# Business Payments Coalition Vendor Forum
### Summary of November 16, 2017 call

<table>
<thead>
<tr>
<th>Topic</th>
<th>Summary</th>
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</thead>
<tbody>
<tr>
<td>1. Introduction and agenda review</td>
<td>Guy Berg, VP of the Payments, Standards, and Outreach Group of the Federal Reserve Bank of Minneapolis opened the meeting.</td>
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<tr>
<td>2. Robotic Process Automation (RPA) and Artificial Intelligence (AI)</td>
<td><strong>Makarand Pande</strong>, Practice head for Banking and Financial Services Automation at Cognizant, and <strong>Dean Unrue</strong>, the Order to Cash, Global Process Leader at Delphi gave a presentation on RPA and AI. &lt;br&gt;Thanks to Mak and Dean for informative and insightful presentations. &lt;br&gt;<em>The decks are included with distribution of this meeting summary.</em></td>
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<td>3. Vendor Forum updates</td>
<td>Ernie Martin, Chair of the Vendor Forum, said the VF Directory is nearly complete. It will be a living, breathing document, so once published, others can be added. &lt;br&gt;The next effort will be a Trends document with feedback and insight from VF members on what they see coming down the pike that is innovative. Ernie will ask for 2 - 3 volunteers to help. &lt;br&gt;Ernie’s company, Receivable Savvy, launched Receivable Savvy TV. They interviewed Todd Albers of the Minneapolis Fed in the first interview. View the interview on the Savvy report on the RS web site <a href="https://www.receivablesavvy.com/">https://www.receivablesavvy.com/</a>.</td>
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<td>4. Vendor Forum initiative updates</td>
<td>Guy Berg discussed initiatives the BPC and VF have underway or will be kicking off shortly. &lt;br&gt;<em>Refer to the BPC workgroup summary included with distribution of this meeting summary.</em> &lt;br&gt;Work product from some of the smaller initiatives will be used with the larger initiatives. &lt;br&gt;There are a variety of industry initiatives underway, such as faster payments, TCH Real Time Payments, and ISO 20022. How do these fit with the BPC efforts? This question will come up over and over again. The BPC needs a cohesive story to the market. The Federal Reserve is rooting for all of the horses in the race and will support initiatives that have momentum in the marketplace. &lt;br&gt;The BPC will prepare a strawman document explaining the Interoperability Framework and how it fits into the broader industry efforts. What is it? What is the vision? Set a target to focus on and think about: what works, what doesn’t. We will get it in front of the BPC and VF membership before</td>
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<td>going to the entire market.</td>
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<td>In the meantime, short term wins build momentum.</td>
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<td>There is a recent McKinsey report, “Remaking the bank for an ecosystem world” that indicates banking profits are under pressure due to digital disruption. This is a call to action for the industry.</td>
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<td>5. Other discussion and wrap up</td>
<td>Ernie Martin noted this is the last VF call for the year. Will have communications this year and into next year.</td>
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<td>It’s been a productive year. The VF has done some new things this year that we haven’t done before.</td>
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November 2017

Automation Opportunities in B2B Payments

Makarand Pande – Practice head Automation (Banking and Financial Services)
Automation is the Next Disruptor

Automation Continuum

The Potential of Artificial Intelligence

Sample Applications
Automation is the Next Disruptor
Welcome to the 4th Industrial Revolution

Intelligent Automation

robotics
process
automation

machine
learning
cognitive
computing

artificial
intelligence
Impact of automation compared to previous disruptors

1. Productivity growth from the Steam Engine: 0.3%
   (1850-1910)

2. Productivity growth from Early Robotics: 0.4%
   (1993-2007)

3. Productivity growth from IT: 0.6%
   (1995-2005)

4. Productivity growth from Automation: 0.8% - 1.4%
   (2015-2065)

Source: MGI 2016
Impact on the future

In US, 33% of total working hours (~2 trillion $ in wages) highly automatable

% Time spent that can be automated by adapting current demonstrated technology

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<tr>
<th></th>
<th>Manage</th>
<th>Expertise</th>
<th>Interface</th>
<th>Unpredictable Physical work</th>
<th>Collect Data</th>
<th>Process Data</th>
<th>Predictable Physical work</th>
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<td>% Time spent in all occupations</td>
<td>7</td>
<td>14</td>
<td>16</td>
<td>12</td>
<td>17</td>
<td>16</td>
<td>18</td>
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US Wages in 2014 (in billions)

