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Executive Summary

- New York State Comptroller’s Office processes in the range of 6.5 million payment transactions within the Statewide Financial System (SFS) on behalf of 84 business units/agencies during the course of a fiscal year.
  - 52% of these payments are made via paper check and 48% via e-payment.
  - There are multiple purposes (use cases) for these payments, with “specialty” cases representing a vast majority of the check volume.

- In addition, the New York State issues individual payments through agency sole custody processes outside of the Statewide Financial System and records only the financial impact of those payments within the financial system.
  - Benefit programs such as Women, Infants, and Children (WIC), Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), and Unemployment Insurance (UI) process payments via electronic payments and/or payment cards
  - Personal Income Tax refunds and payments for State Insurance Fund, for Workers' Compensation, and to Medicaid providers are paid via a combination of paper check or ACH payments.
  - These account for an additional total of 16.5 million payments (not including Medicaid), of which 2.8 million (16.9%) are checks.
Executive Summary (cont’d)

- The payment flows involve five general process steps that run directly or indirectly through the State Financial System. They result in one of three payment types: ACH, check, or wire transfer.

- Through a review of available payment files, Mercator Advisory Group identified 11 use cases representing two outstanding opportunities for improvement through use of both existing and alternative payment types.
  - Expense reduction through use of e-payments rather than checks
  - Improved experiences for both New York State citizens and the supplier base

- Additional opportunities are also available through digital process adoption and further analysis of payment flows beyond the use cases identified that have high initial potential.
Introduction

- Project Purpose
- Project Approach
- Current State Analysis
Introduction: Project Purpose

The project originated through the vision of Mastercard to fund such analysis in order to uncover pain points in state government payment flows and identify opportunities for process improvements. The results of the study can potentially benefit the State of New York and other state governments by the subsequent report distribution through NASACT.

The objective of Mercator Advisory Group’s engagement with the State of New York is to document the number, dollar value, tender type, and business case (purpose) of the outgoing disbursements originated by the State.

This presentation summarizes findings from Mercator Advisory Group’s analysis of the payments data and discussions with individuals in the Office of the New York State Comptroller. The presentation provides recommendations and highlights opportunities to assist the State of New York to improve the efficiency of their payment operations based on knowledge of industry best practices.

Through the Office of the New York State Comptroller, New York State has already provided an overview presentation to the National Association of State Comptrollers (NASC) at the annual event in April of 2019.

The full report will be subsequently posted to the National Association of State Auditors, Comptrollers and Treasurers (NASACT) website. New York State hopes that all state governments can use this information as a case study for understanding state payments and the option available to effectively make these payments in today’s world, potentially improving their payment operations.
Introduction: Project Approach

**Mercator Advisory Group did the following:**

- Reviewed documentation provided by New York State to better understand state government nomenclature, structure, and operations, and then had ongoing discussions to clarify open questions.

- Analyzed the provided data to understand the current state of payments.

- Identified opportunities based on:
  - Current high-volume use of a less efficient payment type, primarily checks.
  - Current use cases where a payment application is identified as being particularly cumbersome.
  - Where a change in payment solution could make a meaningful, positive difference to the recipient.

- Selected specific use cases representing identified opportunities and outlined solutions for consideration.

- Provided summary matrix of payment type attributes that may help to identify solutions for additional use cases.
Current State: Generic New York State payments taxonomy

Agency → Office of the New York State Comptroller → PSP

**Document Review**
- Compare invoices received in SFS against purchase orders (P.O.s).
  - Auto entry for native and OCR e-invoices.
- Non-P.O. documents are cleared for payment.
  - Medical records, jury attendance, etc.

**Payables**
- Invoice/P.O. matching is completed.
- Payment request is initiated in SFS.
  - Both automated and manually entered.
- Payment is assigned a program and/or account code.

**OSC Filter**
- SFS-originated payment requests are routed to appropriate OSC unit for review.
- Both automated and manually entered.
- Payment requests that originated from an agency not using SFS (e.g., ERP, Payables, Bank system) are handled by assigned OSC unit.

**OSC Approval**
- Authorized party reviews transactions.
  - Manual (MAN) payment types are reviewed and entered into SFS with program and/or account code.
- Approved transactions are released for payment.

