

# **“Document Design on a Dime” Taming Your Unruly Information**

**San Luis Obispo  
Society for Technical Communication**

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Jeff Deskins**

# About Me

- Principal Consultant at JustSystems Inc.
- 20+ years experience in information development technology
  - Air Force Flight Line
  - Technical Writer
  - SGML
  - XML and related technologies
- Contributes to international standards:
  - S1000D
  - Air Transport Association
  - OASIS DITA Technical Committee
  - OASIS DITA Learning and Training Subcommittee
  - OASIS DITA Machine Industry Subcommittee
  - OASIS Product Life Cycle System
- Broad Spectrum of Vertical Market Experience
  - Aviation
  - Automotive
  - Pharma and Life Sciences
  - Software and Hardware
  - Heavy Industry and Capital Equipment
- Frequent speaker at STC chapters

# JustSystems

- Global Presence
  - 1,000 employees, '05 Revenues of \$120M
  - HQ in Japan, North America (NYC, Palo Alto, Vancouver) and Europe (London)
- Our experience
  - 29 years experience
  - Market leader with over 2,500 Customers
- Our Expertise
  - Global provider of office productivity, information management, consumer & enterprise software
  - Framework for XML-based content creation, integration, visualization and delivery
- Our Financial Strength
  - Established and Growing Company



XMetal<sup>®</sup>

**2,500  
Customers,  
Marquee Brands**

DAIMLERCHRYSLER

**HONDA**



**BOSCH**



**Microsoft**

**Canon**



Bloomberg



**Panasonic**

# Global Customers

## High-Tech



## Automotive



## Aerospace



## Publishing



## Financial



## Other

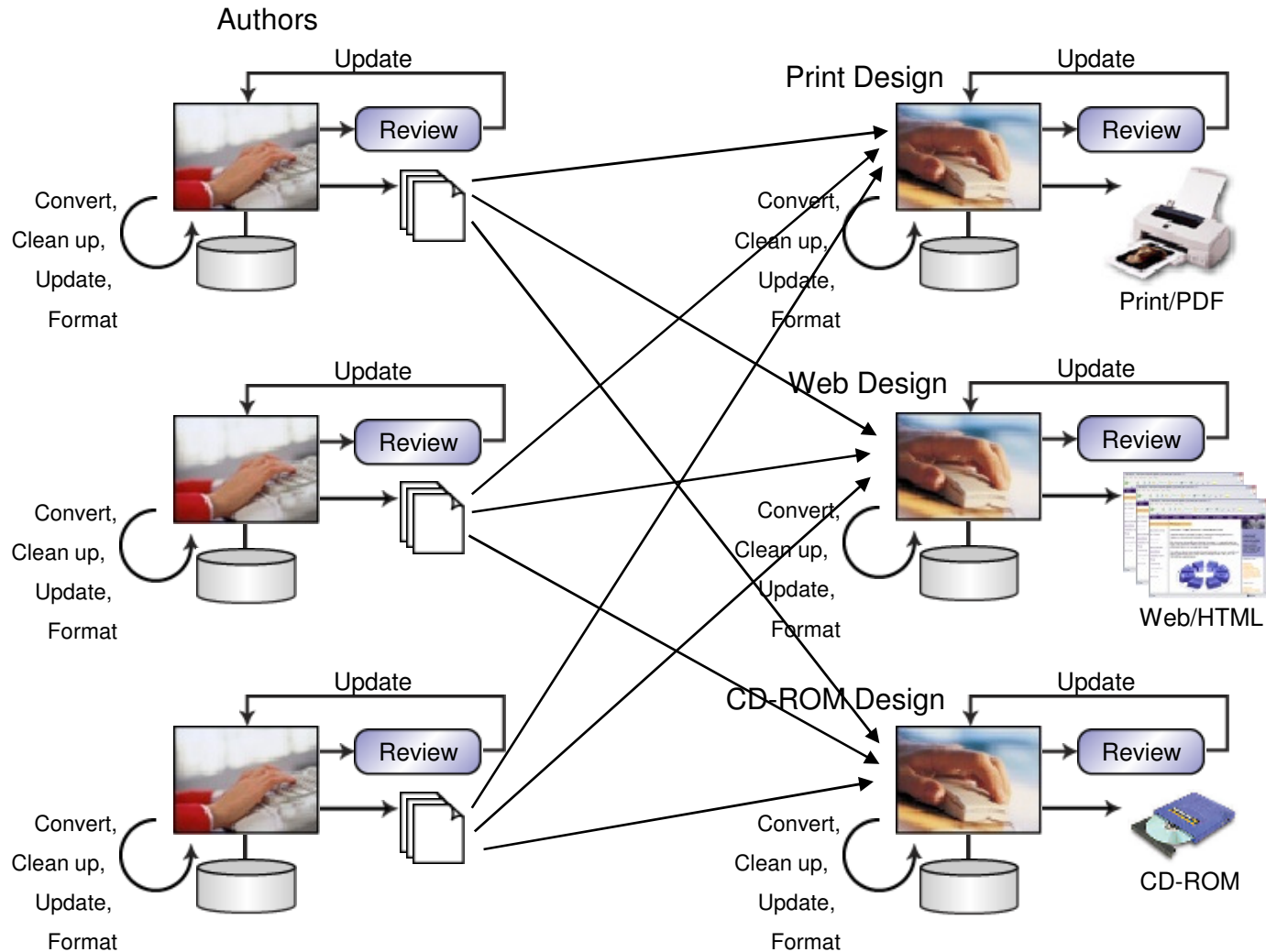


## Status of Content in the Enterprise Today

- Content increasing 50% every year
  - 80% of this is unstructured
  - 90% of unstructured information is unmanaged\*
  - Information storage capacity & cost
- Customized outputs
  - Content for custom products/solutions
  - Multiple publishing outputs (web, help, print)
- Structured vs. unstructured content
  - Rapid adoption of XML standards in 22 months
- Requirements to sell in more global markets, faster
  - High cost and complexity of content localization
- Information accuracy
  - Compliance
  - Customer satisfaction

