CELENT



NORTH AMERICAN WEALTH MANAGEMENT TECHNOLOGY VENDORS

EVALUATING FRONT-TO-BACK OFFICE PLATFORM VENDORS

This authorized reprint contains material excerpted from a recent Celent report profiling and evaluating wealth management platforms with front to back office functionality. The full report is 67 pages long. This report was not sponsored by Broadridge Financial Solutions, Inc. in any way. This reprint was prepared specifically for Broadridge, but the analysis has not been changed from the full report. For more information on the full report, please contact Celent at info@celent.com.

Ashley Globerman October 2017

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EXECUTIVE SUMMARY

KEY RESEARCH QUESTIONS

Who are the leading front-to-back office vendors in the North American wealth management market?

How do the leading vendors compare in key areas?

What is the outlook for the front-to-back office vendor landscape?

The wealth management industry continues to be at a crossroads as a result of regulatory scrutiny, political and market uncertainty, cost pressure, digital disruption and innovation, and a shift in client demographics. Wealth management firms are addressing these changes through the implementation of sophisticated, comprehensive, and fully integrated end-to-end solutions. Wealth managers are better able to serve clients from the mass affluent (MA) through ultra-high net worth (UHNW) through platforms that combine back office efficiency with sophisticated front office features and multichannel support.

Today's wealth management platforms aid in the automation of processes across the value chain, reduction of business costs, management of risk, protection of data, and segmentation of clients in an efficient and targeted approach. Vendors are offering scalable single technical infrastructure solutions that enable workflow automation, transparency, global reach, and a client-centric experience, and can support discretionary, advisory and brokerage businesses on a single platform across multiple back offices through customization, scalability, and flexibility. Additionally, wealth managers and vendors are heavily focused on providing consistent, attentive, and superior customer service.

Celent created three distinct categories in order to compare vendors across a standardized, apples-to-apples scale:

- Front office-only platform providers: These platform vendors support the advisory process from end to end in an integrated workflow and single infrastructure. Celent is including vendors that focus solely on the front office, and do not offer back office support. It is important to note that although these vendors offer an integrated platform solution, many of their solutions are modular so that wealth managers can select specific components to support key workflows. Additionally, it is vital that these vendors remain back office-agnostic, with several out-of-box integrations to core banking and other back office providers.
- Front-to-back office providers: These vendors provide a true front-to-back office platform and provide a single infrastructure for the wealth manager. These vendors frequently have become front-to-back providers via acquisition. As such, integrating their various components is a priority. These platforms have an open architecture so that wealth managers can integrate legacy and other third party systems on top of the platform. Like the front office players, these systems are modular, with the ability to implement only the front office, or only the middle and back office; or the ability to implement only specific components across the front, middle, and back office.

 Core banking providers: These vendors focus on providing core banking functionality for the private banking and retail banking industry. Recently, they have begun adding front office technology to differentiate themselves by providing advisor support.

This report examines the leading North American vendors of *front-to-back office platforms.* The following vendors are included: Broadridge, Comarch, Objectway, SEI SS&C Advent, and Temenos.

A few items of note:

- Bravura, Envestnet, FNZ, Focus Solutions, GBST, Intellect Design, JHC, Pershing, Pulse Software, Scivantage and Third Financial did not participate in the study.
- Comarch and Temenos are included in the earlier comparison tables, but are not included in the ABCD analysis.

A wealth management platform seeks to provide the infrastructure to support wealth management operations and processes across the front, middle, and back offices. Celent has identified 11 components that compose a wealth management platform. Front office components support the advisory process, from acquisition to ongoing maintenance and retention, in a single workflow. These components include client relationship management (CRM), financial planning, portfolio management, and portfolio monitoring. Reporting straddles across front office and back/middle office operations. Middle/back office components focus on the advisor's link to the home office and provide functionality support for investment managers, risk managers, and operations staff. Key components include reporting, portfolio construction (analytics and modeling), model administration, workflow management, compliance, document management, and central data repository.

This study uses the Celent 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**lient base, and **D**epth of client services on two separate X/Y scales.

Figure 1 represents Advanced Technology and Breadth of Functionality measures, and Figure 2 represents the vendors' Customer Base (number of financial institutions and advisors served) and Depth of Client Services.

It should be noted that for all measures, all vendors scored well, so scaling reflects small differences, not an absolute scale.

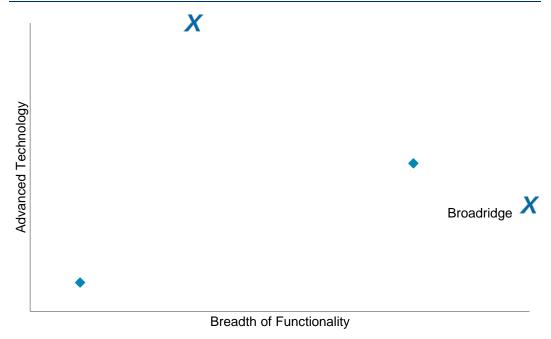
The Breadth of Functionality category (X axis), was based on the number of modules/components available (for example, whether each vendor had a financial planning module, a customer management module, a reporting module, etc.), as well as the depth of functional support within each of the platform module/components.

The XCelent Functionality winner is Broadridge.

In terms of **Breadth of Functionality** (X axis), little separated the vendors, but ultimately, Broadridge came out on top. Broadridge Wealth Solution is a true front-to-back solution offering robust modules. Broadridge allows clients to integrate with best-of-breed financial planning solutions to promote firm planning strategies and behaviors, thus better serving their predominant client base: the mass affluent. Broadridge demonstrates a dedication to developing its digital proposition and empowering the advisor and client through, for example, its three-prong implementation approach of AI and strong mobile apps.

