



Workflow Automation & Multi-Channel Delivery

Times are-a-changin' -
are you keeping up?



Presenters:

Matt Mahoney – Director, Industry Solutions

Greg Smith – Workflow Specialist

Times are-a-changin'



'60s



'70s

Times are-a-changin'



'80s



'90s into today

Times are-a-changin'

- **Survival**
- **Communication Enrichment**
- **Technology**

Today's Discussion

- **Environmental forces – 6 minutes**
- **Production control – 12 minutes**
- **Multi-channel and color – 8 minutes**
- **Technology choices – 2 minutes**
- **Workflow examples – 15 minutes**



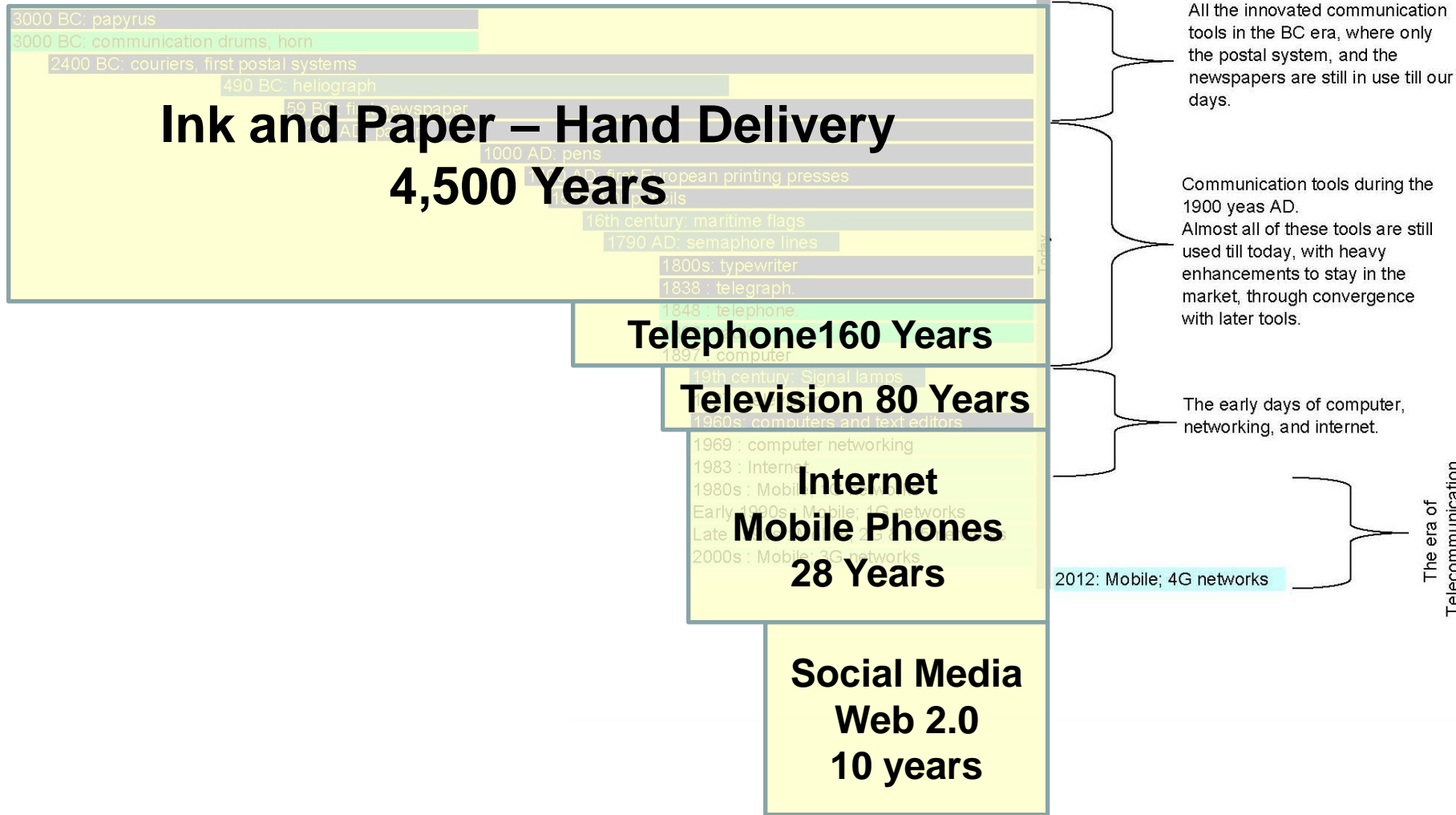
**What's
influencing our
document
production
shops?**

- **Regulation**
 - More and costly
- **Communication**
 - More variety and costly
 - Less physical and more electronic
- **Technology**
 - Networks (computer facilitating social)
 - Innovative, smart production tools

- **HIPAA - healthcare**
- **SAS 70 / SSAE 16 – financial**
- **PCI – credit card**
- **Section 508c – Internet accessibility**
- **CAN-SPAM – email marketing**
- **DNC – do not call**
- **Many more**

- **Impact: Cost and efficiency**

Timeline of Communication tools



- **With all these choices...**
- **Communication is mixed-mode and ad hoc**
 - Depends on consumer preference at any given time

Production – Technology Advances

Feature	1996	2001	2006	2011
Documents	Limited formatting and personalization	Greater customization; Monochrome dominates color	CRM printing; Personalization; Color is a variable	Focus on CRM printing; Color consistently chosen
PDL	Metacode, Line Data, AFP, PCL, PostScript	All the same plus Xerox VIPP	Same, but shifting to PostScript and PDF	AFP, PostScript, PDF
ADF Technology	Homegrown	Start to see commercial offerings	Universal acceptance; Affordable technology	Turnkey offerings; Customizable; Virtual

Source: Gartner

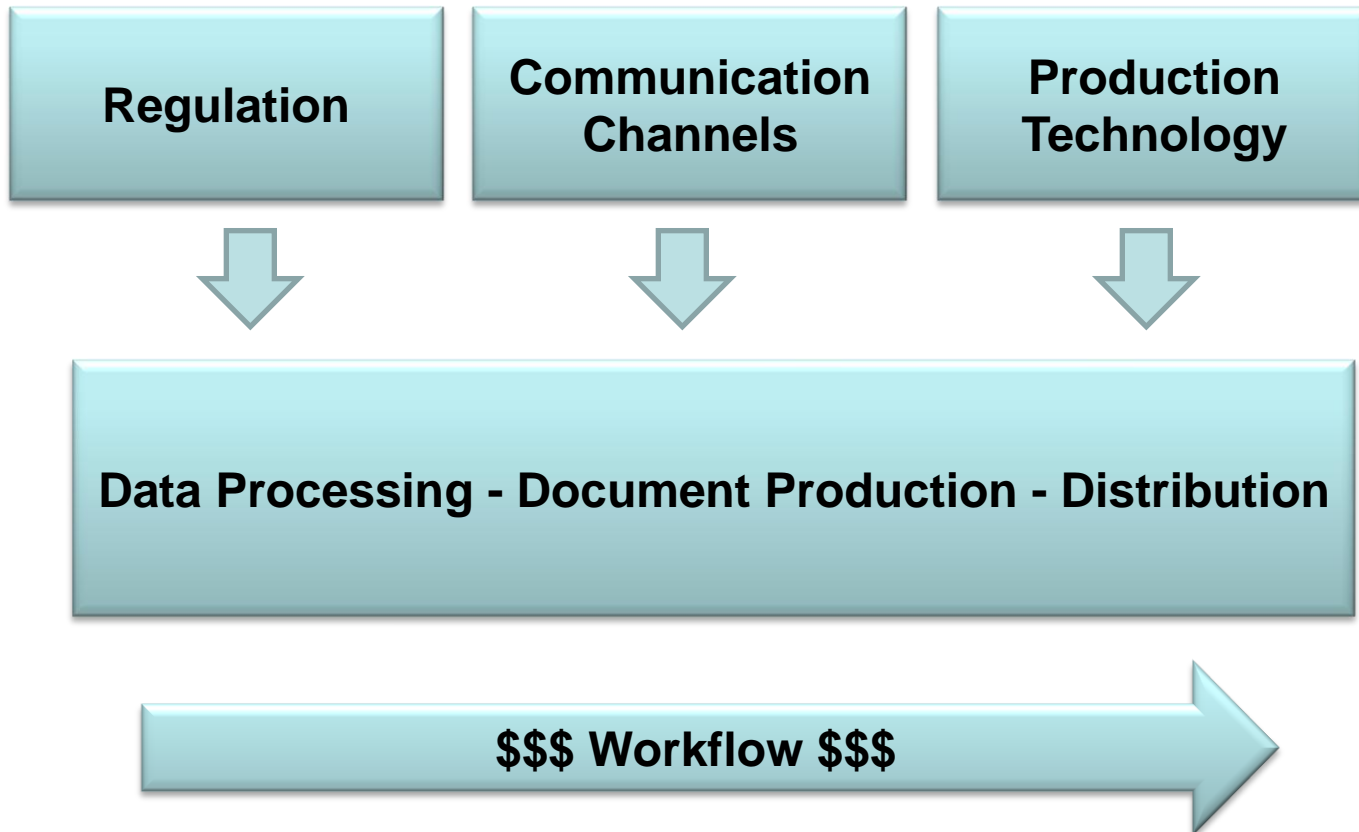
For every \$1 spent on printing...

Another \$6 is spent on managing print workflow...

86% of cost is incurred in non-printing tasks.

