TREND/Attention E-Mart Shoppers!

The merchants are

plentiful, and the

merchandise is

mind-boggling.

The Technology Superstore

Giant technology suppliers stand looming over the Davids of the marketplace. But this time, Goliath seems to be winning. Consolidation is the norm. The big get bigger and the small, well, disappear. Microsoft, for one, continues its stronghold on the competition and is planning to stretch its grasp even further with upcoming initiatives.

How does all of that confusion affect consumers? As users of technology, we want to access information with the click of a button. We want to escape the mired feeling of too much information and too many choices of technology. We want to be in control. We're overwhelmed by the complexity and sometimes contradictory claims made by the technology spin doctors. Where do we turn, who do we believe? What's true, what's hype?

Technology suppliers still rank high on Wall Street, despite the Nasdaq plunge, and in the U.S. corporate business world in general. For example, Docent, a provider of e-learning software, was ranked 20th in the *Silicon Valley/San Jose Business Journal*s annual "50 Fastest Growing Public Companies" list. As a whole,

U.S. e-learning companies generated nearly US\$2.3 billion in 2000 and are on track for a growth rate of more than 50 percent, according to research firm International Data Corporation.

Consider also recent huge contracts between elearning vendors and corporations, such as the one between WBT Systems, a provider of e-learning solutions, and Dow Chemical. Dow expanded its three-year contract with WBT in order to convert 80 percent of its classroom training to the Web by the end of the year.

Also notable is e-learning suppliers attributing a significant portion of their revenue to purchases by the U.S. government. That trend can be traced back to a directive by President Clinton in 1999, Executive Order 13111, which instructs federal agencies to improve employee training through the use of technology. IDC estimates that the government market for all types of training will be US\$4 billion to \$8 billion by 2005.

FasTrac, a government e-learning program managed by the Department of Defense, is enabling almost half a million federal employees to participate in courses from e-providers SkillSoft and NETg. Using the content are employees of the Department of Health and Human Services, IRS, Department of Housing and Urban Development, Army National Guard, and the departments of Labor and Transportation, among others.

Other examples: THINQ Learning Solutions was chosen in May to provide training for about 1.2 million members of the Department of the Navy, including Marines, sailors, reservists, retirees, and the civilian workforce. THINQ's clients include the departments of Energy, Labor, and Commerce. Pathlore, a learning system and professional service provider, announced 150 enterprise-wide deals in one quarter, including contracts with the New York State Office of Mental Health, City of Houston, Colorado Judicial Branch, Texas Attorney General,

and Kansas Department of Social Rehabilitation. Pathlore also has deals with the U.S. Federal Reserve, Arizona Department of Health, and the State of South Carolina.

The distance education and training delivery provider VCampus is implementing, hosting, and managing the General Services Administration's Online University, awarded by GSA's Federal Learning Technology Program. With a potential value of US\$4 million over three years, the order has the largest potential value of any VCampus contract to date.

Those are just a sampling of the big-dollar deals being struck in the e-learning market. There's no end in sight. According to WR Hambrecht + Co, SkillSoft will continue to announce new deals, and Docent's management has outlined areas for acquisition, in addition to its recent purchase of Peer3, a learning software provider. The e-learning mall store is quickly becoming extinct.

However...

Those mammoth entities don't have an easy road ahead. The time-to-market for products must be rapid as suppliers try to keep up with their competitors and changes in technology.

In order to make things speedy for consumers, ease of use must factor into the equation. "Computing is," according to Leslie Walker in her article "Growing Invisibility Is Internet's Utility" in Washtech.com, "en route to the digital promised land, that place where the Internet will be magically transformed into an all-encompassing personal assistant guiding us from birth to death, anticipating our every information need."

In that vein, Microsoft is hoping to simplify life on the Web with its new initiative, .Net, which aims to abate information overload and help consumers make more efficient use of the Internet. The Web-based service will include email reminders of appointments, pager alerts for such events as stock

Not Only Big, **But Fast** In a survey sponsored by Hilton Hotels of 16 to 70), more than half of respondents 72 percent think they do things faster than

prices falling below a certain level, and instant messages for timely information such as a delayed flight. Microsoft's foray from PC operating systems into the Internet arena is likely to lead to new scrutiny by the U.S. government regarding antitrust violations, but as of press time Microsoft is forging ahead.

The desire to make the information-capture process speedy also extends to the e-learning sector. Dave Egan, VP of business development at THINQ Learning Solutions, says "Scaling quickly, serving a large constituency, and being useful for the buyer are essential, but speed is the main goal."

Others agree. Plato Learning recently partnered with the Princeton Review's Homeroom.com to combine testing products into a single powerhouse offering. With that agreement, students will no longer have to use two sources to prepare for important tests. Before the deal, a student could use Plato's extensive content but would then have to visit (1) homeroom.com to tap into its assessment engine and standards-based questions. Now it's possible to obtain a user's likely performance on the test and steer instructional content to any identified gaps in a single session.

Roy Tucker, director of organization and employee development at the U.S. Department of Health and Human Services and a key player in the department's development of its e-learning strategy, recognizes the benefits of providing training that's convenient and quick for employees. He says, "Both SkillSoft and NETg have a searchand-find function that we [plan on buying] because it will help people go directly to the learning they need."

Another example of the effort to streamline is the U.S. Army's new learning portal, o earmy com. To build the system, PricewaterhouseCoopers, the contractor, collaborated with 60 subcontractors, including more than 20 colleges that offer courses

Other **Big** Contracts

Riverdeep, IBM, Lower Education Worldwide. Riverdeep, a courseware provider, and IBM have joined forces to expand interactive learning in local U.S. school districts, state education departments, and national ministries of education.