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<th>1030</th>
<th>931</th>
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Industries high on collect and process data areas

- Finance and Insurance
- Retail Trade
- Healthcare & Social assistance
- Manufacturing
- Transportation and Warehousing
Automation Continuum
Automation Continuum & Thinking

Systems that **DO**
- Replicate Repetitive Human Actions
  - Claims Processing
  - Data Consolidation / Validation
  - Accounts Payable / Receivable

Systems that **THINK**
- Learning Capabilities
  - Handle Judgment Oriented Tasks
    - Service Desk Incident Resolution
    - Network Security Management
    - Customer Service and Support

Systems that **LEARN**
- Understand Context
  - Adapt to users and systems
  - Virtual Cognitive Agents
  - Prescriptive Pricing Engines
  - Portfolio and Investment Services
Understanding Robotics Process Automation

Where RPA Can Help

- Processes involving digitized Inputs with limited human intervention
- Structured, rules-based, repeatable, computer based tasks
- Processes prone to error or re-works with limited need for exceptions
- Performing decisions based on objective criterion
- Need to access multiple systems
- Fluctuating workloads and volumes with long AHTs

Pre-checks & Rules Validation for New Business

Addition of new functionality or process module that requires system rebuild or manual hiring/re-skilling

‘Dirty’ interfaces – data transferred between applications that are not integrated

Multiple sources of data input for business reporting & analytics

Manual checking, decisions and calculations that follow pre-set rules with no judgement involved
## Possible automation opportunities

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<tbody>
<tr>
<td>- Incidents predictions &amp; Management</td>
<td>- Code Analysis / Code Coverage</td>
<td>- Process Optimization</td>
<td>- Chabot’s and Conversational Interfaces</td>
<td>- Runbook Automation</td>
<td>- Continuous integration / delivery</td>
<td>- Shift Left Automation</td>
<td>- Repeated human intervention; Click level automation</td>
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<td>- Storage Management; Event Management</td>
<td>- Automated Unit Testing</td>
<td>- KPI Optimization</td>
<td>- NLP based use cases</td>
<td>- Mailbox monitoring / ticket triaging</td>
<td>- Software Configuration Management</td>
<td>- Reqts to Test Case Automation</td>
<td>- Structured, rules-based, repeatable, human based tasks</td>
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<td>- Log monitoring &amp; Reporting</td>
<td>- Code generation</td>
<td>-</td>
<td>- Anomaly Detection</td>
<td>- Application Data Analysis</td>
<td>- Test Environment Management Services</td>
<td>- Service Virtualization</td>
<td>- Human based Re-works ; Rules based processing</td>
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<td>- Resource provisioning</td>
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<td>-</td>
<td>- Failure Monitoring and Predictions</td>
<td>- Application health checks</td>
<td>- Test data Automation</td>
<td>- Test data Automation</td>
<td>- Access multiple systems for aggregations</td>
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Where to start? Business Processes - Selection Framework

**Compression**
- Decision variability
- Multi-vendor solutions
- Cross application / cross platform requirements
  - *Best for “Do & Think”*

**Reinvention**
- IP intensive
- Industry unique
- Connected processes
- Integrated technologies
  - *Best for “Think & Learn”*

**Velocity**
- Rote, fixed rule activity
- Single platform/application
- Single vendor solutions
- Task / Sub-process targets
  - *Best for “Systems that Do”*

**Innovation**
- Labor + IP automation
- Dynamic, subjective rules
- Multi technology solutions
- End to end processes
  - *Best for “Do & Learn”*

**Data Complexity**
- UNSTRUCTURED
- STRUCTURED

**Process Complexity**
- LOW
- HIGH

**Cost to Automate**
- Most challenging but best potential to disrupt, transform and create new value.

Start here for quick wins

Start here for quick wins
Leverage Automation in conjunction with other levers

Digital Ready IT

Infrastructure
- Hybrid & Converged
  - Hybrid Cloud Transformation – IaaS, Software Defined
- SoR as Catalysts
  - Application Rationalization, Mass Consolidation
  - Application Modularization
  - Predictive AVM

APP Modernization
- Futurizing Workplace
  - End User Experience, Unified Communications
- SoR as Cloud
  - Application Modernization – Cloud
  - API led Customer Touchpoints
  - Partner Ecosystem

