

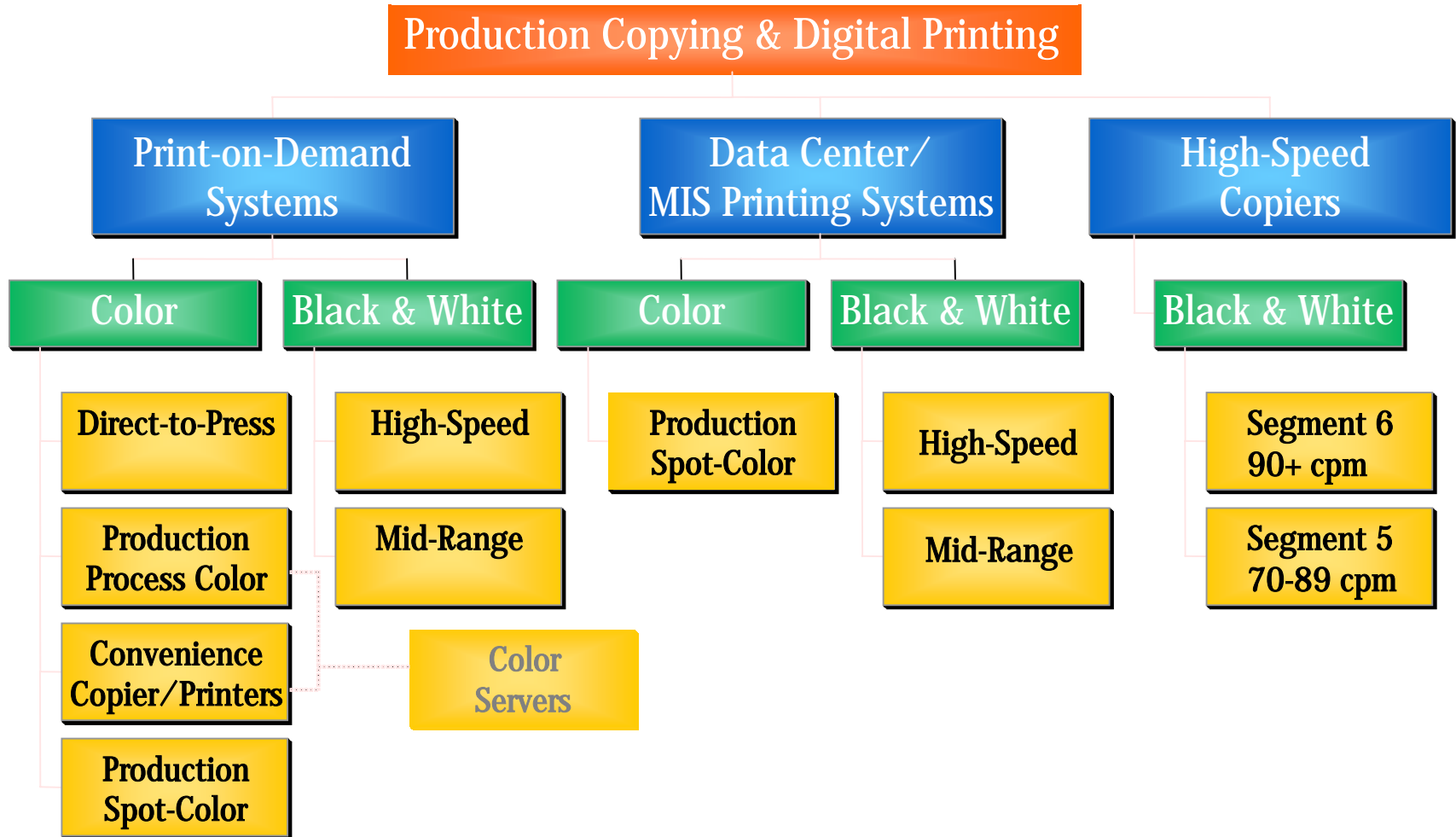
The US On Demand Market Update: Separating the flowers from the weeds