\* Gartner, Mark Gilbert, Symposium/ITExpo: ECM: Content Infrastructure in your Future

# Traditional Publishing Process



**Costly**

**Slow**

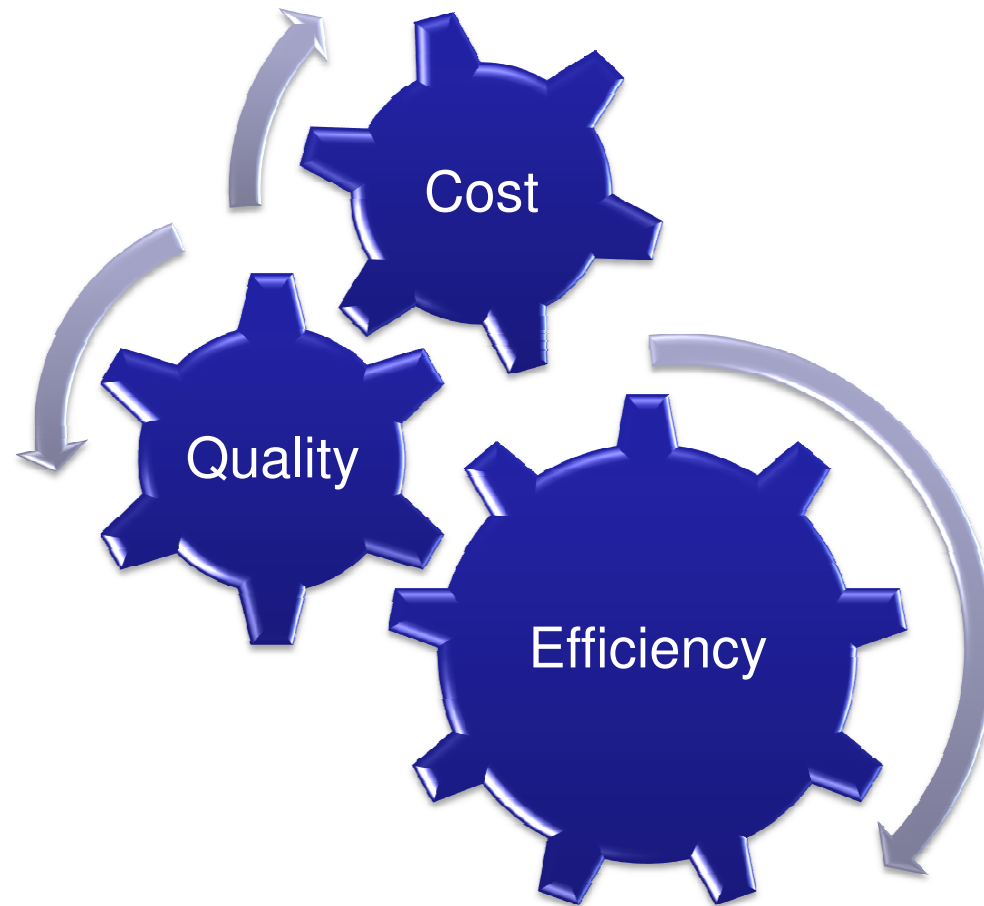
**Out-of-date Information**

**Prone to Errors**

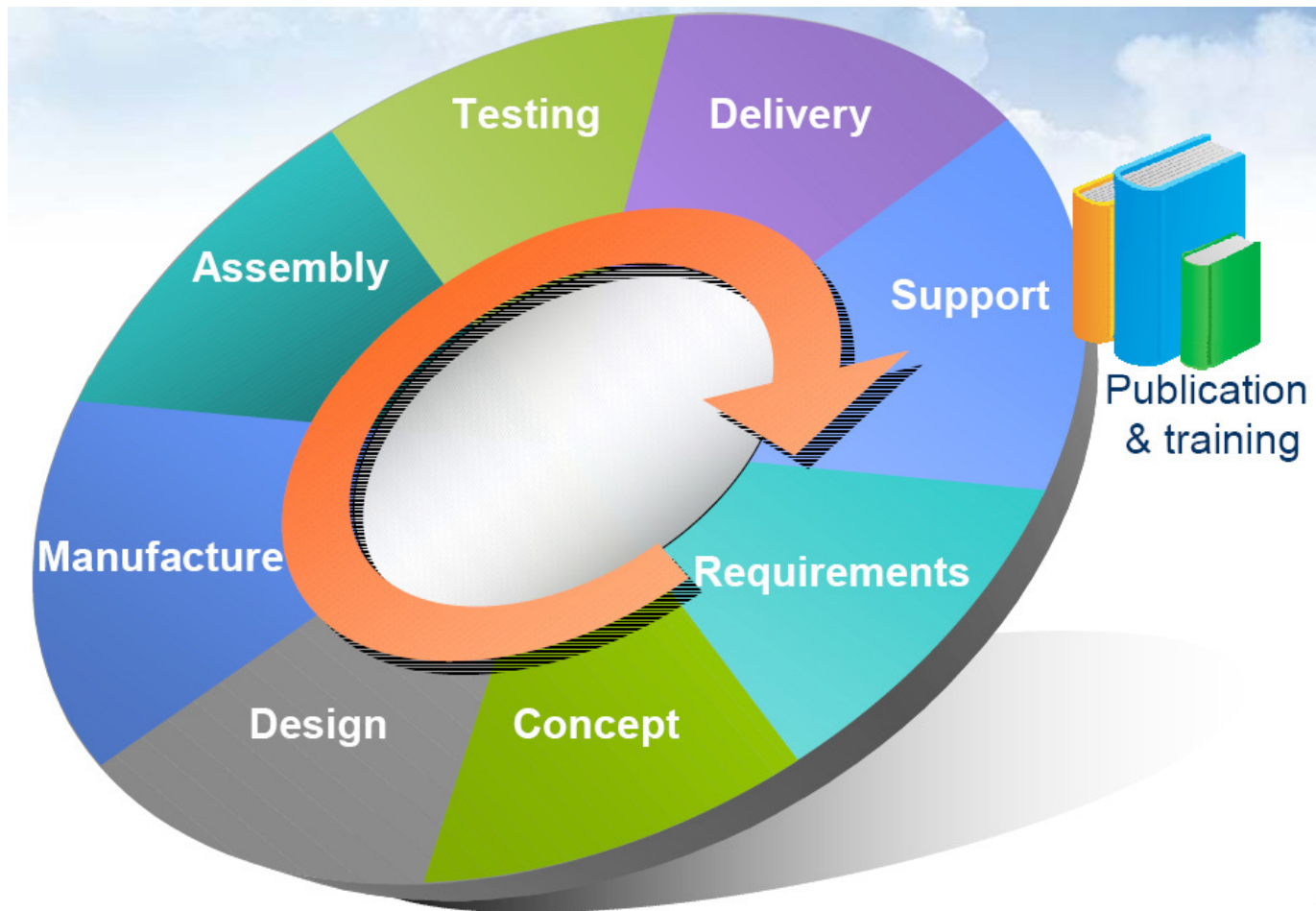
