

Article location: <http://www.fastcompany.com/articles/2008/07/serious-games.html>

July 25, 2008

Tags: [Technology](#), [Careers](#), [Social Responsibility](#), [Work/Life4](#) Readers Recommended this Article

The Rise of Corporate Games

By [Quibian Salazar-Moreno](#)

Last month, the SimCity box set went on sale. It included five different versions of the popular city-building simulation game, which was first published for PCs in 1989. The Sims games were not only one of the best-selling franchises of the past two decades -- they pioneered an entire category of simulation games that require quicker problem-solving skills than trigger fingers.

"What SimCity showed was that you can have a game built for entertainment and have people look at that and say, 'You know, I can teach with this,'" notes Ben Sawyer, co-owner of consulting firm Digitalmill and founder of the [Serious Games Initiative](#) [1], an organization founded at the Woodrow Wilson International Center for Scholars in Washington, DC. The organization encourages the use of virtual environments to address public-policy issues.

"People were saying, 'This is an interesting way to introduce people to the complexities of managing a city.' Of course it wasn't a perfect example of what actually went on, but it got people thinking that games can be a lot more than chasing ghosts and chomping dots."

Now video games are making their way into corporations. These "serious games"—the term that's been kicking around the last few years to describe games that are learning tools—use the same technology as the latest PlayStation 3 or Xbox 360 titles, but they're not targeted at Doritos-munching 14-year-olds.

Primarily healthcare, education, and the military industries were using video games for training. "What's different is that a few years ago, a lot of our customers were dot gov's, dot org's," says Sawyer. "Today I'm starting to see a lot of dot com's—corporations. I can tell you right now that we've done work for six global Fortune 500 companies."

One of these companies is Hilton Hotels. Earlier this year the hotel chain integrated [Ultimate Team Play](#) [2], a role-playing game, into their training program. Developed by Virtual Heroes Inc. specifically for Hilton Garden Inns, Ultimate Team Play puts employees in situations where they have to decide how to best satisfy a hotel guest. For example, an employee may have to interact with a guest in the lobby, or answer the phone, by choosing their level of interaction with the guest from a list to best determine which response best suits a guest's demeanor.

Players are then rated by how well they complete the task, as well as how the guest reacts to the service. Their actions are timed and their choice determines the mood of the virtual guest, which is then calculated by the hotel's real-world Satisfaction and Loyalty Tracking Survey, which is used to rank guests' satisfaction with their stay.

"Not only is Ultimate Team Play a cool training program, but it's the first program that uses serious-games-based technology in the hospitality industry," says David Kervella, Hilton Hotels' senior manager of brand education. "It simulates real-world guest interactions, which is something team members can't get in lecture-based training. And because it's new, it will get their attention."

The beta test is currently being run in five to ten hotels with the full interactive training game being released to all Hilton Garden Inn Hotels in January 2009.

Last year Alcoa, the world's third largest producer of aluminum, announced its implementation of [SafeDock](#) [3], a simulation program that uses gaming technology, into its training program. The interactive 3-D game simulates hazards associated with operating mobile equipment in a loading dock environment like forklifts and pallet jacks. Developed by Etcetera Edutainment, SafeDock is considered an addition, not a replacement, to Alcoa's already thorough and complete safety training program.

SafeDock was made available to Alcoa plant locations worldwide last September, says Alcoa's Environment, Health, and Safety Talent Manager, Jamie Mackay. The program will expand to other plants once computer hardware requirements are worked out.

"Employees who are familiar with video games like SafeDock," Mackay says. "Many older workers, though, have difficulty with it. We are thinking about developing a simpler version of the game as a way to ease employees into the concept of using video games as a training tool."

Next up, Alcoa plans to release another game to train employees on possible dangers in the workplace.

"We are calling it SafeTour," Mackay says. "The objective of the SafeTour project is to develop a training tool using computer simulation technology to train Alcoa employees in the potential environmental, health, and safety hazards they may encounter in a manufacturing plant plus explain the countermeasures in place to protect employees from those hazards."

Even tech companies are using serious games. For the last five years, Cisco Systems Inc., the computer software and hardware giant, has been developing a variety of games for training, promotion and social networking. In the training space, the company has developed games for its Cisco Certification program, one of the premiere networking certification programs in the world.

"Many people preparing for a Cisco Certification examination choose a variety of self-study methods such as e-learning or printed study guides," said Jerry Bush, a program manager for Cisco Systems who works in the Learning @ Cisco group, that is responsible for the development of the Cisco Certification program. "We also find that most students who attend traditional instructor-led classes still spend a great deal of time in self-study. To support these individuals, we built several websites that provide offerings such as practice quizzes, access to mentors and of course, learning games."

The Binary Game is one of the games used in the certification program, and it teaches strategies related to the binary number system, a foundation knowledge used by Cisco certified professionals to install, configure and operate local-area networks (LAN), wide-area networks (WAN) and access services for small networks. The game plays like a game of Tetris or Lumines where rows of 1s and 0s appear from the bottom of the screen and the player clicks the 1s and 0s to create binary numbers. The players earn points when they answer correctly but the game becomes more difficult when rows begin to appear faster and faster. As the players advance through the game, they begin to recognize patterns and develop conversion strategies.

"Learning games offer a fun and effective way to study," Bush says. "We have found that some topics can actually be learned better by using the right learning game."

The demand for games-based training is huge, but it doesn't stop there. Video-game technology is now being used in data collection, market research, promotion, polling, and a plethora of other areas. But people who develop and consult in the serious games space are hoping for bigger and better things—like an office between the accountant and the marketing coordinator at your average corporation.

"The question becomes, are investments in game technologies something that's strategic to an organization across the board, much the way investments in websites, intranet technologies, communications, and video-media production are?" says Sawyer. "Why aren't we applying that same mentality to games?" Given the recent hype surrounding Google's foray onto Second Life's turf, serious corporate thinking about serious games just might be a lot closer to reality.

Links:

[1] <http://www.seriousgames.org>

[2] <http://www.virtualheroes.com/newsDetails.asp?nid=31>

[3] http://www.alcoa.com/global/en/news/news_detail.asp?newsYear=2007&pageID=20070305005759en