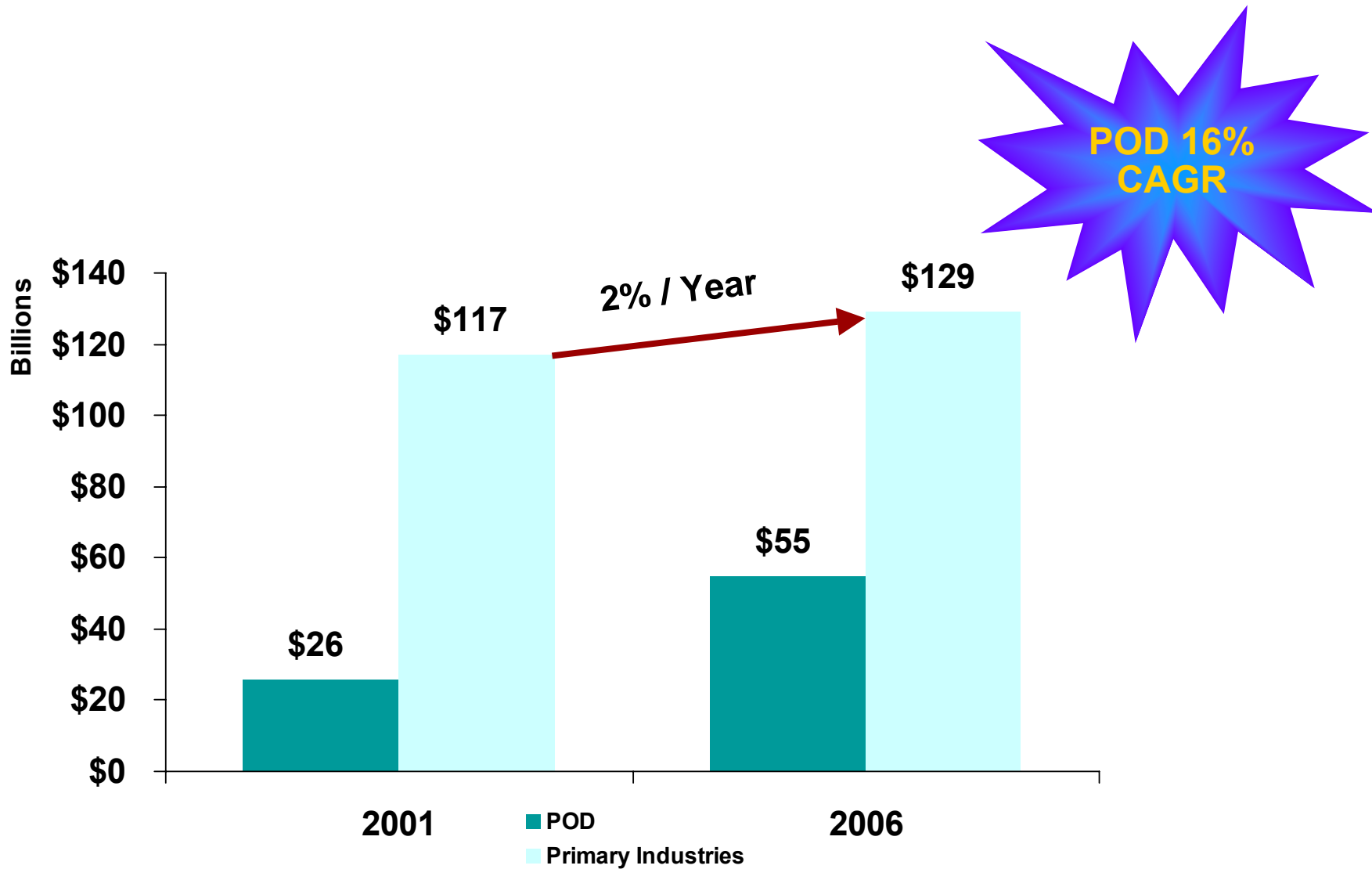
Charlie Corr
Group Director

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Forecast Overview

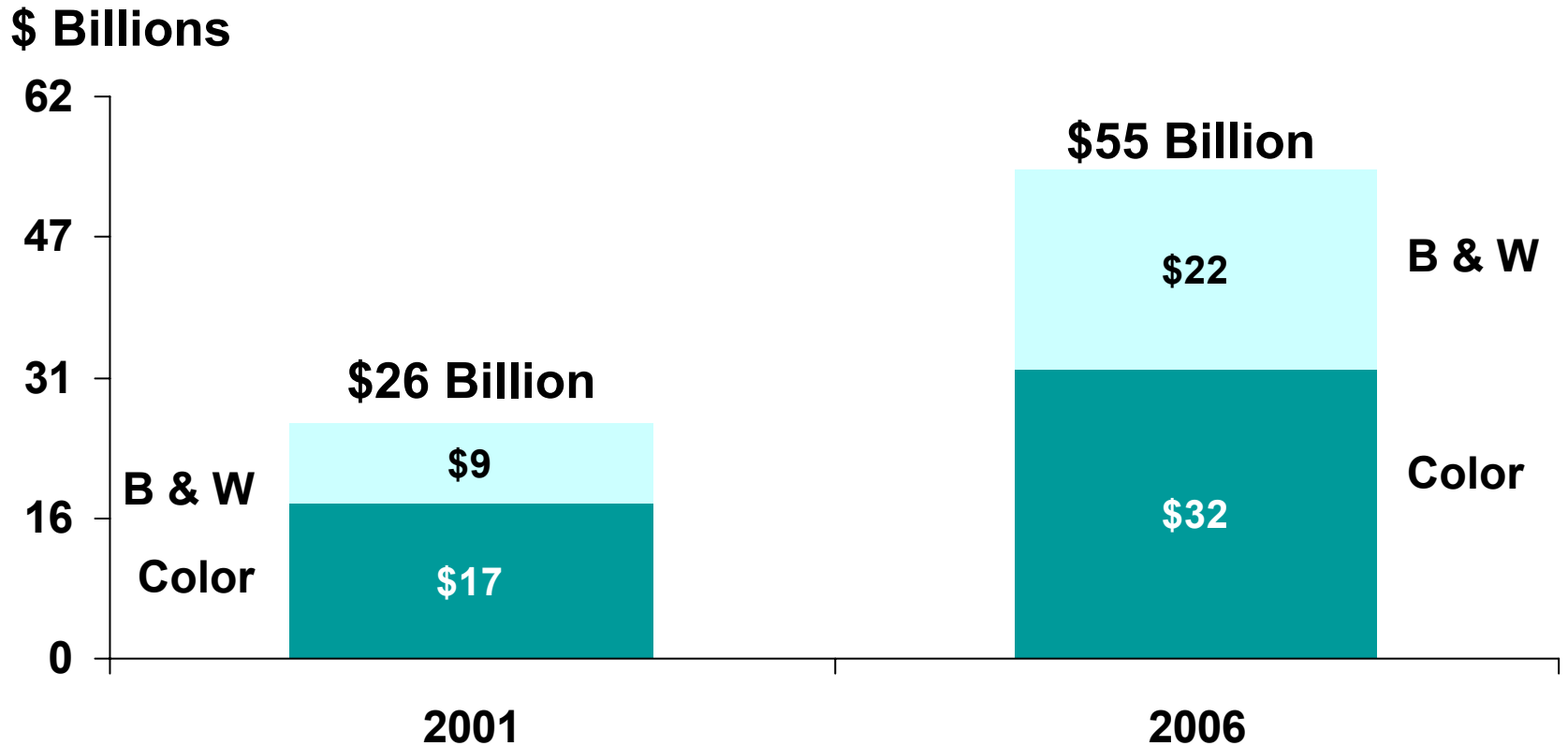


U.S. Print On Demand Market



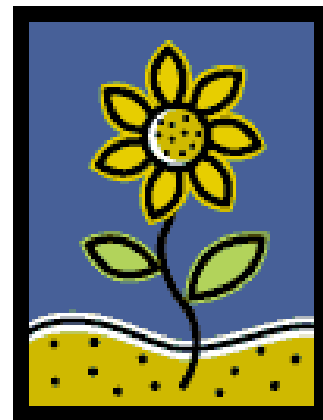
U.S. Print On Demand Market

B&W CAGR = 22%
Color CAGR = 14%



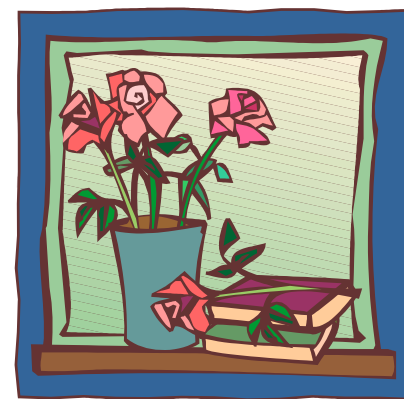
Some markets are blooming

- ▼ Copier class B&W POD devices
 - Fueled by Segment 5 & 6 Analog replacements
- ▼ Production Digital Color 24+ ppm
 - New products, new price points, new opportunities
- ▼ Direct to Press



Some markets are holding their own

- ▼ Production class B&W POD devices
 - DocuTech and 9110
- ▼ Convenience Digital Color Copier/Printers
 - Copier based devices, less than 24 ppm



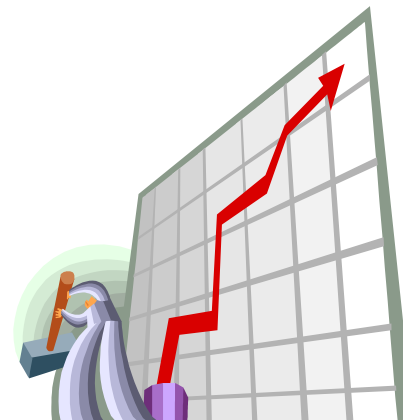
Some markets are in decline

- ▼ Analog Copiers
- ▼ Data Center B&W
- ▼ Spot Color



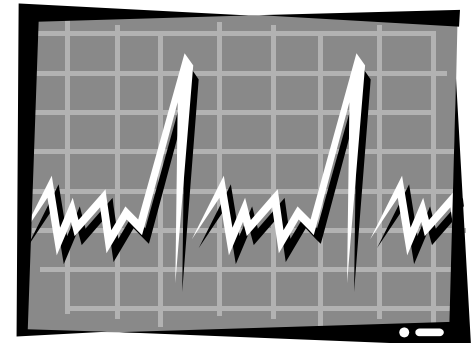
Certain Applications are Growing

- ▼ Variable data and 1:1 Print programs
- ▼ Fulfillment
- ▼ Print On Demand
- ▼ Distribute & Print
- ▼ Books
- ▼ Direct Mail