**Unhappy Customers**

*How can our customers improve their publishing process?*

# Integration Drivers

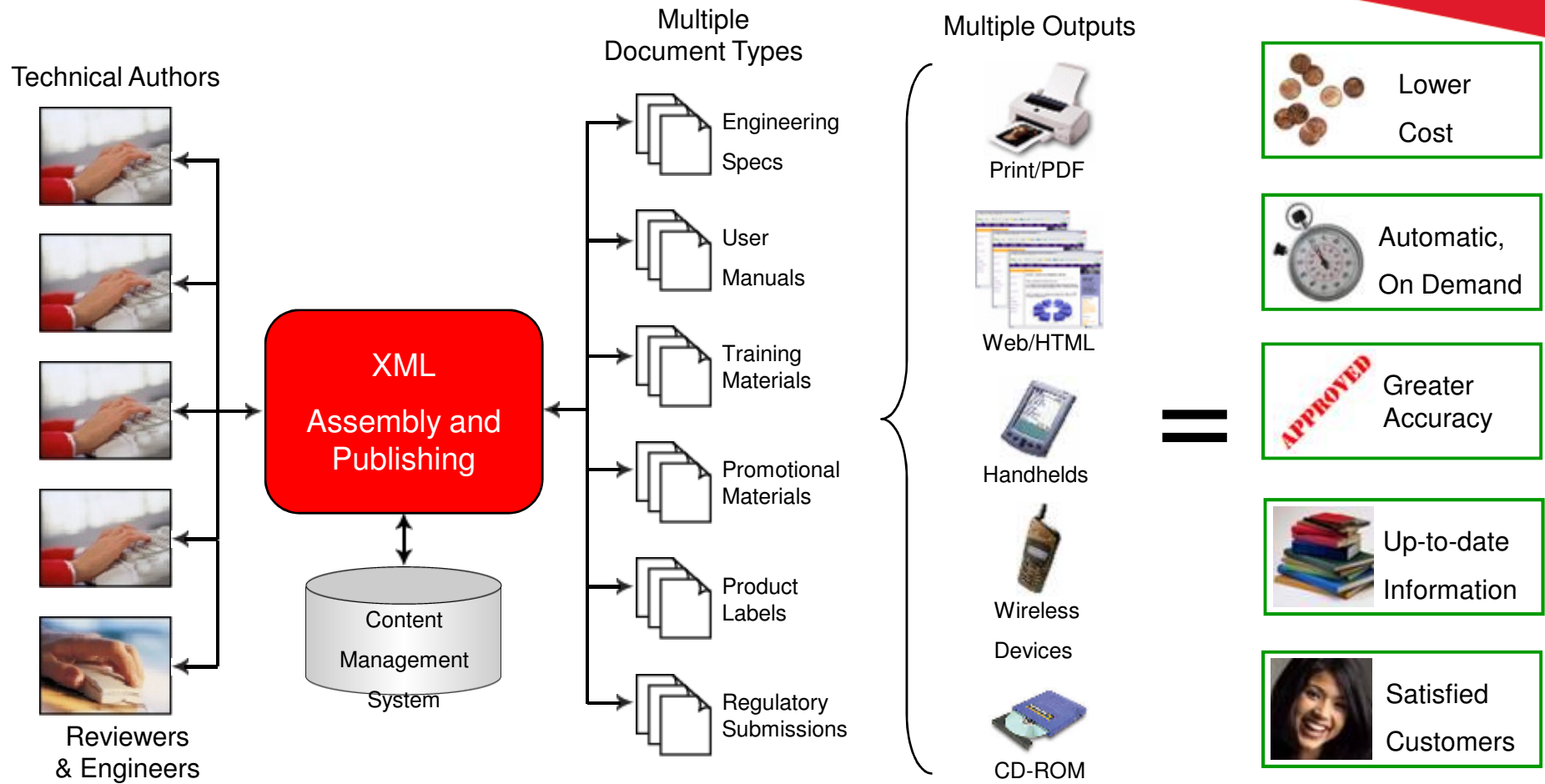


# Product Life Cycle



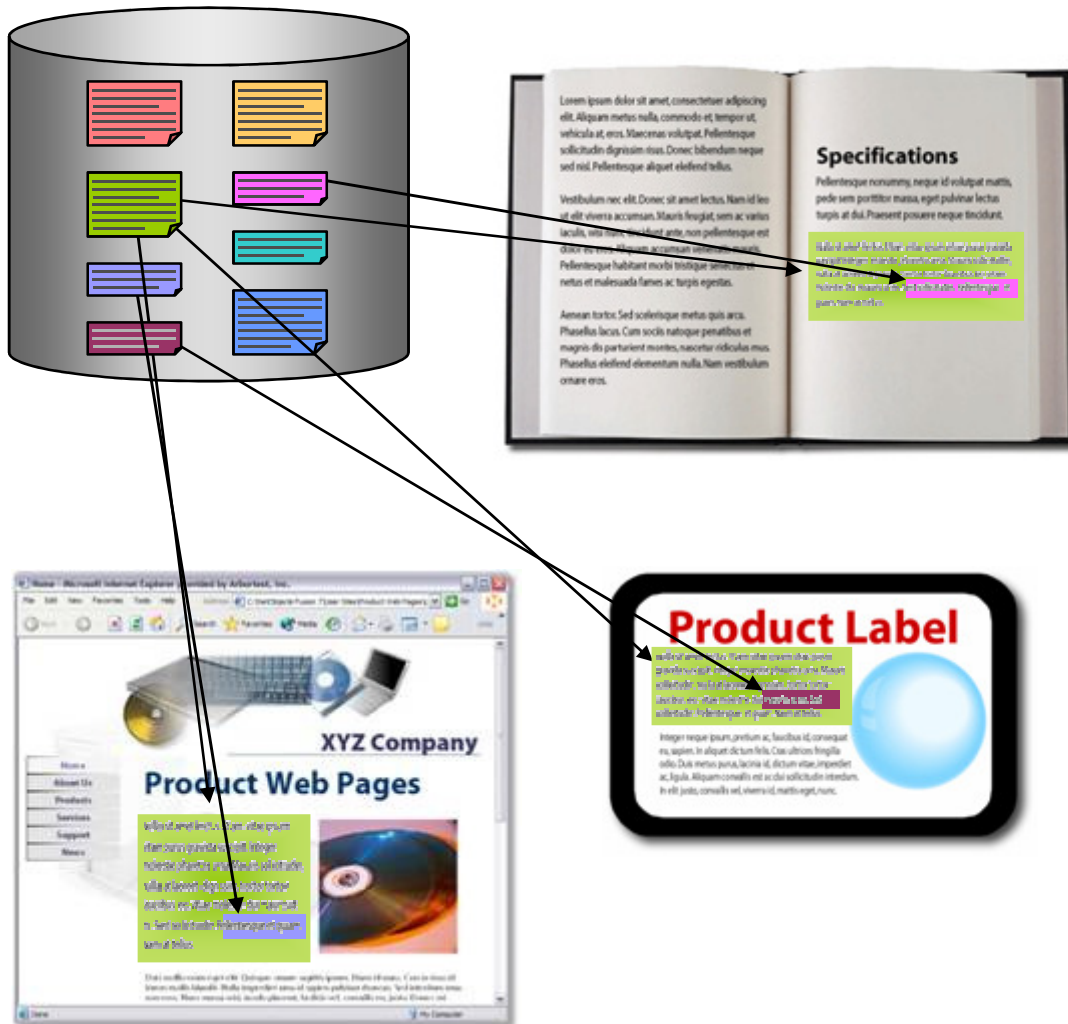