**Payment**
- Payment type is aligned with vendor file description.
- Routing for payment execution:
  - ACH, Wire to bank
  - Checks to internal state processing operations
New York State processes 6.53 million payments through SFS during a fiscal year, essentially split between checks and ACH.

Source: Mercator Advisory Group analysis, New York State payment data files
SFS payment transactions to specialty vendors are highly skewed toward checks, which are inefficient.

Source: Mercator Advisory Group analysis, New York State payment data files
Nearly one half of all Regular and Specialty Account checks (47%) are to pay refunds.

Top 10 Reasons for Checks
Number of Checks (millions)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number of Checks (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refunds</td>
<td>1.58</td>
</tr>
<tr>
<td>Local Grants and Public Assistance</td>
<td>.28</td>
</tr>
<tr>
<td>Clinical and Laboratory Services</td>
<td>.23</td>
</tr>
<tr>
<td>Jury Service per Diem</td>
<td>.22</td>
</tr>
<tr>
<td>Dental Supplies and Materials</td>
<td>.06</td>
</tr>
<tr>
<td>Medical Supplies and Materials</td>
<td>.06</td>
</tr>
<tr>
<td>Attorney for Child</td>
<td>.05</td>
</tr>
<tr>
<td>Postage</td>
<td>.04</td>
</tr>
<tr>
<td>Phone—Local and Long Distance</td>
<td>.04</td>
</tr>
<tr>
<td>Food &amp; Related Consummable Supplies and...</td>
<td>.04</td>
</tr>
</tbody>
</table>

Total number of checks = 3.36 million
Total value= $7.5 billion
Average check size = $2,289

Source: Mercator Advisory Group analysis, New York State payment data files
The top 10 departments account for 71% of all T&E checks.

Top 10 Departments for T&E Checks

<table>
<thead>
<tr>
<th>Department</th>
<th>Number of Checks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dept of Corrections and Community Supervision</td>
<td>3,851</td>
</tr>
<tr>
<td>State University of NY</td>
<td>2,766</td>
</tr>
<tr>
<td>Department of Transportation</td>
<td>2,541</td>
</tr>
<tr>
<td>Division of Homeland Security</td>
<td>1,587</td>
</tr>
<tr>
<td>State Education Department</td>
<td>1,232</td>
</tr>
<tr>
<td>Assembly</td>
<td>1,037</td>
</tr>
<tr>
<td>Office for People with Developmental Disabilities</td>
<td>802</td>
</tr>
<tr>
<td>Department of Health</td>
<td>651</td>
</tr>
<tr>
<td>Division of State Police</td>
<td>521</td>
</tr>
<tr>
<td>Office of Children and Family Services</td>
<td>486</td>
</tr>
</tbody>
</table>

Total number of checks = 21,735  
Total value = $4.6 million  
Average check size = $215

Source: Mercator Advisory Group analysis, New York State payment data files
Alternative Payment Products

- Debit Push Payments
- Virtual Cards
- Person-to-Person Payments
- Same Day ACH
- Prepaid Cards
**Alternative Payments:**

*Debit push payments use debit card credentials to credit accounts.*

A less expensive alternative to distributing checks to consumers and small businesses that have a debit card.

Referred to as a push payment because the sender authorizes (that is, “pushes”) a credit to the recipient. Transactions are never debit “pull.”

Transactions are processed through the debit card networks.

Both Mastercard and Visa operate debit push payments (Mastercard Send and Visa Direct)

Funds are received by the recipient typically within seconds. There is some variation depending on the processing capabilities of the receiving financial institution.

Funds can be sent and received 24X7X365.

Only the payee’s name, debit card number, and card expiration date are required.

Transactions can be used to fund traditional bank accounts as well as general purpose reloadable prepaid debit cards.

Debit push payments can be acquired through larger financial institutions.

The Mastercard Send version of debit push payments operates as a platform that allows the sender to send transactions to both holders of Mastercard and holders of Visa debit cards.

Currently being used in a variety of use cases including distribution of insurance claims, 1099 workers’ pay, refunds, and rebates.
**Alternative Payments:**

*Debit push transactions flow through the debit card networks.*

01
Originator collects debit card information and initiates transaction typically through its financial institution to the network (Mastercard, Visa, or a regional debit network).

