



Embrace Evolution: Web-to-Print

Prepared for Pacific Printing & Imaging

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Web-to-Print Automation

Threat or Opportunity?

www.mailnetservices.com

www.mimeo.com

www.amazingmail.com

www.officedepot.com

www.efi.com

www.quantummail.com

www.printa.com

www.agfa.com

www.mailingonline.com

www.iPrint.com

www.printingforle.com

www.kodak.com

www.touchpoint.com

www.xmpie.com

www.pagedna.com

www.blefish.com

www.expresscopy.com

www.cendix.com

www.press-sens.com

www.bluestream.com

www.pageflex.com

www.kinkos.com

www.shutterfly.com

www.agemedia.com

www.printable.com

www.vistaprint.com

www.l2soft.com

www.mailersclub.com

www.usadata.com

www.myorderdesk.com

www.page.com

www.source.com

www.cactusmailing.com

www.zairmail.com

www.longtermclients.com

www.modernpostcard.com

www.nowdocs.com

www.infousa.com





Web-to-Print Automation

Printing Industry Profile

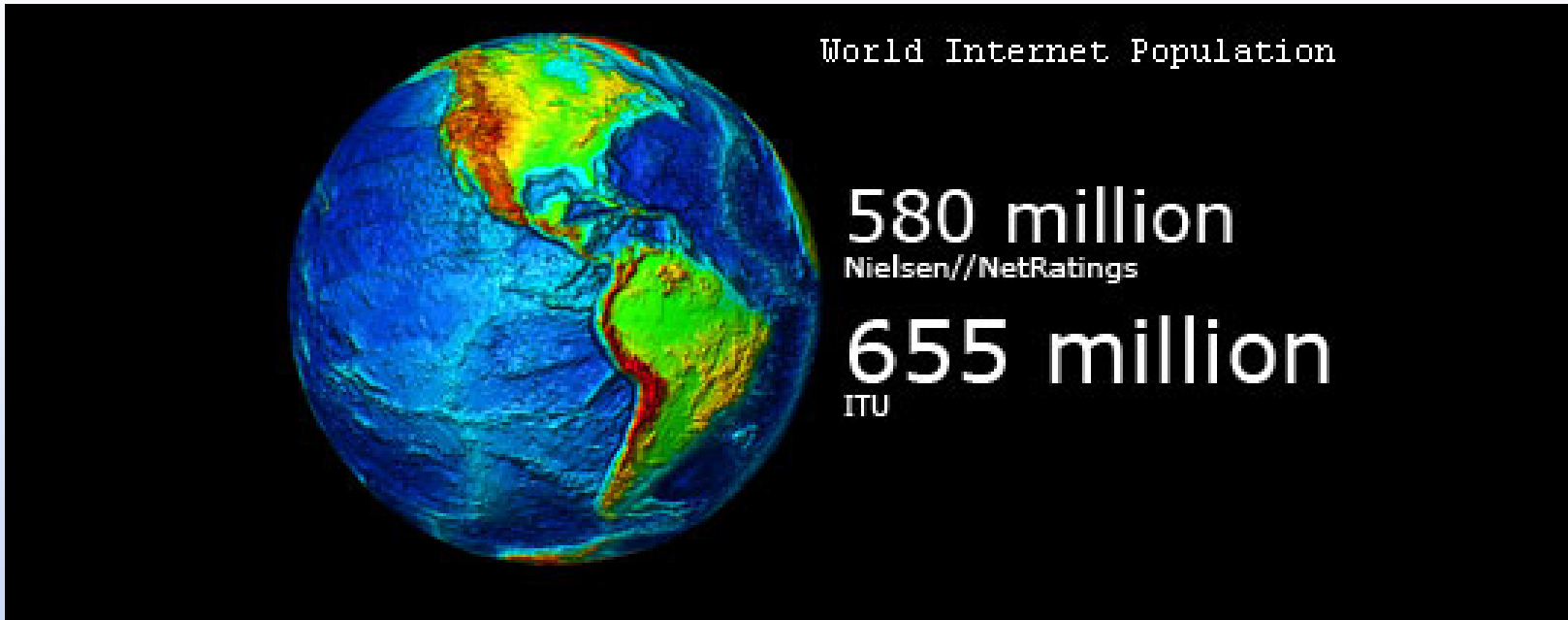
- *Capital intensive*
- *Excess capacity*
- *Commodity business*
 - *Many vendors*
 - *Similar products*
 - *Price-based competition*
- *Rapidly evolving technology*
- *Technology expertise limited*



