

Into Another World

ONLINE COURSES TEACH HOW TO MANAGE PROJECTS IN A VIRTUAL WORLD.

BY LINDA GALLOWAY

The world's largest business software company and the third-largest software supplier overall, SAP AG has a history of innovation and growth that has made it a leader in providing collaborative business solutions for all types of industries in every major market. Therefore, it's not surprising that when SAP needed to improve the effectiveness of its project teams — most of which are culturally diverse and virtual — it developed a unique series of online courses covering all aspects of project management, and all based on an imaginary virtual world.

For its efforts, SAP received Bersin & Associates' 2007 Learning Leader award for Operational Program Excellence. This program, based on detailed criteria compiled

over years of research, recognizes organizations with effective and efficient learning approaches that have resulted in significant business improvement. SAP's best practices in its enterprise-wide learning initiative provide valuable lessons for any learning organization seeking to align itself with corporate strategy.

GLOBAL CHALLENGES

With a global reach that includes nearly 44,000 employees serving more than 43,400 customers worldwide, SAP's software development is spread among seven offices in six countries. Project managers often have team members in many of these locations.

Several years ago, SAP realized that while most managers understood the basics of project and people management, they were having difficulty working with distributed teams because of cultural differences, communication barriers and multiple time zones. A further analysis showed that a many managers were unaware that manag-

ing a remote team would require a different way of doing things.

After experiencing numerous software development problems, SAP set out to increase the quality of its software development without increasing costs. It recognized that improving the management of its virtual teams was critical. By helping employees work together more efficiently and communicate more effectively, product quality and employee morale would improve and retention rates would increase.

"To deal with this difficult and now common problem of virtual collaboration and communication among global project teams, we determined that the best solution would be to develop our own e-learning curriculum on how to manage virtual teams," says Nanci McGonigal, a member of SAP Business One's Global Training Development Department. "Since it was introduced, the program has withstood the test of time without any modifications. In fact, it has been so successful that it has been rolled out to all managers and is



now mandatory training in regions such as SAP France.”

McGonigal, who started as an instructional designer and then took over management of programs, notes that e-learning was chosen because of the SAP’s geographically dispersed workforce. In addition, it was important that learners could take these courses as needed and have the opportunity to practice what they learned.

“Real learning takes place when it includes practice,” says McGonigal. “That makes the whole process considerably more effective and is really the only way to assess how effective the training has been.”

During the needs analysis, SAP requested recommendations of exceptional virtual teams managers. These managers became the program’s subject-matter experts. They were highly involved throughout course development.

MANAGING VIRTUAL TEAMS

Based on the needs analysis results, the

software development group, the project’s sponsor and the learning development team determined that the Managing Virtual Teams curriculum should include six one-hour modules, each addressing a different topic: planning, communication, virtual meetings, team building, team management and cultural understanding.

EInspire Learning, SAP’s partner on the project, designed an interface that would appeal to software developers. The visually



rich curriculum uses a “pseudo world” that takes learners from Earth to another planet: Orth has characters that are composites of a variety of earthly ethnicities and cultures and includes fictional locations that are unlike anywhere in particular on Earth. These multi-cultural elements were designed to avoid stereotypes and make all participants feel equally comfortable.

“Because our teams include a wide variety of cultural differences, we felt it was essential to include this as one of the topics of the curriculum,” says McGonigal. “We wanted to ensure that this came out as a positive experience,

When SAP needed to improve the effectiveness of its project teams, it developed a unique series of online courses covering all aspects of project management, and all based on an imaginary virtual world. Photo courtesy SAP and Bersin & Associates.



Screen shot of an SAP training program that takes place in a “virtual world.” Photo courtesy SAP and Bersin & Associates.

so we addressed these differences by using characters with names and features from a variety of ethnicities and then mixing them up. We also made sure that no one location in our story matched a single location in reality.”

INTERACTIVE CONVERSATIONS

The content of the curriculum is framed within narrative, interactive conversations that tie the six courses together. Each module follows the same course structure: interactive conversation, interactive tutorials and activity. The modules are designed so that that busy developers can learn in chunks, with stop/start functionality and sophisticated navigation tools that remember where users leave off.

The user participates in conversations with two fictional program managers that discuss distributed development at a fictional software company. These interactive conversations present the user with a relevant problem and rhetorical question. They provide a “real world” example of a project aspect that can be used to illustrate the concepts discussed in the interactive tutorials, which deliver the “meat” of the content. Flowing naturally from the conversations are interactive exercises, such as multiple choice, multiple select and drag-and-drop activities.

Activities at the end of each module include engaging games and puzzles in which the user applies the concepts learned and reinforces the learning objectives. Each mod-

ule is designed to simulate an activity of project management, such as resource allocation or performance evaluation. While the user performs the activity, the “game play” is interrupted by events or messages that require a decision. The activity cannot continue (and its goal cannot be achieved) until these decision points are settled.

Each course has its own activity; however, the activity type, such as resource allocation, may be reused in two or more chapters if appropriate.

Events are choreographed as a set of nested decision points; earlier decisions can affect the appearance of later events, and the user may not experience all events, depending on the choices he or she makes. User performance in the activity (and in the branching simulation that rides on the activity) is based on three project success variables: quality, number of features and employee commitment. Every action and decision that the user makes in some way affects his or her score in one or all of these variables.

With SAP’s organized approach, the project took less than one year. The pro-

course, learners must pass the simulation. The LMS system generates automatic reports that go to managers and identify which of their employees have successfully completed the courses.

Job impact was measured through surveys, which asked about skills and abilities from each course objective and were completed by the participant, his/her manager and his/her direct reports. The survey was done before, shortly after, and six months after the program rolled out.

“We learned that this was an effective program and, if we had it to do over, we would probably not do anything differently,” McGonigal says. “It’s been built to last.”

Learners report that the scenarios and puzzles are engaging, and at the same time they are learning how to be more effective managers and improve virtual team effectiveness and communication.

As a result of the training using Managing Virtual Teams, SAP has seen a return on investment of nearly \$2 million. In addition, when comparing scores from a questionnaire taken before and after the e-learning program, the ratings of team

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gram was launched through the SAP Learning Portal, with all six modules coming out within one week of each other. Enrollment is free and open to all employees in the organization.

To create interest in the new curriculum, information was published through several internal communications channels. These included e-mails to development managers, an article in the internal newsletter, and an article on the landing page of the corporate portal.

“We also found that a trailer was an effective way to build excitement surrounding the course,” McGonigal says. “In the grand development scheme, the trailer did not require much time to produce, but it was a valuable tool in creating interest in the course.”

In order to successfully complete the

leaders improved by 26 percent. These results were the same across all three regions (Americas, India and Germany), supporting SAP’s goal of providing training that would be equally successful within and across different cultures.

“The Managing Virtual Teams curriculum has helped to make SAP a high-impact learning organization because it is fun and interesting but, most importantly, effective,” says McGonigal. “Learners enjoy following the stories throughout the modules and solving the puzzles at the end. But while they are enjoying themselves, they are learning how to be more effective managers and improve virtual team effectiveness and communication. This program is a great example of the major emphasis that SAP puts on training.”