

# WHAT YOU SHOULD KNOW ABOUT PAPERLESS IBM i ELECTRONIC FORM PROCESSING

## IN THIS GUIDE YOU WILL FIND:

- What is Paperless IBM i Electronic Forms Processing?
- The Critical Benefits of a Paperless Processing Solution
- Shopping and Configuration List for Paperless Processing on an IBM i
- Common Myths about Electronic Forms and Paperless Processing

## WHAT IS PAPERLESS IBM i ELECTRONIC FORMS PROCESSING?

A *Paperless Processing* solution (figure 1) covers all the activities and applications needed to a paper-intensive process with an automated, efficient paperless flow. IBM i Paperless Processing uses these components:

- A *Paperless Reporting* system using *Paperless Report Distribution* software converts, delivers, and archives **IBM i spooled file reports** in universal digital formats such as PDF, Excel Spreadsheets (XLSX), and HTML to name a few.
- An *Electronic Forms Management* solution generates, delivers, and archives **IBM i electronic forms with merged data** to laser printers or to PDF files. Electronic forms have graphical elements like lines, boxes, barcodes and logos, and are commonly used for B2B and B2C documents such as invoices, purchase orders, bank statements, and patient forms.

Paperless Reporting and Electronic Forms Management systems share many features, including their delivery methods, archiving, and auditing solutions. They are frequently sold together in an IBM i Paperless Processing software suite.

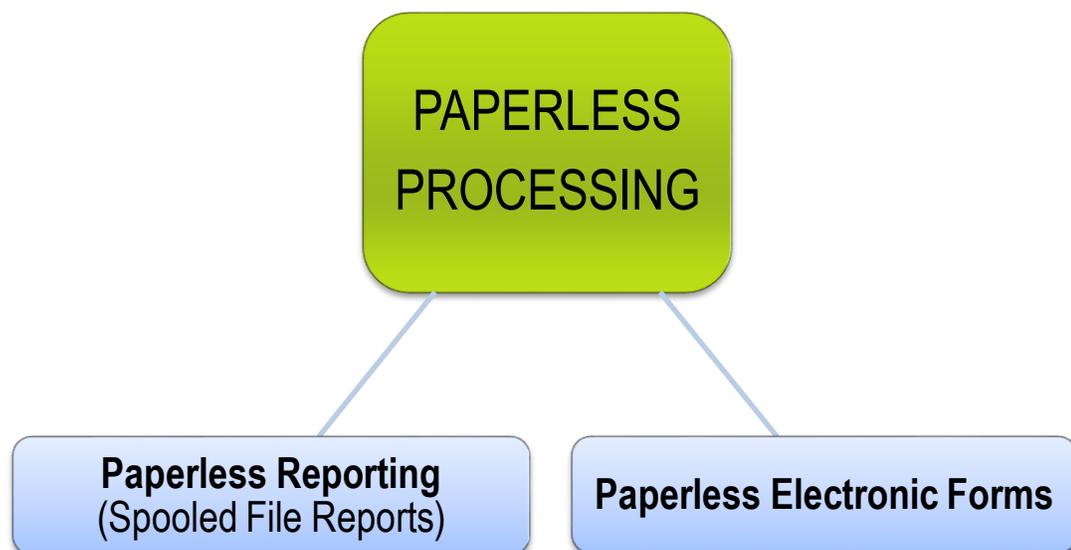


Figure 1: A Paperless Processing system uses Paperless Reporting and Electronic Forms software to automate a paperless process flow

## THE BENEFITS OF AN ELECTRONIC FORMS SOLUTION

An Electronic Forms solution creates your digital distribution strategy for IBM i forms, such as invoices, purchase orders, statements, patient forms, etc. It provides many significant benefits (figure 2), including:

- *Major cost reductions* over printing, distributing, and storing pre-printed forms
- *Professional form design* options to import, create, and maintain (modify) form templates
- *Multiple delivery options* that merge IBM i data with forms and automatically deliver PDF form files directly to users (via email or fax), file servers and Web sites, or as printed output
- *Secure delivery* of electronic forms to protect personal, proprietary, and other sensitive information
- *Digitized archiving, retrieval, and resend capabilities*, to store, search, retrieve, and resend historical forms on demand
- *Reporting and auditing capabilities* to identify when documents were sent and received, to whom and by whom they were sent, searched, viewed and easily re-sent as needed.