Data Analytics
- Data as Information
  - Data Stores, Data Lakes, Data Integration, MDM and Governance
- Data as Intelligence
  - Advanced Analytics
  - Real-time data processing
  - Algorithmic driven
  - Single View of Customer
- Systems that Do
  - Business Process Automation (BPA)
  - Infrastructure Automation
  - AVM Process Automation
  - DevOps Automation
  - Continuous test automation

Data as Business Insights
- Systems that Think
  - Predictive and Self-healing
  - Systems of Insights
- SoR as Moments of Engagements
  - Cognitive & Autonomous systems
  - System of Insights
- Data as Business Platforms
  - Self Service Platforms
  - Partner Ecosystem

Systems that Learn
- Systems that Learn
  - Cognitive & Autonomous systems
  - System of Insights

IT Enablement
- IT as Orchestrator
  - Next-gen App Store
  - IT as Advisor
  - Managed Security Services / Platforms
- Predict & Adapt
  - Implementation & Integration
  - Security Consulting
  - M&A

IT as Enable!
- IT as Advisor
  - for Next-gen Transformation
  - Integration of data and services

Next Gen IT Model
- Security
- Automation
- Next Gen IT Model

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The Potential of Artificial Intelligence
Conversational AI Market Trends in Banking & Financial Services

- **75%** of financial institutions view chatbots as an opportunity.
- **86%** of financial institutions believe chatbots will help engage millennials.
- **36%** of financial institutions believe that over half of customer conversations will be handled by bots in the next 3-5 years.
- **42%** of financial institutions believe they will need outside help to move forward with bots.

Gartner has listed Conversational AI among its **top 10 Strategic Technology Trends for 2018**.

- **7 out of 10** customers would welcome AI powered advice for banking, investment & insurance services.
Banking & Financial Services Conversational AI Maturity Curve

Tactical

- Silo'ed tactical effort across portfolios
  - Bottom-up approach - Testing smaller use cases with Cognitive technology
  - Efforts silo'ed across portfolios
  - Use cases predominantly simple lexicon driven chatbots
  - Challenge: Dynamic AI platform market and stuck in the business case limbo

Use cases: IT ops FAQs, HR questions

Common across banks

Strategic

- Fail fast philosophy and defining strategic AI foundation for enterprise adoption
  - Started early, with transformational use cases leveraging AI tech stack and quantified benefits
  - Testing scenarios which are integrated with enterprise applications
  - Defining strategic AI foundational capability: Speech, Image recognition, NLP engine

Use cases: Email classification, Virtual cognitive agent with standard foundational capability for IVR & cognitive bot

UBS, TD Bank, Citi

Enterprise Integrated & Advanced AI

- Fintech and leading company's advanced AI engine
  - Advanced AI engine, with custom built Machine learning engine re-defining business
  - Laying foundation for advanced use cases, with integrated front and back office

Use cases: Detailed account-specific questions and advice, integration across multiple channels

Capital One, Bank of America

Conversational AI maturity in Banking & Financial Services
Sample Applications (RPA)
B2B Payments Lifecycle powered by RPA

Key Services

1. **Advanced Analytics**
   - Daily KYC checks
   - Audits required by OFAC
   - Regular AML checks
   - Day limits on approvals

2. **Disputes**
   - Token based signatures
   - Audit trails
   - PCI Security Standards

3. **Reporting**
   - Compliance
   - Risk

4. **Compliance**
   - KYC checks
   - Audits required by OFAC
   - Regular AML checks
   - Day limits on approvals

5. **Risk**
   - Compliance
   - PCI Security Standards

6. **Reconciliation**
   - Payments Processing
   - Clearing & Settlement

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RPA in B2B Payments: Illustrative Opportunities

- **Buyer Receives Invoice**
- **Invoice Validation and Correction**
- **Approval and Release of Payment**
- **Funds Deposited into Supplier Account**

**Supplier Side Automation**

**Workflow Automation**

**Remittance Data**

**Remittance Data Automation/Efficiency Improvement**

**Automation of Payment and Settlement**

100% Data Reconciliation
RPA in B2B Payments: Illustrative Use Cases

**Supplier Side Automation**
- Scan, capture and validation of all invoices
- Automatic matching of invoices with POs and remittance information

**Automation of Payment and Settlement**
- Automated Payment Repair
- Notification on receipt of payment exception (within 24 hours, instead of days or weeks) so that payment issues can be resolved quickly

**Workflow Automation**
- Automate scheduled payments with buyer-defined payment rules
- Automated payment approval workflow

**Remittance Data Automation**
- Combine remittance data and payment data, to facilitate easy and accurate reconciliation
- Automate creation of the remittance data file to ensure accuracy of data. Ensures 100% reconciliation thus reducing operational cost.
RPA in B2B Payments: Automated Recon

A much improved reconciliation process can occur as payment data passed with electronic transactions is automatically matched with purchase data, eliminating the need for manual inputs.

