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On-demand printing: Show me the money

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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.

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Preview

Defining the market
equipment, product categories, strategies

Market Drivers
faster, better cheaper, more color, X-Media

Where's the $$$$$$$
adding value

How do I get to the $$$$$
equipment, software, automation

This symbol

new

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

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

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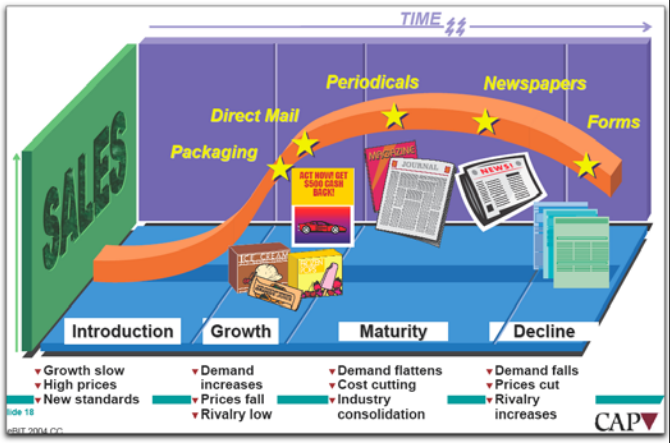
Defining the market

Competing Tech. Slow Growth Offset

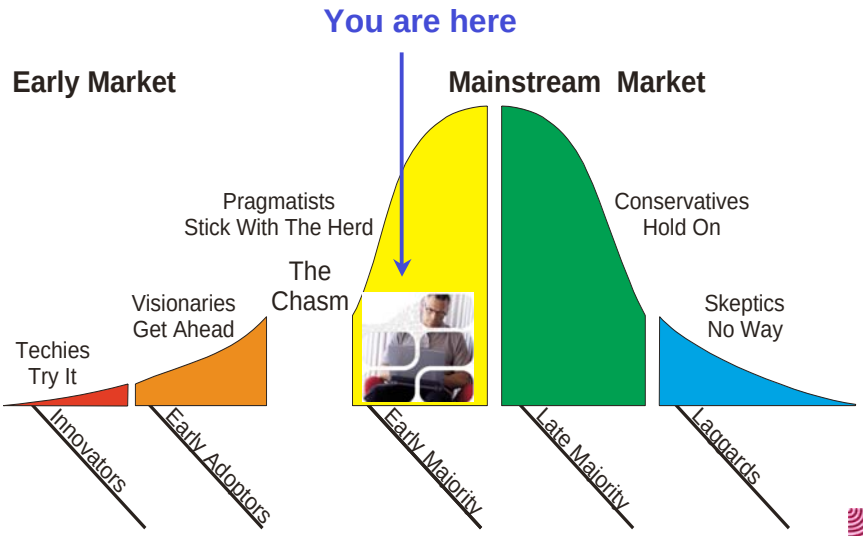
- Web pages
- E-mail
- Digital printing
- Variable data printing
- PDAs
- Multimedia cell phones



Source: CAPV

New Tech. Fueling Growth Digital/ Variable

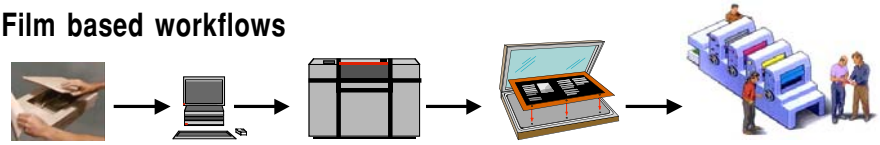
On-demand printing: show me the money



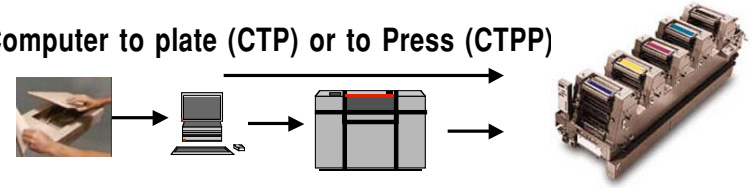
3 Workflows

On-demand printing: show me the money

Film based workflows



Computer to plate (CTP) or to Press (CTPP)



Digital Printing (non-impact)

b & w

color

Production Changes

On-demand printing: show me the money

Yesterday	Today
Analog prepress Make ready with film, processing chemistry, cameras, stripping	Digital Prepress No film, digital cameras & scanners, monitor proofing, high speed networks, WWW
Printing Longer runs to reduce the cost per page B/W toner	Printing CTP and DI printing Automation: CIP3/4, JDF Digital color presses
Finishing in or near line	Finishing in or near line
Warehousing Inventory risk due to obsolesce	Warehousing On line ordering Less or no storage JIT manufacturing

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Offset, Digital & Hybrid printing

Riso HC5000

Offset Litho. & static pages

- Film based, CTP, CTPP
- Cheaper for longer runs but less targeted
- Well established sales, CSR and production

Electrophotographic & Variable Pages

- Less expensive make-ready, some have quality concerns
- Ink jet press (Versamark) & Ink jet heads (Scitex)
  - higher quality then inkjet heads, but fewer markets
- Variable pages can target specific interests (increases responses), can integrate with web templates but harder to sell

