for Wealth Management: An Overview of the European Market April 2018

Agile in a Waterfall World: Mastering the Scrum, Wealth Management Edition August 2017

North American Wealth Management Technology Vendors: Evaluating Front-to-Back Office Platform Vendors October 2017

COPYRIGHT NOTICE

Copyright 2021 Celent, a division of Oliver Wyman, Inc., which is a wholly owned subsidiary of Marsh & McLennan Companies [NYSE: MMC]. All rights reserved. This report may not be reproduced, copied or redistributed, in whole or in part, in any form or by any means, without the written permission of Celent, a division of Oliver Wyman ("Celent") and Celent accepts no liability whatsoever for the actions of third parties in this respect. Celent and any third party content providers whose content is included in this report are the sole copyright owners of the content in this report. Any third party content in this report has been included by Celent with the permission of the relevant content owner. Any use of this report by any third party is strictly prohibited without a license expressly granted by Celent. Any use of third party content included in this report is strictly prohibited without the express permission of the relevant content owner. This report is not intended for general circulation, nor is it to be used, reproduced, copied, quoted or distributed by third parties for any purpose other than those that may be set forth herein without the prior written permission of Celent. Neither all nor any part of the contents of this report, or any opinions expressed herein, shall be disseminated to the public through advertising media, public relations, news media, sales media, mail, direct transmittal, or any other public means of communications, without the prior written consent of Celent. Any violation of Celent's rights in this report will be enforced to the fullest extent of the law, including the pursuit of monetary damages and injunctive relief in the event of any breach of the foregoing restrictions.

This report is not a substitute for tailored professional advice on how a specific financial institution should execute its strategy. This report is not investment advice and should not be relied on for such advice or as a substitute for consultation with professional accountants, tax, legal or financial advisers. Celent has made every effort to use reliable, up-to-date and comprehensive information and analysis, but all information is provided without warranty of any kind, express or implied. Information furnished by others, upon which all or portions of this report are based, is believed to be reliable but has not been verified, and no warranty is given as to the accuracy of such information. Public information and industry and statistical data, are from sources we deem to be reliable; however, we make no representation as to the accuracy or completeness of such information and have accepted the information without further verification.

Celent disclaims any responsibility to update the information or conclusions in this report. Celent accepts no liability for any loss arising from any action taken or refrained from as a result of information contained in this report or any reports or sources of information referred to herein, or for any consequential, special or similar damages even if advised of the possibility of such damages.

There are no third party beneficiaries with respect to this report, and we accept no liability to any third party. The opinions expressed herein are valid only for the purpose stated herein and as of the date of this report.

No responsibility is taken for changes in market conditions or laws or regulations and no obligation is assumed to revise this report to reflect changes, events or conditions, which occur subsequent to the date hereof.

For more information please contact info@celent.com or:

Awaad Aamir aaamir@celent.com

Americas EMEA Asia-Pacific Switzerland USA Japan 99 High Street, 32nd Floor Tessinerplatz 5 The Imperial Hotel Tower, 13th Floor Boston, MA 02110-2320 Zurich 8027 1-1-1 Uchisaiwai-cho Chiyoda-ku, Tokyo 100-0011 +1.617.262.3120 +41.44.5533.333 +81.3.3500.3023 USA France Hong Kong Unit 04, 9th Floor 1166 Avenue of the Americas 1 Rue Euler New York, NY 10036 Paris 75008 Central Plaza 18 Harbour Road +1.212.345.3960 +33 1 45 02 30 00 Wanchai +852 2301 7500 USA Singapore Italy Four Embarcadero Center Galleria San Babila 4B 138 Market Street #07-01 CapitaGreen Suite 1100 Milan 20122 Singapore 048946 San Francisco, CA 94111 +39.02.305.771 +65 6510 9700 +1.415.743.7960 Brazil United Kingdom Av. Dr. Chucri Zaidan, 920 55 Baker Street Market Place Tower I - 4° Andar London W1U 8EW Sao Paulo SP 04583-905 +44.20.7333.8333 +55 11 5501 1100