



**WHITE PAPER**

# **US REAL-TIME PAYMENTS: LINKING ADOPTION AND CONNECTIVITY**

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FINANCE IS OPEN**

# INTRODUCTION

**Real-time payments (RTP) schemes are taking off across the globe, with more and more consumers and businesses in countries worldwide able to benefit from the speed and convenience of payments in real-time.**



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The US came to the party in late 2017 with the launch of The Clearing House's (TCH) RTP® system. Rapid take-up among the largest banks since then means the system now covers almost half of the total demand deposit accounts in the US.

However, many banks have chosen to begin their RTP journey by implementing "receive" functionality only—leaving them unable to initiate real-time payments for their customers. Fortunately, growing numbers of banks are now planning to implement both receipt and initiation. But in the early stages, the focus on receipt functionality has contributed to the launch volumes of RTP transactions being both low and unpredictable.

The outlook for volumes is brightening, as ever-rising numbers of banks establish RTP connectivity—the first step towards reaping its full benefits. With the proportion of US banks connected to RTP projected to double in 2019, volumes are expected to pick up strongly, accompanied by growing demand for real-time payments from business and corporate banking clients.

All of this means banks in the US face a binary choice: connect to RTP as matter of urgency—or face suffering from competitive disadvantage and creeping irrelevance. So the real question is not whether to connect, but how.

In this paper, Aite explores the current state of real-time payments in the US, provides projections for adoption and transaction volumes, makes a case for the importance of connectivity and insights on how to overcome the hurdles to adoption.

Having established RTP connectivity, banks are well placed to pursue the opportunities it presents to develop and deliver compelling new services for their customers, including through collaboration with FinTechs. But the first step is clear: Get Connected. Today.

# Real-Time Payments: Linking Adoption and Connectivity

FEBRUARY 2019

Prepared for:



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## EXECUTIVE SUMMARY

*Real-Time Payments: Linking Adoption and Connectivity*, commissioned by Finastra and produced by Aite Group, outlines current adoption trends of The Clearing House's RTP system and discusses how connectivity options can help accelerate market adoption.

Key takeaways from the study include the following:

- Real-time payments have been a hot topic around the globe, with over 40 countries live at the end of 2018 and several more slated for 2019. With the introduction of The Clearing House's RTP system, the U.S. has entered the real-time arena for business payments.
- Adoption of real-time payments for business payments in the U.S. has been slow and steady but is projected to climb in 2019. At the end of 2018, just under 50% of the U.S. demand deposit base was enabled to send and/or receive RTP payments.
- Due to the number of banks initially implementing receive only, volume has been low and difficult to predict. As more banks allow initiation of real-time payments for their corporate clients, the volume will begin to rise quickly.
- Connectivity is the first step for banks to reach full utilization of real-time payments capabilities. Although initial implementation may not allow for initiation of all messaging types, establishing connectivity to the system allows for easier launch of full functionality at a later date.
- The key challenges banks commonly face in implementing new technology offerings—such as limited resources, lack of internal expertise, and uncertainty around use cases—can be eased by utilizing a third-party service provider.

## INTRODUCTION

The importance of real-time payments in the U.S. payments landscape continues to rise. The investment in and launch of The Clearing House's RTP system has given U.S. banks the ability to offer real-time payments to their corporate customers. But adoption has been slow, even as The Clearing House targets 2020 for total market ubiquity across all U.S. financial institutions. The missing piece may be that banks are viewing the dive into real-time payments as all or nothing; however, once the initial connection is made, launching more robust features is not as large of a task as it may seem.