Source: Xerox, IDC, CAPV

Summary Environmental Factors





**What do you
change?**

**Where do you
start?**



**Before we answer
these questions
let's talk about
3 things...**

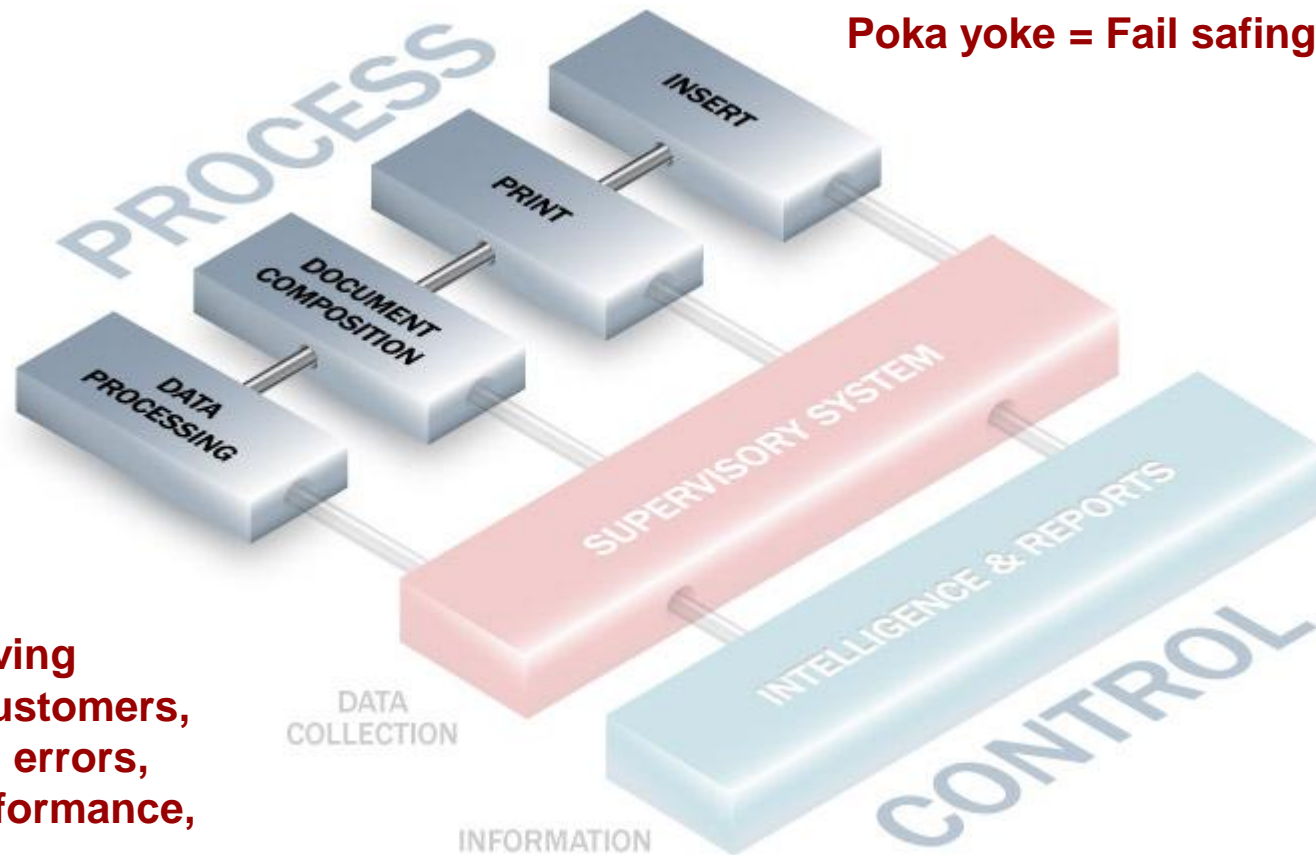
- **Efficiency – Get more output for the same/less input**
- **Effectiveness – Meet the goal**
- **Example of bad balance:**
 - Customer service IVR

Two More Concepts

- **Mistake vs. Defect**
 - Mistakes are going to happen
 - Defects occur when mistakes are not caught

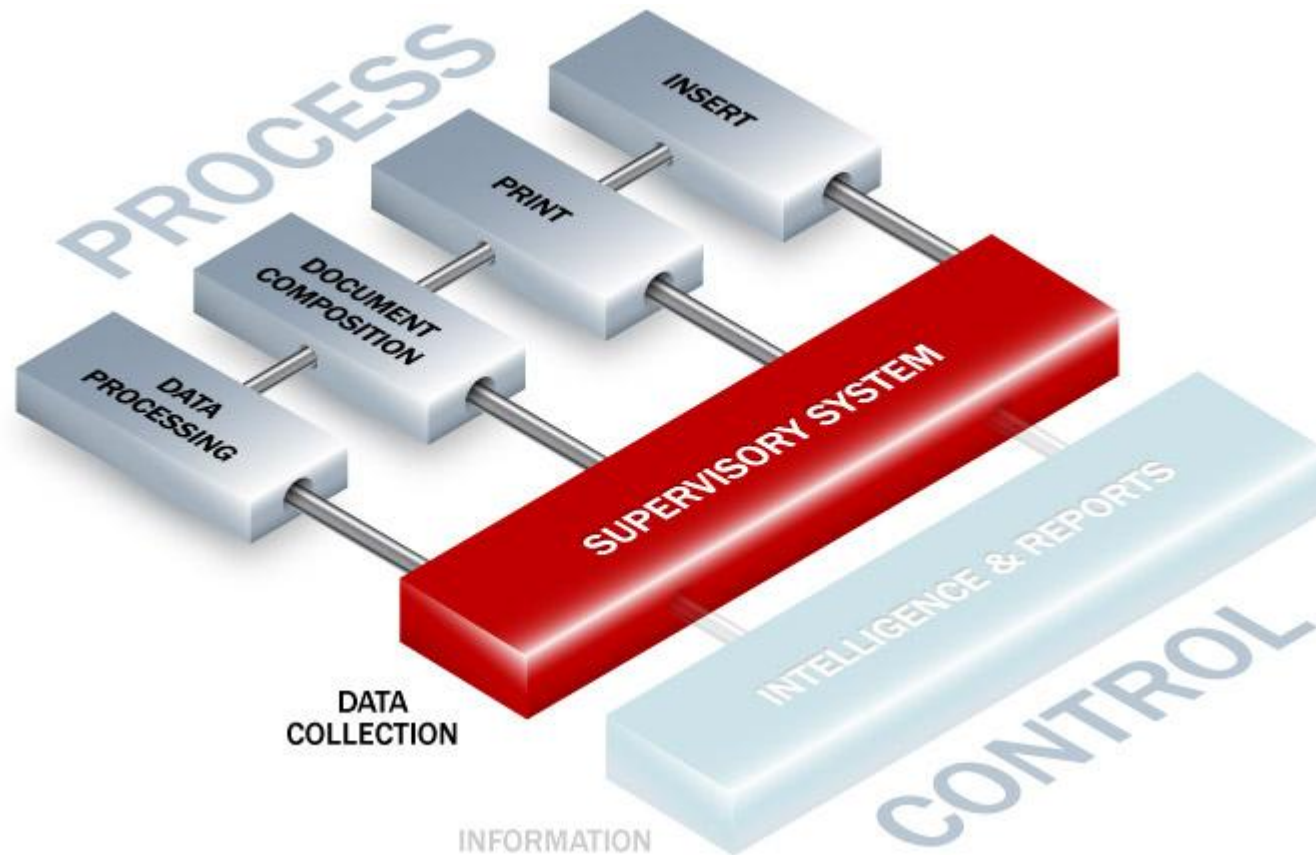
- **Prevention vs. Detection**
 - Prevention is “Poka yoke” (fail-safing)
 - Detection is catching errors when they happen

Efficiency and Effectiveness Where do you start?

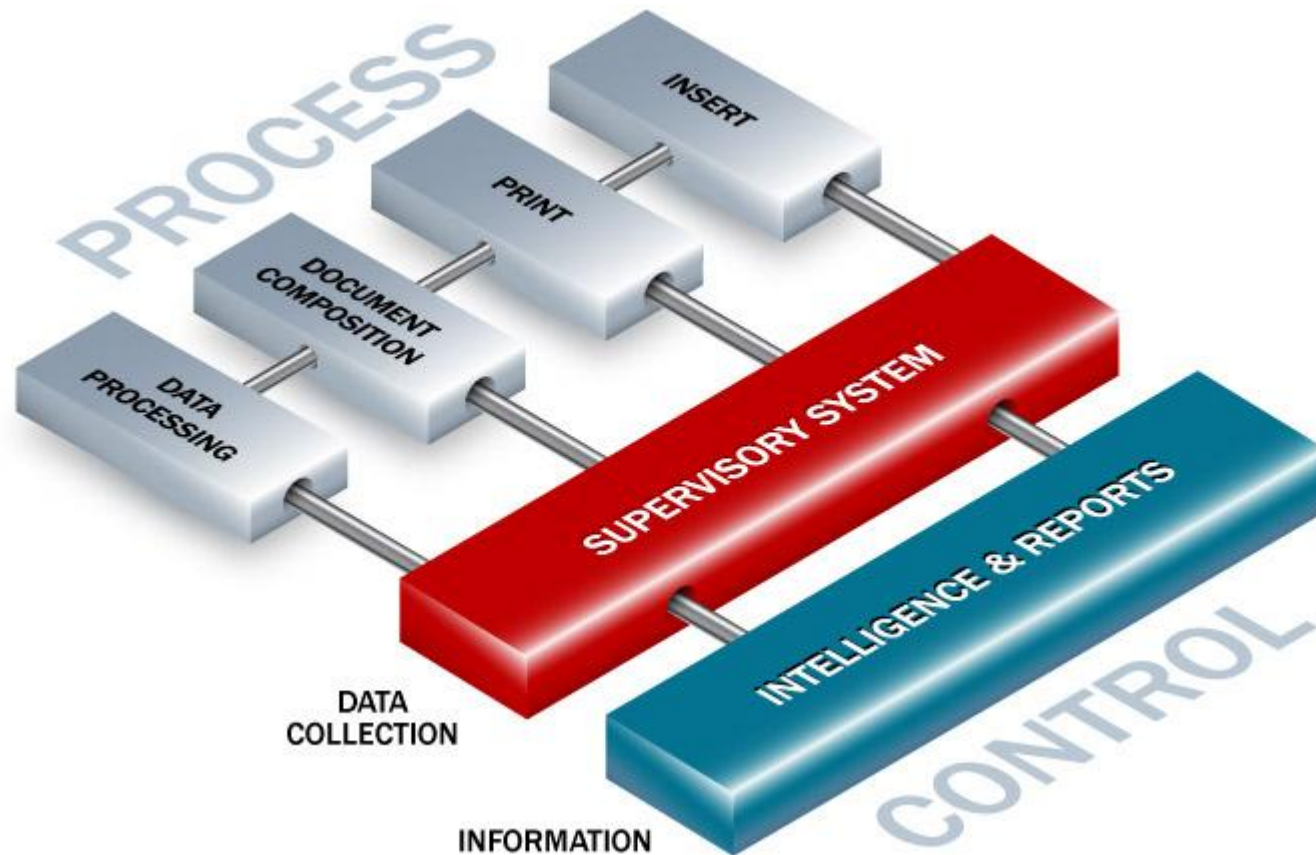


Things driving change, Customers, regulation, errors, waste, performance, etc..