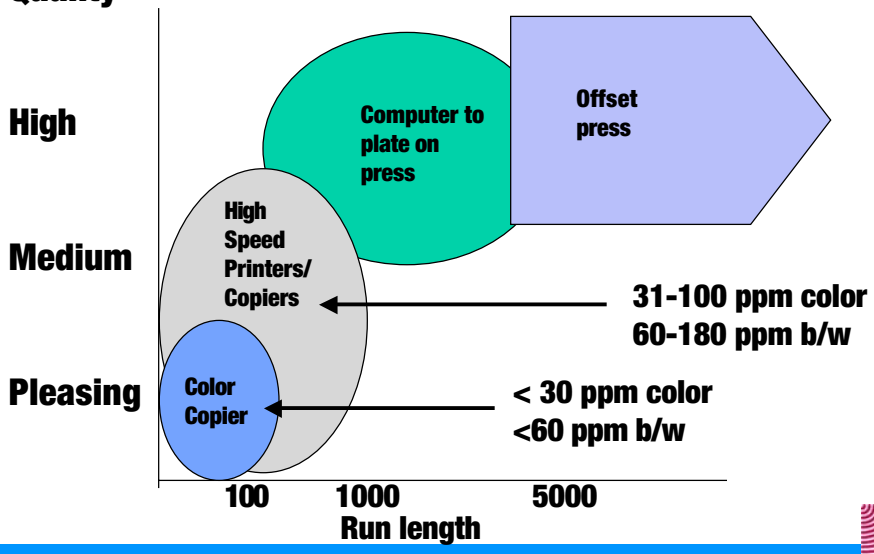
Hybrid

- Ink jet heads - lower quality (200-300 dpi), used for text mostly
- Shells - 4c offset and overprint b/w for personalization
- Riso HC5000: 105 - 11x 17 ppm inkjet office / network printer, $40K
  - Lower quality then offset, but suitable for many app's
  - Buyers Lab - recommended, BERTL Innovation Award
  - Inkjet 5¢ pg/color. .007¢ b/w

update

Product Categories

On-demand printing: show me the money



Digital Presses technologies

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)

Are coatings important?
- Most digital printers say no
- But in PIA/GATF Tech Alert 05 study, 6"x9" postcards and tracked
- About 1/3 arrived and about 1/4 were damaged

Digital Press Coating & Finishers

new

Color Quality
- The major complaints about digital printing is that "it did not look as good"
- Part of that was color fidelity - part of that was gloss
- The color is better then ever and now there are coating options

Kodak Nexpress 2100
- 5th unit, called Intelligent color, coating and glossing
- In line clear toner & Near line NexGlosser

IGen3
- Epic Products inline CTi-635 coating system
- overall & spot UV coating, options for gloss or matte finish

HP - Indigo
- working with Dorn SPE off-line UV coater to seal the sheet
- Gloss, matte, satin and other finishes are offered

Xeikon's web-fed model 5000
- clear toner & new Print Protector (inline flood coater)

Inline or Near line finishing

new

Another issue with digital presses are finishing options
- **Few have few inline options & the costs are high**

New options
- **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)**

Static vs. Variable

Static pages

- Every page the same (offset printing)

Variable

- Every page unique documents
- 2 types
  - Transactional documents (in-plant)
    - banking, financial services, securities
    - health care, pharmaceuticals, insurance
  - Sales & marketing products (commercial)
    - direct mail, retail, wholesale, travel/leisure
    - "Congratulations, you have one $1 million!"

Basic vs Complex Variable

Basic

- Versioning (change black plate offset press)
- Inkjet "Congratulations Howie you've won …"
- Hybrid: 4C offset shells & b/w laser printer
  - 144 billion pgs year are on preprinted shells

Complex:

- 4 data types:
- Customer Data
- Transaction Data
- Psychographic (lifestyle)
- Demographic

More Realistic Growth

On-demand printing: show me the money

For years the retail value of digital & color page growth in the market place

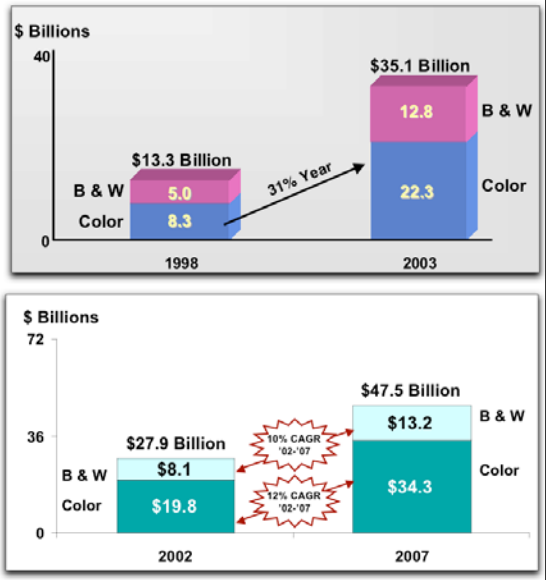
Did not met expectations

In 97-98 growth of 27% growth was projected (not shown)

In the 98-03 time growth of 31% was projected

Today growth projected at 12%

most reasonable



Source: CAPV

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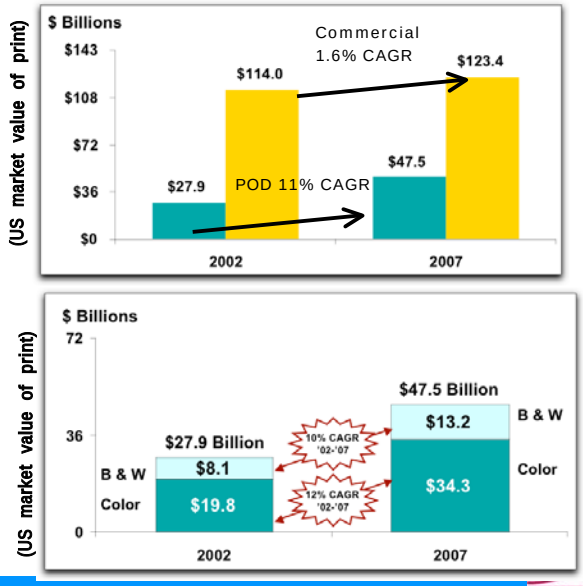
POD vs Commercial Growth

