AitéNovarica

JUNE 2023

AITE MATRIX: U.S. CASH MANAGEMENT TECHNOLOGY PROVIDERS

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

Q2

IMPACT REPORT

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INTRODUCTION

The cash management industry and the technologies supporting it have become a central focus for many banks. Corporate treasurers are more demanding than ever before and forcing the hand of their primary FIs to open their platforms, integrate more tightly with third-party systems, and offer more tools to help them effectively and efficiently manage their finances. Platform extensibility is critical.

These factors, coupled with a challenging economic environment, a regional bank crisis, and the growing presence of fintech companies, are driving significant change within this industry. This change requires increased focus and investment in digital capabilities and experiences, evolving strategies, and new skillsets.

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

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 FI 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 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 list is by no means exhaustive. Firms looking to undergo a vendor selection process should conduct initial due diligence before assembling a list of vendors appropriate for their unique needs. Table A presents basic vendor information for the participating solutions.

COMPANY	HEADQUARTERS	FOUNDED	TARGET MARKET	SAMPLE CLIENTS
Bottomline	Portsmouth, New Hampshire	1989	FIs with over US\$5 billion in assets or those with a strategic focus on commercial banking	Citizens Bank, Regions Bank, CIBC, Fulton Financial Corporation, Frost Bank
Dragonfly	New York	2022	Banks with US\$2 billion to US\$500 billion in assets for its full platform and banks with greater than US\$500 billion assets for individual modules	Wells Fargo, TD Bank, Associated Bank, Santander, East West Bank
FIS	Jacksonville, Florida	1968	Community, regional, and super-regional U.S. banks	Southern First Bank, Popular Bank, Plains Capital Bank
Fiserv	Brookfield, Wisconsin	1984	Banks and credit unions with assets of US\$5 billion and above	Northwest Bank, West Teas National Bank, Tri Counties Bank, Sunflower Bank, Woodforest Bank

TABLE A: EVALUATED VENDORS

COMPANY	HEADQUARTERS	FOUNDED	TARGET MARKET	SAMPLE CLIENTS
Infosys Finacle	Bengaluru, India	1981	Large and super- regional banks (over US\$50 billion assets) and regional banks (US\$10 billion to US\$50 billion assets)	Marcus by Goldman Sachs, Bank of the West, Santander UK, ABN Amro, Axis Bank
Intellect	Chennai, Tamil Nadu, India	2014	Tier-1, Tier-2, and large Tier-3 banks, globally	CIBC, Canadian Western Bank, BNY Mellon, HSBC
Jack Henry	Monett, Missouri	1976	Community and regional banks	Undisclosed
NCR	Atlanta	1884	Community banks and credit unions	Penn Community Bank
Q2	Austin, Texas	2004	U.S. banks and credit unions with over US\$750 million in assets	First Citizens, Synovus, Texas Capital, Valley Bank, Texas Security Bank

Source: Vendors

THE MARKET

The following market trends are shaping those priorities and driving the future of the U.S. cash management market (Table B).

MARKET TRENDS	MARKET IMPLICATIONS
Focus on digitizing the bank rather than digital platforms	Banks are focused on cash management platform excellence as well as broader digital transformation strategies and creating a larger digital ecosystem.
Shift toward hyper- personalization	Segmentation and client journeys are getting more granular and personalized.
Growing presence of fintech companies	Partnering with fintech companies has become table stakes for succeeding in the cash management space for cash management technology providers and their bank partners.
Realization that faster payments is not a strategy in and of itself	Faster payments should not be viewed as a new payment type but as part of a broader integrated payments offering.
Enhanced data transparency, connectivity, and exchange	Corporate customers need easier access to consolidated data. Information reporting modules must be enhanced, and integration with enterprise resource planning (ERP) and other external systems must be strengthened for easier data exchange.
Greater expectations for data analytics and advice	Data and analytics must be embedded throughout bank platforms to better anticipate customer needs, identify cross-sell opportunities, and deliver data-rich insights and actionable recommendations.

TABLE B: THE MARKET

Source: Aite-Novarica Group

KEY STATISTICS

This section provides information and analysis on key market statistics and the forecasted number of new contracts signed over the next three years.

