

# The InfoPrint Automated Document Factory Solution

A vendor-neutral, closed-loop automation solution that enables postal optimization, mailroom integrity and output management

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## EXECUTIVE SUMMARY

This whitepaper is intended to inform those who are responsible for production print and mail operations about the financial and operational benefits of the InfoPrint Automated Document Factory (ADF) solution. An ADF solution can solve many print and mail challenges by applying automation to achieve:

- **Postal optimization:** make the best use of every dollar spent on postage – maximize postal discounts and postal tracking/feedback programs.
- **Mailroom integrity:** know that every envelope was mailed with the right customer information and be ready to prove it.
- **Output management:** maximize throughput and utilization and enable business continuity with centralized management for one or more sites.

Many print and mail operations rely on manual processes, much as they have for 30 or more years. Yet business requirements, postal programs and regulatory compliance demand more and more of print and mail operations – demands that are difficult if not impossible to meet without automation. For example, how can you cost-effectively merge operations in case of acquisition? Or establish a backup site with seamless printer and print job oversight? Can you afford the time to manually sort return mail and update lists? Can you prove that an insurance policy cancellation notice was mailed on time? What is the consequence of mailing the wrong medical information or claim checks to the wrong person? How will regulations such as Sarbanes-Oxley affect executives under whose watch mistakes occur?

In today's uncertain economic climate, it's more important than ever to save money, bolster productivity, protect your investments and retain customers. Manual print and mail operations cannot provide the agility, data integrity and scalability required to compete effectively. Automation is the future of print and mail optimization. It's a question of when, not if.

The InfoPrint ADF solution is a vendor-neutral systems integration effort. This means you can integrate existing devices and software and build for the future – whatever it holds. For many companies, this means merger, acquisition, insourcing, high-speed color, electronic document delivery or new opportunities such as TransPromo. All can be taken in stride – and expedited – with an ADF.

An ADF is a closed loop solution that delivers the integrity and control that are required to help you lower cost and reduce risk. Check the dashboard. Every moment, you have a finger on the pulse: SLAs, utilization, throughput, job history, audit trails and more.

InfoPrint Solutions Company™ has a unique perspective on and experience with ADF solutions. We have worked with more than 100 customers worldwide during the past 10 years to implement, enhance and expand ADFs. In industries as varied as finance/banking, insurance, brokerage, credit card, telecommunications and service bureaus – the ADF solution is validated as a sound business decision.

***“We ran out of space to expand our original ADF in California, so we built a second production site in Texas. The InfoPrint solution gives us an enterprise view and enterprise postal optimization. We can route jobs between sites or to an outsource vendor, which means seamless backup and disaster recovery. We know exactly what’s happening every second and have no doubt that we can reply promptly should the SEC come knocking. The ADF has proved to be a good investment that paid for itself quickly.”***

VP of Operations  
Large Financial Services Company

## **AUTOMATION – THE FUTURE OF PRINT AND MAIL**

Why is automation the future of output production excellence? Because it is the only way to fully address the delays, errors, risk, costs and consequences linked to manual processes.

The Automated Document Factory (ADF) isn't a new concept, but the solution has evolved substantially since industry analyst GartnerGroup first wrote about it a decade ago. The ADF was originally conceived as a control and reporting strategy that included job scheduling, job tracking and device monitoring, among other things, to help companies cope with the changing production output marketplace.