On-demand printing: show me the money

Comparing the growth of the commercial to the POD market (>5000 impressions)

Within the short run market the percent is b/w and what is color



Source: CAPV

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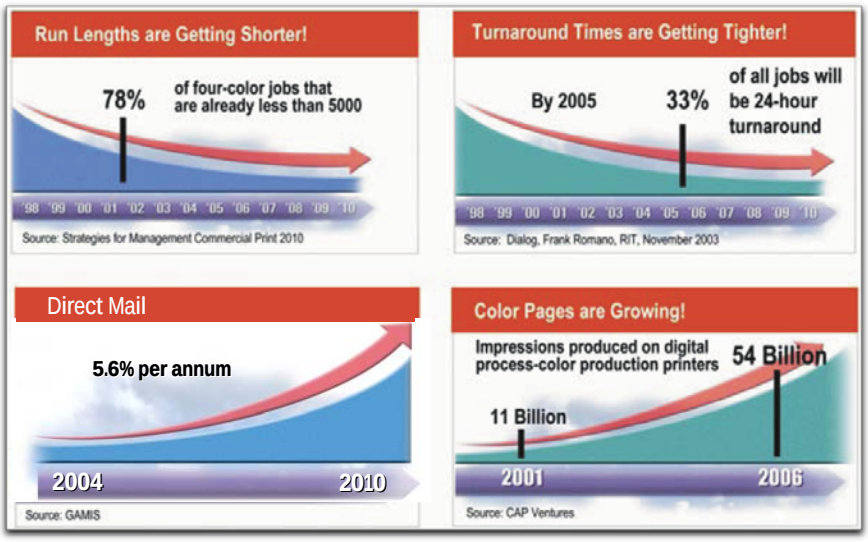
Market Drivers

Demands are changing



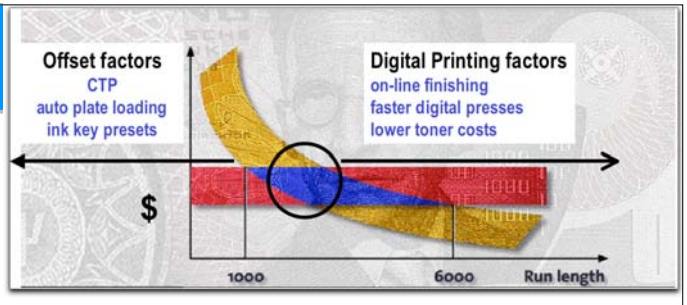
Faster, Cheaper, Shorter

On-demand printing: show me the money

- **Turn times continue to shrink (59%) …**
  as clients move to just-in- time ordering—to minimizing inventory. Who can afford bottlenecks—anywhere—with turn times shrinking?
- **Price competition is intensifying (56%) …**
  despite recovery and consolidation as traditional roles and boundaries break down, getting everyone into everyone else's business.
- **Run lengths continue to shrink (48%) …**
  as clients target their markets more precisely. Who can afford excessive make-ready, waste, and inefficiency with run lengths shrinking?

Source: 2004 - 2005 NAPL State of the Industry

Cost / Page



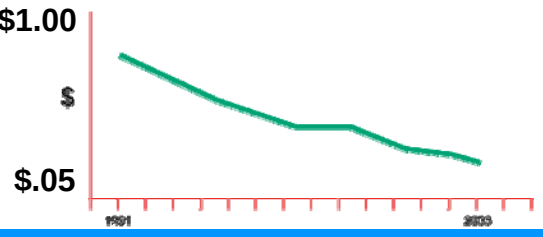
Tug of War

Costs determined by run lengths, make-ready, finishing and how busy the digital press is kept

However some offset technology makes shorter runs cheaper

CTP, DI, Auto plate loading, auto blanket washing

Digital has constantly declined



Color moves people to action!

On-demand printing: show me the money

30 - 50% Acceleration in Payments
7.5% Improvement in Revenue Collection
5% Increase in Customer Approval Rating

55% more likely to pick up a color mail first
Makes an impression that is **39%** more memorable

Better Sales

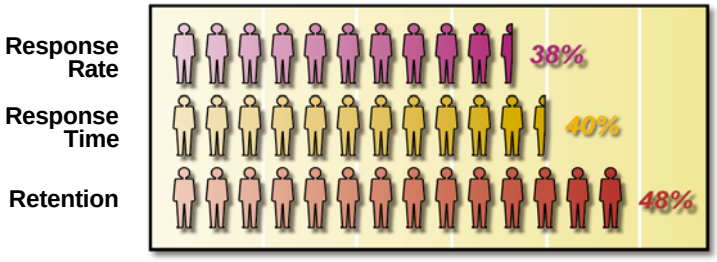
On-demand printing: show me the money

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)



Source: CAPV

Mass Media > Narrowcasting

In the 60's, ad could reach 80% USA
- Today, would need 100 TV channels

TV suffering
- TV viewing dropping, internet increasing
- Commercials have less impact - VCRs & Tivo skip commercials
- From 50's - 70's, the audience grew in sync with the prices
- No more in 2002, the networks' average CPM (cost per thousand viewers) soared from $1.96 in 1972 to $16.79 in prime time *
- And growing diversity of population

Media buyers are shifting away from Mass Media
- Cross media & multiple sales channels (net, stores, direct)

TV Bureau of Advertising

Add Products and Services

On-demand printing: show me the money

For every $1 spent on print…

Another $6 is spent on content and fulfillment!

