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E-Learning Branches Out

E-learning systems may not be easy to implement, but many companies see the potential for a broad business impact

By **Sandra Swanson** *(sswanson@cmp.com)*

Tony Loyd knows how to make a compelling business case for E-learning. He also knows how painful it can be.

Last spring, the manager of learning technology for John Deere & Co.'s Moline, Ill., construction-equipment division worked with a team of 20 training managers hammering out a companywide E-learning strategy for the $13 billion heavy-equipment manufacturer. They argued that improved training for the company's 15,000 technicians would increase customer satisfaction. Moreover, they knew that their increasingly sophisticated customer base wanted access to training through John Deere. To make those things happen, the divisions had to get funding.

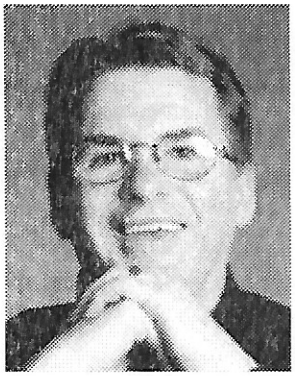
One day last June, the managers gathered in a conference room at the Abbey Hotel in Davenport, Iowa, to present their "strategic blueprint" to a dozen members of John Deere's executive management team. Before the 10 a.m. presentation, the executives were each given a copy of the 200-page blueprint--wrapped in cellophane so they wouldn't flip through it while the presenters were speaking. They unwrapped the documents anyway. And there was something else that didn't quite go according to plan that day: Loyd's presentation.

When Loyd tried ad-libbing about his background, he lost his train of thought. When he tried to explain the finer points of the proposed E-learning plan, he stumbled over every word. At the end of the two-hour presentation by Loyd and four others, one of the VPs, a Texan with a reputation for straight-shooting, spoke up. He told Loyd that it was the worst presentation he'd ever heard, but that it was a compelling business case and the company absolutely had to execute the plan.

The next morning, Loyd received an encouraging E-mail from his manager's boss: "I really think things went great. Š You hit a home run." Loyd wasn't convinced about his public-speaking skills, but the E-learning strategic blueprint had been a hit. By mid-July, Loyd had the money to get the project rolling. He won't say how much, only that "it's more than double the previous year's entire training budget." The online John Deere University program is slated for a March rollout.

When it comes to making the business case for E-learning--providing training and instruction online--companies such as Air Canada, DuPont, John Deere, Ford, and J.P. Morgan Chase are placing long-term bets, moving beyond the traditional notion that E-learning helps cut training costs. They see the potential for broader business impact: tying learning to increased sales, improved employee retention, and better customer service. Still others are reaching outside the firewall, offering online instruction to business partners and customers, or exploring E-learning's revenue potential with online versions of fee-based classroom instruction. As a result, corporate training departments are becoming strategic business assets. And they're teaming with IT managers to make these initiatives work. New corporate

E-learning programs will push U.S. sales of E-learning technology to $11.4 billion by 2003, International Data Corp. predicts.



COMPATIBILITY COUNTS: After purchasing a library of E-learning courses, John Deere discovered a number of integration problems, says manager of learning technology Loyd.

Of course, saving money still has plenty of appeal, and Web-based training yields big savings by letting employees learn from their desks instead of flying them halfway across the country. But for many businesses, that's the least compelling reason for adoption.

"We didn't set out to reduce the cost of training; that's an old paradigm," says Brian Corbett, manager of E-learning and knowledge management at Air Canada in Montreal, which has so far invested $1.5 million in a four-year, worldwide rollout of E-learning for all of its airport ground crews. "We're integrating a culture of safety and awareness," says Corbett. "The VP of airports likes that a whole lot."

But even proponents admit that it's difficult to deal with the growing pains of most E-learning initiatives. Dramatic culture shifts are required at times, especially when users aren't computer savvy. And E-learning can have a steep technology learning curve when products don't work together or when E-learning is perceived as a bandwidth hog. Nevertheless, companies are moving forward. Four out of five CEOs whose companies provide or are planning to provide online training view E-learning as important to their business strategies, according to 250 business and IT professionals surveyed last month by *InformationWeek* Research.