A vendor-neutral system integration, the InfoPrint ADF solution replaces manual processes and tasks with a closed-loop automated system that controls print and mail processes and:

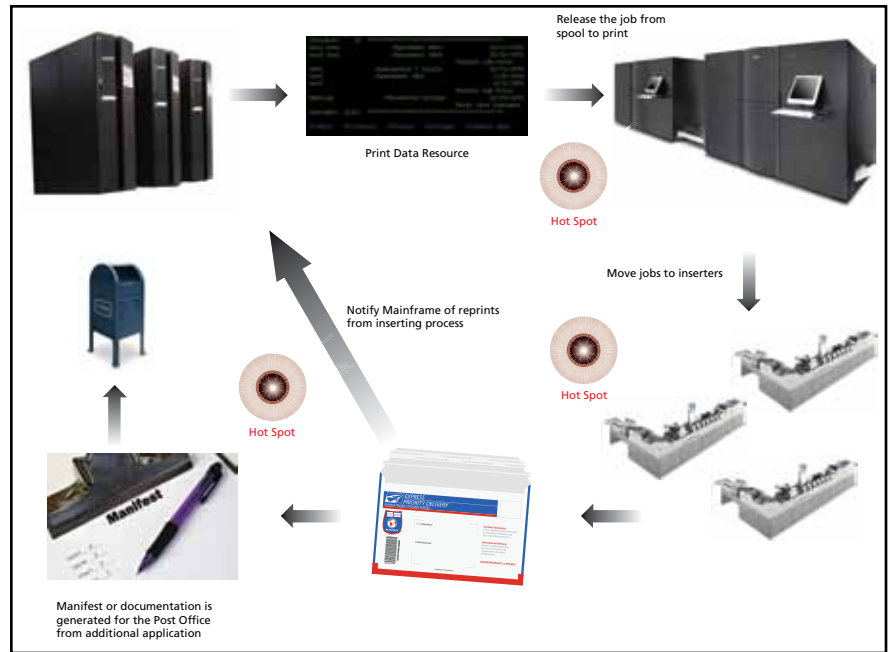
- Drives the printers
- Controls the inserters
- Uses a database to manage the data
- Uses a workflow engine to control the process

Our ADF solution is modular and scalable so it can embrace postal programs, new equipment and new business rules. The workflow engine integrates with all types of print and mail processes and multi-vendor hardware and software environments. More important, the ADF goes far beyond tracking and reporting. You can:

- Control processes
- Use business intelligence where it makes sense
- Optimize your operation continuously

## **TYPICAL TROUBLE SPOTS IN MANUAL OPERATIONS**

The production output marketplace has changed but so have business, regulatory and postal conditions. Yet many companies use the same manual production print and mail processes they began using in the 1970s – a job begins with the arrival of the files and an operator with a clipboard who checks the job queue. Typical trouble spots in non-automated print and mail operations are (1) releasing jobs from spool to print; (2) moving jobs to inserters; and (3) handling reprints.



*Manual intervention in a typical output environment can cause delays and errors, increase risk and jeopardize customer satisfaction and compliance.*

The InfoPrint ADF solution illuminates activity in your print and mail operations. You know what's happening every moment. You have instant access to real-time tracking, reports and reconciliation. You know without a doubt that everything is printed, every document is accurate and reprints are completed automatically. From the moment the files arrive through interaction with the post office, the ADF solution facilitates and oversees your entire print and mail processes.

Regardless of the type of pieces you print – statements, magazines, checks, coupons, catalogs and so on – an ADF solution helps you do what you do better and paves the way for your business to take advantage of emerging trends and opportunities. Color and TransPromo, for example. In manual print and mail operations, you may be missing out on these risk- and cost-reducing capabilities:

- Taking full advantage of postal discounts and programs
- Assuring data integrity (right information to right customer) and complying with applicable regulations
- Managing, protecting and updating the personal consumer information that is collected and used to improve mailings and response rates
- Satisfying customer preference for electronic document delivery
- Providing backup and/or business continuity, especially when mergers and acquisitions occur
- Meeting job deadlines and service level agreements (SLAs) without buying more equipment and hiring more staff