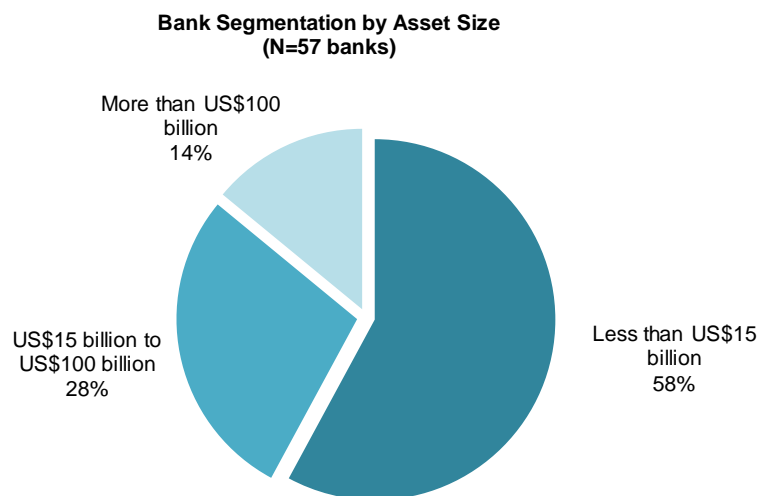
This white paper provides an update on RTP adoption and volume in the U.S., and discusses how banks are viewing connectivity and the biggest barriers to implementation.

## METHODOLOGY

This Impact Note is based primarily on the results of a December 2018 survey of 85 financial professionals at 57 U.S. financial institutions.

The banks are categorized into three ranges of annual revenue: less than US\$15 billion, US\$15 billion to US\$100 billion, and over US\$100 billion. The smallest participating bank has approximately US\$65 million in assets, and the largest participating bank has approximately US\$370 billion in assets. A breakdown of bank survey participants by asset size can be found in Figure 2.

**Figure 1: Bank Survey Participants by Survey Size**

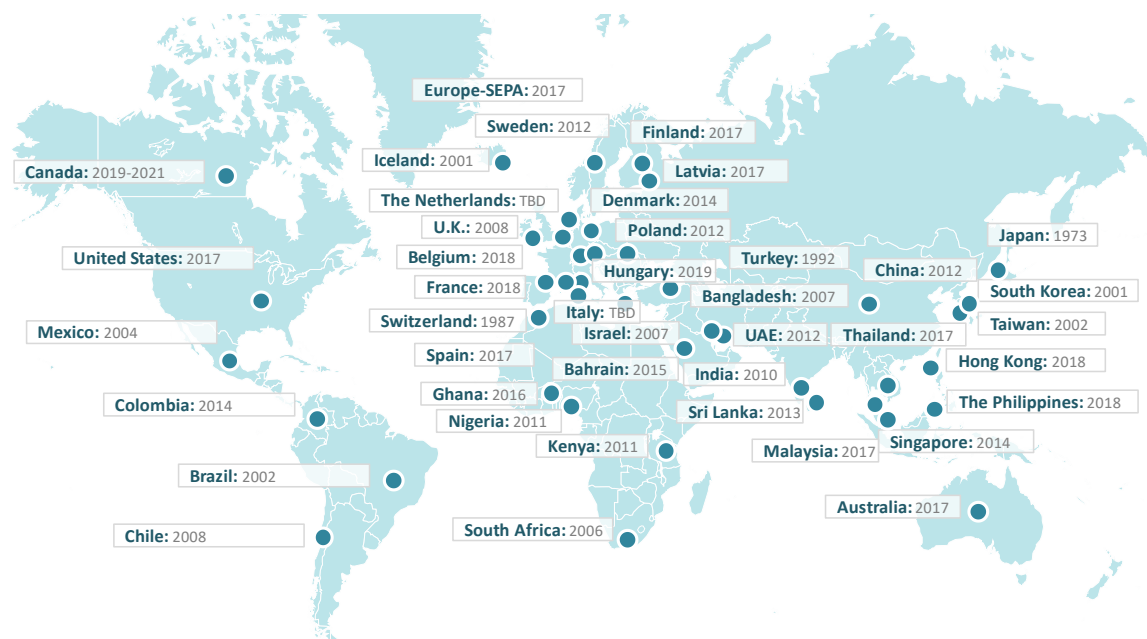


Source: Aite Group survey of 57 U.S. banks, December 2018

## CURRENT STATE OF REAL-TIME PAYMENTS

The global faster payments ecosystem is a diverse landscape of disparate payment schemes. Some of the payment systems have clear similarities, but many bear little resemblance outside of the speed of settlement. Over 40 countries are live with a real-time payments scheme (Figure 2). The U.S. entered the arena in November 2017 with The Clearing House's launch of the RTP system. Another eight to 10 countries have already announced plans to go live before 2023. Real-time payments have undeniably become an integral part of the global payments landscape.