02
The network originates the transaction, routes to debit networks and provides transaction controls.

03
Financial institution settles with the network and the originator.

04
Receiving financial institution receives transaction data from the debit network(s) and posts payment transaction to cardholder's account.

05
Recipient receives the payment in the checking account associated with the debit card number provided.

Source:
Alternative Payments:
Virtual cards are a check alternative used for invoice payments or expense reimbursements.

In the commercial cards business virtual space, some terms are used that can have different meanings and create misunderstandings.

Virtual Card/Virtual Account (two terms used interchangeably) to denote usually non-plastic, 16-digit account numbers, but are not all are the same:

- **Ghost Card** is a reusable card account typically stored in a supplier’s system for use to charge payments on pre-agreed services.

- **Single-Use Account (SUA)** is a 16-digit account numbers generated for one-time use. These payments include “pull” (Supplier-Initiated Payment, or SIP) and “push” (Buyer-Initiated Payment, or BIP).
  - SIP are truly SUA generated against single invoices, requiring merchant handling to process a “card not present” at a terminal.
  - In effect, BIP are considered to be “straight-through-processing” (STP) and are not really SUA, but reusable master accounts that may have subaccounts by vendor. They can be issued for combined invoices and require no physical handling by the merchant once initiated by the payer.
**Alternative Payments:**

**Virtual card process flow**

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**Supplier Initiated Payment (SIP):** Buyer-approved payment is requested through the virtual account system interface. Single-use account (SUA) is securely communicated to supplier through virtual system by email or other method; then retrieved (pulled) and processed by supplier using a business-as-usual card payment method. Normal cards network authorization and settlement flow with potential separate remittance file sent to supplier from virtual account system.

**Buyer-Initiated Payment (BIP):** Buyer-approved payment is requested through the virtual account system interface; then the account is pushed through the network authorization and settlement flow directly to supplier bank settlement account, bypassing direct supplier handling for payment processing.

Source: Mercator Advisory Group
Alternative Payments: P2P disbursements use email address or mobile phone number as an account proxy.

Person-to-person (P2P) apps, such as brands Zelle and Venmo, can be used for government-to-consumer (G2C) disbursements.

Consumers need to enroll or have already enrolled in one of the free payment apps. Users of Zelle also need to have a U.S.-based checking account.

Zelle is a bank-owned and -operated solution through Early Warning Systems that now reaches over 50% of all U.S. checking accounts. Any financial institution can participate in the network.

To send a payment through the Zelle network, a file with the payee’s name, mobile phone number, or email address plus the amount of the transaction is sent to a participating bank and distributed through the network.

Funds are available in real time to the recipient. Net settlement is managed via ACH.

Early Warning holds the directory that associates the email/mobile number with the checking account information to move transactions.

Consumers who bank with a financial institution that is not currently participating in Zelle can still download the stand-alone Zelle app and receive funds through Zelle as long as they have a checking account and a debit card. In this scenario, transactions are processed through Mastercard Send or Visa Direct.

P2P payments can be sent and received 24x7x365.

Other P2P apps such as Venmo (offered by PayPal), Square Cash, Google Pay, etc. offered by nonbank tech companies are also options for disbursements.
Alternative Payments:
A typical Zelle P2P process flow

01
Originator collects name and email or mobile number for recipient and initiates file to their financial institution.

02
The financial institution debits the originator’s account and sends file to the P2P network.

03
P2P network sends transaction message through its network for individuals who are with an integrated financial institution, or through the debit networks if the financial institution is not a part of the network.

04
A message is sent to the recipient that funds are available via SMS text or email.

05
A. Receiving financial institution posts funds to the consumer’s account if the recipient has an established P2P account app, or
B. Recipient is sent a notification to download the P2P app for free to receive funds.
**Alternative Payments:**

**Same Day ACH**

Same day ACH may offer an alternative to more expensive payment types where speed is the primary objective. If received in a timely manner, an ACH transaction can be sent and received within one business day.

Same Day ACH, like standard ACH, requires knowing the recipient’s checking account details.