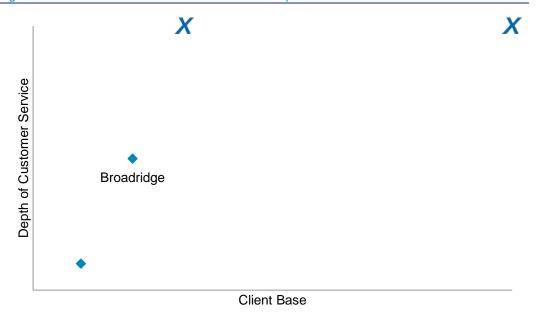
ω | Chapter: Executive Summary

Figure 1: ABCD Vendor View: Advanced Technology and Breadth of Functionality



Source: Celent analysis

Figure 2: ABCD Vendor View: Customer Base and Depth of Service



Source: Celent analysis

Chapter: Executive Summary

In the first report, Celent focused on front office vendors with wealth management offerings:

 North American Wealth Management Technology Vendors: Evaluating Front Office Platform Vendors.

The other reports in this series include:

- European Wealth Management Technology Vendors: Evaluating Core Banking Platform Vendors
- European Wealth Management Technology Vendors: Evaluating Front-to-Back Office Platform Vendors
- Deal Trends in the European Wealth Management Front-To-Back Office Platform Market: 2016 Edition
- European Wealth Management Technology Vendors: Evaluating Front Office Platform Vendors
- Deal Trends in the European Wealth Management Front Office Vendors Market:
 2016 Edition

Chapter: Introduction

INTRODUCTION

The wealth management industry continues to be at a crossroads as a result of regulatory scrutiny, political and market uncertainty, cost pressure, digital disruption and innovation, and a shift in client demographics. Wealth management firms are addressing these changes through the implementation of sophisticated, comprehensive and fully integrated end-to-end solutions. Wealth managers are better able to serve clients from the mass affluent (MA) through ultra-high-net-worth (UHNW) through platforms that combine back office efficiency with sophisticated front office features and multi-channel support.

Today's wealth management platforms aid in the automation of processes across the value chain, reduction of business costs, management of risk, protection of data, and segmentation of clients in an efficient and targeted approach. Vendors are offering scalable single technical infrastructure solutions that enable workflow automation, transparency, global reach, a client-centric experience, and can support discretionary, advisory and brokerage businesses on a single platform across multiple back offices through customization, scalability, and flexibility. Additionally, wealth managers and vendors are heavily focused on providing consistent, attentive, and superior customer service.

Front office components support the advisory process, from acquisition to ongoing maintenance and retention, in a single workflow. These components include client relationship management (CRM), financial planning, portfolio management, and portfolio monitoring. Reporting straddles across front office and back/middle office operations. Middle/back office components focus on the advisor's link to the home office and provide functionality support for investment managers, risk managers, and operations staff. Key components include reporting, portfolio construction (analytics and modeling), model administration, workflow management, compliance, document management, and central data repository.

KEY RESEARCH QUESTIONS

Which are the leading front-to-back office vendors in the North American wealth management market?

How do the leading vendors compare in key areas?

What is the outlook for the front-to-back office vendor landscape?

RESEARCH METHODOLOGY

Starting in June 2017, Celent conducted a study on the North American wealth management vendor market. Celent focused on major trends, technology and functionalities, and client preferences. The vendors responded to a detailed RFI that consisted of a range of questions covering the following topic areas:

- Client types: Retail banks, private banks, brokerages, family offices, etc.
- Firm strategy and how client reporting fits into their overall offering.
- Regional presence.

- Solution architecture, technology, functionality, and differentiators.
- Market trends and future enhancements.

Categorizing Vendors

Celent created three distinct categories in order to compare vendors across a standardized, apples-to-apples scale.

- Front office-only platform providers: These platform vendors support the advisory process from end to end in an integrated workflow and single infrastructure. Celent is including vendors that focus solely on the front office, and do not offer back office support. It is important to note that although these vendors offer an integrated platform solution, many solutions are modular so that wealth managers can select specific components to support key workflows. Additionally, it is vital that these vendors remain back office-agnostic, with several out-of-box integrations to core banking and other back office provides.
- Front-to-back office providers: These vendors provide a true front-to-back office platform and provide a single infrastructure for the wealth manager. These vendors frequently have become front-to-back providers via acquisition. As such, integrating their various components is a priority. These platforms have an open architecture so that wealth managers can integrate legacy and other third party systems on top of the platform. Like the front office players, these systems are modular, with the ability to implement only the front office, or only the middle and back office; or the ability to implement only specific components across the front, middle, and back office.
- Core banking providers: These vendors focus on providing core banking functionality for the private banking and retail banking industries. Recently, they have begun adding front office technology so as to differentiate themselves via advisor support.

FRONT-TO-BACK OFFICE VENDORS

This report will focus on the front-to-back office platform providers. Thus, Table 1 provides the list of vendors considered in this report. Although most of these vendors offer a modular solution whereby the front office functionality is marketed and can be sold on a stand-alone basis, Celent has grouped all vendors that offer both front and middle/back office vendors. Those vendors who do not offer any back office technology and offer solely front office platforms are featured in the previous report, North American Wealth Management Technology Vendors: Evaluating Front Office Vendors.

Table 1: Front-to-Back Office Vendors

CATEGORIZATION	FIRM NAME	PRODUCT NAME	
Front-to-Back Office Vendors	Broadridge	Broadridge Wealth Management Solution	
	Comarch	Comarch Wealth Management	
	Objectway	Objectway Wealth Suite	
	SEI	SEI Wealth Platform SM	
	SS&C Advent	Advent Portfolio Exchange and Moxy	
	Temenos	WealthSuite	

Source: Celent

CRITERIA FOR PARTICIPATION

Celent used the following criteria for inclusion in this report:

- All vendors must have a product that fits into the categorization as defined and outlined in the previous section.
- Participating vendors must provide a front-to-back office solution that is sold on a stand-alone basis. Wealth management vendors offering front office capabilities integrated into a wealth management platform with middle and back office support have not been considered for this report. Although some front-to-back office vendors can sell their front office component on a stand-alone basis, these vendors are still considered "front-to-back vendors."
- Must support multiple components within the front-to-back office. That is to say, vendors that provide merely one component of the front office (for example, portfolio management or CRM), are not included. Thus, point solutions are not included.
- 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 front-to-back office wealth management tools, though participating vendors may also target institutional clients.
- Web-based capability. All participating vendors must have web-based tools.

