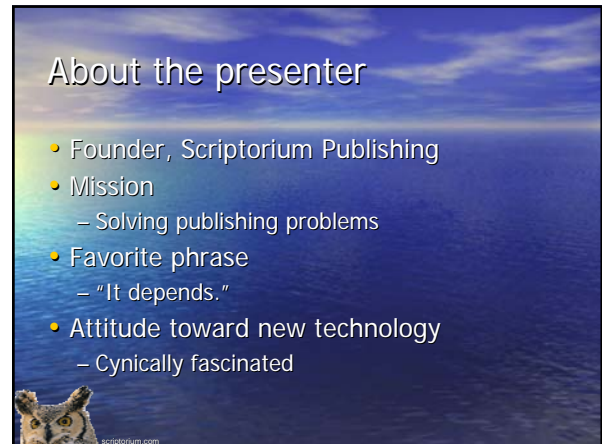


LavaCon 2005

Building a Business Case for XML

Sarah O'Keefe
Scriptorium Publishing

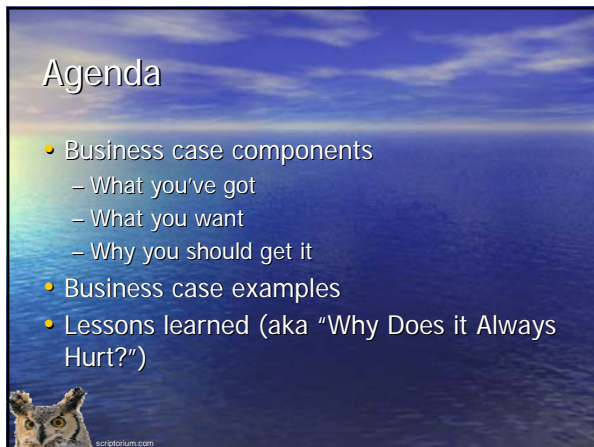
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About the presenter

- Founder, Scriptorium Publishing
- Mission
 - Solving publishing problems
- Favorite phrase
 - “It depends.”
- Attitude toward new technology
 - Cynically fascinated

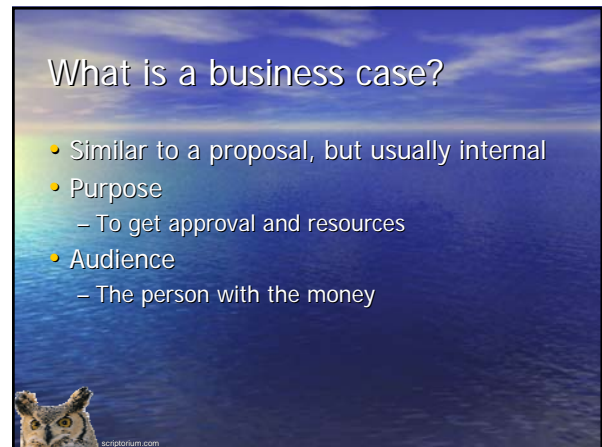
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Agenda

- Business case components
 - What you've got
 - What you want
 - Why you should get it
- Business case examples
- Lessons learned (aka “Why Does it Always Hurt?”)

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What is a business case?

- Similar to a proposal, but usually internal
- Purpose
 - To get approval and resources
- Audience
 - The person with the money

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Business case components

- Status quo description
- Proposed changes
- Cost of changes
- Risks
- Return on investment

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Management secrets

- Management cares about:
 - Saving money
 - Improving time to market
 - Improving quality (maybe)
- Management does not care about:
 - Things that are cool
 - Things that are fun
 - Things that are good for your resume
 - Things that interest you

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What problem are you trying to solve?


1. Enabling content exchange
2. Extracting information from databases
3. Reducing content duplication and reusing information
4. Extracting information based on structure and metadata
5. Improving formatting consistency
6. Reducing author learning curve
7. Reducing repetitive DTP in house and in translation
8. Improving compliance with required document structures



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What problem are you trying to solve?


- “Documents are never consistent.”
- “Localization cost is very high, and we keep adding languages.”
- “Our content is inaccurate.”
- “Our customer requires a particular document organization, and our verification process takes forever.”
- “Our documents are getting rejected by our customer because they do not meet the required standard.”