Certain Applications are Stable

- ▼ Checks
- ▼ Forms
- ▼ Tech Manuals
- ▼ Statements



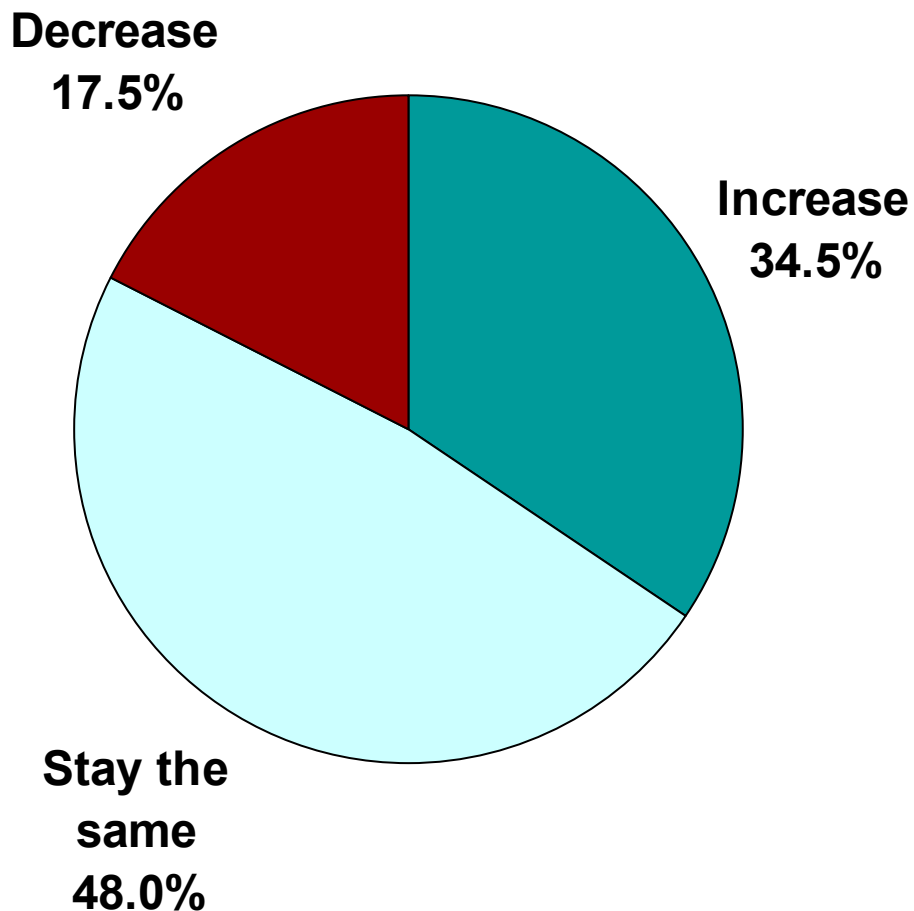
Certain Applications are in Decline

- ▼ Sys Out Reports
- ▼ Analog copying



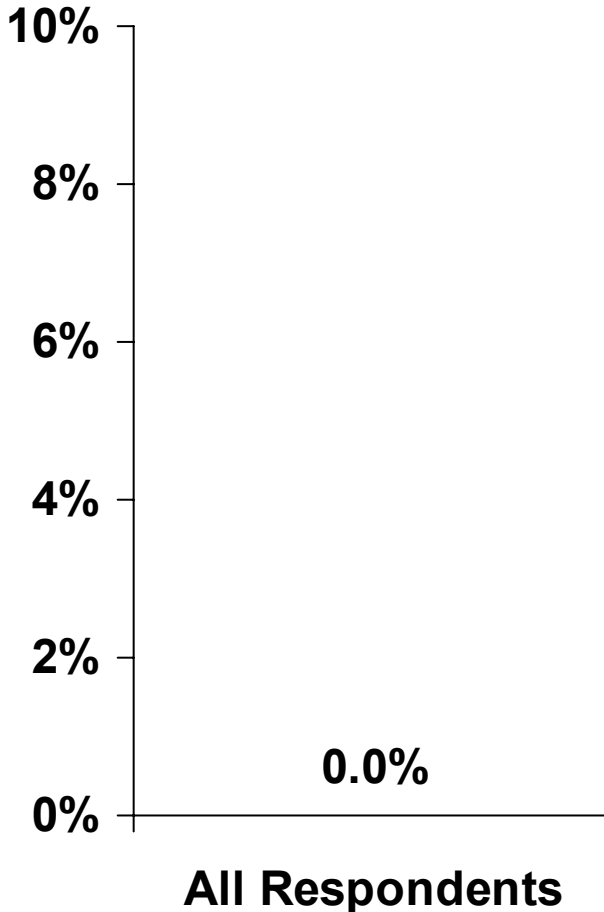
Expected Change in Print Spending in 2002

Given trends in the economy and activities of your company, along with various electronic delivery initiatives your company may have (e.g. email, Web), over the next 12 months would you say your print spending will ...?



Net Anticipated Change in Print Spending

Net change in print spending



(35% indicated an average increase of 17%)
Minus
(18% indicated an average decrease of 23%)

Every Vertical Market had Winners and Losers

▼ Best opportunities

- Companies with more than 500 employees
- Companies that buy between \$500,000 and \$999,999 annually
- Manufacturing and Health Care

Critical Trends

- ▼ The combination of changing business requirements and technology improvements in POD price/performance will combine to drive pages towards digital technology
 - Shorter run lengths
 - Just In Time
 - Personalization/Customization
 - Faster turnaround time

Critical Trends

- ▼ The Production Color POD Market is set to take off
- ▼ It will have a much greater impact on the printing industry than did B&W POD technology
- ▼ It will transform the industry
- ▼ Single largest inhibitor is retail price

Some advice

▼ Print service providers

- Drop the price of production color to \$.25
- Focus on process improvements
- Understand what clients want and sell the values of digital print
- Look for customers who are growing

▼ Equipment Vendors

- Provide honest cost data to the market
- Promote the value of Print On Demand to end-users
- Focus on open solutions
- Extend substrate support and provide Pantone Matching on digital color devices

Some advice

▼ Paper Companies

- Develop more substrates for digital equipment
- Forget the past, the digital color opportunity is just unfolding
- Price for market development

▼ Solution Providers

- Develop metrics to facilitate market knowledge
- Adopt open standards
- Clearly illustrate benefits and value proposition

Integrated Production Workflow Solutions: “Killer Apps” for an Industry in Transition

