Business Payments Coalition

Business Payments Coalition
October 20, 2019
Meeting Recap

An in-person BPC meeting was held October 20, 2019 in Boston at the AFP 2019 Conference location. Thanks to AFP for arranging meeting space and for all the attendees. The meeting had highly engaged discussions on each of the topics - progress with assessing the e-invoicing frameworks and new NACHA B2B Payment support tools including the Remittance Validator and B2B Payments Directory.

Current BPC work: e-Invoicing

Refer to pages 6 - 8.

BPC work groups are assessing existing e-invoicing frameworks in other global regions for feasibility to expand adoption of e-invoices in the U.S. The work has prompted European organizations to explore international e-invoicing interoperability. Canada and Mexico are interested in participating in an e-invoicing delivery network if one is developed in the U.S.

The assessment included a technical proof of concept (POC) that developed a basic access point for sending and receiving electronic invoices using existing standards and technology. The POC assessed the relative degree of difficulty establishing an access point for an e-invoice delivery network modeled after established frameworks in Europe. The next step for the technical work group will be to build a demonstration federated registry and delivery network with a handful of external provider participants as a validation pilot.

Next steps also include a work group to assess possible governance models for the U.S. based on what other global governance frameworks have done.

The BPC work groups are in a position to build on the momentum they have created. Participation by access points is key.

The work groups will publish three papers by the end of the year: an overview for a general audience and assessments of both an e-delivery network and a semantic model for technical audiences. BPC members are encouraged to read the overview paper published November 1, *Overview of an e-Invoice Interoperability Framework*, to learn more about the framework and how the e-delivery network works.

NACHA Support of B2B Payments

BPC member Rob Unger of NACHA presented "I Want Romaine in My Caesar Salad: Blockchain, Food Safety and Payment Process Evolution," about NACHA's efforts to help corporates with payment processes. Refer to pages 9 – 31. NACHA is the organization that sets rules for the ACH network and they

have been partnering with companies that enable greater ACH usage and integration into bank and business systems.

Remittance Validator

The NACHA Remittance Validator is a tool designed to improve automated cash application in accounts receivable. Developed in conjunction with High Radius, it is a tool that tests compliance with a company's specifications for structured EDI 820 remittance data in an ACH addenda. The template is designed with both the buyer and supplier in mind. It could support ISO 20022 remittance messages in the future.

The Validator addresses the "many buyers-to-many suppliers" problem by providing one location for suppliers to post remittance specifications. Buyers use the tool to assure their format is compliant at the individual supplier level. It is in beta now with Johnson & Johnson, Verizon, and Consolidated Edison. Consolidated Edison requires payers to have a compliant addenda to send payments by ACH.

Attendee discussion:

- The number one complaint with ACH payments is with the way remittance data is received today, which increases the cost of an ACH. Also, companies are not receiving structured remittance data, and information about short pays is frequently not provided.
- Obtaining ERP support for sending remittance data is difficult. Remittance file output frequently requires middleware. NACHA will be convening ERP providers for Remittance Validator support. Support is also needed from third party providers and TMS systems.
- One adoption challenge is that accounts payable vendor master files cannot store remittance templates for individual suppliers.
- How do you drive this on the accounts payable side? It works only for large trading partners.
- Although NACHA owns the product, some attendees expressed that service providers who are competitors of High Radius may have competitive concerns. NACHA assured that they are happy to work with all providers.
- If PO flipping is used to create an invoice, how do you make remittance requirements discoverable?
- The ISO 20022 standard for the Request for Payment message allows substantial data, although the TCH Real Time Payment system limits the amount of data in the RfP message.

B2B Directory

During the 2018 romaine scare, it took months to discover the source of the problem. The Blockchain Food Safety Alliance developed a supply chain blockchain to be able to quickly trace produce back to source.

With payments, the dilemma is friction for discovering payments data and the fraud risk in exchanging the information. Accounts payable needs supplier information such as contact information, certification forms, and payment methods for vendor master files. NACHA is developing a B2B directory to address a secure way to find the information needed for supplier onboarding. They have completed a proof of concept and are now working on a production directory.

Users will be able to search the directory with an API call. The directory is federated, with the actual data housed at credentialed service providers (CSPs). There is a central connection layer built using blockchain technology that contains a hash of the payee information and the location of the service provider that has the electronic payee information (see diagram at page 29).

Attendee discussion:

- Is the data tokenized? The payment information is not on the blockchain, only a cryptographic hash. CSPs house the sensitive data.
- For fraud control, CSPs do the due diligence on the payee information, and the CSP signs the hash.
- NACHA has to work through how to handle payees that have multiple payment methods housed at different CSPs.
- The CSP nodes do the blockchain consensus on the change of the hash. There are no limits on the number of nodes. NACHA thinks they will start with under 25.
- There will probably be a master CSP to house small bank CSPs, with one node per CSP.

Thanks to Rob Unger for the presentation and to attendees for their engagement and offering perspectives.