CELENT'S ABCD VENDOR ANALYSIS

Celent's ABCD Vendor View is a proprietary 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 relative positions of each solution evaluated and does not reflect an abstract evaluation. Each vendor solution is judged relative to the others in the group. In this report, the factors used to evaluate each vendor are listed in Table 2.

CATEGORY	FACTORS INCLUDED		
Advanced Technology	 Deployment options Channel support (i.e., mobility, branch, call center, etc.) Integration to multiple systems Customization/configuration Cloud services 		
Breadth of Functionality	Ease of useNumber of modules supportedDepth of support within each module		
Customer Base	 Number of clients Diversity of client types Ability to target different customer segments Geographic distribution of customers across North America 		
Depth of Services	 Breadth and depth of partnerships Security and educational support Customer reviews/client support resources Breadth of geographic/branch support locations 		

Source: Celent

Key Research Question

Who are the leading front-to-back office vendors in the North American wealth management market?

Bravura, Broadridge, Comarch, Envestnet, FNZ, Focus Solutions, GBST, Intellect Design, JHC, Objectway, Pershing, Pulse Software, Scivantage, SEI, SS&C Advent, Temenos, and Third Financial are some of the major players. This list is by no means exhaustive, but it is a good representation of the space.

PROFILES

BROADRIDGE FINANCIAL SOLUTIONS INC: BROADRIDGE WEALTH MANAGEMENT SOLUTION

COMPANY

Broadridge is a publicly traded company headquartered in New York, USA with sales and professional services personnel located throughout the North American region. Broadridge is a global provider of investor communications and technology-driven solutions to banks, broker-dealers, mutual funds and corporate issuers. Their services include investor and financial communications, securities processing, and data and analytics solutions. Broadridge serves retail and institutional customers across the entire investment life cycle across their five businesses: Bank/Broker-Dealer Investor Communication Solutions, Corporate Issuer Solutions, Advisor Solutions, Mutual Fund and Retirement Solutions, and Global Technology and Operations. The company has over 10,000 employees; 170 are available to provide professional services / client support for the solution.

Table 3: Company and Product Snapshot

COMPANY	Annual revenues derived from product	Not provided
	Year founded	2007
	Exchanges/Symbols	NYSE: BR
	Headquarters Location	Global: New York, USA
	Employee Breakdown	Employees physically located in North America: 5,080 Employees located outside of North America: 5,000 Average years of experience of employees: 10–12 years
WEALTH MANAGEMENT FRONT-TO-BACK OFFICE SYSTEM	Name	Broadridge Wealth Management Solution
	Current release and date of release	Broadridge does not publicly share solution versions.
	Upgrades	Financial services customers must upgrade by going from one version to the next sequentially (e.g., 4.0 to 5.0). Vendor support for prior versions: They support
		current versions and up to two prior.
	Target market	The Broadridge Wealth Management Solution is provided to enterprise wealth management firms and individual advisors across all wealth management sub-segments.

Source: Vendor RFI

PROS/CONS

This section provides Celent's view on the solution using different reference points: our evaluation of vendor-provided RFI and documents and client references.

Table 4: Strengths and Weaknesses — Broadridge

PROS	CONS

Broadridge Wealth Management Solution is suitable for financial institutions ranging in size due to its modular, flexible, and scalable architecture. Broadridge serves the global financial industry across market segments including Asset Management, Capital Markets, Wealth management and Corporations. The solution is particularly well-suited for institutions ranging from 25 FAs to 10K FAs.

Broadridge has improved its offering to serve a range of clients and is focused on enabling advisor efficiency, but there are some gaps that could continue to make the solution more intuitive and digital for advisors, such as e-signature.

Within the past two years, Broadridge strengthened its front-to-back solution through the acquisition of advisor compensation and social media integration platforms.

Mobile wealth management solution has been live and in production for more than three years. There is deep native app support; the apps offer consistent functionality (Key Mobile Functions: Account Inquiry, Order Entry, Market Data, Money Movements, eDocuments) for employees, end users, and advisors.

Broadridge allows clients to integrate with best-ofbreed financial planning solutions to promote firm planning strategies and behaviors, thus better serving their predominant client base: the mass affluent.

The solution has a clean and well-designed UI.

Broadridge demonstrates a dedication to developing its digital proposition and empowering the advisor and client through, for example, its three-prong implementation approach of AI.

Source: Celent, client reviews, vendor RFI

OVERALL FUNCTIONALITY

Table 5 shows the availability of different functions within the system.

