

AiteNovarica

APRIL 2022

FEDNOW IS ALMOST HERE

WHAT TO KNOW BEFORE THE
LAUNCH OF FEDNOW

—

PREPARED FOR:

Volanté 

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WHAT TO KNOW BEFORE
THE LAUNCH OF FEDNOW

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EXECUTIVE SUMMARY

As the demand for real-time payments grows, so does the need for financial institutions (FIs) to offer more robust access to faster and more efficient payments. The Clearing House's (TCH's) RTP network laid a solid foundation for use cases and connectivity protocols, but some FIs have been waiting for FedNow before deciding how to move forward. FedNow is finally about to launch.

This paper is about the Federal Reserve's announced plans to develop FedNow, a real-time payment and settlement service with clearing functionality to support faster payments throughout the United States. Key takeaways from the study include the following:

- FedNow creates redundancy in the market, but there is a clear demand for the service from FIs that are still forming their real-time payment strategies.
- Starting in early 2021, over 100 organizations began participating in the FedNow Pilot Program for testing and troubleshooting. Participating institutions have helped to shape various features of FedNow by providing feedback on the user experience, testing adoption roadmaps, and trying out various instant payment strategies.
- With larger banks and smaller banks having very different barriers to entry and customer demand for real-time payments, understanding the differences as well as the similarities among these FIs helps to demonstrate the market opportunity for FedNow.
- Several industries have proved the value of real-time payments and will be early use cases for FedNow. But it is becoming clear that the value of real-time payments is not use case dependent; it is desirable for all payments to be more efficient.
- FedNow extends the recent trend of more payments types becoming available—now nearly double the number of types that were common a decade ago—thus ushering in a true multi-network world for which banks need to prepare.

INTRODUCTION

TCH launched RTP, the first real-time account-to-account payment rail in the U.S., in 2017. A few years later, to the surprise of many industry experts, the Federal Reserve entered the landscape by announcing the development of FedNow. Although the move was unexpected, the Fed held townhalls and comment periods to ensure that the solution would be developed with the input of the business and financial community, and would provide the intended value to the market.

This report is about what is known so far about the FedNow service, now that its launch is imminent, and how banks can use this knowledge to prepare. This includes information about the system features, use cases, and bank strategies that all industry professionals need to be aware of, particularly those at FIs that have not connected to any real-time network to date. The pressure is on to move forward as industry expectations grow and focus around faster and more efficient payments. FIs that are neglecting this have much to lose.

METHODOLOGY

This report draws on the author's in-depth knowledge of the industry and subject matter. It also includes data extrapolated from recent Aite-Novarica Group research, including a quantitative survey of 117 U.S. community banks and credit unions from Q2 2020 and qualitative interviews with U.S. banks.

OVERVIEW OF FEDNOW

In 2019, the Federal Reserve announced plans to develop FedNow, a real-time payment and settlement service with clearing functionality to support faster payments throughout the United States. As the Federal Reserve noted in its press release regarding FedNow, “the rapid evolution of technology presents a pivotal opportunity for the Federal Reserve and the payment industry to modernize the nation’s payment system and establish a safe and efficient foundation for the future.” Now set to release in 2023, FedNow will support a 24/7 real-time payment infrastructure that includes over 10,000 depository institutions. Set to work alongside private-sector providers, FedNow brings some redundancy to the market given the live status of TCH’s RTP, but given its scope, it should also significantly advance instant payments throughout the economy.

After fielding industry feedback, the Federal Reserve has announced core features of the initial services FedNow will provide. A few of these follow:

- Use of ISO 20022
- Flexible adoption standards, including optional “receive-only” participation
- 24/7/365 operations, including access to balance on weekends
- Clearing and settlement capabilities
- Request for payment functionality
- Data security and fraud prevention tools
- Integration of liquidity management tools

