



Efficient Learning with iPads

“Green” Learning at Siemens: Customer Training via iPad App

With the iPad@PowerAcademy project, the traditional German industrial conglomerate Siemens has embraced a mobile learning solution with a tailored iPad app. The aim is to complement traditional face-to-face training and expand it to blended learning. This initiative seeks to improve training quality and introduce more innovation.

Training materials in printed form are only limitedly “mobile” due to their volume. High production and holding costs, as well as additional expenses such as error-related costs during the printing of learning materials, prompt a reconsideration of the use of purely on-site training in the company. This is also the case at Siemens Power Academy: as an innovative, green technology conglomerate, not only does the environment hold a high priority, but so does contemporary technological advancement.

By utilizing mobile learning on iPads,

not only can consumption and printing costs be significantly reduced, but it also lays the foundation for innovations. In this regard, Siemens' internal research department, Corporate Technology (CT), in collaboration with the solution provider SoftDeCC on behalf of the Energy Sector of Siemens AG, has implemented the automatic and individual distribution of digital training materials and developed a customized iPad app. In line with its policy as a “green” conglomerate, the technology company is sending a direct signal with this initiative.



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iPads as training tools at Siemens AG

75% of Siemens Power Academy customers can imagine the use of tablets in courses.

Project Progress

The eLearning project aimed to develop a model solution for global training deployment across all sectors of Siemens AG. The finished implementation was designed to be as user-friendly as possible. During face-to-face training, there was continuous feedback from the training manager, and after the course, online feedback forms provided by the SoftDeCC TCmanager® were utilized. In a customer satisfaction analysis, the question of whether the use of tablets in the course would be conceivable was answered with "Yes" by 75%. The positive feedback was captured and analyzed through the use of TCmanager® feedback forms. Continuous participant feedback and quality management processes, firmly integrated into Siemens, ensure the sustainability and relevance of the project.

Learning Objectives and Target Audiences

The essence of the project is primarily to provide electronic course materials from face-to-face training sessions, initially focusing on the topic of E- and Process Control Systems at Siemens Energy. Initially, a qualification analysis of the target audience was conducted:

using the qualification tools of the TCmanager®, training needs and individual curricula were assigned from the pool of registered customers/employees. The learning target groups were defined as customers from around the world and participants in face-to-face seminars at Siemens.

The learning solution is intended to be course-specific and applied in individual working groups of up to ten people, who undergo extensive practical training. iPad learning allows users an intuitive, seamless operation and a unified user experience. "Learning nuggets" can be incorporated into the training materials to specifically support the learning process. Existing content, such as from WBTs (Web-Based Trainings), can be further developed, processed, and collected in a database using authoring tools. Sorted and stored in this "fresh-up area," the content can be used by participants for targeted, quick refreshers, for example, during an international assignment.

The iPad app can display PDFs and develop notes, including linking to short videos and manuals. The created

notes are automatically synchronized with the server. Edited PDFs are made available to the training participants after the course in the webshop under "myTraining." Participants can download their version with their annotations from there. Upon download, notes are merged with the PDF and, to protect Siemens AG's intellectual property, are marked with digital rights management and a watermark.

Furthermore, learners are offered an online feedback function in the iPad-adapted view of the webshop. With practical applications, exercises, or tests – before, during, and after learning – the learning success can be measured. et

Project Result

The automatic and individual distribution of digital training materials was implemented by SoftDeCC and Siemens CT, enabling flexible and immediate provision of course materials supplemented with individual participant notes. Materials from courses can now be used flexibly and on the go. This not only allows for significant cost savings but also contributes significantly to environmental protection.

The strength of the solution developed by SoftDecc lies in the combination of proven face-to-face training with the advantages of the iPad: high computing power, internet access, and simple, mature operation. Short video sequences, feedback functions, QR codes, learning assessments, and access to online databases can be used in the course. After the course, participants can download all materials with their own individual annotations. After a communicated period, the personalized course materials are deleted from the web server to free up storage space.

With this "Innovations for Mobile Cloud" solution, additional use cases and applications of mobile learning are enabled throughout the entire company.

Conclusio

With the iPad@Power Academy project, established face-to-face trainings in all sectors of Siemens AG can be made more innovative. "The feedback from the initial users is excellent: The evolution to blended learning enables efficient learning at the workplace and on the go; and highly complex content is presented vividly," says Detlef Rautmann of Siemens AG.

SPECIFICATIONS & SPECIAL FEATURES

SPECIFICATIONS:

Due to their volume, paper-based course materials have limited portability and involve significant costs for materials and printing. With the help of a Mobile Cloud solution that utilizes iPads as training media, the goal is not only to drastically reduce consumption but also to enhance and innovate training quality. The development of an app by Siemens CT and the provision of infrastructure by SoftDeCC aim to provide participants with an easy-to-use note-taking function and the display of PDFs, including linking to short videos and manuals. Further innovations that build upon this will follow.

SPECIAL FEATURES:

The eLearning solution from SoftDeCC and Siemens CT combines proven face-to-face training with mobile learning and can be used for global training in all business areas of Siemens AG. Course materials can be deployed mobile, supplemented with individual notes, and made flexible and immediately available.