Table 5: Functional Availability

FUNCTIONALITY		AVAILABILITY
ADMINISTRATION	User-definable dashboard	Live
	User entitlements	Live
	Ability to personalize views	Live
	Messaging functionality	Live
	Workflow templates by type of user	Live
	Workflow controls	Live

FUNCTIONALITY		AVAILABILITY
CUSTOMER RELATIONSHIP MANAGEMENT	Built-in module	No support
	Integration with Third Party CRM system (Please indicate name of vendor)	Live
	Individual view of accounts	Live
	Household view of accounts	Live
	Automated internal account aggregation	Live
	Automated external account aggregation	Live
	Manual external account aggregation	Select Option
	Campaign management	Live
	Document management	Live
	Client reporting	Live
FINANCIAL PLANNING	Built-in module	No support
	Integration with other vendors	Live
	Goals-based planning	Live
	Cash flow-based planning	Live
	Multi-period retirement	Live
	Budgeting tools	Live
	Tax planning	Live
	Estate planning	Live
PLAN GENERATION / ASSET ALLOCATION	Customer profiling	Live
	Proposal containing portfolio suggestion	Select Option
	What-If scenarios	Live
	Custom asset allocation	Live
	Advisor modification of asset allocation	Live
PORTFOLIO MANAGEMENT	Portfolio construction	Live
	Portfolio modelling	Live
	Portfolio optimization	Live
	Automated rebalancing	Live

FUNCTIONALITY		AVAILABILITY
	capabilities	
	Risk analytics	Live
TRADING AND COMPLIANCE	Integrated trading system	Live
	Automatic trade order generation	Live
	Compliance engine (allows for specific compliance rules to be implemented depending on country, portfolio, and company)	Live
OTHER FUNCTIONALITY	Multicurrency	Live
	Multilanguage	Live
	Market data	Live
	Online help for advisors	Live
	Self-directed functionality for end clients	Live

Source: Vendor RFI

CUSTOMER BASE

Broadridge has a total of 40 financial services customers in the region. Most financial services customers are brokerage firms (60%), followed by RIAs (15%), financial advisors (15%), and bank-affiliated brokerages (10%).

Table 6: Customer Base

NORTH AMERICAN CUSTOMER BASE	New clients since 2014	North America: Broadridge declines to provide
	Percentage breakdown of	Brokerage: 60%
	clients by client type	Bank affiliated brokerage: 10%
		RIA: 15%
		Financial Advisors: 15%
	Percentage breakdown of clients by investable assets	Mass market: 30%
		Mass affluent: 60%
		High Net Worth: 10%
		Ultra-High Net Worth: 0%
	Deployment method	BPO: 20%
	(percentage of client base)	Hosted: 80%
	Marquee clients	Confidential

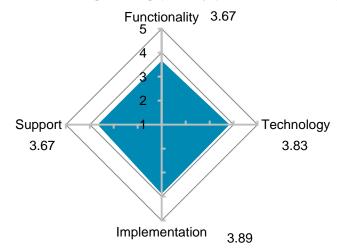
Source: Vendor RFI

CUSTOMER FEEDBACK

- The clients who provided feedback for Broadridge have been using the system for more than three years enterprise-wide to serve clients in the MM-HNW customer segments.
- One of the reasons that clients chose the Broadridge solution was because of its US subsidiary's longstanding and valued relationship with Broadridge. Another reason is that Broadridge has demonstrated its ability to understand a client's complex and decentralized business model.
- Clients remarked that the solution is good at handling large amounts of data. They
 would like to see more functions migrated off of green screen technology and a more
 intuitive system.
- The overall implementation and technology of the system were given above average marks. Project management, overall project success, ease of system maintenance, flexibility of the data model, and scalability of the solution were viewed favorably.
- Overall, clients would recommend this solution to another wealth manager.

Figure 3: Customer Feedback

Customer average rating (1=very poor; 5=excellent)



Source: 2017 Celent customer feedback survey. Note: based on limited customer feedback.

TECHNOLOGY

The technical architecture on the front end is based on Java EE 7. The back end is composed of REST-based web services. The UI is a Single Page Architecture (SPA) that utilizes REST-based web services to get the data and display to the user. For the advisor compensation module, the underlying architecture is based on MS ASP.Net, Angular.js(4) and REST-based web services. For the advisor productivity module, the client tier is jQuery, HTML 5, Javascript and Bootstrap for the framework with the application tier using ASP.NET and SQL server on the back end.

Back end primary US book-of-record architecture is mainframe-based with COBOL and Assembler with a DB2 database and sequential files. Augmenting BPS are distributed components such as Websphere, Phase IV, BPS Connect using Java with SQL, and Oracle databases with Linux as the operating system.

An application for employees, end customers, and advisors/agents are all live. The solution supports Apple (iOS), Android, Windows, and mobile-friendly HTML5 apps.

Table 7: Technology Options

TECHNOLOGY	SPECIFICS
CODE BASE	Core technology: Java: 40% .NET (): 15% COBOL: 30% Other (please specify in Comments): 15% Business users: Java: 40% .NET (): 15% COBOL: 30% Other (please specify in Comments): 15% Developers: Java: 100%
OPERATING SYSTEMS	Implemented in Microsoft .NET and JEE/Java Operating systems deployed on: Linux OS, Windows OS
APPLICATION SERVERS	RedHat JBoss EAP 7, Progress Application Servers including Webspeed Non-Mainframe functions, IIS
DATABASES	Preferred: Oracle; Microsoft SQL Server (only option); DB2/UDB (only option); Others (Progress Database for client onboarding) (only option) Additional options: Sybase
INTEGRATION METHODS	Preferred: SOA/Web Services Additional options: ACORD Standard XML; Other XML; MQSeries, JMS or similar queue technology; Flat files; Custom API
SCALABILITY	Largest deployment: 9,000 users and 3 million portfolios processed

Source: Vendor RFI

About 21% to 30% customization of the system is usually required for a client to be up and running.

Wealth management product configuration, screen configuration, business rule configuration, and role-based security integration are configurable using simple tools targeted for a business user. Workflow configuration and interface configuration require coding. Data configuration is not available.

PARTNERSHIPS

Broadridge has not established partnerships but the solution suite is integrated with bestof-breed CRMs such as: MS Outlook, Ebix SmartOffice CRM, RedTail, Salesforce, MoneyGuide Pro, ICE Data Services, and others as necessary. In the North American region, Broadridge Wealth Management Solution is preintegrated with its own solution for account aggregation, A/P disbursement systems, document management systems, data warehouse, rules engine, social media, and workflow engine; Broadridge, PeopleSoft, SAP, Great Plains for general ledger; IDC and Quote Media for third party data services (e.g., market data, etc.); and DocuSign for e-signature.