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Business Payments Coalition meeting

October 20, 2019

At the AFP Annual Conference, Boston

BPC Meeting
October 20, 2019

Agenda

1. BPC Updates
2. Real Time Payments: Sense of the B2B Market
3. I Want Romaine in My Caesar Salad: Blockchain, Food Safety and Payment Process Evolution

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e-Invoicing

Current Activities

Completed or Near Completed Activities

Market Analysis: e-Invoice **2018**

- Evaluation of the current state of the market for U.S. invoicing and an analysis of the challenges and opportunities presented by e-Invoicing

Solution Assessment: e-Invoice **Target Q4 2019**

- Assessment of existing interoperability frameworks to determine the feasibility of leveraging established principles to support a U.S. Interoperability Framework

International Market Impact

Global Interoperability Framework – Recommendations from the BPC solution assessments are being considered for the basis to establish a global interoperability framework.

Assessment Reports to be published in 2019

Overview of an e-Invoice Interoperability Framework

e-Delivery Network Feasibility Assessment

e-Invoice Semantic Model Assessment

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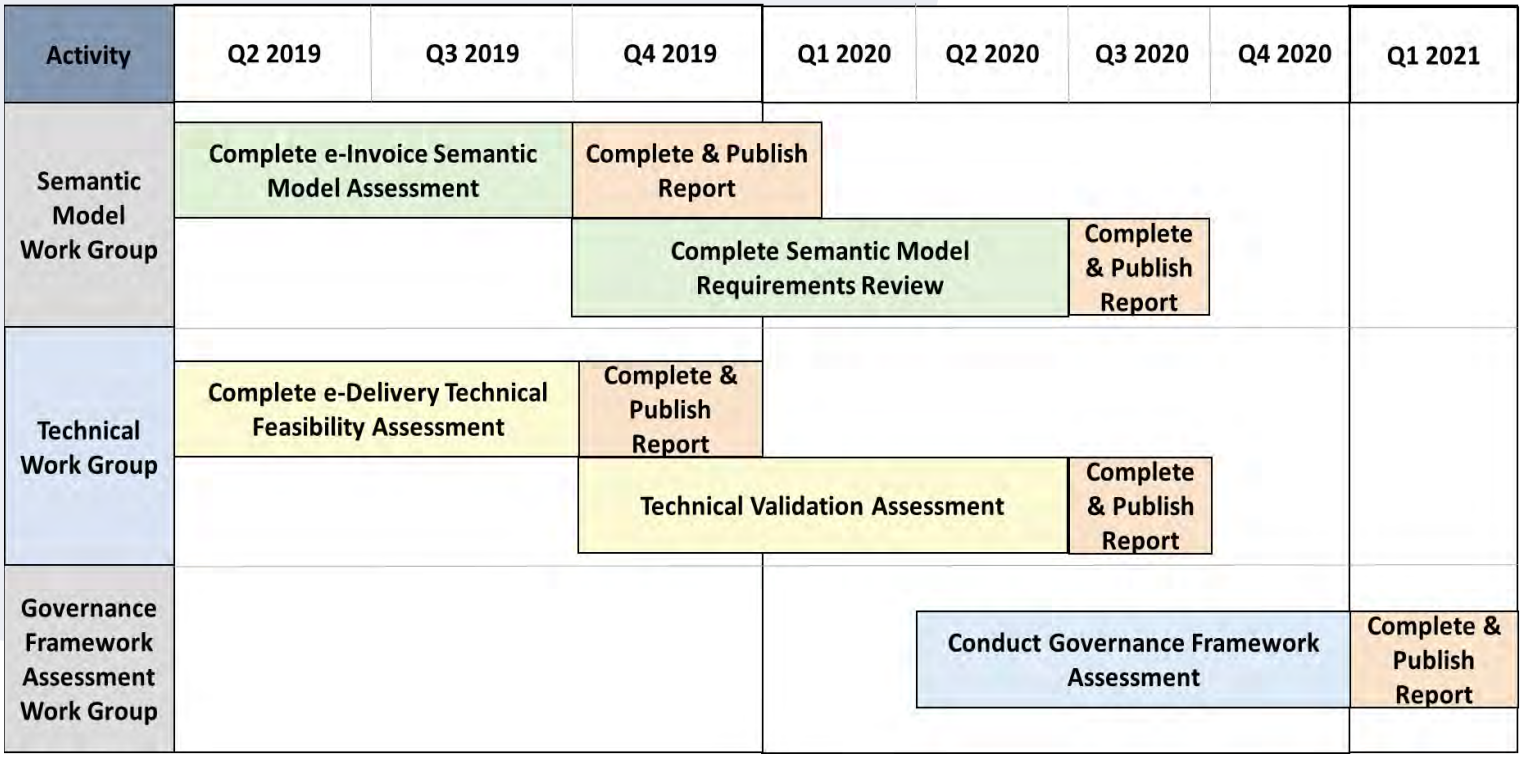
e-Invoicing

Work plan through 2020

1. Complete the semantic model (data definition) standard
2. Create an e-delivery network validation system
3. Assess governance framework models