**Figure 2: Faster Payments Around the Globe**



Source: Aite Group

Several market drivers continue to push global adoption forward, causing faster payments systems to manifest in different manners. The primary two drivers are government mandates and market-driven expectations. The majority of initiatives have been government-mandated and the result of a central authority forcing faster payments on the local banking system to modernize and eliminate aged infrastructure. These mandated systems have helped push the market innovation in other regions. The U.S. is a prime example of a market-driven new real-time payment system.

### THE RISE OF REAL-TIME PAYMENTS IN THE U.S.

Real-time availability of funds is quickly becoming an expectation across payment types. As individuals become more accustomed to instant gratification in their personal interactions, the expectation is spilling into their interactions with businesses and, consequently, how businesses transact with each other. The Clearing House's RTP system has certainly been part of every

payment strategy conversation when banking and industry professionals talk about business payments in the U.S. after The Clearing House enabled the first-ever real-time business-to-business (B2B) payment in the U.S. The RTP system is designed to be accessible to all financial institutions regardless of size and has a transparent pricing structure. The goal is to create ubiquity across all financial institutions in the U.S. to not only facilitate real-time payments across a variety of B2B and business-to-consumer (B2C) use cases but to also allow critical data to move with the payment, easing the burden of reassociation and payment application for the end user. However, there are other real-time payment systems to fit other needs, such as person-to-person and cross-border payments (Table A). As real-time payments in the U.S. continue to rise, RTP is one important component of the strategic real-time payment landscape.

**Table A: Examples of Real-Time Payment Methods**

Payments type	Primary use cases
<b>RTP system</b>	B2B and B2C domestic payments that settle in real time
<b>Mastercard Send</b>	Primarily B2C domestic and cross-border payments in which the recipient has a debit card
<b>Visa Direct</b>	Primarily B2C domestic and cross-border payments in which the recipient has a debit card
<b>Ingo Money</b>	B2C domestic and cross-border payments through endpoint gateways
<b>SWIFT gpi</b>	Cross-border payments with in-network bank-to-bank settlement
<b>Zelle</b>	Person-to-person domestic payments received in real time for individuals who have enrolled with batch settlement between banks
<b>Fed RTGS</b>	New domestic real-time gross settlement system proposed by the Federal Reserve

Source: Aite Group



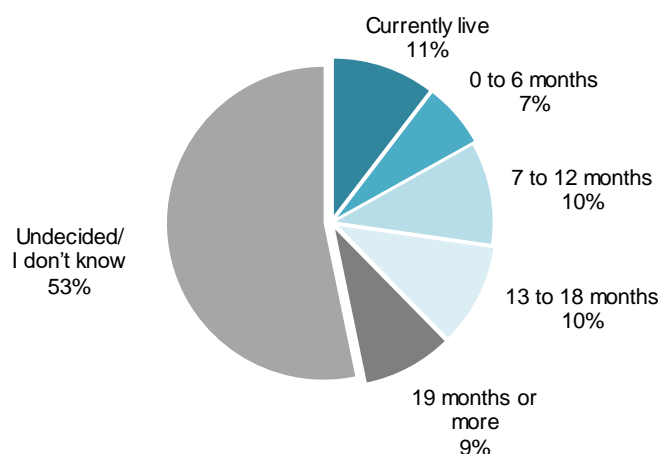
## ADOPTION OF RTP

Although slow, adoption of The Clearing House's RTP system continues to grow. Most growth to date has occurred within the 26 member banks, whose investment in the system is truly changing payments in the U.S. At the end of 2018, 12 banks were live with the RTP system. While this may look glum for The Clearing House's goal of ubiquity by the end of 2020, the banks that are live impressively hold just under 50% of the total demand deposit accounts in the U.S.