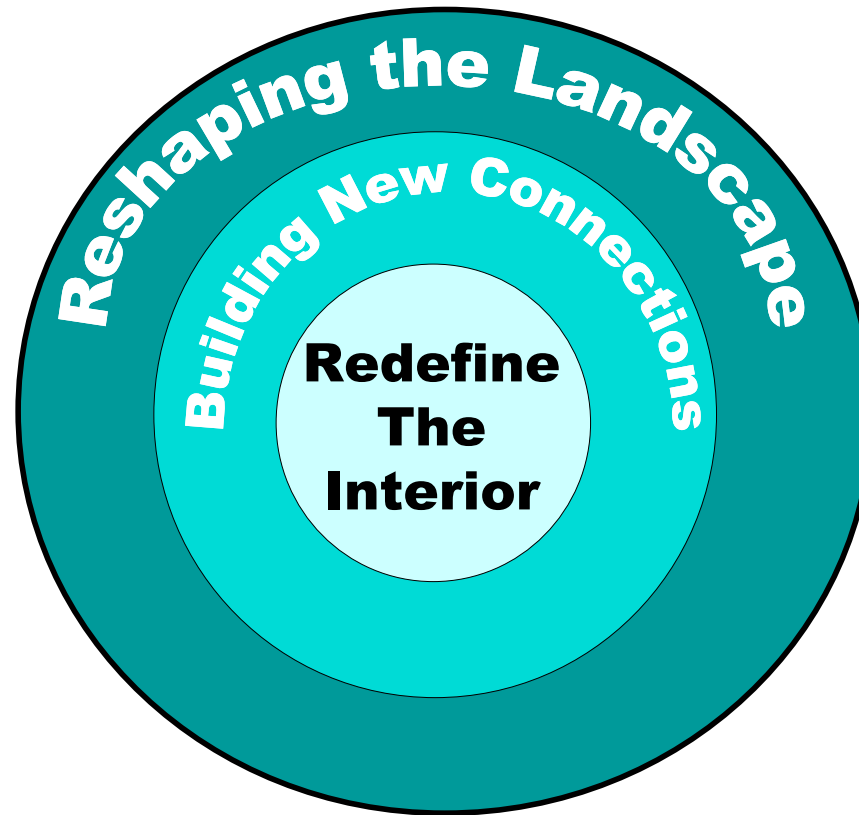


Holly Muscolino
Associate Director

April 24, 2002

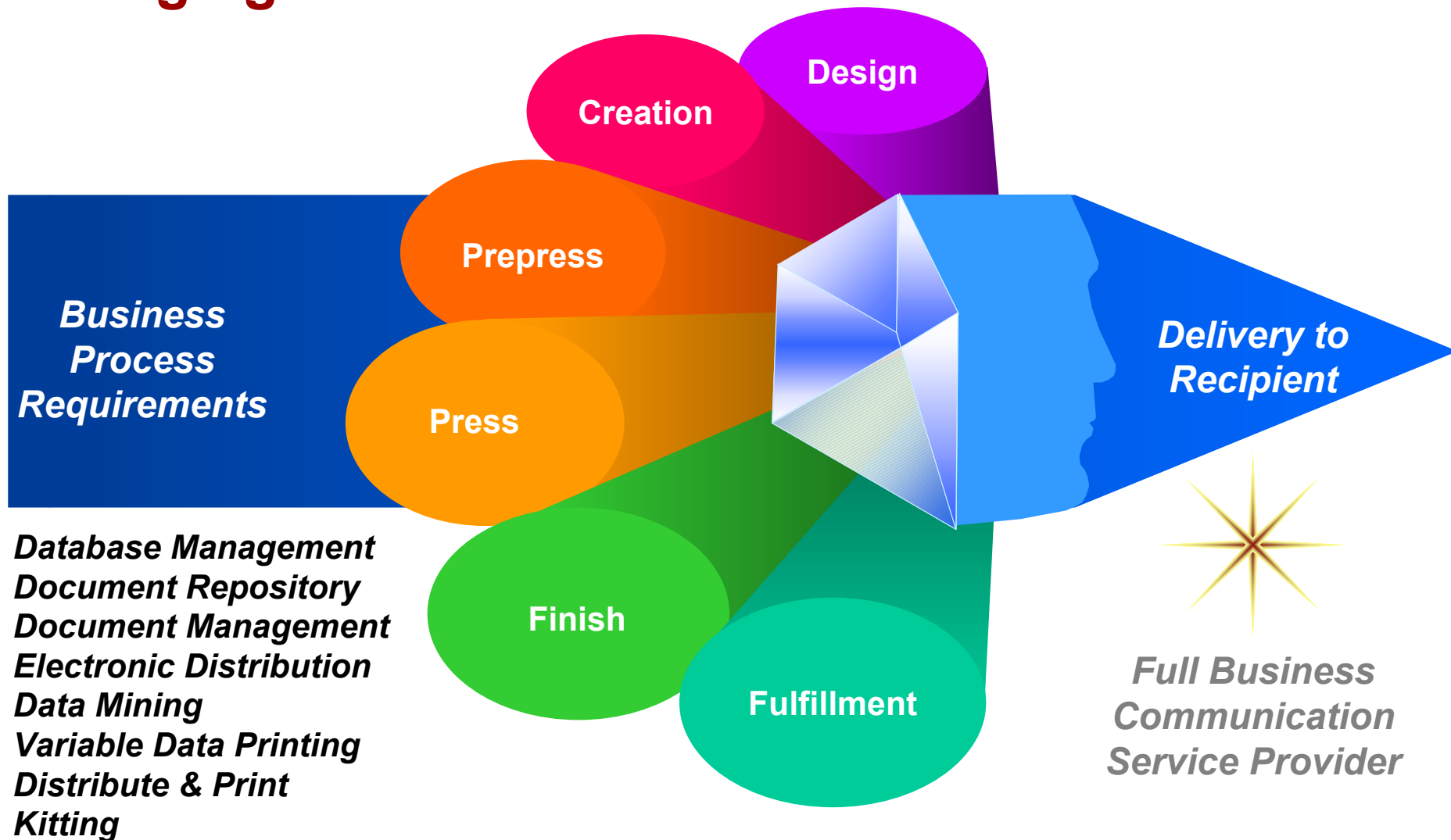
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The Three Stages of Killer App Design

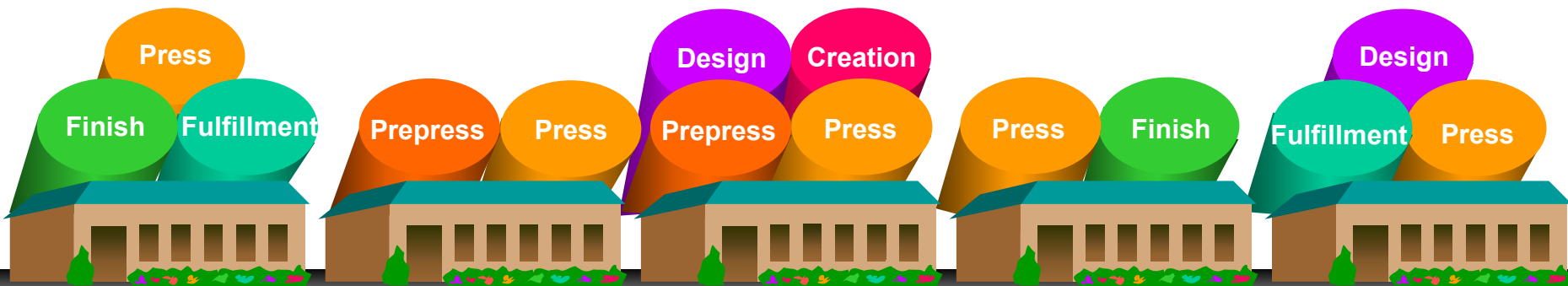


Source: Downes, Larry and Chunka Mui, [Unleashing the Killer App](#), Harvard Business School Press, 1998.

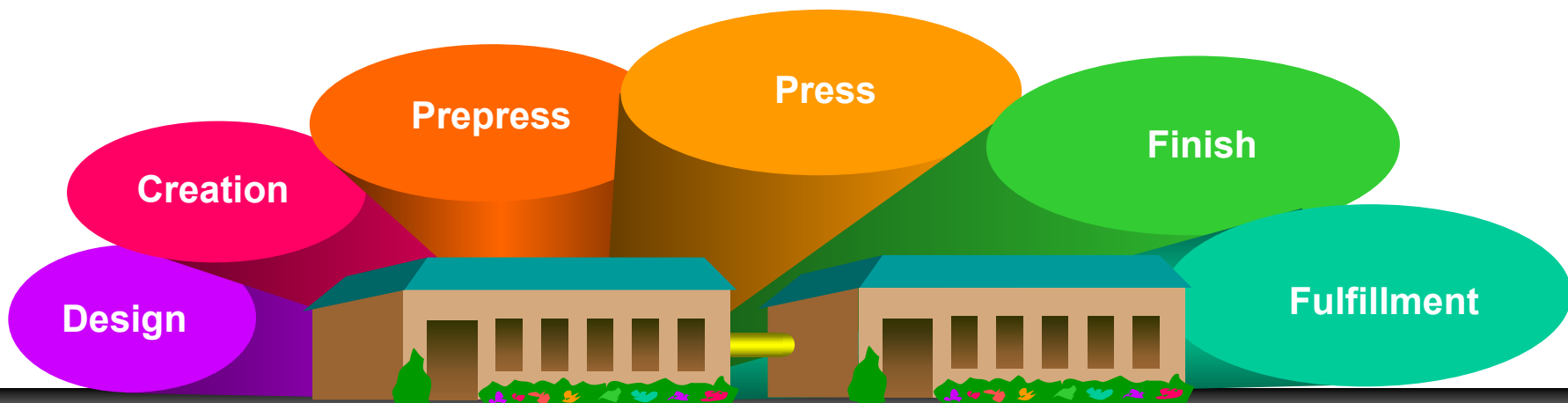
Why Software Solutions and Services? Changing Roles for the Service Provider



