

Aité Novarica

OCTOBER 2021

AITE MATRIX: LEADING U.S. CASH MANAGEMENT VENDORS

CHRISTINE BARRY

This excerpt provided compliments of this Best-in-Class vendor:

Q2

IMPACT REPORT

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INTRODUCTION

The U.S. cash management industry continues to evolve, as does the technology that supports it. Banks must regularly reexamine their strategies and product offerings to ensure they are meeting client expectations and are armed with the right tools to meet future needs. Today's corporate and commercial bank customers require robust realtime capabilities that enable them to efficiently initiate digital payments, collect money owed, and manage their financial positions and operations as effectively as possible. The level of urgency for such tools has intensified because of the pandemic. Never before has there been such a divide between those banks that have been investing in digital transformation and those that have not. Feature-rich but usability-poor offerings are no longer acceptable, as customers require easy-to-use, agile, and open platforms that seamlessly integrate with both internal bank platforms and external ones. The result has been a growing need for banks to swiftly and efficiently replace outdated platforms or risk being left behind and looking outdated. Intense pressure is on the technology provider community to continue to enhance the various platforms to stay one step ahead of both bank and customer expectations. It is a competitive field of established vendors, each adopting a slightly different strategy to differentiate itself from the pack and deliver new value to the market.

This Impact Report explores some of the key trends within the U.S. cash management market and discusses how technology is evolving to address new market needs and challenges. This Impact Report also compares and contrasts the leading vendors' offerings and strategies, and it highlights their primary strengths and challenges. Finally, to help financial institutions make more informed decisions as they select new technology partners, this report recognizes specific vendors for their strengths in critical areas.

METHODOLOGY

Leveraging the Aite Matrix, a proprietary Aite-Novarica Group vendor assessment framework, this Impact Report evaluates the overall competitive position of each vendor, focusing on vendor stability, client strength, product features, and client services.

The following criteria were applied to develop a list of vendors for participation:

Bank awareness of the vendor as a provider of a viable cash management offering

- Successful implementation of a cash management solution at a minimum of one
 U.S.-based Fl and an ability to provide client references
- Ability to offer a full out-of-the-box cash management solution as opposed to just components of one

Participating vendors were required to complete a detailed product request for information (RFI) composed of both qualitative and quantitative questions, conduct a minimum 60-minute product demo, and provide active client references.

THE PLAYERS

This section presents comparative data and profiles for the individual vendors that participated in the Aite Matrix evaluation. This is by no means an exhaustive list of vendors, and firms looking to undergo a vendor selection process should conduct initial due diligence prior to assembling a list of vendors appropriate for their own unique needs. Table A presents basic vendor information for the participating solutions.

TABLE A: EVALUATED VENDORS

FIRM	HEADQUARTERS	YEAR FOUNDED	TARGET MARKET
ACI Worldwide	Miami, Florida	1975	Banks with between US\$2 billion and US\$500 billion in assets as a full cash management suite; also deployed by larger banks as a modular solution
Bottomline Technologies	Portsmouth, New Hampshire	1989	Fls with greater than US\$5 billion in assets or institutions of any size that have a strategic focus on commercial banking
Finastra	London	2017	Tier-1 to Tier-4 banks, both domestic and international
FIS	Jacksonville, Florida	1968	Small, midsize, and large Fls running supported FIS core banking solutions
Fiserv	Brookfield, Wisconsin	1984	Commercially focused FIs with assets of US\$10 billion to greater than US\$100 billion
Infosys Finacle	Bangalore, India	1981	All-size banks, including the largest global banks, as well as small progressive community banks and credit unions
Intellect Design Arena	Chennai, Tamil Nadu, India	2014	Tier-1, Tier-2, and large Tier-3 banks, globally

FIRM	HEADQUARTERS	YEAR FOUNDED	TARGET MARKET
NCR	Atlanta	1884	Community banks and credit unions
Q2	Austin, Texas	2004	Tier-1 (greater than US\$5 billion assets), Tier-2 (US\$900 million to US\$5 billion), and Tier-3 (below US\$900 million) Fls; Q2 is also increasingly targeting the largest banks, which it refers to as enterprise clients.

Source: Vendors

THE MARKET

The following market trends are shaping the U.S. cash management market (Table B).

