Federal Reserve Commitment

The Federal Reserve identified five key Strategies for Improving the U.S. Payment System (SIPS) — Speed, Security, Efficiency, International/Cross Border, and Collaboration. These strategies are fundamental to modernizing the U.S. payment system.

The BPC is focused on increasing the efficiency of B2B payments and the Federal Reserve works closely with the BPC to support the initiatives.

B2B Market Assessment

In 2020, the Federal Reserve engaged the consulting firms of Kearney and Glenbrook Partners for a strategic review (“Assessment”) of potential industry-led initiatives that would have the greatest impact and highest likelihood of success. To conduct a comprehensive review, the Assessment engaged organizations and subject matter experts in functional areas across the entire B2B payments process.

The research validated what many of us already know; namely, that the primary challenges — the electronic payment setup and achieving straight-through-processing (STP) — are big and complex. As such, we closely examined these areas to identify initiatives that could address them. In doing so, we also identified an emerging concern in the industry regarding the adoption of ISO 20022.

Similarly, we learned these key insights:

- The e-Invoice Exchange Framework led by BPC work groups was well received by the payments industry and there is strong support for driving change and modernization with the completion of the Framework.

- Options to send remittance information both within, and outside, the payment rails are needed to achieve processing efficiency across payment types. The e-Invoice Exchange Framework could be a feasible approach for electronic delivery and automated processing of remittance information. There is industry support for further assessing this approach.

- Finally, there’s strong recognition of the value of ISO 20022 messages for achieving B2B payment processing efficiency, but to realize this potential, the industry needs guidelines for common content and message implementation.

With strong support for industry action in these areas, there is a feasible path forward and now is the time to act. The BPC is approaching the point of transitioning to a go-to-market plan for an e-Invoice Exchange Framework. BPC efforts have laid crucial groundwork for exploring a similar solution for electronic remittance delivery.
The Destination

To successfully advance this work, we embrace four guiding principles. They are:

1) Develop solutions that are payment method agnostic and support all electronic payment types,
2) Keep end user pain points top-of-mind and address business processes that encourage greater use of electronic payments,
3) Develop solutions that are provider agnostic, so they benefit the entire industry, and
4) If something is working well, do not change it. Existing EDI and B2B networks solutions work well and can be extended, not replaced.

In addition to operating principles, we identified several key pillars for B2B payments modernization. They are:

- In the B2B context, registries are needed to find businesses and determine how to send them electronic invoices and remittance information. Federated registries promote competition and avoid concentration of power.
- Second, a virtual network of access points similar to the network that enables email exchanges can deliver electronic invoices and remittance information while supporting market innovation and competition.
- Finally, consistent core message data will lessen costs of ISO 20022 implementation by banks, service providers and businesses.

The Virtual Exchange Network

A virtual exchange network works similarly to the email ecosystem, where end users sign up with an email provider to send and receive email. The email providers serve as access points to deliver emails and use prescribed standards for interoperability. The access points and the internet create the network effect.

In a virtual exchange network for invoices and remittance, service providers act as access points to deliver business data and information vs. emails. The virtual network allows access points to find and connect the end points. Like emails, there are prescriptive standards and rules to assure interoperability.

The virtual network is independent of, and complementary to, payment systems. Remittance information can be sent within a payment, such as in an ACH addenda. The exchange network provides another option when remittance information is complex and voluminous.

How We Get There: The Initiatives

E-Invoicing
With plans for an in-market pilot in 2022, the e-Invoice Exchange Framework has a lot of momentum and industry support. To realize these plans,

- The Semantics Work Group is developing the common data standard for the exchange framework, which will be published in the summer.

- The Technical Work Group conducted a proof of concept exercise in 2020 to develop and test federated registry services for dynamic discovery of participants in the network. In 2021, the group will identify and enhance open-source tools to support broad adoption of the framework.

- The Standards Oversight Work Group is focused on recommending an approach to administer the framework in the U.S. that would also pave the way for global interoperability.

- The Invoice e-Payment Information Work Group will focus on establishing best practices for US businesses to send electronic payment information with a paper or PDF invoice. Many companies already do this because it makes it easier for the buyer to setup electronic payments for recipients.

**Remittance**

Earlier this year, X9 established an ISO 20022 Market Practices Forum to develop best practice recommendations for ISO 20022 usage in the United States. Notably, participants do not need to be X9 members.

- A remittance content subgroup will create a best practice guide for ISO 20022 remittance messages, including common core data. The work will also support non-ISO 20022 remittance content.

- We encourage people with strong expertise in remittance processing and vendors involved with remittance solutions to get involved in this work.

The Remittance Delivery Work Group will assess leveraging the Exchange Framework architecture to enable electronic delivery of structured remittance information that supports all payment types.

- As mentioned earlier, the Assessment indicated that the approach and architecture are a feasible path forward. The approach would support current industry stakeholders and complement existing remittance solutions. An in-depth assessment is needed to determine how to proceed.

- This is a viable approach that does not present a competitive threat to stakeholders. To the contrary, it presents opportunity to enhance and extend the reach of all.

The aforementioned initiatives are part of a comprehensive plan to advance B2B modernization. Contact us at business.payments.smb@mpls.frb.org for more information or to join in the effort.
The Fed’s Commitment

Improving the U.S. Payment System by achieving the five desired outcomes.

