THE POWER OF INFORMATION

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VP Enterprise Analytics

March 31, 2017
Overview

Service Improvement

Operational Efficiencies

Mail Tracking

The Digital Reflection
Enterprise Analytics

The Power of Information

Unprecedented Visibility

Data driven efficiencies

There’s your mail!
Informed Visibility and Service Improvement
Mail Processing Performance Visualization

First Class Mail Performance for 'facility' for a particular Mailer

(Selections highlighted in Red)

Links to Piece level information to identify root cause of failure

Option to select Actual Delivery Date (ADD) or Start-the-Clock (STC) view

Color coded Dots provide total pieces, failed pieces and performance, on hovering
First Class Mail Performance for ‘facility’ for a particular Mailer

Identification of lanes and performance based on Zip3

Identification of service impacts based on Entry mode

Identification of service impacts based on Induction method
First Mile Diagnostics

First Mile performance

Tool provides insight into First Mile Failures for Single Piece First Class Mail for QTD

Hovering over provides total pieces, failures and First Mile impact

First Mile failures can be viewed based on various attributes like MPOO, Origin Facility, Collection Box Zip Code and Mail Category
First Mile performance – Trend and Route info

'Trend and Route' drilldown displays the Failed Volume trend and provides impacts based on additional attributes like Day of Week, Route and Collection Box ID.
Last Mile Diagnostics

Last Mile performance

Tool provides insight into Last Mile Failures for QTD

Heat Map shows weekly Last Mile Performance

Hovering over provides total pieces, failures and Last Mile impact

Last Mile failures can be viewed based on various attributes like MPOO, Mail Class, Mail Category, Sample type and Political Mail
Last Mile performance – Trend and Route info

Trend and Route’ drilldown displays the Failed Volume trend and provides impacts based on additional attributes like Day of Week, Route and Destination Zip Code.
The HUDs visualization lists the number of trays at risk per site, as well as "Origin delayed" trays that will not be delivered in time.
Quick visual identification of impacted O/D pairs

Identification of Handling Unit make up, mail class, service standard, etc.
Users can analyze container performance by Lane, Assign Date, Root Cause, etc.
They can also look at Arrival Dates or filter by Origin location.
Users can view container performance by Destination as well.
Container Performance can be viewed by Origin/Destination paths or lanes
Map allows user to view performance by mail class, service standard, shape etc. down to the ZIP3 level.
Informed Visibility and Operational Efficiencies
Mail Inventory & Predictive Workloads
Mail Inventory & Predictive Workloads (MIPW)

- Incoming Inventory (II) Visualization
  - Volume by Arrival View
  - Trips by Arrival View

- Mail Condition Visualization (MCV)
  - Current State
  - End State

- Work In Process/Automated Plan Generator (APG)
  - Phase 1 Overview
  - Phase 2 Overview
IV Incoming Inventory Visualization

- Provides near real-time visibility of incoming trips and associated volume for a facility.
- Provides visibility to Incoming Mail Inventory for each facility, including mail that is in transit.
- Provides visibility to Volume Arrival Profile for each facility by mail class and mail shape.
- Provides historical information for each facility.
- Visualization currently in initial pilot
IV Mail Condition Visualization (MCV) (end state)

- Provides a robust management tool to be used by Plant Managers, Operations Managers, and In-Plant Support that displays volumes for on-hand, delayed processing, delayed dispatch, late arriving, and delayed mail flow, as well as oldest mail date by facility in near real-time.

- Provides a variety of passive calculations to determine how well facilities are processing mail.

- MCV will eliminate the need for manual counts of mail inventory in facilities.

- MCV: Initial pilot in April 2017
IV Automated Plan Generator (APG) Visualization Phase 1 (pilot)

- APG will generate facility run plans utilizing IV data, replacing the need to manually prepare RPG plans.
- APG plan will be displayed in IV Work-in-Process (WIP) visualization for comparison to mail processing performance.
- APG initial pilot planned for June 2017.
IV Automated Plan Generator (APG) Visualization Phase 2

- APG will notify user of alerts from IV automatically generated run plan.
- Alerts include unscheduled volume, missing maintenance windows, and machines with no assigned volume.
- User can modify run plan to eliminate alerts, assign missing volumes and maintenance windows, and add new equipment.
Volume Arrival Profile (VAP)
### IV
Informed Visibility

The single source for all your mail visibility needs

| Area: | SOUTHERN | District: | SUNCOAST | MPOO: | Number of Routes | AM/PM: | Date: | 03/24/2017 |

**24-Hour Clock**

<table>
<thead>
<tr>
<th>FACILITY</th>
<th>TIME AM (TIMES IN THE AM REFLECT START TIMES)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>0:00</td>
</tr>
<tr>
<td>Office Carriers</td>
<td></td>
</tr>
<tr>
<td>Street Carriers</td>
<td></td>
</tr>
<tr>
<td>Clerk</td>
<td></td>
</tr>
<tr>
<td>Plant Packages</td>
<td>2</td>
</tr>
<tr>
<td>AAU Scans Network</td>
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</tr>
<tr>
<td>AAU Scans DDU</td>
<td>1</td>
</tr>
<tr>
<td>Pallets</td>
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</tr>
<tr>
<td>Trucks</td>
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</tr>
</tbody>
</table>

