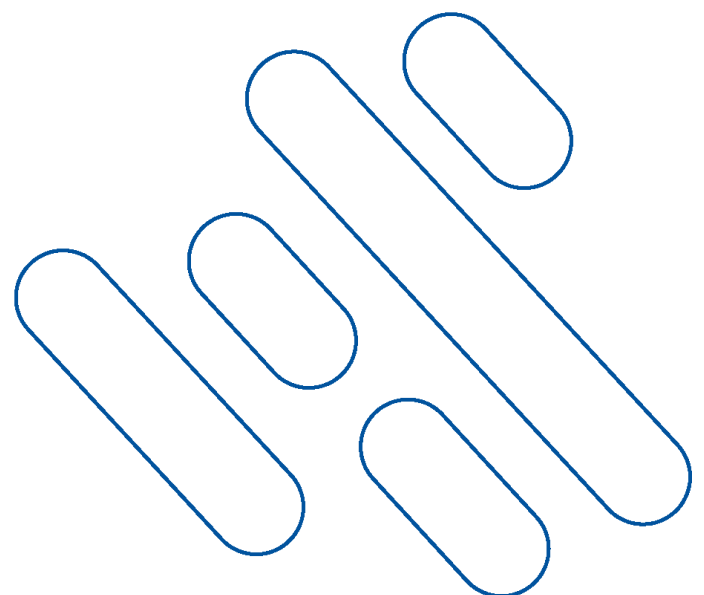# Implementing the Intelligent Mail® Barcode

Make decisions that are right for your business – today and tomorrow.

"Look for your choices, pick the best one, then go with it."

Pat Riley,
NBA coach and GM

IMPLEMENTING THE INTELLIGENT MAIL® BARCODE

Based on the final USPS® Federal Register Notice, mailers looking to take advantage of the lowest automation prices will need to replace the current POSTNET™ barcode with the new Full-Service Intelligent Mail® barcode in the fall of 2009.

As the first full-scale barcode change since the introduction of POSTNET™ in 1980, many companies may find themselves in uncharted territory. In addition to a new barcode format, the change requires new data fields, new printer fonts and new mail preparation processes.

This new barcode will also impact how information flows between you, the Postal Service™ and your customers – and learning how to take advantage of this data could have a tremendous effect on the overall profitability of your operation.

While there is no one-size-fits-all approach, there is a plan that is right for your business. In this Intelligent Mail® white paper, the second in a series of practical resources developed to help you achieve better results, you'll learn about the advantages and limitations of each of the approaches you may want to consider:

- When you **compose** the document
- When you **produce** the document
- When **you sort** the document
- When **someone else sorts** the document

For a more detailed assessment, you can also contact Pitney Bowes for a customized analysis and find out how you can simplify this transition. When you get smart about Intelligent Mail®, you put yourself and your company in position to achieve more with your mailstream.

Upstream or Downstream?

Should you generate the barcode upfront as part of document creation or ship your finished mail out to a presort service bureau? Perhaps adding the barcode during production is best. Or maybe a combination of approaches is necessary.

In simplest terms, the further upstream you generate the barcode, the easier it may be to take advantage of the new-found customer intelligence inherent in Intelligent Mail®. Likewise, the further downstream you generate the barcode, the less effort may be required to comply with this new mandate.

How and where you barcode is an important question for a number of reasons. One, there are long-term implications and opportunities associated with the whole Intelligent Mail® movement, and decisions you make today may have consequences in years to come. Secondly, few companies will want to change their barcode process twice. If you're going to plan for a change, you should make sure it's done right the first time.

UPSTREAM: DOCUMENT COMPOSITION

*"Begin at the beginning and go on till
you come to the end; then stop."*

Lewis Carroll,
English author and mathematician

As you consider the different ways to implement the new Intelligent Mail® barcode, think about how companies apply the POSTNET™ barcode today. While it may be easier to spray a barcode on an envelope at the end of the production process, the trend is towards creating the barcode further upstream.

- Most high-volume mailers now draw barcodes within their document either as part of document composition or print production, where the mailer can control assignment and quality.

- As companies migrate to more sophisticated document composition tools, it has become easier (and more popular) to generate barcodes even earlier in the process.

The trend toward document composition, however, has been driven in large part by marketing opportunities, such as statement redesign, personalization and TransPromo. If you are generating barcodes as part of your documents today— or are planning to do more with your statements in the future—you should engage your marketing departments early to educate them on the role of barcodes and the potential value of this new-found intelligence.