Print is NOT Going Away; Other Mediums are Growing

Web-to-Print Automation

Internet Emergence

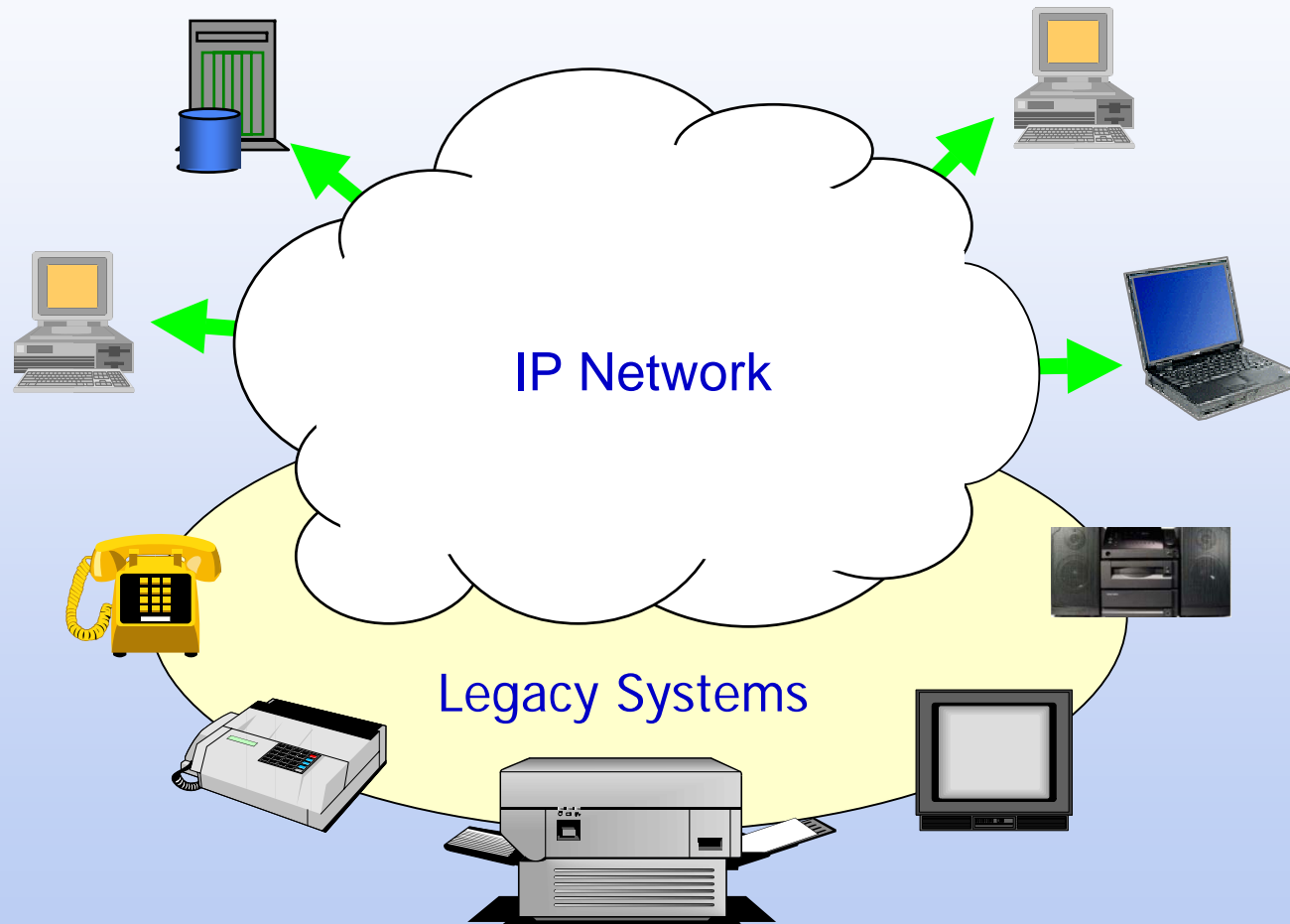


- *Ubiquitous (20% of world population online)*
- *Advantages: content rich, immediate, global reach, low friction*
- *Disadvantages: passive, separate world, communication connectivity...*



Web-to-Print Automation

Internet Convergence: *Web-to-stuff*





Web-to-Print Automation

Web-to-print Defined



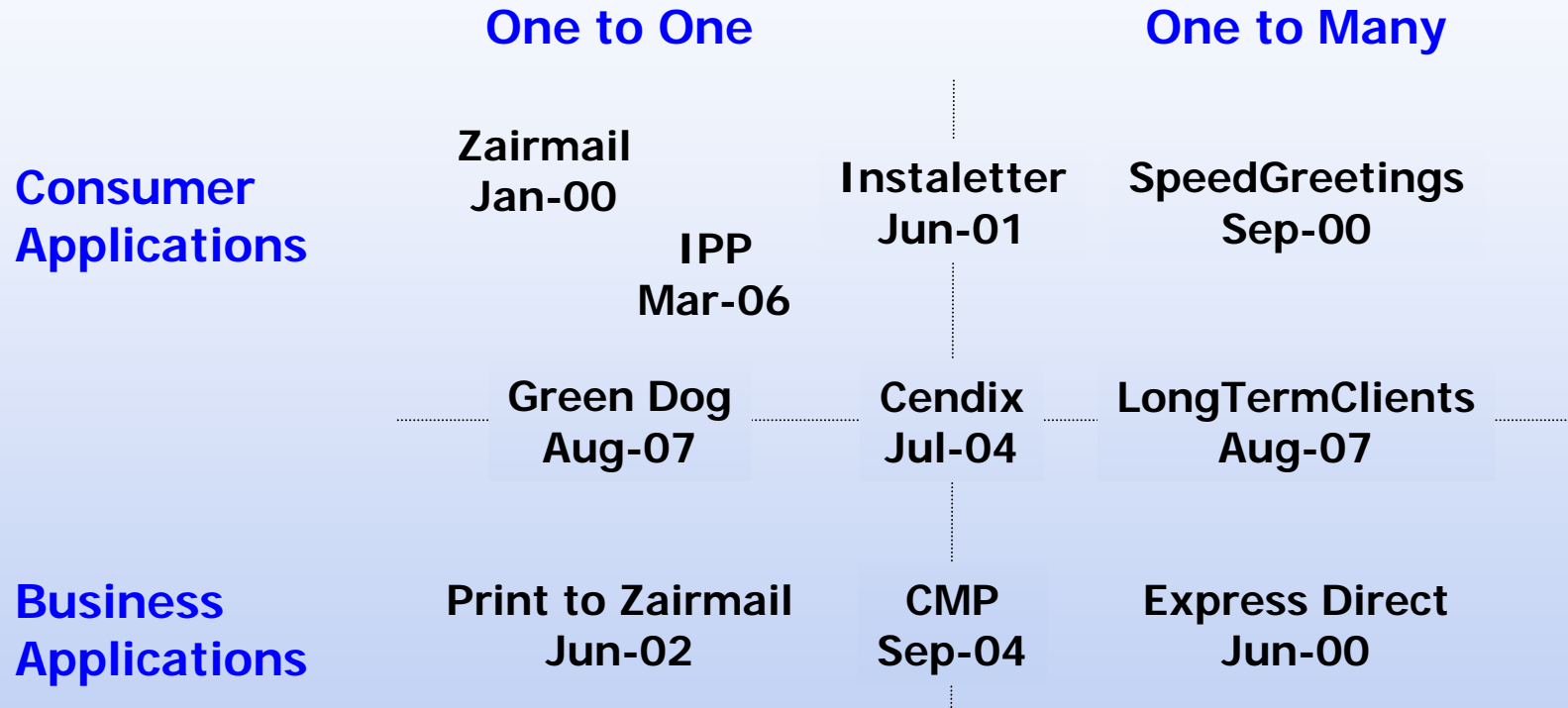
***Web-to-print** is a process that bridges the gap between digital content online and commercial print production. This process is supported by software and tools that allow print buyers (consumers or businesses) to present documents or other printed materials digitally for production by commercial print providers.*

