

#68



# Technologies Changing Your Business

by **Howie Fenton**  
Senior Technical Consultant, **NAPL**

NAPL is a not-for-profit trade association providing companies with the strategies, insights, and guidance to make informed business decisions, minimize risk, anticipate change, and profitably grow their business.

Have you seen us lately?  
If you get the chance – stop by the booth 862 and say hello!



## Preview

This symbol

**new**

means newly added slide, which is not in your handout.

**Computer-based technology**

**Printing-based technology**

**Automation technology**

**Web-based technology**

**Digital Printing technology**

For an updated handout give me an email address - that will not block an attachment



## New Tech Must Answer Need

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**“I’m not gonna pay a lot for this muffler”**

Same quality or better but not cost more

**“Are you talking to me?”**

I need to stand out... want more bang for my ad bucks

**“I feel the need ... the need for speed”**

Faster - both proofs and final products

**To continue to participate in production**

Design, digital camera, set type, scan, correct, proof

**Greater convenience**

Do more on line (transfer files & proof)

Print just what I need, when I need it

**Increase my customer retention**

Studies show customers stay for 3.1 years

Then costs 7-11 x more to acquire new



## Computer-based Technology

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## Computer Trends

### General

- Desktop computer sales dropping as laptops increase
- Online retail sales in the Q2 totaled \$96 billion
- Worldwide market for handheld devices will climb from 12.9 million in 2000 to more than 63.4 in 2004
- 2002 flat panel displays were 20% by 2006 70%

### Personal computer use for design

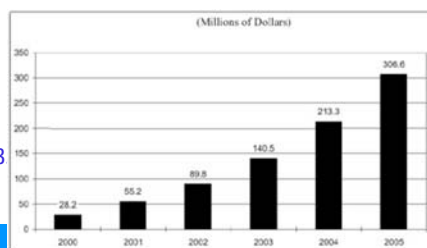
- 80% designers use Macs - 20% PCs
- 60% use QuarkXpress (dropping to InDesign)

### Companies switching to less \$ servers

- +9% increase small servers (>\$25K)
- +7% increase midrange (\$25-\$500K)
- 14% high end (+\$500K)

### Linux usage increasing

- Linux servers generated \$960 million in Q4 2003
- Revenue up 63%, shipments up 52%



## Image Acquisition

**Drum scanners have higher resolution and can capture a greater dynamic range than less expensive flatbed scanners**

**Drum (PMT) for 35mm slides & transparencies**

**Flatbed (CCD) for 4 x 5 or larger reflectives**

**Digital camera use is soaring**

**Worldwide sales digital hit 50 million units in 2003**

**Everyone needs to master digital camera usage**

**Users have to learn more about lighting, calibration and color**

**Service providers need to learn more about fixing color casts and automating the process with batch functions and profiles**



## Networking



**PCs will not be the only broadband drivers**

**New technologies (PDAs, iPods, cell phones)**

**Wi-Fi hot spots, WiMax, 3G, VoIP**

**1 billion Multi-media mobile phones by 2010**

**games, photo messaging, streaming audio / video, ads**

**Disruption in long haul carriers from VoIP**

**Convergence of mobile mail & enterprise data services**



## Wi-Fi



**Wi-Fi 1st meant Wireless Fidelity**

**today is used for Wireless networking**

**Allows you to log onto a network or the web**

**Standards**

**802.11b - 11 Mbps (300 feet)**

**802.11g- 54 Mbps, shorter distance**

**IEEE P802.11n - 320 Mbps**

**IEEE 802.16 - miles not feet, into homes**

**Issues - Security**

**Best tool today WEP (Wired Equivalent Privacy)**


**Best usage**

**Alternative to wiring for some buildings and traditionally "un-networked" areas i.e. front offices, warehouses**

**2003 equipment sales = \$2.5 million, up 40%**



## WiMax




**Wi-Fi = Wireless Fidelity**  
 today = Wireless networking can log onto a network/web

**Standards today for short, fixed distances**  
 802.11b -11 Mbps (300 ft), 802.11g-54 Mbps,150 ft

**Longer distance standards WiMax (2006?)**  
 Distance measure in miles not feet, into homes & phones  
 Could become as popular as today's cell phones  
 1 for fixed wireless into homes & offices (802.11-2004)  
 1 for mobile units (cell phones / PDA 802.16)

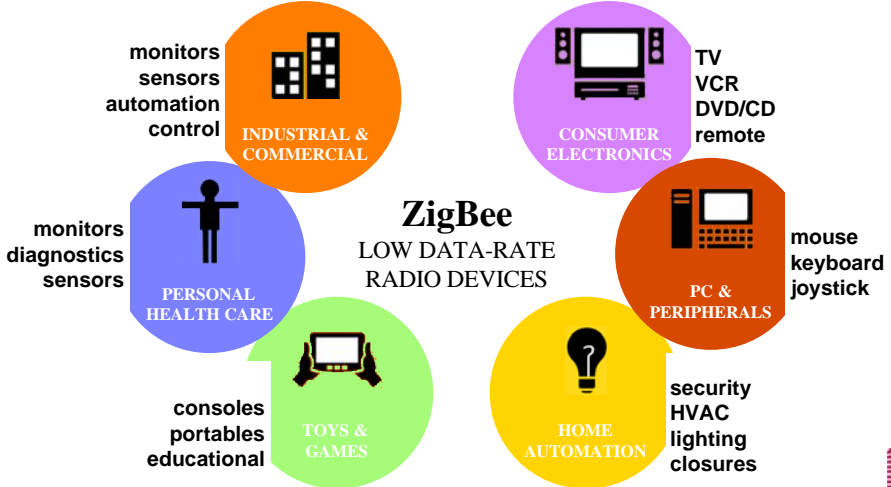
**Disney running beta tests in S. California**  
 Network spans 2 miles



## ZigBee Applications


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Over 50 companies to enable cheap, low-power, wireless networking for monitoring and control products



**ZigBee**  
 LOW DATA-RATE  
 RADIO DEVICES

- INDUSTRIAL & COMMERCIAL** (orange circle with building icon): monitors, sensors, automation, control
- CONSUMER ELECTRONICS** (purple circle with TV icon): TV, VCR, DVD/CD, remote
- PC & PERIPHERALS** (red circle with computer icon): mouse, keyboard, joystick
- HOME AUTOMATION** (yellow circle with lightbulb icon): security, HVAC, lighting, closures
- TOYS & GAMES** (green circle with game console icon): consoles, portables, educational
- PERSONAL HEALTH CARE** (blue circle with person icon): monitors, diagnostics, sensors



## RFID

### RFID (radio frequency id)

Has been around since 60's

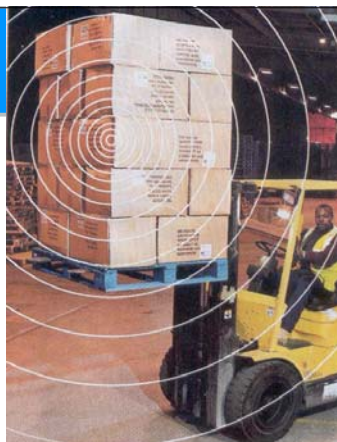
Getting smaller & cheaper (\$.05-.10  
when buying 1 billion)

### Can be used to

locate stuff (photos, catalog samples)  
monitoring production (plates) or  
pages through the plant  
shipments out the door

Initially for palettes

Ultimately component and product



## Larger DVDs for Hi Def. TV



Current DVD drives use red lasers (630 to 650 nm)

store 2.3-4.6 Gb, good for movie or computer data

But for Hi-Def TV need larger capacity

Easiest way to increase density is to switch to shorter-wavelength  
lasers (Blue or violet), to increase capacity 15 GB of data / side

New Blu-ray consortium created:

Sony, Matsushita Electric (makes Panasonic products), South  
Korea's Samsung Electronics and Dutch Philips Electronics.