Fewer Printers Provide Broader Range of Products & Services

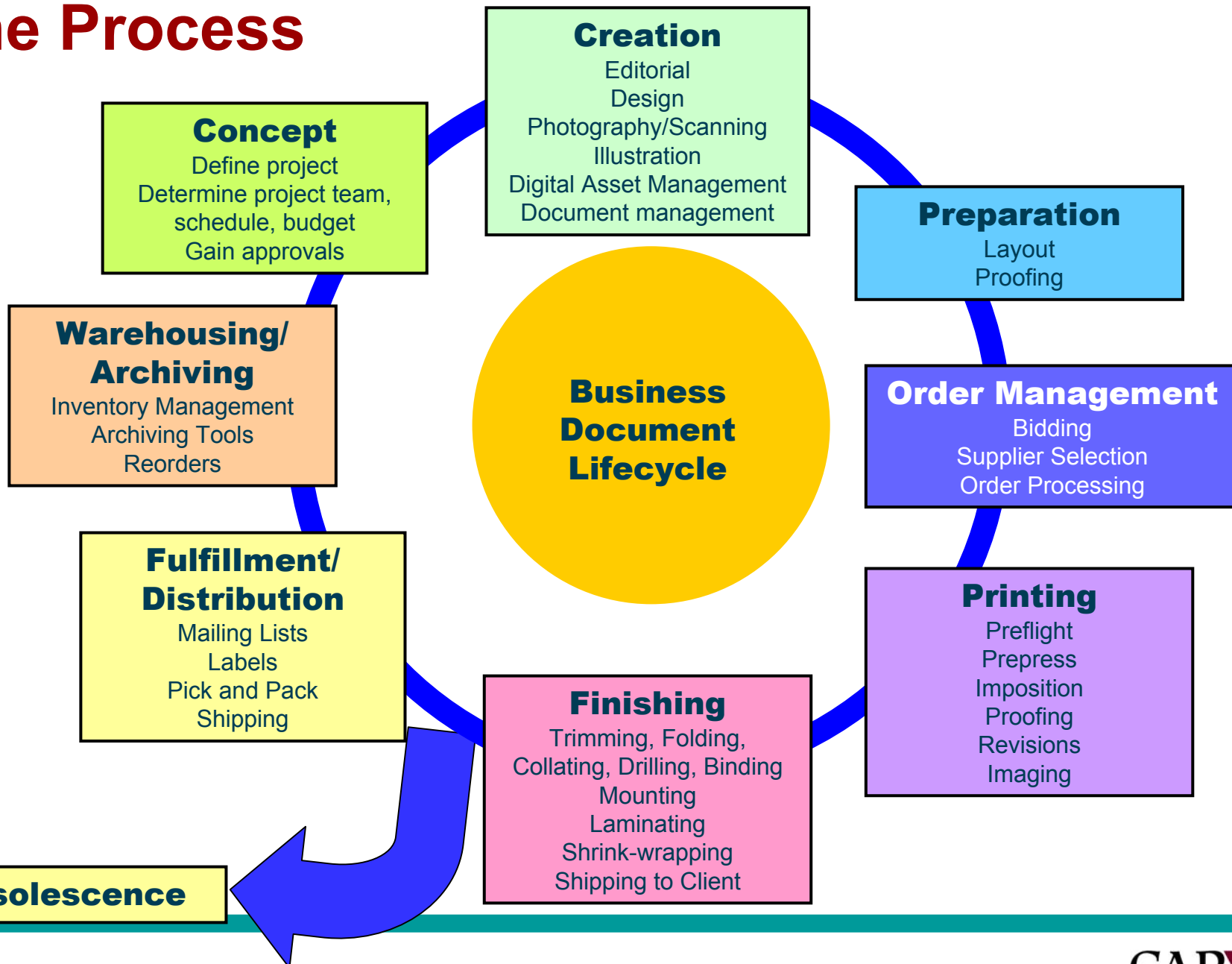


2000

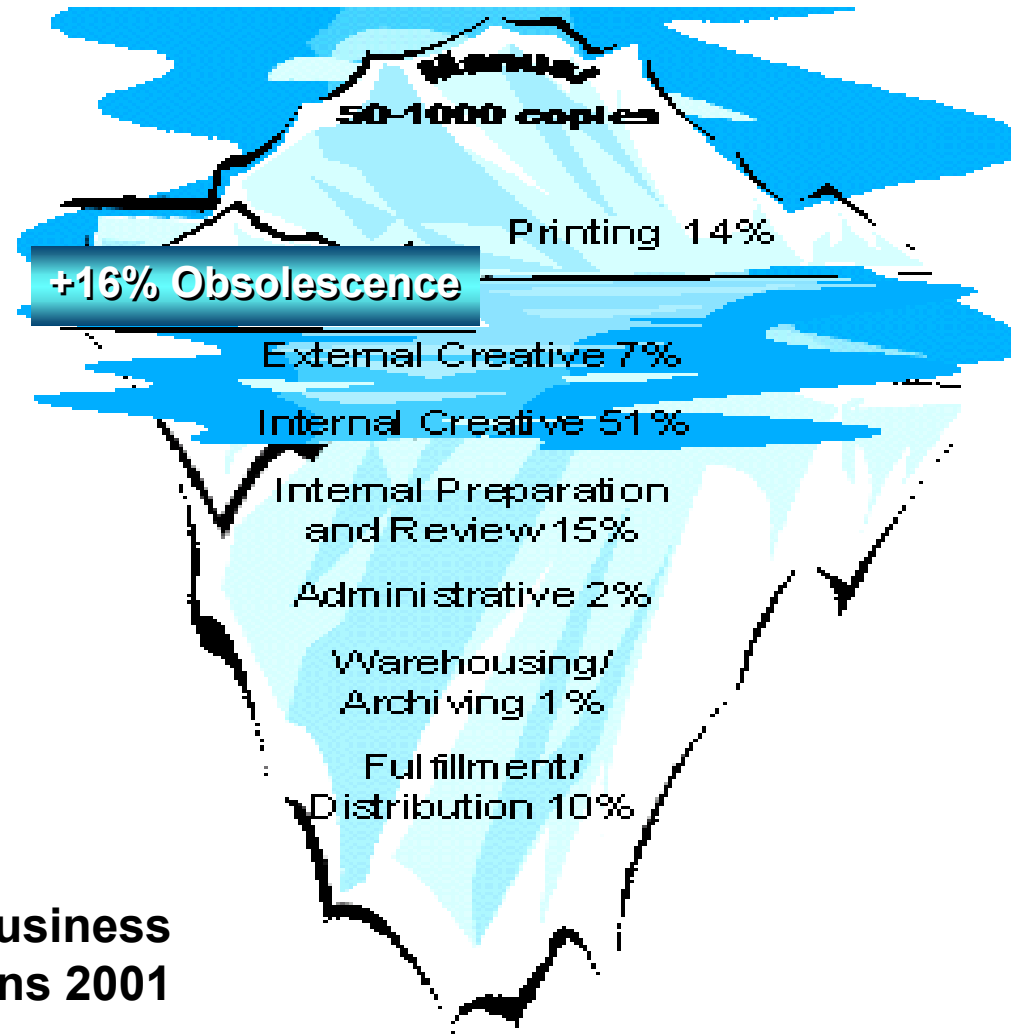


2010

The Process



Printing Costs: The Tip of Iceberg . . .