2019 - 2021 e-Invoice Interoperability Framework Roadmap



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e-Invoicing

B2B networks and e-Invoicing

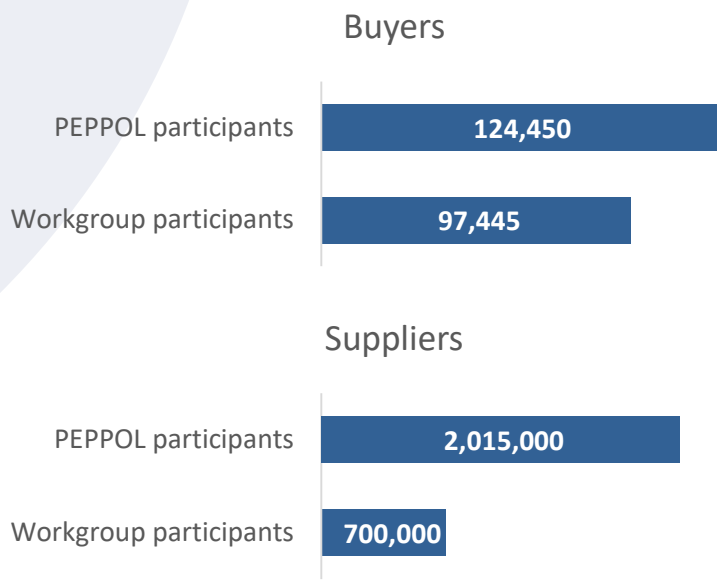
B2B networks participate in e-Invoice delivery networks as a member service

- Incentive to establish a U.S. e-Invoice delivery network for a broader reach
- Large established base of buyers and suppliers

Forrester study of 25 B2B networks

- 11 participate in the European e-Invoice delivery network (PEPPOL)
- 6 participate in the BPC e-Invoice workgroups

Potential reach of buyers and suppliers in B2B networks



Source: Forrester: Vendor landscape: B2B Networks, 2017 to 2018

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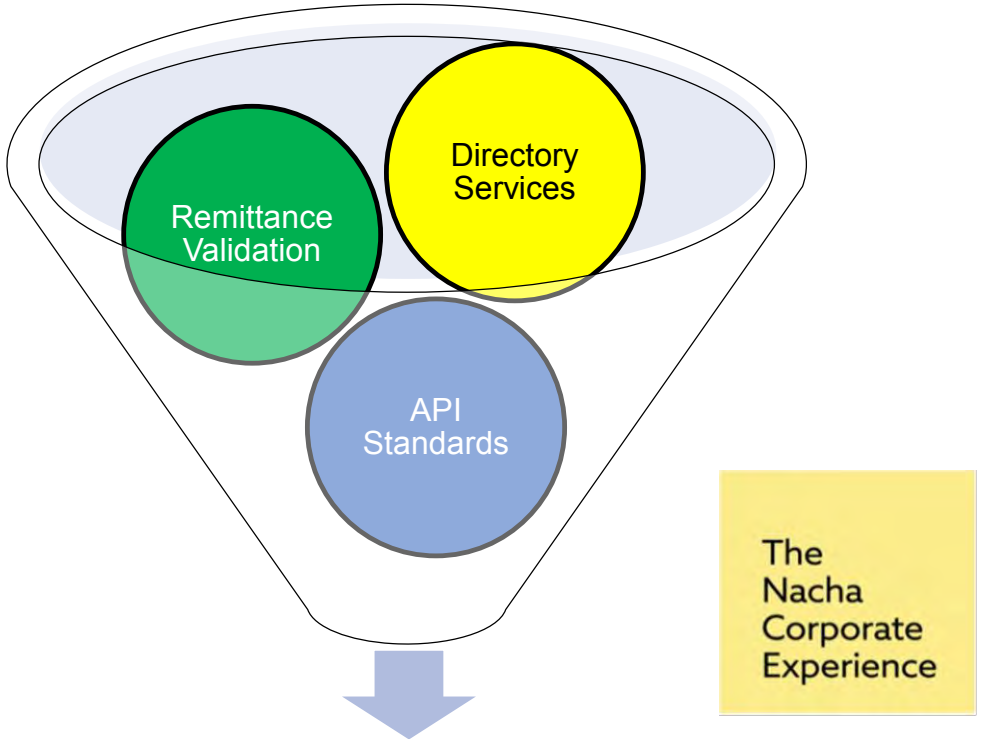
I Want Romaine in My Caesar Salad: Blockchain, Food Safety and Payment Process Evolution

Business Payments Coalition Meeting
AFP October 20, 2019

Robert Unger, Senior Director Product Management &
Strategic Corporate Relations, Nacha
runger@nacha.org, 703-561-3913

The Nacha Corporate Experience

- Elements are complementary, but not necessarily connected
- Separate offerings mean that participants can choose which solutions best meet specific needs
- All solutions support the ability to efficiently and securely exchange payment-related information