IMPLEMENTATION, PRICING, AND SUPPORT

The preferred implementation approach is agile.

The total cost to implement Broadridge Wealth Management Solution can vary according to the capabilities and available resources of the client, and the overall scope of system use.

Pricing information is confidential.

BROADRIDGE: FUNCTIONALITIES AND TECHNOLOGY

The following sections provide an overview of Broadridge Wealth Management Solution. This section will focus on technologies, delivery and implementation options, and functionalities.

TECHNOLOGY, DELIVERY, AND IMPLEMENTATION

Table 8 is an overview of the vendors' technical architecture. Most solutions commonly deploy on Oracle, SQL, or DB2 as databases, and JEE/Java and Windows operating systems. The use of single global code bases enables vendors to roll out new functionality across all of its customers, regardless of geography.

Table 8: Basic Technology

VENDOR	PRODUCT NAME	PROGRAMMING LANGUAGE	SERVER OS	DATABASE
Broadridge	Broadridge Wealth Management Solution	Java; .NET; COBOL; Other	Windows; JEE/Java; Linux OS, Windows OS	Oracle; SQL Server; DB2/UDB; Sybase

Source: Celent, vendor questionnaires

Table 9 highlights sample integration capabilities and technology delivery. Open architectures and open APIs enable vendors to offer real-time integration with a host of partners and/or external systems, and support multiple channels. The ability to manage multiple front-to-back products on one platform reduces risk complexity and costs.

Celent has differentiated mobile delivery from web-based delivery by defining mobile as currently supporting either a native/hybrid app or a browser app that has been coded and designed specifically for mobile devices. As demonstrated in Table 9, it is apparent that multiple-channel support is table stakes, as compared to the same table in Celent's 2013 report where the vendors offered desktop delivery and mobile delivery was less prevalent.

Table 9: Integrations and Technology Delivery

VENDOR		TECHNOLOGY DELIVERY		
	SAMPLE FRONT/BACK OFFICE INTEGRATIONS	DESKTOP	WEB-BASED	MOBILE
Broadridge	The Broadridge Wealth Management Solution combines the Broadridge wealth capabilities across the different product and technology platforms on a component architecture. Wealth capabilities can be combined in many different ways. The web service layer offers the opportunity to integrate with many different front-end (i.e. in-house client website) and back-end applications.	•	•	

Source: Celent, vendor questionnaires

^{■ =} support, ◆ = partial support, □ = in development, ⋈ = no support

Table 10 demonstrates the types of implementations vendors support. An in-house implementation is synonymous with a client-side installation, whereas ASP and SaaS deployment models share a goal of eliminating IT overhead from business. ASP is a deployment method where software is transplanted from the client side to a dedicated hosting environment custom-created by the vendors. SaaS, on the other hand, takes the concept of ASP deployment further; a single, integrated code base is hosted centrally and accessed on-demand by users.

In-house deployment has traditionally been the preferred deployment method and still continues to be the case.

Generally, vendors' implementation approach varies across agile, waterfall, hybrid of agile and waterfall, and proprietary. The majority of wealth managers and wealth management software vendors have embraced a hybrid of waterfall and agile methodology. Today's wealth manager needs to improve time to market, adopt new technologies, and adopt digital best practices to face market competition. These goals are exacerbated by a complex application landscape and infrastructure with, many times, multiple legacy systems. Celent's recent report *Agile in a Waterfall World: Mastering the Scrum, Wealth Management Edition* explores how agile frameworks differ from waterfall implementations, and if these two transformations can coexist.

Table 10: Implementation Environment

VENDOR	INSTALLATION ON SITE	ASP	SAAS	CLOUD
Broadridge	X	•	X	X

Source: Celent, vendor questionnaires

■ = support, \spadesuit = partial support, \square = in development, \boxtimes = no support

PARTNERSHIPS

Table 11 provides a sample of major partnerships established by Broadridge. This table does not provide the full list of the vendor's partnerships; it is designed to illustrate areas of strategic focus for the vendor.

Table 11: Selected Partnerships

VENDOR	SELECTED PARTNERS
Broadridge	IDC - Data; Scivantage – Tax

Source: Celent, vendor questionnaires

CLIENT BASE AND CLIENT SUPPORT

In this category, Celent explores the size of the vendor's operations by the number of financial services clients and recent client wins. Figure 4 charts the number of North American financial service clients. The number of enterprise clients varies greatly across the vendors in this study. Vendors must adapt their platforms to address the change in end-client behaviors, the intersection of digital and legacy technologies, and persistent regulatory pressure in order to retain and acquire clients.

45 40 35 30 25 20 15 10 5 0

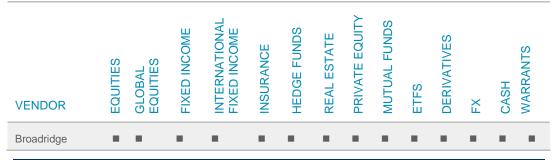
Figure 4: Number of Financial Services Clients in North America

Source: Celent, vendor questionnaires

ASSET CLASSES, PRODUCT SUPPORT

Table 12 shows the range of asset class support. The trend among investors to invest in alternative asset classes, which is evident in the table below.

Table 12: Asset Class Support



Source: Vendor questionnaires, Celent

■ = support, ◆ = partial support, □ = in development, ☒ = no support

CUSTOMER RELATIONSHIP MANAGEMENT (CRM) AND ACCOUNT AGGREGATION FUNCTIONALITY

Table 13 shows the vendor's support for customer relationship management; vendors have historically supported the majority of features within this area. Over the past couple of years, wealth managers and advisors have emphasized the importance of deep CRM functionalities. For example, alerts, client reporting, household views, and client onboarding are increasingly powerful. The digitization (e.g., mobility, connectivity, push messages, etc.) of front end features strengthens client management and optimizes sales and customer services processes. Client segmentation, which is supported by all of the vendors, is also a key feature, as is the ability to search and slice and dice customer information. This is particularly important given the change in customer demographics from baby boomer to next-gen clients.