Up to 15% of a company's overall revenue is spent on Content

Value Added is a $1 Trillion Market

Source: IDC & CAP Ventures

On-demand printing: show me the money

Where is the $$$$

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What & How is Value Added

Webster's dictionary says value-added pertains to

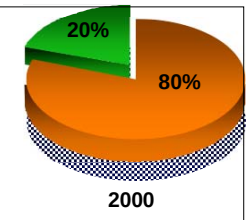
"something added to a product to increase its value or price

A "value-added" product or service:

- augments/enhances the product making it more attractive
- benefits the end-user better than the competition's product or service
- is preferred by a customer (even if it costs more)
- has more inherent perceived value to the end-user

How will you add value?

- Outstanding sales & world class customer service
- Faster Speed, Higher Quality. Decreased Costs
- Greater Convenience: On-line
- 1 stop shopping: Design, Finishing, Fulfillment



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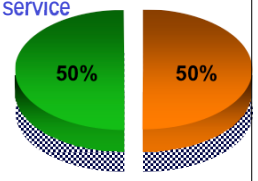


2010

Print Revenues

Non-print Revenues

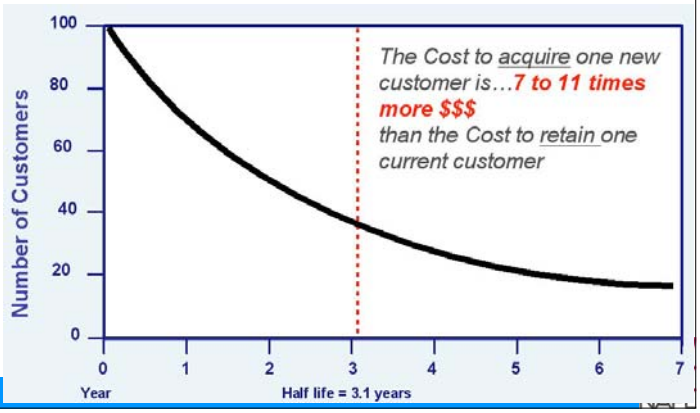
Source: CAPV

Value for Transactional Printers

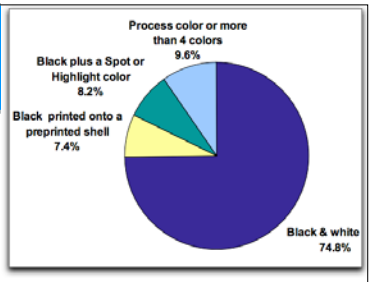
On-demand printing: show me the money

Transactional documents are statements, bills, policies, contracts, compliance documents)

The goal of DAM is to reduce customer turnover



Transactional Printers Need More Color & More Personal



Transactional documents usage

- 75% printed in black & white only
- 25% evenly divided between spot/highlight color, preprinted shells, and process color
- 56% is personalized

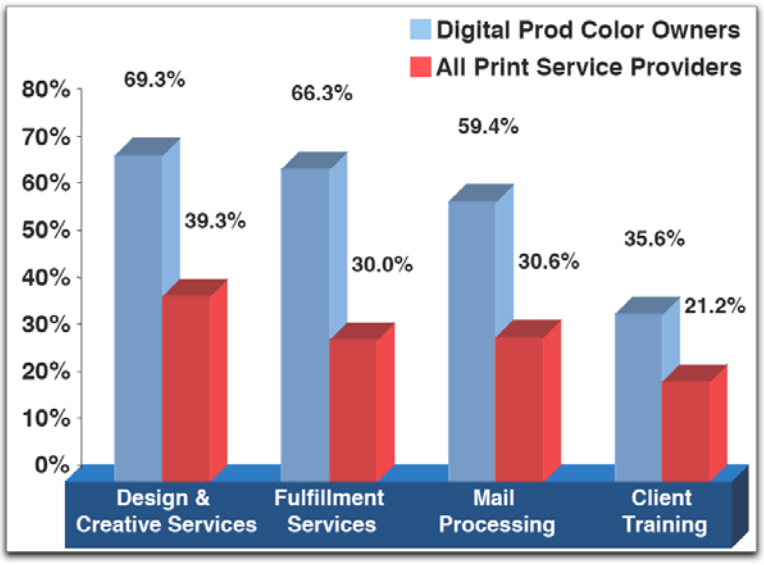
Transactional document drivers

- 78% new customers
- 70% company growth
- 40% more staff
- 36% new or additional government regulations
- 35% increased pressure from competitors