**Consider an ADF if you:**

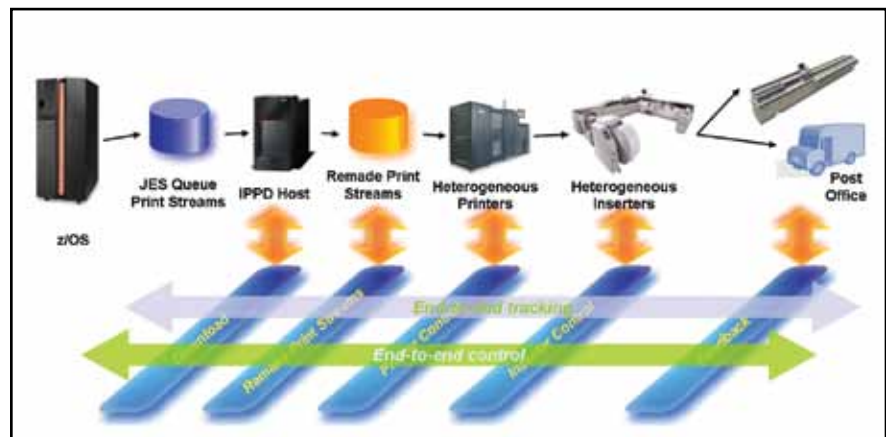
- Desire to better manage postage and reduce postal charges
- Need to implement the USPS Intelligent Mail® barcode system
- Handle returned mail manually
- Key in information manually to process reprints
- Desire to have a complete auditable log of each job and mailpiece
- Are not comfortable with the way you manage compliance
- Want to improve worker productivity
- Accidentally printed and mailed one or more duplicate jobs or test jobs
- Want to manage multiple print and mail sites centrally with a single GUI

**AUTOMATE BECAUSE IT WORKS**

Each InfoPrint ADF solution is tailored to solve specific problems – risk, cost, accountability, productivity, disaster recovery, compliance concerns and so on. The ADF helps address these issues by applying automation to print and mail operations in three areas:

- **Postal optimization:** make the best use of every dollar spent on postage – maximize postal discounts and postal tracking/feedback programs.
- **Mailroom integrity:** know that every envelope was mailed with the right customer information and be ready to prove it.
- **Output management:** maximize throughput and utilization and enable business continuity with centralized management for one or more sites.

Whether you have responsibility for enterprise operations, a line of business, the print center or the inserting center, you can most likely identify hard and soft dollar justifications for an ADF solution.



*Automation simplifies everything.*

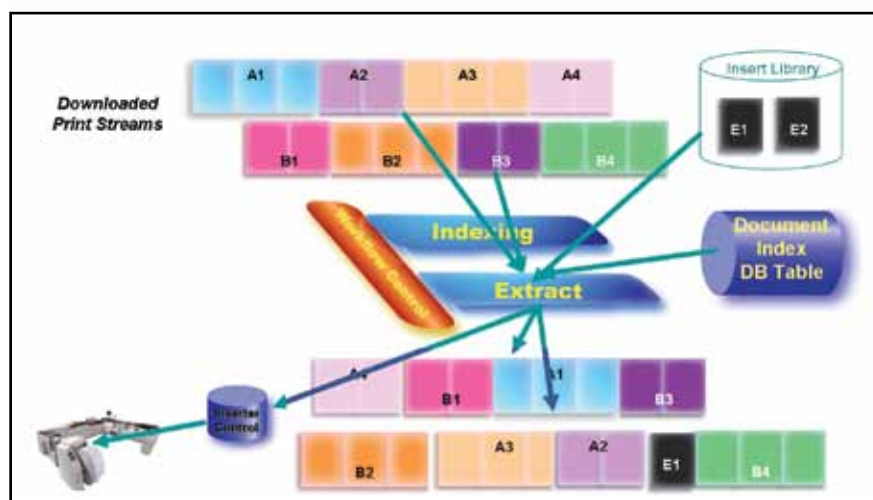
## POSTAL OPTIMIZATION

If you think your postal costs are too high, they probably are. You can get more out of your postal dollars by streamlining pre-print steps with an ADF. One of our customers was able to get far more out of their postal dollars with InfoPrint's ADF solution.