ANNUAL REVENUE ESTIMATES ANALYSIS

The U.S. cash management vendor landscape comprises established players with strong revenue streams and financial viability. Even newer entrants to the space are not startup companies but established vendors successful in other areas expanding their capabilities or divestitures of existing companies. Some non-U.S. players are looking to penetrate this market, but it is uncommon 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).

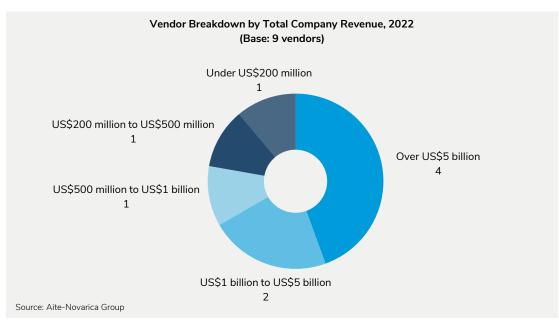


FIGURE 1: ANNUAL REVENUE ESTIMATES BREAKDOWN

NUMBER OF NEW CONTRACTS SIGNED

The number of banks looking to replace their cash management platform continues to rise as competition increases and legacy platforms place FIs at a disadvantage. The market saw a slight slowdown in 2020 due to the pandemic. Momentum has improved since; the market saw approximately 101 replacements in 2022 (Figure 2).

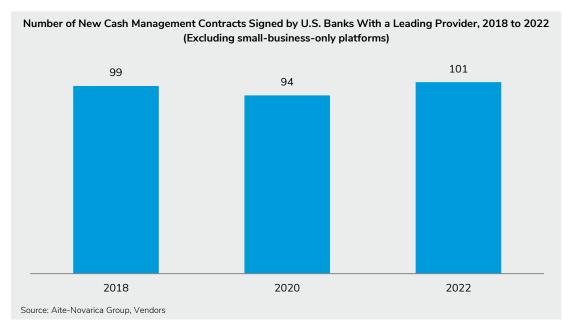


FIGURE 2: NEW CONTRACTS SIGNED

Figure 3 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 only include contracts for new deployments, 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 (seven) averaged fewer than 10 new cash management client wins each year over the last three years. However, some of the vendors targeting smaller FIs were able to surpass that, given their larger target markets. The average 2022 contract length has held steady at five years.

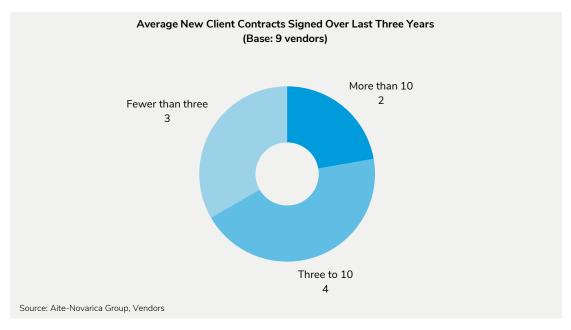


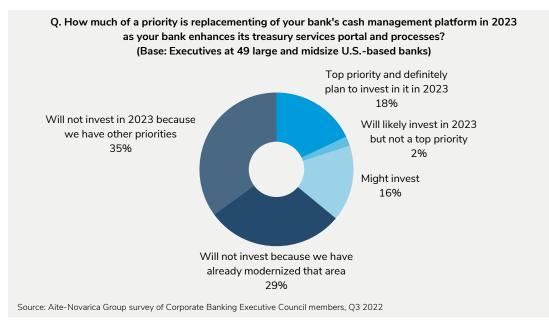
FIGURE 3: NUMBER OF NEW CONTRACTS SIGNED

FORECAST MOMENTUM

Technology providers are noticing increased activity in the market. Aite-Novarica Group expects the increase in the number of cash management platform replacements in 2022 to continue, especially as pent-up demand from the pandemic persists. Customer demands are further driving the need for replacements. Many of the largest banks have already replaced their platforms, and super-regional and several regional banks plan to do so.

A Q3 2022 Aite-Novarica Group survey of 49 large and midsize U.S.-based banks found that 20% of survey participants will likely or definitely invest in a new cash management platform this year, and an additional 16% might (Figure 4).

