Drug Research Firm Cuts Costs and Boosts Training Quality with Collaboration Solution

Overview

Country or Region: United States
Industry: Life sciences—Pharmaceutical contract research organizations

Customer Profile
PPD is a global contract research organization serving biopharmaceutical clients. It is headquartered in Wilmington, North Carolina.

Business Situation
PPD wanted to improve the quality of its employee training, while reducing travel costs, by employing new forms of collaboration that could also be used for other company functions.

Solution
PPD deployed PPD® 3D, a customized version of the ProtoSphere virtual collaboration environment from ProtonMedia. PPD 3D takes advantage of the communications features of Microsoft Lync Server 2010.

Benefits
- Improved trainee engagement
- ROI of six months
- Competitive differentiation through expanded services

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Mike Wilkinson, Executive Vice President and Chief Information Officer, PPD

PPD, a global contract research organization serving clients in the biopharmaceutical industry, wanted to improve the quality of employee training while reducing travel costs and enhancing collaboration across the company. PPD implemented PPD® 3D, a custom-tailored version of ProtoSphere Lync Edition 2010 from Microsoft partner ProtonMedia. ProtoSphere builds on Microsoft Lync Server 2010 with a virtual space in which users collaborate through the use of three-dimensional avatars. PPD has used ProtoSphere to boost knowledge retention for trainees, thus making them more effective employees. Reduced travel costs have helped the company recoup its software investment in less than six months. Building on the foundation of ProtoSphere and Microsoft Lync Server 2010, PPD and ProtonMedia are currently expanding the groundbreaking collaborative experiences into other business processes.

Situation

PPD is a leading global contract research organization providing drug discovery, development, and lifecycle management services to support its clients in developing medical treatments. The company's clients and partners include pharmaceutical, biotechnology, medical device, academic, and government organizations. PPD has offices in 44 countries and more than 11,000 employees worldwide. Its 2010 net revenue was U.S.$1.4 billion.

"Pharmaceutical research is a highly regulated environment, so it's extremely important that our quality is high," says Mike Wilkinson, Executive Vice President and Chief Information Officer of PPD. "It's also a highly competitive environment, which means our performance has to be high. To continuously improve quality and performance, we put a lot of effort into training."

A major component of PPD training is a 10-day course for new clinical research associates who monitor clinical trials. "We hire experienced monitors, so we're going beyond the basics to teach them how we do monitoring at PPD," Wilkinson says. Traditionally, the courses were led by instructors using slides and other media to show the types of activities that clinical research associates perform in their jobs.

PPD hires people all around the globe so they can be close to customer and research sites. One drawback of this system was that employees had to travel to a regional hub for training. "Over the course of a year, we paid close to $2 million in travel costs for this training," Wilkinson says.

For years, Wilkinson had been on the lookout for ways to improve PPD training, ideally through a combination of increasing knowledge retention and reducing costs.

However, PPD also had wider goals. It was seeking to investigate new methods of collaboration that could improve clinical trials.

"The 'e-clinical' approach is very hot right now," Wilkinson says. "Everyone in the industry is seeking to use technology to run trials more quickly, at reduced cost, with reduced burden on the patient and on the site—all while maintaining the highest quality."

In short, PPD was looking for a new collaboration solution that could improve the quality and reduce the costs of training, as well as show promise in providing similar benefits across the company.

Solution

PPD investigated numerous approaches to improving training and collaboration. "We assessed several companies over the years and didn't see much value, didn't see good return on investment," Wilkinson says. "So we kept looking."

In December 2010, PPD learned about a solution called ProtoSphere from ProtonMedia, a Microsoft partner with a Silver Unified Communications competency. ProtoSphere is a virtual collaboration environment in which individuals engage in highly social, interactive, and visually appealing three-dimensional virtual spaces.

ProtoSphere Lync Edition 2010 enhances the functions of Microsoft Lync Server 2010 and Microsoft SharePoint Server 2010. "We provide a visual layer and additional integration that help companies take full advantage of the always-on, unified communications benefits of Lync Server 2010," says Ron Burns, CEO of ProtonMedia. For example, ProtoSphere provides text chat, voice over IP, application

Figure 1: A class session in ProtoSphere. Each trainee is represented by an avatar.
Figure 2: Trainee avatars in a different classroom setting.

ProtonMedia leadership team," Wilkinson says. Furthermore, PPD had just embarked on a partnership with Microsoft and was implementing Lync Server 2010, SharePoint Server 2010, the Active Directory service, and Microsoft Office 2010. So PPD was impressed that ProtoSphere takes advantage of all these Microsoft technologies—technologies that PPD was already familiar with.

In March 2011, PPD signed a partnership deal with ProtonMedia that called for PPD to implement a customized version of ProtoSphere Lync Edition 2010—named PPD 3D—and for the two companies to work together to develop e-clinical initiatives. PPD spent three months tailoring the software to its business processes and executed its first PPD 3D training session in June.

