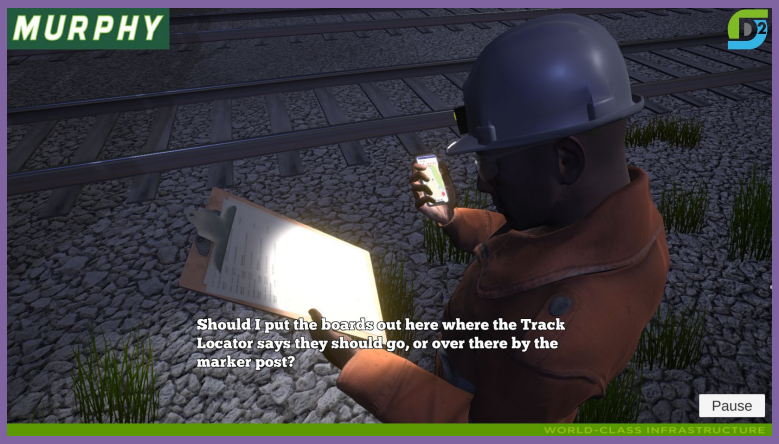
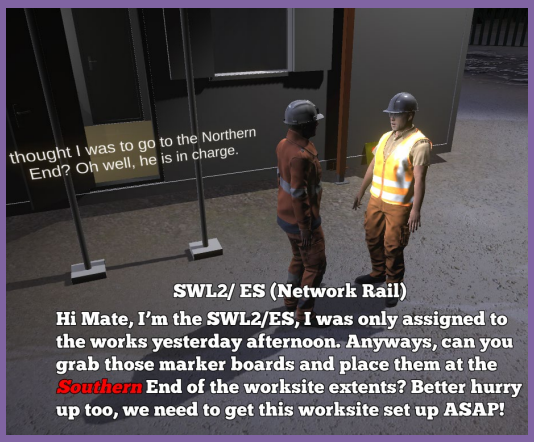
CASE STUDY

PROJECT: Lessons Learned Animations and Training
CLIENT: Murphy Group
DATE COMMISSIONED: May 2022





Introduction

D2 was approached by Murphy to support with several safety briefs and animations that were going to outline lessons learned and the importance of correct procedure when placing possession protection. The requirement was for innovative safety procedures and briefings that could be used to highlight key risks and past close calls in a safe and engaging way.

Engagement was the most important part of this requirement and Murphy wanted to develop a briefing that provided a more interactive experience rather than simply present information on screen that must be watched.

D2's Digital Technology team was asked to address this requirement using its experience and expertise in interactive training programs and material, having previously had great success in producing interactive training modules and scenarios for a number of safety critical processes, including protection board placement and heavy plant operations.

Deliverables

Murphy wanted to present more than just a video for staff to watch.

To retain attention, the animation had to use a combination of pre-set animations with an interactive element that tests end user engagement and knowledge checks.

The animations needed to show past real-world scenarios and outline the lessons learned.

The goal of the system is to spot and highlight common safety hazards around work sites.

The system needed to give information on past close calls, contributing factors, and lessons learnt throughout its running.

Challenges and Solutions

A major challenge was the output format. Most animations run from start to end and output to a single video file. As this project needed to be interactive, a single file output would not work. Requiring a user to download or install the system would also increase complexity and engagement which was undesirable. The team decided to deliver the output as an online resource, allowing users to navigate to a secure URL and run the system directly in a browser. This made access and entry to the system as easy as possible.

Interactivity and running order were also a challenge. There could be occasions when the users needed to talk about what they had just seen and discuss possible solutions. There would also be times when the system needed get a message across in a short time frame. The solution here was to implement several features that added flexibility into how the system could be presented.

1. Split the system into scenarios – 3 scenarios were created and split into modules that can be played in any order. A main menu system allows for quick selection, or replay, of a specific scenario.

2. Allow the system to pause at any point – the lead can stop each scenario at any point if there are questions or a discussion to be had, resuming where they stopped when ready.

3. Additional information prompts – during its running, the system will show prompts that the user can select. Once selected, additional information about lessons learned and contributing factors is shown.

Client feedback in this project was key. The client knew what needed to be discussed in the system but was not sure on how it would translate to a 3D environment and interactive system. After initial story outlines and text-based steps for each animation, D2 produced a storyboard to show how the system would look, and how the interactions would flow. Next, D2 produced a rough draft of the first scenario to show the environment, models, animations and interactivity that would be used. This allowed the client to get an early view of how the system would look, and to make changes or alterations before full production of the system started. Client feedback and involvement throughout the project helped ensure it achieved the client's objectives, and that the system portrayed the intended messages.

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Benefits

The scenario-based solution provides a flexible way of delivering safety briefs and training, with the client able to decide which scenarios to show, and what additional information to portray. The key messages can be communicated quickly if required, or a more in-depth discussion can be explored.

The interactive elements ensure a higher level of engagement from participants which can help with information absorption and retention.

Delivering the solution via an online link, and running entirely in a browser, add flexibility for delivery and ease of use.

Testimonial

"At the recent NW&C Suppliers Sharing of Best Practice, JMS were really pleased to be able to share the work we have been doing to modernise the way in which we share safety lessons learnt. With the support of D2 Rail, we developed innovative interactive animations of 3no. real life past incidents. The quality of the graphics and interactive capabilities produced by D2 Rail were very impressive, offering an exciting fresh approach to providing safety briefs on past incidents, greatly helping increase engagement!"

Jamie Rothwell
Senior Contracts Manager