HOW FEDNOW FITS INTO THE REAL-TIME LANDSCAPE

As mentioned, FedNow creates some redundancy in the market. However, there is FI demand for the service based on a review of the comments to the Fed’s invitation for public comment as well as Aite-Novarica Group research, which indicates that over one-third of community banks and credit unions are either waiting for FedNow to launch to offer real-time payments or will offer FedNow in addition to another method. Aite-Novarica Group discussions with mid- and top-tier banks indicate that many of these FIs also plan to go live with FedNow when it is available. Businesses generally do not care which rail a payment is settled on, but they do care how fast and efficient the payment

is. As more payment methods are added to the landscape, the need for efficiency as well as value-added differentiated services around those payments is becoming even stronger. Some FIs that were concerned about the needs of banks that were not owner banks of TCH took the initial announcement of FedNow’s development as welcome news. There was fear in the market that the bigger owner banks could make decisions with only themselves in mind. While this fear has been largely dispelled, there is still ample market opportunity and need to expand the use of real-time payments in the market outside the existing methods. Table A shows a variety of domestic payment options, including FedNow, and their positioning in the faster payments landscape.

TABLE A: DOMESTIC FASTER PAYMENT RAILS IN THE U.S.

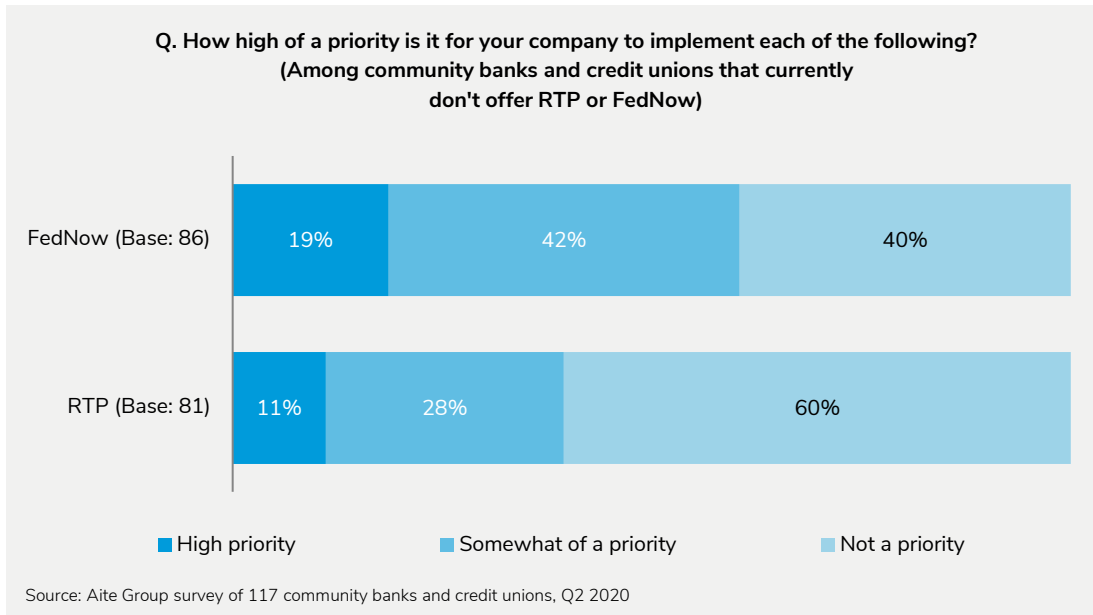
CATEGORY	PAYMENT RAIL	DESCRIPTION	PRIMARY USE CASES
Real-time gross settlement systems	Fedwire	<ul style="list-style-type: none"> Weekdays 7:30 a.m. to 7:00 p.m. ET Same-day cutoffs can vary by bank and location Account-to-account US\$50 million Limits vary by bank 	<ul style="list-style-type: none"> Payments among any combination of consumer, business, small business, or government entity Large-dollar, low-volume, urgent payments
Real-time/instant clearing and settlement rail	FedNow	<ul style="list-style-type: none"> 24/7 Account-to-account US\$500,000 limit 	<ul style="list-style-type: none"> Business to business (B2B), business to small business (B2SMB), business to consumer (B2C), and person to person (P2P) Insurance, utilities, gig economy, payroll, and vendor/supplier disbursements
	RTP	<ul style="list-style-type: none"> 24/7 Account-to-account US\$1 million limit 	<ul style="list-style-type: none"> B2B, B2SMB, and B2C Insurance, utilities, gig economy, payroll, and vendor/supplier disbursements