Much of E-learning's potential ties into the buzz surrounding today's knowledge economy. Human capital will make or break your business, the management gurus say; the more your employees know, the more they can accomplish. Of course, the need for well-educated employees is nothing new. But with ramped-up product rollouts and customer requests, there's a greater urgency to provide training that can be updated quickly and accessed at employees' convenience.

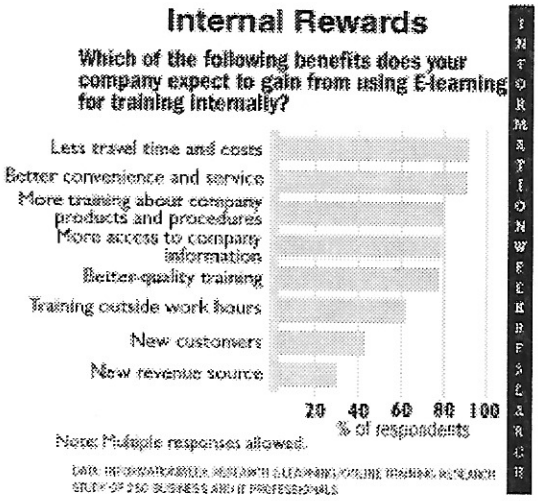
For salespeople at Circuit City Stores Inc. in Richmond, Va., Web-based training is the only way to keep pace with rapid-fire product introductions. When vendors send representatives out to personally train salespeople about their products, it can take anywhere from 16 to 24 weeks before all of Circuit City's 750 locations are covered. With E-learning, Circuit City can have online training developed in six weeks for a new line of digital cameras, says Jeff Wells, VP of human resources.

FUN AND LEARNING: To get its employees comfortable with technology, Air Canada encouraged them to play games on their computers, says manager of E-learning Corbett.

Since employees with more product knowledge will sell more digital cameras, home theaters, and everything else, E-learning "is the ultimate competitive advantage," Wells says. To prove that, Circuit City is integrating its DigitalThink Inc. learning-management system--software that manages a company's Web and classroom training courses, including registering users and tracking course completion--with its PeopleSoft Inc. HR files. This will let the company track whether sales performance improves after training and how to customize the training for each individual. "HR initiatives [usually] take two to three years to judge, but we think we'll see some very good short-term results."

J.P. Morgan Chase also values E-learning's ability to convey information quickly across an organization.

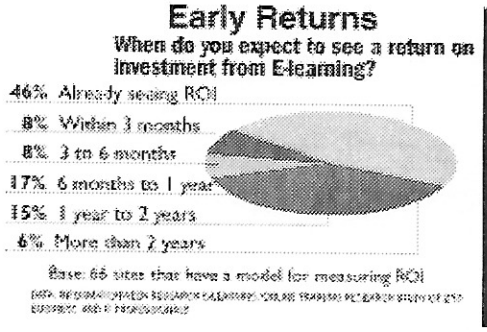
That's why the recently merged bank and investment company in October introduced 14 hours of online E-business content for employees using the Ingenium learning-management system from Click2Learn.com Inc. The goal is a workforce that's better prepared to create E-business solutions for customers. "With a traditional classroom solution, it would've taken six months to a year to train our 83,000 employees," says Peter Jones, director of E-learning for J.P. Morgan Chase. With that snail's pace and the rapid changes in E-business, content would be irrelevant by the time it reached all employees through classroom-based training.



Unlike classroom instruction and even CD-ROMs, Web-based courses, at their best, can be updated on the fly. Still, E-learning doesn't always equal flexibility, so caveat emptor should be the purchaser's mantra. During a beta test with an E-learning supplier, Volvo Trucks North America Inc. was told that once its E-learning portal was up and running, the company could design its own courses. Not quite. "There was no internal flexibility other than dropping words into paragraphs--the templates were extremely rigid," says Mark Williams, project development manager. So Volvo had to bring back consultants to redo programming, at anywhere from $65 to $200 an hour. Needless to say, Volvo dropped that vendor. Williams says, "It was like they sold us a pretty package, but it had to have batteries, and they were the only ones that had the batteries." Volvo ultimately chose a product called Socrates from Quelsys LLC, particularly because it's easy to use. Socrates includes a course-authoring tool, a learning-management system, and an E-commerce option that lets companies resell their training material.

