



March 2010

Document **K13**

CASE STUDY BENTLEY TRAINING PARSONS BRINCKERHOFF

THE BOTTOM LINE

Parsons Brinckerhoff invested in a Bentley training subscription to provide employees with consistent and timely access to Bentley software training, reducing training costs while increasing user productivity and accelerating ramp-up time on new projects.

Average annual training cost savings: 50%

THE COMPANY

Founded in 1885, Parsons Brinckerhoff is an infrastructure engineering, construction, and planning consulting firm with global headquarters in New York City. It has 13,000 employees and serves clients in the Americas, Europe, Africa, the Middle East, Asia, and Australia-Pacific regions. Catering to both the public and private sectors, PB provides strategic consulting, planning, engineering, program and construction management, and operations for transportation, power, community development, water, and environmental infrastructure systems.

THE CHALLENGE

PB Americas had numerous locations with employees using Bentley software and had taken advantage of a Bentley Enterprise license subscription and centralized management to manage software procurement processes and costs. However, training on Bentley software was still managed and funded locally. This decentralized training posed several challenges to PB's growth and efficiency:

- Inconsistent skill levels. Because training was funded locally, local office directors funded training only when they thought that it was needed or appropriate — meaning that local employees' skill levels often depended on their local office structure and not overall company goals.
- Lack of economies of scale. Local training was more costly to develop and support than distance learning and other options, and PB wasn't able to take advantage of its size in negotiating cost-effective training.
- Limited flexibility. If a PB office won a new project and needed to develop skills with a new software program to manage the project, the office often hired or trained its own team because it didn't have visibility into where program-specific expertise might lie — slowing project start-up times and impacting overall productivity.

TOPICS

Enterprise Applications

THE STRATEGY

Because PB had had standardized its product licenses with its Bentley Enterprise License subscription, it used that savings to invest in an initial pilot of Bentley product training in October 2005. During the pilot, users were able to take advantage of unlimited access to e-learning content and 10 users across the country could take unlimited classroom training at Bentley Institute sites in their area. After success with the initial pilot, PB implemented centralized training for the United States and eliminated locally-funded training, instead providing unlimited access to training for all users. In the first five months, PB US employees attended more than 430 training classes including in-person hands-on courses, remote hands-on courses, remote lectures, self-paced hands-on courses, and self-paced lectures. In 2008 alone, PB users completed more than 480 courses, of which 361 were distance learning or on-demand e-learning courses.

KEY BENEFIT AREAS

Moving to a training subscription for its Bentley software users has enabled Parsons Brinckerhoff to increase the talent and skill level of its staff while better enabling it to take advantage of its global presence. PB has leveraged the “blended” learning approach to provide staff with the optimal training strategy based on the needs of users and constraints of their project and travel schedules.

Direct benefits

Training has enabled PB to dramatically increase the amount of training provided to end users while avoiding most of the cost of that training. Previously, PB distributed its training budgets individually across its offices, and it estimates that funding the amount of training it takes advantage of on an annual basis today would cost at least \$500,000 in training and travel costs without a training subscription. Instead, they pay half that amount and have saved more than \$750,000 over a 3-year period.

Indirect benefits

PB achieved a number of indirect benefits from the training subscription including:

- Improved competitive differentiation. By continually offering training to its US staff, PB’s staff expertise in using existing and emerging software packages is a key differentiator against its competitors. In a number of cases, the ability to rapidly bring local teams up to speed on the clients’ tool of choice and start a project without lag time has been a key factor in new project successes.
- Accelerated learning curve. PB can use training to bring new users up to speed quickly and enable users to learn how to take advantage of upgraded applications when it’s most convenient for them.

Users can ramp up on a new application or version of an application an average of twice as fast because of the ease of access to subscription training.

- Increased flexibility. As a consulting engineering firm, PB has many different versions of software that are required by different clients at different points in time. Ongoing training ensures that staff are skilled on a software package, and that people joining a new project can be brought up to speed quickly on whatever software package they need to use.

- Increased productivity. Because users can access training at their own pace as needed, they can spend less time on tactical training and drive faster time to completion of projects. For example, as PB prepares to effectively respond to a state department of transportation's upgrade to a later version of MicroStation, it can use a combination of training methods that bring staff up to speed while allowing them to continue to be productive in the office.

For casual users of Bentley applications at PB, consistent access to training as needed drove productivity gains of up to 50 percent.

- Greater collaboration. Remote online training classes enable users from across the United States to participate in classes with staff from other offices, fostering greater collaboration and kinship among geographically-distributed employees.
- More workforce stability. Global visibility into training and available resources has enabled PB to support more work sharing and outsourcing of work to different offices. In the past, if an office won a large project, it would hire and train the needed experts for the project and would then have to lay them off if there wasn't additional work when the project was completed. Today, teams can be sourced from multiple offices, smoothing hiring and reducing the need for post-project downsizing.
- Greater workforce availability. PB's enterprise training enables trained employees to take on challenging new assignments regardless of location.
- Increased employee satisfaction. Access to training enables employees with initiative to learn new software to drive their own productivity and expertise levels, reducing employee turnover.

BEST PRACTICES

Although PB gained significant benefit from the training subscription, it also found that it needed to market the opportunities and benefits of the program internally to ensure that all users took advantage of it. Effective communication of the appropriate use of training was important to ensure employees focused their time on the training that would have a direct positive impact on their productivity. PB has also found that a well-trained staff enables them to identify and use the most efficient and effective software tool for the job rather than the one dictated by available employees' skill sets.

CALCULATING THE BENEFITS

The average annual training savings — a direct benefit — was calculated by quantifying the overall number of courses PB employees completed and the normal list price of those courses compared to what PB paid for the training subscription, as well as the savings in travel costs associated with accessing distance learning and on-demand e-learning courses supported by the subscription program. Indirect benefits not quantified included improved competitive differentiation, accelerated learning, increased flexibility, increased productivity, greater collaboration, more workforce stability and availability, and increased employee satisfaction.