CATEGORY	PAYMENT RAIL	DESCRIPTION	PRIMARY USE CASES
P2P/crossover payment systems	Zelle and other digital wallets	<ul style="list-style-type: none"> • 24/7 or batch via ACH or RTP • Limits determined by bank 	<ul style="list-style-type: none"> • P2P, B2C, B2SMB, and consumer to businesses (C2B) • Insurance, higher education, class-action payouts, gig economy, and payroll
Other faster payment systems	Same-day ACH	<ul style="list-style-type: none"> • ACH batch • US\$1 million limit 	<ul style="list-style-type: none"> • B2B, B2SMB, business to government (B2G), and B2C • Urgent payments and general disbursements
	Push-to-card	<ul style="list-style-type: none"> • 24/7 • Debit push direct to account 	<ul style="list-style-type: none"> • B2B, B2SMB, B2G, and B2C • Online marketplaces, retail returns and rebates, and lending

Source: Aite-Novarica Group

FIs of all sizes have been active participants in the FedNow pilot. Within this, the needs of community banks and credit unions have been particularly considered. As expected, many of these FIs are awaiting FedNow before implementing a real-time payment rail. In a study at the start of the COVID-19 pandemic, it was found that even though the launch of FedNow now was still a few years away, more FIs in this segment considered FedNow a higher priority than the already-live RTP rail (Figure 1).

FIGURE 1: PRIORITY OF FASTER PAYMENT IMPLEMENTATIONS



A couple of factors are important to consider. First, these FIs are generally laggards in technology adoption due to budget, resources, and customer base. Second, more than 100 of the FIs in this segment have gone live on RTP since the pandemic. Nevertheless, this is still strong evidence that FedNow was an important part of the real-time payment landscape in the U.S. even before all launch details were known, and this importance has only continued to increase.

PILOT PROGRAM

FedNow is currently set to launch in 2023, though to ensure safety and to ease deployment, the Federal Reserve plans to release FedNow in stages. Starting in early 2021, over 100 organizations began participating in the FedNow Pilot Program for testing and troubleshooting. Participating institutions have helped to shape various features of FedNow by providing feedback on the user experience, testing adoption roadmaps, and trying out various instant payment strategies. Beginning in late 2021, testing also included end-to-end implementation. Press releases have stated that 120 participating organizations are now offering advisory positions on topics ranging from roadmaps and integration to onboarding and ISO 20022 specifications.

The pilot program and the number and variety of market players that elected to participate have helped FedNow create momentum and build on the foundation of education and general real-time knowledge that other faster payment rails laid down in the market. When FedNow was announced in 2019, there was still some question in the market of how necessary real-time payments really were. Fortunately, the industry has largely moved past these questions and has matured into a market that is ready to innovate, grow, and adopt new technologies. The pilot program has played an important role in the pre-launch activities and has had a direct impact on use cases and bank strategies.

USE CASES

Instant payment solutions cover a broad range of use cases, many of which have existing private-sector counterparts. FedNow will support account-to-account transfers and consumer-to-business (C2B) bill pay, with further use cases deployed to meet market demands for B2B payments. Account-to-account transfers include instant money transfers between accounts at different FIs, instant loading of prepaid cards or mobile accounts, instant funding or cashing out of accounts, real-time transfers between FIs and brokerage accounts, and corporate fund consolidation into a single account for payroll.

C2B bill pay enables individuals and businesses to pay bills that post to the biller's account immediately, which simplifies account management, avoids late fees, and helps companies manage cash flow. FedNow also features an e-invoicing option for payment requests issued directly to customers, with an end-user interface that provides remittance details to facilitate the transaction.