TABLE B: THE MARKET

MARKET TRENDS	MARKET IMPLICATIONS
Continuing increase in comfort level with technology	Corporate and business customers expect modern platforms with robust digital capabilities and intuitive user experiences. These new expectations are driving a growing number of bank digital transformation initiatives and platform replacements.
Digital experiences becoming more seamless	Bank silos must continue to come down, enabling easier onboarding and navigation across bank products and services without multiple logins and disjointed user experiences.
Bank focus on personas and better aligning with customer journeys	Greater levels of personalization must be at the heart of every bank's user- experience (UX) initiatives. Analytics must be better utilized to identify key client personas and preferences so client journeys and workflows can be established.
Greater expectations for data and analytics	Data and analytics represent the future of the banking industry and must be more deeply embedded in bank workflows. The use of analytics must go beyond simply fraud prevention.
Accelerated focus on building out fintech ecosystems	It is no longer a matter of if, but when, technology providers will create fintech ecosystems for their bank clients. Most have made building these ecosystems a top priority.
Strong use cases for real-time payments	Businesses of all sizes see important use cases for real-time payments driving up need and adoption. Technology providers must support not only real-time payment initiation but also request to pay for a richer experience.
Spikes in digital adoption and usage	Sharp spikes in digital banking transaction volume by businesses and corporate treasurers triggered in part by the onset of the COVID-19 pandemic have created a "new normal" and require banks to continue moving forward with new digital transformation and automation initiatives.

Source: Aite-Novarica Group

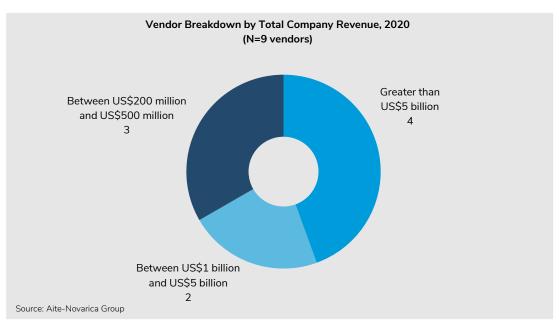
KEY STATISTICS AND PROJECTED DEPLOYMENTS

This section provides information and analysis on key market statistics related to the vendor market.

ANNUAL REVENUE ESTIMATES ANALYSIS

The U.S. cash management vendor landscape is composed of established players with strong revenue streams and financial viability. The smallest player generates greater than US\$200 million in annual revenue. Even newer entrants to the space are not startup companies but rather established vendors successful in other areas that are expanding their capabilities. While some non-U.S. players are looking to penetrate this market, it is not common to see emerging fintech companies entering it as anything more than a complement to existing offerings. It is an industry with high barriers to entry, given banks' focus on vendor experience and a proven track record (Figure 1).





CLIENT BREAKDOWN BY TYPE

Most of the technology providers profiled in this report target their corporate cash management offerings at all sizes of banks; however, their levels of success within each asset segment often vary. For example, the core banking providers have seen great success to date in cross-selling their cash management offerings to existing core customers and serving the majority of smaller banks with less than US\$9 billion in assets (those beyond the 100 largest banks by asset size). In contrast, others have successfully sold their single-platform strategy that serves consumers, small business, and corporate customers. Other point solution providers, such as Q2, while also serving smaller banks, have seen greater success targeting the largest banks as well as commercially focused smaller ones. Finally, non-U.S. providers most often leverage their modern platforms and rich functionality to attract the largest banks and those looking for something different in the market (Figure 2).

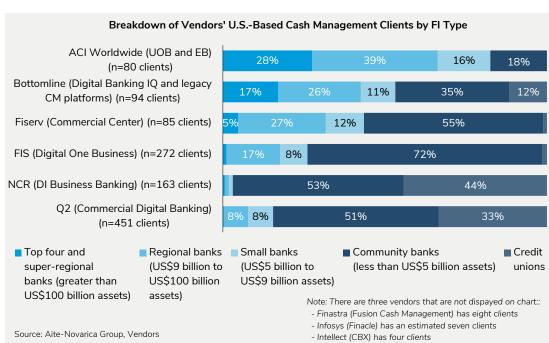


FIGURE 2: BREAKDOWN OF VENDOR'S U.S. CLIENT BASES BY FI TYPE

NUMBER OF NEW CONTRACTS SIGNED

Approximately 94 new U.S. bank cash management contracts were signed with the leading technology providers profiled in this report during 2020. While the interest and