**CAPV Cost of Business
Communications 2001**

The Interfaces



Production Processes



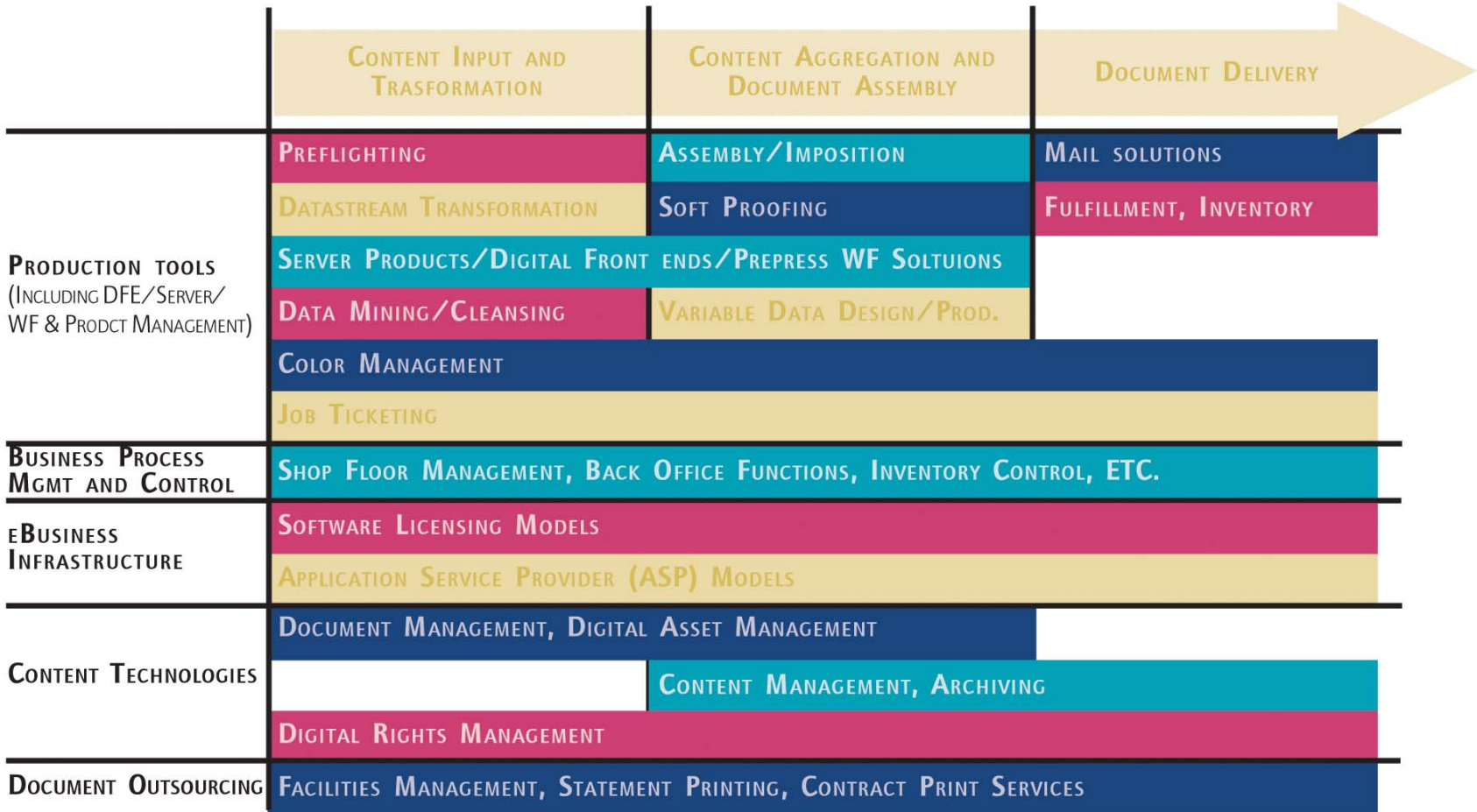
Real-Time Communication



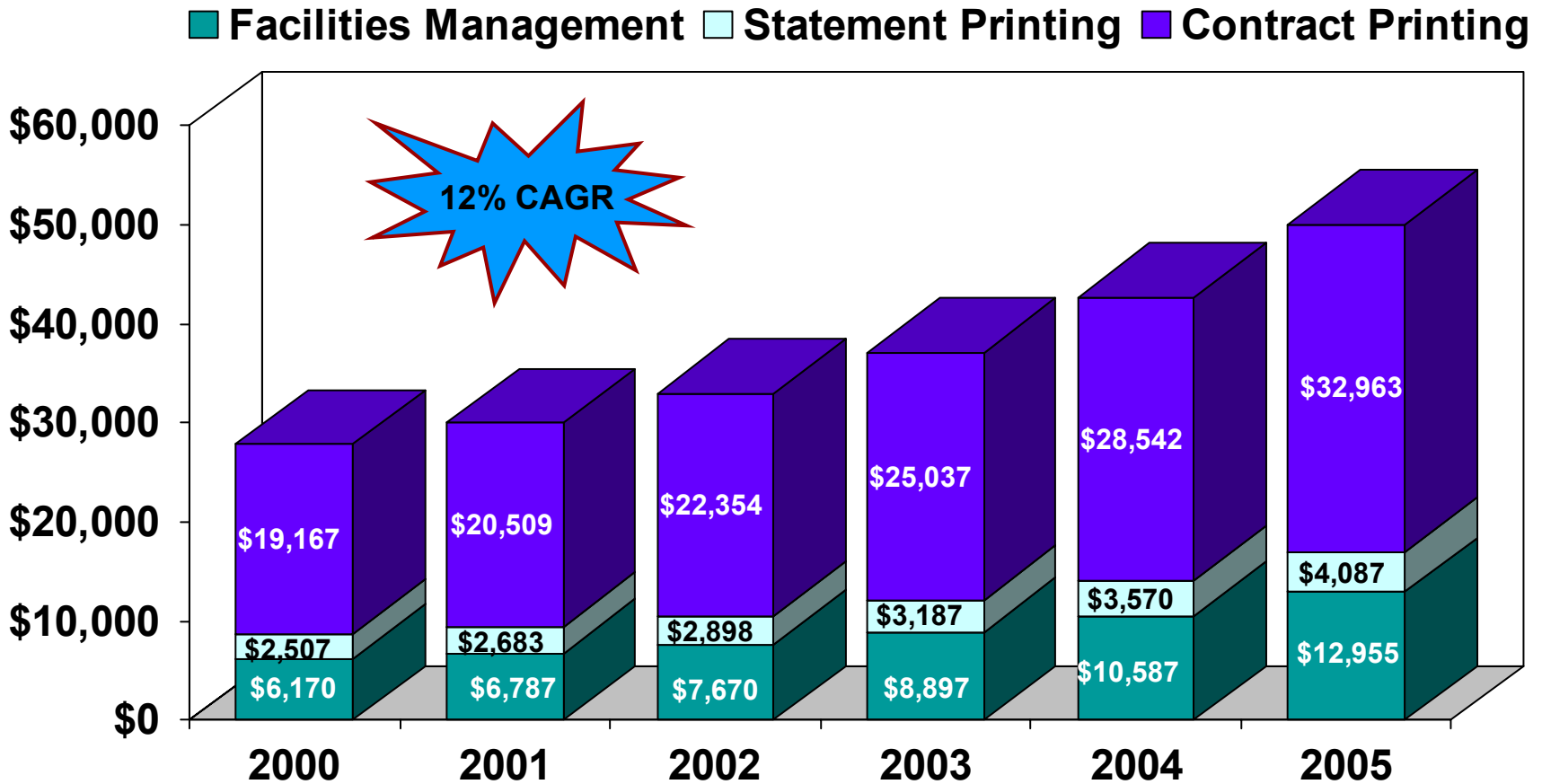
Business Processes



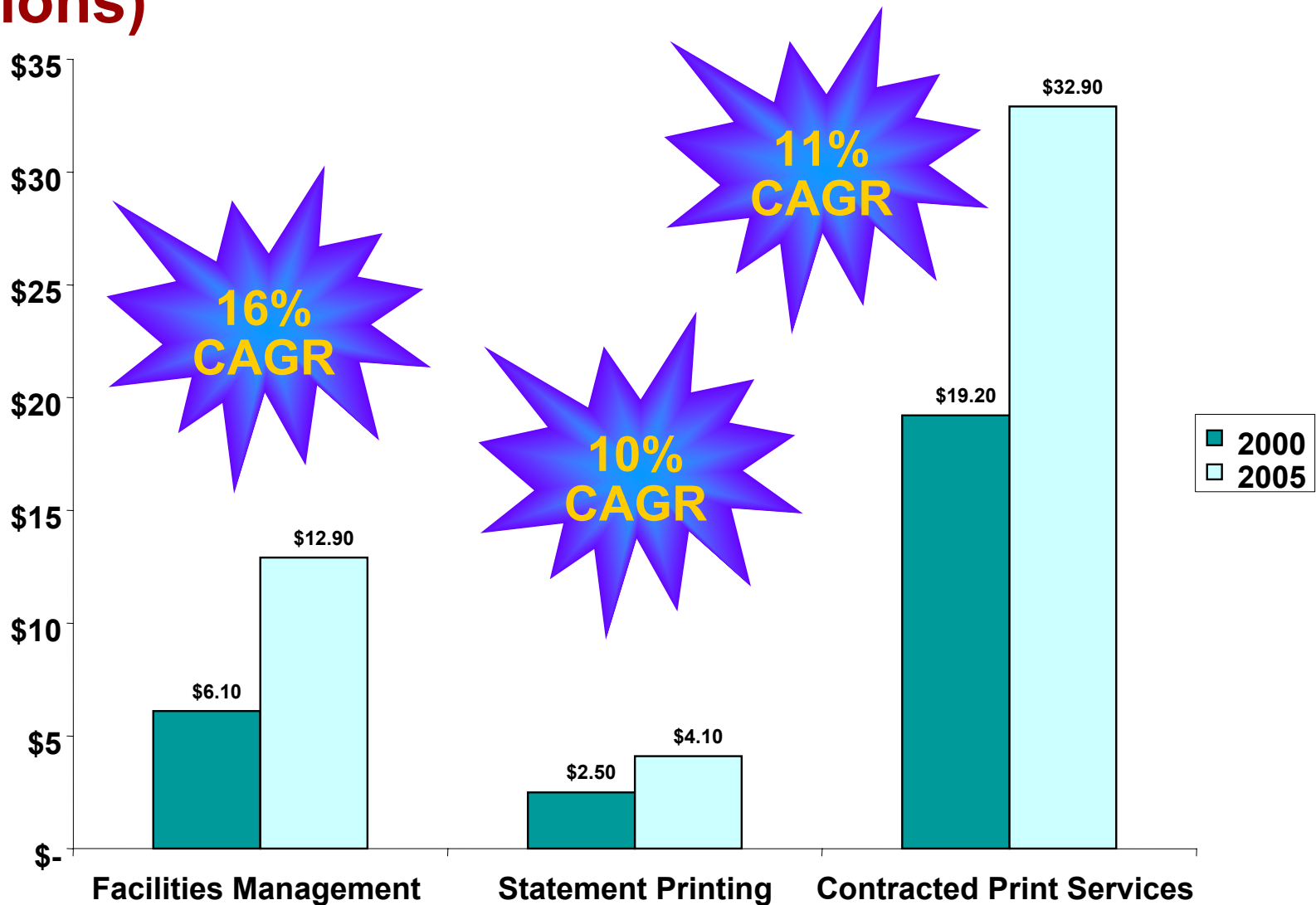
Production Workflow Solutions



U.S. Document Outsourcing Forecast by Environment (\$ Millions)

