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Apple at a crossroads: We offer a glimpse of the company's cross-platform OS. 125

Saying no to nagware: Readers tell Foster that software they pay for shouldn't pester them. 94



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Gotcha: Will Justice prevail?

Integration is key issue IT users take both sides

By Bob Trott and Lynda Radosevich
 MICROSOFT'S PLANS to integrate Internet Explorer 4.0 into Windows 98 raises a question at the heart of the Department of Justice's lawsuit against the software giant: Is the browser a separate application, or is it a function of the operating system?
 Attorney General Janet Reno accused Microsoft of anti-competitive practices — using its virtual

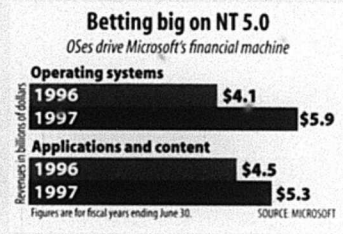
By Matthew Nelson
 USERS ARE SPLIT DOWN THE middle on the legalities and importance of the conflict between Microsoft and the Department of Justice.
 For many people, the central issue is whether the department is right to define Internet Explorer as a separate application from Windows 95, given Microsoft's plans to make it an integral part of the OS.

IE 4.0 page 28 USERS page 28

SPECIAL REPORT

Microsoft's high-wire act

By Katherine Bull and Bob Trott
 MICROSOFT HAS a dilemma with Windows NT 5.0. On the one hand, the company is committed to shipping a quality product in order to effectively compete in the enterprise space. On the other hand, it is counting on this all-important upgrade to significantly contribute to its 1998 bottom line.



With NT 5.0's ship date not set in stone and many users planning to implement at least six months after it ships, some industry observers wonder whether Microsoft can

► **FUTURE page 18**

ENTERPRISE COMPUTING

Most U.S. companies believe the European Economic Monetary Union currency, the "euro," is just a European problem. Wrong. When the euro is launched in 1999, it will profoundly affect all global companies' business and IT systems. What's more, experts say euro compliance will cost more than year-2000 projects.

Article on page 109

Mobile processors

Intel readies yet another Tillamook chip

By Ephraim Schwartz
 INTEL PLANS TO announce in January that the mobile Pentium chip in its .25-micron version, formerly known as Tillamook, will see another iteration in a 266-MHz version.
 However, industry analysts, IT managers, and notebook makers are questioning the need for another version of the Pentium chip, especially when the mobile Pentium II, code-named Deschutes, will follow a few short months later.
 "The 266 [MHz Tillamook] would run about 10 percent faster than the 233 [MHz Tillamook]," said Frank Spindler, marketing director of the mobile handheld products group at Intel, in Santa Clara, Calif.
 However, Spindler declined to confirm plans for such a chip.
 "The percent of [the 266-MHz chip's] performance is in the 10 to 15 percent range."



COM-CORBA realism

■ Talks could mitigate object differences

By Ted Smalley Bowen
 DESPITE THE HOLY-WAR imagery surrounding the market for distributed computing software, vendors of the Object Management Group's (OMG's) CORBA software seem to be taking a pragmatic approach to Microsoft's rival Component Object Model (COM).
 Similarly, Microsoft has of late exhibited a more open approach to the realities of integrating a multiplatform enterprise environment.

Active Group and licensing Unix versions of Distributed COM (DCOM) from Microsoft partners.
 "I'm surprised [ORB vendors] haven't licensed it already [as part of the offering] of some type of combined product. [supporting DCOM and Internet Inter-ORB Protocol], or put a CORBA/DCOM bridge on a Unix server," said Melinda Ballou, an analyst at the Meta Group, a consultancy in Stamford, Conn.

Market analysis

Toshiba's falling profits may spell trouble

By Rob Guth
and Ephraim Schwartz

TOSHIBA'S ANNOUNCEMENT last week of a 47-percent drop in non-consolidated profits during the first half of its fiscal 1997 year may indicate deep problems at the computer giant. The company blamed cut-throat price competition in the Japanese and U.S. PC markets, slowed U.S. PC sales, and a fall in demand for consumer goods in Japan. However, others have a different view.

"We haven't felt that Toshiba wanted our business very badly ... A lot of companies would consider having our business as prestigious, but they didn't seem to," said one IT manager at a Big Three automaker.

"Their Sekai program, in which you had to apply to them to get special treatment, was a different way of doing business, and we don't work that way," the manager added.