level of urgency for replacement has increased significantly in the last few years, and especially as a result of the COVID-19 pandemic, the numbers don't completely reflect it. Much of the U.S. was at a standstill during the first half of 2020 due to questions about the pandemic's implications. Workforces went remote, and replacement of large banking systems was not top of mind. Instead, banks were focused on adding the most urgent capabilities that customers needed, such as automating the application process for the Paycheck Protection Program (PPP) and tools to enable remote work. However, during the second half of the year, while the pandemic was still in full force, most of the panic subsided. Banks once again began looking forward and investing in the "new normal" that was quickly being shaped for the industry. It was at that time that new cash management contracts were being signed at an increasing rate. The level of urgency for faster digital transformation was at a high, and the differences between banks that had been investing in digital channels and those that hadn't had never been clearer. So, while the numbers are lower than the prior year, demand and need were actually higher, as the numbers primarily reflect less than a year of buying (Figure 3).

Number of New Cash Management Contracts Signed by U.S. Banks With a Leading Provider, 2018 to 2020 (Excluding small-business-only platforms) 127 99 94 2018 2019 2020 Source: Aite-Novarica Group

FIGURE 3: NEW CONTRACTS SIGNED

Figure 4 shows responses from the vendors when asked for the average number of new U.S. cash management contracts signed over the last three years. The numbers include only contracts for new deployments and not the addition of new modules. These

numbers also only count deployments of the middle-market and large corporate cash management solutions profiled in this report and not the small-business-specific offerings of any of the vendors.

Most of the vendors (five) averaged fewer than 10 new cash management client wins each year over the last three years. However, four vendors were able to surpass that, given their greater penetration among smaller banks and thus larger target markets. The average 2020 contract length has held steady at five years.

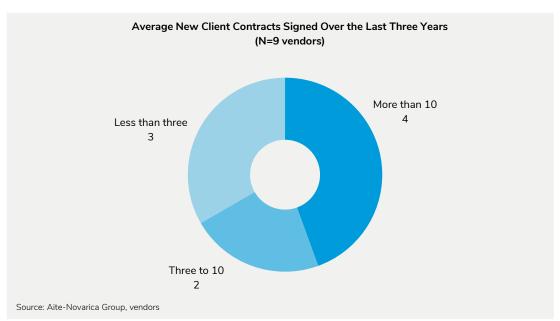


FIGURE 4: AVERAGE NUMBER OF NEW CONTRACTS SIGNED

FORECAST MOMENTUM

Aite-Novarica Group forecasts the market will see a continued rise in cash management platform replacements by U.S. banks and credit unions over the next few years. This increase will be due to pent-up demand and a greater urgency to better meet new client expectations, and correct deficiencies with legacy platforms made obvious as a result of the pandemic. Leading technology providers already see this increased demand and opportunity compared to two years ago (Figure 5).

FIGURE 5: VENDOR OBSERVATIONS



In addition to pent-up demand and new customer expectations, many banks are also becoming more commercially focused as a result of potential fee-based revenue opportunities that come along with it. This, too, is driving a growing number of cash management replacements, especially by smaller institutions. Platforms that are "good enough" are no longer sufficient for banks that want to enjoy greater success with commercial clients. The trend toward more commercially focused banks is likely to continue over the next few years (Figure 6).

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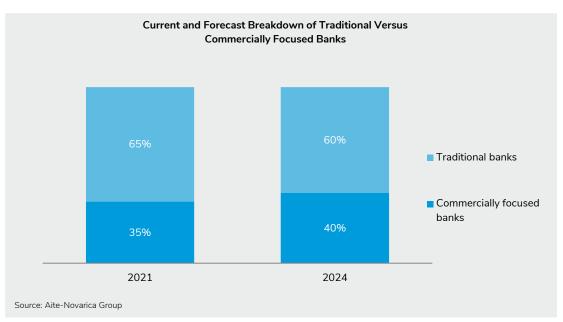


FIGURE 6: FORECAST OPPORTUNITY GROWTH WITH COMMERCIALLY FOCUSED BANKS

Aite-Novarica Group estimates leading vendors will sign approximately 130, 140, and 165 new cash management contracts with U.S.-based banks in 2021, 2022, 2023, respectively. This represents an increase over the high number of deployments in 2019 prior to the start of the pandemic and also takes into account the expected rise in commercially focused institutions. These numbers include only full true cash management platforms and not small-business banking platforms (Figure 7).

