Information development organizations that started as Innovators or Early Adopters of the Darwin Information Typing Architecture (DITA) are now taking the DITA XML standard to new frontiers of adoption, even encouraging and supporting acceptance of the standard by more conservative potential users, the members of the Early Majority. This view of the DITA adoption life cycle is based on the thesis that Geoffrey Moore developed in his work, Crossing the Chasm. Subtitled “Marketing and Selling High-Tech Products to Mainstream Customers,” Moore followed the course of technology adoption from Innovators and Early Adopters through the Early Majority, Late Majority, and Laggards. As you might easily imagine, Innovators and Early Adopters are anxious to get their hands on the latest technology. They are often quite willing to accept usability flaws and general difficulties of adoption because they believe that a new technology will give them a competitive edge and a business opportunity. Unfortunately, the Innovators and Early Adopters, as you can clearly see in Figure 1 represent only 16% of the potential.

Moore suggests that there is a deep and significant gap between the Innovators and Early Adopters and the Early Majority, a gap he labels the Chasm. Early Majority customers want a calm and evolutionary change that minimizes the stress on their organizations. These mainstream organizations want a technology to fit easily into existing environments, provide a well-established design methodology, and have a support base of trained and experienced experts to implement it. Without a support base or a list of reference-able organizations like them, the Early Majority customers remain on the sidelines.

In this article, I demonstrate how and why DITA adoption has crossed the Chasm, based on the hard work of the Innovators, like my own organization, and the bravery of the Early Adopters, with whom we learned what was required to support the Early Majority. And, I also discuss the new directions that the Innovators and Early Adopters are now taking the technology to meet the rapidly emerging requirements of enterprise adoption and optimized delivery of information to consumers.

**It All Begins with the Innovators**

As Moore explains, Innovators are technology enthusiasts. “They are the ones who will spend hours trying to get products to work that, in all conscience, never should have been shipped in the first place. They will forgive ghastly documentation, horrendously slow performance, ludicrous omissions in functionality, and bizarrely obtuse methods of invoking some needed function—all in the name of moving technology forward. They make great critics because they truly care.” If Innovators sound to you like many of the first DITA users, you’re right. Those of us who started using DITA even before the first official release of the standard in 2005 were trying something new because it held remarkable promise for the information-development industry.

When CIDM inaugurated in 2005 the DITA North America segment of our now 14-year-old Content Management Strategies conference, the presentations were largely provided by the Innovators. All the DITA-related speakers were members of the OASIS DITA Technical Committee, the managers of the DITA standard. IBM participation included teams that were DITA Early Adopters. Attendee interest was high; in fact, they overwhelmed the conference venue. They came to find out what the seeming hype was all about. Most of them went home with a “wait and see” perspective. The technology supporting the standard was just too new. Even the vendors of authoring and content management systems remained skeptical. It was too risky to invest software development funds in something that might not make it. Better stay with the proven practice of writing DocBook customizations.

**Innovators Guide the Early Adopters**

It all changed in 2006. So many attended the San Francisco conference, there was hardly room to turn around. It had taken about three years, but what we experienced was the entry of the Early Adopters. Vendors were still cautious but the crowd’s enthusiasm was contagious.

When the information-development manager from Stockholm invited her two IT colleagues to attend the 2006 Content Management Strategies conference, using XML to create standalone topics of content was still a provocative idea, just emerging and still viewed as strange and risky. But when this small team learned that they could transform the Installation, Operations, and Maintenance (IOM) manuals produced for their global enterprise’s industrial products, they were convinced. The
A DITA Timeline for the Early Majority

As Innovators, we have learned a great deal from the Early Adopters. We refined our Roadmap to DITA, putting into place a standard process and timeline from early exploration and preparation through education and training to pave the way for a successful implementation. Our timeline, ready for DITA Early Majority organizations, looks like Figure 2.

Early in the DITA Timeline, an Early Majority adopter requires Planning time to explore, prepare, and become educated about DITA adoption. Planning may actually begin much earlier as managers and team members gather information about what DITA is, who is already using it, what will it cost to implement, and what changes it might require to internal processes. We encourage organizations to use their Planning time to attend webinars or workshops, read our Introduction to DITA, and review information available on the OASIS DITA Adoption website <http://dita.xml.org>.

Once you believe that DITA is the path for your organization, you must communicate to executives and those who control funding. The most appropriate form of communication is a business case, tied closely to a management presentation. To prepare your business case, you should focus on identifying pain points in your organization, issues that would be solved by better practices. Among the pain points frequently identified, we find:

♦ Increasing translation costs
♦ Changing business models resulting in new content types
♦ Inconsistencies and duplication in existing content
♦ Time spent formatting content for numerous deliverables
♦ Changing customer requirements for information access

By identifying the costs associated with each of these pain points, information-development managers often find it relatively easy to identify clear cost and time savings as well as opportunities to improve quality for the customer.

As the timeline illustrates, Planning time may be quite short, especially if your business case has already been accepted, or long if you must demonstrate your understanding of potential implementation costs as well as potential cost savings. However, it's important at this early stage to focus on business problems and opportunities rather than tools acquisition. A common mistake is to assume that buying a new toolset will automatically result in a successful DITA implementation.

As the DITA Timeline shows, early planning means developing a specific roadmap for your organization. Information Modeling is a critical early activity because it means:

♦ Assembling an information architecture team of enthusiastic supporters
♦ Working carefully through the DITA architecture

Initial meeting led to a corporate-level presentation led by the Director of Marketing Communications. What would it mean to their corporation if they could significantly reduce the $42 million cost of translation and reduce the total cost of content? What if the IOMs could be developed with single-sourced content, reducing time for writing, reviewing, and publishing? What if they could reduce publishing costs millions of dollars in the first full year of DITA implementation? It was all they needed to hear.