Toshiba's Sekai program targets certain companies while ignoring others, and may have backfired on them, according to one analyst.

"They told their reps that they were to focus on customers with

a certain dollar amount," said Steve Lair, executive consultant for the Lair Group, in Orange County, Calif. "So if you don't happen to be one of those customers, your relationship with Toshiba was hampered."

Company officials do not agree. "Sekai's target is global organizations," said Jeffrey Friederichs, vice president of worldwide marketing at Toshiba. "The program has been very successful, and it is a program that continues to expand and grow. Sekai allows us to have much higher global support for key customers."

An IT manager bluntly disagreed. "It never worked out," said an IT manager of a large global company, who tried to use the Sekai program.

Despite remaining the worldwide market leader for notebook PCs, the company has been plagued by excess inventory problems for over a year, analysts said. Also, laggard performance of the company's year-old U.S. desktop-PC business will likely continue to drag down earnings, analysts and officials said.

Internally, the company seems to be in disarray.

"It's a 'cover your butt world' at Toshiba," said one source familiar with events at Toshiba's U.S. headquarters, in Irvine, Calif. "Van Andrews [general manager of the computer systems division] is never seen, and the spirit of cooperation is never there."

Increased competition also may be affecting the gloomy financials.

"Toshiba was getting the benefit in the corporate space from problems that Compaq had with its notebooks and IBM's inability to deliver its ThinkPads," said Rob Enderle, an analyst at Giga Information Group, in Santa Clara, Calif. "Now Compaq is very strong, and IBM is shipping in volume."

For the full year, ending March 31, 1998, Toshiba expects nonconsolidated sales to fall 1 percent from the previous year to \$31.4 billion. Profit for the same period is expected to drop 17 percent to \$661 million.

Toshiba Corp., in Tokyo, is at <http://www.toshiba.co.jp/>.

Rob Guth is a Tokyo correspondent for the IDG News Service, an InfoWorld affiliate.

But before some prosecutor decides to make a play for national recognition by hauling Microsoft into court to face racketeering charges, the industry as a whole needs to demystify computers and do a better job of educating politicians, judges, and lay people about how technology really works.

As noted in the article by Bob Trott and Lynda Radosevich on Page One, whether the browser is a part of the operating system is a highly debatable point, even for industry experts. And letting a judge or a politician, at least at this

stage, be the one to determine the ultimate course of computer innovation just doesn't sound like a very good idea. After all, it was that kind of thinking that led to the mess we now call the telecommunications industry.

So the question is, do we just have to hope that the courts will serve us well as the government gets more involved in technology, or is there some middle ground that will effectively allow the computer industry to police itself? Write to me at michael_vizard@infoworld.com.



will be harder to consummate, and that they personally will have to spend more time and money on political action committees to influence policy makers.

Of course, some of this is just an inevitable part of our industry's maturity. Although we may fondly look back at the wild and woolly days of the last 20 years, the reality is that our business has become a core component of the national interest.

FROM THE NEWS DESK · MICHAEL VIZARD

Will the Microsoft suit lead to Justice for all?

There's only one thing that computer companies fear more than Microsoft: the prospect of government intervention. Despite the public cries from Sun, Netscape, and others, there is still a strong libertarian ethic in this industry.

In fact, even Sun and Netscape dread what might be in the Pandora's box that the Department of Justice is getting ready to open.

There is a growing concern among industry leaders that once the government is through with Microsoft, it will start taking a closer look at how the rest of the business is run.

And when this happens, industry leaders worry that innovation will be unnecessarily hampered by legal reviews, that business alliances

NOVELL HAS FIX FOR YEAR-2000 PROBLEM

Contrary to statements made by Novell representatives last week, the company now claims that it has the technology to automatically distribute its patch for the year-2000 bug to clients on NetWare 3.12 networks. Officials had previously said that a patch to fix the bug has been developed — it is currently in beta testing and available from Novell's Web site — but that it was still trying to develop a means of automating the distribution of this to clients. Novell now says that distribution is possible using an existing utility. According to Coleman Barney, senior director of marketing services at Novell, the company's Automatic Client Upgrade technology can be used to distribute the patch in the same way that it can be used for regular client upgrades.