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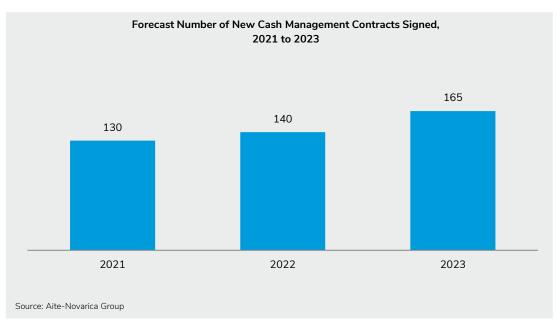
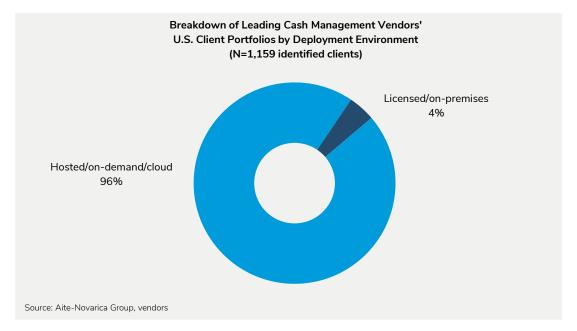


FIGURE 7: FORECAST NEW CONTRACTS TO BE SIGNED

DEPLOYMENT OPTIONS ANALYSIS

When deploying those solutions, the majority of Fls will select a hosted/on-demand or cloud-based option. There has been a steady shift in this direction over the last several years, and it is expected to continue. In fact, with the exception of the largest 20 U.S. banks, most Fls prefer such a deployment over licensing the solution and running it inhouse. Hosted and cloud deployments often lead to faster time to market, lower capital expenditures, and the ability to remain on new releases. Multitenant deployments are also seeing traction. That decision has led to much more predictable and faster deployment timelines for the vendor. Ninety-six percent of the U.S. Fls running one of the solutions profiled in this report are running it in a hosted/on-demand/cloud environment (Figure 8). Given the strong preference for that deployment type in the U.S. market, all of the vendors profiled in this report provide this deployment option, with most offering both options. Only two of the new cash management contracts signed during 2020 were for a licensed deployment environment.

FIGURE 8: BREAKDOWN BY DEPLOYMENT ENVIRONMENT



AITE MATRIX EVALUATION

This section breaks down the individual Aite Matrix components, drawing out the vendors that are strong in each area and how they are differentiated in the market.

THE AITE MATRIX COMPONENTS ANALYSIS

Figure 9 overviews how each vendor scored in the various areas of importance. Each vendor is rated, in part, based on its own data provided when responding to the RFI distributed by Aite-Novarica Group as well as on product demos and follow-up discussions as part of the Aite Matrix process. Ratings are also driven by the reference customers of the examined vendors along with analyst knowledge of the space to support a multidimensional rating.

Vendor Client Client Product Vendors stability strength service features Q2 Legend: BEST IN 1 91% to 100% CLASS 80% 84% 87% 81% to 90% 86% 82% 81% 65% to 80% INCUMBENT/ 88% 86% 84% Less than 65% **EMERGING** 92% 83% 87% 90% 90% 84% 89% 91% 84% 91% 83% Source: Aite-Novarica Group

FIGURE 9: AITE MATRIX COMPONENTS ANALYSIS BY HEAT MAP

Vendor Stability

The cash management vendor landscape is a stable one, composed of established players with strong financials and growth rates. The smallest player generated over US\$200 million in revenue during its last fiscal year, with most vendors generating more than US\$1 billion in revenue. Not surprisingly, all vendors profiled in this report scored well in this area. The components within this category driving the greatest differences across vendor scores are perceived knowledge and vision of the U.S. market and customer feedback on the quality of the management team category.

Client Strength

Successfully attracting and retaining new customers is critical to success in the cash management technology industry. Doing so is no easy task given increased competition and more demanding customers. Banks expect modern open platforms with robust functionality, intuitive UIs, and a forward-looking roadmap. This category evaluates vendor strength based on important factors such as a vendor's total number of U.S.-based clients, the diversity of those clients across customer segments, a proven track record with large banks, average number of new contracts signed over the last three years, client retention and feedback from customers regarding their likelihood to replace their solution, and vendor reputation. Q2 finished second as it continues to gain momentum with larger banks while also leveraging its strong relationships on the consumer banking side for cross-selling.