Global provider of merchant processing services, electronic commerce and payment solutions	
<p><b>Existing ADF</b></p> <ul style="list-style-type: none"> <li>• Many small jobs not optimized for high-speed printers and inserters</li> <li>• 50 or fewer documents handled manually</li> <li>• Large in-house sortation volume</li> <li>• Limitations of legacy mainframe applications</li> </ul>	<p><b>InfoPrint's ADF Enhancements (InfoPrint ProcessDirector)</b></p> <ul style="list-style-type: none"> <li>• Document pool commingles jobs of various sizes</li> <li>• Automated mailing insertion replaces manual process; enables fewer machine set-ups</li> <li>• Active management of SLAs</li> <li>• Electronic sortation of jobs that contain many envelopes for the same postal codes so they do not have to be physically sorted on envelope sorters (pre-sort machines) but rather can be sent directly to the post office</li> <li>• Multi-site management from one GUI</li> <li>• Migration to TCP/IP print and pSeries® print</li> </ul>

## EVERYONE INTO THE DOCUMENT POOL

The unique document pool feature of the InfoPrint ADF solution enables print stream manipulations that can result in large savings and higher integrity. It indexes every document in every downloaded print stream and rearranges files based on criteria such as zip+4. The document pool commingles jobs into a cohesive production run, performs insertion and sortation electronically, and updates inserter control files – all functions that allow every line of business, regardless of quantity, to take advantage of lower postal cost.



Document pool technology enables print stream manipulations that can produce large savings and increase integrity.

## **INTELLIGENT MAIL® BARCODE UPDATES – EASIER THAN YOU THINK**

The U.S. Postal Service is requiring mailers to change from the POSTNET barcode to the Intelligent Mail barcode (IMB) by May 2011 in order to receive the full discounts for presorted mail. For large mailers, the lost discounts can amount to tens of thousands of dollars or more per month. The IMB initiative also provides new capabilities for tracking mail throughout the postal network.

You can reprogram applications in order to comply with the base requirements, but this approach is extremely time consuming and expensive. Or you can spray on the barcode at the inserter, sorter or presort house – a solution that may compromise your brand and doesn't help you on the remit side.

The InfoPrint ADF solution can replace existing POSTNET barcodes with the Intelligent Mail barcode in your Advanced Function Presentation™ (AFP™) files, or generate a new IMB based on required criteria. The InfoPrint ADF solution is compliant with either Basic or Full Service Intelligent Mail, allowing you to choose the right service option for your business.

The InfoPrint ADF solution can also help you take advantage of delivery confirmation and address corrections services via the IMB – without application changes.

## **ADD STAFF OR EQUIPMENT? PROBABLY NOT NECESSARY**

To compensate for issues caused by lack of postal optimization, many companies add equipment and staff in order to print higher volumes and meet SLAs. Instead of saving postal dollars or getting more out of every dollar you spend, you actually increase costs and reduce profitability. The top ways an InfoPrint ADF solution enables postal optimization are:

- Electronic sortation/manifesting
- Merging of documents from many jobs to achieve higher postal densities (commingling) to streamline production runs
- Management of document sortation to optimize sorter operation
- Electronic document delivery – eliminate print and postage cost

***“InfoPrint’s ADF solution allows us to ‘fill the ounce.’ Since it calculates weight electronically, we know whether or not we should add or exclude an insert to meet 1 oz. or 2 oz. limits. Add the benefits of commingling, and we really optimize our postage.”***

Director of Operations  
Telecommunications Company

## **MAILROOM INTEGRITY**

What are the symptoms of lack of mailroom integrity? Lost jobs and documents. Mailing of wrong documents to customers. Accidental mailing of test or duplicate jobs. Inability to demonstrate compliance. With mailroom integrity, you know that every envelope was mailed with the right customer information and you can prove it. One of our customers implemented the InfoPrint ADF solution to ensure compliance with HIPAA, a U.S. privacy regulation, and solved several other print and mail challenges at the same time.