FIGURE 4: BANK PLANS FOR PLATFORM REPLACEMENT



In addition to pent-up demand and new customer expectations, many banks are also becoming more commercially focused because 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 will likely continue over the next few years (Figure 5). 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 will likely continue over the next few years.

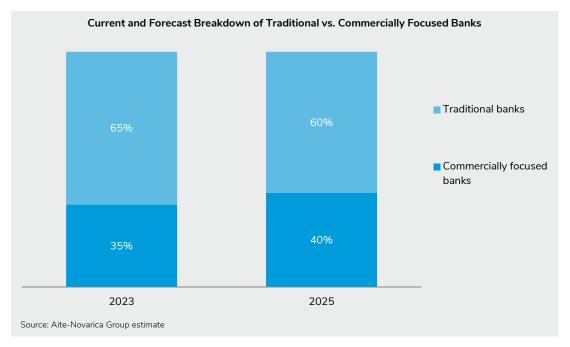


FIGURE 5: GROWTH OF COMMERCIALLY FOCUSED BANKS

Aite-Novarica Group expects the number of platform replacement contracts signed to increase by about 3% this year and about 5% thereafter, given the growing demand and urgency for digital transformation to be competitive (Figure 6).

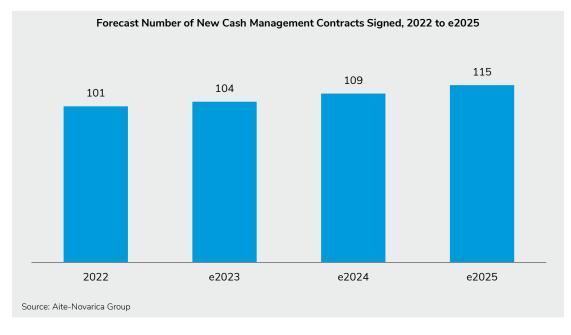
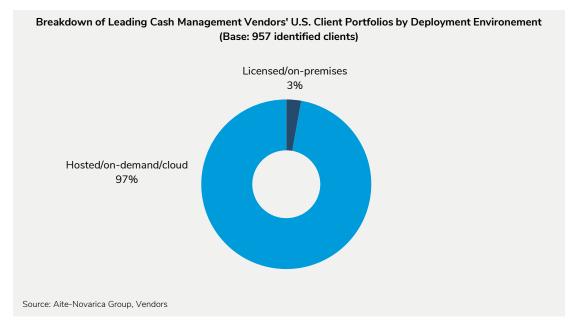


FIGURE 6: FORECAST NUMBER OF CASH MANAGEMENT CONTRACTS SIGNED

DEPLOYMENT ANALYSIS

Some of the largest banks prefer a licensed deployment environment, but the number continues to decline. In fact, several of those with licensed deployments are beginning to invest in the cloud and see it as the industry's future. All new cash management deployments during 2022 have been hosted in a vendor data center or cloud environment. Of the 957 clients of the vendors profiled in this report, 97% of the deployments across their cash management client base are currently in a hosted/on-demand or cloud environment (Figure 7).

FIGURE 7: BREAKDOWN BY DEPLOYMENT ENVIRONMENT



AITE MATRIX EVALUATION

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

THE AITE MATRIX COMPONENTS ANALYSIS

Figure 8 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 and 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 to support a multidimensional rating.

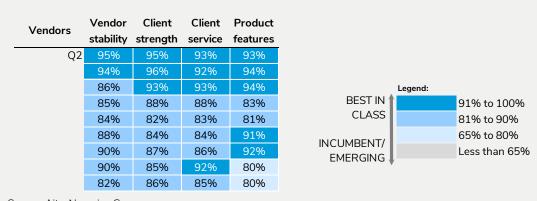


FIGURE 8: AITE MATRIX COMPONENTS ANALYSIS HEAT MAP

Source: Aite-Novarica Group

Vendor Stability

The U.S. cash management vendor landscape is a solid one with established players. There are high barriers to entry, so all providers are stable. Q2 leads this category as best in class, given its strength from a revenue standpoint and high scores for quality of management team, ability to retain talent, and customer satisfaction with investment in research and development. Retaining talent is especially challenging in the current environment but critical to maintaining a satisfied customer base. Its management teams are viewed as approachable, knowledgeable, and engaged.