Good news

Larger capacity DVD drives coming

Bad news

There could be another format war, which slows acceptance

Currently 4 DVD formats DVD-R, DVD-RW, DVD-RAM, DVD+RW formats

Not compatible with all older formats

Sony's can read DVD-R and DVD-RW but not DVD-RAM or DVD+RW

Until demand increases it will cost 6-10 more money



# Printing-based technology



## PDF

PDF files are smaller and easier to send for output or to receive for monitor (soft) proofing

Acrobat 6 & 7 decreased bad PDFs

PDF/X-1a & built in preflight - decreased the # of bad files

Server option - facilitates more consistent creation

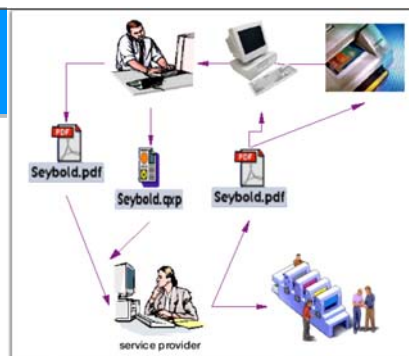
### Tomorrow

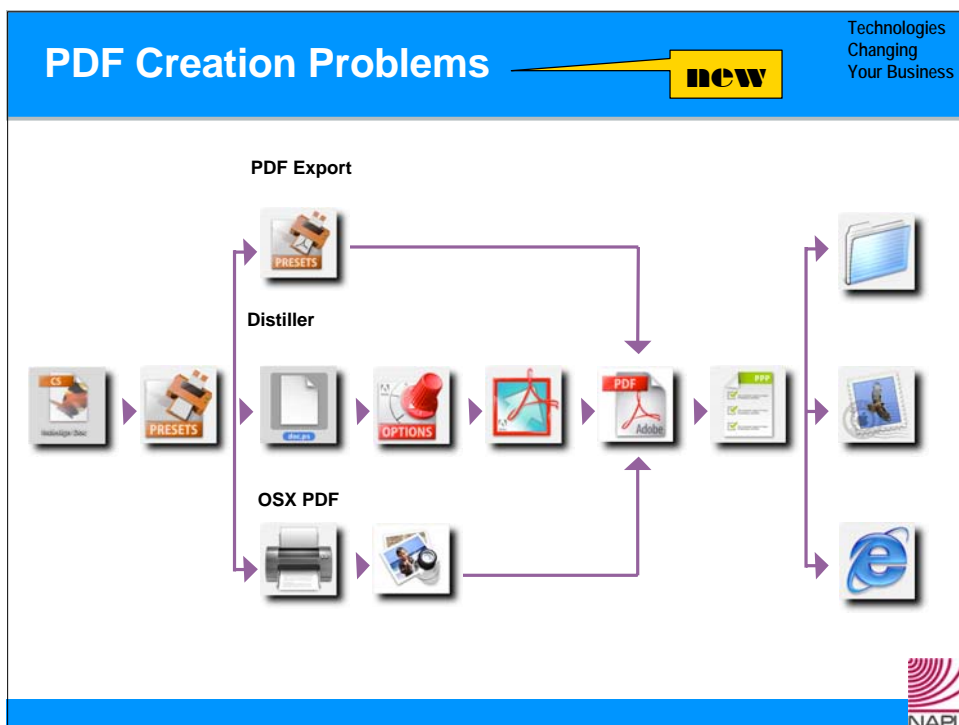
Will continue to evolve and become defacto file

PDF/X3 will enable CMS workflows

In printing increased use for file submission and increased use for proofing and will enable automation of high end workflows (JDF)

Better tools to preflight and repair PDFs will emerge





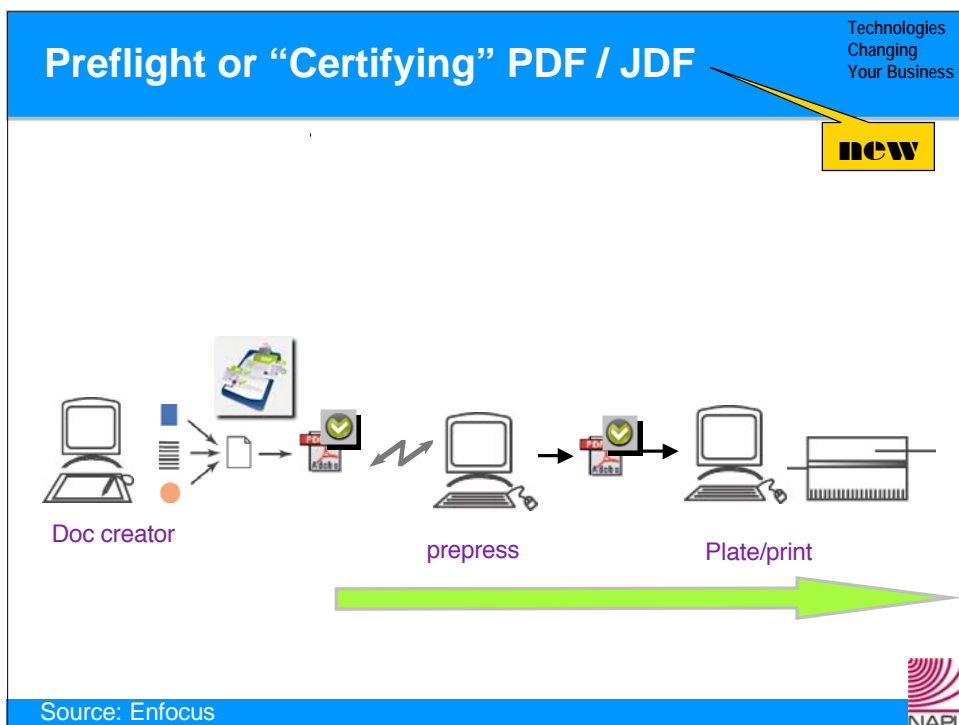
## Good & Bad PDF's

- **Bad : PDF writer, not PostScript**
  - Files based on OS
    - Mac QuickDraw or Win GDI routines
  - EPS render at screen res (jaggy)
  - Masks in EPS files disappear
  - Subsets fonts (if LT 35% char) used
- **Good ways**
  - Create PDF (Mac), PDF Maker (PC),
  - Print to Distiller (PC) Create PDFx/1a
  - Acrobat Server - everyone makes it the same
  - Get server provider for settings file, create PostScript, 2nd create PDF file

The right side of the slide shows two screenshots from Adobe Acrobat:

- Acrobat PDFWriter Properties:** A dialog box showing settings for page size (Letter, 8.5 x 11 in), margins, and orientation (Portrait).
- Chooser:** A file selection dialog showing various printer and output options, including 'Acrobat PDFWriter' and 'AdobePS'.

