Using Technology to Reduce Mailing Costs

By David Foster



Where we started

- Five separate legacy systems, housed in a central DP area produced nightly print output
- All correspondence was printed at the central facility and trucked to our outbound mail processing facility
- The Outbound Mail unit counted, folded, and stuffed outgoing correspondence
- Outgoing correspondence was then trayed and delivered to a bulk mail processing vendor for final processing
 - Obviously there was cost associated with this process
- Outsource vendor sorts by ZIP, re-trays and delivers to Post Office.

Other Stuff We Mail/Print

- The Revenue Division also handles the following large volume monthly mailings:
 - Motor Vehicle Renewal notices
 - Driver's License Renewal notices
 - STAR Renewal notices
 - Legislative Budget Manuals
 - 1099 Statements
 - State Employee W-2 forms

The Arkansas Integrated Revenue System (AIRS) Letter Process

- 1. Where we started for updating our letters
- **2.** The team, and their goal
 - The team included specialists from all tax areas who would be included in the AIRS project and also representatives from Revenue Legal, and Field Audit/Collections
 - The goal was to review all current letters, and see where duplication existed and develop common letters for all tax types

The Arkansas Integrated Revenue System (AIRS) Letter Process cont...

- **3.** Methods Used
 - The team met weekly to review letters and determine how many tax environments each letter would support
 - They developed criteria and standardized language and common letter header and footer criteria, as well as standardized font and type size
 - Letters can be printed two sided which assists with reducing total paper usage
 - All letters referencing a legal code section, or dealing with legal issues, were sent to Revenue Legal for additional review.
 - Before they were published in AIRS, the Administrator of Revenue Legal and the Assistant Commissioner for Policy and Legal reviewed each letter

The Arkansas Integrated Revenue System (AIRS) Letter Process cont... The Results:

- We now have 285 standardized letters in three different categories: Case 60, Tax 220, and 5 in other categories
- 125 of the Tax letters are used by multiple tax types
- For the current rollout, we are reviewing about 27 new letters, or current letters that require changes or updates

The Revelation

- After beginning the letter development process, we came to a revelation:
- THERE IS A BETTER WAY TO DO BUSINESS
- AIRS creates letters as a PDF for all correspondence, and forms
- All types of correspondence going to a customer at a single address can go together
- Different letter types can go together
 - Separate mailing processes can be combined Notice of Adjustment/Proposed Assessment
 - Similar letters for the same taxpayer can be combined
- The system automatically knows when the number of pages going to a single address exceeds the weight limit, and spools these letters to a special "Overweight" printing and they are handled separately

The Process for Overall Mail Improvement

- Meetings began in August of 2008 to discuss the overall mail environment and how it could change
- An assessment of mailing needs for all tax sections was made
- A review of existing equipment for print, and mail processing began
 - Existing print capability was adequate
 - Mail Processing equipment was older and could not support all functions of the new system
- After analysis of cost and savings, a decision was made to acquire updated equipment for the Outbound Mail unit, and to move the existing printing equipment into the Outbound Mail area

The Timeline

- We began the update study and implementation in August of 2008, with a system go live date of February 16, 2009, we were under a tight timeline
- We also had to maintain current productivity standards during the conversion, all in the same facility
- By early September we had defined the action items required to make this happen
- Short overview of action items
 - Remove existing modular furniture, and all inventory shelving
 - Relocate inventory shelving to another location
 - Replace all HVAC for the facility

The Timeline cont...

- Install new ceiling and ductwork
- Install updated network cabling, add new wiring, and upgrade connectivity to the back-up generator
- Upgrade climate control equiptment
- Assess USPS requirements and documentation to become a USPS mail facility
- Meet with the fire Marshall to insure all changes were up to code
- Identify staffing requirements
- Get purchase order prepared for upgraded mailing equipment
- Add additional walls, and secured access to the facility
- Relocate our OIS Operations staff to this facility
- Have vendor build, test, deliver and install new equipment
- Relocate print equipment to the new facility

The Players

- Assistant Commissioner Operations and Administration
 - General Services Manager
 - Mail Room Supervisor and Personnel
 - Revenue Division Building Maintenance Manager
- Assistant Commissioner Office of Information Services (OIS)
 - Assistant Administrator OIS
 - OIS Operations Manager and staff
- Tax Section, Field Audit and Legal Administrators
 - Tax Section Managers

The Players cont...

