Customer Case Study

The Challenge

Three years ago the NASA Safety Center set out to create a career-oriented professional development system designed for working professionals in safety and mission assurance fields. There was no agency baseline, and no existing program to start from. High expectations from the program’s target audience made the challenge even greater; over two thirds of the 900 NASA mission assurance engineers had more than 20 years of experience, 99% have engineering degrees, and more than half have advanced degrees. “Talk about a challenge – build it and they will only come if they are impressed and feel it is value-added,” said John Marinaro, director of the Technical Excellence Office at the NASA Safety Center. Undaunted by the challenge, Marinaro set his sights high. His vision was “to create ‘the NASA University for Safety,’ and ultimately become the Harvard or MIT of NASA Safety.”

The Solution

In September 2009 NASA rolled out the first level of its new training program. The program initially had 30 one-hour web-based courses available on NASA’s learning management system. Ultimately the program covered 250 competencies in six major technical disciplines, including four qualification levels, more than 500 hours of academics in each discipline, and comprehensive tests. Over the following two years NASA developed nearly 600 hours of training courses, comprising 63 web-based courses.

Accessibility & Section 508 Compliance

As a U.S. government agency, NASA is required to comply with Section 508 of the U.S. Rehabilitation Act, ensuring that all electronic information is accessible to people with disabilities. “Our team develops Section 508-compliant web-based and instructor-led training content, and we do it on-time and on-cost,” says Dr. Jim May, program manager of the Education and Career Training Environment (EDUCATE) program at Alphaport, Inc., the company contracted to develop the program for NASA.

Accuracy & Cost-Efficiency

With accuracy and cost-efficiency as key requirements for the program, Automatic Sync Technologies’ CaptionSync service was the natural choice when it came time to caption the video content. When courses are captured using NASA’s lecture capture platform, a built-in workflow automation can securely send video files directly to CaptionSync, and CaptionSync sends back the caption results to media servers as soon as they are ready. Timesaving workflow automation features like this were a critical factor in allowing Alphaport to deliver such exceptional results to NASA on time, and within budget.

AST’s reputation for accuracy, scalability, and cost-effectiveness proved to be a big advantage. AST uses technology to automate key parts of the captioning process, but it uses highly-trained human stenographers to transcribe videos. “AST even assigns stenographers who have experience with particular language dialects, which has really helped in getting accurate transcriptions of courses taught by instructors where English was not their first language,” Dr. May added. “The captioning industry today is populated by a wide range of companies, and AST is the dominant player occupying the sweet spot where accuracy, scalability, and cost-effectiveness intersect,” explains Dr. Kevin Erler, founder and CEO of Automatic Sync Technologies. “We use technology to automate the right parts of the process, which allows us to charge less than traditional caption
services that do the entire process manually. However, we use our large network of stenographers, not speech recognition, for transcription. This gives us a huge advantage in accuracy compared with companies that use speech recognition for all or part of the process.”

**Proven Track Record & Workflow Automation**

AST’s proven, eight year track record serving over 2,000 customers in government, education, and corporate markets was another deciding factor. AST provides the quality and scalability that is required for organizations that need large batches of video transcribed and captioned quickly – something that startup companies that are new to the captioning and transcription market cannot provide. AST is also a registered GSA Schedule 70 contractor, simplifying the procurement process for federal government agencies.

**Video Search Enabled by Closed Captioning**

Because all of the video content is transcribed and captioned, NASA users can easily find content using search features on their media and learning management platforms. This is especially important for the online video-based training courses that NASA offers, both because of the sheer volume of training material and also because instructors are often not available for questions after the course is created. “Unlike universities, our instructors aren't typically available for questions or consultation after the course is captured, so what we try to do is provide as many online resources as we can,” explains Dr. May.

**The Result**

The training solution leveraging AST's CaptionSync and other rich media and content management technologies has allowed Alphaport to deliver an incredible return on investment to NASA, creating the “NASA Safety University” in only 18 months. The program allows NASA to train a large, geographically-dispersed community, including not only NASA employees and contractors but also European and Japanese Space Agencies. It virtually eliminates travel costs and schedule complications, and can handle high demand for training in a short period of time.