Client Service

The scoring of this category largely depends on vendor-provided information on service-level agreements and support provided as well as on client feedback about each vendor's ability to deliver on promises and provide high levels of service and a positive cost value. This is a key area of differentiation across the vendors. While some struggle to meet timelines and are challenged by large organizational structures and/or fast growth, others have shown tremendous improvement in this area compared to prior evaluations. Client references were asked about overall service levels, vendor communication, delivery on promises, and whether or not they felt their voice was being heard. Those scoring highest in this category also have strong customer advisory boards and localized support.

Product Features

Innovation is on the rise within the cash management industry as more tech-savvy clients pressure their banks and ultimately the technology providers to enhance their capabilities from both a usability and functionality standpoint. This category considers feedback from clients regarding the robustness and breadth of the functionality within each vendor's cash management offerings. It also measures important factors such as overall solution usability and intuitiveness (based on both client feedback and Aite-Novarica Group analyst observations), the overall robustness of its functionality, and the vendor's ability to stay ahead of the curve with forward-looking capabilities and initiatives, such as progress with the build-out of fintech marketplaces, embedded

machine learning and predictive capabilities, forecasting/corporate liquidity management, and RTP with request-to-pay capabilities. Q2 leads this category.

THE AITE MATRIX RECOGNITION

To recap, the final results of the Aite Matrix recognition are driven by three major factors:

- Vendor-provided information based on Aite-Novarica Group's detailed Aite Matrix RFI document
- Participating vendors' client reference feedback or feedback sourced independently by Aite-Novarica Group
- Analysis based on market knowledge and product demos provided by participating vendors

Figure 10 represents the final Aite Matrix evaluation, highlighting the leading vendors in the market.



FIGURE 10: 2021 CASH MANAGEMENT AITE MATRIX

Best-in-Class Vendors: Q2

Q2: Q2 has also held onto its best-in-class title from last year due to its continued
focus on innovation and overall platform usability. Its fast growth in recent years has
created some growing pains, but overall, it offers the market a strong offering with a
client base that remains loyal and excited about its many initiatives.

BEST-IN-CLASS: Q2 SOFTWARE INC.

Austin, Texas-based Q2 was founded in 2004 and markets itself as a "leading provider of secure, cloud-based digital solutions that transform the ways in which traditional and emerging financial services providers engage with account holders and end users." Its digital banking offering serves consumers, small businesses, and corporations, all from a single platform. The vendor has seen tremendous growth over the last few years in both its client base and annual revenue. Its revenue during the fiscal year ending December 31, 2020, was US\$402.75 million, up 28% from the previous year.

Q2's roots are in consumer and small-business banking; however, with the combination of increased investment and the help of critical partnerships with commercially focused banks, it has been able to build out its banking platform over the last several years to also meet the needs of corporate customers and to become a leader in the cash management technology space. The vendor made a smart decision a few years ago to shift away from offering the market two package options to meet the needs of business and corporate customers to a single commercial banking suite, called Q2 Commercial Digital Banking. This offering scales to meet the needs of the smallest microbusinesses up to the largest corporate customers and enables its FI clients to more easily grow with customers as they become more sophisticated in their needs. At the same time, it also simplifies the vendor's development process and market messaging.

Aite-Novarica Group's Take

Q2 is the vendor to watch from a cash management innovation standpoint. It was one of the first of the cash management providers to build out a fintech marketplace and has since made smart acquisitions over the last few years that have enabled its offering to deliver value beyond traditional banking. Its acquisition of PrecisionLender, in particular, and the strong analytics and pricing capabilities that came along with it, have given the vendor an edge over many of its competitors in its ability to tightly integrate cash management and lending, as well as identify opportunities, efficiently cross-sell products, quickly onboard customers to them, and determine their impact from a relationship profitability standpoint. Such acquisitions have also enabled the vendor to offer a different value proposition to different types of prospects. While its delivery of consumer-to-large-corporate-customer digital banking functionality from a single platform still resonates with many institutions, especially smaller ones, its breadth of capabilities across banking, lending, and onboarding are appealing to a new set of banks

recognizing the importance of adopting that type of strategy as the definition of banking and expectations for a seamless experience across products continue to increase. While the vendor's success continues to primarily be with large regional and small Fls, it continues to strengthen its brand among larger institutions. Additionally, PrecisionLender's success with large banks (including one of the four largest banks) may also result in this vendor moving further upmarket with its Q2 Commercial Digital Banking platform. There are currently more than 150 banks running the PrecisionLender platform to which other Q2 products may now potentially be cross-sold.