Many companies with large-scale rollouts are willing to wait before demonstrating hard-dollar paybacks. According to the *InformationWeek* Research survey, 46% of respondents already see a return on investment, but 21% say it will take a year or more to report ROI on their programs. "People need to [assume] that the first year is going to be an investment," says Brandon Hall, lead researcher for Brandon-hall.com, which does E-learning research exclusively. Consider the cost of a learning-management system: The average price for a system that handles 8,000 students is $550,000, a fivefold increase from 1997, Hall says. And that doesn't include costs associated with content and Web servers.

The total investment can be a big, bitter pill to swallow. J.P. Morgan Chase's Jones knows companies that have spent $7 million on large-scale E-learning initiatives. "I've spoken to lots of people at different companies, and I haven't seen anybody who's been able to say, 'I've saved money the first year.'" Chase is no exception. It won't realize any savings on E-learning this year either, says Jones, who won't say how much the company has invested.

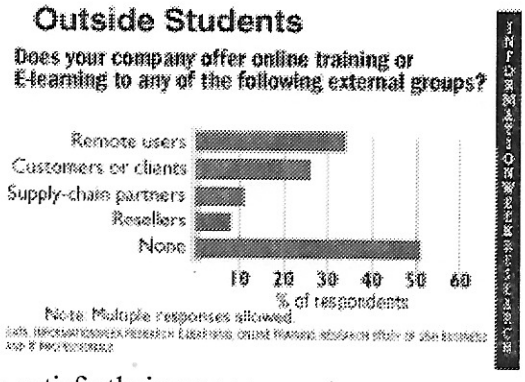


Air Canada didn't save money in the first year of its E-learning program in 1999, but that was never a goal. The $6 billion airline wanted to create a stronger safety culture for ramp employees, who are responsible for ground handling of planes: loading and unloading cargo, deicing planes, and directing planes to airport gates. Air Canada launched an E-learning trial based on voluntary use in the summer of 1998.

Trouble was, about 80% of the target employees had no computer experience. Kim Horne, an E-learning integration manager at Air Canada, recalls one employee who had his first computer encounter at the training session. "He picked up the mouse and said, 'OK, what do you want me to do with this now?' and jokingly starting talking into it." Horne has seen at least one employee speak into a mouse in earnest: "Some people have been watching too much Star Trek."

To create a technology comfort zone, employees were encouraged to play Hearts, Quake, and other games on the computers. Corbett also got cooperation from the machinists' union, which agreed to have its logo displayed on the learning home page for ramp employees. The online-learning segments never exceed 15 minutes, letting employees spend downtime between flights learning about handling dangerous goods, such as how to load ammunition onto a plane. Within six months, 78% of the target learning audience had accessed the E-learning program, and Air Canada proceeded with the full rollout. By 2003, it will be worldwide, so a ground-handling station in New Delhi, India, that's servicing an Air Canada plane will have the same learning opportunities as employees in Toronto.

Since mid-1997, Air Canada has invested about $1.5 million in its E-learning effort, yet it doesn't expect to save money anytime soon. Focusing on training costs for E-learning ROI is "ancient history," says Corbett. "If organizations are trying to measure value on that basis, they're not going to get anywhere. You have to impact what's important to the business."



The most important goal of Air Canada's E-learning program is to reduce personal injuries and damage to aircraft, equipment, and facilities attributed to ramp operations. Those areas represent upward of 5% of the total cost of running the business, but it will probably take three to five years to see tangible payback from the program, Corbett says. Air Canada executives understand that such changes won't occur overnight. They're focused on a compelling near-term reason for supporting E-learning: safety. Other companies take a similar approach to measuring E-learning's benefits; nearly 80% of survey respondents said soft-dollar payback was sufficient ROI to satisfy their management.

That's the case with the business measurables that Corbett laid out for Air Canada's E-learning program. Typically, new projects must meet certain financial benchmarks to receive funding, such as payback to cover the initial investment within six months. The learning program flunked the financial benchmarks but scored big on strategic value. Air Canada, like other companies, is prepared to make a significant E-learning investment today and wait for the meaningful ROI a year down the road, maybe two years, maybe never. "Innovation is all about risk taking," says Corbett. "We're prepared to take risks."