SPEED, SECURITY, EFFICIENCY, CROSS-BORDER PAYMENTS, COLLABORATION
B2B Market Assessment
The Market Assessment

Initiated by the Federal Reserve System in collaboration with Kearney and Glenbrook Partners.

Gathered insights from 115 people from 60 organizations

**Our Goal:** Determine which initiatives to improve B2B efficiency have the greatest potential and highest likelihood of success.
Spanned the Full B2B Payments Process

Procure to Pay Process

Order to Cash Process

Legend:
- Primary focus
- Secondary focus

BUYER
- Manage suppliers
- Create PO
- Receive Goods/Services
- Send Goods Receipt Note
- Receive, Reconcile & Approve Invoice
- Send Remittance
- Make Payment
- Reconcile Payment & Analyze

SUPPLIER
- Provide data for onboarding
- Receive PO/Create Sales Order
- Deliver Goods/Services
- Generate Invoice
- Send Invoice
- Process Remittance
- Receive Payment
- Reconcile Payment

Supplier Onboarding
Ordering & Delivery
Invoicing
Payment (Collection)
Reconciliation & Payment Posting

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We Assessed: Initiatives That Would Be Impactful

Areas Assessed

<table>
<thead>
<tr>
<th>Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Inability to discover and obtain electronic payment information of trading partners</td>
</tr>
<tr>
<td>2</td>
<td>Lack of solutions to enable small and medium businesses to move from checks to electronic payments</td>
</tr>
<tr>
<td>3</td>
<td>Inability to effectively exchange invoices between trading partners in a manner that enables efficient processing of invoices</td>
</tr>
<tr>
<td>4</td>
<td>Inability to effectively exchange remittance information to enable efficient association with the payment and the original invoice</td>
</tr>
<tr>
<td>5</td>
<td>Lack of consistency in implementations of ISO 20022</td>
</tr>
<tr>
<td>6</td>
<td>Inability to effectively credential businesses in B2B payments</td>
</tr>
</tbody>
</table>

Focus of BPC (industry) efforts to date

Additional challenges identified in market engagement
We Learned: Strong Support for Industry Action

- Invoicing: There is momentum and support for industry initiatives to drive change.
- Remittance: Support remittance information within and outside the payment rails.
- Common Data Content: Support for ISO 20022, but concerns about fragmentation.
We Learned: There Is a Path Forward

Now is the time to act
- The increasing adoption of instant payments is an impetus for change
- Covid-19 has increased the priority for corporations to reduce manual processes

The groundwork is laid
- The BPC’s e-Invoice exchange framework is nearly complete
- Exchange frameworks in other countries gives us confidence
- BPC efforts have laid crucial groundwork for exploring a similar solution for e-Remittance delivery

There is a feasible path forward
- Address provider and end user pain points in invoicing and remittance
- Implement ISO® 20022 standards
- Support traditional and emerging electronic payment methods
The Federal Reserve and the BPC’s Destination
Operate with Guiding Principles

Electronic payment method agnostic
Support all electronic payment types

Focus on pain points of end users
Consider the benefits and costs to all stakeholders

Provider agnostic
Enhance collaboration and capabilities that benefit the entire industry
Do not favor one proprietary solution over another

Don't change what works well today, extend the connectivity
EDI and B2B networks are very effective for many companies; the exchange framework allows for them to extend the reach
Leverage federated registries
Alleviates concerns about concentration of power/competitive advantage

Enable a virtual network of exchange access points
Similar to what enables email exchanges between disparate email solutions

Define common core data
B2B message content consistency across all payment rails
The Ideal State of e-Invoice and e-Remittance Delivery

Prescriptive exchange framework technology works for both

- Exchange frameworks deliver electronic invoices and remittance data between buyers and suppliers
- Virtual networks complement payment systems
- Address two of the most challenging inefficiency pain points
- Support all payment types
How We Get There: The Power of the Federal Reserve-BPC Partnership
e-Invoicing Initiatives to Move the Industry Forward

2019 – 2022 Roadmap

<table>
<thead>
<tr>
<th>Year</th>
<th>Semantics Work Group</th>
<th>Technical Work Group</th>
<th>Standards Oversight Work Group</th>
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<td>2019</td>
<td>Assess Existing Semantic Models</td>
<td>Assess Existing e-Delivery Networks</td>
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<td>2020</td>
<td>Develop U.S. Semantic Model</td>
<td>Conduct Proof of Concept</td>
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<td>Publish U.S. Semantic Model</td>
<td>Develop Open-Source Tools</td>
<td>Conduct In-Market Pilot</td>
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<td>2022</td>
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<td>Assess Existing Standards Oversight Bodies</td>
<td>Identify Oversight Approach</td>
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</table>
Establish best practices for electronic payment information on an invoice
e-Remittance Initiatives to Move the Industry Forward

2021 – 2023 Roadmap

**2021**
- X9 ISO 20022 Market Practices Work Group
- Remittance content and market guide

**2022**
- Assess remittance delivery options
- Oversight assessment

**2023**
- Oversight body identification

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<table>
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<th>2022</th>
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</table>
The Path Forward Is Clear

Steps you can take to modernize B2B payments:

- Stay involved in the BPC
- Join a work group
- Follow Fed Payments Improvement on Twitter and LinkedIn
Thank you for attending today’s call.

Please complete the short survey.

https://businesspaymentscoalition.org/

business.payments.smb@mpls.frb.org