

OUTSTART



Challenger Builds World's Largest Electronic Library for Clinical Training with OutStart LCMS

Challenger Corporation runs the world's largest electronic library for clinical training. Since 1991, more than 40,000 medical professionals have taken Challenger's courses either via CDs or through an online learning portal.

Memphis, Tennessee-based Challenger built its vast library, so physicians can prepare themselves to meet a slew of healthcare standards and certifications for practicing medicine. Challenger's library holds thousands of hours of technical courses packed with statistics, tests and more than 18,000 graphics. Each year, an array of medical societies and prominent universities reviews and approves Challenger's training, which is developed and peer-reviewed by teams of academic and practice experts in several specialties.

THE CHALLENGE

"Today's medical standards are constantly evolving," said Bob Sweeney, CEO of Challenger Corp. "In the old days, if a guy had a medical license, he could keep current by taking some continuing medical education, or CME. But today, the standards are more complex. And the knowledge doctors need to meet today's standards exists in a thousand places – journals, people's heads, seminars, textbooks. Ultimately, doctors have to show the government and the public that their skills are up to par, or they will lose their right to practice medicine."

So, more than 15 years ago, Challenger began building its electronic library for clinical training. But as that library grew, so did the complexity of keeping it current with evolving medical standards. In the early 2000s, things reached a critical point for Challenger. Namely, the size of the library was becoming unmanageable. And if Challenger failed to keep its library up-to-date, Challenger's business would fail too.

For Challenger, this wasn't a question of simply delivering and tracking training. Rather, the Tennessee-based company had to find a way to orchestrate complex changes to its library quickly and accurately. The company also needed a way to create new courses by leveraging all the knowledge it had already accumulated. By doing that, Challenger would be able to provide a better learning experience than anyone else offering clinical training.

"If we developed a course, say, five years ago, it had to be maintained as medical procedures changed," said David Beard, Challenger's CFO. "What we wanted was a software application that would treat training content like a database in which you don't have to create a new course; instead you just change relevant bits and pieces of the course."

INDUSTRY Healthcare

SOLUTION

OutStart LCMS has fueled Challenger Corporation's efforts to build the world's largest electronic library of medical training and tests. In a fast-paced industry where medical standards constantly evolve, Challenger has kept ahead of its students' demands. By deploying OutStart LCMS, Challenger offers cutting-edge medical training, including testing and self-assessments, which gives medical professionals the confidence to obtain their medical licenses.

RESULTS

- Increased by tenfold the amount of medical training offered to physicians.
- Made accurate changes to complex medical training in as little as 24 hours.
- Helped to boost pass rates by 31 percent among students taking medical exams.

“With a library like ours, the ability to store, edit and reuse vast amounts of content lowers development and production costs.”

Challenger Builds World's Largest Electronic Library for Clinical Training with OutStart LCMS

THE SOLUTION

"We have thousands of hours of courses and tests," added Beard. "All these images, statistics and Q&As are reviewed and approved for doctors to use to gain accreditation. The depth and breadth of what we have is really much, much larger and complicated than a text book of medicine. Plus, much of the material in the courses is interconnected."

Sweeney and Beard examined options for technology. They quickly determined that a learning management system (LMS), which tracks training, wasn't a fit. "An LMS cannot create and manipulate courses; it can't reuse the content of one course when building another," said Sweeney. "Instead, we picked a learning content management system, or LCMS, which can create, manage and deliver not only training modules but also edit all the millions of bytes that make up a catalog of training."

The acronyms LCMS and LMS are barely discernible, but the differences are tremendous according to Challenger CFO Beard. "Once we implemented OutStart LCMS, we could add to, edit and maintain our library like never before. And this meant our customers were assured of getting up-to-date, accurate medical training.

"For example, after Merck pulled VIOXX® from the market, we had to look at our library to see where references to VIOXX showed up," said Beard. "With the editing system in OutStart LCMS, we could link to one piece of content in our library and change every reference to VIOXX in one day. If we didn't have this system, we would have had to go through more than 3,000 hours of courses to find every instance of the word VIOXX. I've no idea how long that would've taken, or if we could've even done it."

To put a finer point on editing content, Beard noted the difference between an LCMS and authoring tools.

With authoring tools, says Beard, you create one elearning course at a time. These are good courses, he notes, but it's a lot like building muskets - the parts aren't interchangeable. And he adds, you're limited to creating elearning courses alone, no other formats. On the other hand, with an LCMS, a company creates courses with chunks of content, or assets (e.g., graphs, images of procedures, assessments, Q&As, etc.). These chunks can be used again and again in all sorts of ways and for all sorts of training, whether it's elearning, a CD or even a text book.