In a recent Aite Group survey of 57 U.S. banks, almost half of banks have some sort of timeline of when they aim to be live on the RTP system for their business clients (Figure 3). This leaves over half of banks still unsure and without an implementation plan or business case. However, this is an improvement from early 2018 data, which showed that fewer than half of the banks planning to offer real-time payments for their business and corporate customers had a plan as far as a timeline. Unfortunately, the system does not seem accessible or necessary to many of the smaller financial institutions in the U.S., as the majority of the banks that are undecided are less than US\$15 billion in asset size. In fact, none of the 37 banks with less than US\$35 billion surveyed are live today or plan to be in the next six months. This bank segment also makes up 74% of the banks that are undecided. The complexities of understanding and connecting to the RTP system are a large deterrent for this segment, but that is starting to shift.

**Figure 3: Current State of Adoption**

Q. When will your bank offer real-time payments for business payments?  
(n=56 banks)



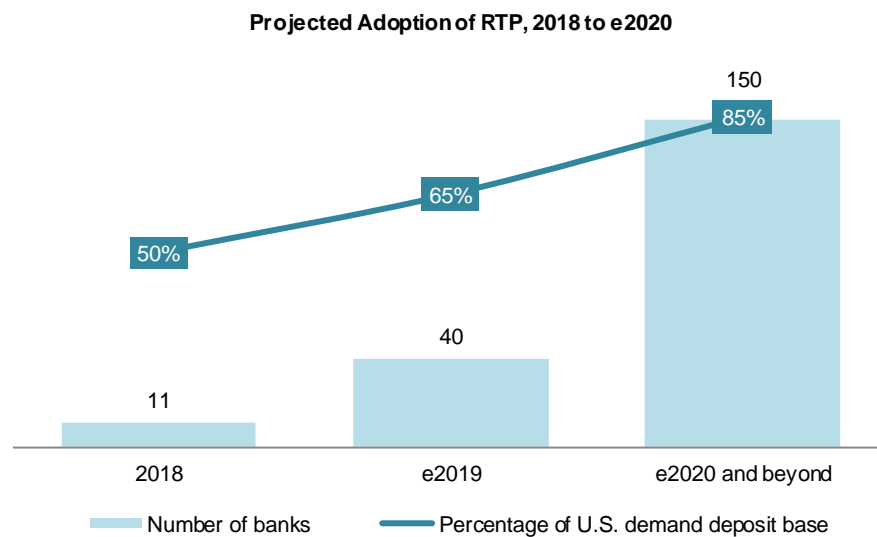
Source: Aite Group survey of 57 U.S. banks, December 2018

## PROJECTED ADOPTION IN 2019 AND BEYOND

Each bank that is onboarded to the RTP system gets the market closer to a sense of ubiquity. The Clearing House expects the number of banks that are live with RTP to more than double in 2019. Included in this, several more of the largest U.S. banks will be connecting directly to the system

and enabling RTP for their corporate customers. This will bring the total of demand deposit accounts that will have the ability to transact a real-time transaction through the RTP system to 60% to 70% by the end of 2019. Aite Group expects that this trend will continue exponentially beyond 2019 (Figure 4). Total market ubiquity by the end of 2020 is unlikely; however, the penetration into total demand deposit accounts will likely reach over 90%. Also, helping to increase adoption in 2019 are the core processors in the U.S., with several set to launch RTP services to their customer base. Another important milestone coming in 2019 is the launch of RTP to a credit union service provider that is scheduled to begin offering real-time functionality to credit unions in the first half of the year.