# XML-Based Process



*Accurate and timely information available when it is needed.*

# Information Reuse



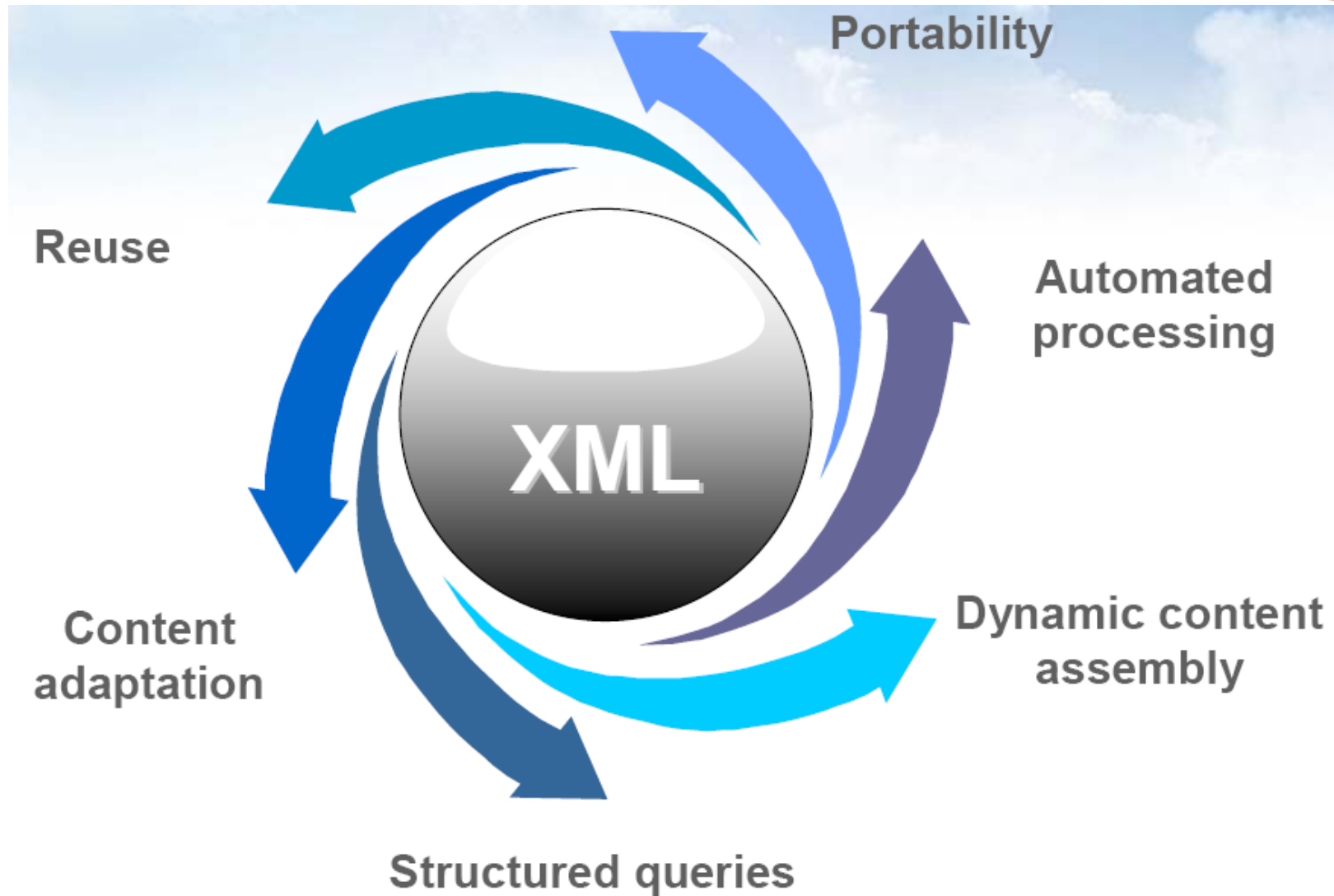
- Speed up time-to-market
- Reduce content creation costs
- Reduce content translation costs
- Increase content accuracy, consistency

