Giving students, professors, and professionals the right tools for solving real-world design challenges

Washington State University (WSU) was founded in 1890 as a land-grant college in Pullman, Washington. Today it is a nationally recognized research university providing world-class education to more than 26,000 undergraduate, graduate, and professional students enrolled in ten different colleges.

The School of Electrical Engineering and Computer Science (EECS), part of WSU’s College of Engineering and Architecture, consistently ranks among the top 70 electrical and computer engineering schools nationally by U.S. News and World Report. Its world-class faculty includes a member of the National Academy of Engineering and seven Fellows of national professional societies such as IEEE and the Institute of Physics.

Business Challenge
As seniors, School of EECS students are required to take part in the Senior Design Curriculum, which creates partnerships between students and sponsoring companies. The program requires students to take the knowledge they have learned in all of their classes and apply it to satisfy a need of the client.

The program engages students in developing important problem-solving skills that make them more valuable to prospective employers. Students and client sponsors work together in developing and presenting a poster that describes a solution to the client’s problem, and writing an engineering final report. Throughout the two-semester project, teams need to work closely together, document and track what they are working on, exchange ideas, and involve faculty as needed.

To stay in touch with each other and on track, some teams tried using Facebook groups to post updates and share documents and links. To these teams, Facebook felt unprofessional. It lacked important features for teamwork, and did not offer the right level of security to protect sensitive academic and company information.

The college recognized a need for a simple yet secure platform to support the collaboration between students, faculty, and sponsors. The new tool had to be intuitive for everyone, from college students to senior engineers in the business sector. And it needed to be safe enough to ensure the privacy of sensitive intellectual property provided by the sponsoring companies.

Socialcast Solution
Vasiliy Bunakov, Information Technology Specialist at the School of EECS was introduced to Socialcast® by colleagues in the university’s IT department. The IT team had experience with VMware’s virtualization and networking technologies and was eager to try out Socialcast, VMware’s ESN platform.
Bunakov and an initial group of participants took advantage of the Socialcast free trial program to explore its capabilities. From the outset, people found Socialcast easy to use, with a familiar, Facebook-like experience. Participation grew rapidly as students discovered a very efficient way to share documents, post comments, add suggestions, and share ideas. Suddenly the task of juggling calendars and setting up meetings just to report on progress was replaced with a real-time activity stream. Team members could log in to Socialcast anytime, anywhere – at desktops or from their mobile devices – and quickly get up to speed on their projects.

Professors also liked Socialcast as a way to kick-start new project teams and also maintain a complete historical record of each project. At the beginning of a new project, the professor would create a group in Socialcast, upload necessary resources, and make introductions between students, mentors, and sponsoring company stakeholders. As the projects progressed, professors could provide guidance when needed – all in one shared workspace. As students and sponsors rotated in and out of ongoing projects, the work accomplished by each team remained accessible and organized for subsequent teams. This made hand-offs and transitions quick and efficient.

By Fall Semester 2012, the college had fully deployed Socialcast as the communication and collaboration platform for the Senior Design Curriculum. “This is a program in which we seek to emulate a real-world work environment, where people work in teams – often from multiple locations – to solve problems,” said professor at EECS. Students are expected to set and meet their team's objectives and deadlines, and to overcome any obstacles to accomplish their tasks. Projects are evaluated periodically throughout the term, and students are graded not only on how well they complete their projects but also on their professionalism, participation, documentation, and ultimately, how well the team was able to collaborate and use each individual’s skills. “Socialcast is an ideal platform for bringing teams together and for giving professors the visibility we need to observe all facets of student performance,” added professor at EECS.

**Business Impact**

The use of Socialcast has had a dramatic effect on team productivity. A significant amount of time used to be spent on coordinating calendars and arranging meetings. This task has been virtually eliminated; team members can now update each other and find information they need through Socialcast.

Face-to-face interactions are still important to the learning process, but with Socialcast professors can set up and mentor multiple projects more efficiently.

With a real-time view into what students are working through, sponsoring companies find it easier to bring in the appropriate technical engineers at the right time to assist. Engineers can review the project scope, status, and supporting documentation at their convenience, and find everything they need to know about the project all in one place.

With less time spent on busywork, design teams have gained more time to focus on real solutions to real problems. Socialcast is enabling project teams to collaborate at deeper levels and produce more thoughtful and valuable solutions for companies and institutions throughout the Northwest, giving graduating students valuable skills they can put to use in the workplace.