**Trip Legend**
- [L] - Leave
- [A] - Arrive
- [P] - Plant
- [U] - Delivery Unit
- [M] - Multiple Trips
### 24-Hour Clock

#### Table: Volume Arrival Profile (VAP)

<table>
<thead>
<tr>
<th>ZONE</th>
<th>PLANT</th>
<th>MACHINE</th>
<th>OPERATION</th>
<th>PKGS</th>
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<tbody>
<tr>
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<td>APPS 084</td>
<td>249</td>
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<td>34698</td>
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<td>APPS 084</td>
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#### Table: Status and Truck Type

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<th>SCHEDULE</th>
<th>ACTUAL</th>
<th>TRUCK TYPE</th>
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<tbody>
<tr>
<td>AU</td>
<td>335B2</td>
<td>683</td>
<td>03:10</td>
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<td></td>
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<td>LU</td>
<td>335B2</td>
<td>683</td>
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#### Table: Time, Label, Device

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<th>LABEL</th>
<th>DEVICE</th>
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<td>March, 24 2017 03:16:31</td>
<td>99P346982G0001055-73088192</td>
<td>030SHNT319</td>
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#### Table: Employee ID, Begin Tour, Designation

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### Delivery Unit Volume Arrival Profile

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<th>DESCRIPTION</th>
<th>SORT PLAN</th>
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<th>PIECES</th>
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<td>918</td>
<td>DBCS/DIOSS BCS DPS, 1ST PASS</td>
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#### 24HR CLOCK

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**24HR CLOCK**

- **PM:** (Times in the PM reflect return time)

<table>
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**24HR CLOCK**

- **PM:** (Times in the PM reflect return time)

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<td>918</td>
<td>918</td>
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</tbody>
</table>

**Activity Codes:**
- **M:** Mail
- **LF:** Lifts
- **M:** Mail
- **LU:** Local Use
Informed Visibility and Mail Tracking
There’s your Mail!
Dashboard Information Discovery Path

Mailing View
- Where is a mailing? Where are delays at?
- Provide visualization on service and visibility for a mailing.

Facility View
- If delayed at a particular facility, why?
- Show breakdown of volume by EDD.
- Show breakdown of cycle times by machine type

Lane View
- If delayed at a particular facility, can delay be attributed to a particular inbound/outbound lane?

Internal Mail Tracking Benefits:
- Expanded visibility into the mail tracking
- Allows USPS to provide mailers with better customer service
- Improved operational efficiency
Set filters to view a specific mailing:

- Search Type
  - CRID
  - Mailer Name
  - Job ID
  - Mailing Group ID
  - Appointment ID

- Search Text

- Set Mailing Date
The Mailing view answers the questions – Where is mailing at? Where are the delays at?

Use Mailing Date, Mailing, Job, and Service Standard selectors to plot on the map the mailing’s mail flow from Origin/Induction points, to first Container scans, to first Tray/Bundle scans, to first Piece scans.

Once you filter Type or Search Text and select a Mailing Date you will need to select a Job ID and Mailing Group ID.
Mail Path Map

The visualization maps all paths for selected Mailing Dates, Mailings, Jobs, and Service Standards.

A path consists of Entry Point -> First Container Scan -> First Tray/Bundle Scan -> First Piece Scan

Line thickness represents volume.
Line color can represent Processing Score or % Delivered
Click on facility to see next aggregated scan event: Entry Point -> First Container Scan -> First Tray/Bundle Scan -> First Piece Scan

Hover over any facility for details and to navigate to the Facility view.
Facility Scan Percentages

The visualization shows mail paths in a table view and allows users to view paths of possible issues in an overall view.

Users can view the Facility, Scan Type and Scan Percentage for a particular mailing.

Percentages are based off of amount of downstream scans.
Circle thickness represents volume.
Color can represent Processing Score or % Delivered.
Delivery Date Breakdown

Delivery Date Breakdown breaks the mailing down by Class.

View the Date:
- Expected
- Anticipated
- No Visibility
Informed Visibility and the Digital Reflection
The Mail Moment
An inventory of mailpieces to be delivered is created based on the Last Processing Operation.

The “Anticipated Date of Delivery” is created by comparing the scan time to the operation’s clearance time.

Based on geo breadcrumbs, it is determined when a carrier enters a ZIP+4 geo fence.

A Logical Delivery Event is generated for mailpieces within the ZIP+4, that have an “Anticipated Date of Delivery” of today. This data is then sent to IV.

IV provisions the Logical Delivery Events to mailers.

Red boundaries represent the geo fence. Red dots represent the carrier entering the geofence.
Real-time Event-Driven Multi-Channel Marketing

Mail Delivered → Additional Info Sent → Mail Moment

Real-Time Data Received → Mailer Notified → Customer Conversion
Questions?