**Buyer**
- Sends approved accounts payable files to Automation Provider or buyer’s commercial bank

**Automated Reconciliation Systems**
- Processes these files
- Adjusts card limit to match invoiced amount
- Sends remittance notices to supplier
- Creates a Reconciliation file for buyer’s record tracking

**Supplier**
- Charges buyer’s commercial card with approved amount

A much improved reconciliation process can occur as payment data passed with electronic transactions is automatically matched with purchase data, eliminating the need for manual inputs.
Sample Applications (Conversational AI)
Cards & Payments Use Case 1: “Pay My Bill” via Amazon Echo

1. Alexa, open Bank Bot
2. Welcome to Bank Bot, how can I help you?
3. I’d like to pay my credit card bill
4. OK, you’d like to pay your bill. Please enter your personal pin code
5. 1234
6. VCA authenticates user by confirming passcode
7. VCA queries business application and relays bill amount to user
8. Your credit card bill this month is $73.64. Do you want to pay this in full using the bank account on file?
9. Yes, please
10. Your bill has been paid in full. Thank you!

VCA invokes transaction using 3rd party business application
Cards & Payments Use Case 2: Travel Abroad

1. I will be traveling abroad next week and would like to be able to use my debit card.

2. What countries will you be visiting on your trip?

3. Italy and France

4. In order to enable your debit card, I’ll need you to enter the last 4 digits of your social

5. 1234 (will appear as ****)

6. Thank you, your card has been enabled for travel to Italy and France from Aug. 23-31st

Channels

Cognitive

Cognitive

Cognitive

Cognitive

Italy and France August 23rd to 31st
Cards & Payments Use Case 3: Fraud Detection

1. A potentially fraudulent transaction takes place and VCA notifies user

   We believe someone may be using your card fraudulently. Did you charge $342.76 to your card at Lowe’s in Atlanta on Sept. 24th?

2. Yes

3. Thank you – can you confirm how long you will be in Atlanta so you can use your card at any ATM/merchant?

4. 4 days

5. Thank you, we’ve made a note that you will be in Atlanta until Sept. 28th. Sorry for any inconvenience, you may now resume using your card.
We noticed you haven’t used your credit card in the last 6 months. To show our appreciation for being a cardholder these past 2 years, we’d like to offer you a 3 month interest free promotion for purchases made with this card.

Reply yes or no if you’re interested in this offer?

Great! Normal interest rates will apply after 90 days.
Thank you
Delphi Automotive PLC (NYSE: DLPH)

• Delphi is the leading supplier of Automotive Technology

• Delphi is a high-technology company that integrates safer, greener and more connected solutions for the automotive and transportation sectors. Headquartered in Gillingham, U.K., Delphi operates technical centers, manufacturing sites and customer support services in 46 countries.

At Delphi, we are driven by meaningful innovation. We see the future of driving and are making it possible today. We envision a society with zero road fatalities, zero injuries and zero accidents.
Robots have been part of Automotive Technology for a Long Time
Movement of BPA and AI from Manufacturing to Transactional Processing
Agenda

• Robotic Automation (Definitions)
• Robotic Automation Practitioner Overview & Cash Application Project Review
• Roll Out Approach & Detailed Best Practices Summary
• Questions
Services delivered through a Global footprint… in partnership with Delphi stakeholders and outside services providers

- China (Huaqiao)
- India (Hyderabad)
- Poland (Krakow)
- Mexico (Juarez)
- USA (Michigan)
RPA, AI and Big Data, Movement toward Automation

The Four Industrial Revolutions


FIRST (1784)
Mechanical production, railroads, and steam power

SECOND (1870)
Mass production, electrical power, and the advent of the assembly line

THIRD (1969)
Automated production, electronics, and computers

FOURTH (NOW)
Artificial intelligence, big data, robotics, and more to come

• RPA is perfect for further reducing cost and increasing efficiencies and controls in mature Shared Service Environments by Automating Manual Intensive, High Volume Transactional Processes

• Robotic Automation, Big Data and AI are trending Tools in OTC & Shared Services in general across Transactional Towers & Across Industries
RPA - Definition

• **Robotic Process Automation** (RPA), is a strategy a business uses to automate processes in order to contain costs.