The governing body for ACH transactions, NACHA, has received approval from its membership to open up an additional processing timeframe (window) later in the day so files may be processed more quickly. This will become available in September 2020.

The dollar value limit for a same day ACH transaction will be increased from the current level of $25,000 to $100,000. This will be effective in March 2021.

Processing availability will continue to be based on a business week.
Alternative Payments:
Prepaid cards are often used to reach consumers without traditional banking services.

Prepaid cards are issued to individuals who do not have a checking account or choose not to share their checking account details.

Cards to distribute government benefits was one of the first use cases for prepaid when prepaid products were first launched over 15 years ago.

Prepaid plays a significant roll in G2C payments including Social Security, Nutritional Assistance, Temporary Assistance for Needy Families (TANF), Court-Ordered Payments, Transit, Tolls, State Unemployment, etc.

Where prepaid is used for disbursements, a network-branded debit card is sent to the beneficiary and associated to a database that tracks the value of the benefits that have been distributed and any payments or other deductions made. One card can serve as access to deposits from multiple sources of funds.

File containing the cardholder’s name, card number, and amount is sent to the card issuer, along with the total value to be distributed. Timing of funds availability to the cardholder is dependent on the bank’s processing capabilities.

Cardholders can make purchases, pay bills, and get cash using their prepaid cards. Prepaid cards have evolved such that they are nearly indistinguishable from traditional checking accounts. Cardholders cannot overdraw their accounts.

Fees to cardholders are minimal.
High-Value Opportunities

- Heat Map: Overall Agency View
- Use Case 1: Clinical and Laboratory Services
- Use Case 2: Jury Service per Diem
- Use Case 3: Refunds
- Use Case 4: Local Grants and Public Assistance
- Use Case 5: Unclaimed Funds
- Use Case 6: Colleges and Universities
- Use Case 7: Personal Income Tax
- Use Case 8: State Insurance Fund
- Use Case 9: Inmate/Client Wages
- Use Case 10: Non-Employee Expense Reimbursement
- Use Case 11: Expedited Benefits
Payments data led to primary and secondary opportunities to generate more e-payments.

Heat map of agency-based opportunities

<table>
<thead>
<tr>
<th>Low Opportunity</th>
<th>Medium</th>
<th>Highest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value not consequential at this time</td>
<td>Longer-term opportunity</td>
<td>Selected reviews advised</td>
</tr>
<tr>
<td>• 39 agencies</td>
<td>• 12 agencies</td>
<td>• 23 agencies</td>
</tr>
<tr>
<td>Highest single agency annual check volume only at 3,836</td>
<td>Annual check payments volume &gt; 50% of total payments for each agency</td>
<td>Some check volume substantial (e.g., 48,000 in one agency) but &lt; 50% of total payments for each agency</td>
</tr>
</tbody>
</table>

Use cases identified by high check volumes and drill downs into departments, programs, and accounts, both through SFS and other provided data.
Use Case 1:
Clinical and Laboratory Services

Use Case Explanation:

- Approximately 206,000 checks are disbursed for account number 55125, Clinical and Laboratory Services.

- Over 80% of the recipients are categorized as a “specialty vendor” in payment for records and services used in making disability determinations.

- A frequent use case example is $10.00 checks sent to providers, clinics, medical records companies, and professionals for providing requested patient medical records to support disability claims.

- The State of New York has already achieved positive results to secure DDA credentials to begin ACH rather than check disbursements. (decrease of more than 10,000 from 2017 to 2018).
Use Case 1: Clinical and Laboratory Services

Recommendations:

1. Consider the use of virtual cards as a check disbursement alternative.

2. Efforts that are already underway to contact vendors through the mail and request checking account details to conduct ACH payments will return reasonable results and should continue.

3. Investigate the integration of new medical records providers to determine how best to secure checking account details with the first payment.
Use Case 2:
Jury Service per Diem

Use Case Explanation:

- Approximately 224,000 checks are disbursed for account number 55162, Jury Service per Diem.

- A payment of $40 per day is provided to citizens who participate in jury duties. Checks are mailed to participants after their jury service has concluded.

