Simply DITA

A **Simply XML™** White Paper
By Doug Gorman

Overview

"Complexity expands the work, drowning an organization, draining its strength and vitality, leaving little time for innovation," says renowned business author John Mariotti. Mariotti goes on to point out that complexity is one of the three enemies of innovation, the other two being negativism and giving up too soon.

His conclusions should raise a red flag for the current run of DITA as an emerging information standard. There is no doubt that Tech Pubs has proven the value of DITA. Widespread organizational adoption of DITA now requires a focus on broader business results, modifications to the implementation process, and the adoption of easy to use software tools. We find ourselves directly confronting this enemy of innovation as an obstacle to the widespread adoption of DITA. To simply solve the enterprise adoption problem it is necessary to secure the right perspective in advance of decisions about appropriate enterprise initiatives, investments, and tools.

How Things Work

Most complex things can be viewed from the technical perspective of the developer behind the scenes, or from the simplified perspective of the end users. DITA is no exception. As an example, consider the question: How does an analog television work? There are really two answers:

The first answer, from the perspective of the technologist, comes with assistance from Wikipedia.
>*Analog television has a number of critical technical components. The critical component necessary for the high-fidelity broadcast and projection of reconstituted light information is the cathode-ray tube, originally used to produce x-rays for medical purposes. An "iconoscope" then scans an image with an electron beam and converts it into electronic signals for transmission. The image is fed through a mosaic plate which is covered with microscopic photosensitive dots we now know as pixels. The receiving device reverses this process and the modern TV was born in 1929.*

The second answer, popularized in the 1950's with, "The Howdy Doody Show," is this:

> **You turn the television on, tune it to a station, and watch your favorite TV program.**

So, how does DITA work? There are also two answers.

Here is an answer from the DITA OASIS Cover Pages publication:

The Darwin Information Typing Architecture (DITA) is "an XML architecture for designing, writing, managing, and publishing technical documentation, whether in print, as online help, or on the Web. It implements the principles of information design, information typing, and information architecture." To the extent that a "topic" is the basic DITA architectural unit, the system has some affinities to Topic Maps; to the extent that it features modular content design and optimizes content reuse, it is similar to Information Mapping®. DITA supports a unique transclusion mechanism that is validated under DTD processing rules."

The second answer, the one that needs to be pervasive for widespread adoption of DITA is this:

You open your usual authoring tool, create your desired content in small, reusable topics, and publish and reuse it as desired.

Getting From Here to There

The incredibly positive impact of a standard like DITA is only realized when there is widespread acceptance and adoption of the standard by the community that can reap the benefits. There are four organizational issues that must be overcome in order to make DITA ubiquitous.

- Complex authoring tools require users to deal with DITA code and are hard to use.
- Many parts of the organization don't all need to use the entire DITA standard.
- Authors don't have the training to write DITA content in a way that can be reused.
- Many DITA initiatives don't have organizational commitment beyond the technicians.

Now before I begin talking about these issues, I'm going to acknowledge that the implementation of DITA in a large complex global organization requires a certain number of technical people who understand XML, the DITA standard, XSLT, content management systems, metadata, and work flow at a very granular level of detail. But the vast majority of users only need to know how to use their authoring tools, save their work, and publish it to PDF or the web.

Organizations Need Easy to Use Authoring and Publishing Software

To achieve the benefits of information reuse, multi-channel publishing, and efficient localization of content, organizations must create content that is standardized. Authors will need to write with a tool that organizes and saves information using Extensible Mark-up Language (XML). It should be driven by a

set of rules or Document Type Definitions (DTDs) ideally with an accepted standard, for example, the Darwin Information Typing Architecture (DITA).

While there may be thousands of people who are comfortable using tools like Structured FrameMaker®, XMetaL®, and Arbortext Editor®, there are tens of millions of people more who use Microsoft® Word every day. These authors of sometimes structured and sometimes semi-structured content create mountains of content and save it in their "My Documents" folder. They print their documents by hitting a menu icon. They don't worry about XML, DITA, PostScript®, or other technical things. They turn on their computers, open their word processing systems, and off they go. Much of the content these people create should be available for reuse or publishing to multiple media. The implications for widespread DITA adoption are now becoming visible.