Client Strength

Technology providers scoring well in this category have a solid cash management client base in the U.S. with high retention rates. They also offer platforms capable of scaling to a broad range of bank sizes and a proven track record. Finally, their bank clients show a strong likelihood to remain on the platform, be satisfied with the relevancy of the product roadmap to their needs, and often state they would choose the vendor again if given the opportunity.

Q2 scored best in class in this category. This vendor has especially strong product roadmaps appealing to a wide range of institutions. For that reason, it is often considered for replacement.

Client Service

Banks desire technology partners that are easy to work with and deliver high levels of service and support. They recognize that issues may arise occasionally but value those partners that offer clear communication and look to quickly resolve problems. They take the blame when needed and don't point fingers. Thus, scoring well in this category requires hyper-focusing on customer experience, communication, and delivering on promises. It also requires strong channels for communication with the vendor and among clients for idea sharing. Technology providers excelling in this area have strong advisory groups and dedicated account/customer success managers.

Q2 finished on top in this category. It has also stepped up its game in this area as it has demonstrated to clients that it is a true partner.

Product Features

Corporate and business customers are becoming more demanding and placing greater pressure on banks to ramp up their capabilities and how they deliver services and information. They rely on technology providers to bridge the gap between market demands and existing offerings. High scores in this category are based on the robustness and scalability of product offerings and client feedback regarding UI, ease of upgrades, and support or customization. It also considers the vendor's roadmap and vision and differentiating capabilities such as embedded machine learning and analytics, the strength of its payment capabilities, and the build out of its fintech ecosystem.

This category had the highest vendor ratings and the greatest variance across the vendors. Q2 scored above 90%.

THE AITE MATRIX RECOGNITION

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

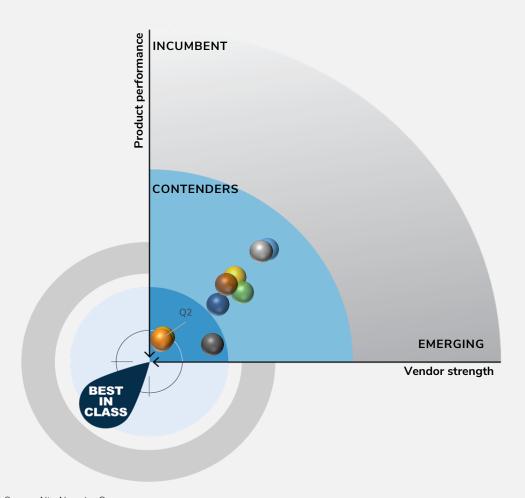


FIGURE 9: 2023 CASH MANAGEMENT AITE MATRIX

Source: Aite-Novarica Group

Best-in-Class Vendor: Q2

This year's overall best-in-class vendors include Q2. Q2 offers solid solutions and received a consolidated score of 94%. It is commonly considered when banks of all sizes consider a platform replacement.

Q2 has been on an upward trajectory over the last few years as it built out its capabilities and won the business of some larger banks. Beyond the value of a single platform to serve consumers, small businesses, and large corporates, the vendor stands out for its innovative approach to the market. It is getting a lot of attention from banks for its fintech marketplace and has made some smart acquisitions in the last few years that have broadened its capabilities in key areas such as onboarding and analytics.

BEST IN CLASS: Q2 SOFTWARE

Austin, Texas-based Q2 Software (Q2) is a publicly traded company (NYSE: QTWO). It describes itself as "a financial experience company dedicated to providing digital banking and lending solutions to banks, credit unions, alternative finance, and fintech companies in the U.S. and internationally." While its initial roots were in retail banking, the company is now also a leader in providing digital and lending capabilities to meet the needs of small businesses and corporate customers.

In April 2022, the vendor launched Q2 Catalyst, an integrated suite of commercial banking solutions consisting of those built internally, acquired, and accessed through partnerships. Q2 Digital Banking Platform, its cash management product, is a part of the Q2 Catalyst suite and was originally released in 2004. It is widely used by Fls of all sizes.

