

Insider Year in Review

It is a worthwhile exercise to review what I thought were trends in the technologies and tools that I follow and to examine my predictions over the past year. It improves my assessment of important technologies and can refine my forecasting approach. This past year I emphasized three trends: The potential benefits of XML as expressed in the eXtended Business Reporting Language (XBRL); a legal issue combining digital documents (Microsoft Word) and XML—i4i's suit against Microsoft's alleged patent infringement in Microsoft Office Word; and the importance of a new product category, e-readers.

Let's start with i4i. Nobody believed that i4i's lawsuit would stop Microsoft from selling Microsoft Word, although the results of that suit were surprising. Microsoft was ordered to pay i4i \$240 million in damages, and that award was upheld. In July, Toronto-based i4i won another victory, as the U.S. Patent and Trademark Office confirmed the validity of the i4i patent. In last year's column "Words and 401(k)s," I said that Microsoft would keep selling Word, but it wasn't clear how it could continue providing its "custom XML" functions without licensing it from i4i or using a different technology. Well, Microsoft was forced to stop shipping Word until it removed the custom feature. In Office 2010, Microsoft re-engineered the feature to avoid the patent infringement. Talk about the mouse that roared. Let's hope software vendors everywhere are learning that they must improve their products with true innovation, and that innovation, not litigation, is how they grow their bottom lines.

Now to XBRL, which looks like the ultimate XML application. Imagine a complex financial vocabulary, with more than 1,000 rules and XML tags, expressing complex financial reporting needs for publically traded companies throughout the world. XBRL could enable ordinary investors, with the right tools, to sharpen their evaluation of individual and groups of equities and mutual funds. I predicted that XBRL might help "savvy investors analyze and generate reports using XBRL data," although at the time, I noted that the tools I was considering were not simple because, in part, the underlying financial information is complex. Since then, Altova has continued improving its XBRL capabilities, and its 2011 MissionKit provides XBRL charting and reporting functions.

While current tools are still too complex for mainstream consumers, I believe that will change, eventually. Liv Watson of XBRL International told me that she's "been around since there were five people in a room, considering XML's future impact on accounting, in 1997. The SEC is now getting critical mass data for forensic analysis and corporate governance. Data aggregators' business models will have to change." XBRL US Labs recently announced a project to deliver an iPad app for analyzing XBRL information this year.

Now about the iPad: It, and e-readers in general, has rocked the econtent world this year. Google Books periodically estimates the number of books in the world; as of this writing, the total was 130 million, counting only traditional bound books. Most are not yet digitized, yet clearly, the trend is toward digitization. Now combine all the digitized books with all the digital records and documents in every enterprise, with the need to be able to view any of them in their original formats for as long as needed, no matter what version of which software created them. This total, whatever it is, screams for a device to be able to view those documents consistently and reliably, for long periods of time. I hoped just such a product would come from Plastic Logic, in the form of its QUE reader, which promised to be lightweight, to be nearly indestructible, to have a long battery life, and to offer viewing formats that could be updated as needed. The ship date (and my opportunity for a hands-on review) of this product continued to slip, and suddenly, Plastic Logic pulled the product, citing a need to address changes in the e-reader market. Soon afterwards, the *Financial Times* reported that Plastic Logic was selling a majority stake of its company to the Russian firm Rusnano.

So I bought an iPad, a delightful device with definite shortcomings as an e-reader, handling only a small number of digital document formats and rendering some of those imperfectly, but it has a stunning popularity and some features that have reignited publishers' hopes for profitable digital publishing.

*Talk about the **mouse that roared.***

Lesson relearned? Never underestimate how difficult it is and how long it takes to build new tools exploiting very complex technologies. And never underestimate what can be accomplished with them either. ■

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