Several industries have proved the value of real-time payments and will be early use cases for FedNow. These include payroll, utilities, telecom, and insurance. Use cases are also emerging within higher education and healthcare. It is becoming clear that the value of real-time payments is not use case dependent; it is desirable for all payments to be more efficient. Some FIs struggle to explain to clients the value of a real-time payment as a working capital tool. Allowing funds to be sent at a specific moment is valuable to small businesses whose cash flow dictates daily decisions, such as vendor payment timing.

When considering use cases, it is also important to consider the recipient. Businesses that pay consumers need to meet rising consumer demand for better recipient experiences. When collecting bill payments from consumers, request for payment (RfP) for bill pay is a powerful tool that simplifies reconciliation of payments. For more sensitive business relationships, real-time payments can also be an important part of a business's payment strategy.

LOOKING AHEAD

The key to use cases moving forward is to provide businesses with the options needed to compete, be efficient, and offer faster settlement as part of the larger payment strategy. FIs need to shift from payment types and connectivity as offered products to real-time/instant 24/7 payment customer experiences and the accompanying value-added services as the offering. Corporate end users want to navigate the developing multi-network world without concerns about the underlying payment type. They want the FI or payment provider to choose the network based on the desired customer experience and factors such as speed, limits, fraud, reachability, cost, and known payee information. As real-time adoption increases, this type of true any-payment routing and integrated payable capability is going to be much easier with RTP/FedNow because they are both ISO 20022 based and will have similar if not completely interoperable messaging.

BUSINESS STRATEGIES

There is no question that real-time payments are essential to the payment landscape. However, the point in time when adoption and implementation become critical depends on the segment of FI. While the pressure to provide more robust payment services to businesses of all sizes creates urgency across all industry segments, there are still some clear general divisions. Larger banks and smaller banks have different constraints associated with new product development, such as core dependencies and internal resource availability as well as varied understanding of customer demand, and perceiving the differences as well as the similarities helps to demonstrate the market opportunity for FedNow (Figure 2).

FIGURE 2: BUSINESS STRATEGY SEGMENTS



EARLY PIONEERS

Early pioneers have already solved for 24/7 connectivity and will have a more streamlined implementation of FedNow. Early pioneers include many large banks, a lot of TCH owner banks, and forward-thinking smaller banks that have invested early to take advantage of the market opportunity for real-time payments. Moving from a batch environment to an always-on environment can be the biggest hurdle in starting a real-time implementation. This will enable these banks to not only continue to ramp up the real-time payment volume with the existing rails but also to capture new payment volume created from the downstream FIs that will be implementing FedNow. These banks have become more flexible and quicker to market as early adopters of RTP and automation technologies, so implementing FedNow is a logical part of the total payments offerings. Already having connectivity to one real-time network makes it easier to connect to an additional network. Subsequently, many of these FIs will quickly become multi-network innovators, discovering the synergies and opportunities for multiple real-time networks and having the agility to provide robust, flexible payment solutions for their clients.

Contributions of the Early Pioneers

The early pioneers have solved many of the business challenges that FIs of all sizes have to consider before implementing a real-time payment solution. These are some of the technical and business problems associated with launching a new product that early pioneers have solved for:

- Transaction pricing
- End-user experience, including mobile
- Use of request for payment
- Accommodating extended operating hours
- ISO 20022 enablement

Additionally, the pioneer banks have also had to face the business problem of customer adoption of real-time payments. This includes proving use cases, socializing new uses, building go-to-market strategies, and training both the internal and external market. These benefits have a strong influence on the other bank segments as they implement real-time payment solutions.

FAST FOLLOWERS

Midtier banks are often thought of as fast followers in the market, and they make up a large segment of the fast followers. But banks of all sizes are in this category for real-time payments, including some of the largest U.S. banks that are implementing well after launch. These FIs tend to let the large banks and early pioneers go first—to prove the market demand and return on investment (ROI) as well as solve technology kinks—to make their implementations safer and take place with fewer unknowns.