When you consider how to implement the Intelligent Mail® barcode in your company, you should recognize that every approach offers unique advantages. Likewise, each option

FACTS ABOUT THE INTELLIGENT MAIL® BARCODE

The USPS will provide mailers with two options: Full-Service and Basic. The Basic option will have fewer requirements. The Full-Service option will provide access to more services (such as free ACS™ and Start the Clock information*) and will enable mailers to earn the greatest postal discounts as of the fall of 2009. The details below apply to the Full-Service option.

- To obtain the lowest automation prices on Letters and Flats, mailers must use the 65-bar Intelligent Mail® barcode on each mail piece, encoding the delivery point information plus four new fields including an assigned Mailer ID, the class of mail, an optional endorsement line, plus a mail piece sequence number that must remain unique for 45 days.
- New 24-digit tray barcodes and 21-digit container barcodes.
- Electronic documentation using Mail.dat,® Wizard Web Services or Postage Statement Wizard® will be required for the full-service option.
- Must acquire Mailer ID number(s) from the Postal Service, encode all data into the barcode components and then graphically render this barcode on every mail piece, tray and container.

PROGRAM OPTIMIZATION ENTAILS:
- Create mechanisms to capture data provided by the USPS
- Link USPS data back to your source data
- Leverage this data to improve your business

PRIMARY BENEFITS INCLUDE:
- Continue earning lowest postal rates
- Better scan rates and improved deliverability
- More effective returned mail processing
- Better looking mail pieces (fewer barcodes)
- Visibility into the mailstream
- Free Address Change Service
- Better customer intelligence
- Delivery Confirmation™
- Access to new services

* (Free ACS is unlimited for First-Class® Mail; free for 30-days for Standard Mail® and 60-days on Periodical Mail.) The Basic Option, which provides mailers with less intelligence, does not require electronic documentation or the nesting of tray and container barcodes.

raises considerations that you'll need to address. When it comes to a document composition solution:

Overall Advantages:

- create barcode directly from source data for greater integrity
- potentially easier to take advantage of ACS™ benefits
- can leverage barcode tracking throughout your process

Key Considerations:

- changes are required at the application level
- legacy systems may not support graphics needed for the new barcode
- will need to generate data fields that do not exist today

Points to Remember:

Leverage your CASS Certified™ coders.

If you are running your CASS™ program for every mailing, then you may be able to upgrade your software so that it can also assign the mail piece sequence numbers needed for barcode generation.

Link your mail piece sequence number to your source data.

As you are dealing with source data at this stage, you may find it easier to make the link between barcodes and customer records, so that when you receive information back from the USPS (i.e. an address correction) it will be easier to match this back to your database.

Look for software designed for mailers.

Document composition tools should easily integrate with mailing technologies such as delivery point coding and change-of-address software, so you can validate your data prior to barcode creation. Pitney Bowes document composition solutions, for example, are designed to meet the needs of marketers and operations heads, allowing you to create, manage, test and revise the high-volume print and electronic communications essential to your business.

UPSTREAM: DOCUMENT PRODUCTION

"Destiny is no matter of chance. It is a matter of choice. It is not a thing to be waited for, it is a thing to be achieved."

Williams Jennings Bryan,
American statesman

There are other ways to add and manage the Intelligent Mail® barcode as part of your documents, without having to change each individual application.

With document output management software, you can modify print streams on the fly—adding, removing and improving upon content such as barcodes. In some ways, this approach may offer you the best of both worlds in that you are maintaining a link to your in-house data while keeping much of your barcode implementation confined to your production floor.

The complexity of this approach may depend on the variety of applications, printer description languages and print streams employed today, but it is likely that scripts can be written even for documents generated by the most outdated legacy systems.

Alternatively, you can also apply barcodes and other variable messages directly on your envelope by adding an envelope finishing system to your inserter. This approach may not involve any changes to the actual document.

Overall Advantages:

- create barcode directly from payload data
- enjoy application independence
- easier to create enterprise standards
- can handle in a production environment
- minimal dependency on IT

Key Considerations:

- how to generate unique IDs
- all automated mailstreams must be analyzed and migrated

Points to Remember:

The possibilities of production intelligence.

Once you have a scannable piece ID as part of your document process, you can then leverage a broader range of document management advantages.

- Job reconciliation. Eliminate the manual processes associated with job count discrepancies—you can track each individual mail piece through every step.
- File-based processing. Increase integrity and enable new initiatives such as targeted messaging and selective inserting.
- Automated processes. Simplify document delivery with new capabilities such as closed-loop reprinting and multi-channel document delivery.
- Enhanced reporting. Streamline workflow with job ticketing capabilities that enable full control, reporting and centralized job accounting.
- Increased efficiency. With workflow studies, you can identify trouble spots and find ways to improve productivity, reduce cost and increase worker safety.