The Innovators were there to help, albeit with a hefty amount of experimentation. How should the authors be organized? How would we create a flexible Information Model to be followed by those authors? What training was needed? Who should be involved in a pilot project? How would we get the content converted? What would have to be rewritten?

The European company presented special challenges—there were few writers. Marketing communications staff produced the new IOMs from the engineers’ hand-written notes on old copies. Since technical writers, marketing communications, engineering, and regulatory affairs were all part of the legacy process, they all had to be invited to the planning. This diverse team became responsible for the first Information Model. It turned out to be the right thing to do, since it spurred knowledge and acceptance among many parts of the organization.

As Innovators, we also interacted with Early Adopters who were not as successful as the first one. One organization simply gave its writers a DITA XML editor and told them to do whatever they wanted. The result was complete chaos. Everyone had a different notion of what constituted a topic. None of the XML tagging turned out the same. No stylesheet could handle all the individual differences without creating a mess of exceptions. As it turned out, they had to start over.

Many other Early Adopters discovered that implementing the DITA standard was not as simple as buying a new set of tools and technology, as they had assumed. Staff often believed they were getting a new desktop publishing system. Nothing needed to be changed in their processes or how they thought about content development.

What these Early Adopters learned was that the real issues are always about process, standards, and collaboration. Getting people to change the way they work is much more challenging than teaching them to use a new tool. Some Early Adopters learned to their dismay that without process and structural authoring changes, timelines lengthened rather than decreased and staff argued for a return to the “good old” tools. After a bad start, we found it took at least another year for everyone to calm down and for management to institute the training and process changes that made a significant difference to productivity and acceptance.
Deciding which elements of the DITA architecture are needed in your organization and which may be discarded

Documenting your decisions in a custom Information Model

Using your custom Information Model as a basis for your pilot project

The DITA Timeline indicates that you may convert some content and start on your pilot information development before the Information Model is complete. You will find that Information Modeling is most effective when your information architecture team actually begins work on the pilot content. Practice with real content always makes learning and decision-making easier.

During Information Modeling and Pilot Project development, Stylesheet development also gets started. Stylesheets are designed to transform simple XML content into publications, whether these are for PDFs and help systems or delivery to the web as HTML books or individual topics. Whatever the requirements, Stylesheet development should result in publications that look the way you want them to look.

While the Information Modeling, Pilot Project, and Stylesheet development are underway, an Early Majority adopter begins to evaluate Component Content Management Systems (CCMS). Because a process has begun to be well defined, requirements for a CCMS become clearer and comparisons among offerings are easier to make. It is especially important to have clear requirements when trying to distinguish the capabilities of a purpose-built DITA CCMS and a system that might have to be heavily customized. Unfortunately, many companies own several document or project management systems that are fine products but don’t meet the needs of the DITA architecture.

Once a Pilot Project is complete, Early Majority adopters need to report the results to senior management and secure support and funding for the next project phases, especially the process of rolling out the solutions to other information developers and the majority content.

With all the right elements in place, you can demonstrate that you have reaped the benefits of automated publishing and structured authoring, as well as the mantra of write once and use many times, supported by XML elements named for the content they contain rather than how they look on a page or a website or a tablet or a phone (you see the point).

Innovators and Early Adopters move ahead

At the same time that the DITA standard has moved across the Chasm to the mainstream Early Majority adopters, the Innovators and Early Adopters have not stayed in place. In 2012, we are engaged in helping Early Adopters move more conservative internal groups across the Chasm to profitable adoption by the global enterprise. Content that started out with highly technical publications is finding a home in marketing communications, service and support functions, training, sales catalogs, and more.

Organizations are discovering ways to use in new areas the content that they are now producing with significantly reduced costs. Customers who want quick answers to their questions, rapid solutions for using products effectively, content delivered through social media, video, and smart phones are finding their needs addressed. The flexibility provided by DITA XML solutions makes it easy to repurpose and restructure to deliver customer solutions in new ways. The ease of use of XML authoring, supported by a host of simplified products, means that more content can be converted and developed anew to meet the needs of content contributors throughout the enterprise. Collaborations with myriad enterprise groups today mean that the Early Majority consumers of the DITA architecture are coming aboard and ready to invest.

Innovators are also exploring emerging technologies. E-books, Kindle publications, and Apple iBooks provide capabilities for interactive presentations that involve the customer directly. What if, for example, we could include executable code examples that members of a software developer community could modify and test in the context of the instructions? What if we can embed 3D animations of parts assembly and repair and deliver to a handheld device where the images might be manipulated using voice commands. What if we can assemble content based on user characteristics through a login identifier or from the text of a question and let them download a set of topics formatted as a mini-guide?

Innovators are stretching the existing boundaries of the DITA specification by exploring new technologies for content delivery. They are also exploring ways of simplifying the authoring and reviewing environments so that more communities members are able to contribute content without the barrier of learning XML first. And, as always, the Innovators are offering their latest ideas to the Early Adopters.

Across the Chasm, DITA has enormous potential to become a foundation for new information development. Crossing the Chasm means that Early Majority resources become available to fund new development efforts. The expansion of the Early Majority community into new areas of the enterprise and new government, business, and industrial sectors means that we have more opportunities to learn what people need to increase efficiency and expand the borders of their abilities.