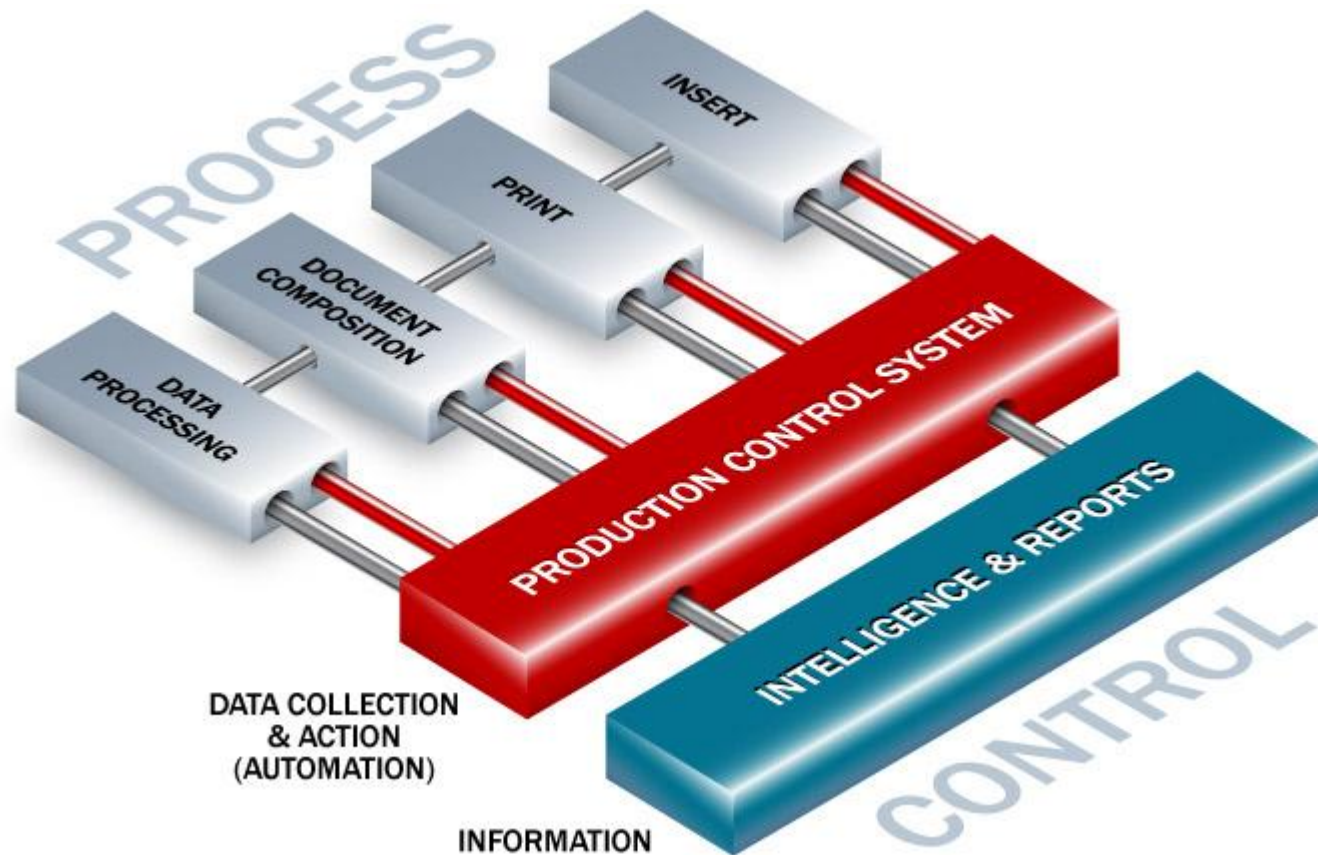
Efficiency and Effectiveness Process Monitoring



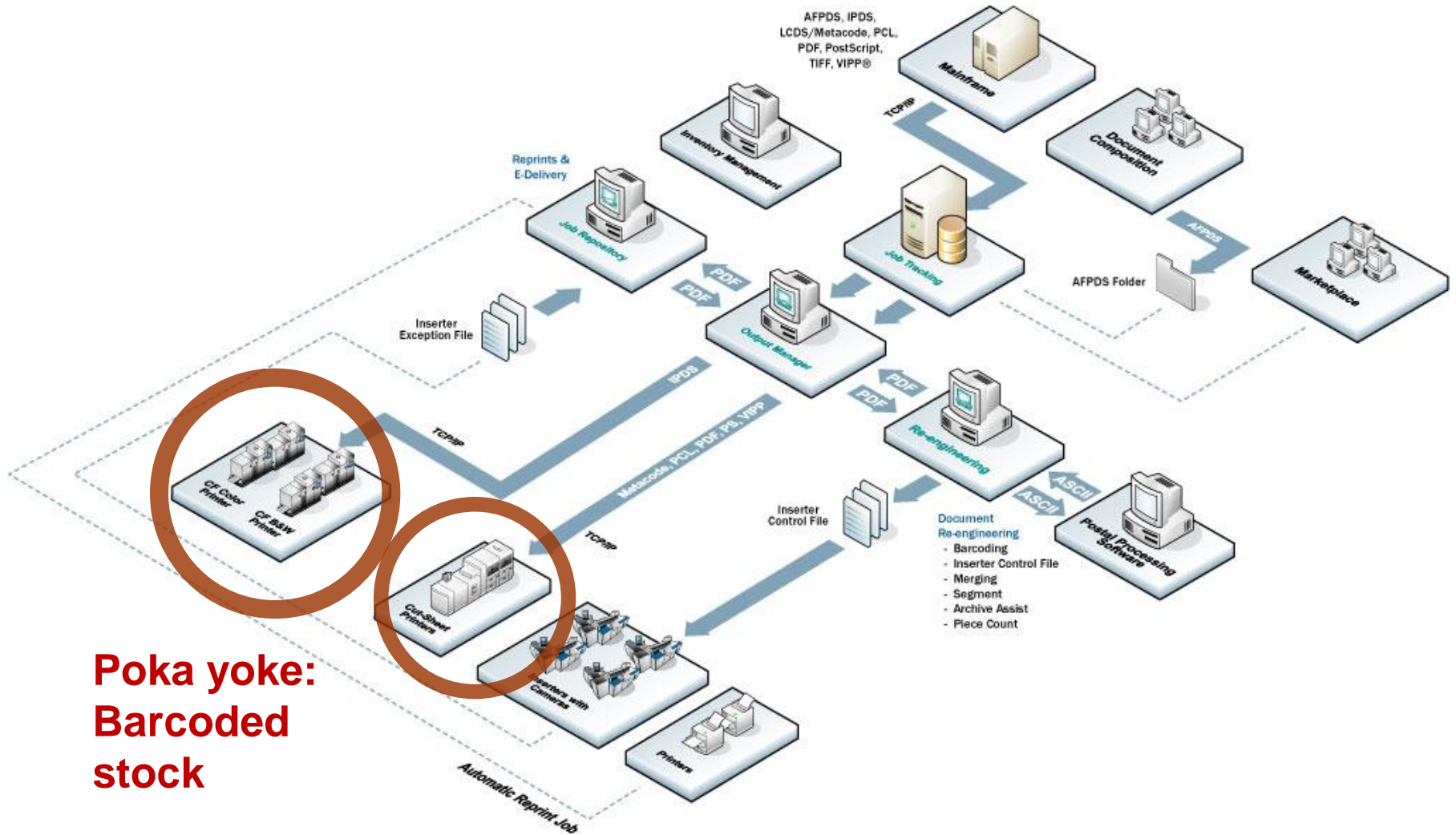
Efficiency and Effectiveness Production Information



Efficiency and Effectiveness Production Control



Example – Poka yoke



- **Separate your thinking about**
 - Process
 - Control of the process
- **Motivation for change**
 - Edge in communication
 - Cost reduction
 - Trust your operation

Page 1 of 4



Solibre Corporation Variable Annuity

QUARTERLY STATEMENT

STATEMENT PERIOD: April 1, 2008 - June 30, 2008
 ACCOUNT NUMBER: 6380354 5685004
 BENEFICIARY: JONATHAN H. BERENSON
 CONTACT: 200A Union Park Center, Suite 201, Alexandria, VA 22304

***** REISSUED ADO 493
 Jonathan H. Berenson
 13823 Newburg Rd
 Lorton, VA 22080-1001

Account Summary

Value last statement	\$95,390.00	Contract date	5/23/2005
Additions	+700.00	Maturity date	3/31/2025
Withdrawals	-0.00	Payments to date	\$0.00
Fees and Charges	-0.00	Value if surrendered	\$95,205.56
Change in market value	+871.31	Change if surrendered	\$2,508.68
Value this statement	\$97,892.24		

Account Allocations

Allocation of Current Holdings



Allocation of Current Premium



Contract	Value	Allocation
Contract 1	\$50,000.00	50%
Contract 2	\$47,892.24	49%

It's all about the view.

There's nothing more beautiful than the view from your balcony. At the Solimars, you'll find the perfect escape, with stunning views of the ocean and the city.

FREE PRINK

At the Solimars, we offer a complimentary prink to all our guests. Choose from a variety of delicious prinks, including our signature Solimars prink.

The Solimars Club

Join the Solimars Club and enjoy exclusive benefits, including access to our private lounge and complimentary prinks.

2190661

Color, Transpromo, Multi-Channel

Richer Communications

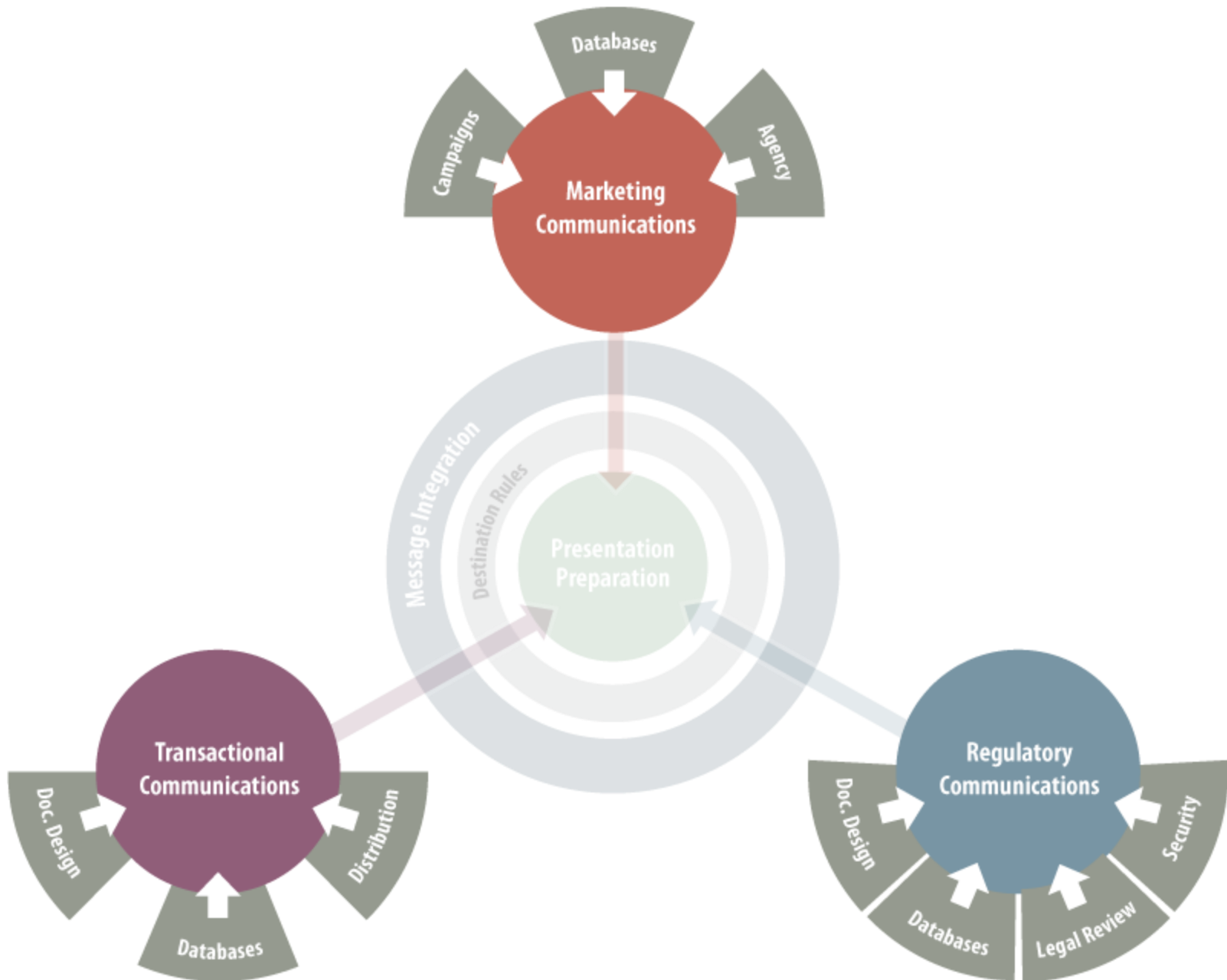
- **Face to face is richest**
- **Motion pictures**
- **Voice**
- **Written**