Source: CAPV

Comm. Printers Adding Value

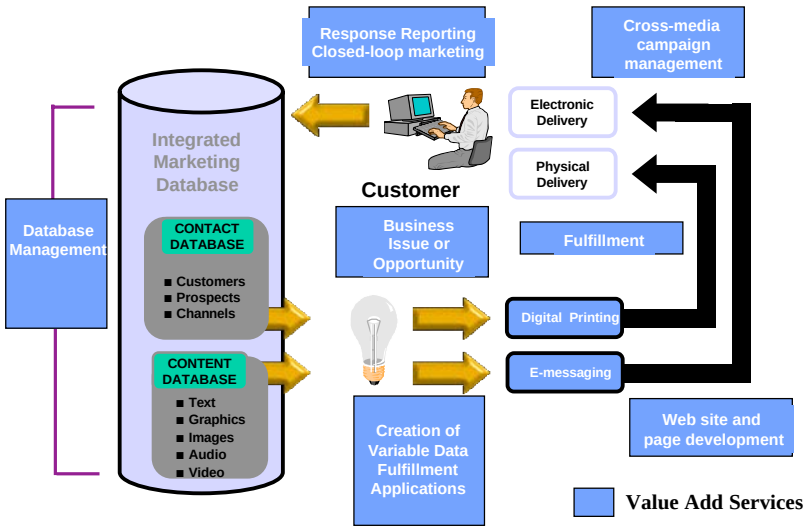
On-demand printing: show me the money



Source: CAPV

Value Added: X Media Campaigns

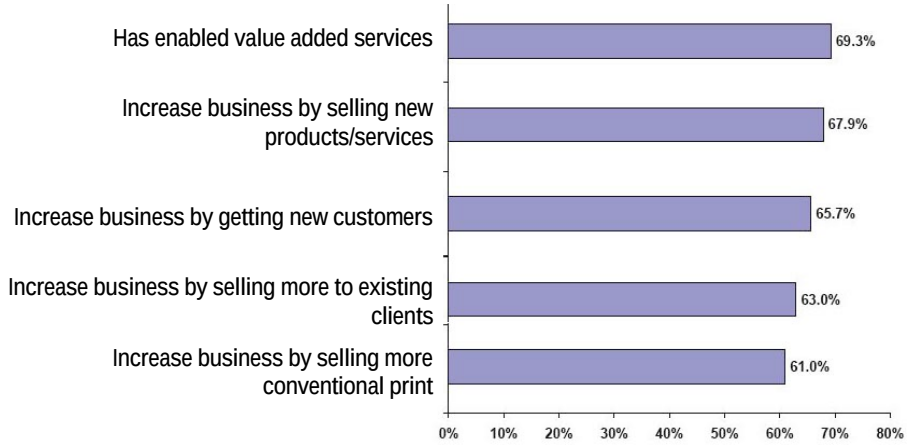
On-demand printing: show me the money



Offering digital creates opportunities

On-demand printing: show me the money

Digital printing …



Source: CAPV Nexpress study percentage strongly or somewhat agreeing

Commercial markets & size

On-demand printing: show me the money

Marketing/Sales

- ▸Advertising
- ▸CRM
- ▸1:1 Marketing
- ▸Brand Management
- ▸Creative Services

$670 B

Operations

- ▸Supply Chain
- ▸Enterprise Resource Planning (ERP)
- ▸Just In Time
- ▸Billing

$167B

Human Resources

- ▸Corporate
- ▸Universities
- ▸Employee Recruitment
- ▸Benefit Programs

$47B

Publishing

- ▸Niche Publishing
- ▸Self-Publishing
- ▸Test Marketing

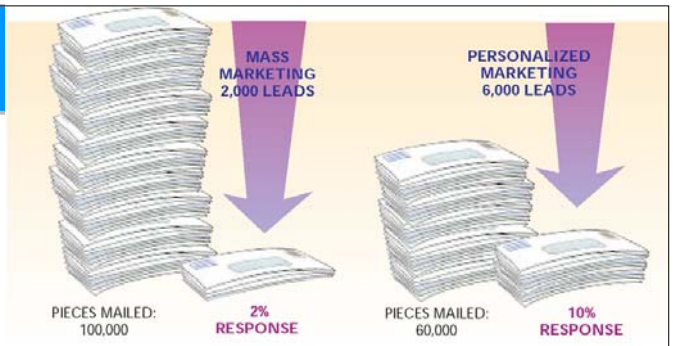
$46B

Source: Accenture Content Marketplace Study

Swamped in Advertising

- **Relevance: you talking to me?**
- **Synergy: target market via multiple media options is a force multiplier**
- **Efficiency: bang for bucks**

Targeting



$30K - static offer

100K pieces in the mail (30¢/ea = 10¢/ea + .20¢/ea mail)

2% response yields 2k leads

$30K - variable offer
60K pieces at 50¢/ea (30¢/ea + 20¢ mail)
10% return yields 6k leads

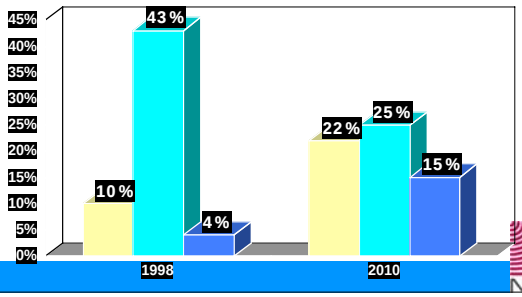
Targeting & Relevance

For publishers, retailers, catalogers & direct marketers

- Targeting - reduces the promotion costs
- Relevance - increase increase sales

How are world class companies achieving?

- Targeted email, opt in email (overcome spam filters)
- Customized product lines (Babies R Us) and catalogs (specialized catalogs)
- Targeted publications (W Jewelry, Successful Student)
- Flexible and customized content (searchable library online, single chapters,etc.)
- Personalized web page experiences



Source: Institute for the Future 2000

Personalization, Relevance, Targeting & Convenience

Static message

- At Avis we try harder

Personalization is good

- "John, at Avis we try harder for you."

Relevance & Targeting is the better

- "John, as a buyer for Acme Construction you spend an average of $1.3 million per year on rental car expenses.

