Intel Enhances Corporate Training Process With VR, Sees Estimated 5-Year ROI of 300%

Learn all about how the tech juggernaut deployed a scalable, effective VR solution with the help of VIVE and VIVE Enterprise Advantage.

Preface: Benefits & Challenges of Implementing Emerging Tech

When an enterprise invests in virtual reality, they often reap a number of compelling benefits. A number of forward-thinking companies have leveraged VR to reduce their total cost of ownership, better retain and motivate their employees, and craft immersive training environments where teams can learn by doing in an effort to maximize ROI.

So, why isn't every enterprise using VR? There are a number of reasons: Hesitation about using advanced technology, required familiarity with adjacent software/hardware, and the challenge of VR-workflow integration. Yet, there's one reason in particular that holds companies back the most: Limited quantifiable data relating to VR's impact on an organization.

Enter Intel

Intel is well-equipped to explore VR's potential, thanks to a business unit that advocates for premium VR technology adoption with partners across multiple industry verticals. To fully implement VR, however, Intel needed a plan that could generate sustainable and scalable results in the organization and serve as a foundation for best practices. This led to the creation of a pilot project that could capture quantifiable results closely aligned with anticipated outcomes (reduced cost of ownership, increased trainee retention, increased ROI).

Intel centered this project around their Electrical Safety Recertification course. This initiative provided trainees with relevant, high-quality VR content with clear learning objectives, what-if scenarios, and feedback loops in a controlled, room-scale environment deployed and managed by VIVE and VIVE Enterprise Advantage.

VIVE & VIVE Enterprise Advantage

Integrating VR into organizations like Intel, as you can imagine, represents a major challenge. With their sheer size and strict security and personal-use policies, Intel required a scalable and secure enterprise-level VR solution—a solution that only VIVE and VIVE Enterprise Advantage could provide.

VIVE and VIVE Enterprise Advantage gave Intel the flexibility and control they needed to **securely manage software deployments and updates with ease,** resolving the software incompatibility issues that come with non-commercial-grade VR solutions.

Furthermore, the VIVE platform **allowed for content controls that met Intel's strict information security and personal-use policies.** This enabled them to remotely monitor programs, and deploy and manage software/drivers for all devices behind a firewall—an impossibility with consumer-use VR platforms.

Why Electrical Safety Recertification?

Electrical accidents are considered one of the deadliest workplace accidents—only 1/10 of an amp is all it takes to stop a human heart. According to OSHA, one out of ten electrical accidents results in a fatality. (The fatality rate in other Prevention Programs is as low as one in 300.)

Between 2015-2017, there were 24 electrical incidents at Intel with just as many near-misses. This translated to **over one million dollars in cost.** 90% of the root causes were behavior-based, caused by employees not following proper procedures.

What Did Intel Find?

The tested audience, most of whom have worked at Intel for years, are used to taking and passing the Electrical Safety Recertification course in a web-based training (WBT) format. However, 75% of these trainees struggled to complete the same training in virtual reality. Why wasn't theoretical knowledge translating into practical knowledge?

Was it the equipment? No. Post-testing findings showed trainees had little to no issue operating the VR hardware. In fact, the trainees enjoyed it—94% wanted more virtual training. Digging deeper, Intel found that most of the issues centered around the trainees' lack of experience with electrical safety equipment, a low familiarity with tools, and no clear understanding of the proper sequence for task execution. In fact, most of the trainees in the WBT and VR Electrical Safety Recertification course—people who have been taking the course for years—never had and never would be expected to execute the tasks required by the program. **This represents a major procedural and safety gap** that wouldn't have been discovered or solved without the assistance of VR.

Weighing the costs of development against the response to these findings (reducing the trainee base by up to 50%, removing employees with no exposure to electrical hazards, refining the questions) and the benefits (expected incidents deduced from course, expected incident savings per course, cost incurred per incident), Intel's model concluded their first VR-based corporate training course had an **estimated potential five-year ROI of 300%.**

Next Steps

Confident in their ROI figures, Intel made a final round of adjustments to the pilot project, moved their virtual course into production at its initial site, and replicated the blueprint at another. Afterwards, Intel approved a global-scale deployment with plans to roll out to several additional sites around the world—effectively becoming the framework for a broad VR-based training program across the organization.

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