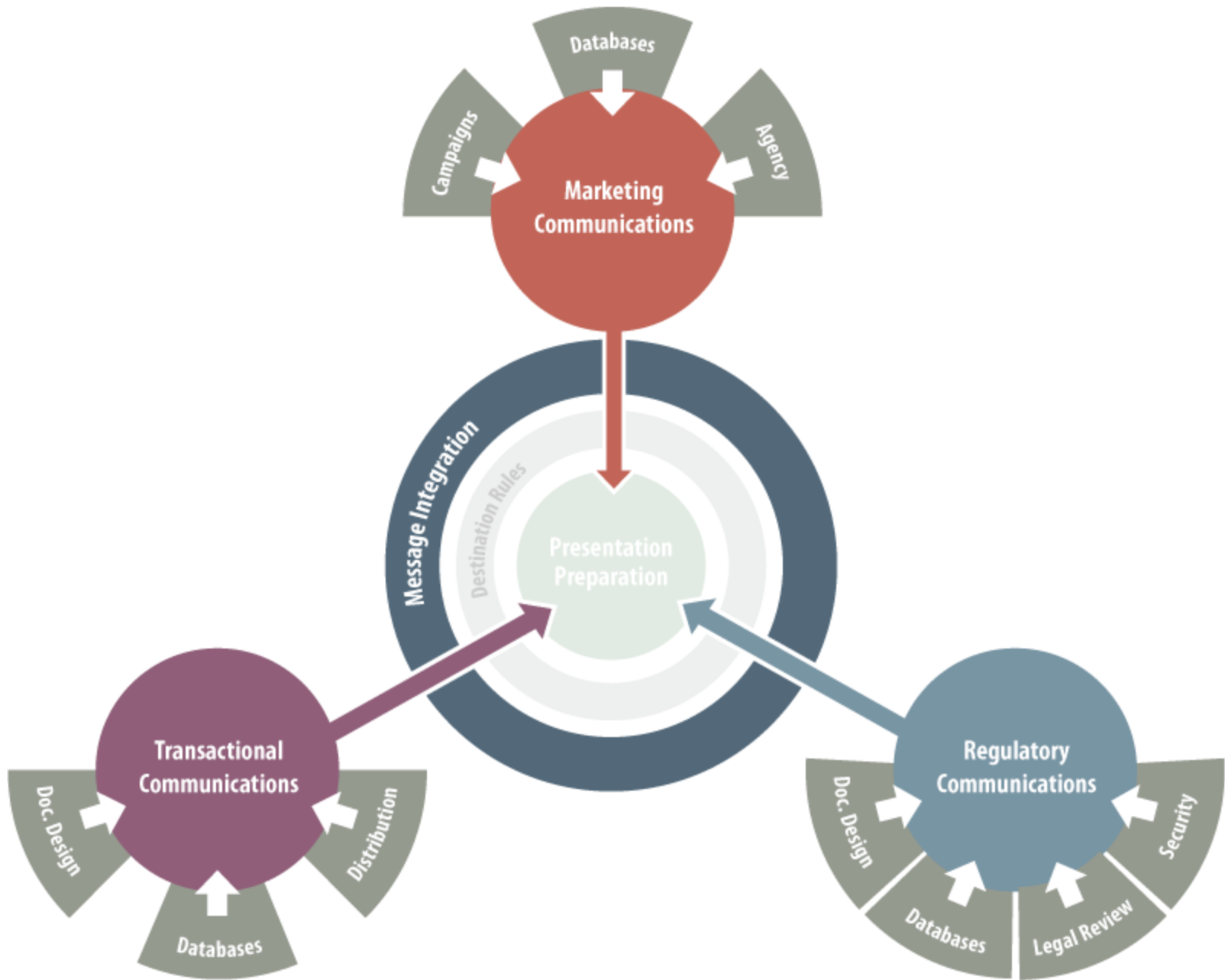
Implication for Documents

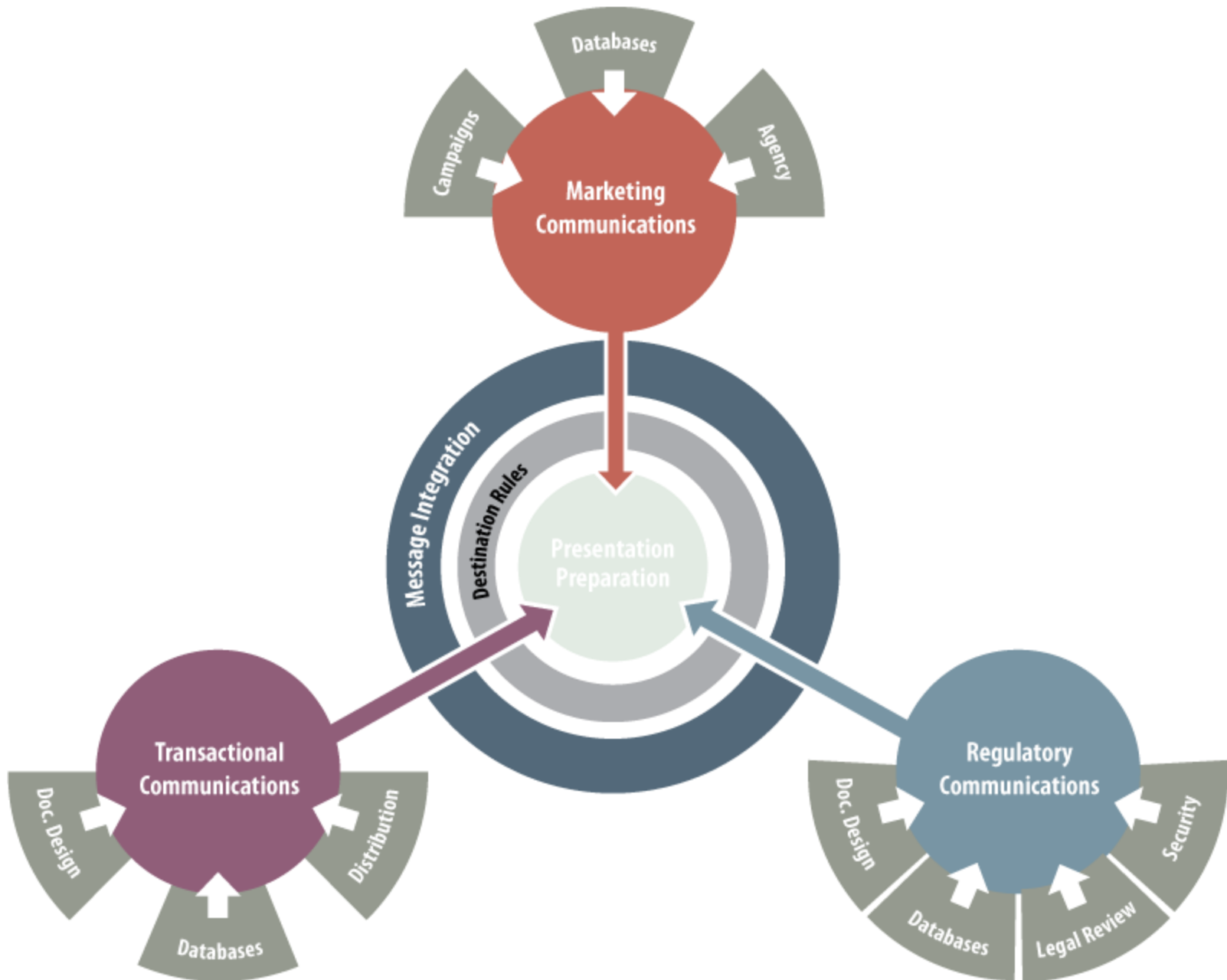
- **Medium**
- **Relevance**
- **Color**
- **Accessibility**

