Advanced Video Game Technology Transforms Construction Industry

Contractors are saving millions of dollars while making job sites safer

By Joe Nattress

"Damn!" John yelled.

It felt like a truck slammed into the cab of his high-rise crane. He felt his heart pounding in his chest.

The intense gust of wind came out of nowhere. Low clouds rolled across the 37th floor of the incomplete steel-frame building.

John strained to see the hand signaling him below. Above that hand swung a steel girder, an erratic pendulum jittering on its cables.

Experiencing weather like this in a crane was new to John. It was his second day on the job.

Training pays off

This could have turned out horrifically for the workers that day. Or for anyone on the street below. But no one was injured. No materials were lost. No equipment was damaged.

This was a virtual reality (VR) training simulation, similar to a state-of-the-art video game. John experienced the very real sensations of being in a crane in bad weather in the simulator.

It was part of a program designed by [VRST, Inc.](#) in Chicago. They create construction safety training software. They're on the cutting edge of VR crane operator training.

From video games to the job site

Virtual reality simulates real-world environments on a computer and displays them in viewer headsets. Viewers can see anywhere they turn their heads in the 360º 3D environment. They sense motion, distance, height, and width. It's as if they were on an actual job site. Viewers can also interact with elements within this simulated environment.

VR technology has improved rapidly in the video game industry. In the newest games, players are immersed in life-like artificial worlds.

For construction safety training, these worlds are now being modeled on construction sites and equipment. This gives construction trainees an opportunity to feel the sensations of being on a real job site.

They can virtually operate expensive construction equipment. They're able to operate in potentially hazardous conditions in the safety of a training center. This eliminates the risk of trainees being injured, or injuring someone else during training.

Not only that, international research shows that VR trainees are better trained in shorter time than traditionally trained workers. And they retain training knowledge longer.

Saving money and saving lives

VR training programs also cost significantly less than hands on training. Companies save on transportation costs, materials, and wear on equipment.

"The really exciting thing about VR training is that our workers are better trained, and we've cut our training expenses by 67% this year by using VR," said Val Hernandes, Site Supervisor of Minneapolis based Jensen Industries.

The savings don't stop there. Better trained workers make fewer mistakes in this potentially dangerous industry.

"We've seen a 73% decrease in worker accidents this year," says Tom Reynolds, V.P. of Safety Training for RCV Contractors in Raleigh, NC. "We've been using VR operator training and job site safety programs."

He's not alone. Research studies confirm that many construction firms report fewer accidents when using VR training.

Having fewer accidents means fewer workers' compensation claims. This brings down insurance premiums.

Construction companies can save millions of dollars a year with VR simulation training.

Tailored VR construction safety training

VR software developers can create [specialized VR training programs](#) at an affordable price, no matter the specialty of the builder, or the hazards involved.

Program creators have designed training programs to give potential high-rise workers the sensations of working on the 100th floor. Others train workers for pouring foundations on a mountainside, building a 12 pitch roof, or welding underwater bridge columns.

What about your company?

Can VR construction safety training improve your safety and save you money?

The answer is yes.

If you're serious about the safety of your workers, and saving money is important to your company, consider VR construction safety training.

Finding the right VR construction safety training program

One of the most important points to consider when choosing the right VR training company is the company's construction training experience.

There are many new startups entering the VR training field. Many of them are capable of creating detailed VR experiences using the newest technology. But few have an extensive background in construction training.

VRST, Inc. is an exception. They've been designing construction training programs for 43 years.

In 2016 they began integrating cutting edge VR gaming technology into their programs. That's when they hired former Canary Games lead developer Brian Weber. He also brought several of his key designers with him.

VRST has a history in construction safety training. Their software developers are some of the finest in the industry. That's why VRST is a leader in VR construction safety training.
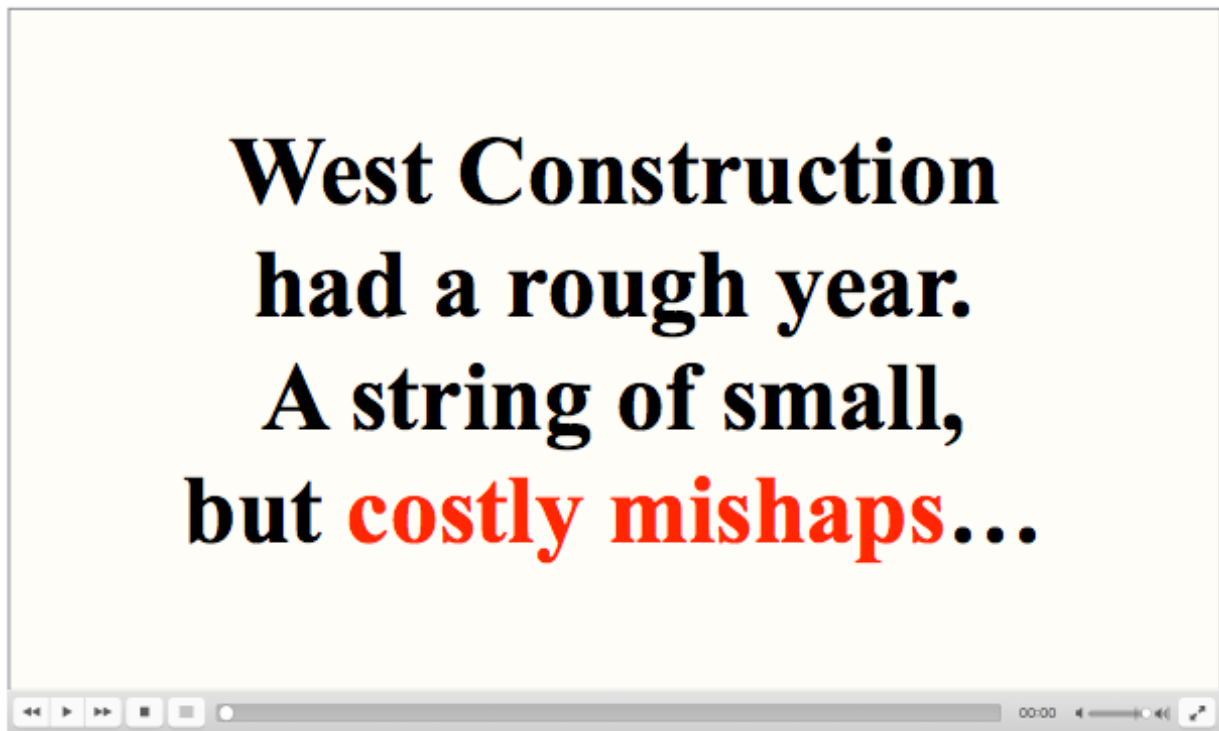
You can see several of VRST's customized training programs [here in this video](#). These programs are helping construction companies cut costs and save lives.

In this video, you'll learn how:

- VRST developers design custom training packages
- VRST's Elite 3.0 training software creates life-like simulations of the newest construction equipment

- Construction firms have benefited from specialized VRST training programs
- How you can save money with customized training programs tailored to fit your company

Start saving money today with cutting edge VR construction safety training. Your workers and your accountants will be glad you did.

West Construction
had a rough year.
A string of small,
but costly mishaps…

[Watch the video here](#)

Note: This writing sample demonstrates my writing skills and marketing knowledge. It is based on a fictitious company.