Empowering Users with Electronic Performance Support Systems

Kent State University Uses Just-in-Time Online Training to Optimize Use of Mission-Critical Software

– Chris Howard, Principal Analyst | June 2006

IN THIS CASE STUDY

With ongoing budgetary challenges, increasingly complex educational demands and rapidly changing technologies, state universities struggle to make the most of their resources. Kent State University in Ohio is no exception.

The school has a large administrative and clerical staff, which operates across eight campuses. Ensuring that these employees have the tools and the training to do their jobs well is a top priority. For example, Kent State needed to provide ongoing training and support for its heavily used collaborative software and e-mail system, but had limited resources to accomplish this.

The university’s department of Administrative Computing Services found a solution that addressed learning needs and budgetary needs simultaneously. The group found that skillful deployment of an electronic performance support system (EPSS), the subject of this case study, is helping employees make better use of the collaborative software to achieve a higher level of job performance with minimal outside support. This case study also provides research on the impact that EPSS has had on other forms of assistance, including the help desk.
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Kent State Overview

Kent State University, part of the Ohio State University system, is an eight-campus network with its main campus in Kent, Ohio. Satellite campuses are located in the towns of Ashtabula, East Liverpool, Geauga, Salem, Stark, Trumbull, and Tuscarawas, all in northeast Ohio.

Established in 1910, the institution achieved university status in 1935. The second-largest public university in the state, it has a population of nearly 35,000 undergraduate and graduate students. Carol A. Cartwright, the university’s president since 1991, is the first woman to serve as president of a state university in Ohio.

Kent State employs approximately 5,700 people, including full- and part-time faculty; executive, professional, administrative, and clerical staff; researchers; technicians; skilled crafts workers; service and maintenance workers; and graduate assistants.

The Business Challenge

Kent State has a 2,300-person administrative and clerical staff spanning eight campuses. These employees make heavy use of IBM Lotus® Notes®, client/server collaboration software designed to conduct business and increase productivity across the organization.

Lotus Notes training is provided by the HR department. Support for Lotus Notes is provided by the school’s help desk and the Lotus Notes administrator, both of which fall under the department of Administrative Computing Services (ACS).

ACS is part of the division of Information Services and reports to the university’s vice president and chief information officer. ACS is responsible for the implementation, maintenance, and upgrading of the university’s information systems, from hardware installation to delivery of output.

The Lotus Notes administrator, along with a part-time employee, is responsible for server maintenance, user account creation,
workflow applications, and troubleshooting problems. The Lotus Notes administrator also collaborates with the HR development group.

The help desk team, which includes six full-time people, provides desktop support to a faculty, student, and employee population of nearly 40,000 people, as well as staff at the school’s seven computer labs.

The system for providing Lotus Notes support was cumbersome and inefficient. It was often slow to respond to people’s needs and a drain on IT staff. The situation also strained the limited manpower of the help desk team and disrupted the work of the Lotus Notes administrator.

The challenge for Kent State University was how to offer Lotus Notes support that would help employees perform their jobs more efficiently and effectively in an environment of limited human and financial resources.

Implementing an Electronic Performance Support System

Lotus Notes Training

IBM Lotus Notes is a proprietary, client-server collaborative software and e-mail system. The system’s capabilities include e-mail, calendaring and scheduling, instant messaging, personal information management (PIM) tools, discussion forums, virtual team rooms, and reference databases with basic workflow. The software also includes a desktop platform for collaborative applications.

At Kent State, approximately 2,300 administrative and clerical employees use Lotus Notes. Initial training on Notes (as well as Microsoft Word) is provided in instructor-led classrooms as part of new-hire orientation. The classes are provided once a month, run for two hours and typically include 10–15 participants.

New-user training covers the most rudimentary functions of Lotus Notes e-mail and calendaring. This is an important part of the software’s functionality but represents only a fraction of its capabilities.
Kent State’s Lotus Notes administrator reports that many users have expressed the desire for more detailed training but, because classroom instruction is so time- and labor-intensive, the school has been unable to offer this. Additionally, most users have been unable to do self-training on Lotus Notes, because of busy work schedules and the difficulty in using Lotus Notes’ limited self-help capabilities.

**Lotus Notes Support Before the EPSS Launch**

Until late 2005, if Lotus Notes users needed assistance, they would place a call to the Lotus Notes administrator or to the help desk. If someone was available, he or she would take the call and attempt to walk the caller through the steps needed to resolve the issue.

More commonly, however, no one would be available to offer immediate support. In such cases, the help desk would open a “ticket” for the job and call back the user at a later time. In worst case scenarios, a long round of phone tag and e-mails would be exchanged, during which time the question or problem would remain unaddressed.

The situation was far from ideal for all those concerned. Lotus Notes users would be unable to use the application fully until help arrived, creating frustration and suboptimal work performance. The Lotus Notes administrator was frequently interrupted with questions and problems. Trying to meet the immediate needs of the software users often prevented the administrator from pursuing more value-added aspects of their job.