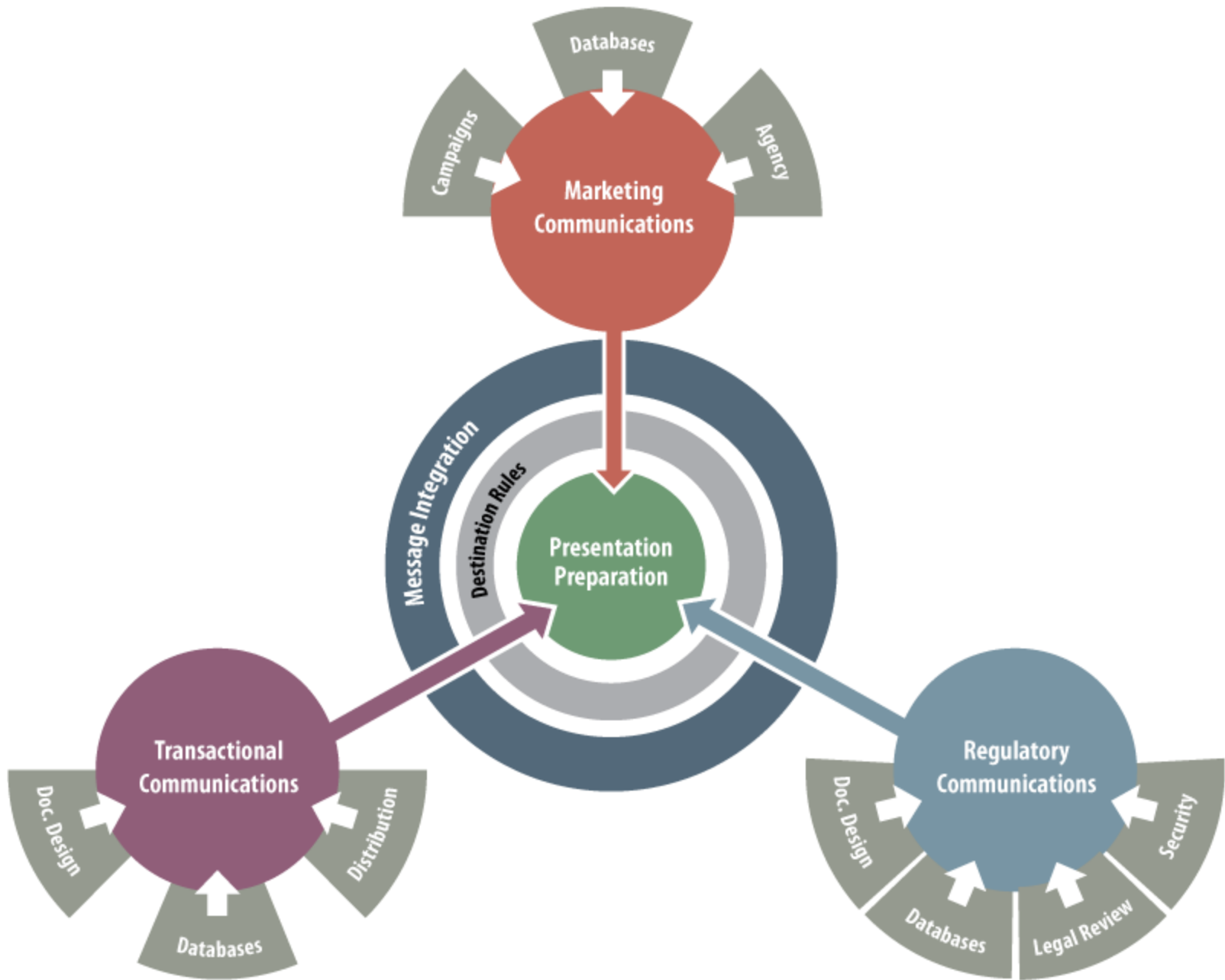


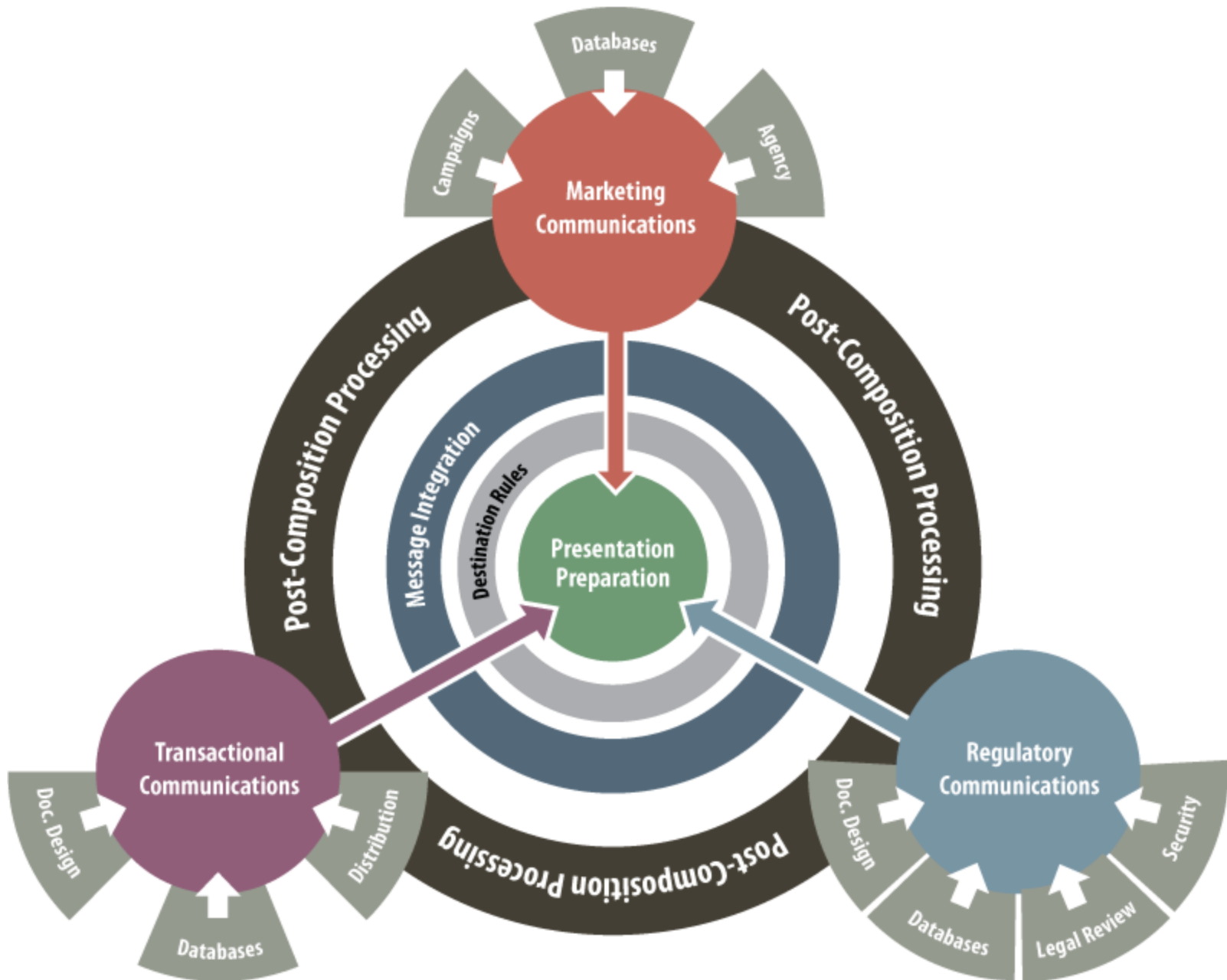
- **Benefits of color**
 - Eliminates preprinted stock / warehouse
 - Better communication
 - Broadens business scope
- **Challenges**
 - Different than B&W / learning curve
 - Color consistency



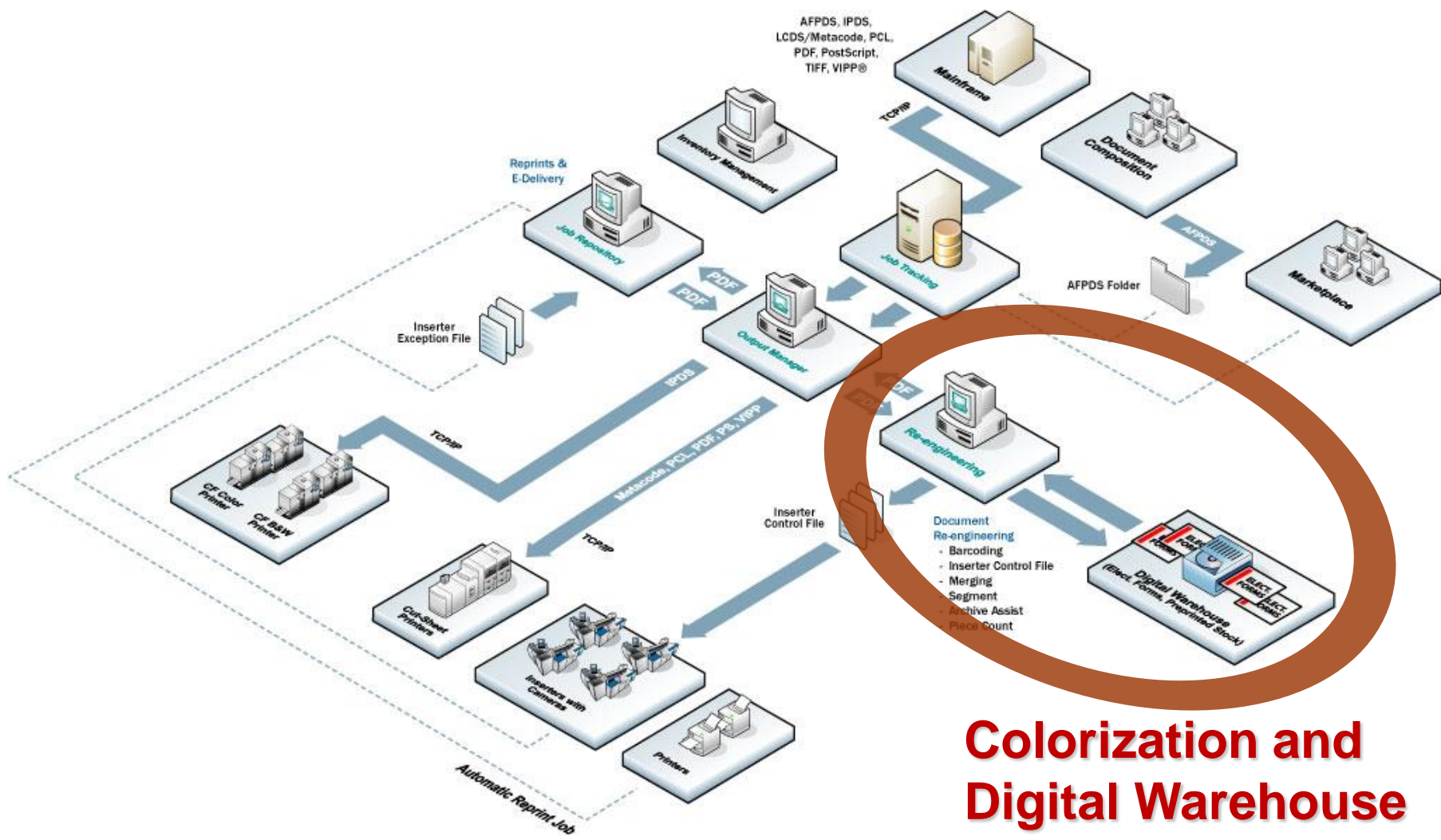








Replacing Paper Warehouse



Colorization and Digital Warehouse

- **Make vs. Buy**
 - Printer, inserter, servers
 - Software
- **Software economics**
 - Pay developers \$100K to build a system and what do you have?
 - Purchase \$100K in software and what do you have?

eDelivery & Archive

- Reduce costs related to print/mail
- Faster access to information
- Print only what is needed
- CSRs
- B2B / B2C
- Proofing
- Cross-reference documents
- Security
- Push / Pull delivery



Job Management

- Improve workflow efficiencies
- Smart phone management
- Security & compliance
- Resource management & optimization
- Job segmenting
- Print stream conversions
- Load balancing



Production Control

- Cost reduction
- Tracking
- Audit trails
- Reprints
- Reduce errors
- Meet SLAs
- Comingle small runs
- Reduce manual processes
- Introduce standardization



DATA RE-ENGINEERING

Data Re-engineering

- Modify print data
- Barcoding / control marks
- Add TransPromotional content
- Mask content
- Data exchange with external processes
- Make application changes without recoding
- N-up / book blocks / imposition
- N to 1 / print order
- Printer finishing control
- Scale and shift output
- Underlays / onserts / digital inserts
- Introduce or migrate to color



SOLIMAR ADF WORKFLOW

JOB MANAGEMENT

PRODUCTION CONTROL

MAILING EFFICIENCIES

MAXIMIZE EQUIPMENT

Maximize Equipment

- Leverage and optimize investments
- 'Any to Any' - printers / finishers
- Device optimization - rated speed
- Redundancy & backup
- Vendor-neutral
- Eliminate legacy print solutions
- Multi-channel delivery



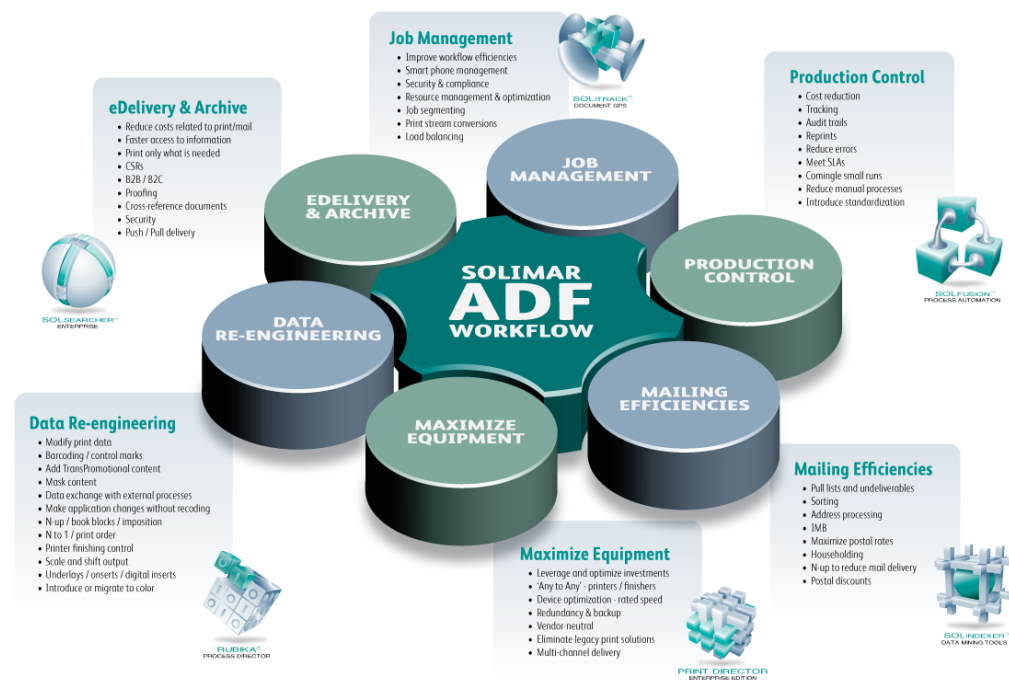
Mailing Efficiencies

- Pull lists and undeliverables
- Sorting
- Address processing
- IMB
- Maximize postal rates
- Householding
- N-up to reduce mail delivery
- Postal discounts