Organizations often begin with a pilot program for the use of XML and the DITA standard by licensing technical authoring tools and hiring a layer of experienced technical staff to implement DITA. These consultants or staff members are well-versed in the relevant technologies including the DITA OASIS standard and the typical XML authoring content management and publishing technologies. The pilot program focuses on the conversion or often re-writing of important documents in a structured, topic-based format. They specify the required information architecture, metadata, work flow, and publishing formats. And these pilot programs are very often successful. Control is increased. Standards are enforced. Localization is easier. Reuse is realized. Money is saved. The technical managers remark, "This is great, isn't it? Let's now roll it out across our large complex global organization."

And so the technical managers meet with the business managers and show them the money that can be saved by adopting this wonderful DITA standard. And then the managers of the technologists describe an implementation proposal. They say that, "We are going to train the staff in topic-based writing and we need to pick just one XML authoring tool, so we have decided to standardize on _____ (XMetaL®, Arbortext Editor™, Structured FrameMaker®…) and everyone who creates structured documents, including policies and procedures, compliance information, marketing materials, etc. is going to move to that authoring tool and the DITA standard."

And then the voice of practical reason, the voice of the masses of the organization, the voices of "I've got a lot on my plate right now" tell the technologists to "Please go away. I use Microsoft® Word and I like it. I write documents and then press a button and print what I want, and, by the way, I'm busy."

So, the first significant constraint to widespread organizational adoption is the need for the large majority of authors to continue to write in the tool users already know and like–Microsoft Word.

Organizations Should Focus Enterprise Implementation on a Subset of the DITA Standard

It's no secret that gaining an understanding of all the capabilities of DITA is a lengthy and complex process. But taking advantage of DITA for typical policy and procedure manuals, training manuals, marketing materials, and sales can be rather simple. You can focus implementation on those parts of the DITA standard that are needed to write high quality DITA Topics, DITA Tasks, DITA References, and DITA Concepts. We have found that only about one-third of the available DITA elements are needed for implementation beyond Tech Pubs.   And most of these elements relate to standard writing constructs like paragraphs, tables, headings, and bullet points. So authors only need to learn a few new concepts about topic-based writing and they can be up and running quickly with DITA. You can even start by focusing only on DITA Topics which are very easy to understand and create.

The result of such authoring is valid DITA. That DITA can be opened and edited in the more complex XML editors if ultimate reuse is in Tech Pubs. And in certain conditions, that XML can be "round tripped" back to MS Word.   Simply XML™ is making our Simply DITA™ schema available for free to organizations that are interested in using this simple subset of DITA.

The conversion of legacy content is always an important consideration. It is usually quite straight forward to import legacy information into DITA Topics. In early stages of implementation templates can be used for more specialized content that requires standardization. Over time authoring of new material can be further refined using DITA Tasks, DITA Concepts and DITA References.

You can also move slowly in adopting the useful advantages of metadata, attributes and work flow. In the early stages make the shared use of the repository as simple as possible.

So, the second organizational issue is the need to simplify the implementation of the DITA standard as the route to widespread component content management and single source publishing.

Organizations Need Training for Authors and Others

Authors new to DITA will need some training, but that training need not focus on DITA. The goal of any DITA author training class should be to teach authors how to write their same old familiar content in a new way, one that produces content that is easier to manage and reuse. It should focus on policies and procedures, training materials, marketing materials, white papers, documentation, etc. authored to consist of small, manageable topics organized by their purpose for the user. At least 90% of any such training should be focused on the content and not on the standard, not on the authoring tool, not on the publishing tool, and certainly not on the details of the DITA standard or the DITA Open Tool Kit. In fact, the instructor and the organization should get gold stars if they can leave the audience in the dark

about the details of the wonderful technology behind DITA implementation.   Their goal should be to focus on doing the business of the organization.

Just for the record, I will repeat that there is a place for technologists who understand how the atoms and ions of DITA work. But please leave the masses to their PC's and Microsoft Word. They should focus on learning to write topics, separating content development from content publishing, and leveraging the opportunity for information re-use. This is going to be difficult enough without forcing them to do this in a new world of DITA acronyms and technical obscurity.

So, the third organizational issue is the need to teach authors about structured content as the route to component content management and single source publishing.

Organizations Need Enterprise Level Organizational Commitment

By adopting the DITA standard you are acknowledging that things are going to change, a lot of things. And that is a good thing. But change demands clarity, focus, flexibility, and resources. Organizations need to begin to manage their content centrally. They must put the same level of attention on managing content as they do on managing people, technology, and process. They need to separate the creation of content from the storage of and the publishing of content. They need to determine which information offers the opportunity to save money by reuse or multi-channel publishing.