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Problems

- “With high turnover, we spend a lot of time teaching our writers our style guide.”
- “We don’t have a style guide.”
- “Our writers have other responsibilities.”
- “Our content is out-of-date.”
- “Our content contains grammatical errors and misspellings.”
- “Our staff can’t keep up with the workload.”



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More problems


- “We need to deliver different versions of our documents.”
- “Our documents have shared content, and copying and pasting is not working any more.”
- “Our parts list is in a database, but the parts list in our documentation is created manually.”
- “Our reviewers take forever to provide feedback, and what they do provide isn’t very useful.”



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It’s not a panacea...


- Does XML and structured authoring offer a solution to your problem?
- ***Is the solution worth the cost?***



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Questions you will be asked


- What works in the current workflow? What doesn’t work?
- What problem will this change solve?
- Is it worth the expense of making the change?
- Why change now? Why change to this? What other options are there?



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Cost of changes

- Hard
 - Software, hardware, training, consultants
- Soft
 - Learning curve, change resistance, turnover
- Short-term vs. long-term




Risks

- Change is always a risk.
- XML does not substitute for management.
- Many tools are still in early versions.
- Writer rebellion is a very real possibility.
- Product deadlines may not accommodate implementation.
- Must develop a structure that works for your content.




Return on Investment (ROI)

- Calculate savings per year
- Calculate cost of implementation
- How much time before implementation pays for itself?
 - 6 months to 1 year – excellent argument for implementation
 - 1-2 years – good business case
 - 3+ years – getting approval will be a challenge




Developing a business case for structured authoring and XML

1. Enabling content exchange
2. Extracting information from databases
3. Reducing content duplication and reusing information
4. Extracting information based on structure and metadata
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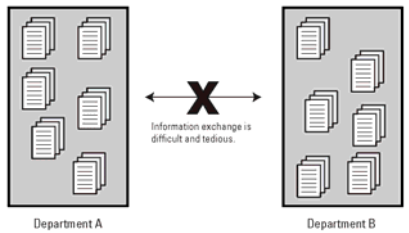


Enabling content exchange


- Minimizes application incompatibility
- Eliminates manual conversion and reformatting
- Avoids putting content in "silos"
- Eliminates content duplication
- Reduces content-creation time
- Goal: Develop information once

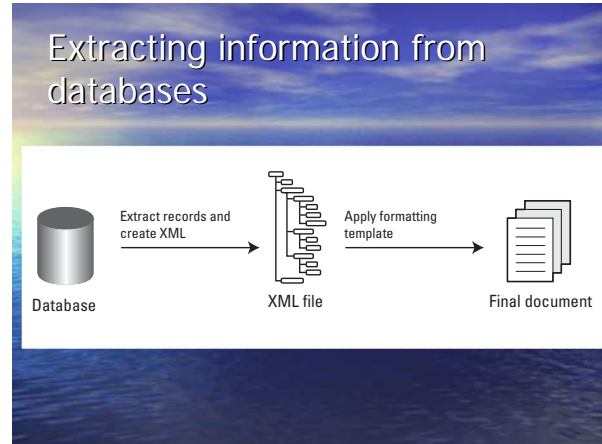
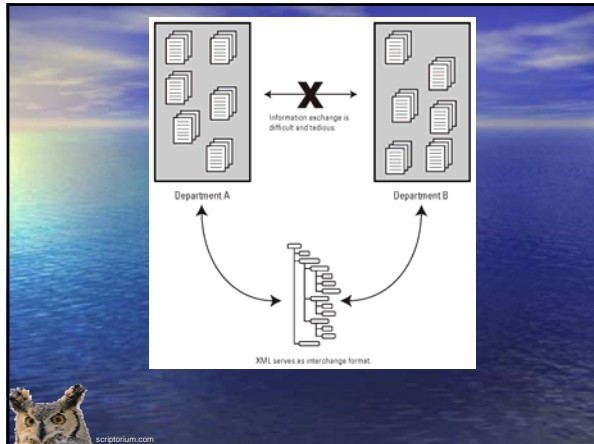


Enabling content exchange (continued)



Information exchange is difficult and tedious.