**Figure 4: Projected RTP Adoption**



Source: Aite Group

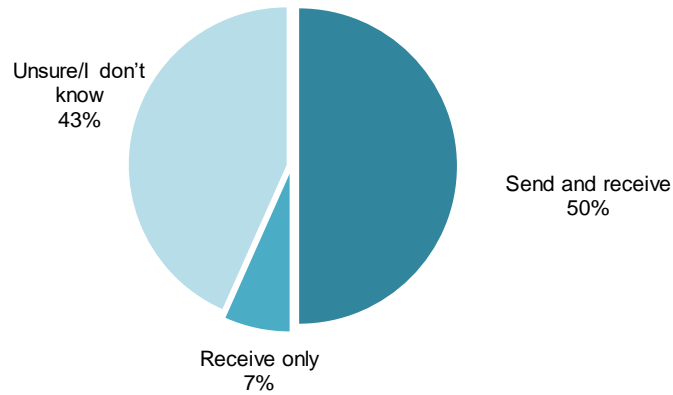
## ADOPTION IN VOLUME

Even with 12 banks live, the volume of RTP transactions is lower than expected because of banks moving forward with receive-only functionality first. This means that a limited number of banks are able to initiate real-time payments; consequently, there are not many transactions to receive. However, the number of banks that plan to offer both receipt and initiation is growing. In an early 2018 study, over half of U.S. banks planning to offer real-time payments reported that they would only allow receipt. The more recent data shows that this has shifted to 50% of banks planning to offer both receipt and initiation (Figure 5).

**Figure 5: Receive vs. Send**

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Q. Will you support send and receive or receive only?  
(n=52 banks)



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Source: Aite Group survey of 57 U.S. banks, December 2018

Even without this shift and the subsequent impact on volume, going live with receipt only is not necessarily a bad thing. While there may come a time when The Clearing House does not allow implementation with receipt only, it does for now. And this allows banks to tackle the implementation in phases and focus on the most important piece of an RTP implementation—connectivity.

## THE IMPORTANCE OF CONNECTIVITY

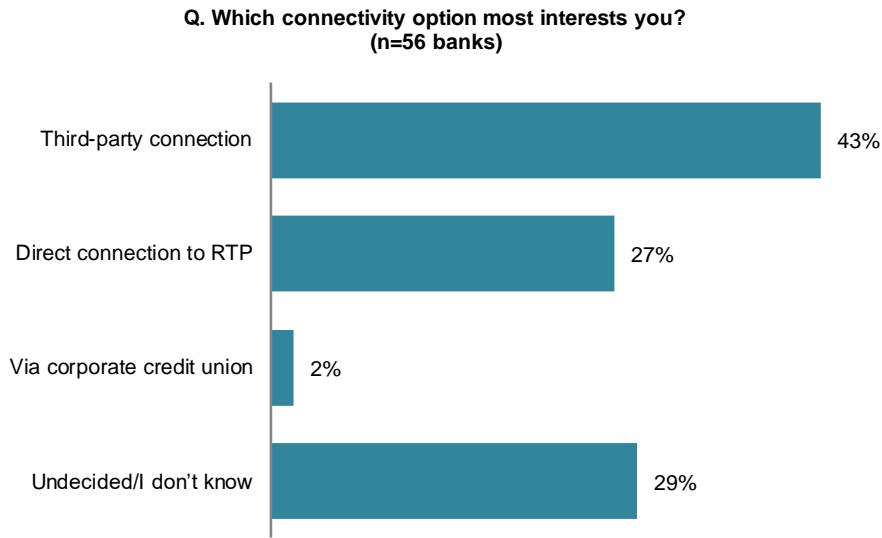
Deciding how and when to connect to the RTP system is the first step to a successful implementation. The connectivity and messaging should be the first and primary initiative. Once a bank has established the connection and then implements the functionality to receive RTP transactions, the journey to initiation becomes quicker and easier. Taking advantage of the flexibility in allowing just receipt first is an advantage to the banks with an upcoming implementation. Over the last year, The Clearing House has spent a lot of time on connectivity. Consequently, many vendors are focused on connectivity and can help banks get connected to The Clearing House. It will likely only be the largest banks that link directly to The Clearing House going forward.