Business Problems ADF Solves

- **Technology**
 - Make vs. Buy
- **Transpromo & Color**
 - Adding Value
 - Document Re-engineering
- **Multi-channel**
 - Efficient Tracking, Communication & Delivery



- **Call Center Representative – Hello, how may I help you?**
- **Customer – Did you receive my Job? What's the status of mailpieces A,B,C and X, Y, Z?**
- **CONSIDERATIONS:**
 - Can the Service Bureau answer the question?
 - Security
 - Accuracy; Real-time reporting
 - Customization to fit operations





Secure Tracking

Permissions for Administrators Allow

Administrator Privileges	<input checked="" type="checkbox"/>
Create Alerts	<input type="checkbox"/>
Create Contact Lists	<input type="checkbox"/>
Create Monitors	<input type="checkbox"/>
Create Storage Folders	<input type="checkbox"/>
Manage Alerts	<input type="checkbox"/>
Manage Checkpoints	<input type="checkbox"/>
Manage Contact Lists	<input type="checkbox"/>
Manage Contacts	<input type="checkbox"/>
Manage Event Logs	<input type="checkbox"/>
Manage Monitors	<input type="checkbox"/>
Manage Recycle Bin	<input type="checkbox"/>
Manage Reports	<input type="checkbox"/>
Manage Storage Folders	<input type="checkbox"/>

Permissions for PIM01 Allow

Full Control	<input type="checkbox"/>
Owner	<input type="checkbox"/>
Update	<input type="checkbox"/>
Delete	<input type="checkbox"/>
Modify Permissions	<input type="checkbox"/>
Start / Stop	<input type="checkbox"/>
Release Jobs	<input type="checkbox"/>

- Privilege
- Create global objects
 - Delete global objects
 - Read global objects
 - Write global objects
 - System Manager
 - Queue Manager
 - Create configurations
 - Save configurations
 - Rename configurations
 - Load configurations
 - Delete configurations
 - Create new queue jobs
 - Delete queue jobs
 - Modify queue jobs
 - Control queue jobs
 - Change queue sort order
 - Change queue properties while it is
 - Read user session list
 - Can kill other user sessions
 - Can work with Interventions
 - Can shut down the server
 - Move queue jobs
 - Activate/halt paths from Queue Ma...

Call Center Representative



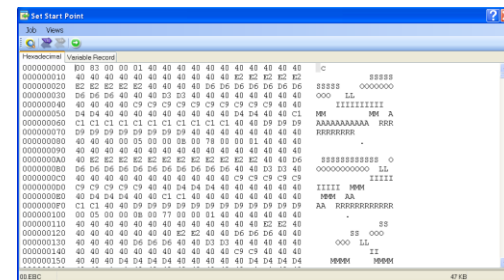
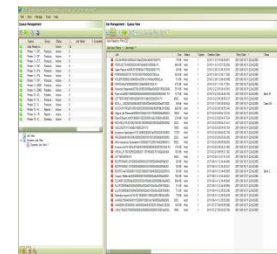
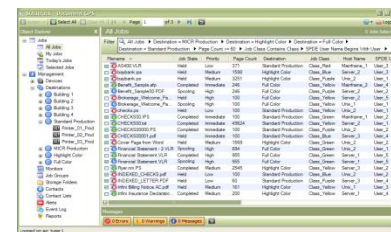
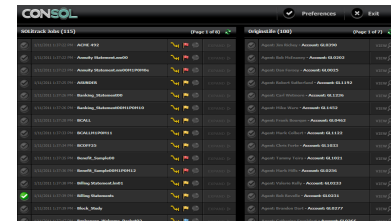
Administrator



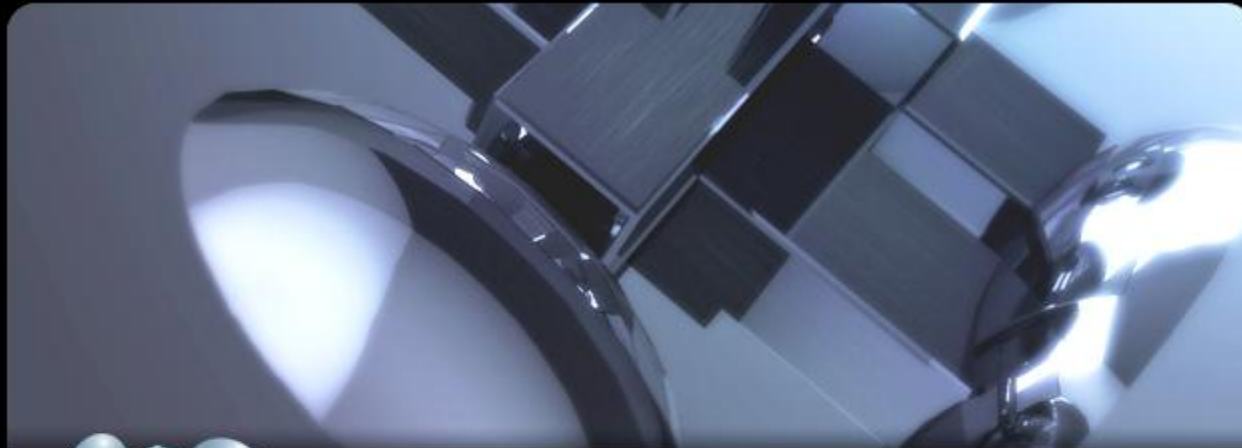
Print Operator



Data Composition & Programming



Document Tracking: Secure Logon



SOLitrack™ Document GPS

USERNAME

PASSWORD

Login

Print Smarter.®



Customizable ADF Dashboards



Preferences



Exit

SOLitrack Jobs (115)

(Page 1 of 8)

<input checked="" type="checkbox"/>	1/11/2011 1:37:22 PM - ACME 492		EXPAND
<input checked="" type="checkbox"/>	1/11/2011 1:37:22 PM - Annuity Statement.nm00		EXPAND
<input checked="" type="checkbox"/>	1/11/2011 1:37:23 PM - Annuity Statement.nm00M1P0M0e		EXPAND
<input checked="" type="checkbox"/>	1/11/2011 1:37:25 PM - ASUNDER		EXPAND
<input checked="" type="checkbox"/>	1/11/2011 1:37:26 PM - Banking_Statement00		EXPAND
<input checked="" type="checkbox"/>	1/11/2011 1:37:26 PM - Banking_Statement00M1P0M10		EXPAND
<input checked="" type="checkbox"/>	1/11/2011 1:37:28 PM - BCALL		EXPAND
<input checked="" type="checkbox"/>	1/11/2011 1:37:33 PM - BCALLM1P0M11		EXPAND
<input checked="" type="checkbox"/>	1/11/2011 1:37:34 PM - BCOFF25		EXPAND
<input checked="" type="checkbox"/>	1/11/2011 1:37:35 PM - Benefit_Sample00		EXPAND
<input checked="" type="checkbox"/>	1/11/2011 1:37:36 PM - Benefit_Sample00M1P0M12		EXPAND
<input checked="" type="checkbox"/>	1/11/2011 1:37:38 PM - Billing Statement.lm01		EXPAND
<input checked="" type="checkbox"/>	1/11/2011 1:37:39 PM - Billing Statements		EXPAND
<input checked="" type="checkbox"/>	1/11/2011 1:37:39 PM - Block_Study		EXPAND
<input checked="" type="checkbox"/>	1/11/2011 1:37:47 PM - Brokerage_Welcome_Packet02		EXPAND

OriginsLife (100)

(Page 1 of 7)

<input checked="" type="checkbox"/>	Agent: Jim Richey - Account: GL0390	VIEW
<input checked="" type="checkbox"/>	Agent: Bob McEnaney - Account: GL0202	VIEW
<input checked="" type="checkbox"/>	Agent: Dan Forsey - Account: GL0025	VIEW
<input checked="" type="checkbox"/>	Agent: Robert Sutherland - Account: GL1192	VIEW
<input checked="" type="checkbox"/>	Agent: Carl Wetmore - Account: GL1236	VIEW
<input checked="" type="checkbox"/>	Agent: Mike Ware - Account: GL1452	VIEW
<input checked="" type="checkbox"/>	Agent: Frank Bourque - Account: GL0462	VIEW
<input checked="" type="checkbox"/>	Agent: Mark Colbert - Account: GL1122	VIEW
<input checked="" type="checkbox"/>	Agent: Chris Forte - Account: GL1033	VIEW
<input checked="" type="checkbox"/>	Agent: Tammy Teira - Account: GL1021	VIEW
<input checked="" type="checkbox"/>	Agent: Mark Mills - Account: GL0256	VIEW
<input checked="" type="checkbox"/>	Agent: Valerie Kelly - Account: GL0233	VIEW
<input checked="" type="checkbox"/>	Agent: Bob Revelle - Account: GL0231	VIEW
<input checked="" type="checkbox"/>	Agent: Brandon Dart - Account: GL0277	VIEW
<input checked="" type="checkbox"/>	Agent: Catherine Frankfort - Account: GL0266	VIEW

Administrator Tracking Dashboard

SOLitrack - Document GPS

Action | Select All Clear All | Page 1 of 3 | Logoff

Object Explorer | All Jobs | 0 Jobs Selected

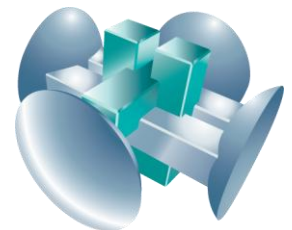
Filter: All Jobs ▶ Destination = MICR Production ▶ Destination = Highlight Color ▶ Destination = Full Color ▶ Destination = Standard Production ▶ Page Count >= 60 ▶ Job Class Contains Class ▶ SPDE User Name Begins With User ▶