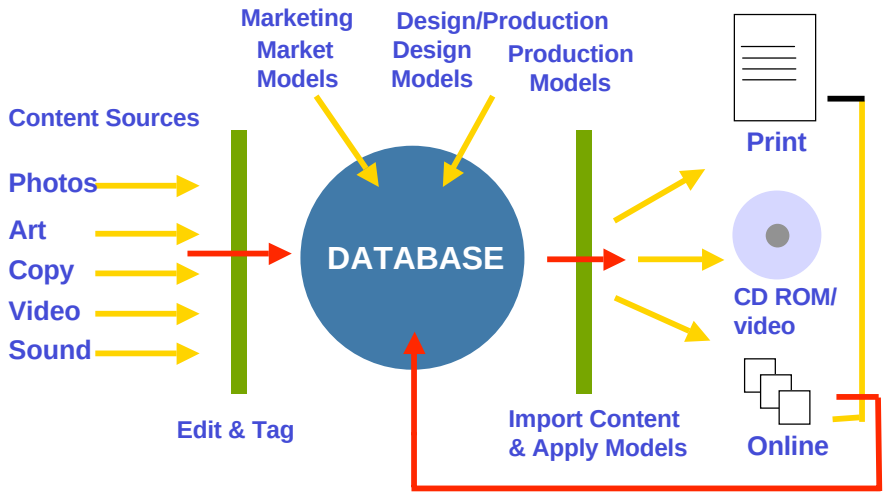
Relevance, Targeting & Convenience is the best

- "John, we have set up a call center and web site for your staff. In less than 3 minutes, your staff can make reservations and save 20% annually.

Source: Podi.org

The Infrastructure

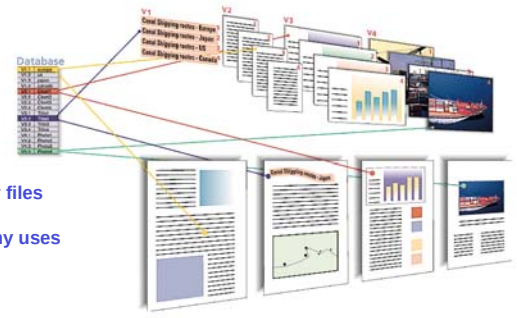
On-demand printing: show me the money



Template-based design & production

On-demand printing: show me the money

Templates designed access & re-use
- Maintain brand consistency
- Increase channel activity
- Reduce time to market

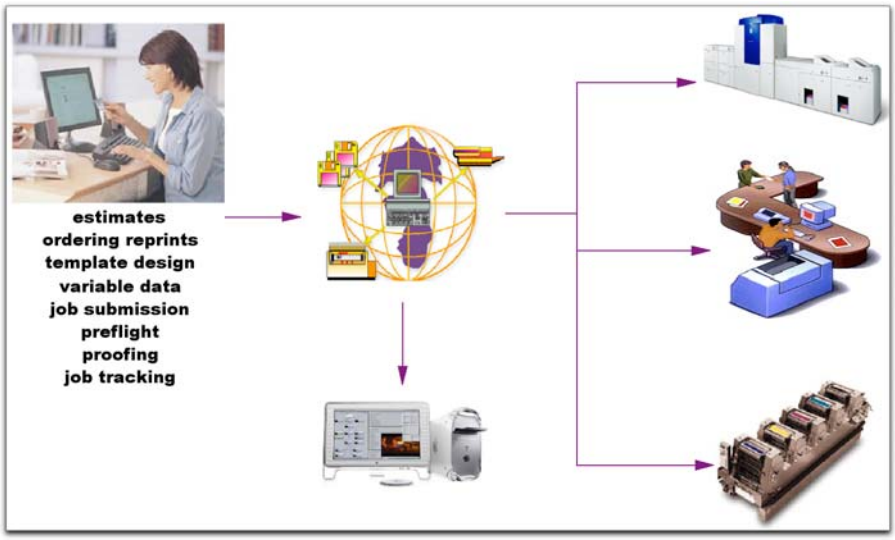


Reduce costs
- Replace error prone processes create better files
- Reduce obsolescence
- Amortize the design & setup costs over many uses

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

Value = Convenience = On Line



Internet Changes Everything!

Direct

- Sales, research products, cross media marketing
- 75% US online & 75% research products online
- New demographic, internet not TV

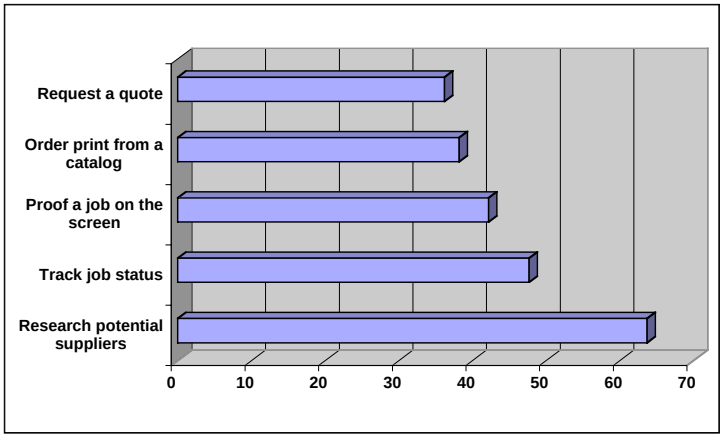
Indirectly

- Greater convenience
- order, track, preflight, proof

Revolutionary

- Data gathering for DB
- New services: template driven design, collaborative production

Popular Internet-Enabled Tools



Most frequently used internet based tools in Fortune 500 companies

Source: CAPV, New Corporate Print Customer 2003

PDF->HTML conversions

new

Varity 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

Web Based Print Services

Benefits

- Decrease costly “hands on” steps (writing estimates, job jackets, etc)
- Automate production (On-line estimates, PDF proofs, job queue)

