

Stark Learning Uses VE Studio to Develop Custom LNG Virtual Maintenance Trainer

“VE Studio allows us to develop a standard methodology for our VR training. The VE Studio workflow helps us to approach tasks as procedures, allowing us to change, update, and build training solutions at scale,” said Milan Vogelaar, Founder of Stark Learning. “With VE Studio, we can develop virtual training solutions without needing to hire a large team of developers.”



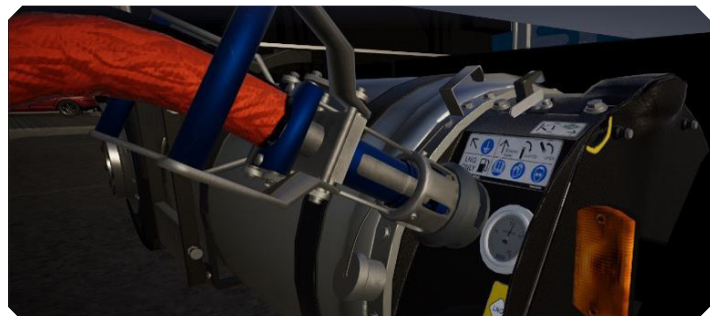
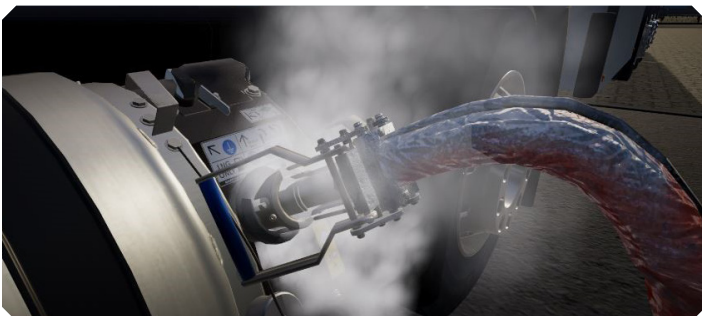
Goal:

Develop a virtual maintenance system to certify Liquid Natural Gas (LNG), truck drivers, with the training required to become operators qualified to refuel LNG independently. Organizing refueling training is a challenging and time-consuming endeavor. A VR training solution will lower the threshold for transport companies to use LNG-fueled trucks and provide an extra incentive for investing in LNG-powered transport. Using VE Studio, Stark Learning was able to develop virtual maintenance trainers for virtual reality, desktop, and touchscreen-based devices.

Challenge:

The German-Dutch border region does not permit unmanned LNG refueling under the PGS (safety regulation guidelines) unless done under the supervision of an operator. There are approximately 40 drivers per truck, yet only between 10-20 truck drivers receive training in this dangerous refueling procedure.

A scalable digital solution was necessary to develop a standard training methodology that would certify every truck driver on this procedure.



Solution:

Recognizing that virtual reality solutions can lower training costs, Stark Learning leveraged VE Studio to develop an immersive virtual training solution.

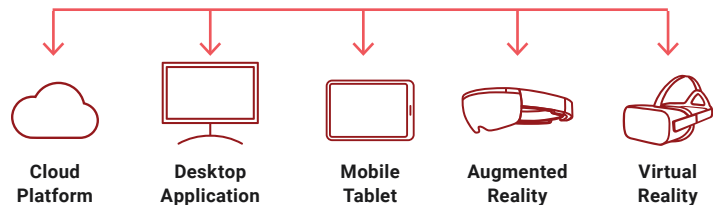
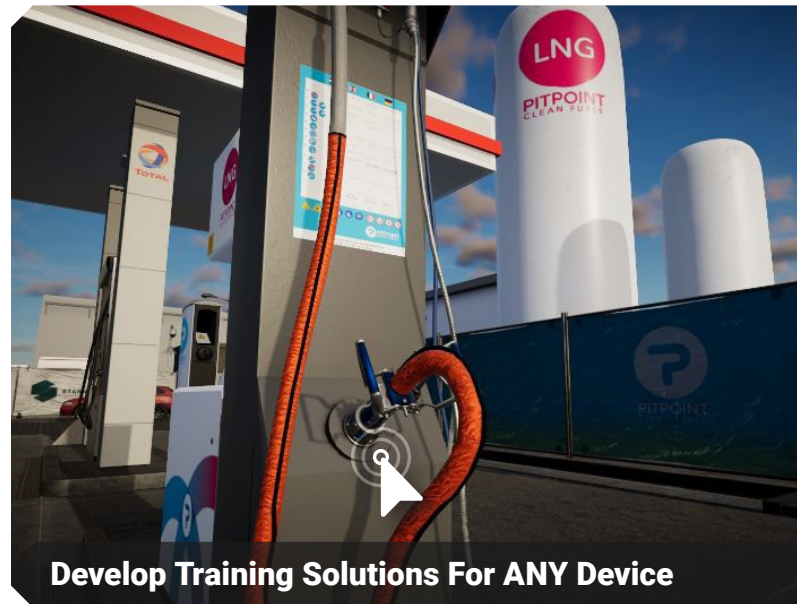
One of the significant benefits of using VE Studio is that it allows non-Unity developers, such as 3D artists, to utilize the VE Studio workflow when developing virtual training solutions.

Stark Learning was able to derive the necessary refueling procedures from truck operation manuals and place them into the workflow to create the virtual training steps.

The team then created a 1:1 model of a detailed refueling station, putting the user in a realistic scenario, requiring them to complete the steps to refuel the truck. Built in three languages, English, Dutch, and German, the completed training solution took three months from conception to delivery to complete.

VE Studio Benefits

- ❖ Database-driven Production Pipeline
- ❖ Use Industry Standard 3D Models
- ❖ Revision Control Support
- ❖ Virtual Environment Framework
- ❖ Automated Requirements Analysis
- ❖ Requirements Traceability
- ❖ Automated Regression Testing



About VE Studio:

With VE Studio software, you can take advantage of the latest developments in Augmented Reality, Virtual Reality, Desktop, Mobile, and Cloud-Based technological solutions for virtual trainer development.

Build a virtual training prototype in a few hours then scale it to a full production system with thousands of procedures. The architecture of VE Studio is robust enough to handle the most straightforward part-task trainers to the most complex and advanced equipment.

VE Studio Additional Functionality & Modules

- ❖ Optimized CAD Conversion Recipes
- ❖ Simulation Engine Framework
- ❖ Procedure Monitoring/Lesson Engine
- ❖ Instructor Operation Station Application
- ❖ Student Station Training Application
- ❖ Intelligent Tutoring