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CASE STUDY BENTLEY TRAINING TRAFFIC PLANNING AND DESIGN, INC.

THE BOTTOM LINE

Traffic Planning and Design, Inc. invested in a Bentley training subscription to support its strategic commitment to continued development of its employees' design expertise and improve its alignment with Bentley software. With effective training, TPD was able to accelerate the delivery of one project by 50 percent.

Average annual training cost savings: 71%

THE COMPANY

Traffic Planning and Design, Inc. (TPD) is a 135-member consulting engineering firm specializing in transportation engineering and related environmental and construction services. Founded in 1989, TPD employees specialize in transportation planning, highway and traffic signal design, bridge design and inspection, environmental permitting, and construction management inspection services for municipal, state, and private clients in Pennsylvania, Delaware, New Jersey, Maryland, and Virginia.

THE CHALLENGE

In late 2003, TPD determined it needed to move its staff from its existing civil design and engineering software package to Bentley InRoads applications, in part because it felt InRoads was a better product but also because the Pennsylvania Department of Transportation uses InRoads as its road design and engineering software. Because InRoads was a completely new software package to TPD, it needed to quickly bring its employees up to speed on the new software so they could take on new projects — and be able to continue to train new employees on the software as TPD grew.

THE STRATEGY

When TPD explored its training options, it found that the cost per user for basic InRoads training would be approximately \$1,300. In conversations with Bentley, TPD learned about Bentley training and found that a training subscription would be much more cost effective for the initial training sessions and would also give TPD greater flexibility in delivering training to users:

- It would provide TPD with cost-effective access to classroom instructor-led training at Bentley training sites.

TOPICS

Enterprise Applications

- For employees that couldn't or didn't want to travel to Bentley training sites, online instructor-led training options were available to provide group or individual training sessions over the Internet.
- New and existing employees could also access online self-paced training on an as-needed basis over time on their own schedules.

TPD started a Bentley training subscription in 2004. From the time TPD started using the training in 2004 through November of 2008, employees completed 378 courses of Bentley training including more than 200 distance learning or on-demand e-learning courses.

KEY BENEFIT AREAS

Investing in training has enabled TPD to adopt new software solutions effectively while ensuring its ability to grow — both in terms of size and in terms of employee skills — over time while managing training costs.

Direct benefits

Direct benefits TPD achieved through its training initiative include avoided training costs and reduced training-related travel costs because employees are able to take advantage of Web-based training on an as-needed basis.

TPD was able to save an average of \$30,548 annually on reduced training costs alone.

Indirect benefits

In addition to the direct cost savings, TPD achieved a number of indirect benefits from its training strategy including:

- Increased competitive differentiation. Initially, TPD invested in training to support a move to InRoads so it could design projects better, faster, and cheaper. Over time, TPD found that it was able to be more innovative and competitive because users had broad access to training that they could use to improve their skills. For example, staff members that didn't have CAD design experience could take advantage of training to add some CAD skills to their resume without having to incur additional costs, leave the office, or disrupt their normal work schedule. This enabled TPD to win more business over its competitors because it could more quickly assemble qualified teams.
- Increased productivity. Access to training has also helped TPD to support its professional development program, which has enabled its users to be more productive. In fact, TPD was recognized in 2008 for its innovation in road and bridge design largely because of the company's ability to complete projects in time frames that were once considered impossible. For example, TPD reduced the time to deliver one project by 50 percent.

TPD was able to reduce the time to design and approve one project from 18 months to 9 months.

- Lower employee ramp-up costs. Because new employees can attend Bentley training sessions as needed, TPD has been able to hire and grow new employees with a faster time-to-effectiveness and fewer upfront costs. For example, when TPD upgraded to MicroStation V8 XM Edition, it was able to

train more than 30 users over a 4-day period by using the account-specific training days offered by Bentley training — rather than having employees spend hours or weeks trying to learn the software on their own.

- Increased employee satisfaction. Global visibility into training enables employees to take on challenging assignments that aren't necessarily in their office if desired, and access to training enables employees with initiative to learn new software to drive their own productivity and expertise, reducing employee turnover.

LESSONS LEARNED

Ongoing training is key to effective adoption of any software program, and TPD found that a training strategy was the best means to ensure its employees could continue to develop their skills and expertise as time permitted without disrupting productivity. Because of its growing proficiency in using advanced features of InRoads, TPD was a finalist in the Bentley customer awards program in 2008. TPD believes that Bentley's ongoing commitment to providing effective training has been a key factor in TPD's continued success.

As TPD continued to take advantage of training, it was able to identify further opportunities for savings and was able to significantly reduce training-related travel costs in 2008 by sending more employees to online training and regional training centers.

CALCULATING THE BENEFITS

The average annual training cost savings — a direct benefit — was calculated by quantifying the overall number of courses TPD employees completed in a 5-year period and the normal list price of those courses compared to TPD's corresponding training investment. Travel-related costs were not included in the calculation but over the course of five years TPD has eliminated the majority of its training-related travel expenses by taking advantage of the flexibility offered through training.

Indirect benefits not quantified included increased competitive differentiation, increased productivity, lower employee rampup costs, and increased employee satisfaction.

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