- Most checks are mailed for one day of participation. However, some are for much larger amounts, including those to jurors who serve on Grand Juries, which can last for months. Those who receive over $600 in a calendar year need to receive form 1099MISC per IRS tax reporting requirements.
Use Case 2:  
Jury Service per Diem

Recommendations:

1. When citizens appear for jury service, collecting their checking account information is difficult because few people carry checks with them or know their checking account, routing, and transit numbers.
   - Most people will have a debit card readily available, which makes debit push payments an option. This information can potentially be collected when citizens check in for jury service, during orientation, or perhaps through an online link.

2. P2P payment, which requires only an email address or cell phone number is also an option.

3. Mercator Advisory Group’s interpretation of the question of compliance with IRS 1099MISC tax filing requirement is that a $600 threshold must first be met, and that PSPs (payment service providers such as debit card issuers or prepaid card providers) have the capability to provide such services
Use Case 3: Refunds

Case Taxonomy:

Agency/Business Unit: Department of Motor Vehicles

Department: DMV-Wide

Account: Refunds

Wire, ACH, Check

Use Case Explanation:

• Approximately 1,584,000 checks are disbursed in a year as a refund. Most are payments to consumers.

• The DMV is the largest originator of refunds. Citizens who turn in their car license plates before expiration of the plate may receive a refund.

• Increasingly payments to the State are made via a credit or debit card. However, if a refund is needed, in many cases the refund is executed by a check to avoid storing card information.
Use Case 3: Refunds

Recommendations:

1. Many of the refund scenarios discussed require an in‐person or direct communication with the citizen who is owed or is requesting a refund. This represents an opportunity for the State to acquire the needed information necessary for a debit push payment or a P2P transaction, both viable options for this use case.

2. A discussion with the State of New York’s acquirer bank may uncover solutions to help facilitate credit refunds transactions via payment card. The acquirer may offer services or can recommend a service provider that offers secure card‐on‐file services. This means that the third party will hold cardholder data for future credit return transactions and have responsibility to provide secure and compliant storage of payment data. As tokenization grows in usage across the industry, Personal Account Number (PAN) information will no longer need to be stored.
Use Case 4:
Local Grants and Public Assistance

Case Taxonomy:

Agency/Business Unit: Office for People with Developmental Disabilities (OPWDD)

Department: OPWDD Long Island

Program: Family Support (General)

Account: Local Grants and Public Assistance

Use Case Explanation:

- Approximately 228,000 checks are dispersed in a fiscal year from various departments for Local Grants and Public Assistance.

- This represents a wide number of use cases including school aid, energy assistance, adoption subsidies, and payments of earned funds and other deposits to wards of the state. Many are government-to-citizen payments.

- One use case includes providing funds to citizens to cover respite care.

- Another use case is the payment of earned funds and other deposits to wards of the state.
Use Case 4:  
Local Grants and Public Assistance

**Recommendations:**

1. In instances where payments are infrequent or may not be provided on a long-term basis (e.g., respite care payments), **debit push payments** or **P2P disbursements** may be a means to provide funding electronically and quickly.

2. In use cases where funds paid to an individual are consistent and are paid over a long period of time, a reloadable prepaid debit card may offer a secure means of distributing funds. This can be particularly appealing and useful for “unbanked” individuals, for instance wards of the state. The individual can use the card to make purchases and get cash. **Prepaid cards** operate very similarly to a checking account, create a record of expenditures, and can be central to teaching fundamental money management skills, promoting financial inclusion. They also eliminate expensive check cashing fees, obviate the inconvenience of finding places to cash checks, and are safer for citizens than carrying around large amounts of cash.
Use Case 5:
Unclaimed Funds

Use Case Explanation:

• Funds and property left dormant by their owners are escheated to the State after predetermined periods of time.

• Nearly 500,000 checks are written annually from the department “OSC – Wide” in the Office of the New York State Comptroller. Many are disbursements of escheated funds returned to the rightful owning citizens and organizations.

• A form is available online to be completed by a claimant on the OSC website.

• This form may represent an opportunity to gather payment information to send funds electronically rather than by check.
**Use Case 5: Unclaimed Funds**

**Recommendations:**

1. For claims made through the website, payment credentials can be requested from the individual in order to send funds electronically.

