



Why Interoperability is Important for Faster Payments Insights from the Industry

April 15, 2021

Contents

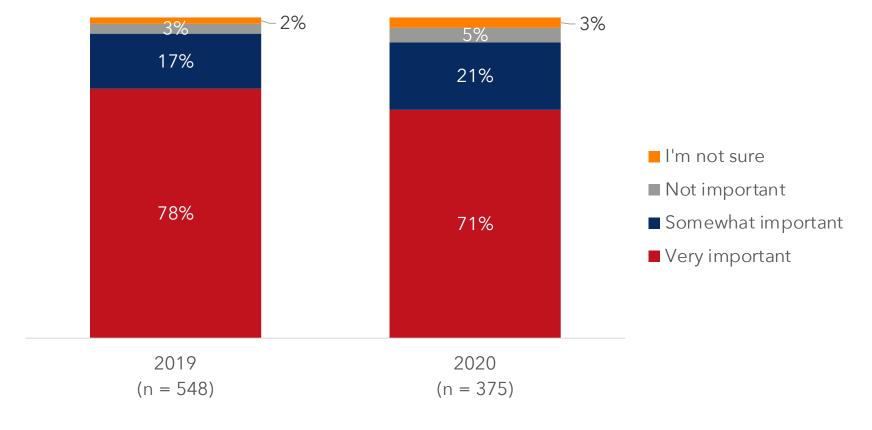
- 1. Introduction
- 2. How the Industry Defines Interoperability
- 3. Why Interoperability is Important
- 4. U.S. Interoperability in Global Context
- 5. Implications

Introduction

Faster Payments Barometer respondents overwhelmingly believe interoperability is important

Results from the Faster
 Payments Barometer surveys
 in 2019 and 2020 indicate
 that survey respondents,
 which include payments
 industry stakeholders from
 across the value chain,
 believe faster payments
 system interoperability is
 important

In your view, how important is it to achieve interoperability across compatible faster payments systems?



As a result, the research this year delved into why interoperability is important

- Our qualitative research this year focused on why interoperability is important for end users and providers
- The research did not intend to address how interoperability can be achieved
- The research also sought to address key questions:
 - How does the industry define interoperability?
 - What are some of the attributes associated with interoperability?
 - What benefits might be realized if interoperability is achieved?

Who we interviewed	Who we did not interview	
Fls (11)	Intermediaries/ Technology Providers	
Business End Users (9)	Networks	
Consumer Advocacy Organizations (2)	Consumers	

2

How the Industry Defines Interoperability



A pragmatic, common definition of interoperability

- Interviewees generally agreed on the definition of interoperability:
 - The ability to pay anyone at any time to any account
 - The ability to seamlessly identify and pay another person regardless of the payment system used
- Interviewees suggested the model used to achieve interoperability (or the "how"), is less relevant than the transaction seamlessly reaching the desired recipient

Stakeholder insights:

- "Interoperability allows an end user to make a transaction, regardless of the network, and without having to worry about the operational aspects behind the scenes."
- "As a user, you don't want to think about it, you want the money moved immediately and you don't care how."
- "The ACH model of interoperability is ideal it just works, it's the lowest common denominator network, and all FIs are connected."
- "Interoperability of telecommunications is a good example you shouldn't have to be aware of the other person's cell service provider."



Alignment on some of the elements that comprise interoperability

- Many interviewees cited common attributes as integral to achieving interoperability:
 - Message formats (specification / data)
 - Operating rules and guidelines
 - Settlement
 - Business processes
- Interviewees noted that the notion of interoperability is not just about the payment rails, but also about identifying recipients and ensuring that they are able to receive a payment

Examples of common discussion points that arose:

- What information do you need to pay someone?
- How do you validate that you are paying the right person?
- How do you obtain that information, if you don't know someone else's bank account information?

Stakeholder insights:

- "What are the major challenges / barriers? Message formats and settlement."
- "In an RTP model, you want to make a payment, but you don't have the banking information, how do you get it?"

3

Why Interoperability is Important



Interviewees cited tangible benefits to achieving interoperability...

- Enhanced customer experience
 - Ability to reach broad range of accounts for both FIs and businesses
 - Consistency of client/customer experience
 - Customer choice
- More competitive market
 - "Level the playing field" for smaller FIs
- Improved operational efficiency from implementation to ongoing process management
- Reduced risk exposure
 - Minimizing exceptions/failures, fewer misrouted payments

Stakeholder insights:

- "Interoperability is important because it creates a better experience."
- "Ultimately it's important for the end consumer the consumer should never have to know what happens behind the scenes."
- "Customers of the smaller organizations will be shortchanged [if there is lack of interoperability]."
- "Interoperability will facilitate ease of implementation."
- "[Common rules] can help with exception handling and returns."
- "Redundancy is greater with two systems."

...and overwhelmingly viewed it as a tool that achieves ubiquity

- Interviewees were strongly aligned that the main goal of faster payments interoperability is to achieve ubiquity
- Interoperability was viewed as a win/win for the industry

Stakeholder insights:

- "Interoperability is one of the keys to ubiquity; banks want to feel confident that whichever solution or network they join will help them get the payment where it needs to go."
- "It if becomes so complex that senders have to figure out which payment method to use based on what the recipient can accept, it will further delay adoption."
- "Interoperability is needed for faster payments to make economic sense to smaller institutions and therefore to achieve ubiquity."
- "Ubiquity will be expedited if both systems work together."
- "The lack of interoperability is an obstacle to ubiquity."
- "Either one system wins in the marketplace, or there is interoperability those are the only ways to achieve ubiquity."



