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## Makeover for Microsoft Excel: Spreadsheet upgrade plus high-performance cluster touted as trading's future

Few software products are as widely accepted and ubiquitous, particularly in the securities industry, as the Excel spreadsheet, and now its proprietor, Microsoft Corp., is acknowledging that the technology hasn't kept pace with the demands that contemporary trading and analytics are placing on it. A new version, Office Excel 2007, is on the way that, in conjunction with cluster server configurations based on the Windows operating system, will make Excel faster, more manageable and readily compatible with the high-frequency trading styles that have changed the complexion of securities markets in recent years, according to the Redmond, Wash. software giant.

"Excel is the trading platform of today," William Hartnett, general manager of strategy solutions in Microsoft's U.S. financial services group, said in an interview last week. "What we are talking about is the trading platform of the future."

Several firms active in the capital markets are said to be testing Excel 2007, which is expected to be formally on the market by November. But a demonstration version is available on Microsoft's Web site, and it will be on view this week at the Securities Industry Association's technology conference in New York, running on a Hewlett-Packard Cluster Platform 4000.

The end users who have made Excel a de facto standard for trading strategies, models and simulations are continually looking for enhancements, which may come from Microsoft, from the numerous independent software vendors that develop add-ons for specific purposes, or from in-house programmers who are called in when the commercially available packages are deemed insufficient for a given task. When Microsoft undertakes such a sweeping initiative to refresh one of its fundamental products, the user community tends to pay closer attention than it would to, say, a periodic version upgrade, and according to Stanley Young, worldwide director of financial markets at Hewlett-Packard Co., "we are already seeing traders talking about" the next-generation Excel. "This is an example of the real-time, low-latency performance that everybody in the industry is looking for, and we are pleased with the direction Microsoft is taking."

William Harts, managing director and head of strategy for equities at Banc of America Securities, said he could not fully judge Excel 2007 and its services and infrastructure improvements without seeing them in action. But, he noted, "Microsoft has been a good partner with BofA. Our direct-market access platform InstaQuote sits on top of Microsoft Windows and integrates with Windows. We have an Excel interface to that product." Of the "platform of the future" announcement, which Microsoft plans to make Tuesday, he said, "It looks like they have made a robust trading-floor version of Excel. It looks like this is a tool you can build other things on top of, whereas we are in the business of providing more end-user tools and user products."

## Integration a Priority

Microsoft's Hartnett pointed out that corporate approaches to computing and to technological "plumbing," much of it Microsoft-based, have changed in recent years. "We're always driven by customer demands for new features and products, and five years ago those features centered on desktop functionality, network searches. ... Microsoft Office [including Excel] was seen as a stand-alone set of products, with the focus on individual applications." Today, said Hartnett, Wall Street is especially intent on "integrating tools into the enterprise data that drives their business." Microsoft is in the midst of "the biggest product ship cycle in the history of the company" to serve these enterprise needs, he said, and Excel 2007 is an example.

Excel's proliferation has had unwelcome consequences. Though it is a common denominator, its presence on individual desktops makes it difficult to control, which can cause problems in management coordination and various aspects of compliance. Hartnett referred to this as "spreadsheet creep," with "no single version of the

truth" for oversight and compliance purposes, which in turn is of "limited usefulness in an algorithmic trading environment."

Excel 2007--along with a set of Excel Services on the Office SharePoint Server, backed by the high-performance Windows Compute Cluster Server--will close these gaps as "the standard modeling and trading platform for the future," Hartnett added. "Algorithmic trading has changed the landscape on Wall Street. The rules are different. We need new tools to address that."

## A Million Rows

Visible changes in Excel 2007 include the size of the grid: 1 million rows by 16,000 columns. The current maximum number of rows--64,000--was too few for some of the larger quantities of information that traders needed to analyze, in which case they'd have to employ multiple spreadsheets.

Microsoft is also building in visualization tools beyond the color formatting that many Excel applications already have. Traders and others "can discover patterns and highlight trends in data by using rich visualization schemes like gradients, thresholds and performance indicator icons," according to the company.

Earlier this month, Google began offering a spreadsheet on its Web site that some analysts saw as a potential challenge to Excel's dominance, though it is designed to complement, and import data from, Excel (Securities Industry News, June 12). It is based in large part on technology Google acquired last year from 2Web Technologies, a New York company that developed a Web-delivered spreadsheet for Wall Street firms and whose founder, Jonathan Rochelle, had wrestled with spreadsheet creep when he was an IT executive at JP Morgan & Co. Rochelle is the product manager for Google Spreadsheets; its selling points include multi-user collaboration and convenient data storage via the Web and on Google's high-capacity servers.

Microsoft is also selling collaboration and centralization: The Excel Services that are coming out with Excel 2007 enable spreadsheets to be managed on a server to ensure a common, current, "single version of the truth." Spreadsheet data can be navigated, sorted and filtered, and other tools can be applied to it, via Web browsers.

"What's great for traders is that they can do their jobs quickly on Excel, regardless of the availability of the IT department," said Hartnett. "But from IT's perspective, it's not great to have that proliferation on desktops--with all the compliance regulations, they don't know what's out there. Our mantra is, give traders the flexibility they need, but give IT what it needs to make sure compliance is managed, with one version of the truth."

That centralization problem has spawned solutions from independent software developers. **Risk Integrated**, a New York and London firm led by former Oliver Wyman & Co. and Capco consultant Christopher Marrison, last month announced the Enterprise Spreadsheet Platform, which is designed to control and mitigate risks on spreadsheets throughout an organization.

Directly addressing the trading function is the enterprise spreadsheet management program of ClusterSeven, a company founded in the U.K. three years ago and now serving the securities industry on both sides of the Atlantic. "We have a platform for managing spreadsheets--unobtrusively--at the enterprise level," explained CEO Steve Semenzato. "We are focused on middle-office, mission-critical spreadsheet usage," which has become particularly fast-growing and challenging in the fixed-income and credit derivatives markets, he added. "The idea is to have a compliance blanket without changing the processes."

Hartnett said that ClusterSeven is a close partner with Microsoft in spreadsheet compliance and that its system is complementary with Excel.

## Cluster Power

The high-performance computing backbone is Windows Compute Cluster Server 2003--it keeps the name of an existing server but the offering is new, said Hartnett. The release was announced June 9 at the TechEd 2006 conference in Boston, and banks such as BNP Paribas in France, HVB Group in Germany and Italy's Monte dei Paschi di Siena are adopting the technology. Microsoft's hardware partners in the effort, besides Hewlett-Packard, include Cisco Systems, Dell, IBM Corp. and NEC Corp.

Oakland, Calif.-based grid computing software vendor Digipede, which integrates programs on Microsoft's .Net platform with cluster networks, is participating in the SIA technology show demonstration. "The capabilities we are demonstrating this week are something the industry has not seen before--the power of a compute cluster, the ease of deployment and administration of Windows Server, and the ease of programming of the Digipede Network," said the company's CEO, John Powers.

Stevan Vidich, technology architect for Microsoft's U.S. capital markets industry group, said the scalability and performance capabilities of Excel and Excel Services on 64-bit-chip hardware platforms is "unprecedented" and "a game-changer in the securities industry." As Vidich summed it up: "Financial advisers and traders essentially gain a real-time strategic trading platform, while firms benefit by leveraging the most common application in the market today--Excel--with the power of Windows Compute Cluster Server 2003. With the upcoming launch of Excel Services as part of Microsoft Office SharePoint Server, firms can centrally lock down their spreadsheets to provide a single version of truth, alleviating risk and compliance concerns."