Fathom and AARP. Fathom, an e-learning company created by educational and cultural institutions, will offer online learning in technology, science, history, and personnel management to AARP's 34 million members.

KnowledgePlanet, Child Health Corporation. KnowledgePlanet, an enterprise human capital management company, will introduce IT and soft skills training, customized health-care information, and compliance training to about 100,000 physicians, nurses, and other staff.

Centra and EDS. A software infrastructure and application service provider for e-learning, Centra will offer EDS's customers access to its virtual classroom and collaboration technology for live, instructor-led training over the Internet. **UNext and GM University.** The e-learning company UNext will supply 88,000 white-collar General Motors workers worldwide with Quantum and e-M.B.A. courses.

online. The system is designed to be easy to use, even for people with no computing experience. Students can search for information on enrollment qualifications and participating schools, and access coursework without ever leaving eArmyU.com. That saves users the hassle of logging in every time they want to obtain information from one of the member colleges. Books are ordered automatically when people register for classes.

four generations of U.S. residents (age say they find slow people "irritating"; their parents did.

Market Speak Translation

It's confusing and often overwhelming to keep up with the e-learning industry. Here's a guide that may help. It's not exhaustive, but it can help decipher what suppliers say about their products. Note: Supplier and product names are fictional and for the purpose of example only.

Claim. "The first standards-based learning content management system that enables organizations to personalize and reuse knowledge assets in the form of prescriptive learning programs for blending live events and recordings with self-paced content."

Translation. A learning content management system, according to the e-learning glossary on Learning Circuits's Website www.learning Circuits's Website www.learning Circuits.org/glossary.html is a software application that enables trainers and training directors to manage administrative and content-related functions of training. An LCMS combines the course management capabilities of a learning management system with the content creation and storage capabilities of a content management system. The fact that a supplier's LCMS is standards-based implies that it complies with current, widespread standards and specifications for content.

For example, AICC (Aviation Industry CBT Committee) was created to standardize instructional material for aircraft manufacturers and buyers, but its standards framework can be used in a wide variety of industries. Another popular standard-setting organization is IMS Global Learning Consortium. It's developing and promoting open specifications for enabling online distributed learning activities, such as locating and using educational content, tracking learner progress, reporting learner performance, and exchanging student records between administrative systems. SCORM, Sharable Content Object Reference Model, is built on the standards of AICC, IMS, and others to create a unified content model. Its standards allow reuse of Web-based learning content across multiple environments.

"Prescriptive" means learning programs are tailored to an individual's needs, whether those needs are knowledge gaps or job requirements. Further, the content can be self-paced—taken at a user's leisure. The supplier is saying that its content includes recorded and live events, such as voice- and video-enabled virtual classrooms, Web conferences, and e-meetings.

Claim. "With its powerful TKO Technology,* Obi* combines the ease of an Internet development platform resource with the flexibility of an open architectured LMS."

Translation. Again, let's start with a definition. The e-learning glossary at Learning Circuits WWW.LEARNINGCIRCUITS.ORG/GLOSSARY.HTML defines a learning management system as software that automates the administration of training events. An LMS registers users, tracks courses in a catalogue, and records data from learners; it also provides reports to management. TKO Technology is a proprietary component of Obi's creator, which it claims provides the freedom to build any e-learning solution that works perfectly without boundaries or restrictions. In other words, it's a patent-pending technology that it says makes clarity and freedom in e-learning possible. Obi also features an open architecture, which lets you choose the e-learning components you need and plug them in easily without worries about compatibility.

Claim. "MediaKing* delivers the industry's highest-quality video stream, coupled with real-time interactive applications and a back-end data infrastructure."

Translation. MediaKing's learning tool relies primarily on streaming video, a sequence of moving images that are sent in compressed form over the Internet and displayed by the viewer as they arrive in a continuous stream. However, the product also uses such interactive features as message boards, polling, synchronized graphics and visuals, and real-time testing. By definition, *back-end* refers to any software that performs either the final stage in a process or a task not apparent to the user. A back-end data infrastructure is simply a database that supports all of the streaming media without being apparent to the user.

^{*} The technology and company names are fictional.

Messy, global buildout

Walker's article in *Washtech.com* says, "The Internet remains in a messy, global buildout stage analogous to the electrification of the developed world a century ago, or the laying of the interstate highway system. People are caught in this painful transition, serving as human guinea pigs for technology.'

That statement can apply to all areas of technology development, and e-learning is no exception. Vince Penkala, federal business development manager for SkillSoft, says, "Because *e-learning* is such a broad term and there's a lot of spin doctoring, it makes it hard for clients to get beneath the hood and see what's really there. There are too many terminologists, and it's hard to be a savvy consumer without having to do a lot of homework."

Market demands further complicate the situation. Penkala explains, "Every vendor is trying to stay ahead of the others by adding to its definition of e-learning. [At SkillSoft] we're getting into simulation technology and online mentoring, all kinds of support systems, and performanceand decision-support tools. I think even a vendor with a niche has to expand, smartly, on an ongoing basis to stay ahead. Again, that's where it gets tricky to keep the consumers aware. If you look at the number of trade shows these days and different e-learning events, it's frustrating because you have this feeling that you have to be at all of them to really be in touch.'

The technology superstore is overflowing with items placed haphazardly in makeshift aisles. Will consumers sift through the confusion and continue spending? Or will the store owners bring more order to the chaos and thus attract more consumers? TD

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