2. Incent the practice by letting citizens know they will receive their funds more quickly.

3. Offer the option to collect debit card information for a debit push transaction as a secondary opportunity.

4. Request checking account data for standard ACH transactions.

5. This particular use case, since it is under the umbrella of OSC, would make for a good initial project providing an example of how the citizen experience can be improved and cost savings achieved through payment digitization.
Use Case 6:
Departments for Colleges and Universities

Case Taxonomy:

- Agency/Business Unit: State University of New York
- Department: (Various schools)
- Account: Example: Scholarships

Use Case Explanation:

- Colleges and universities are frequently sending checks to students for tuition reimbursement, stipends including funds for graduate assistants and living expenses for medical students in residency.

- Initiatives are underway to promote the use of ACH as seen on the CUNY website.
Recommendations:

1. In addition to continued efforts around ACH, consideration should be given to including also options to receive funds via P2P app.

2. Younger consumers tend to be frequent users of P2P and would likely be open to receiving funds through this channel.
Use Case 7: Personal Income Tax

Case Taxonomy:

No specific flow available since originated from non-SFS system

New York State Department of Taxation and Finance disburses checks to individuals.

Use Case Explanation:

- Over 1,958,000 personal Income tax refund checks are sent by New York State annually.

- Checking account information is requested on state income tax forms, but not all taxpayers choose to provide that data.

- Prepaid debit cards were offered in the past, but adoption of the cards was low and so the program was discontinued.
Use Case 7:
Personal Income Tax

Recommendations:

1. Offer the option to tax filers to provide their debit card information to facilitate a debit push transaction. Care is needed to make sure that those who have provided checking account details in the past don’t revert to providing a debit card number given that ACH is likely the most economical path.

2. Although prepaid was not deemed an efficient solution with so few takers, if combined with payment distributions from other business units, the economics and value to the cardholders could improve.
Use Case 8: State Insurance Fund

Case Taxonomy:

No specific flow available since originated from non-SFS system

New York State Insurance Fund disburses checks as warranted.

Use Case Explanation:

• Over 854,000 checks are disbursed in a fiscal year from the State Insurance Fund.

• This operates as a typical insurance company that often insures the “uninsurable.”

• These transactions are primarily to medical providers and some to individuals.
Use Case 8:  
State Insurance Fund

Recommendations:

1. Virtual credit cards can be used to pay medical providers who are typically already enabled to accept credit cards and in some cases may also be receivers of virtual cards.

2. Prepaid cards can be issued to individual beneficiaries for all the reasons mentioned previously, including convenience and ease of use.
Use Case 9:
Inmate/Client Wages

Case Taxonomy:

Agency/Business Unit:
Dept. of Corrections and Community Supervision

Department:
Operations <facility name>

Account:
Inmate/Client Wages

Use Case Explanation:

- Approximately 8,900 checks are created centrally in a fiscal year to facilitate payments to prison inmates. Although this is not a high-volume central activity, it is a cumbersome, time-consuming process.

- Currently the correctional facilities all have separate accounting mechanisms to track inmate balances and commissary purchases.

- When inmates are moved from one facility to another, a check is cut in the amount of their existing balance and then redeposited when they reach their new location.
Recommendations:

Third-party payments providers do offer accounting and payment solutions to handle the needs of correctional facilities, including payments made within the facility. Two example organizations include:

1. JPay (with whom the State of New York has an existing relationship).
   [https://www.jpay.com/](https://www.jpay.com/)

2. GTL
Use Case 10:
Employee/Non-Employee Expense Reimbursement

Case Taxonomy:

Agency/Business Unit: State University of New York

Department: SUNY Polytechnic Institute

Account: Travel-Team (Non Emp)

Use Case Explanation:

- Accounts 54001 through 54104 disburse checks for employee and non-employee expense reimbursement. This generates more than 11,600 checks with an annual value of more than $2 million.

- Although this use case may not represent a relatively high volume of checks, there are commonly used industry best practices that can eliminate checks and streamline the payment process.
Recommendations:

1. For those transactions completed for employees, reinforcement of the message to use available payment options such as travel and/or purchasing cards may be beneficial.