Basic Firm and Product Information

Headquarters: Austin, Texas

Founded in: 2004

Number of employees: Approximately 2,000

• Name of primary cash management solution: Q2 Commercial Digital Banking

- Key financial information: Q2 is a profitable company that generates approximately US\$400 million in revenue. The company reinvests 20% to 25% of revenue back into R&D.
- Target customer base: Q2 has historically broken its client base into three key customer segments: Tier-1 (more than US\$5 billion in assets), Tier-2 (US\$900 million to US\$5 billion), and Tier-3 banks (less than US\$900 million). However, as stated, PrecisionLender's success with the largest banks may also result in the vendor choosing to expand its primary market to also include those banks in the future.
- Number of clients: There are currently 450 U.S.-based banks running Q2's cash management offering. Approximately 8% of its clients have greater than US\$9 billion in assets. Approximately 65% of its clients are on the current versions of its platform. Its largest client running its full cash management platform has US\$55 billion in assets. Approximately 75% of its 2020 contracts were to FIs already using another Q2 product.

Top four banks: Zero

Super-regional banks: One

Regional banks: 34

Small banks: 35

Community banks: 230

• Credit unions: 151

Number of new cash management contracts signed per year:

• 2019: 55 (24 were credit unions)

2020: 27 (Seven were credit unions)

- Percentage of total U.S.-based cash management clients that have deployed its full cash management suite (not just one or two modules, such as ACH or wires): Approximately 55%
- Global footprint: Q2 Commercial Digital Banking is sold only within the U.S.
- Implementation options: Q2 Commercial Digital Banking can be deployed either in an on-site licensed environment or as an on-demand or cloud-based solution.

Differentiating Features and Functionality Profiled in Product Demo

- Leveraging PrecisionLender's capabilities within its cash management platform: Many commercial banking relationships begin on the credit side. By leveraging its recently acquired onboarding capabilities, along with the pricing and analytics capabilities within PrecisionLender, Q2 clients are in a great position to not only cross-sell treasury products at the point of new client acquisition, but also to identify opportunities. Andi, the digital assistant built on top of PrecisionLender, observes missed opportunities and makes recommendations to bank relationship managers. For example, it can point out the treasury management products the customer does not yet have, as well as identify which products would be profitable by calculating the impact of adding and removing products within a cross-sell opportunity to determine overall relationship profitability.
- Demo setup tools: Bank sales teams can select from three out-of-the-box templates when demoing their cash management capabilities to different size clients. Templates can be further personalized by simply checking and unchecking functionality boxes to include only those capabilities of greatest interest to the prospect. New clients experience the FI digital banking offering in their production environment via demo mode. This allows FIs to configure profiles that match the needs of each client and provide their new clients with a real-life preview of what it

will be like to be a client at that FI. This will help FIs compete and win in the market and remove the challenges associated with maintaining a separate demo environment.

• Business and treasury onboarding: Once a prospect determines interest in becoming a client, the banker can electronically onboard that prospect with autopopulated information (if the bank has it), digital document upload, and DocuSign. As such, this capability offers complete end-to-end workflows that include full document management capabilities to onboard new and existing customers with new treasury management products and services. These onboarding capabilities are integrated with Q2's digital banking platform out of the box, while also having the ability to integrate with other treasury management back-office systems and platforms.

Top Three Areas of Focus for Enhancements Over the Last Six Months

Recent Q2 enhancements fall into three key categories. Some of these enhancements have been described in greater detail in the demo section above as well as in the next online UX section.

- Functionality (high-volume account landing page, international money transfer)
- Acquisition and onboarding
- · Integrated small-business digital lending

Enhancements to Online UX

Continuing to improve UX is a big part of Q2's strategy for product enhancement. In doing so, some key functional improvements were recently made to the solution that improve the platform's overall usability:

- High-volume account landing page: This alternate landing page has been created
 for those businesses with hundreds to thousands of accounts. This view allows for
 better usability and performance, and it features natural language search, ondemand account grouping, filters, and high-volume data fetch optimization.
- International money transfer: This enhanced feature enables those businesses performing international payment transactions to see real-time rates (from Wells Fargo) and more easily begin the initiation process. Rates can be locked in once the

necessary approvals are received within the customer organization. Additionally, more sophisticated tiers for international wire FX rates, and integrated SWIFT/BIC lookup and IBAN validation features have been added.