**Best - Acrobat 6 & 7 Pro version ability to create and preflight PDF/X-1a files**



## PDF/X standards

**2 standards**

**PDF/X-1a: - embeds all fonts, CYMK & spot colors**

**PDFx-3 - allows embedding of ICC profiles**

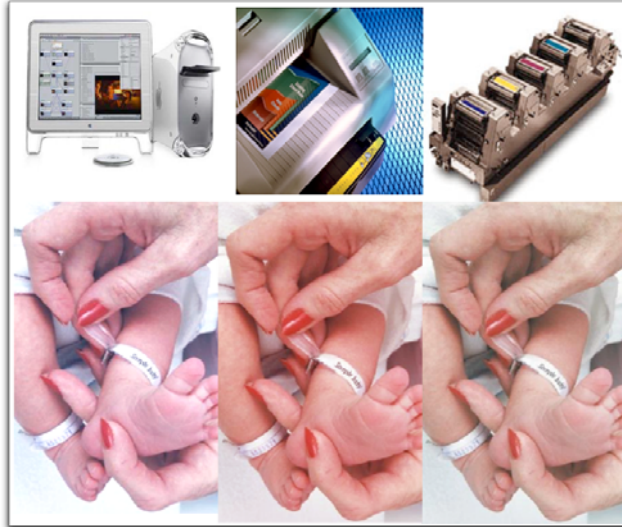
**These are designed to limit the file creation options for pdf files in other words make more reliable pdf files**

**Acrobat 6 & 7 Pro version ability to create and preflight**

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## Problems With Color

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too bright, too blue / too red, too saturated / darker, less saturated



## CMS Workflow & Tools

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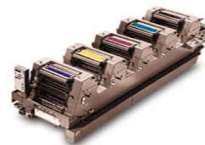
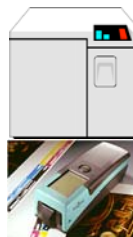
Easier

Harder

Scanner/  
Digital camera

Monitor

Output  
Device  
Press



CMS software, spectrophotometer, colorimeter, densitometer



## CMS Usage

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- **According to Trendwatch 2/3 publishers, design and printers do not use CMS**
- **Why**
  - **Expensive equipment**
    - spectrophotometer, densitometer, software
  - **Many people in the process need to use**
    - photographer, designer, prepress, press
  - **Printers requires more work (process control)**
- **To complicated - Need to know**
  - **Which software works together**
  - **Need to agree on color space**
  - **Have to change defaults in multiple programs**
  - **Should you use it in PDF files**

Source: Trendwatch 2004, Color Management: Another Gray Area

## Digital Proofing Small Printers

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**Proofing is growing for all printers**  
Digital more then traditional

**Adoption rates are determined by type of printer and size products**

**In general small printers use more laser devices**

Proofing Methods	Rating
Color Copiers	6.8
Thermal Wax Devices	6.3
Laser Printers	5.6
Ink Jet Printers	5.4
Dye-Sub Prints	3.7

Source: PrintImage's 2001 CTP Report, 2/01 issue of Quick Printing

## Spec's for Digital Proofs

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**Not well known there are written instructions about how to achieve SWOP - like results**

**For certain devices  
Need to use process control and check for density, dot gain and print contrast**

Color	Recommended Density	Tolerance
Cyan	1.38	+ or - 0.05
Magenta	1.52	+ or - 0.05
Yellow	1.03	+ or - 0.05
Key	1.54	+ or - 0.05

Color	Recommended Dot Gain	Recommended Tolerance
Cyan	23.70%	+ / - 2.0
Magenta	21.10%	+ / - 2.0
Yellow	15.80%	+ / - 2.0
Key	22.40%	+ / - 2.0

Color	Recommended Print Contrast	Recommended Tolerance
Cyan	31.20%	+ / - 4.0
Magenta	37.50%	+ / - 4.0
Yellow	33.00%	+ / - 4.0
Key	36.40%	+ / - 4.0

[www.swop.org/certification.html](http://www.swop.org/certification.html)



## Digital Proofing (Big Printers)

### Declining

Expensive film based proofs, digital proofs (i.e. \$60+/ea.) & digital proofers (i.e. \$100+) are decreasing in usage

### Increasing in use

soft proofing and large format inkjets  
some app - inkjet the best predictor - stochastic / web

Remote soft proofing mainstream for some companies

Some jobs only soft proofed (Hollywood reporter)

On Feb 16 2005 Time announced it would only use SWOP certified monitor proofs

### Tomorrow

Not only SWOP certified but GRACOL certified inkjet\*  
Inkjets will increase in quality, consistency, & speed  
Better soft proofing systems & more soft proofing \*\*



\*PI 1/19/03, \*\*KPG Whitepaper: [www.kpgraphics.com/info/WhitePapers/mpv\\_white\\_paper.PDF](http://www.kpgraphics.com/info/WhitePapers/mpv_white_paper.PDF)



## Remote Proofing Benefits & Features

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### Advantages Remote Proofing

- Cuts 1 -2 days off schedule
- Reduces costs
- Enhances collaboration: multiple people, multiple sites

### Basic features

- e-mail notification
- approval reporting
- CMS profiles
- simultaneous viewing
- activity tracking
- on-screen densitometer

### Advanced features

- Streaming technology (faster)
- ASP or server based (where does the file sit)
- Advanced collaboration
  - Multiple people & sites, mark-up ability
- SWOP certification