1. In the case of non-employees (e.g., contract labor, recruitment expenses, etc.) there is a viable option to use virtual cards that are remotely issued to vendors, or directly to travelers or laborers for proximity payments.
Use Case 11: Expedited Benefits

Use Case Explanation:

• Although delivery of benefits to individuals through ACH is efficient and typically convenient, the batch process and limited processing days used by ACH means that receipt of benefits may be delayed if the payment date falls on a weekend or holiday.

• The batch aspect of ACH can sometimes create hardships for recipients. A use case example is blind veterans who are reliant on monthly benefits to pay obligations. In the past fiscal year, 57,235 payments were made with the Program Description of “Blind Veterans Annuity General”; 20,373 were checks and 36,862 were ACH.
Recommendations:

ACH is the most efficient method for processing these payments, but for those beneficiaries who contact the state requesting an expedited payment, several options are available:

1. A debit card number and expiration date can be collected to expedite funds within minutes through a debit push payment.
2. Email or mobile number can be used to send funds through a P2P app.
3. Same day ACH can be used with the current date noted in the effective date field causing funds to be available same day or early the next day, depending on when the file was submitted. Consideration needs to be given to the timing of the existing standard ACH file and the ability to exclude a specific payment so the beneficiary is not paid twice.
Overarching opportunities around ACH

Sorting data by program reveals certain use cases that use ACH as well as checks. Areas with a higher degree of check use than similar departments may bear further investigation. Examples include:
Additional opportunity: digital payables workflow

**Hard cost extraction opportunity for invoiced payables between best-in-class corporate processes and others is in the range of $60–100 billion**

<table>
<thead>
<tr>
<th>B2B Checks 2015</th>
<th>Accounts Payable Processing Costs (unit)*</th>
<th>Opportunity (billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Best-in-Class</td>
<td>Others</td>
</tr>
<tr>
<td>1) 5.3 billion</td>
<td>$2.74</td>
<td>$15.02</td>
</tr>
<tr>
<td>2) 5.3 billion</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*Note: 63% of respondents NA, 27% EMEA; 2) Mineral Tree AP study (averages across four studies)


**Opportunity cost (soft) through lack of risk and other business insights from underutilization of digital information**

<table>
<thead>
<tr>
<th>Accounts Payable Data Leveraged by CFO</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecasting, budgeting, and planning</td>
<td>70%</td>
</tr>
<tr>
<td>Improving collaboration between finance and procurement</td>
<td>63%</td>
</tr>
<tr>
<td>Better payments strategies</td>
<td>61%</td>
</tr>
<tr>
<td>Better supplier management</td>
<td>53%</td>
</tr>
<tr>
<td>Better cash management</td>
<td>53%</td>
</tr>
</tbody>
</table>

*Note: 63% of respondents NA, 27% EMEA; 2) Mineral Tree AP study (averages across four studies)
High-level analysis of cost extraction for New York State volumes.

1. Assuming similar estimates as for corporate payables process costs

<table>
<thead>
<tr>
<th>New York State Payments 1 year (SFS)</th>
<th>Accounts Payable Processing Costs (unit)</th>
<th>Opportunity (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Best-in-Class</td>
<td>Others</td>
</tr>
<tr>
<td>6.5 million</td>
<td>$2.74</td>
<td>$15.02</td>
</tr>
</tbody>
</table>

2. Looking only at payment execution,* the New York State unit process cost for an outbound check is about $5.00. In comparison, e-payment alternatives are less expensive.

<table>
<thead>
<tr>
<th>New York State Check Payments 1 year (SFS)</th>
<th>Single Payment Processing Costs (unit)</th>
<th>Opportunity (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Check</td>
<td>ACH</td>
</tr>
<tr>
<td>3.4 million</td>
<td>$5.00</td>
<td>$0.10</td>
</tr>
</tbody>
</table>

*Not including document review, other payables costs, errors, and rework.