Look for expertise in documents and mail.

While some companies have expertise in document management, and others have expertise in mail, Pitney Bowes combines both these disciplines to achieve greater cost-savings and efficiencies for our clients. For example, you can integrate these solutions with CASS™ and other mail hygiene processes so improved delivery point data will be added to your print-image files. Today, our document management solutions are used at more than 800 production sites in over 20 countries around the world, and have received notable ratings in several categories, including interface, workflow and output management capabilities.

DOWNSTREAM: IN-HOUSE SORTATION

"Things should be made as simple as possible, but not any simpler."

Albert Einstein,
physicist

Mailers who use presort software to sequence mailings for the best postage discounts can usually use this same software to assign the Intelligent Mail® barcode. Most First-Class Mail® is also sorted with sorting equipment since it allows you to commingle different mailings and achieve greater discounts. For example, if you run five distinct jobs in a day and want to combine these runs into a single presort, you will need to physically commingle and sort the mail using a high-speed mail sorter.

The goal, of course, is to lower your postage costs – and by combining multiple mail runs you could save six cents or more per mail piece by achieving the density needed for 5-digit automation rates. One option is to send your mail to a third-party presort service (see section below). But if you produce more than 50,000 mail pieces a day, it may pay for you to sort your mail in-house, especially if you send a high volume of mail within a limited geography.

Overall Advantages:

- deal with Intelligent Mail® compliance at a single point in the process
- minimize IT resources required
- maintain control and chain of custody of your mail
- can generate and save an image of every envelope

By sorting in-house, you can also program your mail sortation for unique circumstances – such as pulling certain records so they can be hand delivered. Plus, you may be able to use your in-house sorters to handle incoming mail as well, adding to your returns.

Key Considerations:

- if you don't have sorting equipment today, you will need to make an investment
- may need to upgrade inkjet printers to accommodate the new barcode height
- new processes for mail preparation, tray labeling and manifests
- challenges of linking info to original data source

Points to Remember:

There will be no MASS™ Cycle M in 2008.

Instead, mailers who sort their own mail may want to verify that their systems stand up to the reading, sorting and reporting requirements in what is expected to be a 300-piece Intelligent Mail® certification.

If you apply barcodes prior to sortation…

In the past, changes in barcode requirements did not have a great impact on the sorting process. That is not the case with Intelligent Mail®, where wide area barcode readers will need to be updated in order to read the new barcodes. Plus, while MASS™ Cycle testing normally deals with barcode generation, you will need to verify that your system is accurately reading and reporting on the new barcode to be certified on the Intelligent Mail® barcode.

If you apply barcodes during sortation…

Today's leading systems will be updated to comply with the new Intelligent Mail® barcode requirements, and you should even be able to generate and store the unique mail piece sequence number using your system. You will need, however, to develop a mechanism to track back any USPS® intelligence to your original data source.

Consider past performance.

Given the scope of the Intelligent Mail® barcode implementation, you won't want to wait for the last moment for your sorter upgrades to be available. In addition to reliability, flexibility and sort quality, you should work with a company known for their mailstream innovation and

upgrade management. With Pitney Bowes, you'll find sorting solutions that can do it all, efficiently handling incoming, outgoing and interoffice mail.

DOWNSTREAM: THIRD-PARTY PRESORT

"Intelligence is the ability to avoid doing work,
yet getting the work done."

Linus Torvalds,
Finnish software engineer

You can also comply with the Intelligent Mail® mandate by having the new barcode applied by a service bureau.

Today's leading presort service providers will pick up your outgoing mail and process it with specialized equipment that reads the mailing address, validates address accuracy, applies the barcode, then sorts and trays your mail according to USPS specifications.

Your mail will be commingled with mail from other high-volume mailers, which provides for more granular levels of presort – and greater postal discounts for you. So in addition to having the proper barcode, you may pay less for postage, too.

While using a third-party presort service could be the easiest way to comply with this USPS mandate, you will need to work with a service provider who can help you transform postal data into usable information for your business if you want to benefit from this added intelligence.