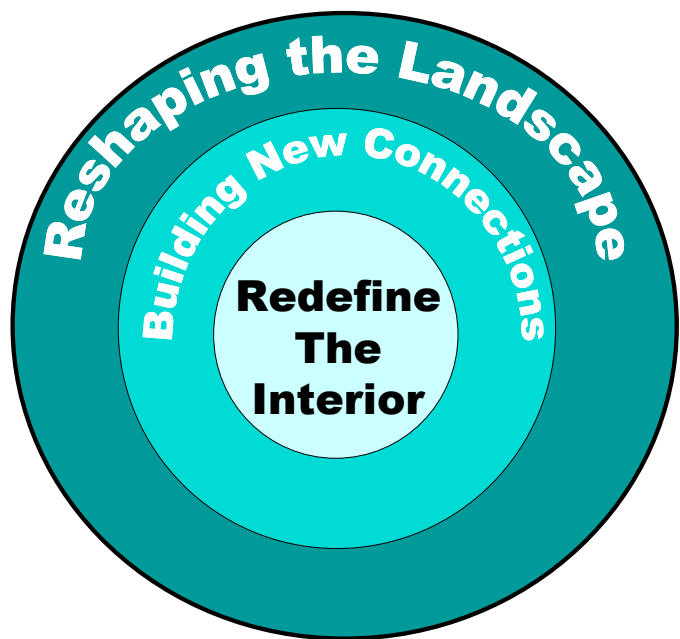


The Document Outsourcing Market (\$ Billions)



Key Trends

- ▼ Growing focus on process innovation and workflow efficiency
- ▼ Wider acceptance & growth of outsourcing
- ▼ Continued growth of non-print services
- ▼ Changes in end user requirements & processes
- ▼ Rapidly growing role of the Internet & e-business
- ▼ New digital technology and growth of print-on-demand



Thank You!



Holly Muscolino
holly_muscolino@capv.com

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CAP Ventures OnDemand Breakfast



Getting to the Root of Your Content Strategy

Michael Maziarka



CAP Ventures, Inc.. • 600 Cordwainer Drive • Norwell, MA 02061

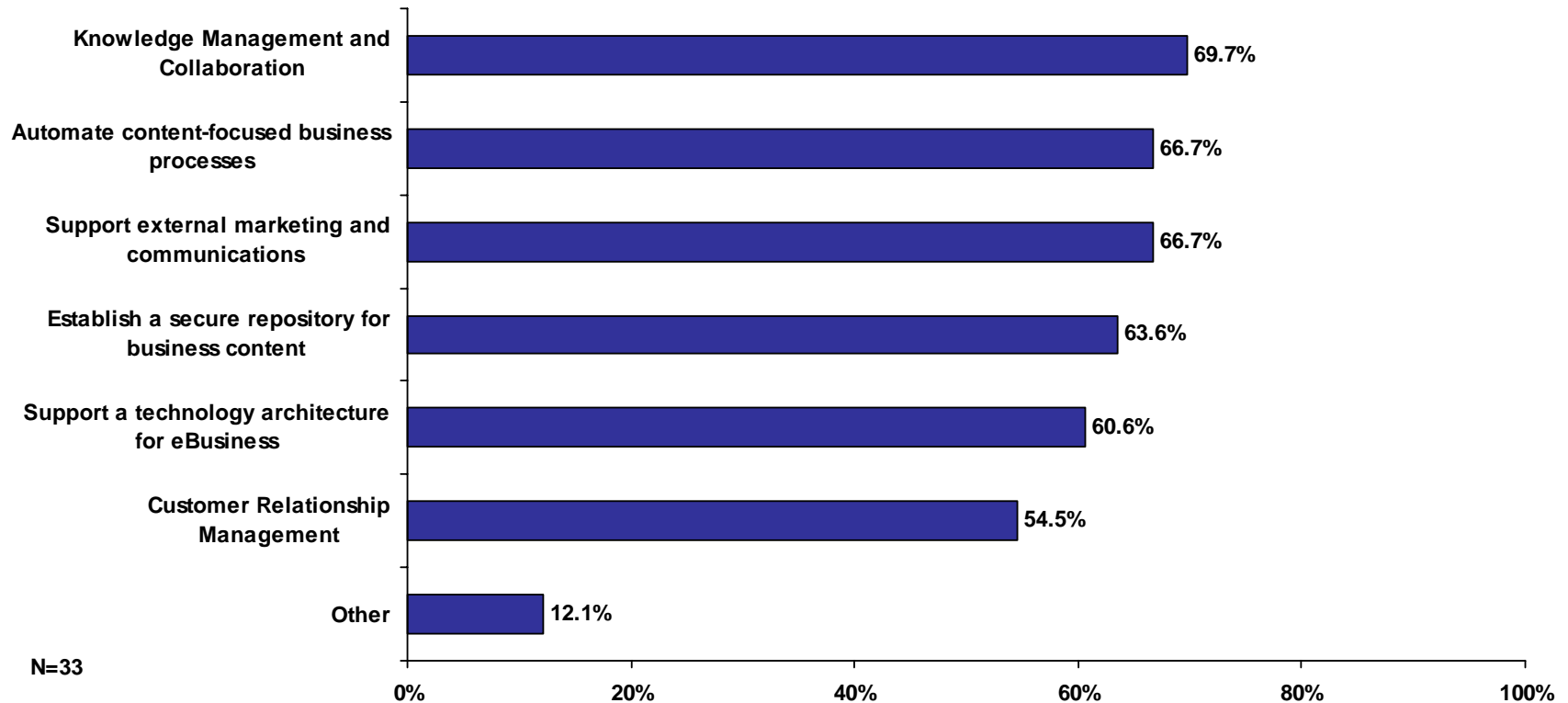
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Why is a Content Strategy Necessary?

- ▼ A Dramatic Change Underway in How We Communicate:
 - The Internet, Extranets, & Intranets
 - Print & Discard
 - Mobile Devices
- ▼ Proliferating Sources of Information & Contributors
- ▼ One to One Communication
- ▼ Geographically Dispersed Teams
- ▼ Competitive Mandates to Increase the Speed of Decision Making

Business Drivers for a Content Strategy

Which Business Needs are the Motivation for Developing a Content Strategy?