# Applications of XML

- Product documentation
- Training manuals
- Maintenance, Field Service manuals
- Policies & Procedures
- Knowledge Base
- On-line Help (User Assistance)
- E-learning
- Patent applications
- Legislation authoring
- Pharmaceutical drug labeling
- Information products
- Website

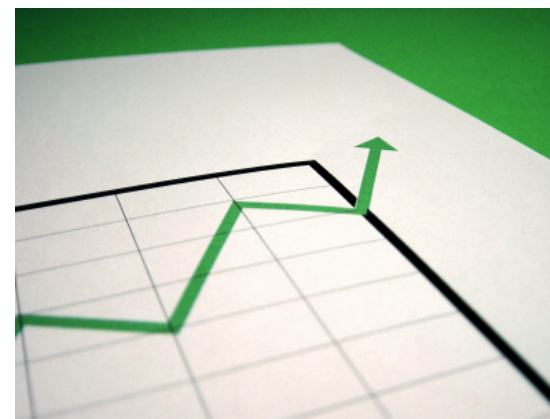


# XML Benefits

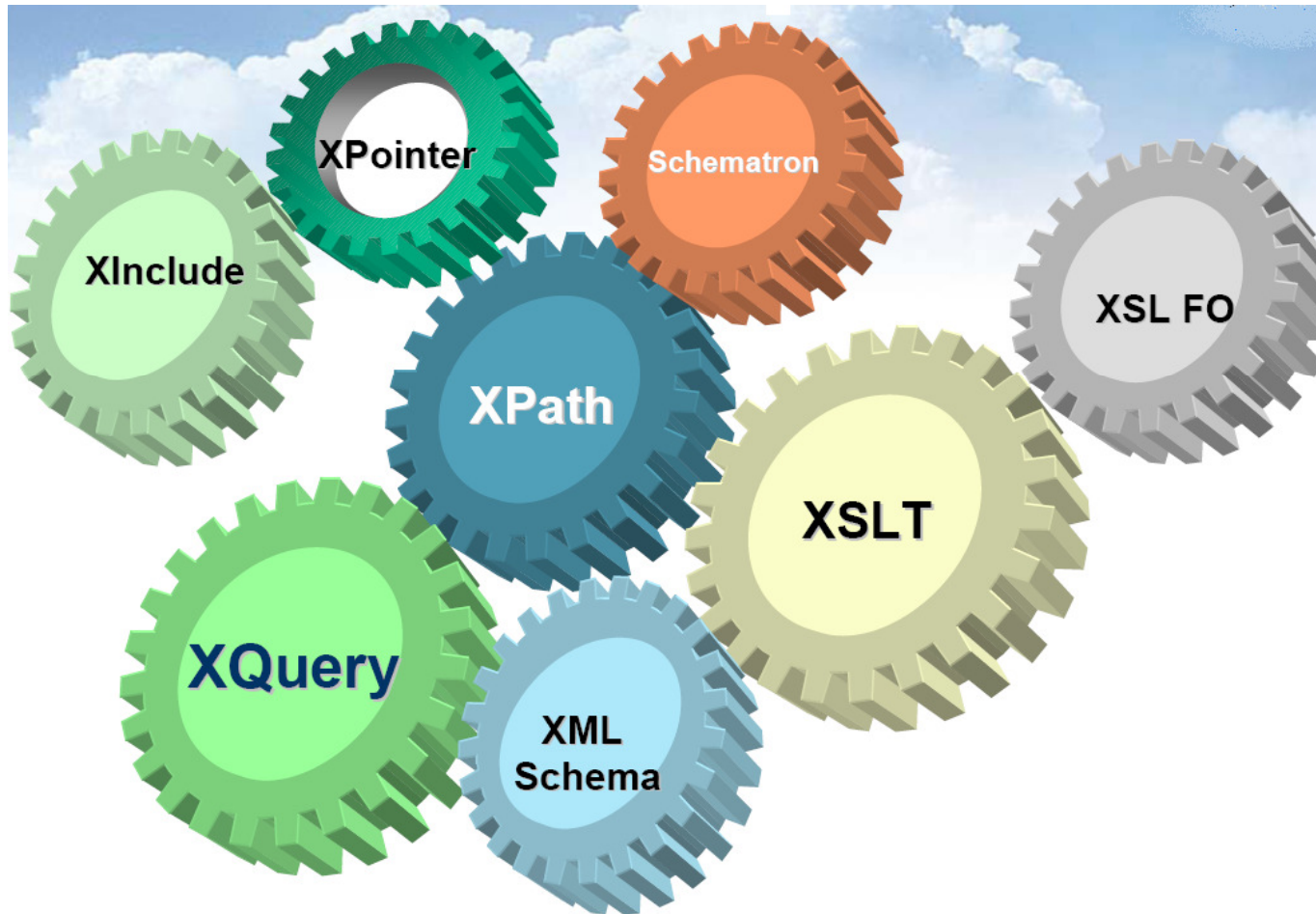


# XML Benefits

- **Accelerate time to market:** simultaneously ship products in multiple markets
  - Faster revenue & market share
- **Reduce costs** by 20% or more through automation; reduce localization costs by 40-70%
- Provide customized, consistent content for a **superior customer experience**
- **Reduce errors** and avoid costs of inaccurate information
- Establish **control over global brand**