"If you're doing OSHA training that spells out how to lift a box, then how often does that procedure change? It's not going to need editing, or reviewing, every year," said Beard. "But in medicine, or any complex industry where techniques and procedures change rapidly, you need an LCMS to survive. Without one, it becomes nearly impossible to manipulate all the training you've created."

And having the power to nimbly orchestrate the training content is something that produces better training in less time.

"With a library like ours, the ability to store, edit and reuse vast amounts of content lowers development and production costs," said Sweeney. "OutStart LCMS also allows us to embed testing into our materials. Along with testing, the LCMS provides tools that measure how well someone understands a subject or ranks relative to his or her peer group."



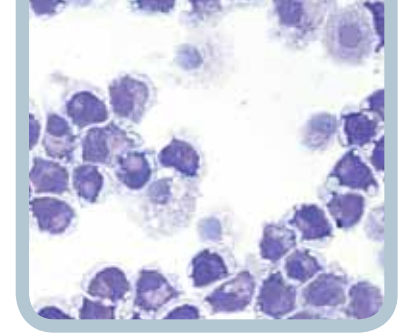
“With OutStart LCMS, we can maintain the equivalent of a textbook on emergency medicine with 4,000 images and almost 5,000 Q&As for a fraction of what it would cost a publisher.”

CASE STUDY



OUTSTART

Challenger Builds World's Largest Electronic Library for Clinical Training with OutStart LCMS



THE RESULTS

By implementing OutStart LCMS, Challenger Corporation has been able to manage the growth and quality of its vast electronic library of medical courses. Because Challenger can react quickly to changes in medical technology, procedures and standards, the company can provide a superior training product that nets results.

In the individual physician practice environment, over 8,600 physicians have used the company's Med-Challenger test preparation series to prepare for their initial certification or recertification exam. The pass rate is over 99%, which is simply unmatched in the training and testing world by any alternative medium or training regime.

The institutional training environment has benefited from the Challenger training and evaluation system as well. For one Tennessee-based college, which began using Challenger's LCMS-fueled library, the pass rate on the initial Physician Assistant National Certifying Exam (PANCE) rose from 69% to 100% over three years.

"Before using Challenger, the college helped students prepare for PANCE by bringing in speakers, recommending books and highlighting anecdotes," said Sweeney. "That

approach is sometimes effective. But a far better way is to provide cutting-edge training with embedded tests that show students how they stack up against their peers. That's what OutStart LCMS does for our students."

"With OutStart LCMS, we can maintain the equivalent of a textbook on emergency medicine with 4,000 images and almost 5,000 Q&As for a fraction of what it would cost a publisher. In fact, because of the extent of re-use and ease of maintenance, it costs us about \$4 per hour of continuing medical education to keep our library current," said Sweeney. "What would it cost to put together a new textbook each year, review the product and incorporate any changes because of developments in medical science?"

According to Sweeney, with OutStart LCMS, his team has been able to boost output of medical training by nearly 300 hours per year, or 10% on an ongoing basis. Today, there is roughly 3,800 hours of training content in the Challenger curriculum. By implementing an LCMS, Sweeney and his team are able to manage the contributions of more than 200 medical authors and, consequently, have increased the size of Challenger's library tenfold.

ABOUT OUTSTART

At OutStart, we're out to solve a big problem.

Most organizations possess a wealth of underutilized collective intelligence around their products, services, and processes. This underutilization negatively impacts employees, customers, and partners, costing precious time and money while hindering performance. Said simply, "what your people don't know will hurt you."

OutStart's social business software and learning systems act like a lifeline: connecting people to the know-how, creativity, and learning they require to be efficient, effective, and agile.

Since its inception in 1999, and backed by leading venture capital firms, OutStart has matured into a profitable and rapidly growing company with an impressive range of customers, who are surpassing their expectations and delivering exceptional business results. The company is honored to have customers like Autodesk, BB&T, Boeing Company, BT, CVS Caremark, DIRECTV, EDS, Internal Revenue Service, Lufthansa, McDonald's, MetLife, Prudential, TiVo, Australian Defence Force, U.S. Navy, UK Ministry of Defence, Verizon Wireless, and Yum! Brands.

OutStart Inc.
745 Atlantic Avenue, Fourth Floor
Boston, MA 02111
Phone: 617.897.6800
Fax: 617.897.6801

CASE STUDY



OUTSTART