• (RPA) - Robots are a bit like macros in Excel. They use Automation software to execute tasks that are often repetitive.

• Instead of a human typing in a password and retrieving a piece of data from a program the Robot will replicate that same task by running a software script that interfaces with those programs

• Add in Artificial Intelligence or Machine Learning and you could actually get Robots to do even more complex OTC tasks, like responding to a customer email inquiry by retrieving some basic data, for example.
RPA – What it Does

- Robots emulate human interaction with ERP Systems, Databases, MS Office Documents and emails.

- (RPA) Coding allows Copy & Paste to Target Systems, ERP Access and Entry, Portal downloads & Data Entry to replicate Transaction Processing
RPA - Impact

• Results of Robotic Process Automation include
  ▪ Accuracy
  ▪ Round the Clock Operations
  ▪ Scalability
  ▪ Compliance

• Labor Arbitrage
  ▪ Beyond original Shared Service or Centralization Labor Savings

• Centralization
  ▪ Legacy Systems and Multiple ERP Versions & assists in Business case for Centralization or Outsourcing or Centralization in Lower Cost Countries

• Standardization and Cost Savings in a Complex Environment

• Strong Controls & Compliance
Robotic Automation of Cash Application at Delphi
Cash Application - Robotic Automation Project

- Cash Application is Labor Intensive, in Hyderabad the AR team maintains 22 FTE that apply 6,800 Cash Receipts per Month for 1,700 customers across 45 sites.

- Cash Application has transformed from manual processing to Partial Automation via ERP applications like SAP “Autocash” functionality or Excel downloads and uploads via Macros, all requiring still manual processing and manual handoffs.

- With Robotic Automation the previous Manual Processing and Data Hand off is performed by the Robot.

- The various stages of logon, download, staging of data and entry into the ERP are performed by the Robot.
Cash Application - Robotic Automation Project

- Multiple Payment Methods
  - Wire, ACH, Check, Factoring, Bank Notes (China), BOE, EDI820
- Multiple Banks with Differing Access and Formats
  - Generic E-Mail, Bank Portal, Factoring Portal
- Remittance Access
  - Customer Portal, Generic Mail Box, Postal Delivery
- ERP
  - Multiple ERP Versions
Cash Application Process Flow - Adopted with RAPID Automation

Start

After receiving bank statements save the bank statement day wise in folder. (This folder will be mapped in Robo's Desktop D drive)

Robot

Robo will go to the folder with bank statement and convert statements PDF to Excel. (conversion of PDF to Excel automated to enhance controls and reduce the manual intervention)

Excel statement will be saved on specific folder.

Robo uses the saved excel, filters the Ford payments.

Robo login into the Ford portal and downloads the individual remittance.

Robo saves the remittance sheets in the remittance folder with predefined running conversations in the Robo desktop.

All remittances will be merged to consolidated sheet for all payments.

Robo triggered to post the payment on account

Robo will split invoices with perfect match vs unmatched and save the file in the share drive

Matching happen based on the remittance consolidated and open invoices from SAP

Open invoices report saved in the Robo desktop D drive.

Download the open invoices report for the associated TB based up on the input file.

Robo login to SAP system.

Robo will pick excel from Robo desktop D drive and save in the remittance audit folder on the share drive

End

Robo to clear invoices will start to post CT and DT entry for the payment that are perfectly matching in SAP

Saves the clearing doc number in the excel template

Robo to clear unmatched invoices and post residual in SAP

Save the clearing doc number in the excel template. This excel file will be save in the Robo desktop D drive

Excel report with posted details and exceptions will be send to management daily.

Robo will pick excel from Robo desktop D drive and save in the remittance audit folder on the share drive

Start

End
Roll Out & Best Practices
### Robotic Automation Rollout

#### Recommended Areas to Assess

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<tr>
<th>Development Phase</th>
<th>Initiate &amp; Assess</th>
<th>Design</th>
<th>Test</th>
<th>Deploy</th>
<th>Maintain/ Run</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess Phase</td>
<td>Secure Coding Phase</td>
<td>UAT &amp; SIT</td>
<td>Pre - Production</td>
<td>Post Go live</td>
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- **Initiate & Assess**
  - Understand overall processes & sub-processes. List upstream & downstream applications that can be impacted by RPA.
  - Review the existing change management policy & procedures.
  - Identify different types of changes (code, config., DB, OS, network etc.) and their management.
  - Identify key point of contacts for all types of changes (including third parties).