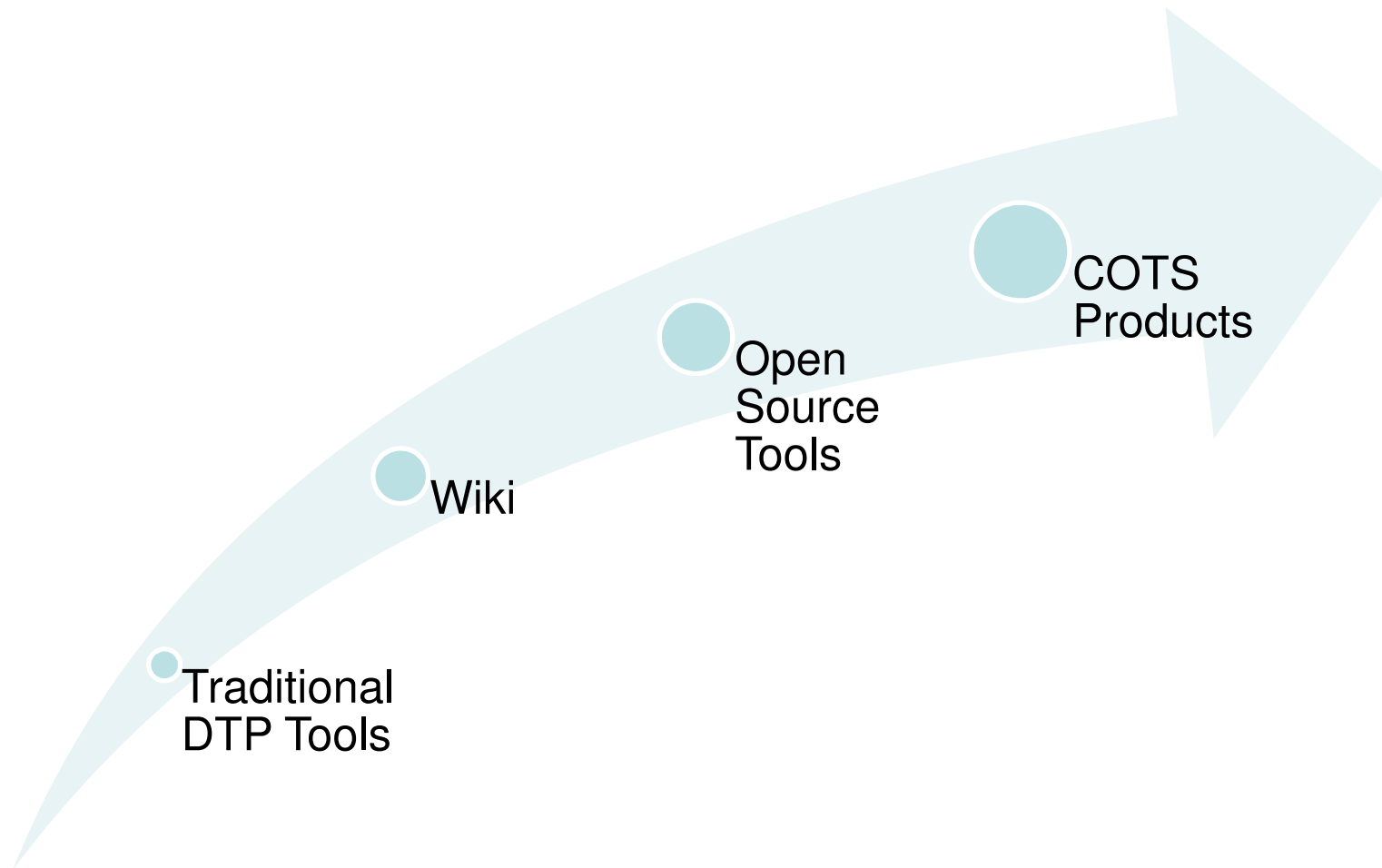


# XML Related Specifications



# Lofty Expectations? Where's the Dime Part?

# Evolution of Information Management Systems





# Components of Information Management

- The Building Blocks
  - Content Authoring Software
  - Information Storage
    - Relational Databases
  - Document or Content Storage (CMS)
    - File System
    - Enterprise Content Management
    - Web Content Management
    - Digital Asset Management



# Free (Nearly Free) XML Editors

There are four main types of XML editors:

- **Dedicated XML editors**
  - Dedicated XML editors are software built solely for the purpose of encoding XML. The editor has functionality to make this process as easy as possible and does not usually offer functionality for other tasks. There are two types of dedicated XML editors.
    - **Dedicated “code view” XML editors**
      - This type of editor offers the user a code view of the XML only. The users have to work in the XML code self.
    - **Dedicated “WYSIWYG” XML editors**
      - This type of editor offers the user some sort of “WYSIWYG” (‘what you see is what you get’) view of the XML. The user can work a view which is similar like the one in a word-processor or a view that presents the XML tags as small icons. A small proportion of editors offer both types of views.
- **Text editors**
  - In addition to editors built for encoding XML, a number of text editors exist which have added functionality for XML encoding. These functions often include syntax highlighting, validation, and sometimes auto-completion of tags and attributes.
- **Word-processors**
  - Word-processors approach XML from a different angle. They provide the possibility of opening XML documents and working with them in a “WYSIWYG” view that hides the XML code for the user. They can also be used to create a new document and save it as a valid XML file.