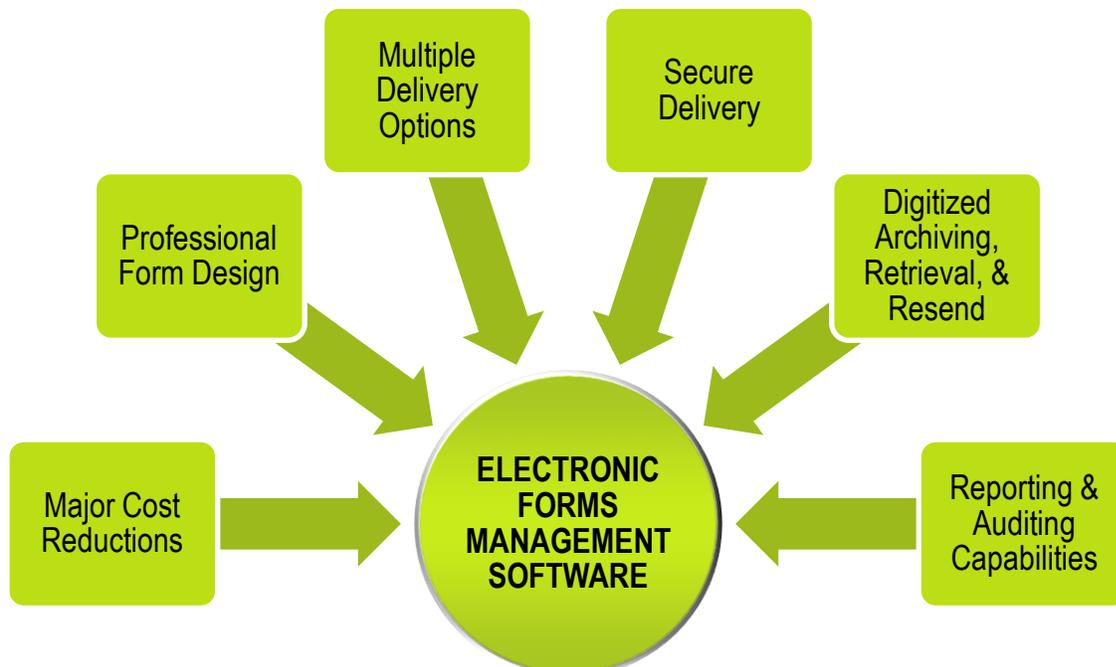


Figure 2: The significant benefits of an IBM i Electronic Forms Management system

Here's how Electronic Forms Management software enhances your ability to reduce costs, service customers, improve efficiency, and provide secure access to IBM i forms.

**Major Cost  
Reductions**

## **ELECTRONIC FORMS MANAGEMENT AFFECTS THE BOTTOM LINE**

Various studies show that managing paper documents can consume up to 15% of an organization's total revenue. Replacing paper documents with electronic forms can have a major impact on any organization's bottom line. Here are some areas you can save money by converting from paper forms to electronically delivered forms merged with IBM i data.

- Continuous and multi-part form costs
- Printing costs
- Printer maintenance / service contracts
- Mailing costs
- Fax machine costs
- Storage costs for on/ off-site document storage
- Staff time for organizing, filing, and retrieving forms
- Customer wait time while relevant forms are retrieved
- Document destruction costs
- Paper waste and recycling

**Managing  
Paper Documents  
Can Consume Up to**

**15%**

**Of an  
ORGANIZATION'S  
REVENUE**

**Multiple  
Delivery  
Options**

## **IBM i FORM DELIVERY IN DIGITAL AND PRINT FORMATS**

Most Electronic Forms management solutions provide multiple delivery options for IBM i forms.

IBM i forms can be digitized to PDF formats, allowing forms to be electronically delivered by email, e-faxing, or posting directly to Web sites and file servers. Text-searchable PDF copies can be automatically archived for organization-wide access to quickly search, view, and resend documents. Some packages even contain email diagnostic logs to help you track email distribution failures.

For organizations needing paper output, electronic forms can be printed to inexpensive laser printers using plain paper stock at a fraction of the cost of pre-printed forms. Laser printers eliminate the cost of pre-printed forms such as invoices, bank statements, and purchase orders; they also eliminate the need for special purpose printers, such as high-speed line-printers with expensive maintenance contracts, and for older models, limited parts availability.

IBM i form delivery can be automated for unattended generation and delivery in batch jobs, without using the IBM i job scheduler or a third-party job scheduling package. Many Electronic Forms management vendors provide their own built-in job scheduler for form generation and delivery without custom programming, although, if preferred, processing can also be accomplished using standard IBM i functions, including Data Queues and embedded APIs.

**Professional  
Form Design**

## **IMPORTING, EDITING, AND MAPPING IBM i DATA TO ELECTRONIC FORMS**

Electronic forms software is the heart of an IBM i document management system. There are three ways to create electronic form templates.

