

CASE STUDY

Education
IoT, Virtual Reality



ellicom Lessons Get Real Using Virtual Reality

ellicom gives training a modern twist, supported by virtual reality, artificial intelligence, and augmented reality, for more effective worker safety courses, decision support, onboarding and course curriculum.

ellicom, a member of the LCI Education Network, specializes in the development of educational curriculum and training.

By linking learning, technology and imagination, ellicom creates long-lasting and engaging training strategies including:

- immersive, mobile and micro-learning;
- simulations & job aids;
- instructor-led training;
- gamification & performance support.

According to ellicom, modern learners are overwhelmed and impatient but social, which changes how they learn. Instead of traditional (and often ineffective) hour-long training programs, costly on-site presentations or e-learning modules few employees remember, ellicom gives virtual reality (VR) and augmented reality (AR) straight As for effectiveness in training programs and university curricula.

Challenge

With the need to provide ongoing staff training, decision support, verify skills, or deliver new course curriculum, businesses, non-profit organizations and public-sector companies used to depend on on-site presentations or online training, which ellicom found were costly, time consuming and often ineffective in reaching staff in a way that could be retained or acted upon. Leaders were looking for better and more cost effective, memorable, effective and accessible ways to meet the needs of the modern learner.

Solution

VR, curated content and delivery of gamified programs on the Google Cloud Platform*, featuring Intel® Xeon® Scalable processors, lets ellicom's customers leverage creative and innovative training and onboarding solutions that more effectively meet the needs of today's employees.

Bite-sized sessions and more focused mobile programs, offered using different media, let learners digest information easier, while VR, AR and gamification let companies deliver difficult safety training or provide employees with more memorable immersive experiences to bring teams together.

Result

Better performance and fewer injuries are just some of the benefits ellicom clients are seeing by using VR, AR and artificial intelligence in their programs, such as a distribution company that reduced turnover rate by 10% and training costs by 75%, and a utility that eliminated training related accidents.

"These new approaches make learning stickier and result in better outcomes and fewer mistakes. We are affecting positive behavior change, one modern learner at a time," says ellicom president, Soula Chronopoulos.

The ellicom logo is located in the bottom left quadrant of the page. It features the word "ellicom" in a bold, lowercase, blue sans-serif font.

Getting Training to Stick

Over the years, employee training has moved from paper to digital to online, but companies still struggle to deliver memorable curriculum in a cost-effective way. Few employees want to attend lengthy training sessions, and continuing education programs within organizations weren't getting results.

In addition, providing safety training was often difficult as no company wants to put employees in harm's way to make sure they understand the dangers around them.

Despite the wide range of digital learning options that have become available in the past decade, it was a challenge to get staff interested in or participating in the training, let alone retain the information they needed to do their jobs safely and effectively.

"Digital learning has become a commodity, so we needed to become better at supporting our customers with programs that really work," says Chronopoulos.

When Chronopoulos asked how many of her instructional designers would go home and view any of their programs, no one lifted their hands. Her next question: why are we delivering old-fashioned training people don't want?

That simple question created a shift in thinking for ellicom and its customers.

Shifting the Education Paradigm

"We're seeing a paradigm shift in learning approaches where we're not only focussed on 'just in time' but 'just enough' training or information," says Chronopoulos.

Shorter, bite-sized sessions with curated content let learners read it, listen to it, and watch it. "It's about repetition but they are seeing it in a slightly different way or from a different angle, which resonates with today's learners," she says.

Education is benefiting from advances in technology. Chronopoulos says six months ago they might not have looked at VR but the combination of web-based content development tools and the cost of headsets dropping from \$3,000 to under \$600 made it viable.

To deliver imaginative and creative learning modules, ellicom relies on PCs powered by Intel® Core™ i7 processors,

and to improve server reliability and scalability, ellicom moved to the Google Cloud Platform, which has upgraded its network to include Intel® Xeon® Scalable processors.

"We can't afford failures, and the Google Cloud is self-healing. Where it could have taken us two days to build a server, we can now fix and deploy one in five seconds," explains Jean-Sebastien Gasse, ellicom's development team manager. With clients in war torn countries depending on ellicom's decision-support programs, downtime can cost lives.

Better Outcomes, Lower Costs

Previous on-site simulations for contractors at a Canadian utility cost more than \$40,000 to build, in addition to travel and staff costs. Creating a VR environment was less expensive, and more effective at showing hidden dangers, while eliminating risk of injury to trainers and participants.

For another client, ellicom replaced a six-hour onboarding session with an immersive experience produced in two weeks, not two months. "We're getting closer to the gamification of onboarding, and closer to the reality of the Candy Crush world we live in," adds Chronopoulos.

A US pharmaceutical company that hires 1,800 research assistants annually needed a novel approach to skills testing. Using an immersive lab experience, they can assess critical thinking skills to see how prospects handle protocols and quickly identify the best candidates.

Creating these environments takes processing power so ellicom invests in IT which they say yields tangible ROI. Chronopoulos says production costs have dropped 30 to 40% thanks to new Intel®-powered PCs, and Gasse says compiling virtual animations and 3D has dropped from two hours to under thirty minutes.

"That's 300% improvement. Time saving is important because I need staff to deliver faster since we have more volume on the floor," adds Chronopoulos, who saved about \$270,000 in lost productivity last year by upgrading the PCs of six developers.

Where to Get More Information

Find the solution that's right for your organization. Contact your Intel representative or visit www.intel.ca/smallbusiness

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