Table 13: Customer Relationship Management

VENDOR	BUILT IN MODULE	INTEGRATION WITH THIRD PARTY	CONTACT MGMT	NEW BUSINESS PROSPECTING	INDIVIDUAL VIEW OF ACCOUNTS	HOUSEHOLD VIEW OF ACCOUNTS	RELATIONSHIP HIERARCHY	CALENDAR MANAGEMENT	ALERTS	CAMPAIGN MANAGEMENT	DOCUMENT MGMT	CLIENT REPORTING	CLIENT SEGMENTATION	SEARCH BY LAST NAME	BY CLIENT ID	BY CURRENTLY MODIFIED	
Broadridge	X	•	•	•		•	•									\times	

Source: Vendor guestionnaires, Celent

■ = support, ◆ = partial support, □ = in development, ⋈ = no support

A common theme among vendors is offering a holistic view of clients' financial (and non-financial) assets. In order for advisors to offer sound financial advice and goal planning, a total view of clients' wealth is crucial. Transparency and holistic reporting are increasingly sought by clients. Automated account aggregation is an important tool; data can be consolidated at individual or household levels in many cases. Broadridge natively supports all of these features, as demonstrated by Table 14

Table 14: Account Information and Aggregation

VENDOR	AUTOMATED INTERNAL ACCOUNT AGGREGATION	AUTOMATED EXTERNAL ACCOUNT AGGREGATION	DIRECT FEEDS TO SYSTEM	VIA WEB FEEDS
Broadridge			•	

Source: Vendor questionnaires, Celent

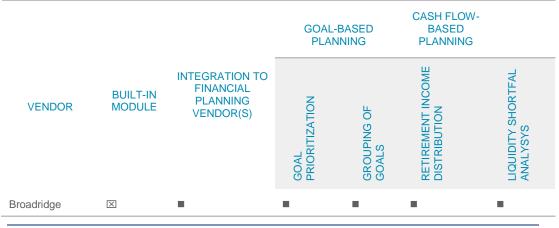
■ = support, ◆ = partial support, □ = in development, ☒ = no support

FINANCIAL PLANNING SUPPORT

Vendors continue to recognize the value in investing in a sophisticated financial planning module, whether it is proprietary or offered via third party integration; Broadridge's support for financial planning components is demonstrated in Table 15, Table 16 and

Chapter: Broadridge: Functionalities and Technology

Table 17. Vendors continue to focus on providing breadth (supporting a range of planning options) and depth (sophistication within each planning module) of functionality in the financial planning area. Vendors have gone from a cumbersome and heavy solution to sleeker Uls, more intuitive workflows, and complete dashboard overhauls rather than simply new tools in the existing dashboard or workflow.



Source: Celent, Vendor Questionnaires

■ = support, ◆ = partial support, □ = in development, ⋈ = no support

Table 16: Financial Planning Functionality

VENDOR	RETIREMENT PLANNING	EDUCATION PLANNING	TAX PLANNING	INSURANCE PLANNING	ESTATE PLANNING	EMERGENCY FUNDS	MAJOR PURCHASES	DEBT MANAGEMENT	DISABILITY	SURVIVOR NEEDS	MEDICAL EXPENSES	GIFTING	STOCK OPTION PLANNING
Broadridge	•	•	-	-	•		-	-	-	-	•	•	•

Source: Vendor questionnaires, Celent

■ = support, \blacklozenge = partial support, \square = in development, \boxtimes = no support

Table 17: Retirement Income and Distribution

VENDOR	MULTI- PERIOD RETIREMENT	REVERSE MORTGAGES CONSIDERED	BUDGET- ING TOOLS	EXPENSE CATEGORIZATION	PARTIAL RETIREMENT CONSIDERED
Broadridge					

Source: Vendor questionnaires, Celent

■ = support, ◆ = partial support, □ = in development, ☒ = no support

PLAN GENERATION

Table 18 demonstrates support across various aspects of plan generation, which is typically composed of components such as proposal templates with a set of administrative tools, guided proposal page flow, configurable profiling and risk scoring, what-if simulations, and workflow tools.

VENDOR	NG AND R	PROFILING AND RIS QUESTIONNAIRE: IMPORTED FROM FIRMS	PROPOSAL CONTAINING PORTFOLIO SUGGESTION	DATA IMPORT OF PORTFOLIO HOLDINGS	INVESTMENT MANAGER DATABASE	WHAT-IF SCENARIOS	WORST AND BEST CASE SCENARIOS	PORTFOLIO RECOMMENDATIONS: ASSET LEVEL	PORTFOLIO RECOMMENDATIONS: SECURITY LEVEL	PROPOSAL TEMPLATES
Broadridge	X X		X		\boxtimes	•				•

Source: Celent, vendor questionnaires
■ = support, ◆ = partial support, □ = in development, □ = no support

Table 19 identifies the various asset allocation options. This module is an area of strength for the vendors in this study, including Broadridge.

Table 19: Asset Allocation

Source: Celent, Vendor Questionnaires

■ = support, ◆ = partial support, □ = in development, ☒ = no support

PORTFOLIO MANAGEMENT

An area of differentiation within the portfolio management module is the depth at which advisors can drill down and analyze a portfolio. The complexity of these tools ultimately determines how strongly the vendor can support discretionary investment management. Table 20 reveals that this is also an area of strength for Broadridge.

Source: Celent, vendor questionnaires

■ = support, ◆ = partial support, □ = in development, ☒ = no support

Table 21 demonstrates the value that the vendor places on greater analytics support for their portfolio management and monitoring tools. Considering the continued interest in assessing risk and portfolio management, it is not surprising to see that this module has been an area of investment.