JAVASOFT OUTLINES MESSAGING PLANS

Sun Microsystems' JavaSoft division is developing a range of draft Application Programming Interfaces (APIs) governing functions such as calendaring, scheduling, printing and database access. The first of these, the Java Mail API specification, was posted to its Web site last week. These new APIs will enable developers to build Java messaging applications and add messaging functionality to existing Java applications, such as word processors and spreadsheets. "This [e-mail API] is the first of a new breed of APIs that start to get into the applications space," said Carole Amos, JavaSoft product marketing manager.

SYBASE JAVA MACHINE GOES TO BETA

Sybase in November plans to begin beta testing its Adaptive Server Anywhere mobile database, which will feature a Java virtual machine for executing Java applets within the database, according to a Sybase source. A Java virtual machine is expected to be included in the Adaptive Server server database in 1998.

HP UPDATES MAINFRAME ARCHITECTURE

Hewlett-Packard said it will implement new mainframe-style architectural improvements into its HP-UX by the fourth quarter of 1998. HP officials said the technologies are the first important developments in HP's alliances with Hitachi and NEC. The officials said the improvements include an "exception infrastructure," which detects and responds to kernel-level component problems, improved fault tolerance, a "protection key" that affords "very fine granularity of control over which pieces of memory the [kernel] module can access," and steps toward HP's proposed Explicitly Parallel Instruction Set Computing. HP has been associated with Hitachi since 1989, and with NEC since 1995.

ORACLE WILL CERTIFY DB PROFICIENCY

The Oracle Education division this week will unveil a testing program for certifying proficiency in use of Oracle products. The Oracle Certified Professional Program initially will provide testing for Oracle 7.3 database administrators, with other tracks planned later for other areas, such as the Oracle8 database and Oracle system administration and applications. Tests will cost \$125 each.

► For the latest IS news and updates, turn to InfoWorld Electric at <http://www.infoworld.com>.

NEWS BRIEFS

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CLIENT/SERVER

Productivity tools

S3 brings 3-D to Windows 95 file structures

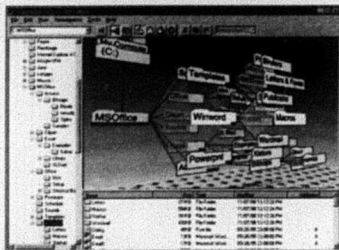
By Jeff Walsh

S3 IS ADDING a dimension to productivity tools with VisiDrive 3D, designed to let Windows 95 users visualize the data on their computer or network.

User can see hundreds of files and directories at once using VisiDrive 3D, and they can view the information through perspective walls or cone trees, officials said. The cone tree depicts the directory-structure hierarchy and the perspective wall lets users browse files across directories based on criteria such as size or date.

S3, best known for its graphics-accelerator cards, developed this product using patented components from InXight Software, a Xerox Parc spin-off.

One analyst said VisiDrive might be the right productivity application



THE CONE TREE VIEW in VisiDrive 3D lets users graphically view desktop contents.

to break through the corporate 3-D barrier because of its ease of use.

"I think it's fairly straight ahead," said Ralph Rogers, principal analyst at Dataquest, in San Jose, Calif. "It's got two views, both of which are very obvious and convenient. We're seeing the 3-D board numbers just skyrocket, and this is an interesting

application in that it will leverage these board shipments, which are primarily for games, into a very different space."

Rogers said VisiDrive would be even more beneficial if it provided Website maps via the same engine.

S3's other new product is LiveWork 3D, which brings real-time 3-D and text to office and e-mail applications. The LiveWork component appears on toolbars in Microsoft, Corel, and Lotus office-suite products. Both products will ship in December. LiveWork 3D will cost \$50. Pricing for VisiDrive 3D was not yet determined.

S3 Inc., in Santa Clara, Calif., can be reached at (408) 588-8000.

Vendors tailor smart cards for myriad uses

By Andy Santoni and Joanne Taaffe

SMART CARDS are proving more and more useful, as vendors introduce products that can run multiple applications, deliver "single-sign-on" functionality, transfer data with or without contact, offer more memory, and provide higher security.

Schlumberger, for example, recently introduced Version 2.0 of its Java-based Cyberflex card that can run multiple applications.

Motorola, which in March set up its Smartcard Systems Business, has introduced its M-Smart card family that includes contactless cards for use in public transportation and combination contact-contactless cards for applications authorizing

access to PCs and permitting physical access to areas.

Xicor is offering its high-density X76F128Y secure smart card, based on its X76F128 Secure SerialFlash EEPROM chip. The 128Kb Xicor products target applications in telecommunications, computers, security, and identification.