In fact, the whole concept of a document is changing. Manuals are out. Just enough and just in time information is in. And by the way, some people want it in PDF, some want it on the web, and some want it on their iPhones. And all of this requires information standards and DITA is a great one.

Organizations need to manage content in a disciplined way that includes the concept of cost effectiveness. They don't need a large extra layer of people to write new DITA content. And they don't need a corporate license to Arbortext Editor and the cost and inefficiency of the resource training and utilization that will result.

The C-Level executives don't need to understand or even know about DITA. They will, however, understand and welcome the organizational ROI gained from more cost-efficient localization, information reuse, easier access to information, lower support costs, improved customer service, quicker time to market, and improved compliance that they will experience from implementing a standard, improving processes, and adopting best practices.

So, the fourth organizational issue is the need to be committed to change –but to simple change driven by traditional organizational realities, measurements, and constraints.

Achieving Widespread Organizational Improvements

The pervasive and ubiquitous adoption of DITA across an organization can dramatically improve efficiency and control, but the best way to achieve this result is to minimize, and even ignore DITA and its related technology – from the end users' perspective at least. Meet the authors where they are by giving them simple, cost-effective tools that hide the complexities of the DITA standard and allow them to continue using Microsoft Word with a transition to topic-based authoring. Simply XML's Content Mapper™ tool is an example of a software tool that allows authors to easily create business documents in Microsoft Word under the DITA standard. These tools can complement the use of more technical authoring tools for more technical authors, but at the end of the day, valid DITA is valid DITA whether it came from Structured FrameMaker, XMetaL, Arbortext Editor, or Microsoft Word.

Let casual authors focus their writing on a limited subset of the DITA standard. This limited focus will greatly improve both their motivation and speed of adoption.

Next, give those authors training in how to write structured content, but focus the training on developing the content they need to create, i.e. policies, procedures, documentation, training materials, marketing material, etc., not on the standard, the tags, and the tools.

Manage the change process like any other major organizational change, with rewards and sanctions similar to those you would use for any change, ensuring that everyone understands the business benefits of the initiative and that it has senior level buy-in.

Finally, hire a small group of centralized staff or consultants to make the information architecture, authoring process, metadata creation, component content management systems, and publishing work in an integrated way, but make sure that generalists are keeping both the technologists and the masses in line.

In the end, writing content in DITA should feel easy and natural to your users – and they should readily see the benefits and advantages it provides in their own jobs and for the organization. If this isn't yet the case in your organization, you probably still have some work to do to find the right solution.

Good luck and let us know if we can help you to simply implement DITA.

About Us

About Simply XML^{TM}

Simply XML^{TM} provides simple solutions for creating and publishing XML content. Our goal is to allow everyone in the enterprise to take advantage of information standards including DITA, DocBook, Information Mapping and custom standards by providing authors with simple, cost effective tools for creating, storing, managing and publishing valid, high-quality XML from Microsoft® Word. We believe that standards adoption and the related benefits will accelerate when the vast majority of authors who use Microsoft Word can easily contribute content and documents to the corporate publishing system. Simply XML offers software and related training that is changing the value proposition for this industry.

About Content Mapper^{TM}

Content Mapper™ lets anyone in an enterprise easily create, find, reuse, tag, store, manage, edit, and publish valid XML content. Content Mapper supports Microsoft SharePoint and facilitates simple or complex workflows, metadata creation and publishing from an easy to use publishing wizard. Organizations can realize all of the benefits XML-based single source publishing, information reuse, standards-based authoring, multi-channel publishing and enterprise content management—for less time and money than you ever thought possible.

About Simply DITA^{TM}

Simply XML introduces Simply DITA^{TM}, which is a Microsoft Word-based software product with supporting training so that casual authors can create policies and procedures, documentation, training materials, marketing materials, etc. under the DITA standard. Content Mapper supports Microsoft SharePoint and facilitates simple workflow, metadata creation and publishing from an easy to use publishing wizard.

About Doug Gorman

Doug Gorman is CEO of Simply XML, LLC. He has 30 years of experience in the software and information industry and more than two decades of work in the structured writing industry. He has a BA in Psychology from Colby College and an MS in Management from MIT.

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