Filename	Job State	Priority	Page Count	Destination	Job Class	Host Name	SPDE User
<input checked="" type="checkbox"/> AS400.VLR	Held	Low	371	Standard Production	Class_Red	Mainframe_1	User_3
<input type="checkbox"/> baybank.ips	Held	Medium	1598	Highlight Color	Class_Blue	Server_2	User_3
<input checked="" type="checkbox"/> baybank.ps	Held	Medium	3251	Highlight Color	Class_Purple	Unix_2	User_1
<input checked="" type="checkbox"/> Benefit_Sample.afp	Completed	Immediate	246	Full Color	Class_Yellow	Mainframe_2	User_4
<input checked="" type="checkbox"/> Benefit_Sample00.PDF	Spooling	High	246	Full Color	Class_Purple	Server_2	User_2
<input type="checkbox"/> Brokerage_Welcome_Pa...	Held	High	100	Full Color	Class_Yellow	Server_2	User_5
<input type="checkbox"/> Brokerage_Welcome_Pa...	Spooling	High	100	Full Color	Class_Yellow	Unix_1	User_1
<input checked="" type="checkbox"/> checks.ps	Held	Low	100	Standard Production	Class_Yellow	Unix_2	User_1
<input checked="" type="checkbox"/> CHECKS00.IPS	Completed	Immediate	100	Standard Production	Class_Green	Mainframe_1	User_2
<input type="checkbox"/> CHECKS00.bt	Completed	Immediate	49624	Standard Production	Class_Yellow	Server_2	User_1
<input checked="" type="checkbox"/> CHECKS00000.PS	Completed	Immediate	100	Standard Production	Class_Purple	Unix_2	User_2
<input checked="" type="checkbox"/> CHECKS00001.pdf	Held	Immediate	100	Standard Production	Class_Blue	Server_3	User_4
<input checked="" type="checkbox"/> Cover Page from Word	Held	Medium	1569	Highlight Color	Class_Green	Unix_2	User_2
<input type="checkbox"/> Financial Statement - 2.VLR	Spooling	High	894	Full Color	Class_Green	Unix_2	User_1
<input type="checkbox"/> Financial Statement.VLR	Completed	High	955	Full Color	Class_Green	Server_1	User_5
<input checked="" type="checkbox"/> Financial Statement.VLR	Spooling	High	955	Full Color	Class_Green	Server_1	User_5
<input type="checkbox"/> Flyer.nm.PS	Completed	Medium	2545	Highlight Color	Class_Yellow	Server_3	User_2
<input checked="" type="checkbox"/> INDEXED_CHECKS.pdf	Held	Low	100	Standard Production	Class_Blue	Unix_2	User_2
<input checked="" type="checkbox"/> INDEXED_LETTER.PDF	Held	Low	60	Standard Production	Class_Purple	Server_3	User_4
<input checked="" type="checkbox"/> Infini Billing Notice.AC.pdf	Held	Medium	161	Highlight Color	Class_Yellow	Unix_1	User_3
<input type="checkbox"/> Infini Insurance Declaratio...	Completed	Medium	200	Highlight Color	Class_Yellow	Server_1	User_4

Messages | 0 Errors | 0 Warnings | 0 Messages

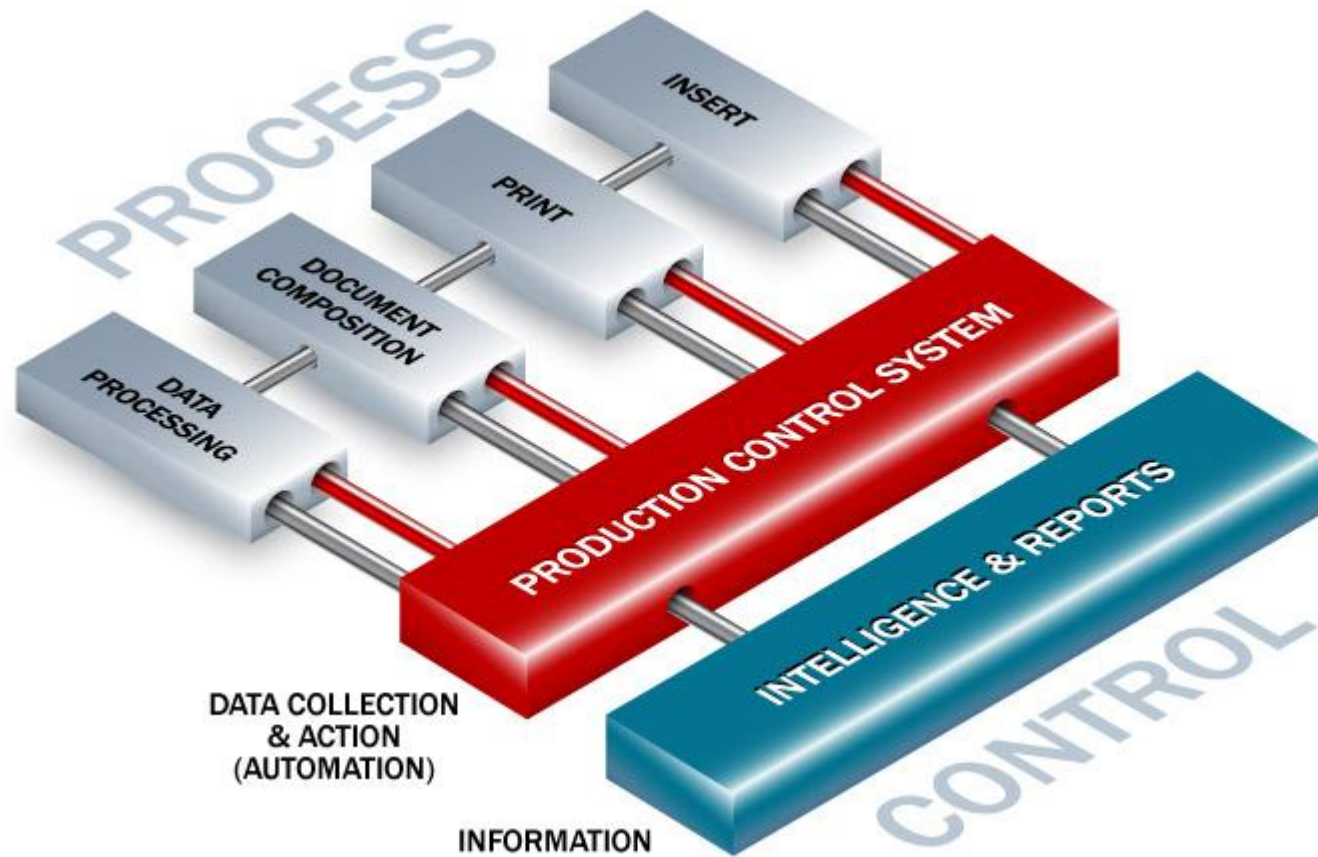
Logged on as: tuser1

Customizable Mobile App Job & Device Control

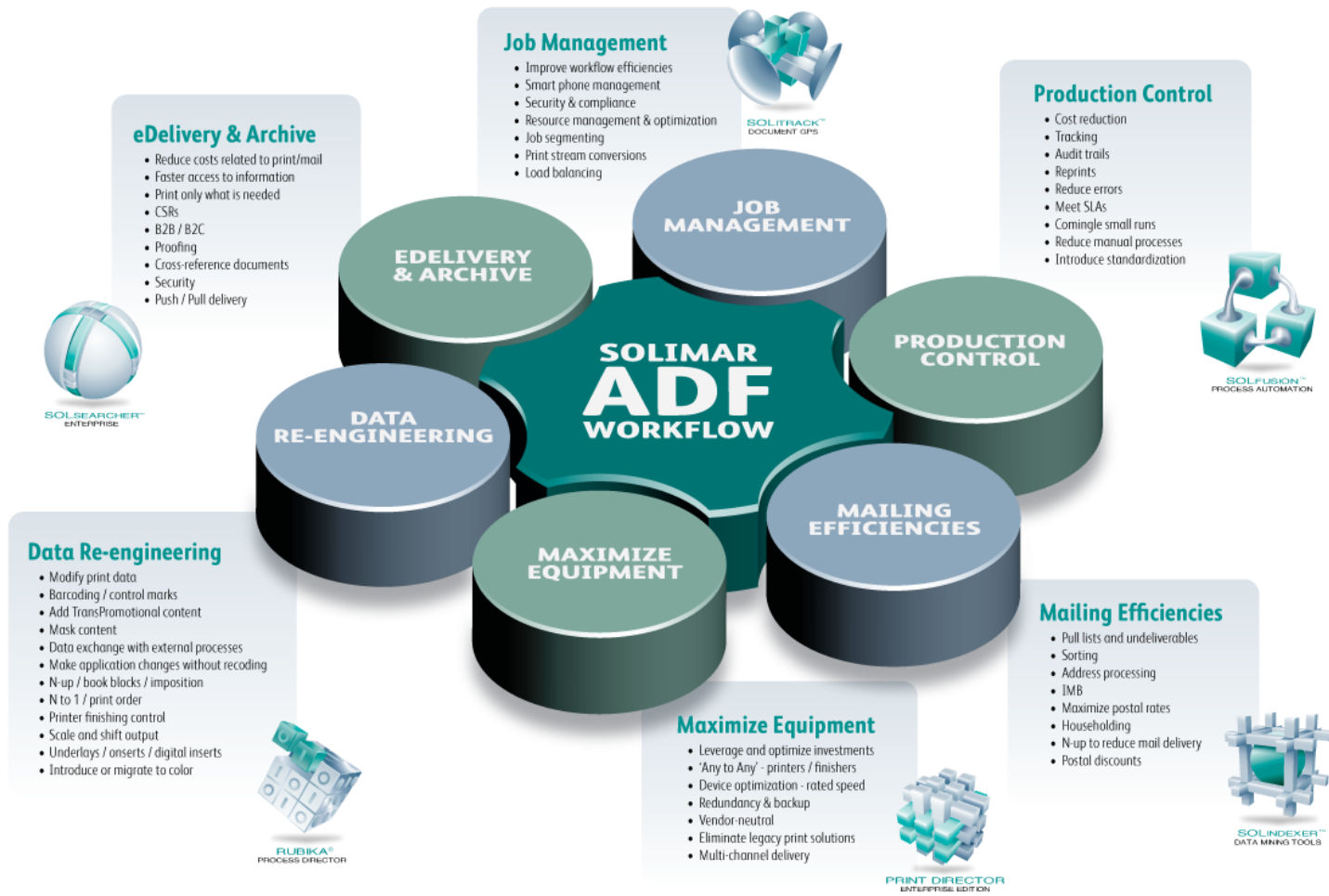


SOLITRACK™
DOCUMENT GPS

Supervise - Action



ADF is also about the processes....