- Commercial dashboard shortcuts and widgets: Additional widgets have been
 added, allowing specific commercial personas to more easily complete transactions,
 navigate the portal, and access the transactions they perform most frequently, such
 as approvals, favorite reports, FX rate lookup, positive pay item details, decisioning,
 and access to unlock locked logins.
- Integrated payables: ACH and wires have been rolled out. Cards will be rolled out in an upcoming release.

Embedded Machine Learning and Predictive Analytics Capabilities

Q2 Commercial Digital Banking leverages embedded machine learning capabilities in several ways. First, its Q2 Sentinel and Patrol products leverage machine learning for security and fraud detection. Second, its Q2 SMART marketing product leverages it to intelligently create targeted campaigns. Lastly, PrecisionLender leverages data and machine learning to provide advice to FI relationship managers on deal pricing and structure.

Enhancement and extension of the platform's machine learning and predictive analytics capabilities are also an important part of the vendor's product roadmap. The pricing capabilities within Q2 PrecisionLender will be extended to include treasury management pricing by the end of 2021. Additionally, machine learning will be leveraged to provide dynamic personalization to enhance the UX.

API Strategy

The Q2 Innovation Studio offers Q2 clients the same tools the vendor uses internally. By completing the Q2 SDK training, FI developers are granted access to the full set of Q2 APIs, receive coding certification, and can submit their extensions for code review, deployment, and support. The vendor is also working closely with a number of third-party vendors that are developing code extensions on behalf of Q2 clients that don't have the staff or the proclivity to create their own. Further, as Q2 continues to build out its Partner Marketplace strategy, Q2 clients will also have the ability to review not only Q2 offerings but also those built by other Q2 clients, fintech companies, and vendors,

thereby creating a free exchange of ideas across the marketplace ecosystem and developers' community.

Fintech Marketplace Creation

Q2 has a strong strategy around creating a fintech marketplace for its FI clients and fintech partners. FIs can partner with the fintech companies of their choice or select from a growing number of referral and reseller partners maintained by Q2. Its FI clients are given free access to its growing Partner Marketplace maintained by the vendor. By doing so, the FI can select any or all of the available fintech company capabilities and make them available directly to their business clients for subscription. Any subscription revenue earned is split three ways among all parties involved, including the FI, Q2, and the fintech company. The vendor also makes it very easy for fintech companies to join its Partner Marketplace. Through the Partner Accelerator program of its Q2 Innovation Studio, fintech companies can leverage the vendor's APIs or its SDK to embed their solution into the digital experience beyond single sign-on. As an example, an accounting provider could create a cash flow widget that could be placed on a dashboard along with bank account balances. As such, fintech companies can quickly have their capabilities live and immediately available to the FIs and their clients.

The Q2 Partner Marketplace was launched in March 2020 with one FI and two fintech companies. Today, the vendor has 95 fintech companies in its future pipeline.

Key Roadmap Items

- Dynamic personalization: Components of the UX will dynamically change based on identified account holder traits to provide easy access to next-best-action functionality.
- Treasury management pricing: The vendor will be extending the pricing capabilities within PrecisionLender to also include treasury management.
- Real-time payments: Q2 is developing an end-to-end payment workflow for business-to-business payments that starts with RTP and includes all of the new RTP message types.
- ERP integration: Q2 is working with partners to establish API-to-API connections with ERP and accounting systems that are used within businesses. This will allow

transaction data to flow seamlessly between the bank and ERP solutions to support payment initiation and cash reporting.

• Innovation Studio: The vendor will continue to build out its fintech partnerships and will be looking to also include fintech companies able to provide capital markets (i.e., buying derivatives and swaps) and international capabilities.

Client Feedback

Q2 continues to grow its brand and reputation as a leading U.S. cash management technology provider, and it continues to receive positive feedback from both banks and prosects about its UX and forward-looking roadmap. Many of its smaller banks select it not only for the robustness of its capabilities and ease of use but also for the ability to serve consumers to large corporations from a single platform. Its growing number of larger bank clients that tend to have more siloed organizational structures and thus often different decision-makers have less of a need for the single-platform structure and instead note the openness of the platform and the vendor's focus on innovation. They see the platform as a strong hub from which it can easily integrate with Q2 partners as well as other third-party and homegrown solutions of their own.