Lack of interoperability is driving fragmented approaches



- Some large FIs are building capabilities to support multiple faster payment methods
- Smaller Fls are continuing to postpone strategic decisions



- Businesses are generally waiting for one of two actions to occur
 - 1. Faster payment methods offered by their providers
 - 2. Faster payment volume grows

Interviewees ultimately agreed that achieving ubiquity will simply take longer if "everyone [continues to] do their own thing"

Larger Fls are tackling uncertainty by creating their own solutions, whereas smaller Fls are awaiting further clarity from the Fed

Stakeholder insights

	Larger Fls		Smaller FIs
	"We will connect to all the networks, so regardless of what the payment is for, it just works in real-time." "We have a strong in-house IT team and we have	•	"We are interested in implementing both [RTP and FedNow], but we are currently struggling with the business case for even doing one. If they are not interoperable, we may be forced to offer both."
	our own core, so we plan to integrate each network into our own internal systems."		"There are many reasons beyond 'waiting for FedNow.' It takes a lot of resources. For many
•	"We would directly connect to [payments systems]there is value in having a single platform that can handle multiple rails, tender types, and transfer mechanisms."		banks, payments are a cost center, they are not a high priority."

While most businesses will rely on provider solutions, or wait until there is meaningful volume in market, some are more proactive

Stakeholder insights

Provider Solutions	Volume	Control/Choice			
 "Once providers start offering [faster payments] and making it the norm, then we'll offer it, but right now, there's no specific use case driving the need." "We look to partners to make the connections but we'll do the individual connection if there's enough customer benefit." 	 "Why do something new unless you'll see a lot of volume?" "Until something gets to a certain point of adoption in the market, it might not be worth the investment." "We have to accept cards to remain competitive, but we don't have to accept faster payments to be competitive." 	 "We give our customers the choice on how to get paid in a dropdown menu, which includes Zelle, Mastercard Send, ACH, and checks." "We are building a consolidated payments hub. The customer just checks the box for which payment method they want, whether it's PayPal or Zelle [or whatever other options]." "We're building a payments hub with middleware that will allow us flexibility across partners." 			

4

U.S. Interoperability in Global Context



Glenbrook observations from global experience

- Interoperability not monolithic or binary
- Many faster payments implementations start with scheme interoperability ... but certainly not all
- Trend toward interoperating both bank and wallet accounts ... sometimes on a use case basis
- U.S. not unique in "wait and see" approach
- Interoperability can have three functional elements not all present in every implementation
 - Governance (rules)
 - Technical integration (rails)
 - Business model
- From the end user's perspective, the model of interoperability used does not matter

Models of Interoperability

Parallel System Interoperability

- Service provider intermediates usage of multiple schemes
- Card network acceptance
- Perception of interoperability

Network Interoperability

- Bilateral arrangements for exchanging payment and settlement
- Business rules for exchange
- Often used for cross-border or regional payments

Scheme Interoperability

- Multilateral, shared scheme rules for clearing and settlement
- Sometimes rules + rails
- Checks, ACH, many domestic card systems

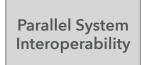




Interoperability and ubiquity can be reached in different ways

- "Rules" govern and enforce consistent actions and communication by participants
- "Rails" are the technical components of a payments system
- In the absence of either shared rules or rails, intermediaries can create perceived interoperability (e.g., cards)
- All three interoperability models increase ubiquity

Models of Interoperability









VISA Direct























Many interviewees believe the U.S. will have a type of perceived or parallel system interoperability

- Interviewees expressed pragmatic views that FIs, intermediaries, or other technology providers will develop workarounds to create the perception of interoperability
- Most are skeptical that U.S. will achieve scheme interoperability

Stakeholder Insights

- "Technology can help the issues associated with true interoperability by portraying the perception of interoperability."
- "It's really the service providers (like their banking relationship) that create interoperability."
- "It could be the integrators that achieve interoperability."
- "We just need a layer on top of all of these systems to make it seem like interoperability."
- "Intermediaries that create interoperability take a lot of pain away from us, they do the programming, they do the work, they take the risk."

5

Implications



Resounding agreement that interoperability is necessary

- Interoperability is top-of-mind, and interviewees underscored its importance to achieving faster payments ubiquity
- Interoperability was often equated with ubiquity
- Interviewees expressed the importance of the end user experience over how interoperability is reached behind the scenes
- They believe intermediaries will solve for potential lack of network or scheme-level interoperability

Glenbrook questions:

- Is the parallel system model of interoperability the best one for the U.S.?
- In the absence of interoperability, what is the acceptable timeframe for faster payments adoption? Is there a minimum viable consumer experience that can be attained?
- What role might directories play in facilitating interoperability, if the rails and rules themselves do not interoperate?
- What rules or standards might be put in place to enable multiple parties to better collaborate with one another? (For example, how might the chain of liability work? Which entities will be responsible for exception handling? Which parties might the end customer interact with?)

Thank you

Elizabeth McQuerry elizabeth@glenbrook.com

Beth Horowitz Steel beth@glenbrook.com

Nicole Pinto nicole@glenbrook.com

Sam Levitt sam@glenbrook.com