Overall Advantages:

- easier to comply with USPS mandate
- minimize IT resources required
- lower postage costs
- no need for new equipment

Key Considerations:

- effort needed to benefit from the intelligence
- may need a second barcode
- challenges of linking info to original data source

If your primary concern is postage savings then you should consider third-party presort services. Mailers who may find this approach most beneficial includes those who:

- mail to customers outside of a specific region (i.e. nationally)
- do not qualify for 5-digit presort levels today
- have limited IT resources available
- are looking for a simple, efficient way to process mail

Points to Remember:

You can barcode yourself, and still use third-party presort services.

This approach may provide the best of both worlds. On the one hand, you'll benefit from more accurate presorts as the system can read both a barcode and an address – increasing the amount of mail qualifying for automation discounts. You'll be able to assign your own mail piece identifier, which can make it easier to leverage mail piece intelligence. Plus, you'll benefit from commingled mail discounts and the expertise in mail tray preparation and postal compliance.

Intelligent Mail® offers you more control in a service bureau environment.

If you had any concerns about handing over your mail to a third-party provider, the new Intelligent Mail® barcode provides you with an added safeguard, because now you can track the flow of your mail all the way through the process – up to postal delivery.

Not all presort service bureaus are the same.

If your Mailer ID is on the envelope, you will still be responsible for quality, even if someone else handles the presorting. Firms that employ the most advanced technologies and quality-oriented processes can provide significantly more value to your business. Be sure to ask about new reporting capabilities, mail piece tracking enhancements and ways your presort provider will help you benefit from the increased visibility and intelligence available through this new barcode initiative.

Pitney Bowes ranks as the most relied upon, most sophisticated presort service bureau in the nation. With the largest workshare partnership agreement with the USPS, we handle over 11 billion mail pieces every year, providing the highest levels of quality, service and savings.

THE NEW DATA PAYLOAD

In total, the new barcode is expected to carry a data payload of 31 digits comprised of the following elements:

Field Name	Length
Barcode Identifier	2
A 2-digit field that's used to specify the presort makeup.	
Service Type Identifier	3
A value that corresponds to a particular mail class with a particular combination of service(s). For example, "040" is First-Class Mail® with Destination Confirm.	
Mailer ID (Customer Identifier)	6 or 9*
A number assigned by the USPS that identifies the specific mailer or subscriber.	
Sequence Number	9 or 6*
An ID specific to this mailpiece that must remain unique for each 45-day period.	
Delivery Point ZIP Code™	0, 5, 9 or 11
The same data used to generate the POSTNET™ barcode today.	

* depending on annual mail volumes

THE INSIGHTS NEEDED FOR A DECISION THAT MATTERS

While the Intelligent Mail® barcode is a major USPS initiative, you will have several decisions to make – and how you manage the near-term implementation of this inevitable mandate could have long-term implications for your business.

In the end, it is likely that larger companies may need to employ several of the strategies listed above in order to achieve the best results. One of the keys will be to develop and enforce standards that help simplify implementation, while making it easier to take advantage of the Intelligent Mail® benefits over time. This may also make ID assignment and management more efficient.

Mailers should not underestimate the potential impact this barcode mandate may have on their business – and the number of departments and business units who may ultimately be involved. Starting early with a thorough assessment will put you in a better position to succeed, including:

- analysis of your current capabilities
- review of your business applications
- assess current approach to data cleansing and barcode generation
- determine compatibility of systems used to print barcodes
- quantify costs and benefits of alternative approaches

At Pitney Bowes, we want you to make smart decisions – decisions that simplify processes, ensure compliance, reduce postage and add value to your business. When you contact Pitney Bowes, you can expect first-rate postal knowledge, unrivaled expertise and innovative ideas… the same mailstream leadership that's behind the nation's leading CASS Certified™ software, the most advanced document output technologies, the most intelligent inserting and sorting systems, and the largest presort service bureau in the world.

For more information, speak with your Pitney Bowes representative or call us today at 877-536-2736.

SPECIFICS AROUND THE NEW BARCODE

The Intelligent Mail® barcode is a height-modulated barcode that encodes up to 31-digits of mailpiece data into 65 vertical bars.

The code is made up of four distinct symbols, which is why this barcode was once referred to as the 4-State Customer Barcode. These are the tracker, ascender, descender, and full bar (TADF).
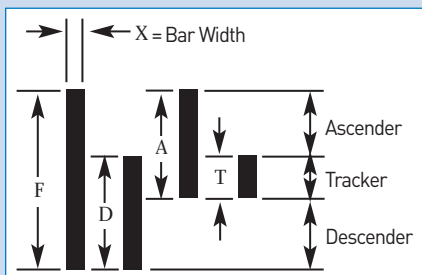
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Engineering the flow of communication™