## OPTIONS FOR CONNECTIVITY

Since it is not feasible for every bank to connect directly to The Clearing House, many banks are deciding to choose a third-party service provider (TPSP). Being able to leverage a TPSP is critical to mass adoption of RTP. The Clearing House has limited bandwidth and is focused on providing the network. It is also neutral when it comes to preferred technology partners. It is up to the individual banks to determine how they will connect, which TPSP they will choose, and when to execute their technology strategy. Some TPSPs are also channel partners. An RTP channel partner is certified by The Clearing House and provides marketing, sales, and service functions related to RTP. Expert advice is to consider which vendors the bank already has a relationship with.

Early after the initial launch of the RTP system, most banks planned to connect directly through The Clearing House. In fact, only 20% indicated they would consider utilizing a TPSP. That number has more than doubled and is at 43% of U.S. banks (Figure 6). Some of the ambiguity around how to connect is dissipating. Also during the early stages, half of banks were undecided in how they would connect to the RTP system, and that number is now just below 30%. These are positive indicators of future adoption, as banks are beginning to understand connectivity options and speak with TPSPs in the market.

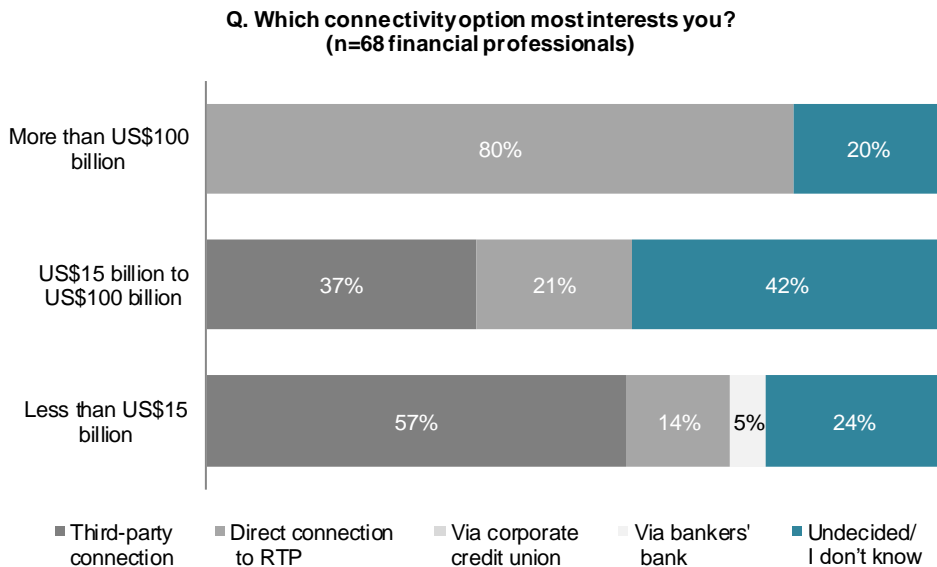
**Figure 6: Plans for Connectivity**



Source: Aite Group survey of U.S. 57 banks, December 2018

To further demonstrate the appeal that connecting through a TPSP has for smaller institutions, 57% of banks with less than US\$15 billion in assets have already concluded that they will connect via a TPSP (Figure 7). By utilizing a TPSP, these institutions will soon be able to leverage the best practices and lessons learned that these providers have experienced in the market. This applies even more to those that leverage a TPSP that is an RTP channel partner with deep knowledge of and servicing capabilities for RTP.

**Figure 7: Plans for Connectivity by Bank Revenue Size**



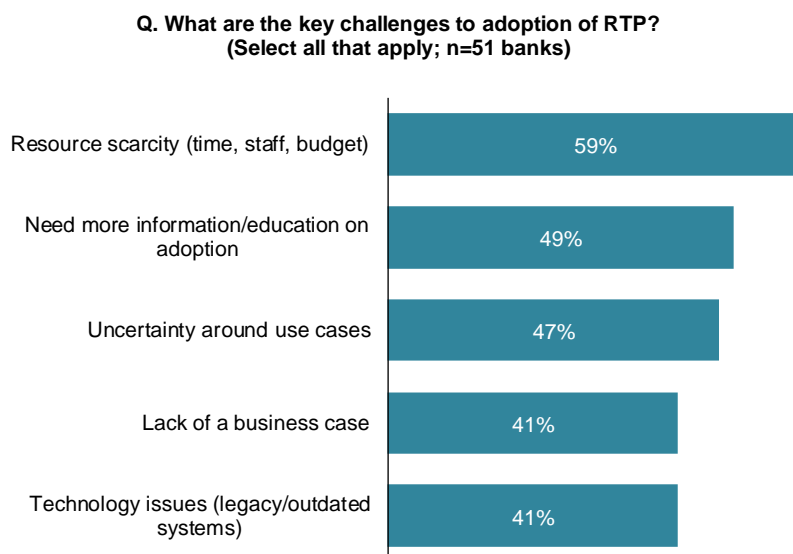
Source: Aite Group survey of 57 U.S. banks, December 2018