Service Bureau Scenario 2

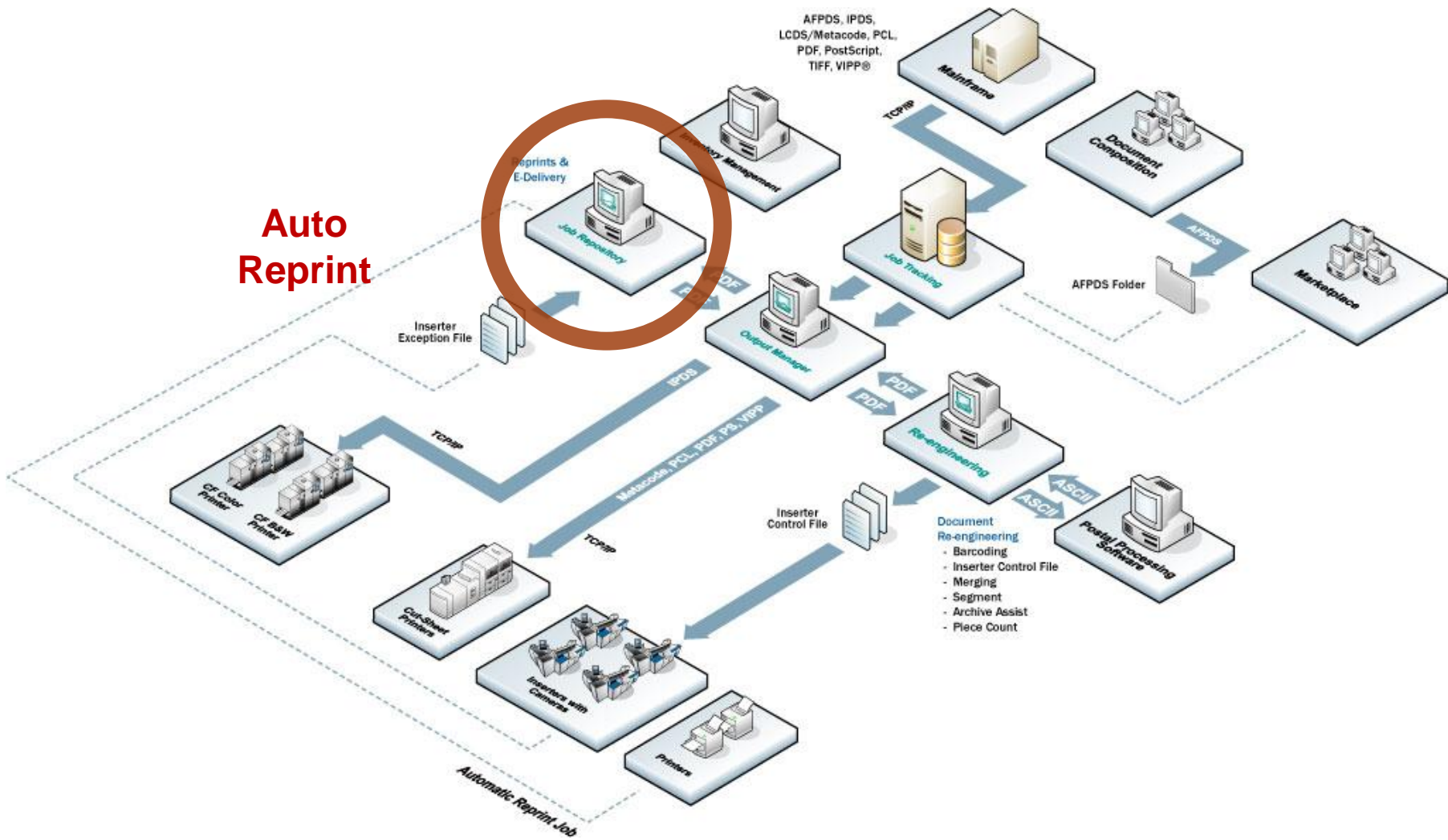
- **What processes are performed on a document in order to manage fully automated reprints vs. manual, secure reprints?**
- **CONSIDERATIONS:**
 - Input & Storage (Job Mgmt),
 - Conversion (Any-to-Any),
 - Re-engineering (Transpromo & Color)
 - Output to Printer (Any-to-Any),
 - Archive (available for reprint & e-delivery)
 - Automated Reprint w/out Intervention
 - Secure, Manual Reprint





Service Bureau Scenario 2 Fully Automated Reprints

Auto Reprint



Service Bureau Scenario 2 Secure Reprint Interventions

Reprint Station Form

Destination:

Account Number:

First Name:

Last Name:

Sequence Start: **End:**

Selected Reprints

2	x	Query: CurrentPageInReport = 19 , Results:	▲
3	x	Query: CurrentPageInReport = 24 , Results:	■
4	x	Query: CurrentPageInReport = 38 , Results:	■
5	x	Query: CurrentPageInReport = 41 , Results:	▼
6	v	Query: CurrentPageInReport = 54 , Results:	▼

Save Assembled As:

Reprint Station Login

Username:

Password:

Service Bureau Scenario 2

Secure Reprint Interventions

Intervention [?] [X]

Timestamp: 8/17/2011 12:13:38 PM
Queue: REPRINT QUEUE
Module: Job Separator
Job: PSTEST.PS

Intervention Steps

Enter the range of pages to be used for this job:

Start Page:

End Page:

OK Cancel Help



Service Bureau Scenario 2 Secure Reprint Interventions

SOLsearcher Web Client

SOLsearcher™ Enterprise Inbox Search Admin Preferences

New Search Edit Search Criteria Hide Options

Query History
My Favorites
Selected Reports
Related Reports

Assemble and View Document
 Assemble and Copy Document to Net Folder

Net Folder:
 File Name:

Send Confirmation E-mail
 Append File Extension
 Append Time Date Stamp

Execute Cancel

Report: Case New Holland - PO Amendment Unit Prices & Part #s Query: Export

	Unit Price	Part Number	Report Type
<input checked="" type="checkbox"/>	2726.00	76092508	PURCHASE ORDER AMENDMENT
<input checked="" type="checkbox"/>	2713.00	87530825	PURCHASE ORDER AMENDMENT
<input checked="" type="checkbox"/>	2235.00	87571324 C	PURCHASE ORDER AMENDMENT
<input checked="" type="checkbox"/>	2337.00	87571330 C	PURCHASE ORDER AMENDMENT
<input checked="" type="checkbox"/>	2675.00	87575366 A	PURCHASE ORDER AMENDMENT
<input checked="" type="checkbox"/>	2662.00	87641300 B	PURCHASE ORDER AMENDMENT
<input checked="" type="checkbox"/>	3294.00	87749354	PURCHASE ORDER AMENDMENT

Page (1) 2 3 4 5 ▶ Results 1 - 20

Internet

Secure Reprint

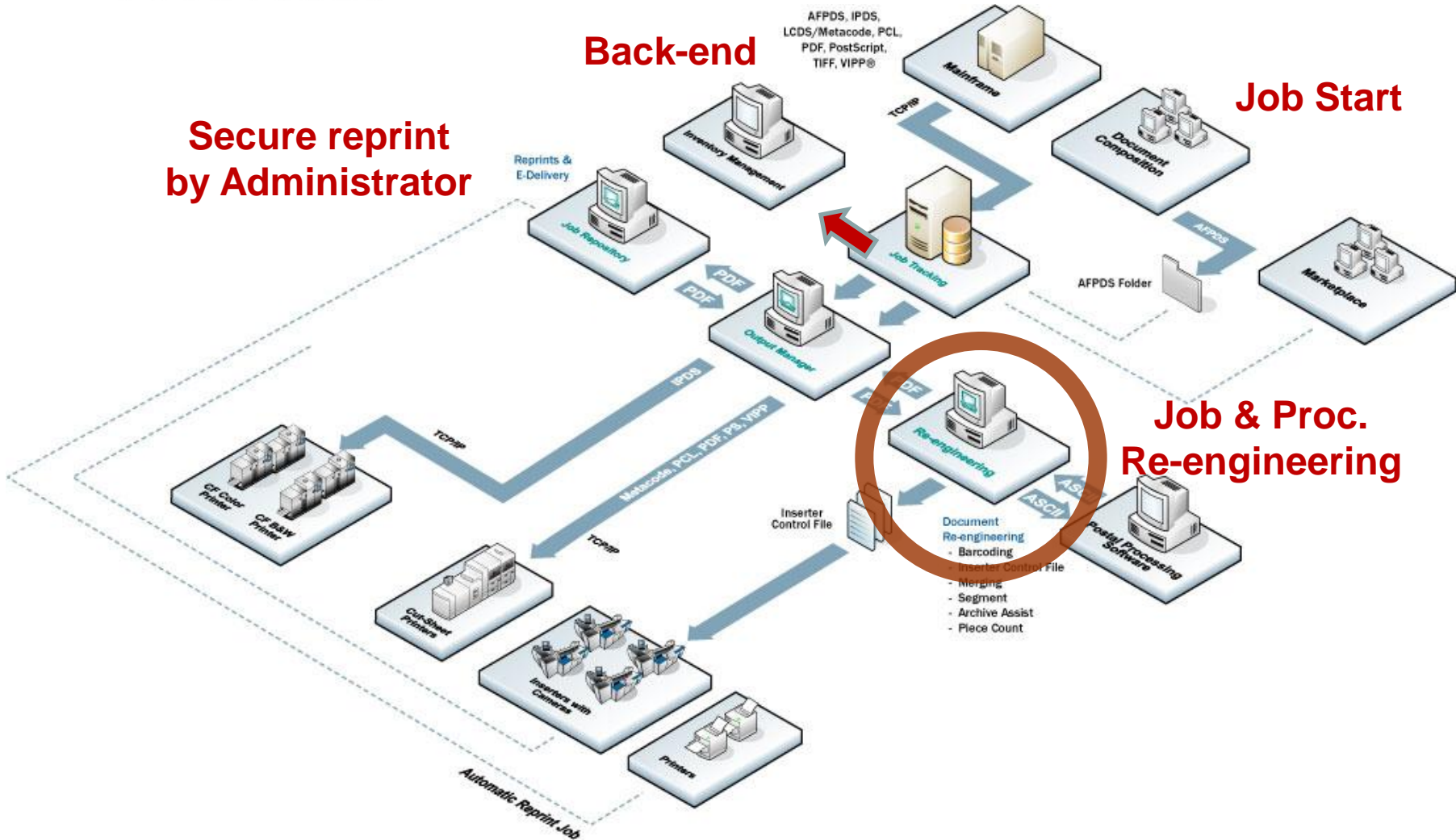
Secure reprint by Administrator

Back-end

AFPDS, IPDS,
LCDS/Metacode, PCL,
PDF, PostScript,
TIFF, VIPP®

Job Start

Job & Proc. Re-engineering



eDelivery & Archive

- Reduce costs related to print/mail
- Faster access to information
- Print only what is needed
- CSRs
- B2B / B2C
- Proofing
- Cross-reference documents
- Security
- Push / Pull delivery



Job Management

- Improve workflow efficiencies
- Smart phone management
- Security & compliance
- Resource management & optimization
- Job segmenting
- Print stream conversions
- Load balancing



Production Control

- Cost reduction
- Tracking
- Audit trails
- Reprints
 - Reduce errors
 - Meet SLAs
 - Comingle small runs
 - Reduce manual processes
 - Introduce standardization



DATA RE-ENGINEERING

Data Re-engineering

- Modify print data
- Barcoding / control marks
- Add TransPromotional content
- Mask content
- Data exchange with external processes
- Make application changes without recoding
- N-up / book blocks / imposition
- N to 1 / print order
- Printer finishing control
- Scale and shift output
- Underlays / onserts / digital inserts
- Introduce or migrate to color



JOB MANAGEMENT

SOLIMAR ADF WORKFLOW

PRODUCTION CONTROL

MAILING EFFICIENCIES

Mailing Efficiencies

- Pull lists and undeliverables
- Sorting
- Address processing
- IMB
- Maximize postal rates
- Householding
- N-up to reduce mail delivery
- Postal discounts



Maximize Equipment

- Leverage and optimize investments
- 'Any to Any' - printers / finishers
- Device optimization - rated speed
- Redundancy & backup
- Vendor-neutral
- Eliminate legacy print solutions
- Multi-channel delivery



PRINT DIRECTOR
ENTERPRISE EDITION



Solimar Systems, Inc.

Thank you Q&A



Presenters:

Matt Mahoney – Director, Industry Solutions, Ph: 407-260-1698

Greg Smith – Workflow Specialist, Ph: 619-849-2800

WWW.SOLIMARSYSTEMS.COM