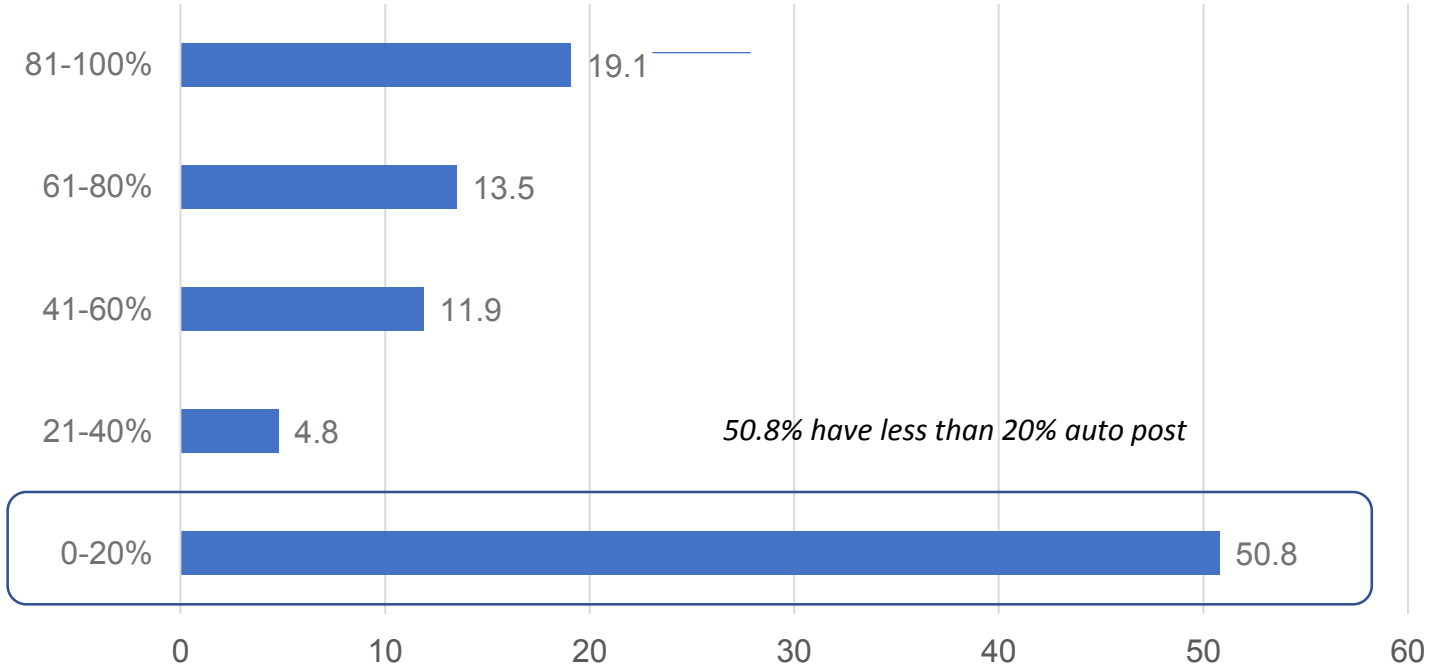


Examples: Payment Information Exchange Challenges

- Remittance information/cash application
- Accounts payable – supplier onboarding
- Other

More ePayments Can Complicate Cash App Hit Rate: 50% Companies Have Less than 20% Auto-post

What percentage of your payment remittance advices are posted automatically without any manual intervention?