Many of these banks that have implemented RTP still have a large market opportunity to increase adoption. Many are also only receiving on RTP, having solved for half of the real-time payment puzzle. Compared to competitors, these FIs have a lot on the line to quickly close the gaps in payment offerings. The competition includes early pioneers of all sizes, other fast followers, and fintech vendors. Many middle-market clients—the sweet spot for these FIs—are turning to other providers to solve payment pain points, including access to faster and more efficient payments. Implementing FedNow will help these banks compete within the wider financial services landscape and stay on a growth path considering the large market opportunity for faster payments.

MASS ADOPTERS

Small banks and credit unions have had the greatest challenges to modernize and go to market with new and complex payment offerings, and they make up the majority of the mass adopters. However, there is great news for this segment. The flexibility of technology solutions in the market, including payments-as-a-service solutions, is making it much easier for these FIs to access robust technology solutions. Many of these FIs have had a problem with core dependency, but that is quickly changing, as vendors in the market are ready to step in and help.

Looking at the general real-time adoption trends, most of the latest FIs to go live on RTP have been from this segment, from a combination of connectivity through third-party service providers (TPSPs) and the core providers starting to catch up with the market. While most are on receive only, this is expected to change as well. Many FIs in this segment have been focused on and waiting for the launch of FedNow to be able to offer real-time payment capabilities to customers and members. Important for this segment to realize is that all FIs will be expected to offer real-time payment options eventually.

TECHNOLOGY STRATEGIES

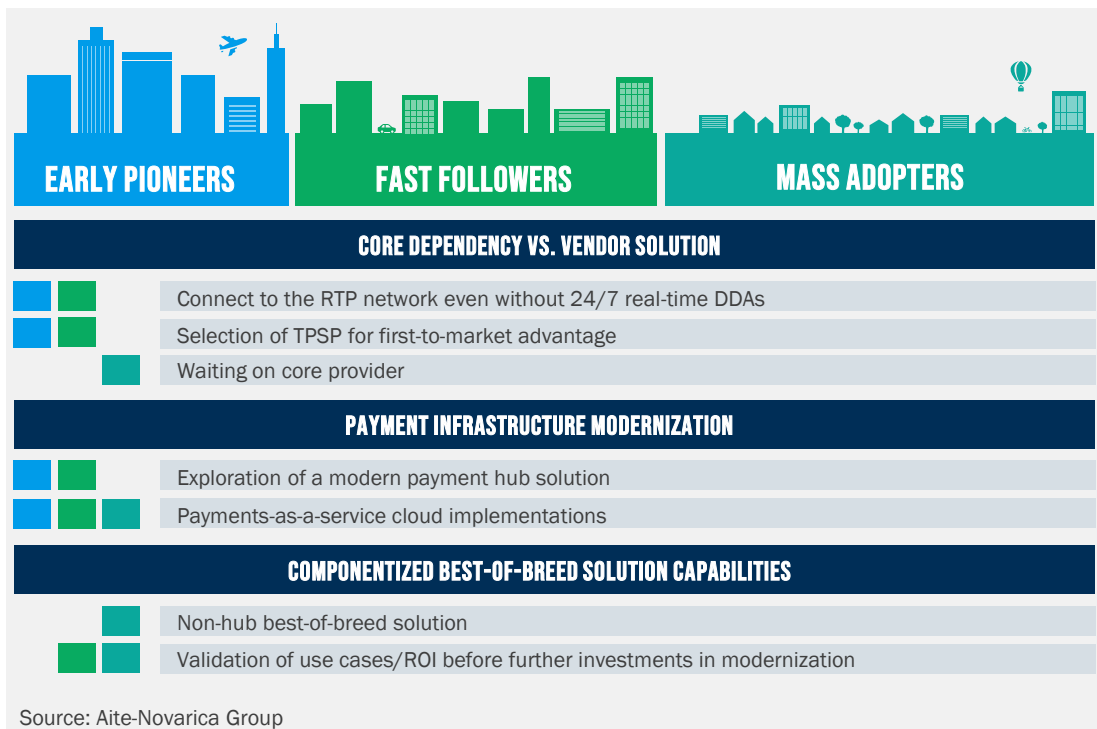
A business strategy is empty without the proper planning and execution of the technology required to implement a real-time payment solution. FIs should consider many factors, including the following:

