How Global Companies Can Close the Globalization Gap with DITA

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Idiom Technologies

- Enterprise software company founded in 1998
- GMS (globalization management systems) market leader
  - GMS turns enterprise content management (ECM) into global content management
- First to combine modern XML publishing platform and GMS in one unified solution
  - WorldServer™ Global Electronic Publishing
Global Publishing Challenges

- **T**: Takes too long
  - Manual batch processes
  - Delayed product release cycles
  - Missed market opportunities

- **Q**: Poor quality
  - Inconsistent brand / message
  - Little content reuse

- **M**: Costs too much
  - Limited resources
  - Exponential cost increases
  - No vendor leverage

The Globalization Gap

**Staggered Releases**

<table>
<thead>
<tr>
<th>Month 1</th>
<th>Month 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create</td>
<td>Manage</td>
</tr>
<tr>
<td></td>
<td>Publish</td>
</tr>
</tbody>
</table>

**Global 'Sim Ship'**

- Create
- Manage
- Globalize
- Publish

**Results:**
- Faster Time-to-Market
- Better Quality
- Lower Costs
- Accelerated Revenue
So How Can I Close the Gap?

What You Need
A centralized system for authoring, globalizing, and producing documents

What You Should Use
Open, modern, accepted industry standards

The Results You Want
Significant time savings, risk reduction, higher quality and consistency, plus cost savings and revenue (due to faster time-to-market)

So How Can I Close the Gap?

Current State

<table>
<thead>
<tr>
<th>AUTHOR</th>
<th>MANAGE</th>
<th>GLOBALIZE</th>
<th>PUBLISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>30%</td>
<td>20%</td>
<td>30%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Time Savings

- Streamline Authoring (15%)
- Streamline Globalization (15%)
- Automate Publishing (20%)
- Enable Concurrent Processes (25%)

Total Time Savings (75%)
So How Can I Close the Gap?

- **Streamline authoring**
  - Modern XML standards – use (choose) preferred XML authoring tools
  - XML content management (check-in / check-out, version control, automatic indexing & table of contents, etc.)

- **Streamline globalization**
  - Centralized translation memory (TM) = highly efficient reuse for globalized content
  - Business process management simplifies and accelerates localization

- **Automate publishing**
  - Modern XML standards (XSL-T / XSL-FO) dramatically accelerate production
  - Eliminate re-DTP

- **Enable concurrent process**
  - The power of “continuous translation”

Globalization: What Does It Take?

<table>
<thead>
<tr>
<th>Steps</th>
<th>Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handoff files to localization group</td>
<td></td>
</tr>
<tr>
<td>Handoff files to localization vendor</td>
<td></td>
</tr>
<tr>
<td>Process files to generate scope and cost quote</td>
<td></td>
</tr>
<tr>
<td>Signoff on cost</td>
<td></td>
</tr>
<tr>
<td>Process files to generate projects for translators</td>
<td></td>
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<tr>
<td>Send out translation projects</td>
<td></td>
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<tr>
<td>Perform translation</td>
<td></td>
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<tr>
<td>Return translation projects to localization vendor</td>
<td></td>
</tr>
<tr>
<td>Process projects to create review files</td>
<td></td>
</tr>
<tr>
<td>Perform review</td>
<td></td>
</tr>
<tr>
<td>Exchange spreadsheets with comments</td>
<td></td>
</tr>
<tr>
<td>Make changes in translation memory tool</td>
<td></td>
</tr>
<tr>
<td>Process projects to create final files</td>
<td></td>
</tr>
<tr>
<td>Perform production and DTP on files</td>
<td></td>
</tr>
<tr>
<td>Handoff final files</td>
<td></td>
</tr>
<tr>
<td>Update, merge, store, maintain TM</td>
<td></td>
</tr>
</tbody>
</table>

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## Globalization: What Does It Take?

<table>
<thead>
<tr>
<th>Steps</th>
<th>Manual</th>
<th>Automated</th>
<th>Centralized, Server-based System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handoff files to localization group</td>
<td>☑</td>
<td></td>
<td>One integrated system — no handoff</td>
</tr>
<tr>
<td>Handoff files to localization vendor</td>
<td>☑</td>
<td></td>
<td>Vendor access to central system</td>
</tr>
<tr>
<td>Process files to generate scope and cost quote</td>
<td>☑</td>
<td></td>
<td>Filters, translation memory, scoping, costing</td>
</tr>
<tr>
<td>Signoff on cost</td>
<td>☑</td>
<td></td>
<td>Centralized computation of vendor charges</td>
</tr>
<tr>
<td>Process files to generate projects for translators</td>
<td>☑</td>
<td></td>
<td>Filters, centralized TM/DTD, auto tkit generation</td>
</tr>
<tr>
<td>Send out translation projects</td>
<td>☑</td>
<td></td>
<td>Workflow</td>
</tr>
<tr>
<td>Perform translation</td>
<td>☑</td>
<td>☑</td>
<td>Minimized because translator had preview</td>
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<td></td>
<td>Workflow</td>
</tr>
<tr>
<td>Process projects to create review files</td>
<td>☑</td>
<td>☑</td>
<td>Direct generation of XML on save, integrated preview</td>
</tr>
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<td>Perform review</td>
<td>☑</td>
<td>☑</td>
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<td>Exchange spread sheets with comments</td>
<td>☑</td>
<td></td>
<td>Issue tracking and segment comments</td>
</tr>
<tr>
<td>Make changes in translation memory tool</td>
<td>☑</td>
<td></td>
<td>Browser translation workbench</td>
</tr>
<tr>
<td>Process projects to create final files</td>
<td>☑</td>
<td></td>
<td>Architecture: direct generation of XML on save</td>
</tr>
<tr>
<td>Perform production and DTP on files</td>
<td>☑</td>
<td></td>
<td>Automated output, multilingual DTP features</td>
</tr>
<tr>
<td>Handoff final files</td>
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<td></td>
<td>One integrated system</td>
</tr>
<tr>
<td>Update, merge, store, maintain TM</td>
<td>☑</td>
<td></td>
<td>Changes never made outside of TM</td>
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</table>
Enter DITA

