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Jim Norwood

Director of Product Management and Development



Success Stories



At a Glance

Location

Headquartered in Little Falls, MN

Industry

Education Software, Business

Challenge

- Permissions for security.
- User friendly, so the average person can publish content.
- Easy site maintenance.

Results

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The Company

Based in Little Falls, Minnesota, Atomic Learning provides software training, primarily for the students and educational staff, in the form of short narrated Quick-Time screen tutorials, “mini-movies” that play within a web browser.

“Our tutorials are like a visual user’s manual,” states Jim Norwood, Director of Product Management and Development at Atomic Learning. “You can go to a page dedicated to a task, like ‘I want to learn Word98,’ or go to an organized list of what’s in the program, or search, using natural-language queries like, ‘How do I create a chart in Microsoft Excel?’ So it’s both a just-in-time tech support tool and a larger training tool.”

Atomic Learning has focussed on the education industry as its market. The company’s customers consist of over 2,000 schools and universities, located throughout every state in the United States as well as in over a dozen other countries.

According to Norwood, “Our customers use our Atomic Learning in a number of ways, including for self-directed staff development, as a supplement to stand-up training, as a course curriculum for students and as an online resource textbook.”

As of late 2003, Atomic Learning has over 4,500 tutorials(they add an average of 200 new ones each month). The tutorials cover over 35 of the most common software applications, including Microsoft applications like Access, Word and Power Point, digital media appli-

cations like FinalCut Pro, iMovie, and education-oriented applications like eClass Grades (an electronic gradebook) and Kidspiration.

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Atomic Learning serves millions of plays of its tutorials to subscribers per year. “Our servers get anywhere from several hundred to tens of thousands of requests per day,” says Norwood. In addition to providing access to its tutorials via the Internet, Atomic Learning offers its tutorials on servers which can be deployed easily at a customer site.

The Search for a Content Manager

Initially, Atomic Learning had no formal Content Management System (CMS) for their tutorials, using straight HTML code to present what was available, and file system permissions to grant password or IP-address-based access. However, as the company’s tutorial inventory and customer base grew, their original content management approach began to show the strain. “We needed a way to manage our content, something to help us quickly and flexibly publish our tutorials, and restrict access to customers,” relates Norwood. “We needed something that was much more manageable.”

In addition to providing access to Atomic Learning’s own tutorials, Atomic Learning wanted a front end and access management system that their customers could also use to upload and manage their own content. “Part of what we do when we work with school districts is make it possible for them to publish their own tutorials, so we

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need some type of content publishing engine that was easy for the average person to use,” says Norwood.

WebGUI Solves the Problem

After looking at a variety of possible solutions, Atomic Learning ended up selecting WebGUI, an application framework for content management and other tasks, from Plain Black Software. WebGUI is used by a wide range of businesses, including Fortune 1000 companies Adobe Systems, Brunswick Bowling, Reuters, and Mercury Marine, as well as in numerous smaller businesses at educational and religious organizations, and personal web sites. As Open Source, WebGUI is available free; Plain Black provides training, support, consulting, funded/custom development and related services for WebGUI.

“We needed a way to let us manage and publish content as easily, quickly and painlessly as possible, so we can spend our time on the things we make money on: content and training,” says Norwood. “There are many systems for creating something to support a community of users, but not many to allow a company like us to publish and maintain a site, and also allow customers to do it. We looked at several alternatives including PHP and MetaDOT. WebGUI was much more flexible, and it had a much more highly thought-out development cycle. We made the shift to WebGUI for our content management system in Fall 2002, and a few months later, also shifted WebGUI to for managing our users, to authenticate everybody.”

In addition to using WebGUI for their own content, Atomic Learning also trains many of their school district clients in using WebGUI to publish their own content. “Another part of our business plan is to give customers who need and desire it the ability to publish things, and for that process, WebGUI is essential. We show school districts how they can easily publish their own content, and manage a very sophisticated web site -- it would be tough to do that without WebGUI, which makes users like these feel ‘yes, we can do it.’”

Why WebGUI and Plain Black

One reason Atomic Learning selected WebGUI instead of other Open Source CMSs is the presence of JT Smith, who founded Plain Black and began creation of WebGUI, as the program's evangelist. "WebGUI is clearly JT's vision," observes Norwood. "Many Open Source projects don't have a 'center,' which means things get added or changed but there's nobody central, JT has laid out a road map for where things are headed that coincide with what we need. He's got a very strong vision of what's going to happen."

WebGUI has also been a match for Atomic Learning's rapid growth curve in servers, according to Norwood. "We have so many customers using the site simultaneously that we're in the process of moving from a single machine to a server cluster, to provide the necessary redundancy and extra capacity. WebGUI lends itself to scaling by clustering, putting the database functions on one server and web stuff on other machines, and being load balanced."

Atomic Learning has availed itself of a variety of Plain Black's professional installation, custom development, support and professional tuning services, Norwood adds. For example, "We were hitting the wall with simultaneous users, so we had JT do some performance tuning for us." One interesting aspect of WebGUI is that some customers pay Plain Black to develop features they want that may not otherwise be on the road map or the priority list -- an option that Atomic Learning continues to take advantage of.

"We and other companies fund features for Plain Black, so if there's a feature of WebGUI that would benefit us, we talk to Plain Black, they give us a quote to code it right now," relates Norwood. "Those features get rolled into WebGUI. We look at where WebGUI is headed, and it gives me ideas for what I need to request or fund."

"WebGUI's code is documented well enough we could do custom things ourselves, and put them back out," he acknowledges, "but that wouldn't necessarily get them into WebGUI itself. You run the risk of things breaking if they're not part of the main release. This way, we don't have any gotchas, and because the funded features go into WebGUI, an upgrade of WebGUI doesn't ignore what we've asked for. Some of the features are only of interest

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to Atomic Learning, not other WebGUI customers, but this gets them done in a way that upgrades won't overwrite or change them."

Norwood cites several examples of WebGUI features that Atomic Learning has funded: "We needed ways to download results from SQL queries, so if users were doing SQL reports, they could download results from WebGUI in a tabular format. We did some things to allow users to receive 'welcome' messages, and getting reminder messages when their accounts are about to expire. And we wanted integration with our credit card processing, so that customers can do online credit card payment and be activated, within WebGUI."

Even with their investment in funded features, Norwood still sees WebGUI as a good investment. "If we were to have to buy a CMS commercially, and continue to license it as we added customers, it could get expensive very quickly. And, since WebGUI is Open Source, we have the ability to make changes to the code on the fly when we need to, or implement a fix until one comes out. A commercial piece of software wouldn't have changes or fixes until the vendor is ready. We've got more flexibility.

"WebGUI fills a need we had, and is flexible enough to change and grow with us -- and gives us the ability to direct feature development," summarizes Norwood. "Atomic Learning could not do some of what we do without it."