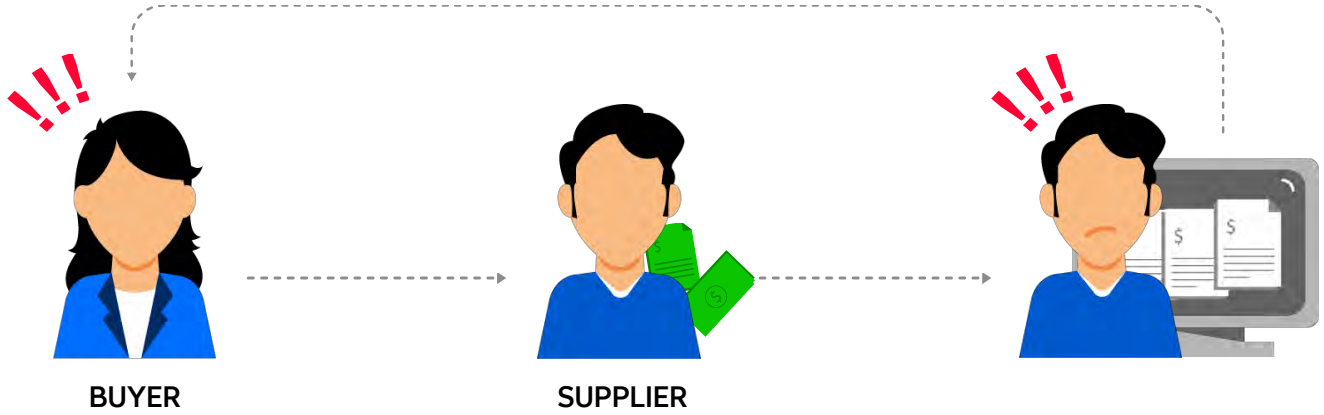


Survey of Accounts Receivable: Credit Research Foundation and NACHA

Solution: Nacha Remittance Validator

Yesterday

REMITTANCE COMPLEXITY DECREASES CASH APPLICATION HIT RATE

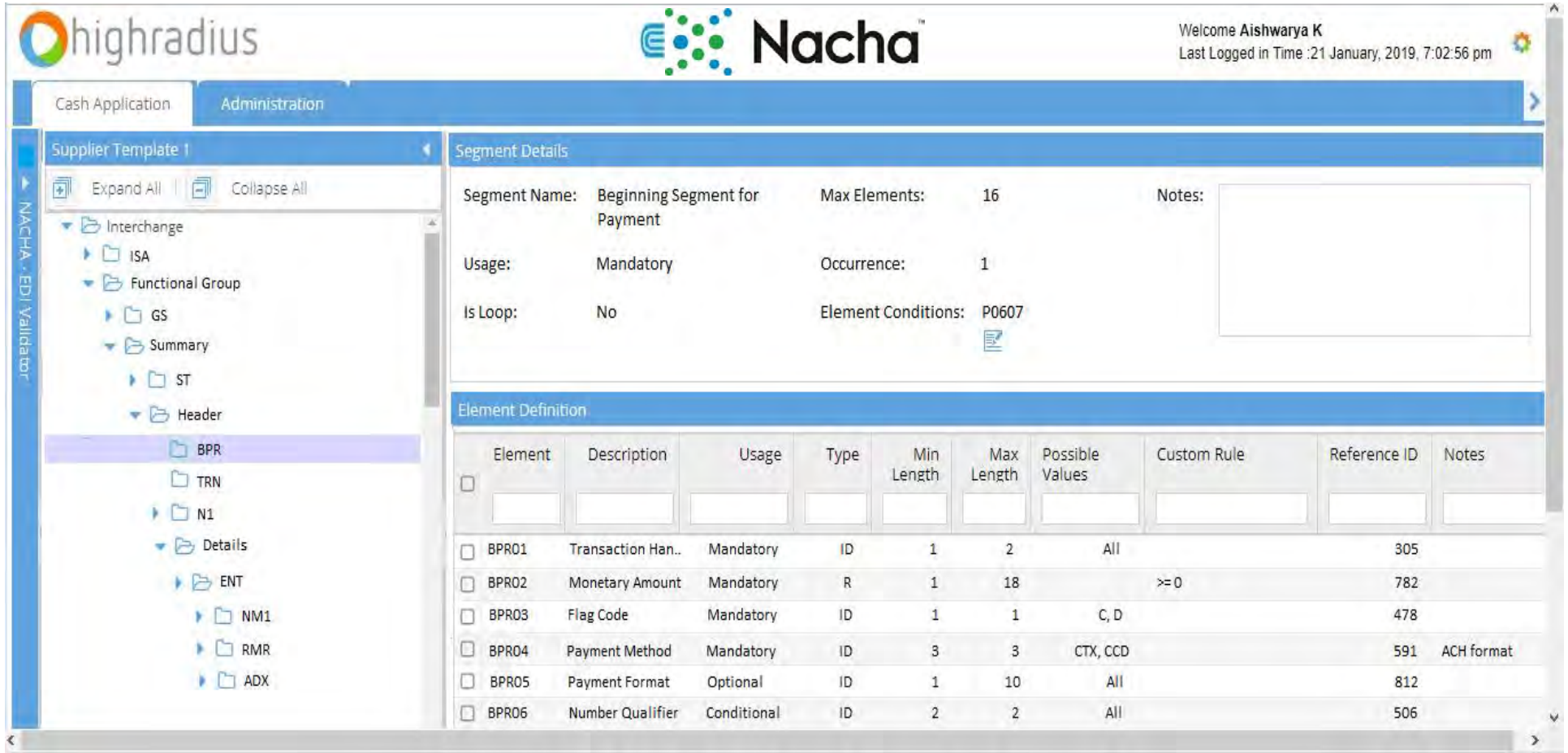


Today
The Nacha Validator

100% CASH APPLICATION HIT RATE WITH NACHA REMITTANCE VALIDATOR

Supplier User

- To configure each template

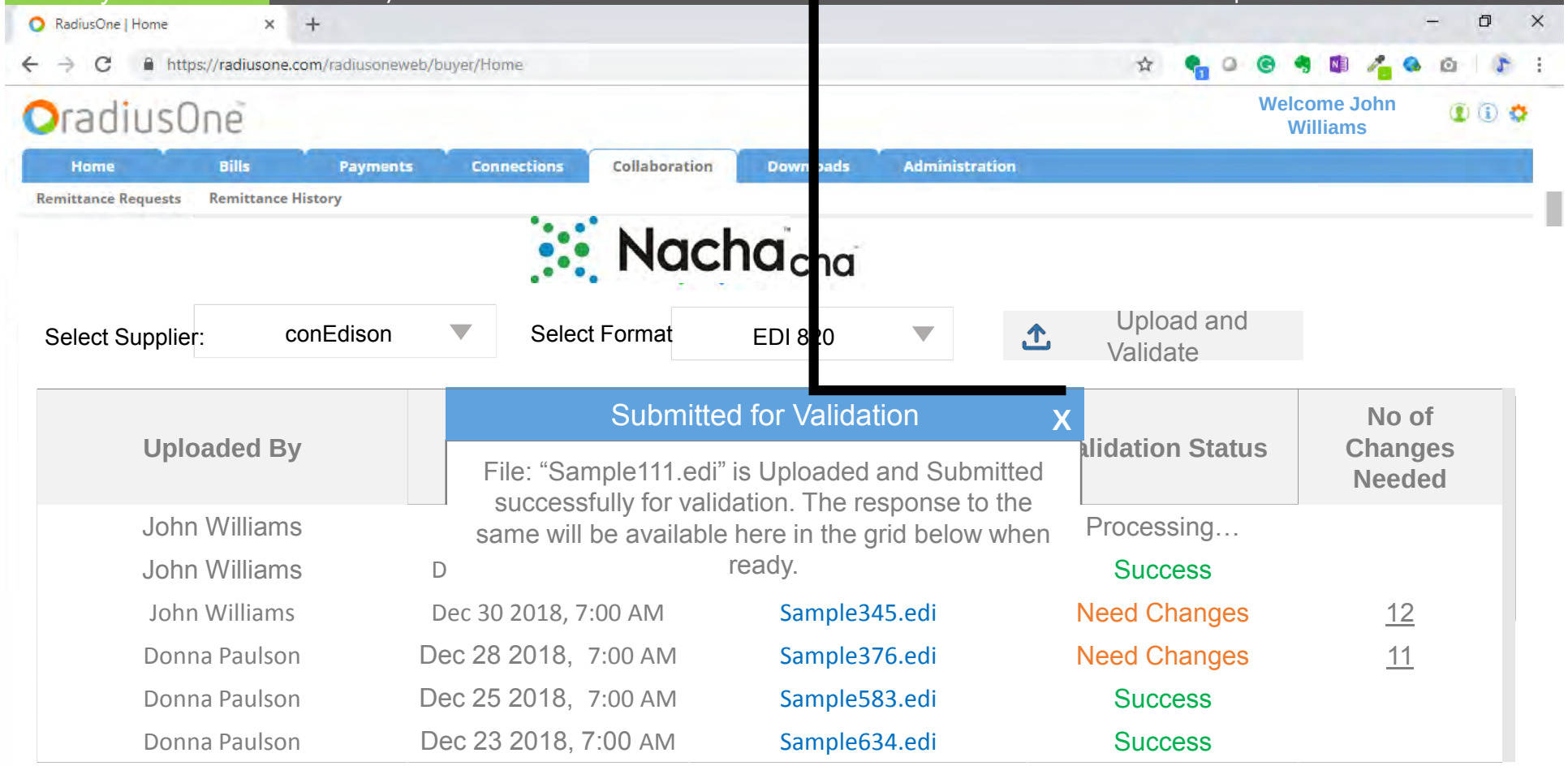


Sample File Upload

```
ISA*00*          *00*          *ZZ*LARRYS CONSTRTN*ZZ*JE PUMBING
SRVS*190509*0121*U*00401*000007758*0*P*:~
GS*RA*9024549508*JE PUMBING SRVS*20190509*012113*3717*X*004010VICS~
ST*820*0001~
BPR*C*7000*C*ACH*CTX**61058949**11101015****61058949**11101015*20190501~
TRN*1*2003766383~
DTM*097*20190509~
N1*PR*LARRYS CONSTRUCTION~
N1*PE*JE PUMBING SERVICES~
ENT*1*CF*9*CUST1234~
RMR*IV*IN1234*PO*7000*7000~
REF*PO*PO1234~
DTM*097*20190501~
SE*11*0001~
GE*1*3717~
IEA*1*000007758~
```

Buyer User

D2. Buyer Submits an EDI File for Validation and View Validation Report



EDI Validator Report

TEMPLATE NAME	FILE UPLOAD TIME
JEP4010	2019-10-07 14:29:20.0

Expand All | Collapse All

SEGMENT POSITION	SEGMENT	DESCRIPTION	ERROR TYPE	ERROR MESSAGE
H	Header	Header		
⊟H.BPR	BPR	Beginning Segment for Payment Order/Remittance Advice		

ELEMENT	DESCRIPTION	VALUE	ERROR TYPE	ERROR MESSAGE
BPR01	Transaction Handling Code	C		
BPR02	Monetary Amount	7000		
BPR03	Credit/Debit Flag Code	C		
BPR04	Payment Method Code	ACH		
BPR05	Payment Format Code	CTX		
BPR06	(DFI) ID Number Qualifier			
BPR07	(DFI) Identification Number	61058949		