- ### Extracting information from database *(continued)*
- Parts catalogs, directories
 - Extract from database
 - Mark up as XML
 - Process XML to produce output

- ### Reducing content duplication and reusing information
- Structure improves content consistency.
 - Consistency + repository = reuse.
 - Search for chunks; reuse them.
 - Eliminate duplication.
 - Reduce maintenance.
 - Minimize total amount of content.

- ### Extracting information based on structure and metadata
- Structured information with metadata easier to locate in a database
 - Multiple "dimensions" of content based on metadata...user level, product, and the like
 - See my article at winwriters.com

- ### Improving formatting consistency
- Separating structure from formatting enforces consistent appearance.
 - "Formatting by rule."
 - Automatic formatting.
 - No more "tweaking."

Reducing author learning curve

- Writers focus on content, structure, and metadata.
- Writers are no longer their own publishers.

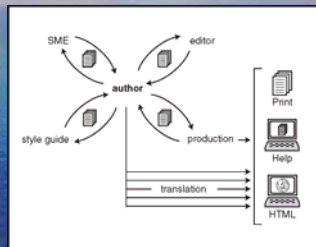


Reducing repetitive DTP

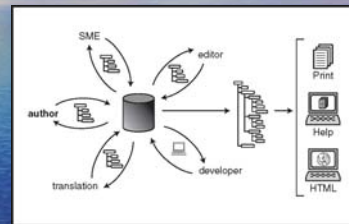
- Enforcing formatting by context eliminates most of the time authors spend formatting documents.
- Enforcing formatting in a multipath publishing environment reduces DTP in each path.



Typical authoring workflow (with translation)



Structured authoring workflow (with translation)



Improving compliance with required document structures

- Government, aerospace, telecommunications, pharmaceuticals
- Regulated industries



The business case — Time

- XML can save time by:
 - Automating content exchange
 - Automating extraction of information from databases
 - Reducing content duplication and reusing information
 - Removing formatting responsibilities from writers (and automating them)
 - Reducing repetitive DTP in house and in translation



The business case — Quality

- XML can improve quality by:
 - Reducing content duplication and reusing information
 - Processing information based on structure and metadata
 - Improving formatting consistency
 - Improving compliance with required document structures



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The business case — Money

- XML can save money by:
 - Automating content exchange
 - Reducing content duplication and reusing information
 - Automating and streamlining production tasks formerly done manually
 - Using low(er)-cost authoring tools



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Implementation costs

- Building the system
 - Consultants
 - In-house resources
- New tools
 - Licensing
 - Installation
 - Configuration
- Content migration
 - Building a conversion system
 - Pushing documents through conversion



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Implementation costs

- Training
 - Tools
 - Technology
 - Company-specific processes
- Reduced productivity while learning new system
- Maintenance costs



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Cost variables

- In-house resources (time) versus consultants (money)
- Software license cost from fantastic to free
- Any content migration will be significant
- Complexity of content
- Similarity between existing content and new structure
- Number of authors
 - Software seats
 - Training cost



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Small implementation

- Under \$20,000
- Already licensed or free tools
- Canned structure
- Minimal customization
- No classroom training
- Minimal content migration



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Medium implementation

- Under \$100,000
- Lower-cost tools
- Canned structure with customization
- Classroom training
- Some content migration



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Large implementation

- The sky's the limit
- Expensive tools
- Content management system
- Custom-built structure
- Extensive training
- Extensive content migration



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Cost justification

- What cost savings are available to you?
- What kind of an implementation can you justify?



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Business case examples

- Reducing formatting costs
- Localization
- Document versioning



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Reducing formatting costs (before)

- Authors use Word to create content.
- A formatting template exists.
 - Some authors follow the template.
 - Some don't.
- Formatting and production editing averages 0.15 hours per page.
- 5,000 pages per year.



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Reducing formatting costs (after)


- Authors use XML editor to create content.
- Structure is enforced by the DTD.
- Formatting is applied automatically by an XSL transformation.
- Formatting and production editing time is cut to 0.05 hours per page.