## Soft Proofing Options



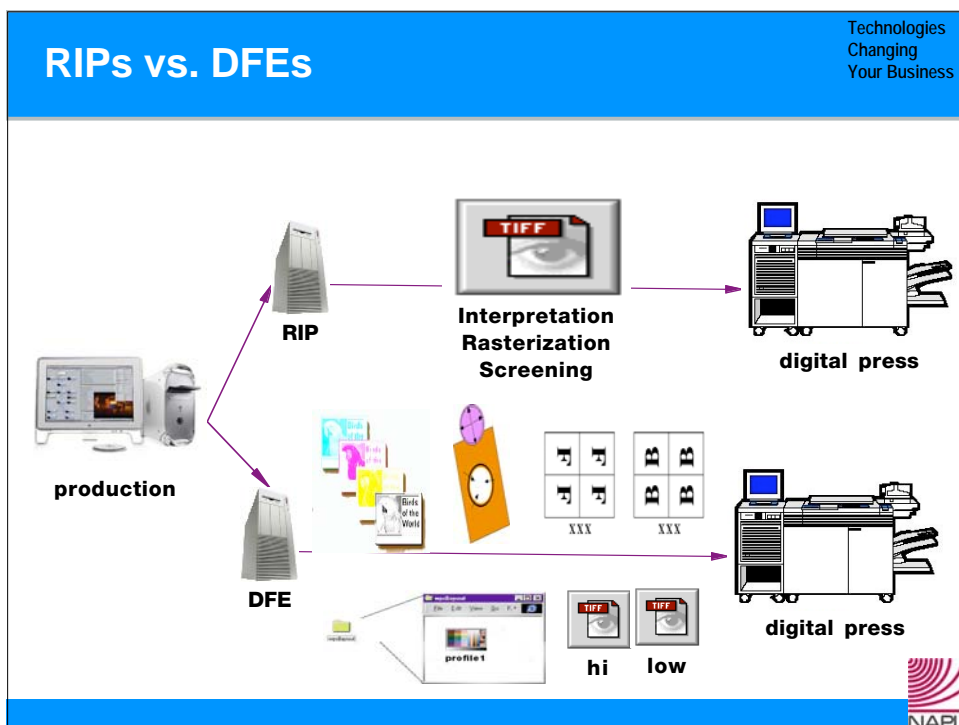
### Stand Alone Solutions

- KPG Real TimeProof suite
  - Classic (server), ASP (RealTimeProof), Express (hi-volume)
- Integrated Color Solutions, Remote Director software
  - software-only solution, using specific monitors
- Dalim Dialogue -
  - Server-only solution, viewed with Web browser
- Proof-it-Online is an ASP
  - works with FlashMark Viewer Web browser plug-in
- Cyan Soft eProof
  - uses RapidImageView streaming technology
- GroupLogic's Imagexpo generates a static bitmap
- Lucid Dream's OnTimeProof for any 1-bit TIFF RIP
- CGS Publishing Technologies offers ORIS Soft Proof

### Workflow systems with soft proofing features

- Creo Synapse InSite
- Agfa Delano
- EFI OneFlow
- Heidelberg Remote Access for Prinect Prepress system
- Hamilroad Software has FirstPROOF for Harlequin RIPs





## Computer to Plate

**Pros**

- Fast imaging (shorter make ready)
- High quality (dots and register)
- Flexible with FM screens
- Can feed several devices

**Cons**

- Larger (40") devices expensive
- Especially when adding automation
- But new smaller and less expensive products coming to market

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## CTP

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**Less \$\$, more affordable devices**

**Electrostatic are cheap - but not good for halftones**

Xanté Platemaker 3, Mitsubishi Silver DigiPlate

**Smaller devices (2-4) are selling like hotcakes**

66% of new placements are going in smaller shops (>50 people) \*

**Polyester works for many shops**

Great market for used drum imagesetters accept polyester plate material (Agfa SS 5 & 7000)

Important to get thicker materials (8 - 12 mil) and test on your presses

**Polyester Dedicated devices**

Alpha Quest PantherPlate/34P

ABDick/ITEK DPM 2000

Esko-Graphics DPX 4

Mitsubishi's SDP-Eco1630II

Printware PlateStream -SC for 2-up

Exxtra EZSetter 300 and 400-series



Source: State Street Consulting

## 2-4 up CTP devices

**updated**

**A.B.Dick DPM34 SC/HSC**

**Agfa Acento (4 up thermal), Galileo VS 4 & Palladio (4 up violet)**

**Creo Trendsetter 400 (4 up thermal)**

**ECRM Mako 2 (2 up violet) & DesertCat 44 (4 up thermal)**

**Escher-Grad Cobalt-4 (4 up violet)**

**Esko-Graphics PlateDriver Compact (4 up violet)**

**Fujifilm Dart Luxel T6000 (4 up thermal)**

**Heidelberg Prosetter (2 & 4 up violet)**

**OLEC's CTP systems (ink-jet)**

**Panther FaSTRAK/HS (4 up either)**

**RIPit Computer's SpeedSetters (4 up - violet)**

**Presstek Vector TX52 (2 up thermal)**

**Presstek Dimension 200 (4 up thermal)**

**Screen PlateRite 4300 (4 up thermal)**



**On Press or Direct Imaging (DI)**
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<b>Pros</b>	<b>Cons</b>
Fast turnaround Shorter make ready Small footprint Higher profitability reports High quality (dots / register / FM screens)	Images plates for 1 press Only 4 colors Plate costs

**Players**

Heidelberg QM DI Plus, Pro, ProSpot, Speedmaster SM 74-DI  
 KPG DirectPress 5034 DI  
 Ryobi 3404X-DI  
 Screen TruePress 344

updated

**Chemistry free plates coming**
updated

**Used to be processor less but most require water rinse, wiping, gumming**  
**Eliminating processor reduces costs, maintenance and process variables**  
**Study that chemistry costs are underestimated for metal devices \***

Chemistry can account for 30% of the price of plates.  
 Typical printer spends \$40 - \$100K/yr. on chemistry

**First available Presstek Applause and Anthem (added Aurora)**

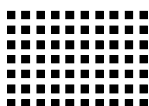
**Today**

Agfa Azura a non-ablative, digital aluminum plate that uses a physical process,  
 as opposed to chemical requires a "clean out" or gumming step  
 Kodak Polychrome Graphics - Thermal Direct no-process plate  
 Xanté Aspen metal plates - 6-mil aluminum, not -photosensitive—no processing  
 Creo's Clarus PL require no gumming, processing or post-imaging treatment  
 Hurst Chemical SmartPlate - processless, polyester plate  
 Konica Minolta thermal, non-ablative process, with unexposed areas then  
 removed on-press by fountain solution and ink.  
 Glunz & Jensen - ink-jet computer-to-plate (iCTP) technology  
 Citiplate's photopolymer - for conventional imaging  
 technologies and thermal or violet CTP platesetters  
 Fuji intelligent polymer plate "under development"

\* John Zarwin CTP Plate Making: Understanding the Real Costs"

## Stochastic screening

AM frequency fixed



FM frequency changes



**No line screens or screen angles**

**less moires**

**better detail**

**no moires**

**smaller dots**

**less variation**

**smoother blends**

**Usage**

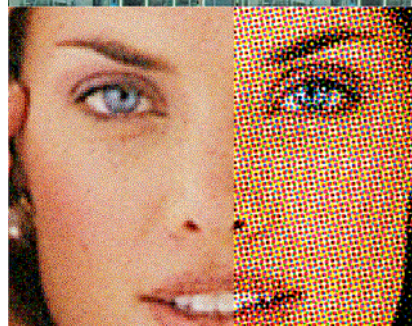
**forms, labels, envelopes**

**Electronics: speaker grilles,  
computers, stereos**

**Clothing: patterns, knits, checks,**

**Glamour: Smoother flesh tones**

**Gradients: Better transition of tones**



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## AM, FM, XM



**AM (traditional) most forgiving for production  
for higher quality need higher line screens**

**FM (stochastic) - less forgiving, smaller dots  
appears like higher line screens**

**XM or Hybrids - combine high AM line screens  
& FM dots in highlights and shadows**

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## Offset Press technologies