- **Core dependency vs. vendor solution:** When RTP went live, early pioneer banks desired to offer robust payment services without waiting for their core providers to enable the services. Instead, they found ways around their core to connect to the RTP network even without 24/7 real-time demand deposit accounts (DDAs). Knowledgeable vendor partners with robust solution offerings have been able to fill the gap left by the core providers' lag time. This has provided a clear competitive advantage in the market. Many later adopters have elected to wait for their core provider to offer the connectivity and capabilities before making real-time payments available to customers and members. For those in the mass adopter category, this is an option. The same decisions will need to be made for connecting to FedNow, with the understanding that early adopters have a market advantage.
- **Payment infrastructure modernization:** The changing and growing payments landscape has allowed FIs of all sizes to consider how infrastructure meets current and future demands. For some FIs, particularly early pioneers and fast followers, this is an opportunity to explore a modern payment hub. Payment hubs are not the monolithic time and resource hurdles that they once were. With a modern hub, the implementation can be fully cloud-based and look more like a flexible payments-as-a-service offering with low cost of entry, easier connectivity, and future scalability and flexibility. Cloud implementations of individual Payments-as-a-Service offerings can also connect the FI to a rail utilizing to the existing technology streams or resources. FIs of all sizes should be thinking about future scalability regardless of current real-time payment offerings.
- **Componentized best-of-breed solution capabilities:** Selecting a non-hub or best-of-breed strategy is also a way to move forward with real-time payments without taking on a larger modernization effort. This would mean FIs would select a separate system for FedNow vs. whatever the FI is using for other payment types. This is not the right choice for all FIs, but it can be for FIs that need a low-barrier solution to offering FedNow (or RTP) to validate the use cases and adoption without undergoing a larger modernization effort. Not having the resources or ability to

develop and execute a more robust technology strategy, which is the case for many mass adopters, should not prevent an FI from offering real-time payments.

Figure 3 exhibits the various technology strategy considerations connected to the corresponding bank segments.

FIGURE 3: TECHNOLOGY STRATEGIES



FEDNOW AND RTP

FedNow offers an alternative to TCH's RTP payment rail, which has been in use since November 2017. There is considerable redundancy between TCH's RTP and FedNow, which in part was the intention of creating FedNow—namely, to promote economic security by enabling redundancy in real-time payment platforms. As a result, both systems will serve as healthy competition to provide 24/7/365 real-time payments and clearing capabilities. While RTP certainly has an advantage over FedNow given its longer presence in the market and current adoption, FedNow will grow in market share and further transform the payments sector. Like RTP, how quickly FedNow is integrated into the payments landscape will be determined by the complexity of back-end system integration, support for third-party integration, relative costs, participation requirements, and confidence in fraud protection.

WHAT IS DIFFERENT

Key differences between FedNow and RTP include transaction limits (US\$1 million for RTP and US\$500,000 for FedNow expected at launch), FedNow's dashboard capabilities for FIs, and cross-border payment capabilities. While RTP allows certain inbound foreign payments, FedNow is purely domestic. RTP is well-established and is used by many FIs; however, given that the Federal Reserve is behind the launch of FedNow, the immediate scope of FedNow could be as high as over 10,000 FIs. Concurrently, FIs using RTP are expected to also begin using FedNow for added security and flexibility in payment offerings. Also of note is FedNow's liquidity management tool.

While other differences between FedNow and RTP are likely to emerge, the current most distinguishing feature of FedNow is the scope of access to the market. While both RTP and FedNow have been designed with broad market penetration in mind, the reach of the Federal Reserve has the potential to connect a broader swath of the FI market to real-time payments.

The Liquidity Management Tool

FedNow will offer a liquidity management tool with its initial release. According to FedNow press releases, the liquidity management tool will support transfers for instant payment liquidity for limited hours per day, typically outside FedWire working hours and including holidays. Transfer will be supported between Federal Reserve master accounts of FedNow participating FIs or between FIs with a joint account with a private-sector

payment solution, such as RTP. Any FedNow account set up to receive customer payments will have the automatic ability to send and receive liquidity transfers. As liquidity challenges have been a hurdle to RTP adoption, particularly for smaller FIs that could have an undesirable cash position from an unexpected series of transactions, this is a welcome feature of FedNow.