## CHALLENGES IN MOVING FORWARD

As with any technology implementation, some challenges and ancillary implications must be considered. Without knowledge of how to overcome key challenges, it is difficult for a bank to justify moving forward with an implementation. A business case must be created, the client demand for the capabilities must be understood and validated, the technology strategy must be clear and realistic, and dedicated resources need to be available for the span of the project.

In addition to the back-end implementation demands, marketing, sales, training, documentation, and customer support components need to be planned out and prepared. Each of these components takes a lot of time and dedicated resources to execute effectively. This is the greatest challenge that banks report as a barrier to implementing RTP capabilities (Figure 8). Utilizing the expertise of a TPSP can help ease some of the burden.

**Figure 8: Greatest Challenges for Implementation of Real-Time Payments**



Source: Aite Group survey of 57 U.S. banks, December 2018

## SEEKING A TRUSTED PARTNER TO OVERCOME HURDLES

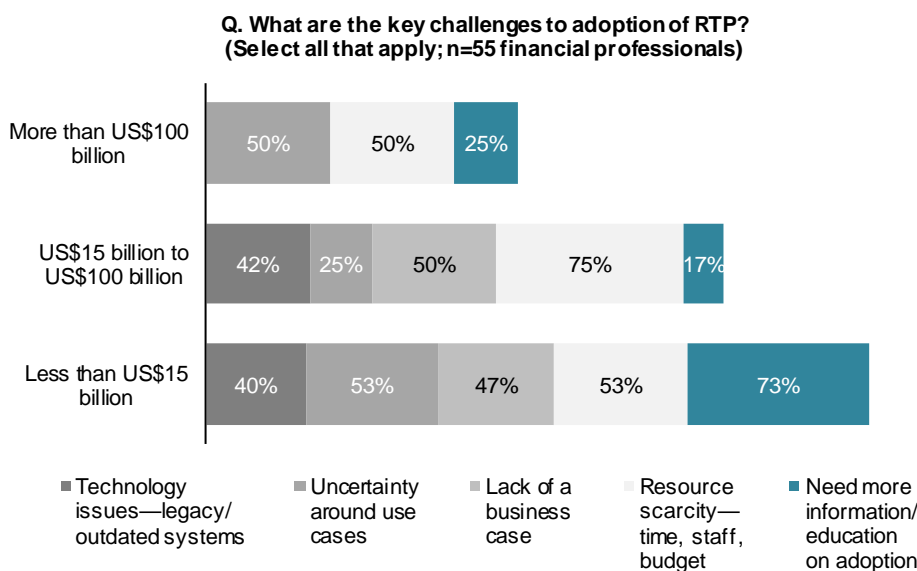
While internal teams and customers will still need to be trained, the experience of a good vendor partner can help relieve some of the internal pressure around the back-end technology requirements, freeing up resources to focus on training, education, and customer launch. Forty-one percent of financial institutions report technology issues as a key challenge. These banks will find particular value in a partnership with a TPSP, particularly if that vendor is also an RTP channel partner.

As the market continues to mature, the other key challenges around use cases, business cases, and education will begin to lessen. At present, there are not enough experts in the market who understand real-time payments to infiltrate every financial institution. Many banks are utilizing

their ACH or wire product managers to fill their real-time payment product management needs or are asking those individuals to provide double duty. As the knowledge continues to cross-pollinate through the market, this will become less of an issue.