At the same time, help desk employees were dealing with a number of calls from Lotus Notes users, straining their already limited capacity to support a large number of people and a wide range of technical issues throughout the university community.
An EPSS for Lotus Notes

The support strain on both users and technical staff was the situation in mid-2005, as ACS prepared to resolve this issue by migrating to Lotus Notes 6.5 and upgrading the Lotus Notes servers.

An EPSS is an electronic system offering integrated, on-demand access to information, advice, learning experiences, and tools. The system provides whatever just-in-time training is necessary to generate performance and learning at the critical moment of need. It is designed to enable a high level of job performance with a minimum of support from other people.

Kent State’s Lotus Notes administrator, director of ACS, and vice president of Information Services were all involved in the decision to acquire the new technology. Since the EPSS would be launched as part of the planned Lotus Notes upgrade, the team believed the timing was right.

Furthermore, they believed that the cost of implementing an EPSS was justified by its expected benefit. By having training on mission-critical software available to all users all the time, an EPSS would make it possible for Lotus Notes to be used in an optimal way by the largest number of people.

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<td>1. Make the upgrade process as painless as possible for all involved.</td>
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<td>2. Make training and knowledge more readily available to users.</td>
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<td>3. Provide a more consistent environment for users and support staff.</td>
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<td>4. Subsequently, reduce the number of support calls users have to make.</td>
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*Figure 1: EPSS Supports System Upgrade Principles*
Evaluation and Launch

In April 2005, the university entered into a trial agreement to purchase Mentor® for Lotus Notes 6.5. ACS ran a monthlong pilot with a small group (less than 100) of IT employees. After a second pilot with another small IT group, the department began to roll out the EPSS to the general employee population.

In June 2005, a series of open houses were held to formally launch the product. During the open houses, videos created by the EPSS provider demonstrated how Lotus Notes would function differently under the new system. Following the open houses, LAN administrators began installing the Lotus Note client and Mentor software on users’ desktops.

The Lotus Notes administrator reports that the implementation went smoothly and that the level of employee acceptance has been high overall. As of March 2006, approximately 70 percent of all employees had migrated to the new system.

Technology

The EPSS used by Kent State is Mentor Just-In-Time (JIT) training, an off-the-shelf product of Learn.com®. The solution is designed to provide a demonstration and explanation from within any application at the precise moment that the user requires it.

Mentor is a workflow-embedded solution, meaning that it is built into the Lotus Notes application. The tool is designed to reduce dependency on help desk support, reduce or eliminate the need for training, and thereby increase productivity.

The technology contains approximately 400 just-in-time multimedia demonstrations that walk the user through the tasks and features of Notes. Topics include using instant messaging integration, applying mail rules to help manage incoming messages, flagging messages for follow-up, blocking spam, employing a tool to manage the workday, and using Notes remotely through Web access.

Mentor’s topics are arranged by category, which facilitates searching. For example, if users want to learn how to synchro-
nize Lotus Notes with a BlackBerry™ device, they might type in “PDA" or “BlackBerry” or “Wireless,” and the system will come up with a list of relevant topics such as “PDA Synchronization Information - mNotes & Blackberry.” This page contains a number of subtopics and links.

**Change Management**

According to Kent State’s Lotus Notes administrator, the majority of employees adapted to the new process very quickly. There was a small group of people who initially resisted the change but this did not last long. Once they had the opportunity to become more familiar with the EPSS, their comfort level grew.

A combination of open houses to introduce the new system and e-mails that were sent to the user population proved beneficial. They helped employees to view the change in a positive light and create a sense of ownership around the new technology.

The e-mails announced the arrival of the new software, discussed its features, and contained links to brief multimedia presentations from the EPSS solution that showed the new-user interface and described the benefits. Users could see demonstrations of how the software worked, how to get started using it, how to accomplish some basic tasks with it, and how to work with some of its more advanced functionality.

The last e-mail showed users how to use the tool when they have a question, want to do something new, or forget how to do something they have done before. The e-mails and links were designed to develop a basic comfort level with the technology and, at the same time, to demonstrate how users were empowered to build skills on their own, without calling the help desk, searching through manuals, or bothering a colleague.

The rollout strategy also included informing people about upcoming change as early as possible, explaining the benefits of change for them personally, and then demonstrating the benefits in a way that mimics the real-life experience. As part of this strategy, a series of three e-mails were sent to every user over a two-week period.

Open houses and e-mail communications helped create a sense of ownership around the new technology.

A News page on the Notes Workspace includes FAQs about the system and a tip of the day.
Lotus Notes Frequently Asked Questions

Top Ten
Welcome to the Lotus Notes Support pages at KSU. Lotus Notes is the officially supported e-mail, calendaring, and integrated database system for the University administrative and classified employees.