**new**

### Small to midsize presses

- CTP (polyester) & DI imaging
- automatic plate loading & blanket washing
- ability to accept CIP3 data & JDF information
- Focus on make-ready and process control
- gray balance midtone dot gain

### Larger presses

- closed loop color
- Hybrid UV inks - < \$, no changing blankets or plates
  - Retrofit press with 2 UV lamps and precoat
  - ink over plastics, vinyls & foil dried off the press
  - electron beam 10% energy, less smell and faster than UV
- inline die cutting, inline foil application
- direct drive (auto registration - i.e. flexo printing)



## Digital Presses

**new**

### Inkjets

- higher speed (Versamark),
- lower costs (Riso HC5000 inkjet 5¢ pg/color. .007¢ b/w)

### Electrophotographic (tone)

- Larger format (IGen3 - 14.3" x 20.5"),
- Tools to increase uptime (NexPress)
- Higher quality, less maintenance (HP-Indigo)

### Coatings

- Inline clear toner and near line NexGlosser for the Kodak Nexpress
- Epic Products inline CTi-635 coating system for the Xerox IGen3,
- Dorn SPE off-line UV coater for the HP Indigo,
- Clear toner & new Print Protector for the Xeikon 5000.



## Inline or Near line finishing

**new**

**C. P. Bourg BB3002 near-line perfect binder**

**Duplo**

**DC-645 Slitter/Cutter/Creaser**

**Duplo System 5000**

**Square-Back bookletmaking solution (tech demo)**

**Morgana Systems DigiFold (creasing),**

**Standard Horizon ColorWorks 8000 (Docucolor 8000)**

**Muller Martini Sigma concept**

**SigmaBinder, SigmaTower, and SigmaTrimmer**

**MBO Digi-Finisher (bookletmaking)**



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# Automation technology



## Automate: Today & Tomorrow



### Traditional Problems

Printing evolved from different fields

Result is time consuming procedures

Paper forms, reenter info, manually set ups

To remain competitive today create "Islands of automation"

Every area - estimating, order entry, prepress, press

New initiatives for modern manufacturing for printers

Computer integrated manufacturing (CIM) / Digital Smart Factory

To remain competitive tomorrow - cross islands

Automate administration: estimate, order entry, billing

Automate production: prepress, press post-press set ups

Offer on-line services to increase convenience for customers

estimates, order, tracking progress, preflight, proof



## Build Islands of Automation



### Use application automation

Acrobat, Photoshop, Illustrator batch functions

Off load tasks to servers & DFE's

Server: DAM, MIS, OPI, PDF creation

DFE: ICC profiles, In Rip trapping, imposition

Unattended automation across devices

CTP systems that offer CIP3 and ink key presetting

MIS software for job estimation, tracking, billing

Template driven design driving digital presses

### Goals

Increase production productivity, decrease production costs, increase convenience (value) for customers



## Today's Manual & Modular Approach to Administrative or MIS tasks

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**new**

Today most companies

take manual / modular approach to admin. or MIS tasks  
some on paper others small software packages

Manual or Module approach to administrative or MIS

Estimating & quoting	Order entry & job tracking
Job history	Raw material inventory
Shop floor data collection	Standardized reports
Invoicing & receivables	Receivables
Payables	General ledger & financials

Why

Early systems did not talk to each other & were too much \$

Source: ABCs of Print MIS by EFI



## Moving toward automation

**new**

Move from ... estimate forms and job jackets

to spreadsheet for estimating and electronic job jackets

Ultimate on-line estimate or JDF to create estimates / job jackets

... no information about production times or forms for time

Shop floor data collection keypads, barcodes, computer tracking

... top of the pile scheduling & production boards

Software scheduling and dynamic scheduling

... manual order entry

Online order entry, JDF triggered order entry

... manual inventory sheets

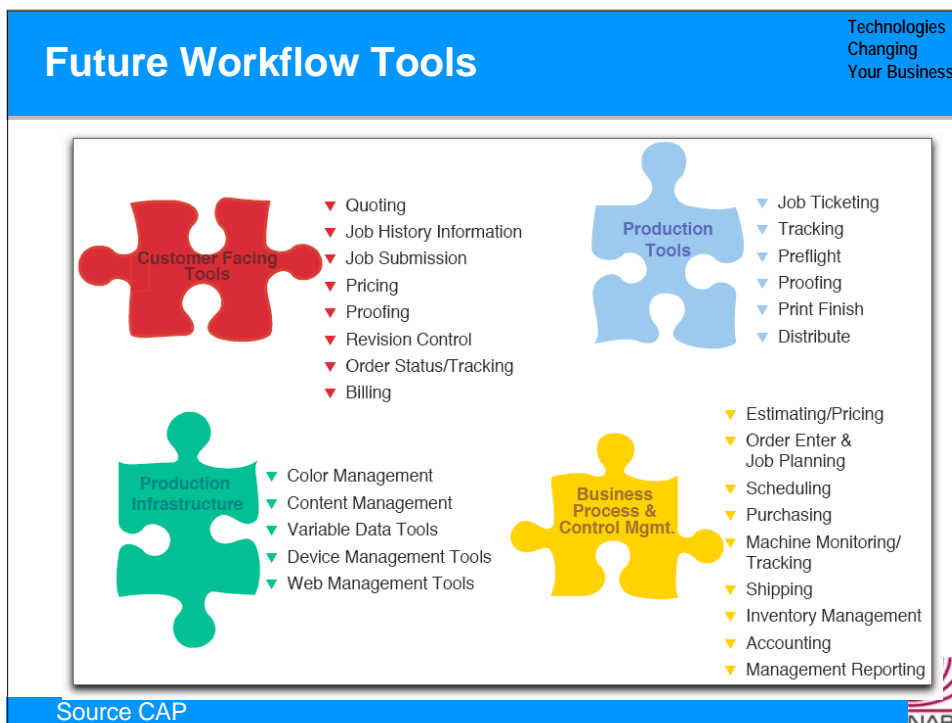
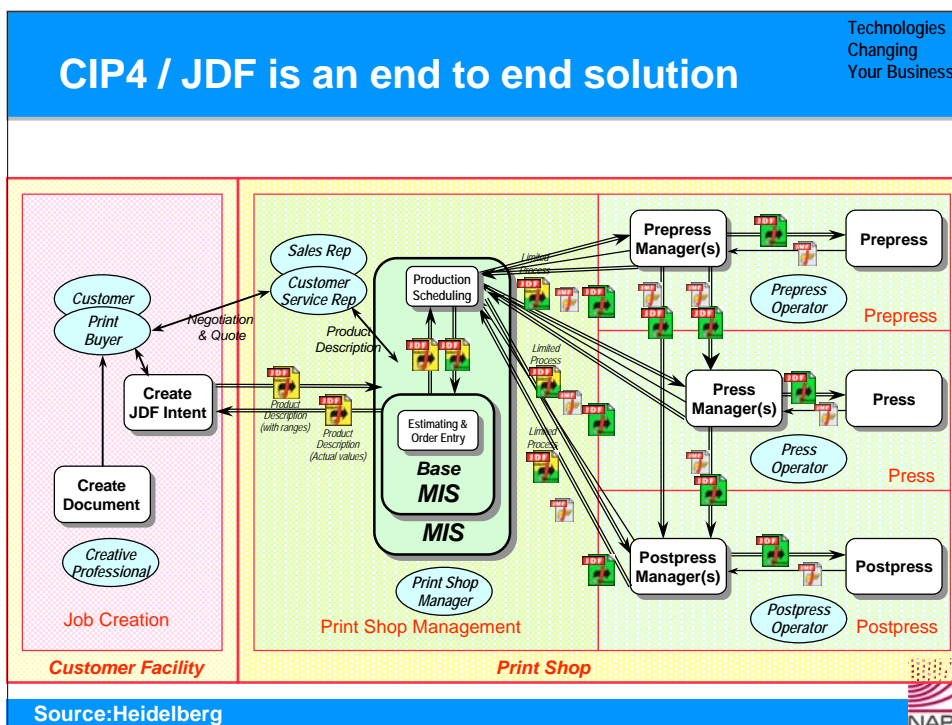
Software maintained or RFID tracking