1. *Professional turnkey services for form conversion* – Many Electronic Forms management vendors have professional designers on staff that will design and help customers convert their paper forms to electronic forms and import them into their electronic forms software
2. *Using graphics design professionals who provide professionally designed form templates that are imported into the software*
3. *Internal users who create and manage form templates directly on the IBM i, using the electronic forms editor provided with many electronic forms packages*

Electronic form template creation and maintenance provides the overall look of a form. The design and look of a form are an important reflection on your organization, almost like a business card that you exchange with trading partners – it should reflect the professional image your organization deserves.

It formats and adds graphical elements to forms, including lines, boxes, logos, pictures, and signatures. Electronic forms can support most barcode formats, including code 3 of 9, code 128 A, B, and C, PDF417, USPS intelligent barcode, Quick-Response codes (QR codes) and many more.

Once the form template is created, a designer maps where IBM i data will be inserted into the template when documents are generated.

**Secure  
Delivery**

## **PROTECTING PERSONAL, CONFIDENTIAL, AND OTHER SENSITIVE INFORMATION**

Many vendors offer security modules to satisfy legal and regulatory requirements for protected information. These modules password encrypt IBM i form PDFs as they are created. Once received, the user enters the required password to open the PDF file.

Many packages allow for both manual and automatic PDF password encryption. Some of the more valuable security features to look for include:

- Manual PDF encryption or password generation, for when a user manually sends a PDF file to another user
- Automated PDF encryption and password protection generated on the fly, for automated batch processing and electronic delivery of IBM i forms
- An administrator “back-door” password in case the recipient forgets their password

**Digital Archival  
Retrieval &  
Resending**

## **ON-DEMAND STORAGE, RETRIEVAL, AND RESENDING ARCHIVED DOCUMENTS**

Electronic forms management software can archive PDF copies of delivered or printed IBM documents on a file server, or on the IBM i Integrated File System (IFS). These files are text-searchable and can easily be searched, retrieved, viewed, and re-sent.

Indexing allows documents to be associated and located more easily. Say a customer did not receive an invoice. Indexing allows you to locate the saved PDF by searching on the purchase order number to quickly locate and re-send the appropriate invoice, even if you don't have the invoice number handy.

Archival purging can be designated according to the user's retention policy. Many packages use selective purging, where certain items can be retained while others are purged. They can also lock down the purging function to prevent unauthorized users from purging documents. Some packages have purge levels that allow for separate purges of either individual file entries, audit trail entries, or both.

**Reporting &  
Auditing  
Capabilities**

## **AUDITING THE ELECTRONIC FORMS DISTRIBUTION PROCESS**

Some Electronic Forms management solutions offer audit modules that can search and report on IBM i form distributions by the following items.

- File recipient
- File sender
- Document name
- Date and time range
- Delivery method
- Indexed Fields

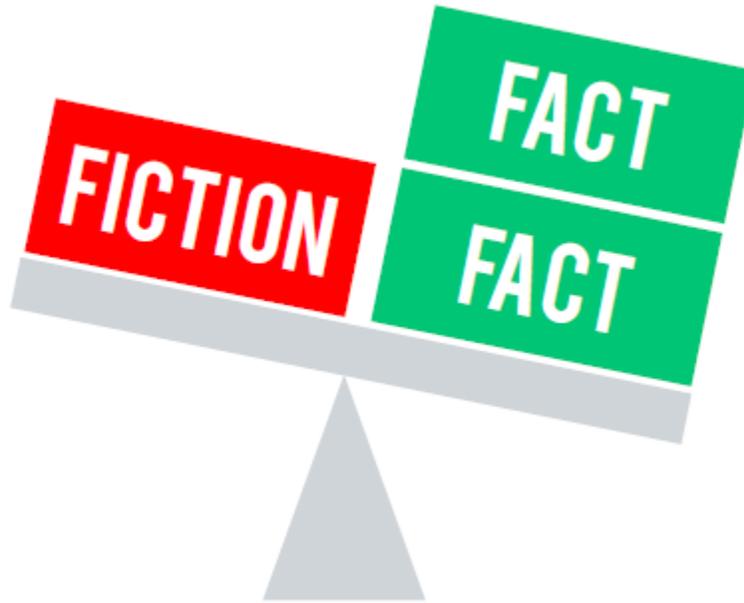
Some packages allow users to create custom audit trail indexes over sent documents, where the user can index the information for their own needs. All of these capabilities are useful for tracking down internal and external audit issues or for identifying system problems.