- Topic-based
- Inheritance/specialization model
  - Extensible and customizable
- Cross-references via unique identifiers
- Multi-level reuse via content references
- Open standard
- Momentum

Key Considerations for Globalization

- XML
- Centralized system housing XML and TM
- Integrated authoring and globalization
- Automated help, print, and PDF output
XML

- For authors…
  - Just write information, no formatting
  - Enables reuse and better searching
- For globalization…
  - Just translate, no localization engineering or DTP
  - Easy to incorporate last minute changes to source
- For production…
  - Single sourcing of all outputs
  - Automated output process for multiple languages

Integrated Authoring and Globalization

- One integrated and streamlined process
- Less work, less pain
- “Continuous Translation” = translate early and often
Automated Output

- Automated generation of all output – no DTP!
- Works across all languages
- Substantial time and cost savings
- Improves quality and consistency

With such enormous business benefits, why aren’t more organizations already using XML?
Global Publishing Infrastructure

- Reports on content using XQuery.
- Creates full help system and topic preview.
- Provides search based on structure and metadata in content.
- XML Editor "Glue" lets authors enter and edit XML in a friendly and efficient environment.
- The actual content. You provide this.
- The rules for content structure. Includes the menu of available tags.

Global Publishing Technology

- Reports
- Help Output and Preview
- Print Output and Preview
- Search Templates
- XML Editor "Glue"
- XML
- DITA DTD
- Reports on content using XQuery.
- Creates full help system and topic preview.
- Provides search based on structure and metadata in content.
- XML Editor "Glue" lets authors enter and edit XML in a friendly and efficient environment.
- The actual content. You provide this.
- The rules for content structure. Includes the menu of available tags.

XQuery
- Language for querying XML repository.

XSL FO
- XML language for defining a printed page. An XSL FO document can be rendered as PDF.

XSLT
- Language for transforming XML. For example, used to transform DITA XML to XSL FO.

XHTML
- XML version of HTML.

Ant
- XML-based build tool. Used, for example, to define print output build process.

EDD, FDK, Read/Write Rules
- Components of a FrameMaker Structured Application.

Java
- Used for extensions to transforms. For example, for index sorting.
"Roll Your Own" vs. COTS

**Self-built**
- Develop DTD
- Plan file/directory organization
- Create editor glue
- Develop XSL-FO transformations
- Develop HTML transformations
- Develop scripts and tools
- Convert content
- Test, test, test…
- Maintain, maintain, maintain…
8-10 person years

**COTS**
- Just convert content
- Optional: specialize DTD
- Optional: configure transformations
- Optional: tweak / replace COTS components

.25 person years

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**Business Benefits – Typical Cost Savings**

- Tech. Pubs. Internal Savings $200,000
- Packaging Files
- Online Engineering
- Localization External Saving – Publishing $800,000
- Engineering & Testing $400,000
- Desk Top Publishing (DTP) $300,000
- File Conversion Tasks $100,000
- Localization Internal Savings – Contractor Expenses $600,000
- Localization External Savings – Vendor Spending $1,100,000
- Savings from TM Improvement $800,000
- Savings from Price Reduction $300,000
- Lowered Customer Support Costs $500,000
- Annual Savings $3,200,000
Business Benefits – Topline

Company revenues: $500,000,000
International revenue: 50%

Accelerated international revenue due to “sim ship” (5%) $12,500,000
Increase in international revenue due to quality (1%) $2,500,000
Increase in domestic revenue due to quality (0.5%) $1,250,000

Annual Revenue Increase $16,000,000
TOTAL COST SAVINGS $3.2M
NEW REVENUE $16M ~$20M

Real-world Example

Top line impact ($750m software company):
- 3-6 month delay ship U.S. → non-U.S. releases
- Minimum 10% international prospects wait for new release
- Minimum 1% international prospects buy competitive solutions

Year 1: $3.0m Year 2: $3.7m Year 3: $4.5m TOTAL: $11.2m
Real-world Example

Bottom line impact ($750m software company):

- Internal costs: significant DTP design, labor-intensive content management, localization project mgmt.
- External costs: escalating translation & localization fees, wasteful re-DTP
- Many of these costs were hidden!

<table>
<thead>
<tr>
<th></th>
<th>Y1</th>
<th>Y2</th>
<th>Y3</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td>$2m</td>
<td>$2.8m</td>
<td>$3.3m</td>
<td>$8.1m</td>
</tr>
</tbody>
</table>

Idiom WorldServer OpenTopic

**What**
A commercial / internationalized implementation of DITA that includes everything you need for global XML-based document production

**Using**
Open, modern, accepted industry standards

**Providing**
Dramatically faster “time-to-XML,” as well as ongoing publishing benefits
Modern XML publishing plus industry-leading Globalization Management System — in one enterprise server-based solution