Table 21: Analytics

VENDOR	PERFORMANCE CALCULATIONS	REAL-TIME VALUATIONS	PORTFOLIO P&L CALCULATIONS	P&L ON HOLDINGS	ASSET ALLOCATION ANALYSIS	CASH POSITION ANALYSIS	PORTFOLIO WEIGHTINGS (BY STOCK, ASSET CLASS, SECTIOR ETC.)	FILTERING DATABASE	ABILITY TO QUERY DATA	EFFICIENT FRONTIER	VALUE AT RISK	MONTE CARLO SIMULATION	STRESS TESTING	RISK VS. RETURN	PORTFOLIO SIMULATION	HISTORICAL AUDIT
Broadridge		-							-					•		-

Source: Celent, vendor questionnaires

■ = support, ◆ = partial support, □ = in development, ☒ = no support

TRADING AND COMPLIANCE

Table 22 demonstrates the breadth of trading and compliance functionalities supported by Broadridge. Generally, vendors have been focusing on improving the depth of their compliance engine functionality, focusing on providing more drift analysis, investment suitability, and security prohibition tools.

Table 22: Trading and Compliance

VENDOR	INTEGRATED TRADING SYSTEM	ORDER ENTRY	AUTOMATED TRADE ORDER GENERATION	COMPLIANCE ENGINE	PRE-TRADE COMPLIANCE	POST-TRADE COMPLIANCE	MIFID SUITABILITY
Broadridge							

Source: Celent, vendor questionnaires

■ = support, ◆ = partial support, □ = in development, ☒ = no support

ADMINISTRATION AND MULTIGEOGRAPHIC SUITABILITY

Table 23 demonstrates that the vendor offers full administrative features. Since Celent's 2013 report, vendors have invested in workflow templates and continue to build upon fee management capabilities.

Table 23: Administration



Source: Celent, vendor questionnaires

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Table 24 reveals the vendor's support for multiple currencies and languages in addition to market data and online support for advisors.

VENDOR MULTICURRENCY MULTILANGUAGE MARKET DATA

Broadridge

■

Source: Celent, vendor questionnaires
■ = support, ◆ = partial support, □ = in development, ☒ = no support

SELF-DIRECTED FUNCTIONALITY AND MOBILITY
Table 25 provides a summary of self-directed functionality.

Table 25: Self-Directed Functionality

VENDOR	SELF-DIRECTED FUNCTIONALITY	DESCRIPTION
Broadridge		Did not provide
Source: Celent. v	vendor questionnaires	

Source: Celent, vendor questionnaires

■ = support, ◆ = partial support, □ = in development, ☒ = no support

Table 26 provides a summary of the vendor's support of mobile apps from both an advisor and end user perspective. Some of the key functionalities for the advisor include: contacts and tasks management, CRM, collaboration, eDocuments, financial planning, goal tracking, hybrid advisory, market data, money movement, notifications, order entry, portfolio analysis and construction, proposal generation, relationship summary, risk profiling, simulations, and view client portfolios, allocations, and statements. On the other hand, key functionalities for investor apps include: account inquiry, communication and messaging, collaboration, document delivery (reports, statements, etc.), goal tracking, hybrid advisory, investment proposal modification and review, market data, money movements, notifications, order entry, portfolio analysis, reporting and visualization, relationship summary, holdings, self-directed trading, and self-profiling.



VENDOR RANKING

Celent's ABCD Vendor View is a proprietary representation of a vendor marketplace designed to show at a glance the relative positions of each vendor in four categories: **A**dvanced technology, **B**readth of functionality, **C**lient Base, and **D**epth of client services.

The Celent ABCD Vendor View shows relative positions of each solution evaluated and does not reflect an abstract evaluation. Each vendor solution is judged relative to the others in the group. In this report, the factors used to evaluate each vendor are listed in Table 2 and Table 27.

Table 27: Celent ABCD Vendor Analysis

CATEGORY	FACTORS INCLUDED
Advanced Technology	 Deployment options Channel support (i.e., mobility, branch, call center, etc.) Integration to multiple systems Customization/configuration Cloud services
Breadth of Functionality	Ease of useNumber of modules supportedDepth of support within each module
Customer Base	 Number of clients Diversity of client types Ability to target different customer segments Geographic distribution of customers across North America
Depth of Services	 Breadth and depth of partnerships Security and educational support Customer reviews/client support resources Breadth of geographic/branch support locations

Source: Celent

Within this framework, the top performers in each of the ABCD dimensions received a corresponding XCelent 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 Depth of Service score.

It should be noted that for all measures, all vendors scored well, so scaling reflects small differences, not an absolute scale.

The Breadth of Functionality category (X axis), was based on the number of modules/components available (for example, whether each vendor had a financial planning module, a customer management module, a reporting module, etc.), as well as the depth of functional support within each of the platform module/components.

The XCelent Functionality winner is Broadridge.

In terms of **Breadth of Functionality** (X axis), little separated the vendors, but ultimately, Broadridge came out on top. Broadridge Wealth Solution is a true front-to-back solution offering robust modules. Broadridge allows clients to integrate with best-of-breed financial planning solutions to promote firm planning strategies and behaviors, thus better serving their predominant client base: the mass affluent. Broadridge demonstrates a dedication to developing its digital proposition and empowering the advisor and client through, for example, its three-prong implementation approach of AI and strong mobile apps.

Breadth of Functionality

Figure 5: ABCD Vendor View: Advanced Technology and Breadth of Functionality

Source: Celent

Figure 6: ABCD Vendor View: Customer Base and Depth of Service



Source: Celent

How do the leading vendors compare in key areas?

Key Research Question

2

All the vendors in this report are required to meet basic functionalities, technology requirements, asset and product support, compliance requirements, and deployment options. There are, however, several areas in which vendors can distinguish themselves among their competition.