Health Care Services Corporation	
<b>Challenges before ADF</b> <ul style="list-style-type: none"> <li>• HIPAA Compliance</li> <li>• Doubling claim and transaction volume</li> <li>• Ambitious growth plan</li> <li>• Manual print processes</li> <li>• No audit trails, production reporting or SLA management</li> <li>• No load balancing between print centers</li> <li>• Inadequate disaster recovery plan</li> <li>• Print quality concerns</li> <li>• Error rate of 1:1000 mailpieces with manual reprinting and reconciliation of claim checks</li> <li>• Severe capital expense restrictions</li> </ul>	<b>Results after InfoPrint ADF Solution</b> <ul style="list-style-type: none"> <li>• Automated reprint of work to item level</li> <li>• Improved consistency and quality</li> <li>• Elimination of meters</li> <li>• Elimination of production bottlenecks, which increases throughput</li> <li>• Reduced risk with end-to-end tracking of print, fulfillment and distribution lifecycle</li> <li>• Scalability because solution was implemented on IBM System p™ servers</li> <li>• Non-disruptive deployment with pilots and phased rollouts</li> <li>• 100% detailed reporting and reconciliation</li> </ul>

### WHAT'S UNDER THE FLAP?

The InfoPrint ADF solution provides a dashboard and user-friendly interface with controlled access. You can see real-time information on all aspects of your operation:

- Status of every job in every process at every site
- Summary information and drill-down capability to any level of detail about any job
- Highlights of error conditions

In addition, you can configure sensitive functions such as purging a job. Yet the system is so aware of processes and devices that only valid actions are allowed.

Mailroom integrity depends on automated process management, which enables job and document tracking, control over print and mail activities, and audit trails. If you depend on manual processes, you can expect errors to continue that can increase the risk of customer dissatisfaction, which can lead to negative brand perception. In addition, if you can't demonstrate compliance, you may become involved in a costly, time consuming recovery situation that almost certainly involves bad press. And your business may become increasingly less able to compete in terms of timeliness, accuracy and customer service options.

### **THE RIGHT CHECK IS IN THE MAIL**

Another customer, a very large property insurance company, assembled policies using cutsheet printers. The policies consist of items such as an I.D. card, bill payment slips, road side assistance card, and terms and conditions on a mix of stocks. Without the floor space to expand, the company decided to implement an ADF solution. Items printed on cardstock are sent to five cutsheet printers (there were 18 cutsheet printers prior to the ADF implementation). Items printed on plain white paper are sent to three high-speed continuous forms printers.

The integrity part of the story is that the ADF prevented checks from being mixed up or double-stuffed into envelopes. The financial part of the story is that the marriage of cutsheet and continuous form printers, along with the ADF's automated process control features, enabled ROI in less than 18 months and allowed the customer to run applications with multiple paper stocks on roll-fed printers.

### **INTEGRITY IS IN THE EYES OF ALL BEHOLDERS**

The consequences of lack of mailroom integrity are felt directly by companies that have experienced a difficult, costly compliance response or a large customer dissatisfaction issue. In these situations, your staff may spend hours, days or weeks to prove something had been mailed or to undo the damage of sensitive customer information landing in the wrong hands.

The InfoPrint ADF solution automated process control, which manages and tracks all jobs and documents to help ensure compliance, offers:

- Historical tracking ability
- Automatic audit trails
- Automatic duplicate checking
- Automatic watermarks for test jobs or non-negotiable checks
- Reporting tools

In addition, the InfoPrint ADF solution can include security measures that limit the functions to which each employee has access. Each action performed within the ADF workflow is recorded with an employee identification number. When a problem arises, you can talk to the employee associated with the print job to expedite the resolution and conduct on-the-spot training.

### **OUTPUT MANAGEMENT**

Output management is focused on productivity, throughput, multi-site workload balancing, and backup and disaster recovery capabilities. One of our clients decided to implement a second ADF in another state because of space constraints in the facility where the original ADF is located. Now the company has an enterprise view of the print and mail operations and seamless backup and recovery among the two sites and an outsource vendor.

