

Vortex VxAdvantage Lifts JCI Training Program to New Heights

Most heavy-lift training organizations experience similar efficiency issues. Variable weather, a limited number of cranes, and high fuel and equipment costs make it difficult to increase student throughput. Several days of bad weather or an out-of-commission crane can take a toll on training programs and profitability. Added to these issues, many novice operators are tough on machines, using much more fuel and causing more breakdowns than experienced operators. How can these organizations increase training efficiency while also keeping their costs down?

As many organizations are discovering, a lot of these typical issues can be resolved with the latest simulation-based training solutions, which have been proven to make training more efficient, reduce wear and tear on the actual machines and lower expenses. And since students can be trained any time and anywhere, simulators accelerate training schedules. To add these considerable benefits to its in-depth training program for the oil and gas sector, JC International Ltd (JCI) turned to Vortex, the industry-leading vendor of simulation-based training solutions.

JCI Benefits with the Easily Expandable VxAdvantage

“To complement our crane and lift-procedures courses, we searched for a simulation-based solution,” says Austin Emezaro, Operations Manager of JCI. “We evaluated a number of products but really found what we were looking for with the VxAdvantage. Since it’s our first simulator, we wanted to start with a reliable entry-level product that had a lot of features but would also allow us to add additional functionality as our program grows. It was the ideal choice because we can start with one crane and one HD display and later add additional cranes, new scenarios and more screens.”

The Company

Based in Nigeria, **JC International Ltd (JCI)** is an oil services company that provides a wide range of services in lifting operations, non-destructive testing (NDT), drill pipes, bottom-hole assembly (BHA), inspections and training.

The Situation

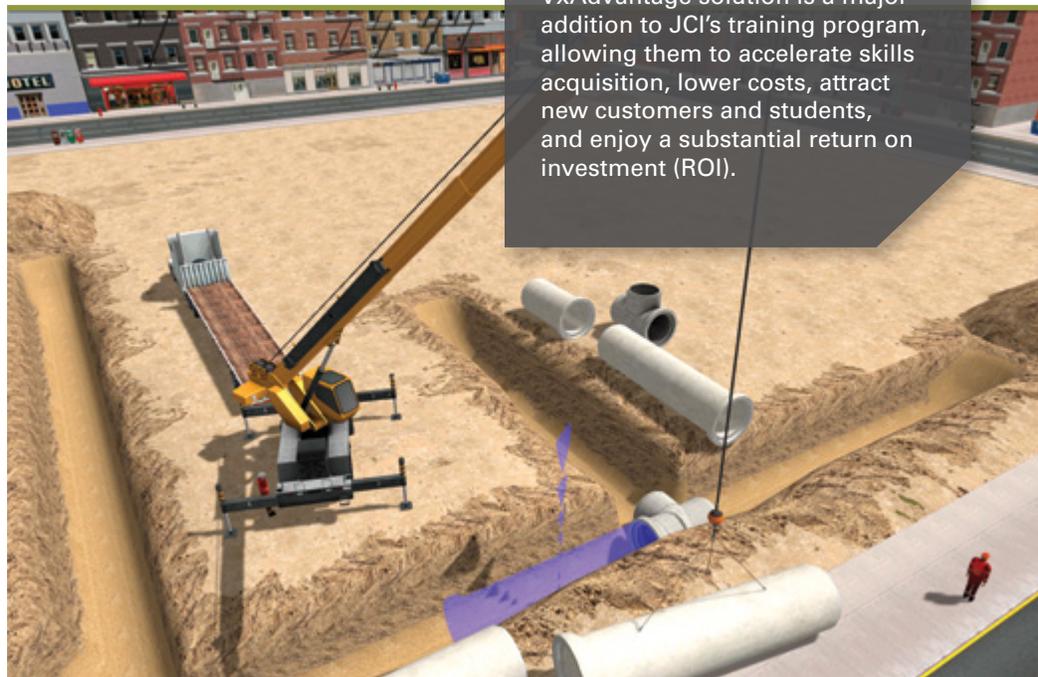
While they have an extensive training portfolio, JCI wanted to expand their mobile crane offering with a full-featured simulator to train more operators, increase lift safety, save on fuel and add extra cranes, scenarios and displays over time.

The Solution

Vortex provided JCI with the turnkey VxAdvantage, a multi-featured and expandable training solution that includes a wide range of crane scenarios – from basic lifts to advanced pipe-laying, building construction and tower crane erection.

The Results

Vortex’s comprehensive VxAdvantage solution is a major addition to JCI’s training program, allowing them to accelerate skills acquisition, lower costs, attract new customers and students, and enjoy a substantial return on investment (ROI).





Wide-ranging scenarios, like working around power lines, build real skills and increase safety.



The VxAdvantage accelerates operator training, lowers costs and reduces wear and tear on real equipment.

“The Vortex Crane Simulator represents a significant acquisition for our training program. We’re the first institute in Nigeria and all of West Africa to use this technology to train crane operators. The VxAdvantage offered us the most value for our investment. It is scalable and gives us the platform to grow our training capabilities by adding new training modules and high-definition displays on the same hardware platform.”

Austin Emezaro, Operations Manager,
JCI

High-Fidelity Mobile Crane Leads to Real Skills

To meet JCI’s training and business requirements, Vortex provided its popular Grove Mobile Crane RT530E-based simulation solution for developing and testing both novice and experienced operators. “What appealed to us about the VxAdvantage is that it puts our students into lifelike scenarios featuring high-fidelity crane behaviour, real-world construction sites and realistic exercises” says Emezaro. “Hands-on training is a big part of what we do, so the VxAdvantage is a perfect fit for our crane operations program. You can really see the students learn.”

JCI’s VxAdvantage includes actual crane joysticks and pedals, authentic cab noises, a wide-screen HD display, a headtracker, a touch-screen load moment indicator (LMI), and a real operator’s chair. The learning scenarios, which range from beginner through advanced, feature built-in navigation aids and performance indicators, so JCI’s students get up and running quickly and their progress is easy to monitor and manage.

Once JCI’s students have mastered basic lift techniques, they learn crucial mobile crane skills like moving and installing sewer pipes, steel structure erection, unloading trucks, working around power lines and manipulating a manbasket. Advanced students can learn how to assemble/disassemble a tower crane and test their skills and proficiency with certification-level training exercises.

So far, JCI is thrilled with the VxAdvantage. According to Emezaro: “Our trainers and students love the Vortex simulator. It’s just like the real crane – you really see, hear and feel all the right behaviour as you lift and move various heavy materials. And it took almost no time for our instructors to set it up and begin rolling out this type of next-generation training to our customers.”

About CM Labs Simulations Inc.

CM Labs provides dynamics-based behavior modeling solutions and services to organizations around the world. With a long history in the real-time visual-simulation and gaming industries, CM Labs produces feature-rich simulation capabilities that set the industry standard for interactive 3D dynamics and simulated mechanical equipment behavior.

Through Vortex, its flagship simulation software, CM Labs provides capabilities for training simulators, mission rehearsal, serious games, virtual prototyping, and testing.