Performance Support Systems

**How to improve user productivity and lower the cost
of software application training.**

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The Supplier

ORGANIZATIONS ARE SPENDING millions of dollars on application and systems training for their employees. Much of that training is delivered online or in the classroom—methods that are costly to develop and require learners to take time away from their jobs. Even with well-designed training programs, participants forget much of what they learn by the time they get back to work.

Unable to complete a task, employees typically turn to co-workers or a help desk for support—or worse, make mistakes. According to a Gartner Group 2001 report on the technical support industry, support costs have been rising 55 percent per year. Mistakes can be even more costly. If a call center employee at an insurance company makes an error in processing a claim, his mistake can result in the loss of thousands of dollars or more.

Wouldn't it be nice if employees had on-the-job support tools that provided just the information they need, when they need it? Enter performance support systems.

Performance support systems are predicated on the belief that for many tasks and skills, employees learn best while they're engaged in the activity. That belief is founded on research. Studies by Michael Streibel, John Seeley Brown, and Lucy Suchman show that learning is most effective when performed in the context of actual work. Proponents of performance support tools argue that conventional training methods remove learners from their jobs and place them in artificial settings. For many tasks, employees need ready access to support tools while they're doing the work.

What are performance support systems?

Performance support systems have been in use for more than a decade. In the 1990s, Gloria J. Gery and other learning experts conducted extensive research on electronic performance support systems. More recently, the term "just-in-time learning" has been used to describe the solution.

Following are the key characteristics of performance support systems:
● provide access to the discrete, specific information needed to perform a task
● use on the job, while engaged in the activity
● access by the user whenever the need arises.

How do they work?

Many people think of performance support systems as online help systems. They can be, but they can also be a lot more. Performance support systems include agents, templates, short tutori-

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als, diagrams, tips, and simulations. System designers present information in a variety of ways—from a simple text dialog box to a short video or simulation.

A diagnostic performance support tool might ask, What's the problem? and then present the user with alternatives or a dialog box to request specific data. For procedural tasks, the employee might click a "how" or "tell me about" button to get descriptions, instructions, or tutorials. American Online, for example, recently deployed Learn.com's Mentor performance support system to increase user assimilation of its new version, AOL 9.0. Users click a "Show Me" button, bringing up a short tutorial that walks and talks the user through the steps of how to complete a task.

Because the primary objective is to help the learner complete a task as quickly as possible, the tools are easy to access (usually one click away), and the content provided is, typically, short and concise. The tools may use text, audio, or simulations, but they don't mix media merely for entertainment. The tools use only the media necessary to effectively support the user in completing the task.

The ROI of training and support costs

Many companies develop instructor-led or online programs for software training, but those programs can be costly. In a large organization, a one-day instructor-led class can cost US$150 per learner

to develop and deliver. At that rate, sending 1,000 employees to a one-day course on a new system or software upgrade would cost the company $150,000, plus the cost of the employees' time away from the office. Assuming a loaded headcount cost of $50,000 per employee, you add another $200,000 to the cost of the training. Thus, that one-day training event carries a total cost of about $350,000—and that doesn't factor in employee travel expenses.

At the end of the day, those training courses may not be fully effective. End users tend to retain some knowledge better than others, such as how to perform frequently used tasks. (Remember the adage, "Use it or lose it"?) When they need to perform a less-used function or task, employees often need support. Help desks are typically inundated after a new software rollout. Many companies hire additional support staff or outsource their help desk for those deployments.

Reducing costs while improving performance

Given the high costs of training and support, companies look for alternatives. Learn.com's performance support tools have been shown to effectively reduce the burden on the support desk:

● A large U.S. computer manufacturer recently deployed a custom Learn.com Mentor performance support system for its knowledge management system upgrade. The company found that help desk calls were 35 percent below their predictions, based on experiences with similar upgrades.

● DuPont estimates its Mentor performance support system provided by Learn.com is eliminating 500 help desk calls per week—for a savings of at least $750,000 a year.

● Pitney Bowes used a Learn.com Mentor performance support system for the rollout of a major desktop application upgrade and found the volume of help desk requests was reduced by over 2,000 calls per week initially following the upgrade. By conservative estimates, that's a savings of $50,000 per week.

Performance support systems can

also reduce the amount of classroom-based training required for software and systems training. Aetna, for example, was able to cut its 13-week instructor-led training course for newly hired call center employees by two weeks through the use of performance support tools. In another example, a major financial services company was able to reduce its classroom training for its call center staff in the United Kingdom from 18 days to three days by providing "just-in-time" support tools while a call was in progress.

More than just cost savings

The benefits of performance support systems go far beyond cost savings. These systems have been shown to directly improve employee performance. Aetna found a direct correlation between the use of performance support tools among their call center employees and the quality of claims processing. One internal study showed that the greater the percentage of employees using the tools, the lower the number of late payments. A second study showed that in every case in which the processed claim contained an error, the call center employee handling the claim had not used the tool. Inaccurate and untimely claims processing have huge cost implications for insurers. Aetna's performance support tools have resulted in significant savings through higher quality claims processing.

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Companies are also turning to performance support tools to increase employee productivity, particularly during enterprise system rollouts. As any IT person will tell you, a new system launch or upgrade creates difficulties for the users. The initial rollout results in reduced productivity, and, until the users have fully assimilated the new system, the return-on-investment is negative. Accelerating user assimilation of the new system is extremely valuable, resulting in increased user productivity, reduced burden on the help desk, and more satisfied employees and customers.

A large international consulting firm made a conservative estimate of the value of getting their new knowledge management system in use earlier. By getting just 15 percent of their consultants using the system to gain five days of productivity, revenue would increase $1.8 million—six times the cost of the performance support system. As an added bonus, a shorter assimilation time meant less user frustration and dissatisfaction with the change.

The good news about performance support systems is that once employees try them, many just like using them. In Verizon's implementation of the Learn.com Mentor for Lotus Notes, the company found that 64 percent of employees said the tool provided more useful content than the instructor-led training class. Verizon employees responded positively to the tool, with 82 percent saying that the tool empowered them to be proactive, self-sufficient, and productive in their Lotus Notes learning.

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