Features - Basic

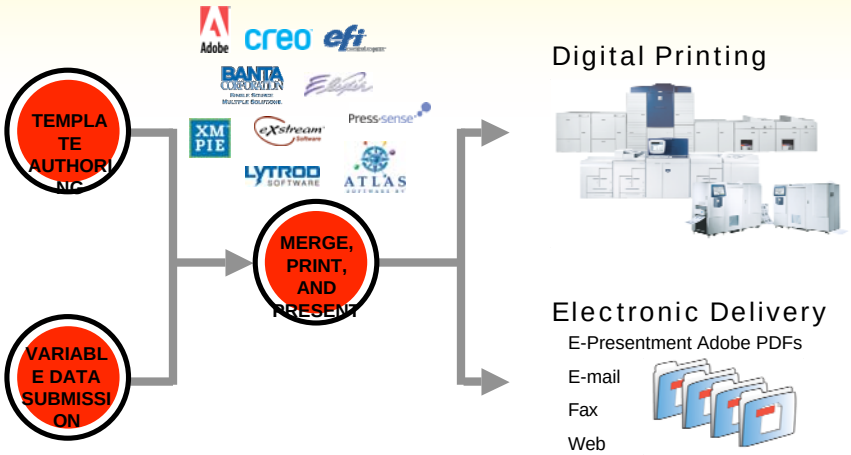
- Web storefront- accept jobs
- Capable of supporting output devices from many manufacturers
- Maintain printing companies web site look and feel of branding
- Support standards (XML, PDF, JDF, PPML, WfMC)

Features - Advanced

- End 2 End solution (buyer interface, printer interface, print manager)
- Facilitate reordering (I.e. 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

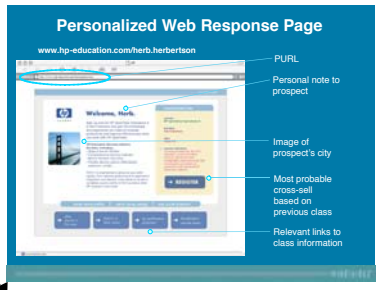
Workflows for print and e-docs

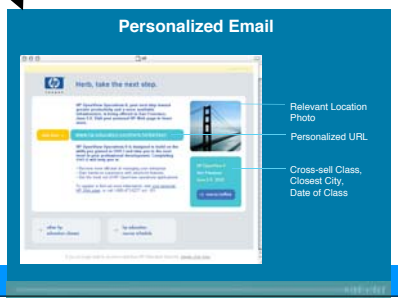
Super efficient workflows for print and electronic documents



The Ultimate in Personalization

Personalized URL
Personalized email
Personalized print





On-demand printing: show me the money

How do I get to the $$$$

Create a Value Added Strategy

Faster turnaround
- Can you get 1-2 days off your turn-around times

Higher quality
- Higher line screenings, Hi-Fi color, FM or XM screening

One stop shopping
- Creative, complex finishing, mailing, warehousing

On line services
- Estimates, orders, status, preflight, proofs, templates

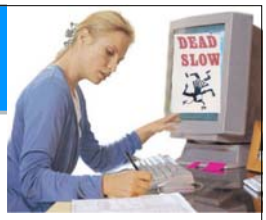
Variable data services
- Customized, personalized, DB production

X-Media
- Can you combine web, email, digital & offset print

Roadmap for strategy

Faster turnaround	1 stop shopping	Higher quality	X-Media
Online software	Design services	Quality Audit	DB infrastructure
CTP	Finishing services	Process control	Online software
Remote proofs	Mailing services	CMS	Variable software
Digital Press			Digital Press

Faster requires automation



Traditional Problems
- Printing evolved from different and separate fields
  - i.e. halftones, color separation, DTP, printing, finishing

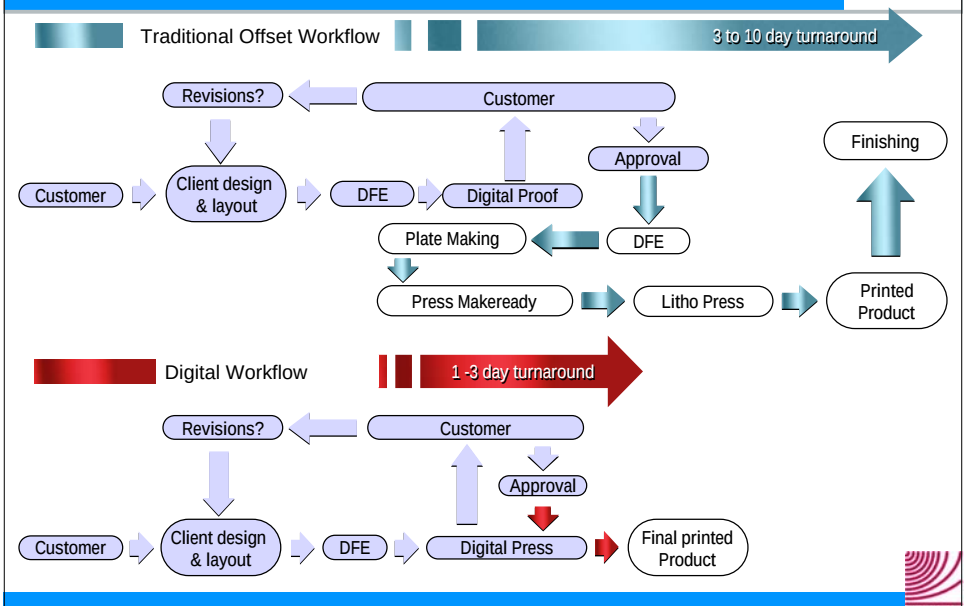
Result is time consuming procedures
- Paper forms, copy, paste and reenter info, manually set up

Today's innovators create "Islands of automation"
- Different companies - design, prepress, press, postpress
- Different areas - estimating, order entry, prepress, press