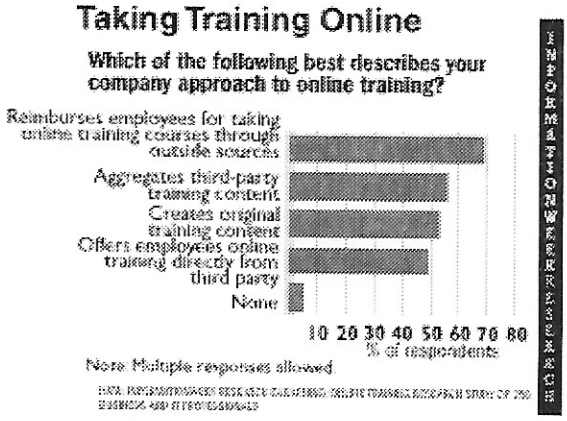
Still, E-learning is most effective when combined with classroom training, and widespread acceptance will

come slowly. For all Air Canada's enthusiasm, E-learning only comprises about 5% of its corporate instruction. That figure will probably increase to half of all training during the next three to five years, Corbett says.

A hybrid approach to learning is the method of choice for Ford's global core engineering organization. In early 1997, Ford set a four-year goal to give 160 hours of instruction to 20,000 employees in nine core engineering programs, including problem solving and process-control methods. But the company soon realized that it wouldn't meet its goal by using only instructor-led training. It now offers seven of the courses on the Web, seven on CD-ROM, and five in the classroom. It's definitely a time-saver for Ford, which finds that Web-based and CD-ROM instruction cuts course time by 30%. But after each Web or CD course is completed, students must attend a two-to four-hour "face-to-face" session to discuss case studies with an instructor.

Ford began offering online engineering instruction to its 3,000 suppliers in late January. So far, about 100 suppliers have accessed information about the online training via the Web, though very few have actually signed on to participate. While Ford charges for the courses, they're not designed to generate revenue, says Bob Kiger, manager of Ford's technical education strategy. "Our suppliers are our partners. We all have to be at the same skill level."

As companies develop more-ambitious E-learning projects, product choices become more complex. The number of learning-management systems has grown in the past two years from 67 to about 113. And that's just the beginning. Once you've selected a learning-management system, will you host it yourself, or have an application service provider host it on its server? What's more, standards don't exist yet to guarantee interoperability among E-learning products. For all these reasons, it's easy to overlook technology due diligence, but there's a price to pay for haste.



That's another lesson John Deere's Loyd discovered last year. After purchasing a library of courses for $70,000, he got an E-learning education during integration time. The vendor, which he declines to name, neglected to disclose critical information up front: Users needed to run off a Windows NT server, and the content depended heavily on Java applets, neither of which John Deere uses. Loyd ultimately received a refund from the company, but he's not taking any chances now. Before he'll even look at new content, he has Logic Bay Corp., John Deere's E-learning ASP, verify that it's technically compatible with the company's system.

Famous Footwear also had an unpleasant surprise when it launched its E-learning initiative for salespeople in July 1999. The Madison, Wis., shoe retailer was using LearningSpace 2.5, a learning-management system from IBM Mindspan Solutions. While LearningSpace 2.5's delivery framework functioned properly, its tracking component--the part that documents course-completion records--didn't work with Famous Footwear's Lotus Notes address book. The result: The IS department had to save the day and build an agent to collect course completion records.

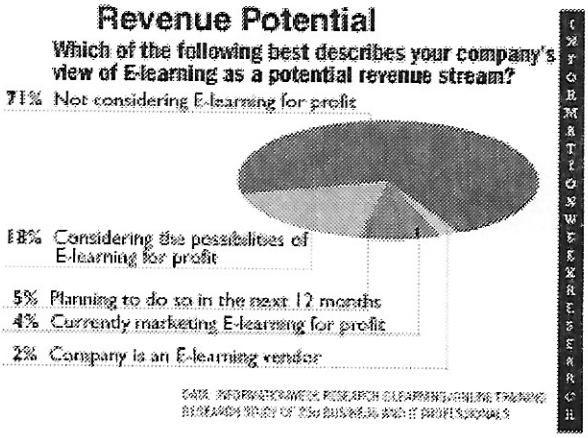
It's hard enough to keep track of the technical requirements needed to make E-learning harmonious with internal corporate IT systems. Throw in variables such as users outside the firewall, outdated modems at home computers, and blocked streaming media, and you've got more trouble. As a result, many

companies revert to technology's lowest common denominator to ensure broad access to E-learning.