... 4 inch thick data reports

Flexible financial reporting of employee, equipment, and sales analysis

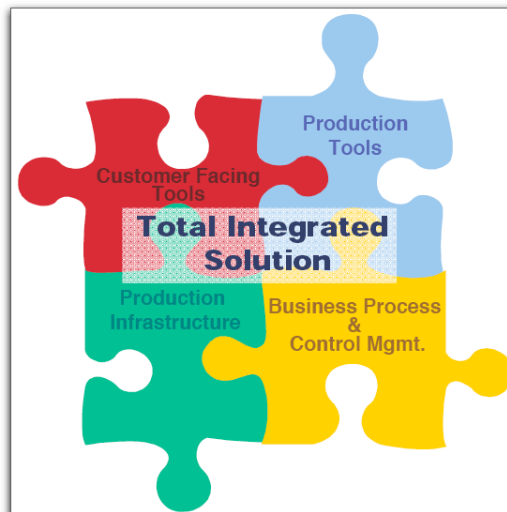
Source: ABCs of Print MIS by EFI





## Ultimate Goal

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## Web-based technology

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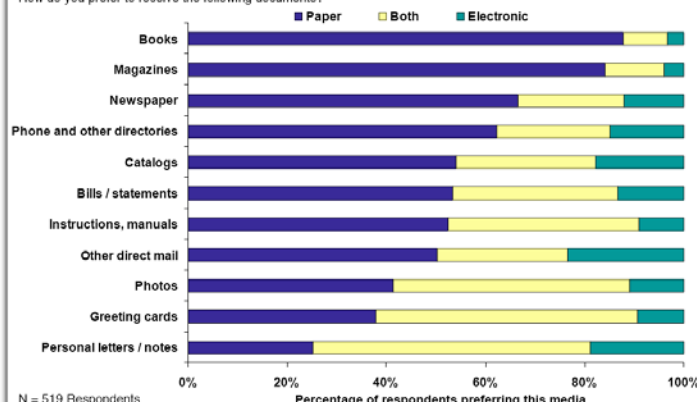


## Paper or ...

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### Consumers Preferred Method of Receiving Documents

How do you prefer to receive the following documents?



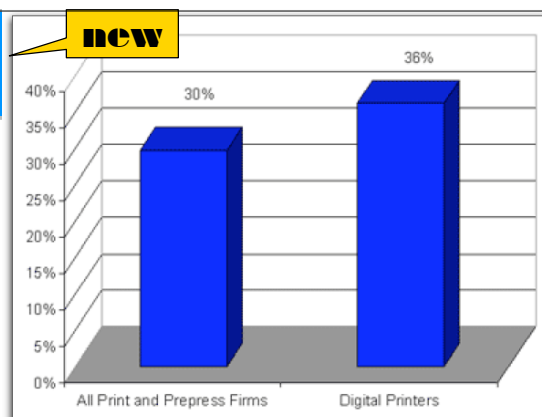
Source CAP



## Web 2 Print Growth

"Do you offer Customized Web Sites for Personalization / On Demand Printing"

Source: GraphSTATS



"Our research has found that both clients and printers have yet to scratch the surface of the advantages that W2P applications

" W2P applications have become more economical & simpler to implement

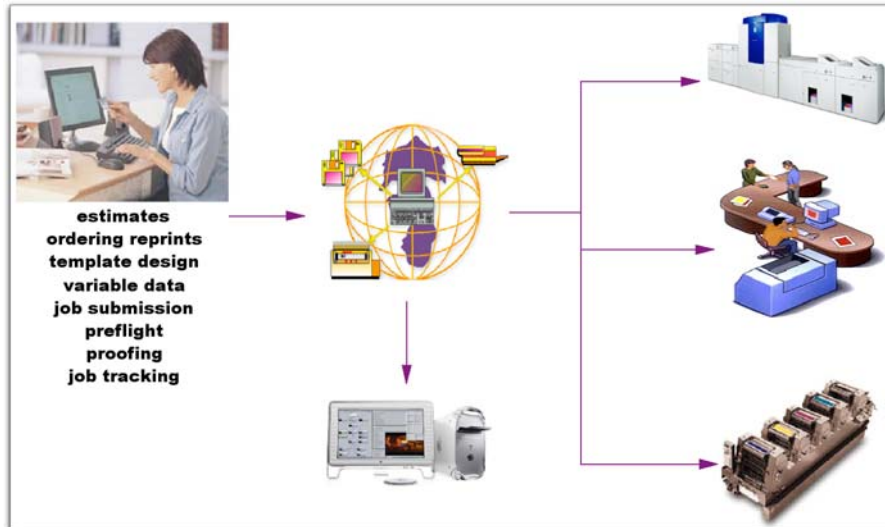
"The ability to add marketing and personalization elements means that there is far more potential here than to simply order business cards remotely.

TWGA Special Report, "Web-to-Print: Internet-Enabled Personalization," July 2005



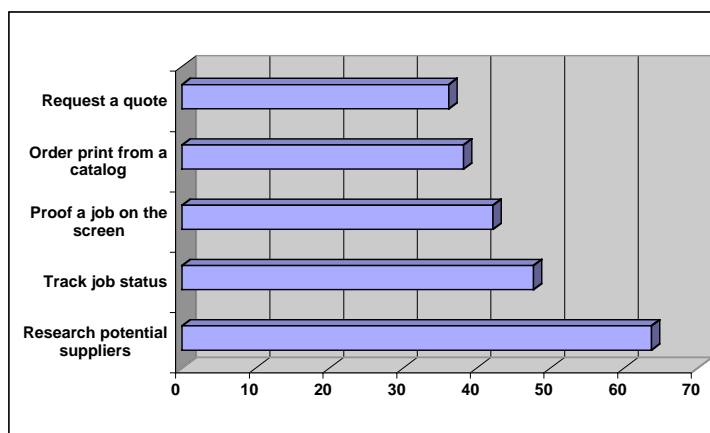
## Value = Convenience = On Line

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## Popular Internet-Enabled Tools