Large Financial Services Company	
<b>Challenges with ADF expansion</b> <ul style="list-style-type: none"> <li>• Load balancing across multiple print centers</li> <li>• Cross-site failover</li> <li>• Real-time tracking of mailpieces</li> <li>• Reporting</li> <li>• Non-disruptive deployment</li> </ul>	<b>Results with multi-site InfoPrint ADF solution</b> <ul style="list-style-type: none"> <li>• Consistent enterprise view with interface that can be accessed from the print centers and back office workstations</li> <li>• Seamless workload balancing, backup and disaster recovery – jobs from MVST<sup>™</sup> and LAN applications can be rerouted between sites or to outsource vendors</li> <li>• Database-driven solution provides complete history for each job</li> <li>• Automated reprints are re-barcoded so they can be managed as a sequential mailing on inserters</li> <li>• Enterprise postal optimization across sites</li> <li>• Seamless, controlled 'cut-over' to second site</li> </ul>

### WHEN THE FLOW DOESN'T FLOW

When your production jobs don't run smoothly and efficiently, productivity and throughput suffer. Costs rise. You may struggle to meet deadlines and SLAs. Causes of low productivity include:

- Wrong paper on the printers
- Many small jobs that start and stop printers
- Low device utilization
- Operator performance that is difficult to track
- Frequent inserter setup
- Meters on inserters slow inserter performance
- Recovery from jams is slow and prone to error

Causes of low throughput include:

- Print jobs are designed for cutsheet printers, so you cannot take advantage of continuous form printers
- Workload balancing among devices is not possible
- Small jobs cannot be merged or large ones cannot be split
- Operator errors

***“Of all the process management solutions we evaluated, InfoPrint had the only one that provided a complete closed loop mailpiece integrity solution from ‘host-to-post,’ including automated reprint of mutilated documents.”***

Jim Trout  
 Director, Output Service Centers  
 Health Care Services Corporation

### ENTERPRISE VIEW SIMPLIFIES EVERYTHING

It's one thing to simplify management and improve utilization and throughput at one site. When multiple sites are involved, the issues are more complicated since control and reporting between sites is required. Yet a multi-site approach is essential for business continuity, disaster recovery or backup planning – all critical business requirements.

InfoPrint Solutions Company has worked with several companies on multi-site ADF solutions to make sure that all production centers work in concert. Sometimes this involves merging work electronically from different mainframes, or routing mail with certain zip codes to certain facilities, or load balancing between sites, or optimizing postage across the enterprise.

Other capabilities simplify output management:

- Automated recovery from jams improves throughput
- Automated print and insert operation reduces errors
- Control over job sizes increases inserter utilization
- Elimination of meters on inserters
- Control of load planning optimizes inserter productivity
- Tracking of operational metrics measures performance

### **BUSINESS CASE DEVELOPMENT**

Every print and mail operation has different challenges. There are soft dollar and hard dollar considerations. This checklist provides some of the items that our customers have taken into account to justify an ADF solution.

<b>ROI Considerations</b>	
<p><b>Soft Dollar</b></p> <ul style="list-style-type: none"> <li>• Job tracking</li> <li>• Mailpiece integrity</li> <li>• Data collection and reporting</li> <li>• Job/mailpiece history</li> <li>• SLA monitoring and reporting</li> <li>• Labor and device productivity savings</li> </ul>	<p><b>Hard Dollar</b></p> <ul style="list-style-type: none"> <li>• Print stream manipulation               <ul style="list-style-type: none"> <li>– Sortation/manifesting</li> <li>– Householding</li> <li>– Print elimination – Web delivery</li> <li>– Production optimization</li> <li>– Electronic inserts</li> <li>– Reordering/splitting for inserters</li> </ul> </li> <li>• Multi-site support               <ul style="list-style-type: none"> <li>– Load balancing</li> <li>– Disaster recovery</li> <li>– Common support costs</li> </ul> </li> <li>• Automated reprint</li> </ul>

This chart summarizes the key issues and ADF benefits for each of the three solution areas we've discussed in this paper. It may help you identify cost-benefit scenarios for your business.