Source: Mercator Advisory Group
**Digital processes create opportunity.**

*Work processes can be digitally connected throughout the business cycle.*

<table>
<thead>
<tr>
<th>Single Solutions – Partner Domain Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Procurement</strong></td>
</tr>
<tr>
<td><strong>e-Invoicing</strong></td>
</tr>
<tr>
<td><strong>Payables</strong></td>
</tr>
<tr>
<td><strong>Alternative Financing</strong></td>
</tr>
<tr>
<td><strong>Reconcile</strong></td>
</tr>
</tbody>
</table>

**Open/Closed Networks – Installed – Cloud - Hybrid**

- Workflow management
- Variable requisition categories
- Change orders
- Automated invoice to contract matching
- Pricing evaluations

- Documents creation
- Inbound paper conversion
- E-Signature
- Multiple standards translation
- Local currency and regulations

- Invoice 3-way and 4-way matching
- Integrated payment files
- Payments monitoring
- Workflow from ERP, AP, Online Banking
- Intelligent routing – all payment types
- Dashboards/Cost analysis

- Supply chain financing
- Dynamic discounting
- Open-loop and closed-loop exchanges

- Account analysis
- Transaction matching
- Categorization
- Auto-posting

---

**Analytics – Integrable – Mobile**

In each solution space, a number of fintech vendors offer solutions.

Source: Mercator Advisory Group
## Summary of Payment Applications

<table>
<thead>
<tr>
<th>Recipient Data Requirements</th>
<th>Timing</th>
<th>Credits/Debits</th>
<th>Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Consumer</td>
</tr>
<tr>
<td>Checking Account</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debit Card Data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact Details</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full Acct. Data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt; 1 day</td>
<td>1 day +</td>
<td></td>
</tr>
<tr>
<td>ACH</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>Same Day ACH</td>
<td>☑️</td>
<td></td>
<td>☑️</td>
</tr>
<tr>
<td>Debit Push</td>
<td></td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td>P2P</td>
<td></td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td>Virtual Card</td>
<td>☑️*</td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td>Prepaid Card</td>
<td>☑️**</td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td>Wire Transfer</td>
<td>☑️</td>
<td></td>
<td>☑️</td>
</tr>
<tr>
<td>Checks</td>
<td></td>
<td></td>
<td>☑️</td>
</tr>
</tbody>
</table>
Next Step Considerations

- Begin to focus on the highest-volume areas.
- Define those use cases where the operational aspects and the ability to gather needed payment data are most straightforward.
- Solicit input from bank partners to understand their alternative payments capabilities, pricing, and integration requirements.
- Review lower check volume scenarios for potential easy fixes.
- Consider request for information for automated payables workflow solutions that can integrate with PeopleSoft.
Appendix

- Glossary of Terms
- Additional Data Charts
Glossary of Terms

- **ACH** – Automated Clearing House is an electronic funds transfer system with rules governed by the National Automated Clearing House Association (NACHA).

- **Business Unit** – The state entity (typically an agency) requesting OSC to make a payment.

- **Department** – The various organizational areas within each business unit.

- **Foreign Payments** – Payments made to individuals associated with the State University of New York and living outside the United States; purposes include grants, traveling professor stipends, tuition reimbursement, and so forth.

- **MAN** – SFS records the payments manually because initiated outside of PeopleSoft. These are wire transfers to fund transaction accounts at banks for downstream payment processing.

- **OSC** – New York State Office of State Comptroller

- **P2P** – A commonly used acronym for person-to-person payments

- **PSP** – Payment service provider (e.g.; payment processor, bank)

- **Program** – Payments requested by a business unit will also be assigned a program code to identify the state program associated with the payment.
Glossary of Terms (cont’d)

• **Regular Vendor**
  A voucher entry category in the financial system used for entering payment requests against both purchase order and non-purchase order procurements.

• **SFS**

• **Specialty Vendor**
  A voucher entry category used for non-procurement payment requests (e.g., Refund, Debt Service, Cash Advance, Payroll, Land Claims).

• **Travel Payments**
  Payments made to employees and non-employees who travel on behalf of the state and receive approved reimbursement for these expenses.
Of the approximately $50 million in foreign payments value, the overwhelming majority were paid by check.

*Sample is one quarter of New York State payments but representative of a full year.

Source: Mercator Advisory Group analysis, New York State payments data file.
The top four overall payment volume agencies account for 53% of checks through SFS.

Source: Mercator Advisory Group analysis, New York State payments data file
Steve Murphy
Director, Commercial and Enterprise Payments Service
781-419-1710
smurphy@mercatoradvisorygroup.com
State of Payments
Study of the Payments of the State of New York
Project Findings

Thank you.