TYING INTO ISO 20022

ISO 20022, first introduced in 2004, is a common language used for incorporating data into transactions. The incorporation of messages into transactions has proven beneficial to domestic payments since it promotes interoperability and integration between different payment schemes and clearinghouses, ultimately reducing friction points in transactions. The initial plan was to integrate ISO 20022 into FedWire via a three-part migration. However, this plan was revised in favor of a single-day full migration, proposed for late 2023, due to concerns over cross-border interoperability, especially with SWIFT enablement of ISO 20022, and ensuring implementation of fully enhanced ISO 20022 messages for the Fedwire Funds Service. This will coincide with changes to the proprietary message format for the Fedwire Funds Service in November 2022, enabling interoperability with updated messaging within SWIFT and the European high-value payment systems. Revising the implementation of ISO 20022 also seems to have stemmed from critical feedback from participating FIs.

Relying on industrywide best practices to integrate ISO 20022 holistically, FedNow (as RTP already has) intends to apply global standards to diverse payment models while aligning with U.S. standards. With successful single-day integration, FedNow will facilitate end-to-end nonvalue ISO 20022 messages, which will include request for return, request for status, and request for information. That FedNow will integrate with ISO 20022 speaks to the increased usage of ISO 20022 and its centrality in reducing friction points in payment and reconciliation. The integration also aligns with the Federal Reserve's strategic initiatives regarding aligning U.S. payment systems with global standards.

CONCLUSION

- FedNow will offer a 24/7/365 real-time payment solution that enables large-scale technology accessibility regardless of the size of the FI, which will be an important part of a holistic, multi-network payment strategy.
- Providing real-time payments has proven beneficial within numerous sectors, yet various hurdles, such as resource availability, technology considerations, and core dependency, have led many FIs to hold off on offering these services.
- FIs must shift from selling payments and connectivity to offering a payment customer experience. Businesses do not want to worry about a payment rail; instead, the desired customer experience focuses on payment factors such as speed, cost, reachability, fraud, and limits.
- Current usage of real-time payments has proven the value of real-time payments ahead of the FedNow launch. Use cases include payroll, utilities, telecom, insurance, higher education, and healthcare. Additionally, use cases are expanding to prove that the value of real-time payments is not just use case dependent.
- FIs can be categorized by when implementation and adoption become critical: Segments are early pioneers, fast followers, and mass adopters. Fast followers and mass adopters have early pioneer implementations to learn from but also need to be aware of the lost market opportunities of lagging too far behind.
- An FI should consider various technology strategies to pave the way for rationalization of implementation as well as prepare for future capability enablement. Mass adopters do not have to wait for their core provider to enable real-time payments before moving forward. Furthermore, fast followers and early pioneers have an opportunity to consider critical infrastructure changes to be well-positioned in the coming years and even decades.
- There is significant redundancy between the services FedNow provides and the existing RTP platform. Security through redundancy was at the forefront of the Federal Reserve's stated decision to develop FedNow, but more important to the industry is the ability to extend real-time payments to more use cases in a multi-network approach.

ABOUT VOLANTE TECHNOLOGIES

Volante Technologies is a global fintech provider of low-code cloud payments solutions to accelerate digital modernization. As a trusted partner to over 125 banks, financial institutions, market infrastructures, clearinghouses, and Treasuries in 35 countries, Volante offers its customers the freedom to evolve past legacy limitations and grow through rapid innovation. The company's real-time technology and Payments-as-a-Service solutions process millions of transactions and trillions of dollars in value daily, powering four of the top five global corporate banks, two of the world's largest card networks, and 40% of all U.S. commercial bank deposits. To learn more, visit www.volantetech.com. Follow Volante at linkedin.com/company/volante-technologies and twitter.com/volantetech.

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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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