## **SHOPPING AND CONFIGURATION LIST FOR IBM i ELECTRONIC FORMS MANAGEMENT**

Getting started with Electronic Forms Management is easy. Most shops can set up their own IBM i Electronic Forms Management environment by installing or configuring the following items.

- Shop for and purchase an IBM i Electronic Forms Management package such as DRV Tech's FormFlex software, that includes:
  - ✓ An electronic forms editor
  - ✓ An email distribution module for sending completed form
  - ✓ An archiving module
  - ✓ Advanced security features for encrypting PDFs
  - ✓ Audit trail capabilities
- Some vendors also offers suites such as DRV Tech's FlexTool solution suite, where you can purchase an entire Paperless Processing solution (paperless reporting & document management) from a single provider.



## ELECTRONIC FORMS MANAGEMENT SOLUTIONS FOR THE IBM i: FACT VS. FICTION

**Fiction:** “We can build our own forms management solution using native IBM i utilities that will be free, and it will work just as well as a third party solution.”

**Fact:** *A do-it-yourself (DIY) approach often requires more resources to design, implement, and maintain over time, than a third-party form solution specializing in streamlining the process. DIY solutions are vulnerable to staff disruptions and shifting priorities. Some of the IBM i print utilities are obsolete and no longer supported. Third-party packages are supported by the vendor’s entire programming and support staff. They are competitive if not less expensive, with creating a solution in-house, are more robust and much easier to maintain in the long term.*

**Fiction:** “I don’t have budget for a Electronic Forms management package and I don’t need all the advanced features”

**Fact:** *Many packages are written in modules, each of which provides added capabilities to the core package. Depending on your vendor, you can pay only for the capabilities you need, and you can add on different modules later. With reduced delivery costs, solutions like FormFlex typically pay for themselves in less than one year. Many clients see complete return on investment of paperless reporting in less than three months!*

**Fiction:** “We have to have a GUI design tool to create our own forms.”

**Fact:** *First question you have to ask yourself: do you really have the resources to design your own forms? Would you let your marketing team make programming changes your core IBM applications? Should programmers be designing forms that will represent your company’s image? Is that really the best use of their time? Many companies offer design services that get you up and running faster with professionally designed forms that reflect the professional image your company deserves. Typically, companies design their form once, and it remains unchanged for years. You should still be able to easily make edits and tweaks, which most solutions allow.*

**Fiction:** “We have some continuous form printers I would like to retire, but our accounting department doesn’t want to print laser checks because they say it is not as secure as pre-printed check stock, with signature signing equipment”

**Fact:** *Depending on the solutions laser checks can be printed more securely than using pre-printed checks. Pre-printed check stock is an inherent security risk, which is why it must be inventoried regularly. Some companies place their security features in proprietary printers that are a gimmick that is unnecessary if you have sufficient security inherent in the check printing process, such as password protected software. DRV’s SecureChex lets you print to off-the-shelf laser printers with MICR toner cartridges, using blank check stock instead of pre-printed checks, with security built into the software using powerful encryption. People save significant money by converting their check printing process to blank check stock. For more information on laser jet check printing, download DRV Tech’s eguide Everything You Need to Know About Laser Check Printing on Your IBM i.*

**Fiction:** “You can only Archive IBM i forms and reports to the Integrated File System (IFS), and we don’t want to give access to the IFS to all our users ”

**Fact:** *You don’t have to save forms and reports to the IFS if you don’t want to, there are other options. Merged forms can be electronically filed from the IBM i directly to any file server on your network for company wide access. Instead of manually filing hard copies, text searchable PDF’s can be searched, viewed, and re-sent with a few keystrokes.*

**Fiction:** “We have been using the same electronic forms software for 20 years. It would be really hard to switch now, besides, ‘if it ain’t broke, why fix it?’.”

**Fact:** *DRV offers a competitive forms upgrade for existing legacy forms software, that can include complete conversion services so you don’t even have to change your forms! Switching to a modern solution means it is properly supported, and probably will save you money in lower maintenance fees. Some legacy solutions are no longer supported by current IBM operating systems, so you should plan on making changes if you plan to keep your system current.*

TO FIND OUT MORE

Since 2002, DRV Tech has been the go-to-expert for IBM i, iSeries, and AS/400 report automation and Electronic Forms management software.

If you want to find out more about creating your own Paperless Processing environment, please contact us at our Atlanta headquarters at 678.417.1521, email us at [support@drvtech.com](mailto:support@drvtech.com), or visit our Web site at [www.drvtech.com](http://www.drvtech.com).

We'll be glad to answer any questions you have and help you design your own Electronic Forms Management and Paperless Processing strategy.