BPR08	Account Number Qualifier			
BPR09	Account Number	11101015		
BPR10	Originating Company Identifier			
BPR11	Originating Company Supplemental Code			
BPR12	(DFI) ID Number Qualifier			
BPR13	(DFI) Identification Number	12345678	CustomRuleError	BPR13 failed the "Equals" validation
BPR14	Account Number Qualifier			
BPR15	Account Number	123456789	CustomRuleError	BPR15 failed the "Equals" validation
BPR16	Date	20190501		

SEGMENT POSITION	SEGMENT	DESCRIPTION	ERROR TYPE	ERROR MESSAGE
⊟H.TRN	TRN	Trace		

ELEMENT	DESCRIPTION	VALUE	ERROR TYPE	ERROR MESSAGE
TRN01	Trace Type Code	1		
TRN02	Reference Identification	2003766383		

SEGMENT POSITION	SEGMENT	DESCRIPTION	ERROR TYPE	ERROR MESSAGE
⊟H.DTM	DTM	Date/Time Reference		

ELEMENT	DESCRIPTION	VALUE	ERROR TYPE	ERROR MESSAGE
DTM01	Date/Time Qualifier	097		
DTM02	Date	20190509		

SEGMENT POSITION	SEGMENT	DESCRIPTION	ERROR TYPE	ERROR MESSAGE
⊟H.N1	N1	Name		

ELEMENT	DESCRIPTION	VALUE	ERROR TYPE	ERROR MESSAGE
N101	Entity Identifier Code	PR		
N102	Name	LARRYS CONSTRUCTION		

Cash application. Simplified.

Visit the Nacha booth for a demo!

Nacha™ Remittance Validator

powered by highradius
Integrated Receivables

Payment Challenges

- Remittance information/cash application
- Accounts payable – supplier onboarding
- Other

"I Want Romaine in My Caesar Salad."

Classic Caesar Salad

Romaine in Ruins *(current scenario)*

- 200+ sickened by E. coli outbreak 2018
  - Months of investigation revealed that the Yuma outbreak was caused by irrigation of lettuce using contaminated water.