# Free (Nearly Free) XML Editors

- XML is a text-based markup language.
- One great thing about XML is that XML files can be created and edited using a simple text-editor like Notepad.
- However, when you start working with XML, you will soon find that it is better to edit XML documents using a professional XML editor.

## Why Not a Text Editor?

- Many developers use text editors to edit XML documents because they are included with the most common OS and it is simple to use.
- But, if you use a text editor, you will soon run into problems.
- Text editors do not know that you are writing XML, so it will not be able to assist you.

## Free (Nearly Free) XML Editors

- Professional XML editors will help you to write error-free XML documents, validate your XML against a DTD or a schema, and force you to stick to a valid XML structure.
- An XML editor should be able to:
  - Add closing tags to your opening tags automatically
  - Force you to write valid XML
  - Verify your XML against a DTD
  - Verify your XML against a Schema
  - Color code your XML syntax
  - Connect to content management systems

# XML Editors

- Free to Nearly Free
  - XMLwriter (\$120)
  - XMLFox (Free)
  - IBM Xeena (Free)
  - Many more on SourceForge.org or via Google Search
- Dedicated “code view” editors
  - oXygen XML (\$275)
  - Altova XMLSpy (\$499)
  - Stylus Studio (\$350)
- Dedicated “WYSIWYG” editors
  - Syntext Serna (\$400)
  - XMetaL Author (\$899)
  - Arbortext Editor (\$600)
  - Adobe FrameMaker (\$899)

# Information Storage

- RDBMS - Short for *relational database management system*
- Stores data in the form of related tables
- Relational databases are powerful because they require few assumptions about how data is related or how it will be extracted
- As a result, the same database can be viewed in many different ways.

# RDBMS

- Free to Nearly Free
  - MySQL
  - Microsoft Access
  - Many more on SourceForge.org or via Google Search
- Enterprise
  - Oracle
  - Sybase
  - MS SQL
  - Informix
  - IBM DB2
  - Others integrated into enterprise systems
    - PLM and PDM Systems
    - ERP and CRM Systems

# Document or Content Storage

- File System
  - Content stored on servers and the typical file system. Could be available via WebDAV (Web-based Distributed Authoring and Versioning)
- Source Control
  - Version control system
  - Basic library services, check-in/out, file lock, and branching
  - Software
    - RCS (Revision Control System)
    - CVS (Concurrent Versions System)
    - Subversion (enhanced CVS)



# Document or Content Storage

- Enterprise Content Management (ECM)
  - Enterprise Content Management is the technologies used to Capture, Manage, Store, Preserve, and Deliver content and documents related to organizational processes. ECM tools and strategies allow the management of an organization's unstructured information, wherever that information exists
  - Wikipedia provides excellent overview
- Web Content Management (WCM)
  - ECM can encompass WCM but information presented on the Internet and Extranet or on a portal should only be data that is already present in the company, whose delivery is controlled by access authorization and storage.

# Document or Content Storage

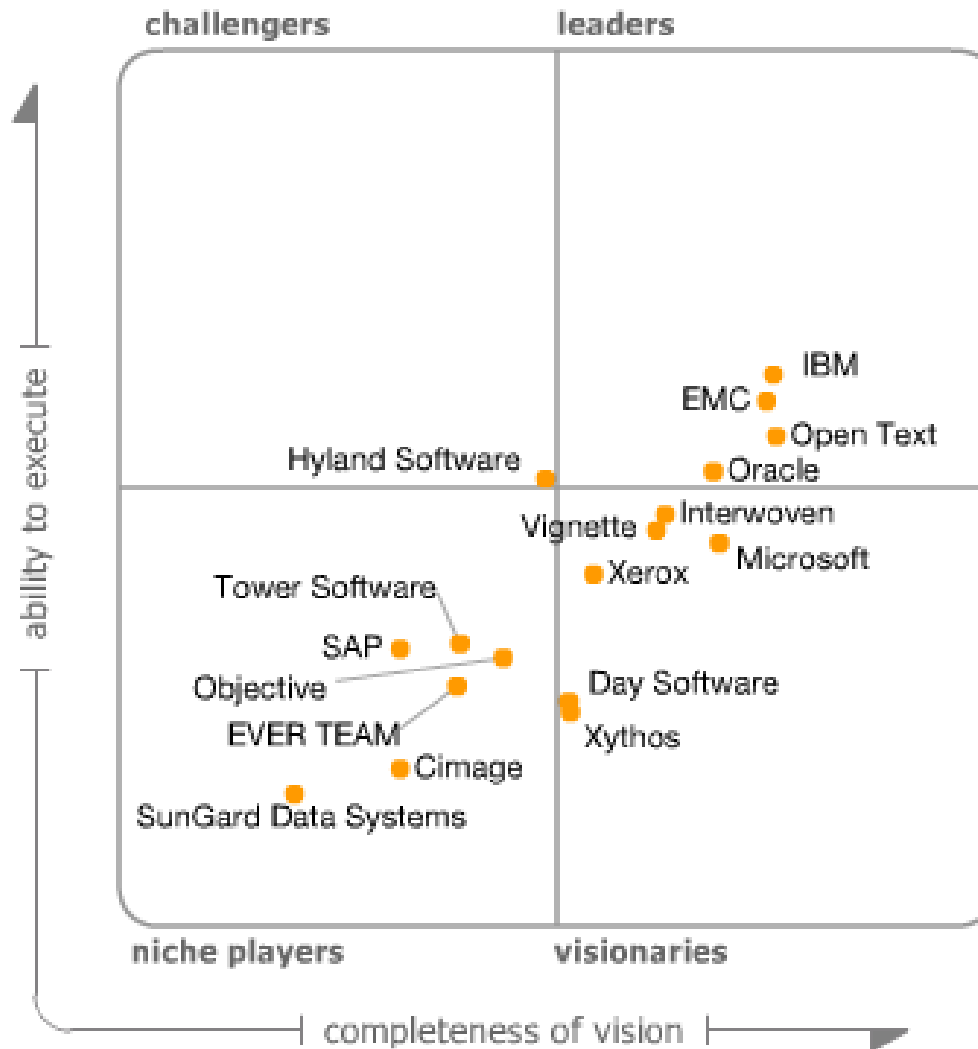
- Digital Asset Management
  - Software that consists of tasks and decisions surrounding ingesting, annotating, cataloguing, storage and retrieval of digital assets, such as digital photographs, animations, videos and music.