Aite-Novarica Group's Take

Q2 remains a leader in the U.S. cash management space as it maintains a forwardlooking roadmap, high levels of usability and personalization for end-users, and a wide breadth of fintech partnerships. The company has made smart acquisition decisions over the last few years to broaden its offering, enhance its cross-sell ability, and deliver end users a more connected and data-rich experience:

- In 2019, it acquired Precision Lender to enable tighter integration and collaboration between commercial banking relationship managers and treasury services officers to focus on the overall relationship profitability. As will be described in greater detail, new treasury pricing capabilities arm bankers with much-needed assistance with pricing and relationship value implications from adding new services.
- Its most recent acquisition of Sensibill earlier this year adds receipt management capabilities for small businesses to better manage their expenses. It can be offered through its digital banking platform. Expense management is a common area for small business/fintech company partnerships, so helping banks fill this gap to retain that business is important.

The broadening of its product portfolio has better positioned Q2 to help its clients of all sizes better compete with industry leaders. It also enables it to continue moving upmarket to win larger banks' business. Its client base is growing quickly, and the vendor is commonly considered by any bank looking to replace their cash management platform.

One area where this vendor stands out from the pack is with its fintech partnerships. Through its Innovation Studio, Accelerator, and Marketplace programs, the company has over 130 partners pre-integrated into its digital banking platform, 40 of which are part of its Marketplace for end-user consumption (business and consumer). These partnerships recognize the growing need for FIs to partner with fintech companies to win and retain business customers and provide a more efficient way for them to do so. Q2 not only vets and narrows down the large fintech ecosystem on their behalf but also eliminates the burden of integration. Banks can determine which fintech capabilities to offer each client and enable them to purchase/enroll in the fintech offerings within the online banking platform in an app-like experience. Once purchased, the capabilities can immediately be accessed within the online portal. Through its Innovation Studio (launched in June 2021), fintech companies can leverage Q2's software developer kit to quickly (in a matter of days) integrate their solution into Q2's platform.

Basic Firm and Product Information

- Headquarters: Austin, Texas
- **Founded in:** 2004
- Number of employees: 2,300
- Name of primary cash management solution: Q2 Digital Banking Platform
- Key financial information: Q2 is a profitable company that generated approximately US\$565.7 million in revenue during 2022, representing a 13% increase over the prior year. The company reinvests 16% to 25% of revenue back into R&D.
- **Target customer base:** Banks and credit unions in the U.S. with more than US\$750 million in assets.
- Number of U.S.-based cash management clients: 216; all of its clients are running the latest release of its offering. Average cash management client tenure is about eight years; annual client retention in the last three years has been over 90%.
- Number of new cash management contracts signed per year):
 - 2022: 27 U.S. banks and three credit unions
 - 2021: 21 U.S. banks and four 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): 100%
- **Global footprint:** No banks or credit unions outside the U.S. are running Q2's cash management platform.
- Implementation options: Q2 Digital Banking Platform is not available for an onpremises deployment. Instead, bank and credit union clients must deploy it in a hosted data center or hosted on a private or public cloud.

Differentiating Features and Recent Enhancements

- **Dynamic personalization:** FIs can create a tailored UX based on their data about each business customer. These capabilities significantly enhance the solution's UX by enabling personalized dashboards that align with specific customer personas, roles, or individual business users to ensure alignment with their needs.
- Instant Payments Manager: This new solution helps FIs manage instant, end-to-end payment workflows by supporting the full instant payment message types and capabilities of the RTP/FedNow payment rails, including request for payment, RFI, credit transfer, and confirmation message types. Instant Payment Manager capabilities will help billers and payers improve the efficiency of accounts receivable and payable processing by embedding invoice data within the workflow.
- Treasury Pricing: The Treasury Pricing module is an extension of the Q2 Relationship Pricing solution. It enables treasury management officers to collaborate with relationship managers for 360-degree views of clients and price treasury products to improve client profitability. The Andi digital assistant recommends pricing and things to consider. It highlights areas where no fees are being charged and the impact of adding new services.
- Test Drive: This new capability arms FI sales teams with the ability to create personalized demos they can leverage to show and enables prospects to view and test out the platform in a walled-off production environment. Bankers can quickly determine which capabilities are seen and for how long to replace less effective HTML and video sales tools.

• ACH Pass Through: This provides end users with a summary of transactions and the ability to search and click to see full details, thereby creating greater efficiency for large corporate customers with a high volume of transactions.

