Strengths and Weaknesses of DITA

DITA adoption has come a long way since its inception. This feature article attempts to provide an objective assessment about the strengths and weaknesses of DITA adoption as of early 2014 for anyone trying to decide if it is the right solution for their documentation requirements, especially when compared to other structured and unstructured options.

# Strengths

Solid foundation, supported standard

* Significant body of research from MIT, IBM et. al. over many years resulted in DITA
* DITA offers a topic-based, rather than a book-based approached to authoring, encouraging reuse of content among multiple deliverables
* DITA Open Source Standard adopted by OASIS
* Minimalist, single source, reusable, cross-platform publishing workflow for structured content
* Both DTD and Schema are offered
* Continued support to open source community from IBM - structure
* Adopted by many corporations, many of which also support community
* DITA resources abound! Cf. Brenda's & Kristen's recent resource lists.
* DITA has achieved a huge mind-share in TA/TC communities
* Supported by open source tools, tool vendors & consultants, thus protection from vendor lock-in

Inherent benefits

* Quality and consistency: DITA enforces structured authoring for consistency and quality
* Efficiency and savings
  + Separation of structure, content and presentation
  + Because it is XML-based, DITA is easy to localize thereby helping to reduce translation costs and promote translation efficiency

Getting started

* Lightweight DITA
* Easy to get started (What’s the “easy” way to get started?? XML editor trial?)

Continuous improvement

* DITA Maturity Model - start off simple, expand as needed
* Expansion into learning and training, & other industry-specific initiatives

Flexible

* The toolkit approach provides a very flexible model for building all kinds of documentation systems, integrating with other XML technologies, e.g. XLIFF, MathML & SVG, and enabling dynamic content publishing & DITA based Wikis, for instance
* Specialization built in

Silo Breaking

* DITA can support sharing content across entire industries and vertically, between customers-companies-subcontractors, OEMs

# Weaknesses

Getting started

* DITA adoption can seem more like a paradigm shift, with a steep learning curve and a complex solution; Paradigm shift for authors is considerable -- must have training in a new way of authoring
* DITA is perceived as very complex, only for XML specialists
* Specialisation can be a red herring, especially in early stages of adoption

Lack cohesive experience

* Key requirements: DTD/Schema, Toolkit, Instruction manual, user mailing list, etc. - from as many as 8 separate sites
* Confusion relating to DTD and Schema - why include both?
* Confusion between DTD/Schema version numbering and Toolkit version numbering
* Commercial interests from consultants can lead to confusion from plethora of web sites

Skills

* Many TAs don't have required skills and/or may not have access to required skills---this is changing
* When DITA is introduced, the review cycles can become much more bumpy because reviewers use other (non-DITA, non-XML) tools: being addressed by tools. Requires SharePoint/CCMS.

Samples and examples

* There is not much high-quality sample DITA content easily available. The samples that come with the toolkit are not great
* Difficult to find well-explained working examples

Focus

* Primary focus on computing needs - h/w & s/w: this is being addressed, slowly

Associated tools

* No content editing tool nor CMS included in toolkit
* Commercial interests from tool vendors can lead to semi-proprietary solutions and potential vendor lock-in

Publishing

* DITA Open Toolkit is just that - a toolkit, not an application
* Exclusive reliance on the Open Toolkit may limit the use of DITA in special environments
* Toolkit documentation is very poor, and also fragmented between different sites
* Requires not inconsiderable customisation, in several XML disciplines: ANT, CSS, XSLT, XSL-FO
* Output using the Toolkit's default stylesheets Is Not Sexy
* Other options are not open source, cost a lot

Enterprise

* DITA can be regarded as only being suitable for larger companies & corporates: this is changing
* DITA is seen as something that only relates to tech.doc and/or technical authors
* DITA is not seen by decision makers as a business solution, to business problems
* DITA is seen by the enterprise as a tech.doc. "black box" solution, not as an enterprise wide solution

Slow updates

* Updates to the standard happen very slowly
* Considerable lag time between an update to the standard and support for that update in the OT. Many users derive no benefit from an update to the standard until the OT supports it.

Cost and complexity

* Perceived and real cost and complexity of converting legacy content to DITA
* Interoperability requirements are not generally understood
* Training required for technical support of the model and the output
* Requires enterprise support, especially IT

# The Future of DITA

DITA adoption focal point

* For OASIS to become a true focal point for DITA adoption
* Part of this would be the sharing of open source resources: specialisations, transforms, builds, etc.
* Fully explain the philosophy and key business benefits of DITA, with cost saving analyses
* Additional cost savings for translation/localisation

Toolkit improvements

* Simplify 'adoption hurdle', especially w.r.t toolkit
* Make the toolkit more 'off the shelf' & easily customisable
* Improve the documentation package

Introduce cohesion

* Develop best practice guidelines
* Identify a one-stop DITA solution for small companies
* Build a universal semantic ecosystem

Associated tool improvements

* Encourage tool vendors to improve support
* First qualitative, then later quantitative, tool testing & recommendations
* Engage in constructive dialogue with tool vendors
* Support integration with enterprise CMS solutions
* Build a world-wide market for DITA services and tools

DITA skills are transferable, high demand

* Career opportunities for TAs and others with DITA experience

# Competing Options

Some other options on the market are competing with DITA.

Unstructured and semi-structured solutions

* Some minimalist, single source, reusable publishing workflows for unstructured & semi-structured content can include an editor and a CMS, e.g. Author-it and Flare
* **Advantages:**
  + Because these companies are not an open community, the complete package is more coherent, includes more end-to-end workflow. One-stop shopping.
* **Disadvantages:** 
  + Not open source. Tied to product and tools.
  + Not as versatile and flexible as an XML-based solution
  + Translation savings nowhere near DITA

Other XML-based standards

* ODF: ?
* Open XML:?
* DocBook: Not topic-based writing. Potential for reuse is limited. Consistency and quality are not inherent. Adoption is falling off.
* S1000D: Used for aerospace industry only, and even then not adopted by all. Seen by some in aerospace industry as fundamentally flawed. DITA meets requirements more closely but industry currently has a schism.