- Slow investigation process
  - Regulatory bodies and retailers must collect data from all parties and piece it together manually to determine the source of the issue. The process can take days or weeks.
    - Pathway: Farm, processing facility, transportation, distribution center, delivery to store, selected by customer

Romaine Rising *(next generation scenario)*

- Leverage technology to improve food safety
  - The food system is absolutely too large for any single entity to track.

- Blockchain Food Safety Alliance
  - " .. relies on IBM's Blockchain Platform, which serves as a distributed ledger and provides an immutable and auditable trail of data concerning food products. It allows information to be taken and retrieved at various points in the supply chain, such as production, handling, and retail."

  - New Walmart supplier policy: "All fresh leafy greens suppliers are expected to be able to trace their products back to farm(s) (by production lot) in seconds – not days."

What is Blockchain? *(hint: it's not Bitcoin)*

- Blockchain is a system of recordkeeping.
  - When a piece of permissioned information (or "block") gets entered into the chain, other computers in the network are notified.

- Blockchain is a form of distributed ledger technology
  - It is not centralized – but instead "distributed" among "nodes" each which owns its own data

- A blockchain itself serves no purpose
  - An application must be built upon it

Characteristics of a Blockchain Project

Many players, overlapping relationships, no direct contract or contacts among all parties

Broken business model(s)

Common desire by players for a better outcome

(economic, compliance, regulatory)

Applying this to the Caesar Salad Caper

Many Players

Farms, processors, transportation distribution centers, stores

Broken Model

Supply chain information distributed, not easily shared - days or months to conduct investigation

Common Need for Better Result

Safe Romaine

The Payments Predicament

The Payments Predicament

- Buyers and suppliers need to exchange lots of information.

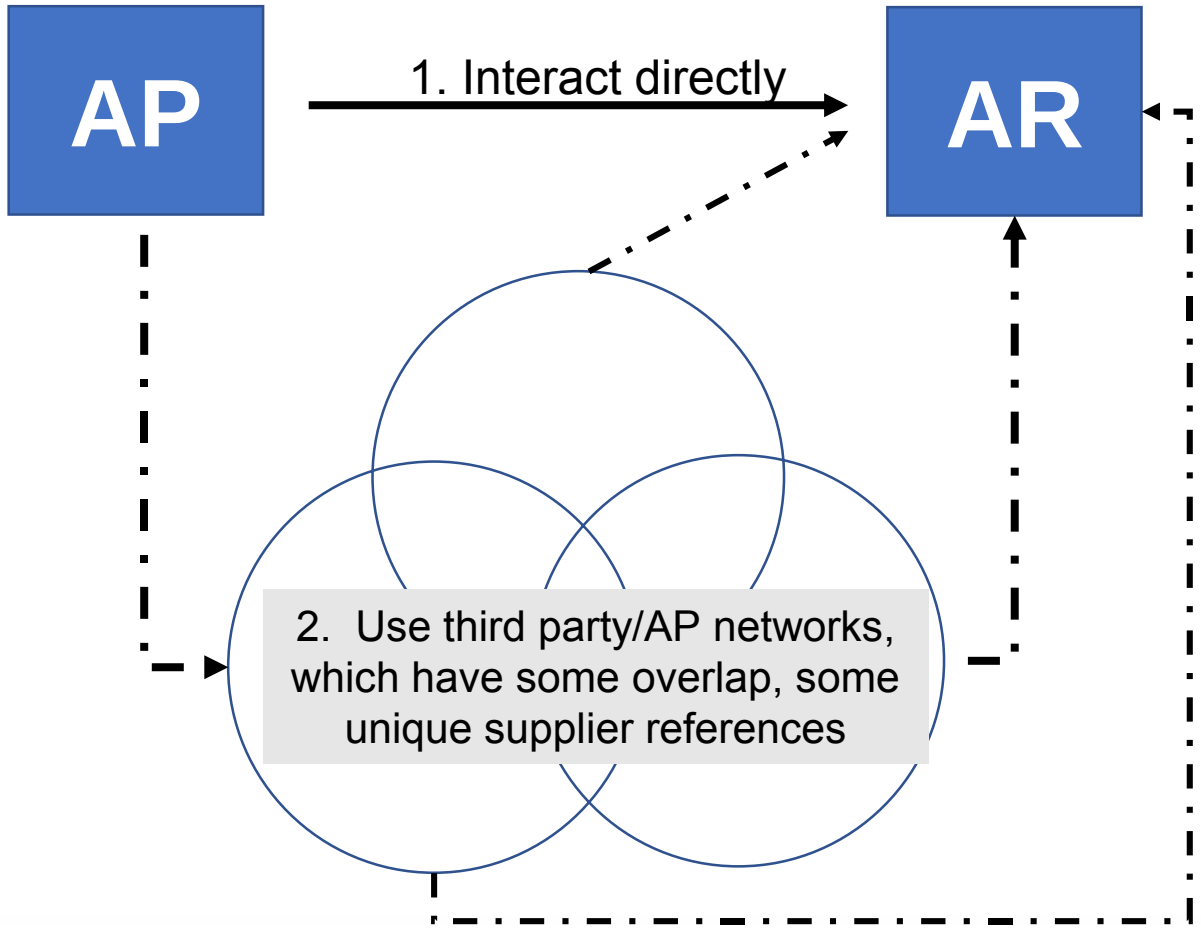
1. The “phone book” dilemma:
   - Exchanging trading partner information is inefficient and cumbersome – there is no central source

