The Manufacturer's Edge

FEATURE ARTICLE EXCLUSIVELY ON THE WEB

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AUDIO, VIDEO, INTERACTIVITY AND MORE... WEB-BASED TRAINING OPENS NEW HORIZONS

Imagine being able to cut training time and costs by up to 50 percent over classroom training. It won't always happen, of course, but that's the potential that web-based training (WBT) offers, according to Brandon Hall, editor of Multimedia & Training Newsletter.

What is web-based training? Basically, it is an innovative approach to distance learning in which computer based training is transformed by the technologies of the World Wide Web, the Internet and intranets. Instead of being delivered via a CD-ROM or client/server-based training system—or even one-way or two-way audio/video teleconferencing—the training program is delivered through a web site on the Internet. As a result, web-based training presents "live" content in a structure that allows self-directed, self-paced instruction in any topic.

As successful as computer-based training has been for some companies, web-based training can offer even more advantages. For example, unlike a CD-ROM, the content of a web-based training program can be quickly updated. It's easily delivered to the end user, as well; plus, it offers the trainee the ability to link to other training systems. You don't have to worry about system compatibility, either. WBT offers instant multi-platform capability

(i.e. Windows, Macintosh, UNIX). Finally, access to the program is controllable, and it requires less technical support.

There are some disadvantages, though, according to the Web Based Training Information Center, a private, information-only web site that is not sponsored by any organization or company. Among them is the fact that bandwidth/browser limitations may restrict instructional methodologies. Limited bandwidth also means slower performance for sound, video and intense graphics. Lastly, someone must provide server access, control the usage and bill users.

"It's also important that companies choose media types based on learning objectives," says Tim Kilby, with the WBT Information Center. "Don't use technology just because you know how or want to impress someone. Before you choose to use video clips, for example, ask yourself whether motion or time-based sequencing are essential elements of the point you are teaching. If not, then forgo using video. Users of your WBT product will be more impressed with ration-al choices of media types and technologies that speed learning and improve human performance."

In an article published in HR Magazine, Eliot Masie, founder of Masie Center, a consulting firm for corporate training in Saratoga Springs, NY, also noted a few obstacles to putting web-based training into practice. First, he says many companies will require system upgrades. Training instructors and early innovators also agree that presentation of the material must be carefully thought out before it's just "flipped onto a web site." In most cases, you can't simply move workbooks, CD-ROM and computer-based training to the Internet.

"There are some courses that work well for web-based training," agrees Anne Brown, an industrial marketing and human resources specialist with the MAMTC office in Garden City,

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KS, and an instructor of fluid power and automation control technology at Garden City Community College. "More often, though, an Internet-based course has to be designed differently. It's nice that we now have a variety of delivery modes for training; but before you just put a training course on a web site, you have to ask, 'Who's going to be taking these courses?' and "Are the people being training comfortable with this mode of instruction?'."

Brown insists that it's important to use several methods of conveying a message in order to be an effective instructor. While some people are good auditory learners, others are visual learners or tactile learners.

"With web-based training, you can use a broad combination of text, illustrations, photographs, audio and video," she relates. " In fact, you can even incorporate a certain amount of interaction and feedback. However, the one thing you lack that you have in a classroom is face-to-face contact. Good instructors, whether they realize it or not, are able to read body language and facial expressions and can tell when someone is not getting the point."

One web-based instructor compares it to being a disc jockey at a radio station. You are linked by aural cues, he says, and silence equals distraction.

On the other hand, web-based training is an ideal vehicle for delivering training to individuals anywhere in the world, at any time. Employees can study a curriculum module at their convenience, rather than being herded into a classroom when they're least receptive to learning. Sales representatives, wholesalers and dealers who handle your product—but are scattered throughout the country—can also be trained on the virtues, installation and/or assembly of your product via the Internet. Web browsers that support 3-D virtual reality, animation, interactions, chat sessions, conferencing, and real-time audio and video will only add to the unparalleled potential for the future.

However, there are a few general rules for good WBT design, according to the WBT Information Center. To begin with, it's important to establish a formal development process that is best suited for your product. Listen, plan, design, test, build, deliver, observe and refine! As Anne Brown says, keep in mind that people learn in a variety of ways. Visual learners need lots of graphic illustrations to understand concepts and relationships. Verbal learners use text and narration to accomplish the same end. Think through each bit of information presentation and ask whether learners with differing learning styles will benefit equally.

It's also important to provide ample opportunity for the user to interact with the information. "Object-oriented programming components, such as those available with HTML, Java and Shockwave, offer ways to add interactive design elements that engage the learner," says the Information Center's Tim Kilby. "Buttons, hot spots (hyperlinks), controls, voice recognition, movable objects and data entry fields each have their use in instructional design."

At the same time, web-based training programs should respect the learner. Avoid any content that is instructionally insignificant, annoying or degrading. Don't set the user up to fail a task in an effort to teach a lesson. As an example, don't display information that disappears after a short time. A slow reader is already doomed to fall short.

Finally, test your designs on real users. This applies to both the instructional design and the user interface. Products of bad design instill resentment in the user and place a barrier to learning.

Keep in mind, too, that there are a growing number of companies that can help. It comes as no surprise that most of the early entrants into web-based training were technology companies that were already comfortable with the Internet. But other web site designers and technology companies are already seeing a market in web-based training and making their design services available to a growing number of customers. An Internet search using the key words "web-based training" will reveal a number of sources.

Obviously, web-based training won't resolve every training issue. But in a growing number of situations, it does allow employees to get what they want, when they need it and at a convenient location, especially if employees work in multiple locations. And that can mean a big savings in transportation, classroom expense and accommodations.