

3D Repo Develop Health and Safety Virtual Reality App



Repo is working with Balfour Beatty, Vinci and Highways England to deploy a Virtual Reality (VR) simulation for Zero Harm Health and Safety Training. Part of the Smart Motorway programme, the fully immersive simulation is designed to prevent on-site accidents by making highways construction and maintenance projects safer through improved training. Featuring different real world scenarios the virtual experience is designed to give the user different perspectives of the same potentially dangerous situation in order to develop an understanding of safe working zones.

“In order to demonstrate our understanding of our customers’ needs and facilitate the collaboration between our customers and their clients, we wanted to digitally transform our approach,” commented Neil Thompson, Head of

Digital Research at Balfour Beatty. “3D Repo and their pioneering virtual environments enable us to do that in a completely new and engaging way.”

Accessed using a standard VR headset, the 3D Repo simulation provides multiple views of different real world scenarios. The user is immersed in a position relative to an activity, for example bank excavation, so they can examine both the worker’s as well as the plant driver’s visibility. The user can then position themselves where they think they are safe and switch to plant operator’s position to understand what they would see.

The 3D Repo VR solution gives workers the opportunity to experience live and potentially dangerous site environments from within the safety of an office or training room and without the need for lengthy manuals, training sessions or specialist personnel. As the scenarios are hosted online the system can be easily set up from any location and can be deployed across numerous sites at the same time.

“Safety is our paramount importance and VR is now helping us deliver training in stimulating ways that ensure our people learn,” commented Harry Parnell, Head of Digital Project Delivery at Balfour Beatty Major Projects. “This is a ground-breaking technology setting a new standard in training and one that is truly helping our Zero Harm vision.”

“Other VR simulations utilise standard game engines which can mean content is ‘baked in’ and any edits require a complete reprocess of the entire simulation,” added Dr Jozef Dobos, CEO of 3D Repo. “The 3D Repo solution provides a web-enabled approach. Upon login, users can access all their projects remotely on the fly and without the need to create custom executables each time. We also utilise existing site-specific 3D models and Building Information Modelling (BIM) data so that custom scenarios can be created and uploaded as and when needed.”

<https://www.gim-international.com/content/news/3d-repo-develop-health-and-safety-virtual-reality-app>