If you have Lotus Notes installed, you can launch this database in Lotus Notes by clicking here.

Do you need a personal Lotus Notes Mentor? Click the image below and use Mentor for Lotus Notes to learn everything you need to know!

Note: You must have Lotus Notes installed to use Mentor for Lotus Notes

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Figure 2: Frequently Asked Questions
Results

ACS reports that the EPSS has had more than 2,100 hits since it was launched in June 2005. Employee response to the system has been positive overall. Feedback from users indicates that they have found the video instructions helpful and user-friendly.

According the Lotus Notes administrator, the most frequent search topics include archiving, changing the password, and instant messaging. None of these subjects are covered in the basic Lotus Notes training course.

A user survey was conducted in April 2006, at the time this case study was being developed. Feedback suggested that Mentor usage was gaining traction at Kent State but still has a way to go. The survey elicited 96 responses from a pool of 156 employees, or a 62 percent response rate.

Forty-six percent of respondents said they were using Mentor for Lotus Notes. Another 48 percent said they have not used Mentor and another 6 percent said they were not sure if they had used the application or did not answer the question.

The survey also indicated that Mentor users are generally satisfied with the tool’s ability to provide them the help they need. A total of 42 percent of users said they were helped “often,” while another 31 percent said they were helped “sometimes.”

These responses suggest there is an opportunity to target the subgroup of employees who are not benefiting from the technology, identify the causes for this, and respond with new communications, follow-up training, or other measures designed to increase usage and user satisfaction.

The survey also indicated that Notes-related calls to the help desk have decreased. A total of 44 percent of respondents said they depended less on the help desk, while the same percentage said they relied less on help from coworkers. So it appears that Mentor is not only freeing up tech support staff for other, critical work but that it is also minimizing the degree to which employees are taken away from their jobs to help others with the application.
Using Mentor for Lotus Notes Assistance

R6 users, please use the Lotus Notes Mentor link at the top of the known issues page.

R5 users only:
To change the letterhead you are using in Lotus Notes, open your Inbox. From the green tool bar, click on Tools | Preferences...

Click the Mail tab, then the Letterhead tab. From the list, choose the letterhead you would like to use, it will give you a preview of that letterhead when you click on the name in the box below.

Figure 3: Changing Lotus Notes Letterhead
Both the Lotus Notes administrator and the help desk team report that the calls they take are qualitatively different since the EPSS implementation. Rather than walking people through the steps needed to solve their problems, they are directing callers to links where they can solve the problems themselves. The hope is that, next time around, the user will go directly to the EPSS, eliminating the help desk call altogether.

An additional benefit is that the quality of support has been standardized by the new tool. The ability to solve a help desk problem is no longer dependent on the proficiency of the support person, including the person’s communication skills and knowledge level.

**Best Practices**

Based on its experience in implementing an employee performance support system, the department of ACS has developed a number of best practices that other organizations may find helpful:

**Synchronize the EPSS and Lotus Notes installations**
Kent State made the decision to launch the EPSS tool in connection with a Lotus Notes upgrade. Because the technology is embedded into the Notes software, all installations, communications, and open house events were combined, significantly reducing the amount of time that would have been required for a separate launch. This not only reduced stress on the ACS department and LAN administrators, but also cut down on distractions and change management issues for users.

**Encourage learning by doing**
Like any technology, an EPSS doesn’t deliver results unless employees learn to use it appropriately and optimally. In the early stages of deployment, at least, this put the onus on the Lotus Notes administrator and the help desk to handle calls differently. It was important for this group to assume more of a coaching role than a “fixing” role in order to change user behavior. This meant that callers would have to be directed to the appropriate link and encouraged to launch the solution themselves.
**Integrate the EPSS into new-hire training**

Now that the EPSS has become an important part of using Lotus Notes, new employees’ first exposure to Notes needed to address this. The Lotus Notes Administrator worked with Human Resources to make Mentor instruction a part of new-hire training.

**Communicate before, during, and after the implementation**

ACS used e-mail communications and open houses to announce the upcoming launch of an EPSS. E-mails explained the features and benefits, contained links to brief multimedia presentations, and showed the new-user interface. The open house events used on-screen demonstrations of the technology and had staff available to answer questions. Once the employee population was familiarized with the new technology, an ongoing communications program was designed to show how the EPSS can help users make better use of the Notes application.

**Go the extra mile**

The Lotus Notes administrator embraced a multipronged approach, particularly with respect to communications around the new system. The philosophy was that any time spent up-front in these efforts was time well spent, because it would make employees increasingly responsible for their own learning and would reduce their dependence on outside support. Developing FAQs, newsletter items, quick tip guides, and other tools was part of this strategy to empower employees to solve their own problems, teach themselves on an as-needed basis, and make optimal use of Lotus Notes’ capabilities.
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