Tomorrow will create super-efficiencies, throughout and across departments
- Automate admin: estimates, order entry, billing
- Reduce production: prepress, press post-press set ups
- Improve communication and convenience with customers
  - clear, complete job descriptions
  - estimates, order, tracking progress

Simplified Workflow Equals Faster Turnaround

On-demand printing: show me the money



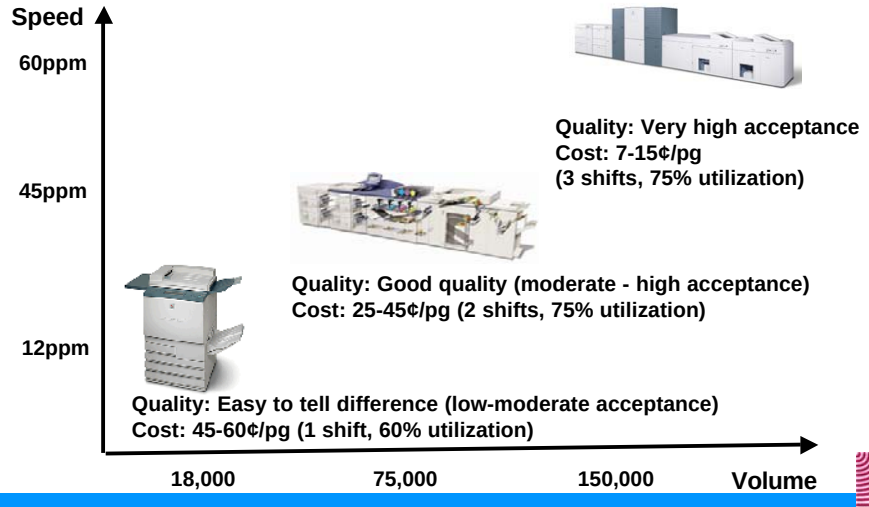
Faster, 1-stop shopping, variable, & X-Media require digital press

On-demand printing: show me the money

Small Companies Less then $1 million commercial printers Advertising Agencies $5M or less In-plants/CRD's for companies < $5 M sales	30 ppm black and white 6-12 ppm color device
Mid - Size $1 - $10 M commercial printers Advertising Agencies $5 - $50M In-plants/CRD's for companies $5 -20 M sales	45 - 90 ppm black and white 45 - 60 ppm color device
Large $10 M + commercial printer Advertising Agencies $5-$50M In-plants/CRD's for companies $20 M + sales	(2) 90+ ppm b/w device or 1 - 150+ ppm (2) 45 - 60 ppm color devices or 1 - 100 ppm

Digital Press Starting Point

On-demand printing: show me the money



Color Copiers

new

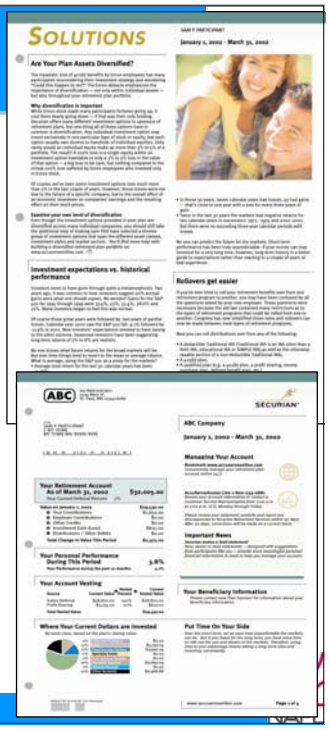
Maker	Product lines
Canon:	ImageRunner, CLC
HP:	ColorLaserjet, Color
IBM:	InfoPrint
Konica Minolta:	8000 series, CF
Lexmark:	KM
Oce:	CDS, CS, TS
Oki Data:	C series
Pitney Bowes:	CD
Ricoh:	CL, Afcio
Riso:	M, R, V Series
Savin:	SD, C, CLP
Sharp:	AR
Toshiba:	e-Studio
Xerox:	Docucolor, WorkCentre

Small step - Equipment

Commercial application
- Jay Pontiac-Buick
- Wanted to increase call sales and service
- started with 60 ppm device

In-plant / CRD
- Securian retirement services
- manages $5.7 billion for 2,800 plans and
- 180,000 plan participants nationwide

Strategy
- Both started slow
  - 60 ppm, $150K device
- After proven success
  - Added another or upgraded to 100 ppm



Small step - Variable w/ Offset

Hybrid: Offset shells & laser printer
- Print black and white - offset
- Run through a high speed black and white printer

Versioning
- different products, different groups

Offset - change the black plate

Selectric Binding - different sections

Simple Inkjet Personalization
- "Congratulations Howie you've won"

Marketing & sales are different

On-demand printing: show me the money

Its not	It is
Selling 1 job @ a time	Sell program, consultative sales, research their objectives, ongoing campaigns (& revenue streams)
Easier to sell	Tougher to sell: more education, show ROI's, longer sales cycle, different contact
More competition	Less competition
Longer runs, greater times, higher prices/job with decreasing cost per page	Shorter runs, faster turnaround, charge less $ / job, more $/pg., more responses/$, more leads/$
Smaller profits, easy for customer to leave	Higher profits, tougher for customer to leave

Template-based design & production

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

Sources of info
- My newsletter
  - Digital Technology Trends Emailed upon request
- How do you get it?
  - Give me your card & write **Newsletter** on back

Other Sources:
- www.napl.org/randecouncil.aspx
  - R&E Council and Digital Smart Factory
- www.podi.org
- www.gain.net
- www.ipa.org
- 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