This report names the winners of the XCelent Awards for North American front-to-back office vendors for wealth management:

XCelent Functionality: Broadridge

LOOKING FORWARD

Today's wealth management platforms aid in the automation of processes across the value chain, reduction of business costs, management of risk, protection of data, and segmentation of clients in an efficient and targeted approach. Vendors are offering scalable single technical infrastructure solutions that enable workflow automation, transparency, global reach, a client-centric experience, and can support discretionary, advisory, and brokerage businesses on a single platform across multiple back offices through customization, scalability, and flexibility. Additionally, wealth managers and vendors are heavily focused on providing consistent, attentive, and superior customer service.

In particular, Celent expects to see the following market and technology trends in the front-to-back office vendor space:

The client experience continues to drive the implementation of innovative technologies. Celent expects to see the continued application of emerging technology, such as biometrics, chatbots, enhanced mobile apps, and intuitive client portals, as well as seamless onboarding and comprehensive reporting features — all aimed at improving the client experience and boosting client loyalty. Celent also expects to see the continued enablement of the self-directed client through social collaboration forums, hybrid advisory solutions, extensive education portals, and navigable digital layouts.

The rise of compliance costs and tightening of operating margins in conjunction with client demands for lower fees will push wealth managers and private banks to outsource back office functions. Wealth managers and private banks are focused on the implementation of regulatory demands and will look to shift their non-core functions, such as KYC and anti-money laundering requirements to outsourcing partners. Vendors that prioritize the protection of client data and are in a position to uphold client privacy will have a competitive advantage.

Continued investment in tools to facilitate collaboration and interactivity between advisors and clients, and increase advisor efficiency. Advisor tools must emphasize collaboration and interactivity where the advisor provides expertise, but can adjust the client's portfolio to the client's comments and also generate actionable advice thoughts. Enabling the advisor to work (e.g., client onboarding, holistic view of holdings, client management, etc.) seamlessly while on-the-go is critical.

Customer segmentation, data analytics, data management, and CRM systems are areas of focus. In order for firms to remain profitable and meet unique client expectations, particularly as the core client base changes, customer segmentation is a must, as is highly organized data and the automation of certain functions, including financial planning modules and analytics that provide "next best offer" functionalities. Investment in CRM has increased, including data capture, analytics, management, and visualization features.

Multichannel support will deepen. The online channel remains the dominant access point for both advisors and end clients, and the mobile channel is no longer a differentiator. The use of social media and analytics is increasingly valuable to segment clients across demographics and optimize sales targets and initiatives.

What is the outlook for the front-to-back office vendor landscape?

Celent expects to see the following trends in the front office vendor landscape:

- Client experience driving the application of digital technologies.
- Advisor-client collaboration and interactivity.
 - Enablement of advisor efficiency while on-the-go.
- Customer segmentation, data analytics, data management, and CRM systems.
 - Enhancing multichannel support.

Key Research Question

3

Was this report useful to you? Please send any comments, questions, or suggestions for upcoming research topics to <u>info@celent.com</u>.

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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 related to wealth management include:

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

Business practice evaluations. We spend time evaluating your business processes. 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.

Chapter: Related Celent Research

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European Wealth Management Technology Vendors: Evaluating Front-to-Back Office Platform Vendors
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Deal Trends in the European Wealth Management Front-To-Back Office Platform Market: 2016 Edition September 2016

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

Ashley Globerman

agloberman@celent.com

AMERICAS	EUROPE	ASIA
USA	France	Japan
200 Clarendon Street, 12th Floor Boston, MA 02116	28, avenue Victor Hugo Paris Cedex 16 75783	The Imperial Hotel Tower, 13th Floor 1-1-1 Uchisaiwai-cho Chiyoda-ku, Tokyo 100-0011
Tel.: +1.617.262.3120 Fax: +1.617.262.3121	Tel.: +33.1.73.04.46.20 Fax: +33.1.45.02.30.01	Tel: +81.3.3500.3023 Fax: +81.3.3500.3059
USA	United Kingdom	China
1166 Avenue of the Americas New York, NY 10036	55 Baker Street London W1U 8EW	Beijing Kerry Centre South Tower, 15th Floor 1 Guanghua Road
Tel.: +1.212.541.8100 Fax: +1.212.541.8957	Tel.: +44.20.7333.8333 Fax: +44.20.7333.8334	Chaoyang, Beijing 100022
		Tel: +86.10.8520.0350 Fax: +86.10.8520.0349
USA	Italy	<u>China</u>
Four Embarcadero Center, Suite 1100 San Francisco, CA 94111	Galleria San Babila 4B Milan 20122	Central Plaza, Level 26 18 Harbour Road, Wanchai Hong Kong
Tel.: +1.415.743.7900 Fax: +1.415.743.7950	Tel.: +39.02.305.771 Fax: +39.02.303.040.44	Tel.: +852.2982.1971 Fax: +852.2511.7540
Brazil	Spain	Singapore
Av. Das Nações Unidas, 12901 Torre Norte - 33° Andar São Paulo SP 04578-903	Paseo de la Castellana 216 Pl. 13 Madrid 28046	8 Marina View #09-07 Asia Square Tower 1 Singapore 018960
Tel.: +55.11.5501.1100 Fax: +55.11.5501.1110	Tel.: +34.91.531.79.00 Fax: +34.91.531.79.09	Tel.: +65.9168.3998 Fax: +65.6327.5406
Canada	Switzerland	South Korea
1981 McGill College Avenue Montréal, Québec H3A 3T5	Tessinerplatz 5 Zurich 8027	Youngpoong Building, 22nd Floor 33 Seorin-dong, Jongno-gu
Tel.: +1.514.499.0461	Tel.: +41.44.5533.333	Seoul 110-752 Tel.: +82.10.3019.1417
		Fax: +82.2.399.5534