- AIRS Personnel
 - AIRS Project Administrator
 - AIRS Project OIS Tech Adminstrator
 - AIRS Project FAST Development Lead
 - AIRS Project FAST Mail System Developers
 - AIRS Project Letter Team Lead

How we Changed from Where we Started

- All correspondence produced from the AIRS System is CASS Ceritified, and contains a 2-D bar code
- The Revenue Division is now a certified USPS Mailing facility
- The print and mail insert equipment is now networked and work in unison to insure proper inserting of completed items
- We are recognizing the full cost savings from utilizing upgraded internal equipment and not outsourcing any part of the process
- The new equipment applies Intelligent Mail Barcode to all outbound mail, including that still generated from non-AIRS sources
- As each new tax type rolls out, all correspondence for that tax type will be produced from the AIRS System



Some Tech Stuff cont...

- Definition of Barcode Used (small and can store a large amount of data):
 - A Data Matrix code is a two-dimensional matrix barcode consisting of black and white "cells" or modules arranged in either a square or rectangular pattern.
 - The information to be encoded can be text or raw data.
 - Usual data size is from a few bytes up to 2 kilobytes.
 - The length of the encoded data depends on the symbol dimension used. Error correction codes are added to increase symbol strength: even if they are partially damaged, they can still be read.
 - A Data Matrix symbol can store up to 2,335 alphanumeric characters.

Some Tech stuff cont...

• Example of One:



Some Tech stuff cont...

• Explanation of mail produced out of AIRS:

• Each night the system evaluates the mail generated for the day and batches them together based on pre-defined criteria, which includes multiple letters going to the same taxpayer/address in the same envelope. Based on the mail batch and envelope the system will overlay a Data Matrix barcode which includes sorting/stuffing information needed and key values about the mail included in the envelope for use if it were to be returned back to the Department. These batches of PDFs are then interfaced to the printers in the mail room and after printing, the sorting/stuffing machines read each pages Data Matrix barcode to determine number of pages in envelope, do inserts need to be included, foreign address, etc....

Some Tech stuff cont...

• Explanation of return mail process:

All AIRS return mail is identified by the "ref: AIRS" printed in the windowed envelope above the barcode (this is done because of all the non AIRS related mail being generated with the same 2d barcode). Each envelope is scanned using a hand-held scanner and the data read from the barcode is interfaced to AIRS on a nightly basis via a flat file. Currently this data is only informational and can be viewed from any taxpayer or account records. Possibilities in the future would be to add indicators, create work items, etc....

Did It Work Right Out-of-the-box?

- The obvious answer is that it was a new system and environment, so **YES** and **NO**.
- Our situation was hampered by the short development and training time available for the process
- Very soon after rollout we began to notice slowdown for outbound mail at certain times
- Our development team was monitoring the processes and delays
- As a result, we began to analyze mailing dates for large volume mail-outs and address configuration for non-AIRS mail
- We began by creating a Mail Status Calendar

Did It Work Right Out-of-the-box? cont...

- We made adjustments to mail dates so that we didn't have several large mailouts process at the same time
- We modified the address block to allow more certain and faster recognition of non-AIRS mail
- We re-grouped AIRS mail into new mail groups with more consistent common mail elements, and identified by critical and non-critical mail
- We developed special handling for non-AIRS critical mail.

For ATAP Users

- We can send all letters and notices via e-mail.
- This system will require legislation before it can use email as a primary delivery source.

The End Result

- By consolidating printing and mailing processes, printing on both sides for many letters, and inserting multiple letters into a single envelope, we processed
 1,145,570 fewer pieces of mail in 2009 than we did in 2008, all related to the taxes in AIRS, for a mailing savings of \$529,488.65.
- This does not include the savings for paper, envelopes, and personnel time
- The largest number of taxpayers will come into the system on January 10, 2011, when we roll out all income taxes