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## Rich Media Knowledge Strategies: Why Aren't We SMILing?

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What difference does it make  
whether rich media content  
is based on standards?

**a**lthough some buyers of IT solutions like the comfort of an established vendor like Microsoft, increasingly IT organizations want open solutions based on standards. This is because standard solutions are often (initially) not as efficient or functionally rich as proprietary vendor offerings. Examples of richly functional but proprietary solutions abound, with obvious examples like Macromedia's Flash MX and Microsoft's Media Player.

Both players are functionally rich, free, and essentially proprietary. Curiously, both Macromedia and Microsoft have actively participated in XML multimedia standards that could apply directly to these multimedia products. Both participated in the Synchronous Multimedia Integration Language (SMIL) and Scaleable Vector Graphics (SVG) World Wide Web Consortium (W3C) committees. SMIL first became a released W3C standard (the W3C calls these "recommendations") in June 1998. In August 2001, SMIL version 2 was also approved as a W3C recommendation. SVG was approved in September 2001, followed by two new SVG specifications (one an extension to version 1, another for mobile devices). These are both in final review.

Macromedia and Microsoft have large market shares for Flash and Media Player. If they modified their products to support W3C multimedia standards—standards they themselves helped define—it might have the "negative effect" of opening them to competition and reduced market share. So it's easy to see why Flash and Media Player go their own proprietary ways. So, you might reasonably ask, "Who cares? What difference does it make whether rich media content is based on standards? What knowledge is there in rich media anyway? Isn't it enough to have an efficient, versatile player of video and sound—with a bonus when the player is free?" Actually, there is more to rich media than meets the eye and ear, beyond the maxim that a picture is worth a thousand words. Each of us—individuals and enterprises alike—is being overcome by an exponentially increasing load of information growing both in number and type. Managing and using that information is increasingly futile without following data management best practices, including two key principles: Keep each information unit in only one authoritative source object, and re-use and republish that information as many ways as is useful, which standards would facilitate. Therein lies a legitimate complaint with proprietary multimedia.

## THE KM IN RICH MEDIA

First, Einstein's maxim: Everything should be made as simple as possible, but no simpler. That said, here is just enough background about XML standards to help you understand the power XML provides for graphics and multimedia. SMIL is a standard for defining time-based presentations in multiple frames and tracks, and these can contain audio, video, vector graphics and animation (including Flash movies). SMIL is platform-independent with respect to media type within its frames or tracks; SMIL doesn't favor one media type over another; it merely specifies those frames and tracks and where the content resides. SMIL version 2 was modularized and allows (among many other benefits) easier integration with SVG and support for Dublin Core's attribute scheme. One of the SMIL modules supports Dublin Core's 15-category metadata scheme (<http://dublincore.org/>). This lets each presentation include information about its creator, title, and date in a standard, predictable way. Lastly, SMIL version 2 also specifies a standard way to develop browser-based animation (similar to Dynamic HTML, which means quite different things to Internet Explorer and Netscape). Microsoft uses the term "HTML+Time" for this SMIL capability and supports it in Explorer versions 5.5 and later.

In contrast with SMIL, SVG is an XML vector graphic standard. Unlike the case with vendor-proprietary vector graphics, applications can easily manipulate, search, or transform SVG objects by applying predictable XML style transformations. Common to both SMIL and SVG is XML, with unparalleled opportunities for single-source content and lifecycle management and reuse. If your goals are: consistent use of marketing content throughout all of your Web pages; media with guaranteed consistency when marketing messages change; or your audience is segmented or international and you want to deliver personalized content based on their interests, then XML is a natural to meet these goals. The argument

for proprietary solutions becomes less compelling as complex content management needs increase.

## SMIL FILES

Even though Microsoft and Macromedia don't offer them, there are a variety of players today from other vendors that play SMIL productions. RealNetworks, QuickTime and Oratrix multimedia players all are based on SMIL. Internet Explorer version 6 also delivers dynamic content using HTML+Time, but this is a form of Web animation, not a time-based multi-frame rich media solution.

Unlike SVG authoring tools, provided by Corel and Adobe, there are very few authoring options for SMIL. Context Media has indefinitely postponed its plans for its SMIL authoring tool "iBuilder." Instead, it is concentrating on its Context Media Interchange Platform, which facilitates the integration, management, packaging, and distribution of content. Padu Nellayappan, Context Media's products vice president, when asked about iBuilder, told me that his company is moving away from client-based products, and that only students and researchers seemed interested in iBuilder.

RealNetworks' RealSlideshow was a fine consumer product for creating SMIL-compliant slide shows with video, yet few services hosted those shows. RealNetworks no longer lists RealSlideshow on its list of authoring products. Instead, Real lists Amsterdam-based Oratrix products and PresenterOne, a product for streaming PowerPoint presentations.

If you are a multimedia-standards believer and want a full-featured SMIL authoring tool, one vendor offers a truly robust offering: Oratrix and its GRiNS Editor for RealOne and GRiNS Pro Editor for SMIL 2.0. I asked Oratrix's CEO, Dick Bulterman, if he believed that Microsoft and Macromedia will ultimately adopt SMIL in their products, and—if not—would the market grow without them. Bulterman believes Microsoft "may be forced to support SMIL if they want to

integrate the Media Player as a mobile multimedia engine." He noted that all mobile multimedia phones make use of SMIL in various dialects. He also believes that "At some time, Flash will run out of steam, especially if users want to make a single presentation that plays back in multiple environments. We'll have to see how Macromedia clings on in the face of new competition from SVG."

Oratrix tools provide outputs to RealOne, 3GPP, GRiNS/Pocket PC player, and to HTML+Time. If you want standards-based multimedia, Oratrix has products to develop and deliver them to present and likely future platforms. One wonders if Bulterman is an unrealistic modern-day equivalent of the Dutch boy with his finger in the dike, resisting the force of proprietary products. He admits that "the adoption has been frustratingly slow," but people will eventually "want to add value to media content that only SMIL can provide."

Recapping, by reusing content in SMIL presentations, you guarantee consistency, accuracy, and get more value from your content management system. Increasing ROI, by getting more from your content management investments, is on everybody's mind. One last thought: Macromedia acquired "FutureWave Software" and its "FutureSplash" product, changing its name to "Flash." Microsoft jumpstarted its Web browser product by licensing the Spyglass browser code from NCSA Mosaic. Both companies have shown their readiness to acquire or license needed technology they need. If both vendors can be persuaded about the value of standards-based multimedia and graphics, history could repeat itself. Then to paraphrase an adage, "He who SMILs last, SMILs best." ☐

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