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**Most frequently used internet tools used Fortune 500 companies**

Source: CAPV



## Web Based Print Services

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### Features - Basic

- Web storefront- accept jobs
- Capable of supporting output devices from many manufacturers
- Maintain printing companies web site look and feel of branding
- Support standards (XML, PDF, JDF, PPML)

### Features - Advanced

- End 2 End solution (buyer interface, printer interface, print manager)
- Facilitate reordering (letters, envelopes, forms, etc)
- Prompt users for print specifications
- Server applications that can read the data and take appropriate action to route the digital files to the appropriate production server queues
- Enables jobs to be received, electronically proofed, approved, scheduled produced and shipped
- Template based production - maintain the look and feel of branding for stationary and marketing pieces



## PDF->HTML conversions

new

### Variety of tools and suppliers

Vertis complete solution to transform print catalogs to web, build db and shopping cart

### Others

- PDF Online
- PDFtoHTML
- Click to Convert
- Amber PDF converter
- PDF to HTML
- Adobes online PDF converter
- GlobalShareware
- PDF Ripper



Source: Images Vertis, 340 converters pdfzone.com

## Supply Chain Automation

new

Technologies  
Changing  
Your Business

Integrating client-facing systems with the preprocess  
job ticketing/order-entry side

Increases convenience and reduces costs

Simple ways - PDF files from Acrobat 7 with basic  
JDF instructions (size, colors, ICC)

Comprehensive systems

**Collaborative Studio & Esko-Graphics Intra-FLEX**

enables companies to submit an order that creates a job  
ticket in Esko-Graphics' BackStage production server.

**Creo Prinergy - Xerox Free Flow for Digital Press**

Prinergy with MIS/ERP systems from Globe-Tek  
and DiMS can set up job tickets in Prinergy

DiMS! system is bi-directional; that is, it can pull status  
reports from Prinergy.



## Search, Find, Obtain - Killer App

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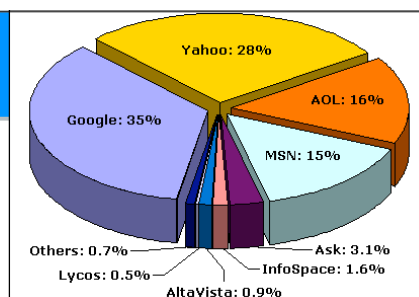
According to Morgan Stanley

1st killer Application: email & messaging

2nd: Web browser, & the 3rd search, find, obtain



## Search Engine Marketing



**Search engines drive 350 million searches daily**

**Search Engines #1 online method used by consumers to research a product for purchase 41% (DoubleClick)**

**81% percent of Internet users find the Web sites through search engines (Jupiter)**

**In 2004, marketers spent over \$3 billion on paid search engine advertising (sempo.org)**

**For advertisers search engine marketing is growing**



## Search Engine Marketing Methods

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Your Business

### **SEM Paid Placement**

Bid on keyword phrases to be placed at the top of the search results page (pay / click)

### **SEM Optimization**

maximize search engine "finds" by improving the specific keyword phrases

### **Evaluate performance with measurements**

Branding Metrics (measuring lift based on experiential branding and the listing itself)

Cost Per Order (CPO), Cost Per Action (CPA), Cost per trial  
Revenue or Profit Per Dollar Spent

Return on Ad Spend (ROAS)

Lifetime Value Metrics, are you factoring yield?

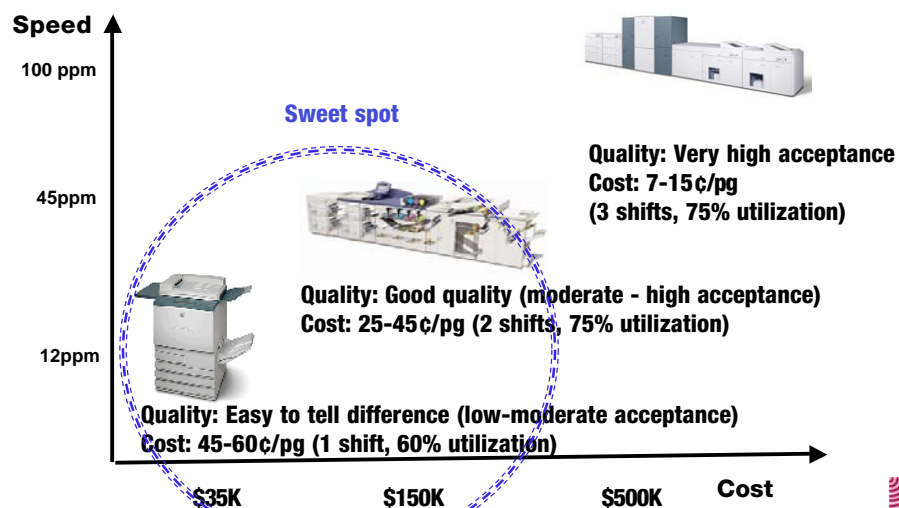
Blended Success ratios that measure value



# Digital Printing technology



## The cost & quality of color



## Stand out with variable printing

Variable data printing allows you to create every page with different data

Variable allows you to talk 1-1

Variable helps overcome the “Are you talking to me?” filter

Variable increases response rates, sales, volumes of sales anywhere from 10-100x



## Improved Results with Variable

Technologies Changing Your Business

Increased Response Rates (Source: USPS)

- 1-2% Average Response to Broadcast Mailing
- 3-5% Average Response to Personalized Mailing
- 6-17% Average Response to Customized Mailing

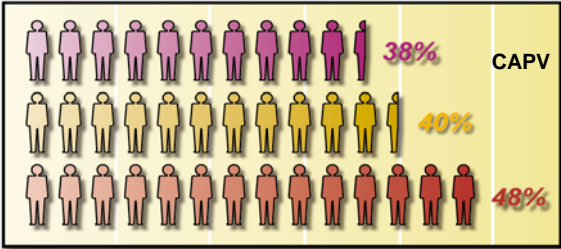
Increased Response Rates (Digital Printing Council)


Static, B&W Mailing	0.46% Response
Adding Name Only	0.66% Response (44% Increase)
Adding Full Color	0.67% Response (45% Increase)
Adding Name & Color	1.08% Response (135% Increase)
Applying Database 1:1	2.76% Response (500% Increase)