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Reducing formatting costs – savings estimate

- 0.1 hours @ \$50/hour = \$5 saved per page
- Company produces 5,000 pages per year
- Savings are \$25,000 per year



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Reducing formatting costs – Conclusion


- Could justify small implementation
- No major cost savings



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Localization (before)


- 2,000 pages per year is translated into 20 languages
- 200 words per page; 25 cents per word per language
- Localization cost: \$2 million
- 60 percent translation; 40 percent production/DTP



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Localization (after)


- Assume that XML/automation saves 50 percent of DTP cost (conservative estimate)
- 50 percent of \$800,000 = \$400,000



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Localization – savings estimate


- \$400,000 per year is enough to get anyone's attention
- Can justify major implementation, probably with content management



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Document versioning (before)


- Each client requires custom documentation.
- Authors revise previous client's version to create new client's documentation.
- Base information is 50 percent; custom information is 50 percent.
- Page count: 10,000 pages.



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Document versioning – cost estimate


- 10,000 pages total
- 6,000 unique pages
- Cost to update 10,000 pages
 - 1 page per hour @ \$50/hour = \$500,000



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Document versioning — Cost estimate with reuse/ XML


- Cost to update 6,000 unique pages
 - \$300,000
- Savings: \$200,000 per 10,000 pages



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Document versioning (implementation)

- Set up XML structure with metadata that supports required versioning
- Custom structure
- Content management software
- Reuse information as appropriate



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Building your business case


- Why do you need XML?
- How will this save time, save money, or improve quality?
- How much will it cost to implement XML authoring?
 - Effort
 - Money



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Mistakes were made...

- Choosing a standard structure
 - Less expensive
 - Appropriate when structure is negotiable
 - Appropriate when standard is a good fit for your content model
 - Problematic when you force-fit your structure into the standard
 - Build your content model first, then decide whether any available structures match.



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Mistakes were made...


- Free, open-source tools are the only way to go!
 - Free is not necessarily low-cost.
- Commercial tools are the only way to go!
 - Commercial is not necessarily better.



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Mistakes were made...


- "But that's the way we've always done it."
 - Resistance to change
 - Authors who don't follow templates probably won't follow structure.
- Lack of executive sponsorship
 - If you don't have any, don't bother.
 - They provide funding.



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Mistakes were made...


- Weak management support
 - Managers fail to communicate the rationale for moving to XML-based authoring.
 - Writers appeal to management to kill the project or get exemptions from structure requirements.
 - Implementation team gets conflicting direction.
 - Decisions are constantly revisited, resulting in project changes and cost overruns.



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Mistakes were made...


- Sloppy or incomplete content modeling
 - Content analysis is critical.
 - Make time for analysis; don't jump into production work.
- You can't please everyone.
 - Trying to do so results in a meaningless content model that allows everything.



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Mistakes were made...


- Choosing the wrong structure for the wrong reasons
 - "It's free."
 - Conflict avoidance
- Making constant, incremental changes
 - This is not your father's formatting template.
 - Develop a release schedule.
 - Use software-development techniques, such as enhancement requests, bug fixes, and versioned releases.



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Mistakes were made...


- Any tool will impose specific requirements on your workflow
 - Understand each tool's limitations
 - Try to work with the tool rather than against it
- Too Many Cooks syndrome
 - XML is of interest beyond just tech pubs
 - IT vs. pubs



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Mistakes were made...


- "Our XML guru just quit."
 - Single point of failure
 - Need a support *team*
 - Cannot hold implementation/structure hostage to a single staff person
- "It's really cool."
 - Not a business case



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Summary


- Examine what XML offers and determine whether it makes sense for you.
- Allow a minimum of six months to get implementation done.
- Plan or fail. It's your choice.
- Ignore content modeling at your peril.



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Summary *(continued)*

- XML...
 - Can improve management of information.
 - Provides more mature approach than free-form writing.
 - Requires writers to master new skills.
 - Requires major change in mindset.
- Consider implementing in phases to mitigate impact.



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Q & A



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Resources


- XML white papers:
www.scriptorium.com/papers.html
- *XML Architecture for Customized User Assistance*:
www.winwriters.com/articles/xml/
- DITA: www.oasis-open.org/committees/tc_home.php?wg_abbrev=dita



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Contact information

- Scriptorium Publishing
- www.scriptorium.com
- info@scriptorium.com
- +919.481.2701 x105



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