Managing Digital Assets- How Developers Work with Customers to Innovate for Growth

Moderator:
Mick Adkisson, SMART Technologies

Panelists:
Ron Fitzgerald, MathResources
Phyllis Hillwig, Words & Numbers
Jari Mielonen, SANAKO

The panel discussion began as the panelists shared with the group the way their respective organizations worked with customers to innovate for growth. Jari Mielonen of the SANAKO Corporation replied that her company mostly does so through quick prototyping and research and development.

Phyllis Hillwig represented Words and Numbers, which develops content for all of the major publishers. Hillwig described innovation as a process and her customers as publishers. The corporation writes curriculum for print, e-learning, games, open source content, etc. She said that companies should challenge customers to partner with them on up-front and, in the end, look at user experience. The focus group testing and meticulous observation of user experience is crucial to success. Companies should align all of the constituents that develop product. Companies need to understand their respective organizations' missions and also what they want the user to experience at the end of the day; in short, they need to understand all of the components of the process in order to plan ahead. Also, Hillwig said, marketing employees can implement useful strategies during the development stage of a product.

MathResources, Fitzgerald said, evolved from work done in two university research labs. They stay in front of the innovation curve by staying connected to the research network. While they focus on math, research groups focus on different issues and continue to play a role in their seminal research. This system enables them to take part in research for other areas, including medicine—as a result, they get to take a look at all of the technologies that are being used. For example, Fitzgerald said, MathResources stayed focused on Mobile Windows instead of Palm because research groups were (despite board pressure to develop for Palm) mostly utilizing the former. MathResources spent a lot of time looking at SCORM compliance and every lesson produced has a user feedback form attached. Students, who reply anonymously (teachers provide some information), talk about their specific experience with the product; this process has yielded great feedback, which MathResources then uses to inform changes in the product.

Question: What do you do if an engineer comes to you with a "great idea"?
Mielonen's company introduced a survey to their engineers. Within three days of the survey's opening, the company received 300 new ideas and subsequently created the Innovation Finals. The company is constantly screening new ideas, an intentional process aimed to motivate engineers—if they make it to the finals, they get rewarded. In Hillwig's experience, some of the best ideas have come from within an organization. She told listeners to encourage brainstorming amongst employees and pay attention to anyone with an idea. Companies should connect with the marketing dept for just ten minutes— put them in a room with no chairs, she said, to encourage quick answers and ask them to consider various things, such as how a customer might use a given product.

Fitzgerald cited the research and development involved in the production of the Blackberry

150m as an example. “Where in our current market can we do this?” he asked, reminding the audience that selling and marketing a product remains just as important as the construction process.

At what point in the development process do you involve your customers? Hillwig replied that companies that invest in partner relationships will become a thought leader as well as a strategic partner for customers. Sharing processes is one thing, but execution is another and the situation becomes beneficial for both parties. MathResources, Fitzgerald said, is very open. Along the way, the company publishes documents to chart their place in the development process. Mielonen described a process utilized by SANAKO wherein customers can join a advisory group and sign an NDA to get lots of info on development. IP (especially in China) and competitors consistently present challenges. Companies should address issues during the innovation process; the point at which an organization acquaints a customer with the development cycle depends on the point reached in the process, but the earlier the better.

If you are delivering your assets as Software as a Service- you can track usage and see what is valued. How do you collect data on how the user is using the content?
Fitzgerald replied that MathResources uses a commercial tool that determines the operational system, type of computer used, how the user arrived, which pages the user accessed and other pertinent information. The company also does some digital rights management so that they can determine the time at which people come to the site and how long they use it. Modified questions, banks and lessons are based on feedback collected by the site—Internet Explorer remains the “granddaddy” of education, he said, but Mozilla Firefox is also becoming popular. Words and Numbers’ clients are publishers, Hillwig said, so they don’t overlook straightforward information: if customers refer or return to content, then the company is doing something right.

Can you describe some of the innovative projects you are working on?
MathResources is currently creating a complete middle school math curriculum. XML, SCORM, Learning Content Managers, repositories and others were all initially part of their focus, and after they felt ready, they set out to create the math program. The company hoped to replace the textbook at the point where one-to-one computing became a reality and has designed all work to build product for a 2007-2010 vision. They are the only company to create SCORM compliant Intro to Algebra for 8th grade program.

Hillwig’s company was approached by a group looking for open source K-12 content. They were having trouble with publishers because of copyright and royalty issues; ultimately, it was easier for them to buy a certain amount of content that teachers could access and modify. Originally, the group relied on teachers, but that was not successful, so they came to Words and Numbers to buy the content. Hillwig cited another example, wherein a group seeks teach math through games and Web 2.0 interactions; teaching, in this case, is seen as a resource.

SANAKO is working on a Linux product. Mielonen concluded with the question of whether or not companies can link virtual communities to mobile devices.