- **Design**
  - Update change policy to cover RPA requirement.
  - Define IT change processes and controls for all related applications and bots.
  - Define requirements for different types of changes (code, infra, access, demographic, infra, workflow, config. etc.).
  - Define the process for emergency changes.
  - Identify owner and point of contact for RPA change controls.

- **Test**
  - Ensure System Integration and User acceptance test have been carried out for all the changes related to RPA.
  - Roll Back plans have been documented.
  - Approvals and test and release timelines have been communicated to downstream and upstream teams.
  - The process is set to test RPA related process/ sub processes in event of any change in upstream/ downstream apps.

- **Deploy**
  - Dip-stick test & dry run for change management controls in pre production environment for following areas:
    - Configuration
    - Code
    - Workflow
    - Access
    - Infra
    - OS & DB
    - Network
    - Upstream/ downstream applications.

- **Maintain/ Run**
  - Continuous oversight and assurance on change management control.
  - Identify the requirements for change management in the Sprint review meeting (in case of Agile approach).
  - Train & educate app point-of-contacts for RPA change control requirements.
  - Document the control test results for support in different audits.
Robotic Automation – Best Practices

• Robots need care and attention - HR Policies — in the form of maintenance, upgrades, and cyber security protocols, introducing additional costs and demanding ongoing focus.

• Map out the Appropriate Processes for Robotics (Transactional, Manual or Resource Intensive)
  ▪ High Volume Transactions with Large Teams doing Similar work
  ▪ Start with Low Impact Process (can’t do everything at once / quick wins)
  ▪ Look at processes where there are Data Interchange issues (ERP Autocash)

• Operations should Partner with IT. IT can not implement in a vacuum, need operations expertise on process, controls and nuances such at Archival for Audit Purposes
Robotic Automation – Best Practices

• If using a 3rd Party, ensure upfront testing of Automation Software in 3rd Party Infrastructure/ environment (CITRIX comes up in Articles)

• The platforms on which the Robots interact (or handshake) often change, as well as the version of the automation software.

• Installing Robots introduces an additional architecture layer into the system requiring more governance and oversight by the IT organization, which is often already burdened with maintaining legacy systems.
Robotic Automation – Best Practices

• Installing Robots also introduces changes in the governance of controls and exception reporting processes that currently are performed by humans.

• Changes upstream and downstream, even during Robot configuration, can significantly delay Robots being put into production. For example, a new regulation requiring minor changes to an application could totally throw off months of work in the back office on a bot that’s nearing completion.
Robotic Automation – Governance

• Governance and Oversight is Critical

• Treat the Robot just as a person for purposes of Onboarding, Monitoring, Metrics and Maintenance
  ▪ Assign a “supervisor”, ERP, Portal, Bank and other system log on identification and passwords, name the Robot and ensure the Robot is tracked with all other HR metrics
  ▪ Assign Operations to daily turn on and monitor the Robot Output (Exception reporting)
    ▪ Example, after cash application, unapplied invoices, deductions or overpayments are sent to the Collector as is the Cash tracker
    ▪ Analysis of exceptions and exception processing remain with humans within the operations
    ▪ Have back-ups in place to monitor the robots and understand the SOP
  ▪ NOTE: It is when Monitoring fails that companies experience issues
• Governance and Oversight is Critical (Continued)

• Centralized functions and BPO’s maintain process desk procedures (SOP’s) and govern those SOP’s with controls
  ▪ Archival, Version Control, Consistency and Approval for example
  ▪ The same applies to the Robot, ensure the following
    ▪ Testing the code and the application
    ▪ Creating the SOP including:
    ▪ Creating exception reporting procedures
    ▪ Creating human input and handoff’s
    ▪ Include the Coding and monitor and document coding changes and the reason for the changes
    ▪ Ensure SOX and IC Audit Compliance, Identify Controls like Archival
Summary - Best Practices from a Practitioner Perspective

• Governance and Oversight is Critical (Continued)

• Continue Monitoring via Metrics

• Continue to test the Business Case, Don’t overstate saving by identifying 100% of Headcount savings as oversight and exception reporting are still required

