

Keynote Tunes Web 2.0 Performance for End Users

Abstract

Keynote Systems (Keynote) has been busy preparing for several fall launches covering mobile, voice over IP (VoIP), Web site and user experience test and measurement services. To add fuel to the already fast-paced momentum, the company just announced end of fiscal year 2007 revenues that were the strongest in the company's history—a 22% jump from its respective 2006 results! The thread across all of Keynote's announcements is its "loud and clear" support for measuring the responsiveness, reliability and customer experience of Web sites using Web 2.0 technologies from the end user perspective.

Specific products addressed in this brief include WebEffective 6.0, Application Perspective 5.0, and Transaction Perspective 8.0. WebEffective 6.0 includes capabilities for assessing user experience on Web 2.0 sites. The new versions of Keynote's flagship on-demand services for testing and measuring the performance of Web sites—Application Perspective 5.0 and Transaction Perspective 8.0—have been enhanced to allow for comprehensive testing and monitoring of AJAX-based and other Web 2.0 applications. Additionally, Keynote has introduced the Keynote Internet Testing Environment (KITE) that is designed to bridge the gap between Web developers and Web operations. KITE provides Web application developers with point and click access to a consistent testing and measurement platform for the entire application lifecycle using IE7.

Keynote Capitalizes on Web 2.0 Capabilities to Improve the Customer Experience

The proliferation of rich media content that characterizes Web 2.0 environments makes the Internet experience dazzling for customers. At the same time, it's challenging for IT deployment and operations staff, who need to figure out how to assess and manage the performance impact of asynchronous JavaScript and XML communications

(AJAX), Web application hybrids (mashups), and standalone technologies, such as Adobe Flash, on applications and transactions. Companies strive to manage and improve the online customer experience, but they essentially lack visibility into end-users' interactions with video, Flash, AJAX, and mashups. Companies are investing large amounts of capital in improving online experiences—adding movie clips, adjusting ease-of-use through navigation, etc. and the challenge is to know whether or not these investments are helping to retain customers and improve the users' ability to do business with the company.

Keynote's Solutions

Keynote focuses on continuously improving online performance, accelerating speed to deployment, and enhancing the Web 2.0 customer experience, offering a range of solutions designed to close the gap between what's happening on the page and what IT thinks the user experience is or should be. Keynote's Web Performance tools—composed of Application Perspective, Transaction Perspective, and KITE help companies assess Web page performance proactively. WebEffective 6.0 offers companies the ability to conduct in-depth customer experience studies in a very interactive way with the user. Transaction Perspective embeds Internet Explorer version 7



(IE7), upgraded from IE6, enabling developers to benchmark site performance. Application Perspective tests, measures, and monitors the quality of performance using open source technologies that can emulate multiple browsers, including IE, Firefox, Safari and Opera. Keynote's performance consulting practice draws on Web 2.0 technology use research in various industries and leverages this information to help companies create better performing, more available Web sites that provide rich user experiences every time.

WebEffective 6.0

WebEffective is an on-demand research product used by companies to improve their Web site effectiveness and online business performance by conducting in-depth customer experience research. The tool helps companies understand not only "what" users are doing on a Web site but also "why" they are doing what they do. WebEffective 6.0 delivers many new product capabilities including comprehensive support for Web 2.0 sites; a customizable participant user interface; and real user performance testing from any of 160,000 desktops (Keynote's panelists) to capture connection speed, page load time and browse time during the course of a site evaluation. WebEffective 6.0 provides Web marketers, researchers and advertisers a customer experience research and usability lab without walls.

Keynote Web Performance tools track the online experience, helping companies better manage performance and usability.