Postal Optimization		Mailroom Integrity		Output Management	
Key Issues	Top ADF Benefits	Key Issues	Top ADF Benefits	Key Issues	Top ADF Benefits
<ul style="list-style-type: none"> <li>• High postal costs</li> <li>• Limited marketing campaign ability</li> <li>• Rising capital and staff expense to meet SLAs</li> </ul>	<ul style="list-style-type: none"> <li>• Quantifiable postal savings</li> <li>• Postal sortation/manifesting</li> <li>• Commingling of jobs</li> <li>• Householding</li> <li>• Electronic inserts</li> <li>• Sorter optimization</li> <li>• Intelligent Mail barcode utility</li> <li>• Electronic document delivery – eliminate print</li> </ul>	<ul style="list-style-type: none"> <li>• Manual reprints</li> <li>• Manual return mail handling</li> <li>• Lost jobs and documents</li> <li>• Wrong documents to customers</li> <li>• Cannot demonstrate compliance</li> <li>• Lack of accountability</li> <li>• Negative brand impact/ loss of business</li> </ul>	<ul style="list-style-type: none"> <li>• Real-time job and document tracking</li> <li>• Audit trails</li> <li>• Automated process management</li> <li>• Auto-stamp for test or non-negotiable checks</li> <li>• Auto-detect for duplicate jobs</li> <li>• Automatic reprints</li> </ul>	<ul style="list-style-type: none"> <li>• Difficulty meeting SLAs or schedules</li> <li>• No workload balancing</li> <li>• No multi-site tracking</li> <li>• Slow error recovery</li> <li>• No ability to merge or split jobs</li> <li>• Inability to track operator performance</li> <li>• Operator errors</li> <li>• Meters slow inserter speed</li> </ul>	<ul style="list-style-type: none"> <li>• Multi-site safety net for disaster recovery or backup</li> <li>• Support for heterogeneous devices</li> <li>• Throughput improvements</li> <li>• Meter optimization</li> <li>• Device utilization improvements</li> <li>• Load balancing between sites</li> <li>• Reports and reconciliation</li> </ul>

### Future ready – TransPromo enablement

The InfoPrint ADF solution helps you implement TransPromo and multi-channel campaigns faster. You've probably heard about TransPromo – a way to add value to transactional documents such as billing statements, receipts, shipping documents and point-of-purchase materials by turning them into promotional opportunities. TransPromo transforms these customer and supplier communications into powerful one-to-one direct marketing tools with the addition of personalized messaging, offers, color and graphics.

TransPromo helps you cross sell, up sell, build loyalty, strengthen your brand, expand multi-channel marketing and reduce call center traffic. With an ADF in place, you have the ability to integrate offers and onserts into the datastream or onto the document.

One of our customers chose the InfoPrint ADF solution to solve data integrity and SLA challenges but soon found out that the print and mail operations could take on more work and enable TransPromo.

***“If companies don’t have an Automated Document Factory, they’ve got problems, even if they don’t know it.”***

Jim Chalker  
VP ETS  
AIGDirect.com

ROI Considerations	
<b>Before ADF</b> <ul style="list-style-type: none"> <li>• No automation</li> <li>• 16-hour print windows caused missed SLAs</li> <li>• Manual inserter intervention every few minutes to fix mis-feeds and double stuffing</li> <li>• Inability to detect test jobs</li> <li>• No audit trail or ability to assure regulatory compliance</li> <li>• Reprints required IT intervention</li> <li>• Many small jobs required multiple print and mail setups</li> <li>• Legacy mainframe applications – could not add bar codes</li> <li>• Large volume of returned mail</li> </ul>	<b>After InfoPrint ADF Solution</b> <ul style="list-style-type: none"> <li>• 2-hour print window – print and mail work is completed by 10 a.m.</li> <li>• Transform Metacode to AFP</li> <li>• 100% tracking, audit and regulatory compliance</li> <li>• Commingling of 72 small jobs into 12 large jobs</li> <li>• Run CASS address hygiene to prevent majority of returned mail and reduced rejection rate from 15% to under 1%</li> <li>• Automated reprints</li> <li>• Capacity to bring direct mail in-house</li> <li>• Expansion to second site for disaster recovery and load balancing</li> <li>• Core of future TransPromo implementation</li> </ul>