• Include the Robots in Performance Reporting and Stage Implementations with a Governance Approval Process
## Governance Example

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<td>Reason for Deviation / Comment</td>
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<tr>
<td>Coding Changes?</td>
<td>One, customer name changed in bank stmt</td>
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<td>Exited Monitored Go Live? (Yes/No)</td>
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<td>Reason for Deviation</td>
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Presentation Take Away

• General Understanding of how Robotics works in Transactional Processes

• Projects should be selected based on high volume low complexity and Business Case should not overstate FTE reduction

• Operations Involvement with internal or 3rd party IT Implementation or BPO is Critical

• Governance is critical, Robot should be integrated into HR process

• Project should be frequently reviewed including post production for Metrics, Coding changes, Handover and Attrition of Human interface
Open Questions

• Any Questions?
Thanks -
Business Payments Coalition Work Groups Call to Action

Have an impact. Make a difference. Join the efforts to make the end-to-end B2B payments process more efficient!

How? By joining the BPC and participating in one or more of several new workgroups. Email business.payments.smb@mpls.frb.org or complete this form to join a work group.

e-Invoicing work group
Get involved to help eliminate paper invoices and promote procure-to-pay automation. The e-Invoicing work group will kick off a new project to identify, design and adopt an electronic invoice interoperability framework for the U.S. market, building on the prior effort of the Catalog of Electronic Invoicing Technical Standards, which was published in October 2017.
Timeframe: Kicks off in November 2017
Facilitator: Todd Albers

B2B Remittance project
Get involved to help eliminate manual cash application of electronic payments. The remittance project will develop industry standards for payment-method-agnostic remittance advices to achieve straight-through-processing of payments, from initiation to application. The scope includes data, message format and delivery.
Timeframe: Kicks off early 2018
Facilitator: Patti Ritter

Card-based Remittance Requirements work group
Get involved to help automate the remittance data needed to apply card payments. The Card-based Remittance work group will:
1. Identify the business requirements for exchanging structured remittance messages between buyers and suppliers for card payments
2. Determine the capabilities of the current card system to deliver remittance information
This effort will engage all parties in the card payment process to enable automated delivery of remittance information.
Timeframe: October 2017 – January 2018
Facilitator: Todd Albers

Simple Remittance Requirements work group
Get involved to help small to medium size businesses (SMBs) convert from checks to electronic payments. The Simple Remittance work group will define data needs for simple remittances that can be easily adopted by SMBs. It will identify three or four levels of remittance information based on needs of SMBs, starting with the minimal, viable set of data needed for payment application and reconciliation.
Timeframe: October – December 2017
Facilitator: Patti Ritter
Business Payments Coalition

The Coalition’s overarching goal is to make B2B electronic payments more efficient across the end-to-end process, that is, to achieve straight-through-processing across both the procure-to-pay and order-to-cash cycles. The Coalition accomplishes this objective by addressing problems and barriers that make it difficult for businesses to use electronic alternatives to paper checks and remittance advices. Membership is free. Join at https://information.frbcommunications.org/JoinBPC

SMB Accounting Software APIs work group
Get involved to help SMBs convert from checks to electronic payments. The SMB Accounting Software APIs work group will gather, compile and publish a list of Application Programming Interfaces (APIs) that can be used with SMB accounting software to automate electronic payment initiation. The work group will also compile a list of banks and payment providers that integrate payment initiation APIs.

Timeframe: November 2017 – January 2018
Facilitator: Patti Ritter

ISO 20022 Capabilities work group
Get involved to help promote the choices that US businesses have to implement ISO 20022. The ISO 20022 Capabilities work group will develop an online registry of US banks and service providers that have ISO 20022 capabilities. The registry will be a resource to end users and will publicize the availability of ISO 20022 for payment and cash management operations.

Timeframe: Early 2018
Facilitator: Patti Ritter

ISO 20022 Education work group
Get involved to help with industry education on general and specific ISO 20022 topics. The ISO 20022 Education work group will develop ISO 20022 educational webinars and companion materials. It will establish a speakers bureau and curriculum for a variety of ISO 20022 topics. The group will enlist industry groups such as X9, IFX, NACHA® and SWIFT® for content and speakers.

Timeframe: Early 2018
Facilitator: Patti Ritter

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612-204-5437

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612-204-5543

https://fedpaymentsimprovement.org/payments-efficiency/business-payments-coalition/

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