Online tools for web-to-print can assist with digital asset management, customization, list management, scheduling, work flow, and end-to-end communication. There are a wide variety of web-to-print solutions available to solve an endless variety of customer, commercial printer, and communication challenges.



Web-to-Print Automation

Representative Cendix Applications





Web-to-Print is NOT...

Print-on-Demand

- Less waste/spoilage
- No inventory
- Inline personalization
- Increase flexibility

Print-in-Advance
Static Print

Offset

Hybrid

Digital

Variable Data
Print-on-Demand

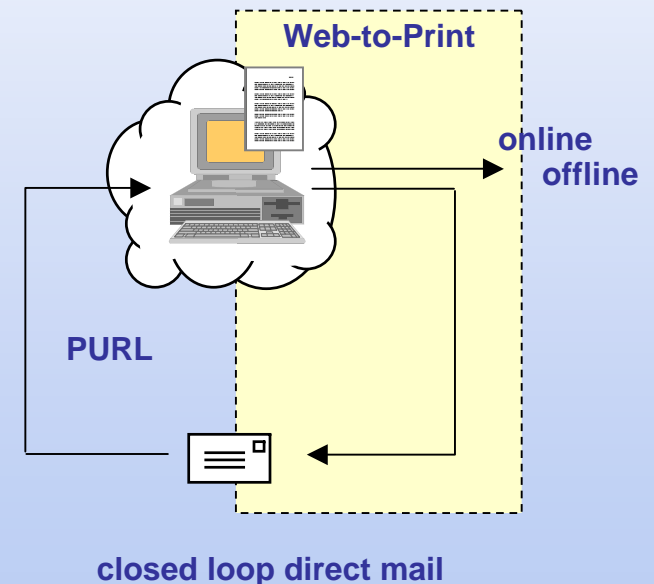
Corollary: Print-on-Demand is NOT just digital print

Web-to-Print is NOT...

PURL's

Personal Universal Resource Locator (URL) is a meaningful Web address that is used to guide responses from marketing campaigns back to a Web site where they can be captured electronically. This tool can be used with either offline or online promotions.

- Direct response mechanism
 - Guide to Web page (micro site)
 - Compliments phone/mail/Fax
 - Interactive response
- Simplifies collection/tabulation
- Streamline online responses
- Easily append list files

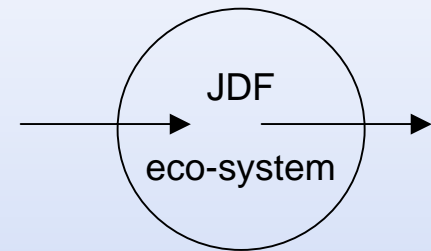




Web-to-Print is NOT...

Job Definition Format (JDF)

- Job Definition Format (JDF)
 - Electronic work-order
 - Standard XML tags
 - Standard format
- Job Messaging Format (JMF)
- Bi-directional work-flow automation
- Managed industry standard (CIP4*)
- Standard subject to interpretation
- Owning JDF devices <> using JDF
- Web-to-print possible with/without JDF



*International Cooperation for Integration of Processes in Prepress, Press, and Postpress

Web-to-Print Automation

Advantages

- *Add additional value for clients/clients of clients*
 - *Online interaction is "expected"*
 - *Improve communication*
 - *Streamline ordering*
 - *Order 24 x 7*
- *Integrate into Clients operations (symbiotic)*
 - *Reduce price-based competition*
 - *Increase switching cost*
 - *Increase margins*
- *Effective competitive response*
- *Reduce operating expenses*