### **AUTOMATION IS ALL ABOUT VALUE**

Your business depends heavily on your print and mail operations. Accurate, timely customer communications influence accounts payable cycles, customer satisfaction, brand strength and business growth. Optimized print and mail operations with closed-loop control and single interface management assure the flexibility and integrity that can reduce risk, reduce costs, support emerging business opportunities and make it easier to adapt to changing regulations, postal requirements and market conditions.

After more than 10 years of experience with design and implementation of ADF solutions, we think these are the top value-adds of an Automated Document Factory:

- Control processes to page level
- Use business intelligence where it makes sense
- Optimize your operation to keep up with changing requirements
- Simplify third-party integration
- Use a single interface to manage one or more sites
- Manage SLAs with set-the-clock control
- Be prepared to prove compliance
- Acquire seamless backup and disaster recovery capabilities

## A TECHNOLOGY OVERVIEW

A systems integration effort, the InfoPrint ADF solution is vendor neutral so you can integrate and protect existing investments such as printers and inserters. Typical components of our ADF solution are presented here to give you another way to consider technology choices.

Architecture	<p>InfoPrint Advanced Function Presentation™ (AFP™) is a published standard for printing variable data at very high speeds with complete integrity. The device-independent AFP incorporates other industry formats, including EPS, PDF, TIFF, GIF, JPEG, XML, XSL, PostScript, PCL and PPML—to cover the entire range of text, image, graphics, process color, highlight color and monochrome printing. AFP can deliver content via print, HTML, fax, e-mail or screen. In combination with Intelligent Printer Data Stream™ (IPDS™) printers, AFP provides full page-level error recovery and resource management to support printing at rated speeds.</p> <p>AFP architecture offers integrated color management, which can simplify high-volume production output. In a mixed color and monochrome environment, the same centralized set of color applications and resource libraries can be shared by both types of printers—enabling color output to be sent to premium customers while monochrome output can be sent to other customers. Device-independent AFP integrates easily with existing statement systems and provides the high level of data control, security and integrity suitable for TransPromo.</p>
Workflow technology	<p>InfoPrint ProcessDirector software is a scalable, customer-configurable output process management system available on both AIX® and Linux® platform. The software enables job-level control of print processes, and it can help you reengineer transaction output processes.</p>

<p>Monochrome printing</p>	<p>The InfoPrint 4100 produces very high quality text and images with a 19.5" (495 mm) format on a wide range of papers. Print Quality Enhancement features 256 levels of gray, four screen frequencies and seven levels of contrast control. The 4100 can print applications designed using FS45, GIF, TIFF or JPEG color objects "as is" without conversion.</p>
<p>Color printing</p>	<p>The InfoPrint 5000 is a full-color, variable-data, continuous-form printer with a 20.4" (520 mm) web width. It uses inkjet print heads, piezo-electric drop-on-demand technology and water-based pigment inks that are designed to resist fading and smearing.</p>
<p>Software</p>	<p>InfoPrint Productivity Suite software and the Productivity Tracking Feature enable the capture of job, operator and printer data, which can help to optimize print operations.</p>
<p>Professional Services</p>	<p>Assessment, design and implementation using existing software and hardware whenever possible. The InfoPrint team possesses deep knowledge of the production process. Additional expertise in data management and mainframes has contributed to 10+ years of successful engagements to solve complex workflow challenges.</p>

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