# Gartner “Magic Quadrant for Enterprise Content Management”

- Gartner assesses content management vendors and their enterprise content management product suites' completeness, maturity and integration.
- Content management is a critical technology that helps organizations manage important documents and other (un)structured information. Content management vendors address a spectrum of user needs and offer a range of functionality, with some focusing on process-centric applications and others on basic content services.

\* Source - Magic Quadrant for Enterprise Content Management, 2007

# Gartner “The Magic Quadrant”

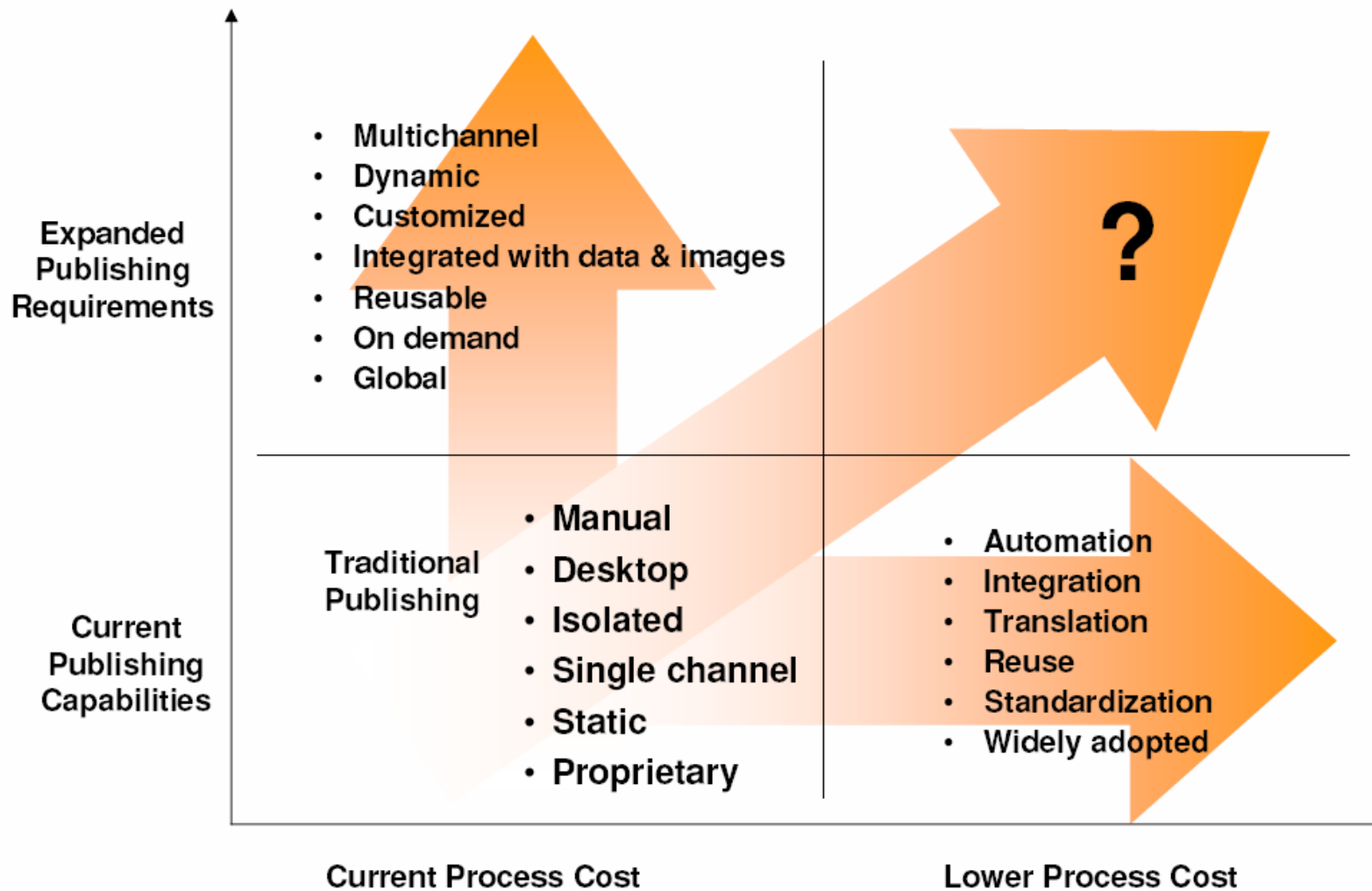


As of September 2007

## Other ECM Options

- Alfresco
  - Open source alternative for ECM
- Joomla
  - Open source WCM for Internet, extranets, and portals.
- Mambo
  - Open source WCM for Internet, extranets, and portals.
- Zope
  - Open source alternative for ECM
  - Web-based user interface
- Plone
  - Built on top of Zope

# Cost vs. Function



## Success Tips

- Many different approaches
  - Jump right into the pool
  - Pilot project or proof-of-concept
- Gather Implementation Team
- End-to-end planning of system architecture and workflow (business process improvement)
- Content Analysis and Information Architecture
- Build checklist of tool feature support
- Select appropriate tools
- Prototype, prototype, prototype!!

# Savings in the Content Lifecycle with XML





**Thank you!**

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**Questions?**