Embedded Machine Learning and Predictive Analytics Capabilities

Machine learning within the platform is used to detect potential fraudulent activities, launch personalized marketing campaigns, and identify opportunities to improve the profitability of customer relationships.

Key Roadmap Items

- **API integration:** Real-time integration with accounting and ERP solutions via APIs for payment initiation and data exchange.
- **Mixed payables:** Capability to accept mixed payment files that are visible in the digital banking platform and can be sent to the FI back-office for processing.
- **Simple funds:** Electronic payments workflow designed for smaller businesses with limited familiarity with traditional electronic payments.
- **Continued addition of new fintech partners:** The vendor averages 10 to 20 every few months.

Client Feedback

Clients most often select Q2 for its UX; its single platform to serve consumers, small businesses, and large corporations; its fintech partnerships; and because they view the vendor as forward-looking. Clients often comment that the vendor is a true partner and that its focus on a limited product set enables greater investment and innovation.

In the last couple of years, the vendor has been able to move further upmarket to win the business of larger banks. The vendor often appeals to these banks because of its willingness to grow with them and build out capabilities as needed instead of an out-ofthe-box offering. Clients describe the vendor and the platform as flexible, and its roadmap largely focuses on enabling banks to move further upmarket to meet the needs of the largest businesses. Customers consider the platform's functionality robust and capable of meeting core end-user needs. Some gaps still exist in the administration module and reporting capabilities, but the vendor is working closely with clients to fill them. The platform is described as easy to integrate with third-party systems. The Q2 Marketplace was stated by many clients as presenting them with many opportunities to better meet client needs, especially small businesses. They see it as a differentiator for the vendor and the FIs partnering with them. The number of fintech partners has grown tremendously in the last few years. Banks can use it to operate more effectively and efficiently, and customers can use it to generate new revenue streams. Many of its customers, especially smaller banks with limited resources, appreciate the many partner options in the Q2 Marketplace and that Q2 has vetted the companies on their behalf. This factor, along with the pre-integration of those capabilities, enables FIs to roll out the additional capabilities quickly to their clients.

Q2 is viewed as a true partner. Its conversions have been strong, even for larger banks. The company has gone through some growing pains, but implementations have improved. Customers appreciate that when the vendor has an issue, it is quick to communicate and share how it is correcting it. The management team is described as engaged and not prone to pointing fingers but looking for solutions.

Clients seem very excited about the vendor's open banking initiative, integrated payables capabilities, and tighter integration with ERPs. They also see a lot of potential for the sales demo tool. While it is viewed as a great tool, it is considered in its early stages, with a great vision of ultimately being able to onboard clients after the demo phase. Finally, the treasury management pricing tool is regarded as a much-needed addition to providing banks with a holistic view that will enable them to better price their offerings. Overall, clients are satisfied with the platform and the vendor and value its initiatives to help them keep up with or stay one step ahead of market needs.

STRENGTHS	CHALLENGES
Fintech partnership/marketplace	Faced some growing pains with implementations but turning a corner
Forward-looking roadmap, dedication to innovation and solution buildout, and strong partner	Perceived to be more of a middle-market and small-business platform despite recent corporate-focused enhancements

TABLE C: KEY STRENGTHS AND CHALLENGES, Q2

Table C displays the vendor's strengths and challenges.

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STRENGTHS	CHALLENGES
Single platform to serve consumers to large corporates with robust functionality	

Source: Aite-Novarica Group

CONCLUSION

Banks:

- Maintaining the status quo and failing to invest in digital transformation will likely lead to your bank falling behind the competition.
- Banks with older legacy solutions should consider replacing their cash management platforms. When evaluating vendor solutions, ensure they have the right functionality to service your client base and any areas you look to for growth.
 Beyond functionality, ensure the UX is modern and flexible with embedded analytics for greater personalization. Finally, look at platform extensibility, an open architecture, a forward-looking roadmap, and a vendor culture that aligns with your organization.
- There is always more work to be done, even among banks that recently replaced their cash management platforms. These banks should work with their technology partners to enhance their integrated payables capabilities, establish tighter integration with ERPs, build out corporate-facing APIs, and establish more fintech company partnerships.

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, leveraging deep insights developed via our extensive network of clients and other industry contacts.

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