As stated, clients describe the platform as intuitive and easy to use both online and via a mobile device. Its administrative module and client setup capabilities were described as intuitive and icon-driven. Desired capabilities can be reached in fewer clicks than some other platforms.

Clients really value Q2's Partner Marketplace with integrated fintech companies. Integration can be very costly for a bank, as is due diligence and vendor management. Having the marketplace eliminates a lot of the heavy lifting for banks and saves them money. While some clients would like to see more business-focused fintech companies added to the partner list, they feel that those fintech firms selected to date are strong. In fact, a growing number of clients are taking advantage of the receivables capabilities provided by Autobooks, and clients appreciate Q2's willingness and encouragement for all clients to bring and suggest potential partners to them. The Partner Marketplace is also being leveraged to fill some product gaps identified by clients, such as the need for more robust international wire capabilities. However, one larger bank client would have liked to see the vendor move forward with a partner for both integrated receivables and payments capabilities for larger corporations. While that bank has had to instead find its

own partners to meet those larger corporate customer needs, it is confident that Q2's availability of APIs and SDKs will make integration easier when needed.

Several clients state Q2's recent acquisitions have strengthened the overall value of the platform. They view the vendor as forward-looking with a roadmap moving in the direction they want to go. They also describe the vendor as a true partner. Unfortunately, while Q2 has a great product and has grown tremendously the last few years, in some ways, some clients also feel the vendor has become a victim of its own success. While clients still feel the product is top notch and a great deal of focus continues to be placed on enhancing it and making sure what is delivered is done correctly, Q2 resources are being pulled in a lot of directions, and resources are spread thin. The vendor has also experienced some internal turnover, and new employees require training and time to ramp up. Some delivery dates have been missed, and some enhancements are not moving along as quickly as some clients would like. Some areas in particular in which clients would like to see the vendor moving a little faster include integrated payables and real-time payments, both of which are high roadmap priorities for the vendor. Integrated receivables and international ACH also came up as gaps for larger corporate end users. While support responsiveness has declined, clients are quick to state that when they do deliver, the new capabilities are addressing the right problems, and the vendor continues to listen closely to customer requests. Clients also feel that initiatives around the marketplace and SDKs should help the vendor move faster with enhancements going forward. Q2 continues to actively solicit client feedback, and the client advisory group has a strong voice.

Finally, client references unanimously stated that if they had to do it over again, they would once again select Q2 for its innovation, for its willingness to listen, for being a true partner to its clients, and for the single platform for consumers up to large corporate clients. From a pricing standpoint, clients also feel they are getting a lot of value for the price, as they view Q2 as a leader in the space. Table C displays the vendor's strengths and challenges.

TABLE C: KEY STRENGTHS AND CHALLENGES—Q2

STRENGTHS	CHALLENGES
Single platform to serve consumers to large corporations	Some resources are spread thin due to fast growth.
Innovative initiatives with forward- looking roadmap	Some larger clients would like to see the vendor move faster with corporate integrated receivables and payables capabilities.
Smart investments that have enhanced the overall value of its offering	

Source: Aite-Novarica Group

CONCLUSION

Buyers:

- Banks recognize the importance of delivering a modern and robust digital experience to their customers. This recognition is leading to a growing number of platform replacements as banks look to deepen client relationships and enhance their opportunities for cross-sell and differentiation.
- While competing priorities and inertia are holding back some banks, those not investing in digital transformation will face challenges remaining competitive in the future.
- Vendor technology platforms have improved considerably over the last few years.
 While the core capabilities are similar across platforms, differences exist across their levels of innovation, focus on service, and ability to deliver on promises. Take the time to closely examine each platform and its roadmap, while also leveraging feedback from client references, to select the best partner for your organization.

ABOUT AITE-NOVARICA GROUP

Aite-Novarica Group is an advisory firm providing mission-critical insights on technology, regulations, strategy, and operations to hundreds of banks, insurers, payments providers, and investment firms as well as the technology and service providers that support them. Comprising former senior technology, strategy, and operations executives as well as experienced researchers and consultants, our experts provide actionable advice to our client base. The quality of our research, insights, and advice is driven by our core values: independence, objectivity, curiosity, and integrity.

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