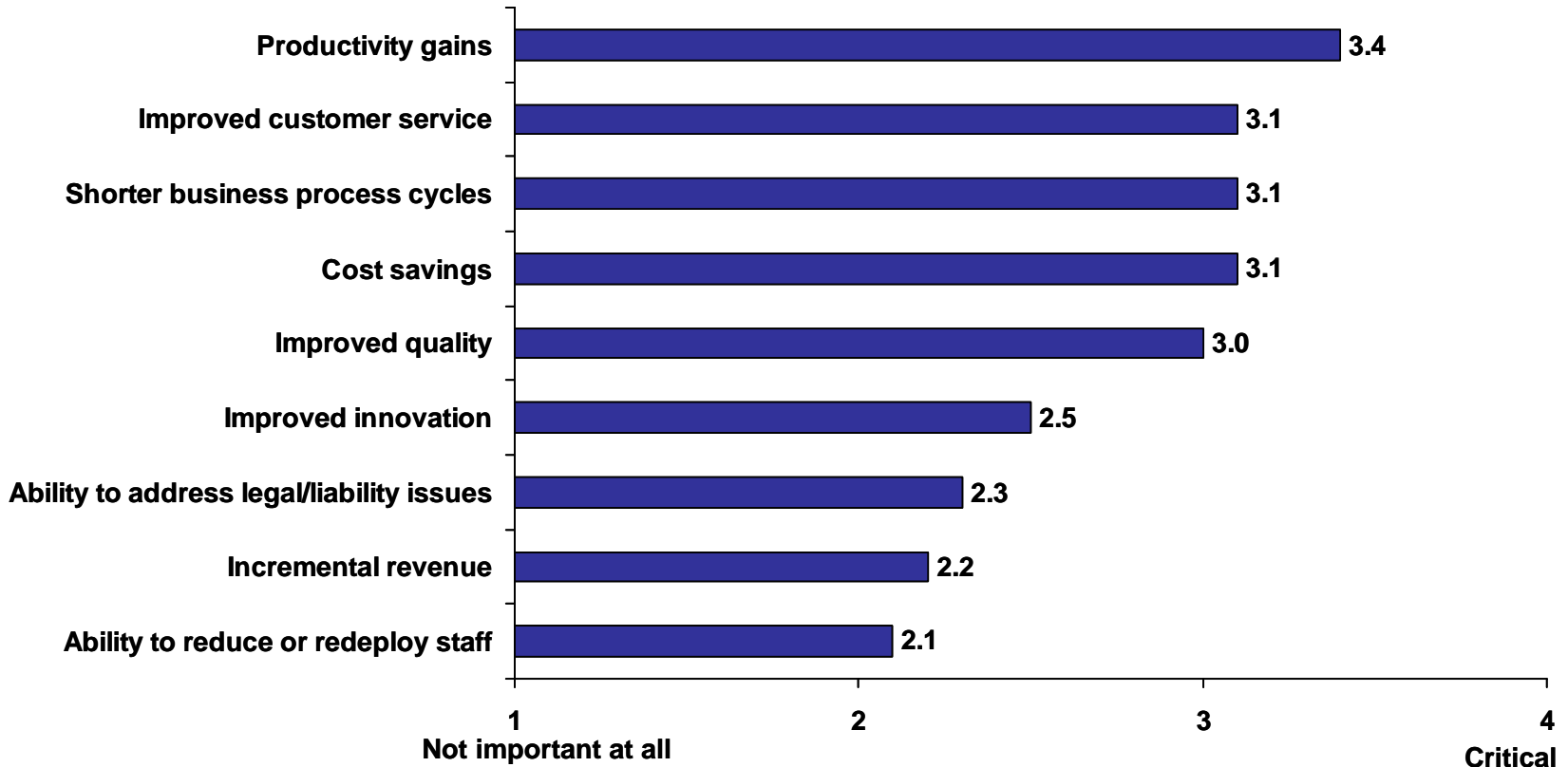
CAP Ventures, Dynamic Content Software Strategies Research, Dec 2001

Considerations for a Content Strategy

- ▼ How is Information Created and Managed?
- ▼ How is Information Obtained and Aggregated?
- ▼ How is Information Exchanged and Distributed?
- ▼ How will Knowledge Workers Collaborate?
- ▼ How will Users Interpret and Place Value on Information?
- ▼ How will Users Make Decisions Based on Information?

Fundamental ROI Expectations

How Important are Various Business Considerations When Assessing Content Projects?



N = 45 companies with content initiatives

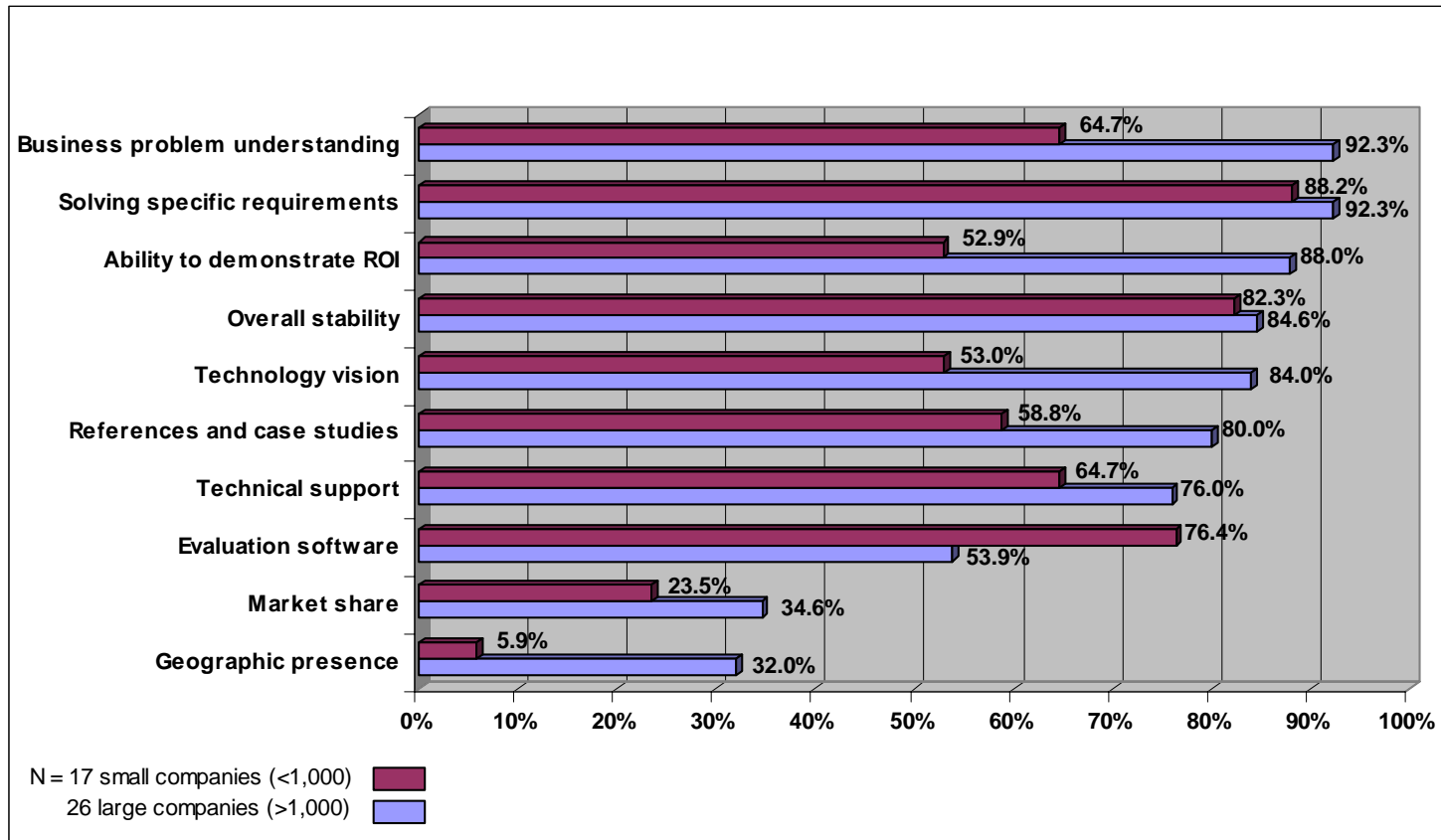
CAP Ventures, Dynamic Content Software Strategies Research, Dec 2001

The Need for a Content Infrastructure

- ▼ Information anytime, anywhere: **Multi-channel delivery**
- ▼ Knowledge management: **Collaboration**
- ▼ Capturing attention: **Rich-media**
- ▼ Customer Service: **Personalization**
- ▼ Global markets: **Localization**
- ▼ Time-to-market: **Productivity and efficiency**

Corporate Expectations for Vendors

Which are the Most Important Elements that a Content Solution Vendor Should Demonstrate?



CAP Ventures, Dynamic Content Software Strategies Research, Dec 2001

Summary

- ▼ Industry is Undergoing a Dramatic and Profound Shift in How We Communicate:
 - Improved Business Processes
 - Methods of Communication
 - Computing Infrastructures
- ▼ Information Creation and Delivery Processes Need to Span Media: Print, Web, Mobile, etc.
- ▼ Driving Need for a Content Infrastructure to Support:
 - Business Goals
 - Information Contributors & Users
- ▼ Content Solution Vendors Need to:
 - Understand Business Problem
 - Meet Technical Requirements
 - Show a Return on Investment



Michael Maziarka

maz@capv.com