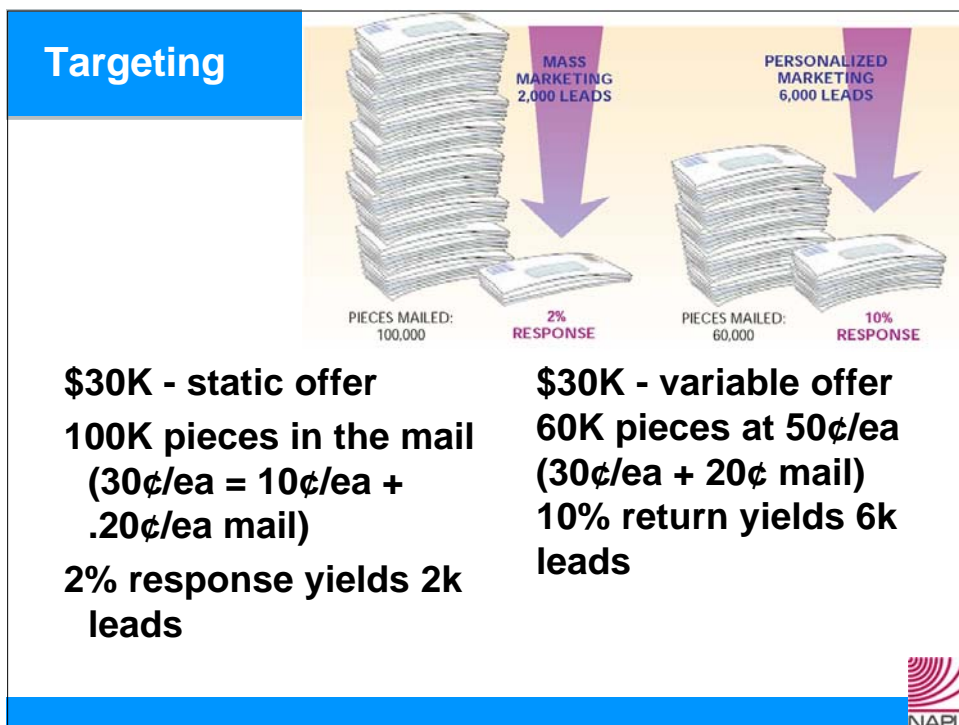
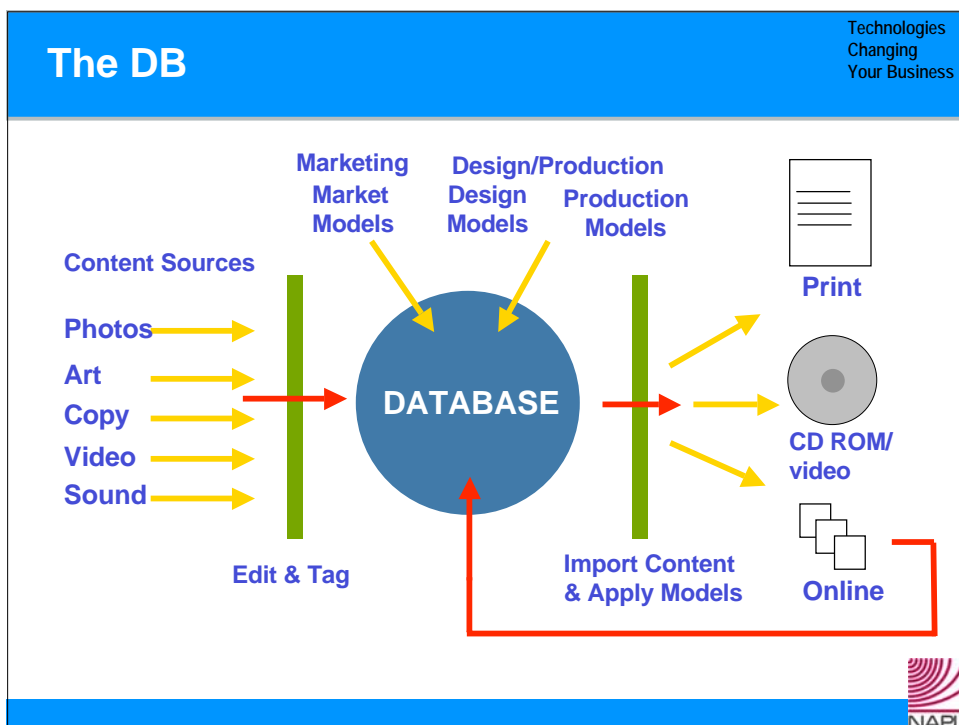
Response Rate

Response Time

Retention







## Keys: Targeting & Relevance

**For publishers, retailers, catalogers & direct marketers**

**Targeting** - reduces the promotion efforts & costs

**Relevance** - increase increase sales

**Publishers**: maintain subscribers and increase ad value

**Advertisers** want increased sales & lower costs

**How are world class companies achieving?**

Targeted email, opt in email (overcome spam filters)

Customized, specialized product lines (Babies R Us) and catalogs (specialized catalogs)

Targeted publications (W Jewelry, Successful Student)

Flexible and customized content (books on tape, searchable library online, single chapters, buy printed or pdf files)

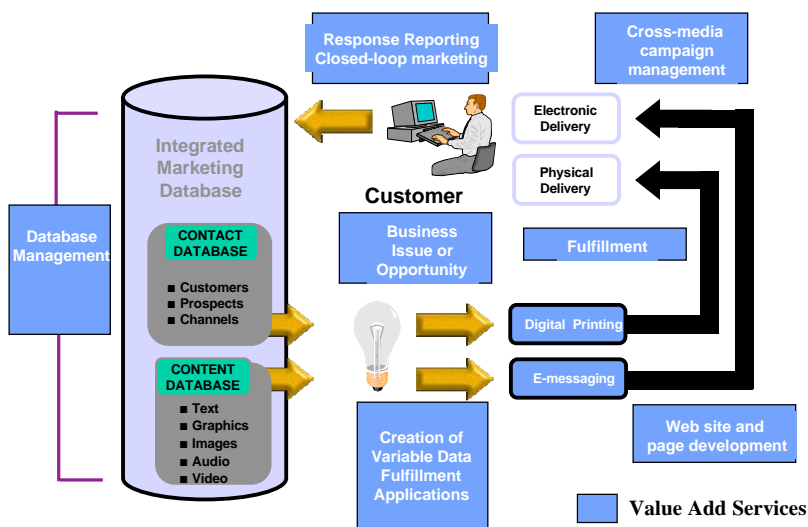
Personalized web page experiences

Variable data to increase sales, retain customers



## Value Added: X Media Campaigns

Technologies  
Changing  
Your Business



## Template-based design & production

Technologies  
Changing  
Your Business

### Templates designed access & re-use

Maintain brand consistency  
Increase channel activity  
Reduce time to market

### Reduce costs

Replace error prone processes create better files  
Reduce obsolescence  
Amortize the design & setup costs over many uses

### Templates can be easy

Business cards, stationary, sales materials  
Versions and personalization can be easy - name, address, logo, demographics

### Templates can be complex

Transactional data: financial, legal,  
Sales materials: specific with text and pictures to groups or individuals



## Thanks

Technologies  
Changing  
Your Business

### Sources of info

#### My newsletter

Digital Technology Trends Emailed upon request

#### How do you get it?

**Give me your card & write Newsletter  
on the back**

#### Other Sources:

[www.napl.org/randeconcil.aspx](http://www.napl.org/randeconcil.aspx)

**R&E Council and Digital Smart Factory**

[www.CIP4.org](http://www.CIP4.org)

[www.ipa.org](http://www.ipa.org)

[www.HowieFenton.com](http://www.HowieFenton.com)

If you get the  
chance – stop  
by the NAPL  
booth #862 and  
say hello!

For an updated  
handout give  
me an email  
address - that  
will not block  
an attachment