2. Exchanging information introduces risk
   - Data quality
   - Fraud

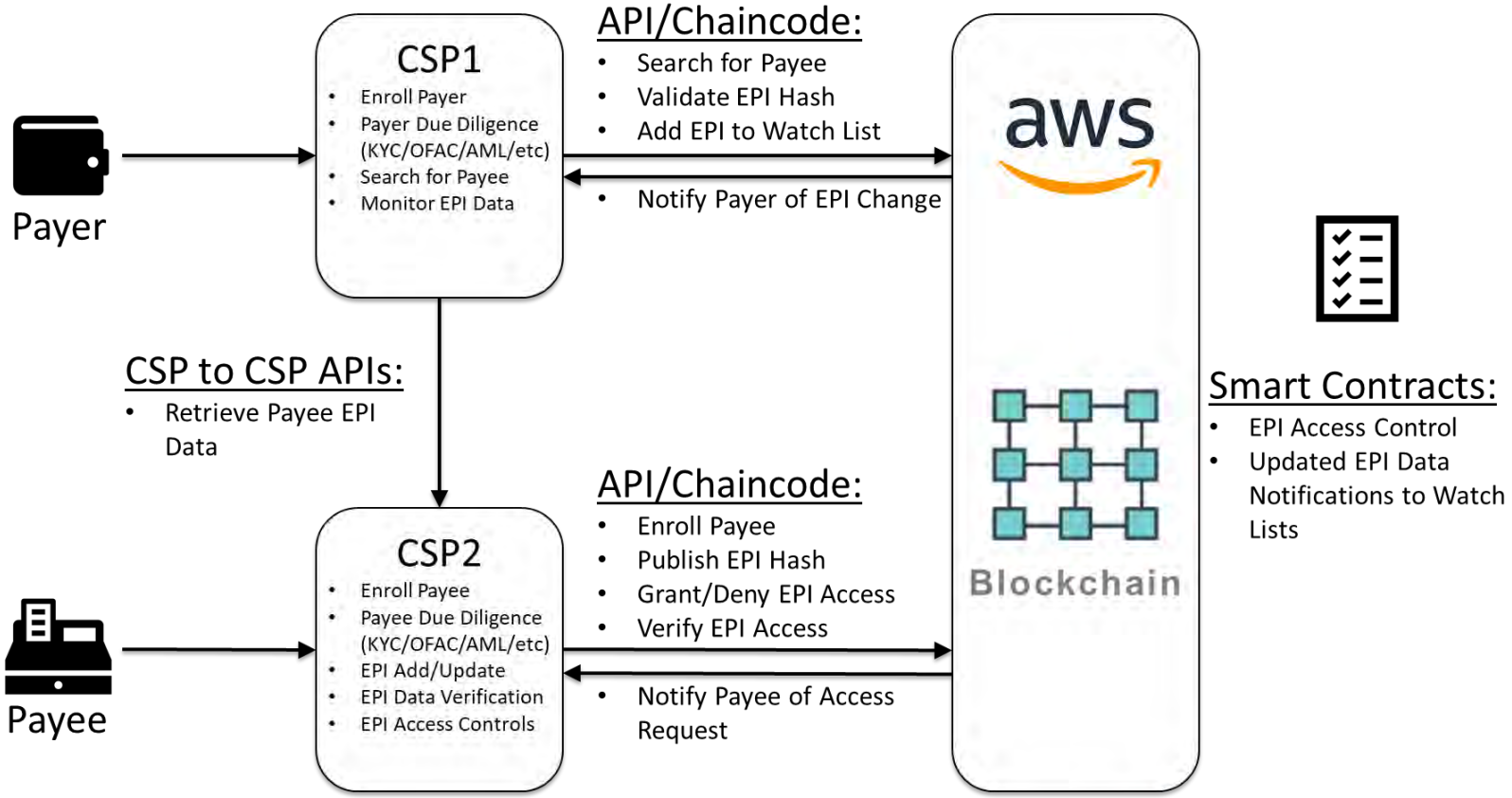
Payments Use Case: Supplier Onboarding

- Friction remains for obtaining/providing – and maintaining - information for supplier master/customer master so a payment can be sent/received:
  - W9/company profile
  - Compliance warranties
  - Certifications
  - Contact
  - Payment options/instructions
  - ……
- Current process
  - May take AP 2-3 weeks to onboard a new supplier
  - AR needs to constantly respond to information requests – and obtain information for customer master
  - What happens when key information changes?

Current Supplier Onboarding Use Case



Supplier Onboarding Paradise



INNOVATION

Applying Blockchain to AP Onboarding

Many Players

AP, AR, banks, third parties, ERPs, accounting packages

Broken Model

Information distributed, not easily shared, unnecessary costs, continued fraud

Common Need for Better Result

Lower payment cost (check vs ACH),

reduce risk

Where else is there friction in supply chain information exchange. Let's Discuss ….

Upcoming Webinar

CRF 2019 Survey: Artificial Intelligence, Machine Learning and Robotic Process Automation in Credit and Accounts Receivable

Tuesday, October 29, 2019, 1 p.m. ET

To register, visit the Events page on the BPC web site

BPC

Business Payments Coalition

https://businesspaymentscoalition.org/

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