Web-to-Print Automation

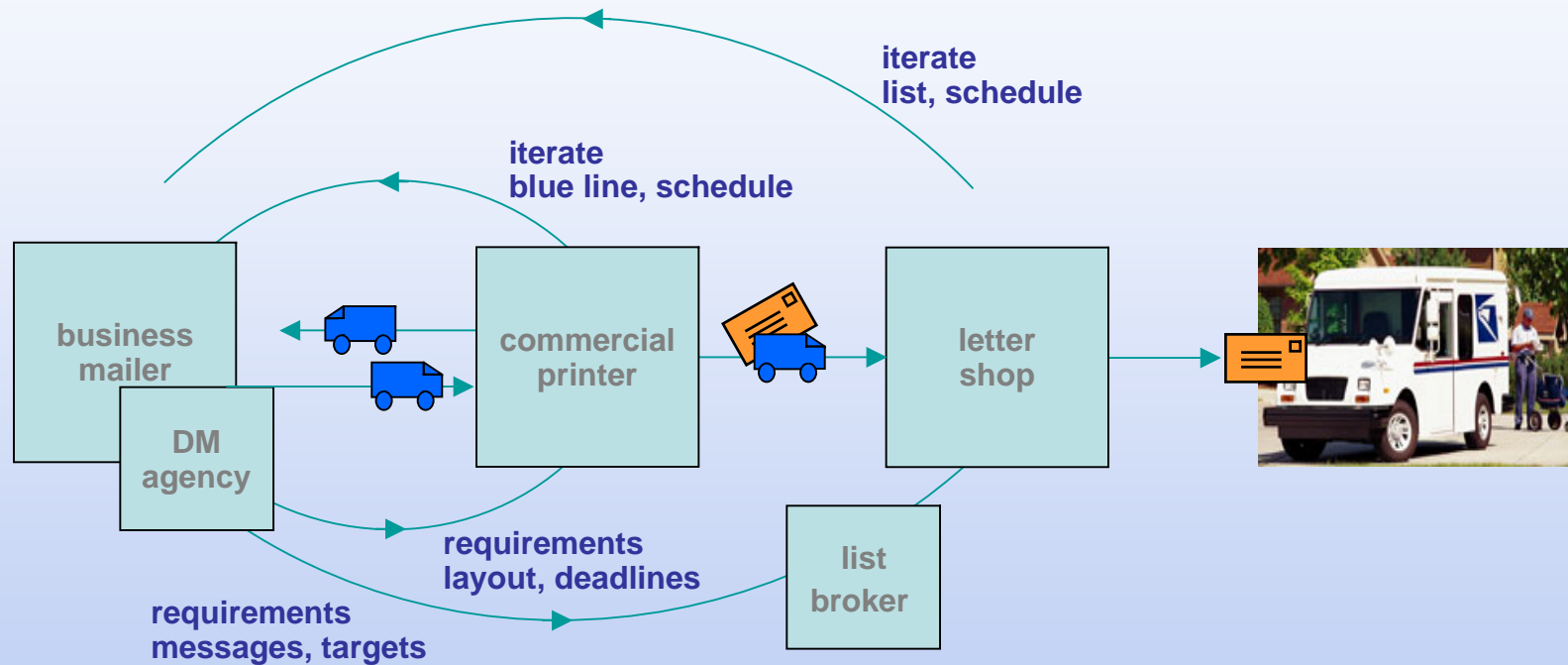
Facts of Life

- *Requires Investment (not FREE!)*
 - *Investment in software*
 - *Investment in systems*
 - *Operations planning*
 - *Sales training*
- *Things will Break*
 - *Existing processes are not fast enough*
 - *Existing processes not flexible enough*
 - *Systems are not integrated*
 - *Staff will resist change*
- *Definite Learning Curve (crawl, walk, run...)*
- *Cannot Anticipate Every Issue/Feature*



Why Web-to-Print?