The new version of WebEffective now facilitates quick, accurate testing of end-user interaction with DHTML, AJAX and Flash, a combination of client-side technologies gaining in popularity used to create highly dynamic and interactive Web sites, which mimic the rich functionality found in PC applications. Prior to these advances, user experience measurement tools were a lot of work. They typically required (and still do with most tools) an instrumented approach and related tags inserted manually into Web applications and page content in order to gain any insight into users' habits with rich Internet applications (RIA). With its Web 2.0 enhancements, WebEffective 6.0 is now well-positioned for testing and measuring the effectiveness of the fast growing category of interactive advertising and market-

ing micro-sites built using Web 2.0 technologies. Companies investing in such sites are beginning to take a closer look at their return on investment. WebEffective 6.0 provides powerful capabilities for measuring such return.

Keynote Internet Testing Environment (KITE)

Keynote's testing console, KITE, accelerates development and testing by enabling developers to test concepts and changes immediately on their desktops—reducing transaction scripting and testing efforts from hours to minutes. It is a workbench environment for Web application testing and development, enabling Web developers to execute rapid performance analysis and validation on their desktop, and fix application code before it goes into production. Built expressly for Web 2.0 environments, KITE creates synthetic transactions to simulate the user going through an application and performing different actions. KITE records Web page activity and enables developers to quickly validate scripts and consistently test and measure application performance.

The KITE recorder adds value by enabling developers to test applications quickly, freeing them from being mired in maintenance efforts. They can focus on developing new features and products rather than troubleshooting production code. More precise monitoring of application components helps companies address problems before they progress to a critical stage. Giving operations and development teams a shared context adds clarity to communications, helping teams to quickly identify and resolve application errors. KITE also infuses consistency into the test and measurement process.

Transaction and Application Perspective

Keynote leverages an authentic Internet Explorer browser in its Transaction Perspective service. This capability enriches a developer's ability to validate the end-user experience. Testing Web applications before they become active has always been desirable in all environments. The user experience, however, has been largely untouchable. It is remarkable to have the capability to get to the granularity and perspective of the end-user in this regard.

Application Perspective 5.0 brings a number of capabilities to the market as well. It provides companies with a software-as-a-service and diagnostics tool for companies requiring frequent, operational monitoring. New capabilities in this release include support for advanced emulated browsers as discussed earlier, the use of cascading style sheets for more complicated Web site architectures, and HTML and header capture to assist operations with more easily visualizing the diagnostic process.

EMA's Perspective

The result of these investments for the market is an armor of tools to assess the reality of their Web site performance. Keynote demonstrates a multi-dimensional view of monitoring the user experience on the Internet. Its not just a single thread, but rather an approach that incorporates many aspects of measurement from the development team, operational performance, user experience, and consulting to round out its practice.

Keynote puts the capability to record and replay scripts in the hands of developers, so they can test Web applications prior to deployment. In an extraordinary move, Keynote offers the console free to all developers. Although currently only customers can download it via the myKeynote web portal, Keynote intends to make the KITE console available to the community at large. Potential customers can now develop a page or script, and then test it locally on their desktop free of charge—while we do not know how long-term this model will be—it certainly will get some attention and garner support for Keynote in the short-term. This capability also serves to defuse the criticism of some competitors that only Keynote consultants can create Web site monitoring transaction scripts. Competitors will be hard-pressed to make this claim in the future. The “try before you buy” philosophy means buying decisions can be driven by Web application developers, potentially giving Keynote access to new markets.

Keynote has remained steadfast in its intent to be the leading performance and user experience vendor for Web performance for several years. This has not been just a matter of shoptalk. Rather, Keynote continues to make a lot of investments. While Keynote has acquired a number of companies to gain access in a particular market, a great deal of investment has been made in the form of internal development dollars to enhance a solid core of Internet performance technology. This is not to say there are no competitors in the market aiming to grab the same or similar group of buyers. Keynote stands out because it continues to stay on top of new technologies that can enhance its offerings by providing visibility into how users are experiencing the Internet—this finds its way to market through vertical-based insight, a wide range of media-based performance tools, and user experience measurements that enable companies with a large Web-presence to maintain and improve their integrity.