The primary integration involved reconfiguring the traditional PPD training for a virtual environment. "We didn't have to do much from the technology perspective," Wilkinson says. "But you don't want to take a paper-based training methodology and run it virtually. So we restructured the content and format to take advantage of virtual delivery." For example, PPD reduced its reliance on slideshows and provided more activities mimicking those that employees perform in their jobs.

At PPD, Lync Server 2010 and PPD 3D run on virtualized HP ProLiant DL580 server computers. As of November 2011, eight PPD 3D training courses have been completed. In the second phase of the project, PPD and ProtonMedia are exploring e-clinical initiatives that take advantage of the ProtoSphere and Microsoft Lync Server 2010 infrastructure.

sharing, blogs, wikis, and user profiles—but it does so in the context of a networked environment in which each user is represented by a three-dimensional avatar. ProtoSphere shows the avatar moving through space and interacting with people and groups, thus providing a context that helps enrich those interactions. (See Figures 1 and 2.)

"We saw great potential in the software, and we had great chemistry with the

Benefits

PPD has used ProtoSphere and Lync Server 2010 to improve trainee engagement, reduce costs, and achieve a six-month ROI. The solution has also given the company a lot of potential to explore new groundbreaking opportunities it can offer its customers using the same infrastructure.

Improved Trainee Engagement

PPD is using the rich virtual environment of ProtoSphere to improve the performance of employees in its training programs. "They're more engaged because the software is fun," Wilkinson says. "For example, a huge advantage over standard distance-learning solutions is that in ProtoSphere it's easy to break people into private conversation circles and then reconvene a larger group. Trainers love to break people into small groups, and we couldn't do this with any other solution."

Furthermore, ProtoSphere helps trainees continually pay attention. "In the past, it was easy for a trainee to disengage from the constant barrage of slides and pure classroom time," Wilkinson says. "But now they spend less time in the classroom and more time with activities. They can do virtual monitoring with virtual instructors looking over their shoulders."

In post-training surveys, participants gave the virtual course higher scores than the face-to-face course for relevance, comprehensiveness, and learning outcomes. The increased engagement means that employees can get more value out of the training, reaching a richer understanding of PPD procedures.

Wilkinson says, "In coming years, we expect PPD 3D to improve our employees' quality and performance, resulting in a more successful company."

ROI of Six Months

In the first three months with ProtoSphere Lync Edition 2010, PPD drastically reduced travel costs. "There are some cases where we want less-experienced employees to have face-to-face time with their managers," Wilkinson says. "But in most cases we are able to eliminate our training travel costs."

Furthermore, ProtoSphere Lync Edition 2010 represents a low cost of entry to a collaboration solution for PPD. It costs less than videoconferencing solutions, which require cameras. And although PPD 3D is a customized version of ProtoSphere, it required little development time or cost. "We used mostly out-of-the-box functionality," Wilkinson says.

The result is an extraordinary return on investment. "We expect to pay for our initial investment in ProtoSphere and Lync Server 2010 by the end of 2011—an ROI of about six months," Wilkinson says.

Competitive Differentiation Through Expanded Services

PPD is eager to use ProtonMedia and Microsoft technologies in other areas of the company. "The training piece is extremely important to us, but we also used it to bring this software into the company," Wilkinson says. "We have all kinds of opportunities throughout our business to have teams meet virtually instead of over the phone or via traditional online conferencing."

One advantage of such virtual meetings is that documents or presentations that were shared in the meeting stay in the virtual room. "If you missed a teleconference, you don't have to wait for the minutes to come out," Wilkinson says. "You can go into the room and everything is still there. The event has persistence."

For More Information

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For more information about ProtonMedia products and services, call (215) 631-1401 or visit the website at:
www.protonmedia.com

For more information about PPD products and services, call (910) 251-0081 or visit the website at:
www.ppdi.com

PPD plans to take advantage of these opportunities not only within the company, but also with external partners. Many of the company's partners in clinical trials use Microsoft technologies. Thus PPD plans to use Lync Server 2010 to federate with these trusted partners. Federation makes it possible for organizations to communicate in real time in an encrypted, authenticated, and managed environment. With federation and ProtoSphere, Wilkinson hopes to achieve the dual benefits of improved performance and lower costs. "Federation could be a game-changer for us," he says.

Wilkinson hopes that these collaborative e-clinical initiatives will result in improved competitive advantage for PPD. "With ProtonMedia and Microsoft, we can differentiate our services for our customers, showing that we can achieve better results more quickly, and at lower cost than our competitors."

Microsoft Server Product Portfolio

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- Microsoft Office
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Hardware
- HP ProLiant DL580 server computers

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- ProtonMedia