

Information Insider

Browser Wars: Now It's eBooks

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November 2000

The story is familiar. One innovative vendor develops a browser, and that browser quickly rises to the top of the heap. In comes Microsoft, initially with a work-in-progress alternative, that slowly evolves into an alternative that crushes the original innovator.

Could Netscape Navigator's sad fate befall Acrobat just as the eBook industry takes off? Its hard to imagine any product surpassing Acrobat at what it initially set out to do: producing digital renditions of paper documents. Instead of printing to paper, you printed not an image but a digital rendition replacing pictures of fonts with fonts themselves. Since fonts are smaller than images, the result was smaller, searchable renditions.

Adobe, inventor of PostScript, applied its experience to Acrobat, trumping its two rivals with a new marketing twist: instead of extracting expensive licensing fees for PostScript systems, it would (eventually) give away the viewers. If you wanted to create these digital renditions (Acrobat Portable Document Format files, or PDFs) for others to view, you paid a modest fee for the Acrobat product suite, including a print driver (PDFWriter) and a higher-quality rendering engine based on PostScript, Distiller. If you could print it, you could "PDF" it for others to view and search the digital rendition even though they might not have the application (e.g., Quark, Excel, MS Project) originally used to produce the product. The quality of PDF files, and the ease of producing them, quickly made PDF a publishing hit. Adobe's licensing of Verity's search system, downsized as an Acrobat plug-in, allowed electronic media publishers to fill media and Web sites with searchable content that could replace hardcopy manuals. When Adobe expanded Acrobat with bookmarks and linking, rudimentary security, annotations, and some support for multimedia, its competitive advantage seemed beyond challenge. Today, 160 million people are estimated to be using Acrobat PDF files. As for eBooks themselves, some predict that the market will grow to nearly \$3 billion in five years. Adobe's Warnock believes the number should be 20 times that when you consider the ability to distribute eBooks securely (using Adobe's WebBuy technology). What could go wrong with Adobe's high-wire act? Acrobat did a peerless job of producing digital renditions of paper layouts, but tied itself to the two-dimensional limitation of paper. The PostScript legacy made display of TrueType fonts problematic, and zooming for clarity with the magnifying glass eliminated a sense of context, especially in multicolumn, multipage copy. Acrobat provided layout fidelity par excellence, but it also delivered an essentially flat, two-dimensional, proprietary, and unstructured medium.

Enter Microsoft (and lesser players such as Glassbook and netLibrary). As the market for eBooks has now begun to skyrocket, so have Microsoft multimedia products like Multimedia Player and the universal influence of XML. Suddenly, Acrobat's monopoly seems vulnerable. The new Microsoft reader offers clearer type ("ClearType"), and thanks to an agreement with Audible Inc., this reader can convert its text to speech, allowing a readable book to read itself to you—book and book-on-tape in one package. As slick and appealing as that capability is, Microsoft didn't stop there. In late May, Microsoft announced a partnership with OverDrive Inc. to develop a comprehensive set of authoring tools and other services to develop an authoring platform, tuned for creating eBooks based on Microsoft Reader. With an upgrade to the free standard tool for building Microsoft titles, authors can easily convert content from MS Word, HTML, ASCII, image files, or OEB. OverDrive's ReaderWorks Publishing tool—an upgrade to the free standard tool for building Microsoft Reader titles—will accept MS Word, ASCII, HTML, images, and OEB formats.

The "Open eBook Initiative" (OEB) may over the long term prove the most powerful impetus for developing eBooks based on Microsoft Reader. The current OEB content document type definition (DTD) is conservative, with elements much like XHTML, although the standard already permits some customization beyond HTML-like tags. Additionally, OEB permits easy creation of marketing and

copyright protection data in ONIX, XrML, and Microsoft Digital Rights Management architecture, and uses the Dublin Core standard for metadata. All this, combined with Microsoft's marketing muscle, won it a deal with Barnes and Noble to produce eBooks for its barnesandnoble.com superstore. What about MS Reader itself? The interface is very simple and offers no full-text searching or ability to index collections. "ClearType" isn't any better than what you see with Acrobat. However, there is clearly an architectural difference between MS Reader and Acrobat: via OEB, Microsoft is based on structure and XML rather than on PostScript.

Will the emergence of MS Reader lead to a balkanization of eBooks? MS Reader's long-term prospects are anybody's guess, but given Acrobat's persisting popularity (on and off the Web), we don't expect it to go away anytime soon. Still, the different architectural directions of these two products suggest that adding support for XML in Acrobat may be a matter of plug-ins and third-party support products, where Microsoft's approach builds in support for both proprietary formats (like Word) and XML. As the OEB extends its use of XML, Acrobat's high-wire act may need a safety net.

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