Streaming media wasn't even considered when $56 billion Nissan Motor Co. Ltd. established its online content to complement classroom training for dealers' technicians in May. The automaker had very specific, and modest, requirements for E-learning vendors: The courseware had to work effectively with a 28.8-Kbps dial-up modem and a Pentium 133-MHz CPU with 32 Mbytes of RAM. "We couldn't be sure where technicians would access the course," says Jim Heideberg, manager of technical training design for Nissan North America Inc. He wanted technicians to access courses from home without waiting an eternity for page downloads.

DuPont wants easy access for its E-learning students, too, especially since they're paying customers. Since December 1999, DuPont has sold instructor-led E-learning events, featuring DuPont expertise in areas such as safety and engineering quality, to customers, including Honeywell, Nordstrom, and the U.S. Postal Service. During the "live" E-learning events, which cost about $350, students listen to instructors in real time, while viewing content online and participating in online polls and chats. DuPont also hosts these E-learning events, using Evoke Communications Inc.'s E-learning platform, for companies that want to reach paying customers with their expertise. SKF Bearings, one of DuPont's suppliers, partners with the company to sell a workshop on bearing analysis to manufacturing and engineering companies.

DuPont experimented with streaming video and audio, currently done over the phone, for its E-learning events, with disappointing results. During one workshop, an instructor used a video clip to illustrate a case study. One-third of the audience had firewalls that blocked streaming video, and some users had trouble turning on Media Player. That's not just bad for E-learning, it's also bad for business. When technology glitches occur, DuPont can't charge for the session, and it loses repeat business.



DuPont invested about $5 million from its Corporate New Business Development fund in its customer E-learning program, called Virtual Workshops, and should break even this year, says George Rotsch, business manager of marketing. "This will be a small business for DuPont, but it has significant potential," he says, adding that Virtual Workshops could remain part of DuPont or be spun off.

REVENUE POTENTIAL: DuPont sees significant potential for its E-learning program; Virtual Workshops could remain part of the company or get spun off, says business manager Rotsch.

Franklin Covey Co. sees revenue potential in E-learning. The $585 million company, which sells the Franklin Planner and other personal-productivity tools, is developing Web-based versions of its classroom instruction for project management and other business topics to be released later this year.

While more companies are looking to E-learning as a way to build customer relationships and generate revenue, efforts are still in the early stages. According to the *InformationWeek* Research's survey, 17% of respondents offer customers focused E-learning; another 21% plan to offer it in the next year.

With such big plans, what hinders companies' adoption of E-learning? Technology plays a large role,

particularly limited bandwidth. While there are companies with access to streaming video, many networks aren't designed for streaming media; instead, they're meant to handle E-mail and printer traffic that can be sent piecemeal or rerouted. Effective networks have management tools to allocate bandwidth for streaming media and to trim available bandwidth for E-mail, but IT departments probably won't rank streaming video for training as a high priority unless the E-learning initiative supports business strategy.

Circuit City found an effective way to provide high-resolution video with its Web-based training: the VCR. When employees reach the video segment of an online course, they're instructed to stop and insert the accompanying video in a VCR. Says Wells, "Everything we do is built around 56K, so we're not into elaborate streaming video programs."

Today's online training has come a long way. When Susan Miller, Famous Footwear's director of training and development, started at the company in April 1998, employees could sit at their computers and learn all about the corporate wisdom--by reading mountains of text on a blue screen. "Everything you wanted to know in 16 hours, if you could stay awake." Now when salespeople sit in front of a computer screen, they interact with virtual customers in Famous Footwear's online training. Miller wants to demonstrate that E-learning improves sales performance, and that won't happen for at least another year. The company plans to purchase a new learning-management system that will require rebuilding content, which will take six months, plus six more of collecting data.

As John Deere's Loyd found out, it all comes down to corporate commitment. Training cost reduction is appealing, but that alone won't justify the investment E-learning requires. It isn't plug-and-play, and it requires a powerful long-term vision to weather the storm of IT glitches and user resistance. --with Diane Rezendes Khirallah and Marianne Kolbasuk McGee

Photo of Loyd by Doug Knutson
Photo of Rotsch by Bill Crammer
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