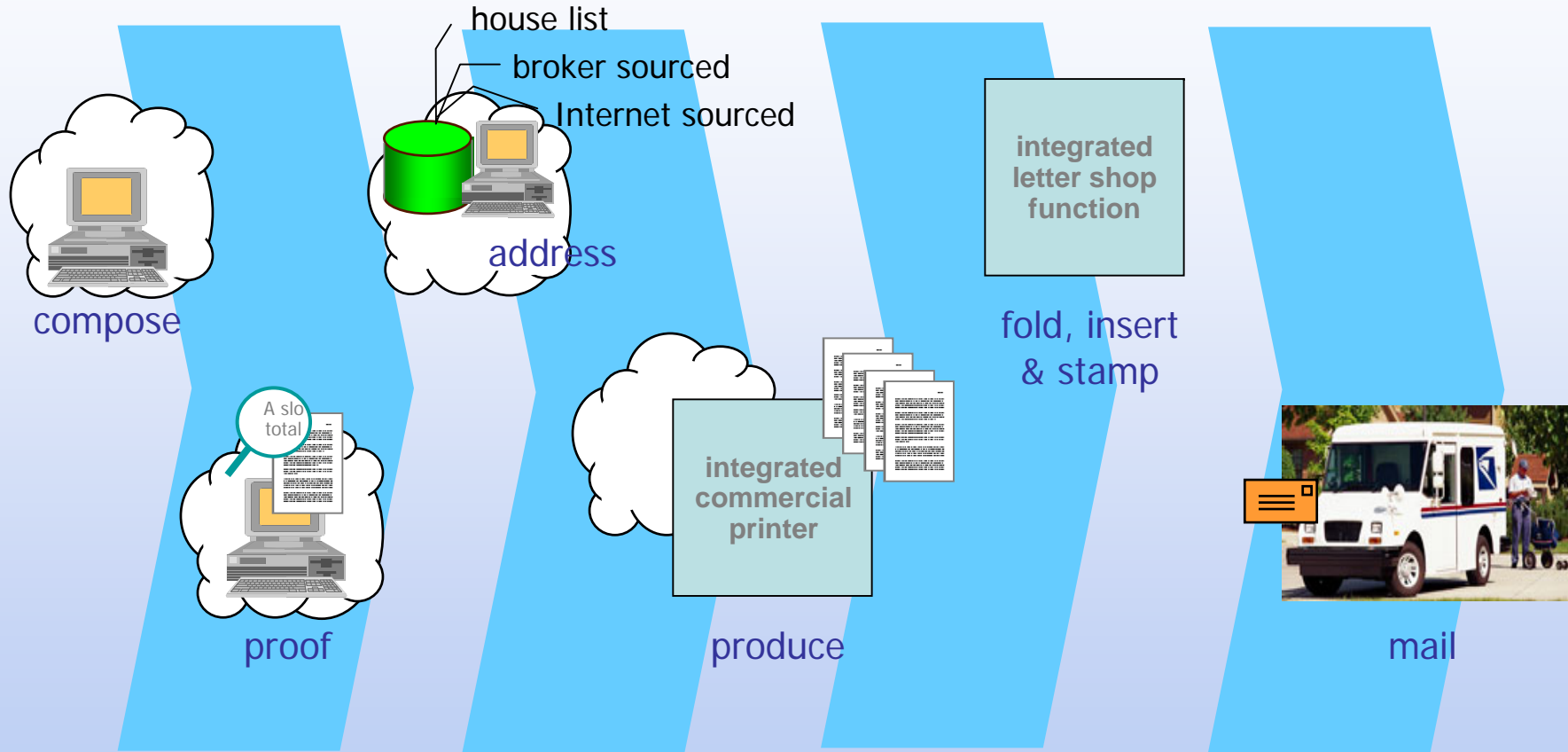
Traditional Workflow Example





Web-to-Print

Revised Workflow Example



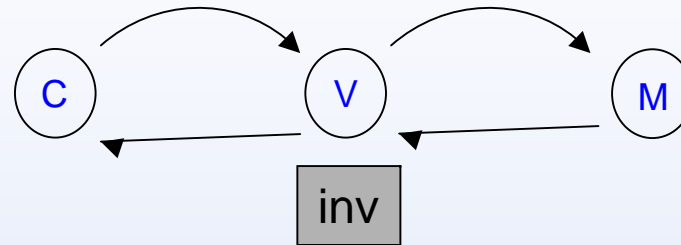
Faster, Easier, and Less Expensive



Web-to-Print Automation

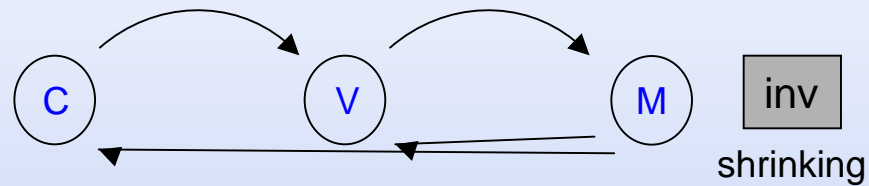
Evolve to Integrated Solutions

Traditional

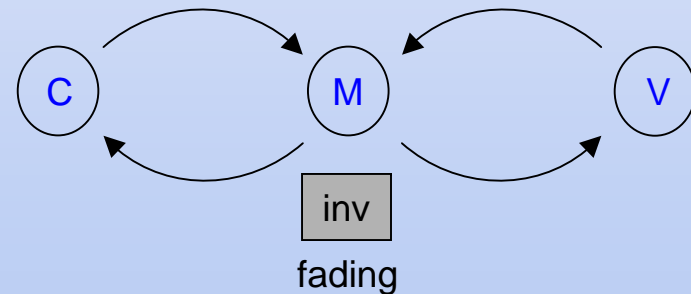


*High-Level
B-to-B*

Enlightened



Web-to-print

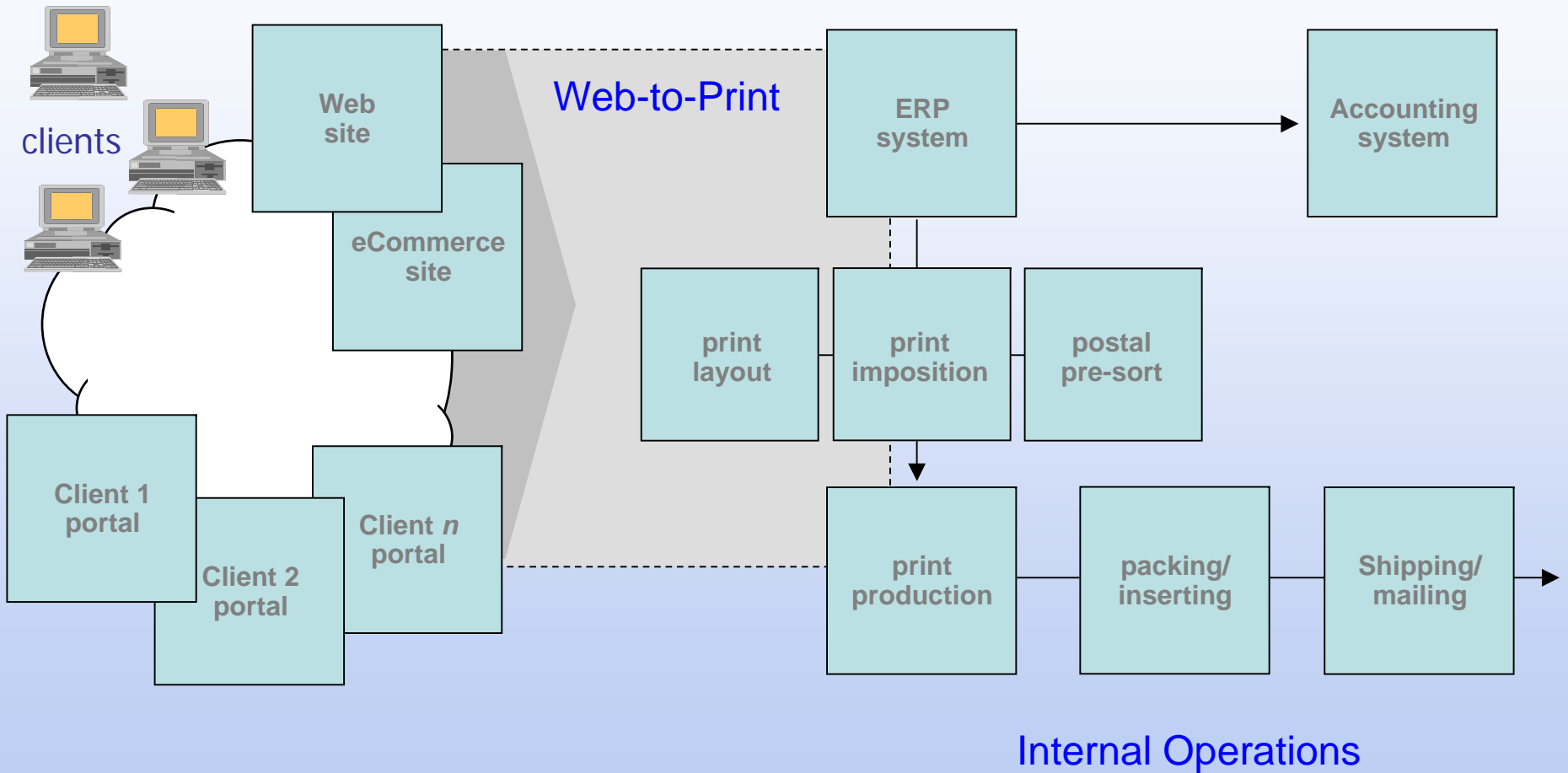


C = client/end user
M = manufacturer
V = vendor



Web-to-Print Automation

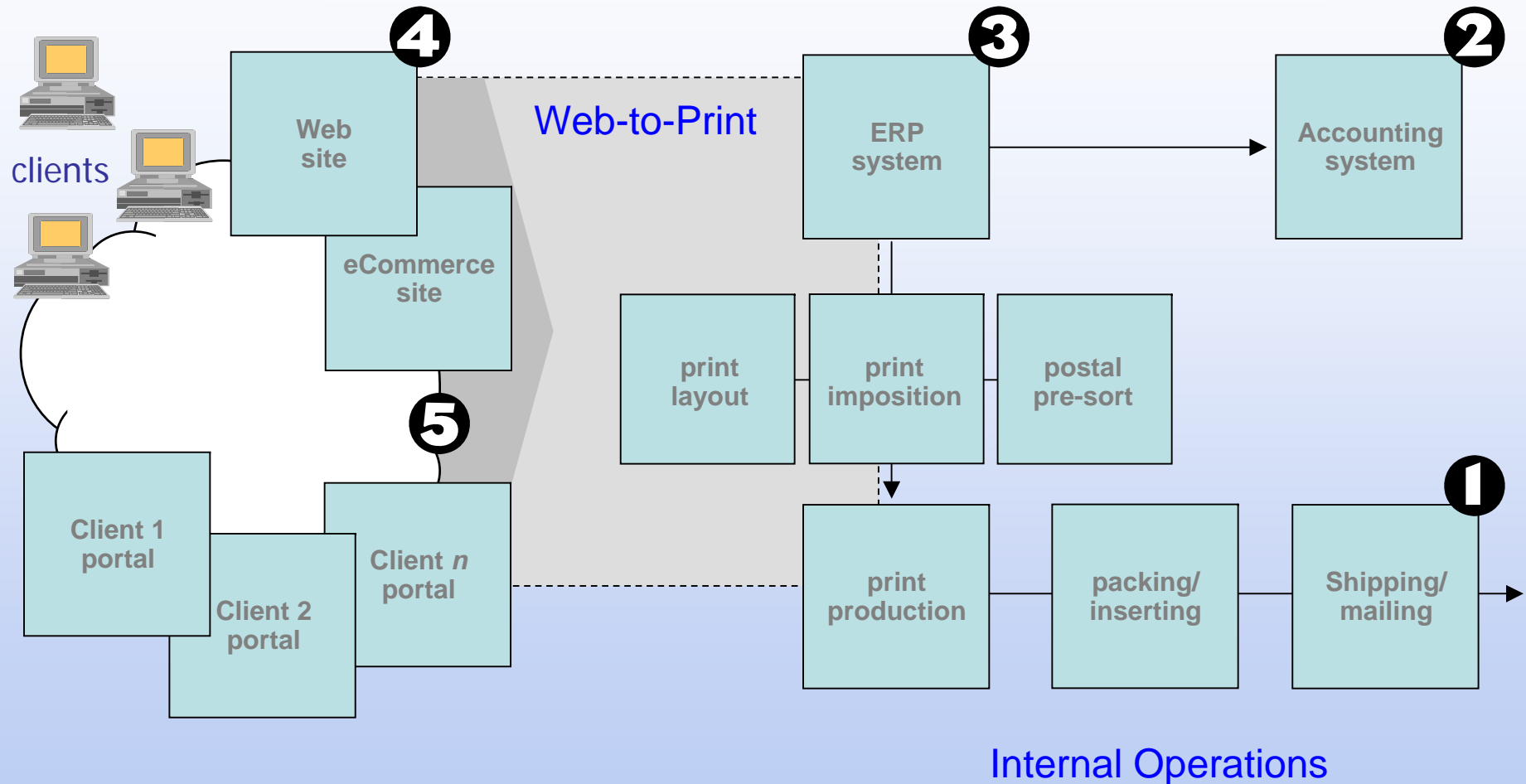
Web-to-Print System Schematic





Web-to-Print Automation

Phased System Adoption

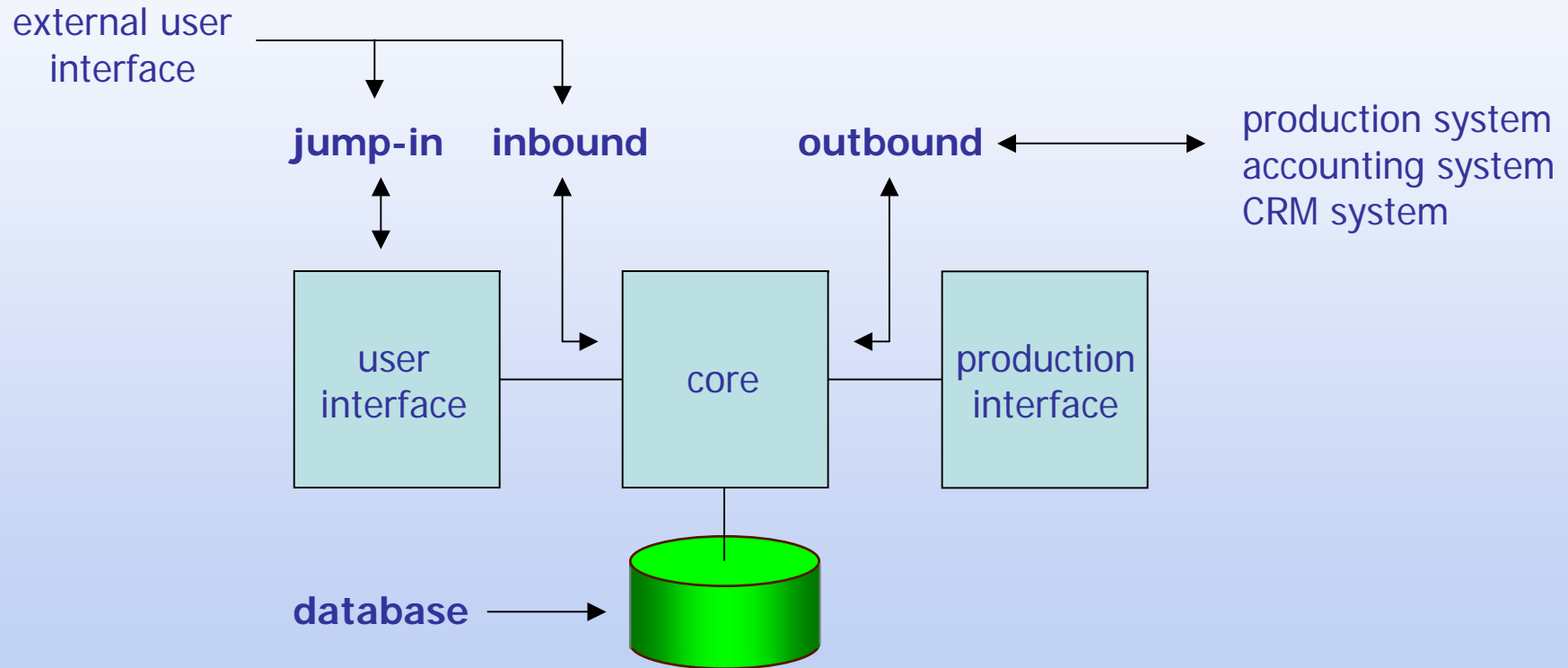




Why Web-to-Print

Application Connectivity

Application Programming Interface (Web Services)



Provides Ability to Flexibly Link to Internal and External Applications



Web-to-Print Automation

Online Maturity Model

- Corporate Web site
 - Informational
 - Products
 - Contact
- Rudimentary Automation
 - Upload files
 - Request quote
 - Online contact
- Interactive eCommerce
 - Submit orders
 - Charge online
 - Check status
- Online Applications (portals)
 - Interactive eCommerce
 - Application specific features
 - Client specific branding



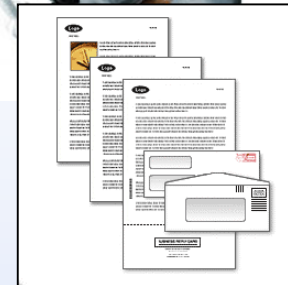


Why Web-to-Print