Gemplus' GPK4000 smart card, with its cryptographic coprocessor, can be used to secure Internet, intranet, and extranet transactions in applications such as Internet commerce and computer security, officials said.

"We believe that multipurpose cards [such as the GPK4000] will be foremost in expanding electronic economies," according to a newsletter from Zona Research, a consul-

tancy in Redwood City, Calif.

GPK4000 cards will be used in the upcoming 2.0 release of ImagineCard, a security solution for corporate applications and Web services jointly developed by Hewlett-Packard, Informix, and Gemplus.

Gemplus Corp., in Montgomeryville, Pa., is at <http://www.gemplus.com/>. Motorola Inc., in Schaumburg, Ill., is at <http://www.motorola.com/>. Schlumberger Electronic Transactions, in Moorestown, N.J., is at <http://www.schlumberger.com/>. Xicor Inc., in Milpitas, Calif., is at <http://www.xicor.com/>.

Joanne Taaffe is a Paris correspondent for the IDG News Service, an InfoWorld affiliate.

Apple releases MessagePad 2100 handheld PCs

By Jeff Walsh

APPLE LAST WEEK unveiled its Newton MessagePad 2100, a handheld personal computer that features expanded memory and upgraded communications software.

The MessagePad 2100 targets mobile users by offering enhanced speed; a 16-level, gray-scale easy-to-read screen; and an optional keyboard, officials said. It uses Digital's StrongARM SA-110 processor, and

NetHopper 3.2 Web browser, which works with proxy servers, and Website authentication features, and it lets users download Newton software directly to their system.

The MessagePad 2100 will be out in November at a cost of \$1,000.

The Newton family of products — including the eMate 300 — were spun off by Apple earlier this year as a separate subsidiary, until Steve Jobs took the helm and brought the

which still hasn't been disclosed.

Jobs has mentioned the eMate 300 as a solution for the education market, which analysts say might indicate the MessagePad's future.

"It is too expensive to compete with the other handhelds on the market, and has been quickly losing market share. I wouldn't expect product development to concentrate anywhere else but on the eMate," said James Staten, an analyst at

Sales-force packages leverage the Web

By Stannie Holt

TWO COMPANIES are using the power of the Web and client/server architecture to help salespeople promote products by drawing on their companies' data more effectively.

Saratoga Systems earlier this month brought out Avenue, a Windows-based sales-automation program: Also, this week PowerCerv will ship Version 7.0 of its Customer

future products — more efficiently than with unconnected applications, officials said.

Saratoga Systems' Avenue lets users compile databases of information salespeople need, such as sales and forecast numbers or background on customers and leads.

Tools to help users customize Avenue include database-schema-definition utilities, predefined tem-

plate, and Screen Wizard, a screen designer. Avenue is available immediately at a cost of \$25,000 per 15-user license. CLM 7.0 will be on sale starting early November at prices from \$1,750 to \$2,500 per seat license.

PowerCerv, in Tampa, Fla., can be reached at (813) 226-2600. Saratoga Systems, in Campbell, Calif., is at (408) 371-9330.



AVENUE LEVERAGES the Web to give salespeople fast access to information.



THE BUG REPORT

Bugs and fixes reported to BugNet

► **Windows NT** Microsoft has updated a security alert for NT 3.5x and 4.0 servers. The default values for some of the security keys allow anyone with a valid user or domain name to log on and gain administrative rights, or run programs that can cause server damage. The problem is with the following registry keys: HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Run; HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\RunOnce; and HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall. To be sure only authorized administrators get these rights, perform these steps: 1) Start the Registry editor; 2) Find the keys listed above; 3) For each key, click Security, Permissions; 4) Select "Replace Permissions on Existing Subkeys"; 5) Click on Everyone, then change the Type Of Access to Read and; 6) Click OK.

► **NetWare and BorderManager** A Novell NetWare 4.11 or IntranetWare server running with BorderManager and Network Address Translation either enabled or configured, and locally-running services such as FTP, SMTP, and POP3, may stop responding. As a fix, Novell says to add the following line to AUTOEXEC.NCF: SET NAT DYNAMIC MODE TO PASS THRU = ON. If you are using Novell's IntraNetWare Client for NT, the path statement in the NT AUTOEXEC.BAT file won't work. Novell has no fix, but officials suggest the problem is with NWGINA.DLL, and that all environmental variables be reset when using the Novell NT client.

Found a bug? Tell the InfoWorld Electric forum at <http://www.infoworld.com>