Smaller financial institutions are feeling the most anxious about these challenges (Figure 9). Very few of the largest banks have the same concerns around technology issues, and they also have fewer resource constraints to contend with. This makes the selection of a trusted partner even more beneficial to these institutions.

**Figure 9: Greatest Challenges for Implementation of Real-Time Payments by Revenue Size**



Source: Aite Group survey of 57 U.S. banks, December 2018

Also important to consider is the accessibility that cloud technology offers, particularly to smaller institutions that have limited technology budgets. Not so long ago, even mentioning the cloud was a bit taboo and caused considerable pause for internal risk and compliance teams. However, the measures in place to ensure the safety and security of the cloud have been proven as financial institutions around the globe start to reap the benefits. Cloud implementations require fewer internal resources, reduce the time to market, reduce overall implementation costs, and reduce the costs of ongoing maintenance. This is allowing many banks to offer technology that would have otherwise been resource- and cost-prohibitive. While there will always be initiatives that fall “below the line,” taking advantage of cloud solutions can significantly move the line. This should be considered when selecting a TPSP to enable real-time payment capabilities.

## CONCLUSION

The implementation of RTP does not have to be feared or viewed as unattainable, even for smaller financial institutions. Not only in the U.S. but also globally, real-time payments are an important part of an organization's payments strategy. Businesses are counting on their financial institution to provide them with the tools and functionality they need to meet customer demands, differentiate themselves in the market through payments, and help them improve their cash conversion cycle. This demand is no longer isolated to the world's largest corporations and is also coming from the business customers that make up a portion of the client base at every financial institution.

Several key takeaways are critical for banks to keep in mind as adoption increases to ensure they are not left behind:

- The RTP system is a critical part of the real-time payments landscape in the U.S. It is the only live real-time B2B and B2C bank-to-bank platform.
- Business and corporate bank client demand for real-time payments will continue to rise. Businesses of all sizes will rely on their banks to help them utilize real-time payments as part of their payment strategy.
- Not all institutions will or should connect to the RTP system directly through The Clearing House. Only the largest financial institutions that have fewer resource constraints and technology challenges will connect directly to The Clearing House.
- Choosing a TPSP, particularly one that is or will be an RTP channel partner, is an effective way to speed up time to market, learn from the experts within those organizations, and effectively establish connectivity to the RTP system, and is not an inferior connectivity option for a bank.
- RTP volume has been slow to ramp up due to more banks offering receipt only and delaying the launch of RTP initiation. This will shift over the next 12 to 24 months as these banks are able to build from their initial connectivity and offer full initiation capabilities.



## ABOUT FINASTRA

Finastra unlocks the potential of people and businesses in finance, creating a platform for open innovation. Formed in 2017 by the combination of Misys and D+H, we provide the broadest portfolio of financial services software in the world today—spanning retail banking, transaction banking, lending, and treasury and capital markets. Our solutions enable customers to deploy mission critical technology on premises or in the cloud. Our scale and geographical reach means that we can serve customers effectively, regardless of their size or geographic location—from global financial institutions, to community banks and credit unions. Through our open, secure, and reliable solutions, customers are empowered to accelerate growth, optimize cost, mitigate risk, and continually evolve to meet the changing needs of their customers. Ninety of the world’s top 100 banks use Finastra technology. Please visit [finastra.com](http://finastra.com)

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## About Finastra

Finastra unlocks the potential of people and businesses in finance, creating a platform for open innovation. Formed in 2017 by the combination of Misys and D+H, we provide the broadest portfolio of financial services software in the world today—spanning retail banking, transaction banking, lending, and treasury and capital markets. Our solutions enable customers to deploy mission critical technology on premises or in the cloud. Our scale and geographical reach means that we can serve customers effectively, regardless of their size or geographic location—from global financial institutions, to community banks and credit unions.

Through our open, secure and reliable solutions, customers are empowered to accelerate growth, optimize cost, mitigate risk and continually evolve to meet the changing needs of their customers. 90 of the world's top 100 banks use Finastra technology.

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