Factors to Consider



- **What problem are you trying to solve?**
 - Reduce costs?
 - Increase revenue?
 - Competitive response?
- **What business do you want to be in?**
 - B to B (small business, small/medium business, enterprise)?
 - B to C (standardized, customized, affinity groups)?
 - Government or other specialty market?
- **What solutions are feasible?**
 - What stage in Maturity Model?
 - How much do you have to invest?
 - What is the market window (timeline)?
 - What is level of technical expertise exists?
- **Production work-flow**
 - What other systems exist?
 - Which systems need to connect?
 - How tight an integration is required?





Web-to-Print Automation

Solutions Available: *Enterprise Software*

Advantages

- Unlimited Portals

Disadvantages

- Price: \$30K - \$100K
- Customization cost
- Annual maintenance
- Upgrades & integration
- Hardware & systems required
- Software experts required
- No design support

Do You Want to be in the Software Business?



Web-to-Print Automation

Solutions Available: *On-Demand Software*

Advantages

- Usage-based license
- No systems required
- No software required
- No technicians required
- Inexpensive initial license
- No upgrades & integration
- No annual maintenance
- Enterprise data center

Disadvantages

- Limited customization
- 3rd party customization
- No design support

Can You Meet the Unique Needs of Your Customers?



Web-to-Print Automation

Solutions Available: *Hosted Solution*

Advantages

- No systems required
- No software required
- No technicians required
- Inexpensive initial license
- Inexpensive monthly hosting
- Extension of technical staff
- No upgrades & integration
- No annual maintenance
- Enterprise data center
- Design support

Disadvantages

- Inexpensive monthly hosting
- Low customization charges
- Portal licensing charges

Are You Comfortable With Your Partner?



Web-to-Print Automation

Pricing Models

- Enterprise Software
 - License (\$30,000 - \$100,000+)
 - Customization
 - Maintenance
 - Integration
- On-Demand Software
 - Subscription fee
 - Template based
 - Transaction based
- Hosted Solution (\$1,000 - \$10,000+)
 - Initial license
 - Monthly hosting
- Cover cost or pass-through

Web-to-Print Automation

Launch Process

- Solution
- Requirements
- Graphical appearance
- Implementation
- Pilot test
- Launch
- Promote
- Refine



Web-to-Print Automation Promotion

“Build It and They Will Come”

- Client Application
 - Announce
 - Train
 - Direct
- Retail Offering
 - Announce
 - Promote
 - Online
 - Offline
 - Refine



Well, Not Really...



Web-to-Print Solution

Marketing Example: Zairmail

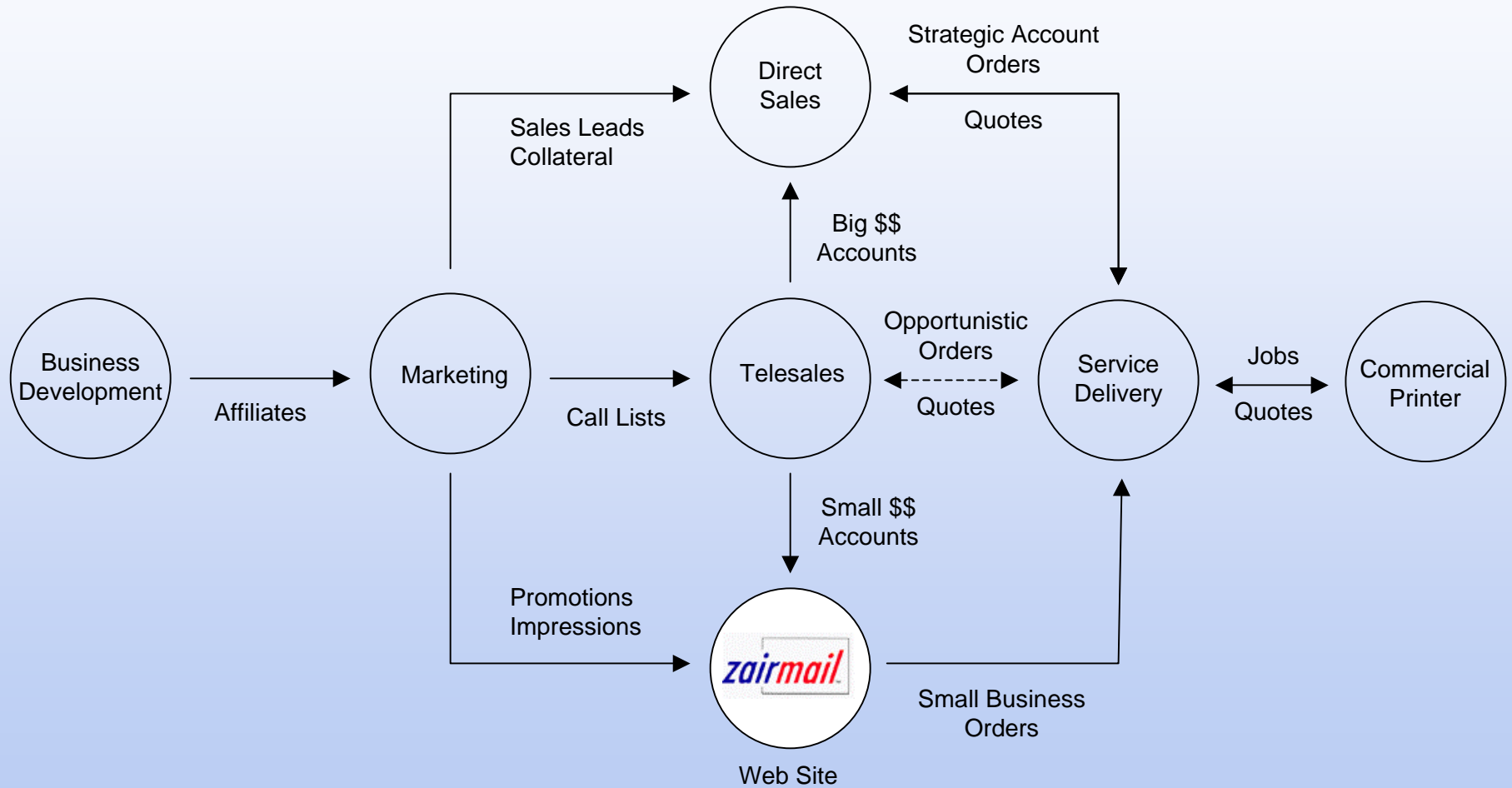


- Viral Marketing
 - URL on every mail piece
 - URL and offer on every email
 - Company logo on every article and newsletter
- Multiple Points of Contact
 - Order online
 - Toll free number
 - Free sample packet
 - Free email newsletter
- Online Marketing
 - Search engine optimization (organic listings)
 - Pay for performance (paid listings)
 - Contributed articles
 - Paid placements




Web-to-Print Solution

Marketing Example: Zairmail



Web-to-Print Automation

Summary

- No Need to Fear Evolution
- Web-to-print Breeds Opportunity
 - Add additional value for clients
 - Integrate into clients operations
 - Reduce price-based competition
 - Increase switching costs
 - Increase margins
 - Respond to online competitors
 - Reduce operating expenses
- Avoid the **ICE** 
- Embrace Technology and Thrive!





CENDIX

Technology that Delivers

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CEO
Cendix



Wilson Zehr

Wilson is the CEO of Cendix (www.cendix.com) the leading provider of Web-to-print solutions that increase sales both online and offline. Cendix also provides strategic and tactical marketing consulting services for emerging growth companies in the Pacific Northwest. In addition, Wilson serves on the faculty for the School of Management at Concordia University, Portland, Oregon (www.cu-portland.edu).

Wilson Zehr has 25 years experience in high technology and telecom – over a decade of experience working with Internet-related products and services. He has created numerous new products/brands and successfully brought them to market. In addition, he has crafted and managed strategic alliances with many (20+) of the largest technology and communications firms in the world. Mr. Zehr is a serial entrepreneur who has raised over \$60 million from investors; returned over \$160 million; and bought/sold a number of enterprises.

More detailed background information on Wilson can be found at <http://www.cendix.com/about/management.html>

References are available on request