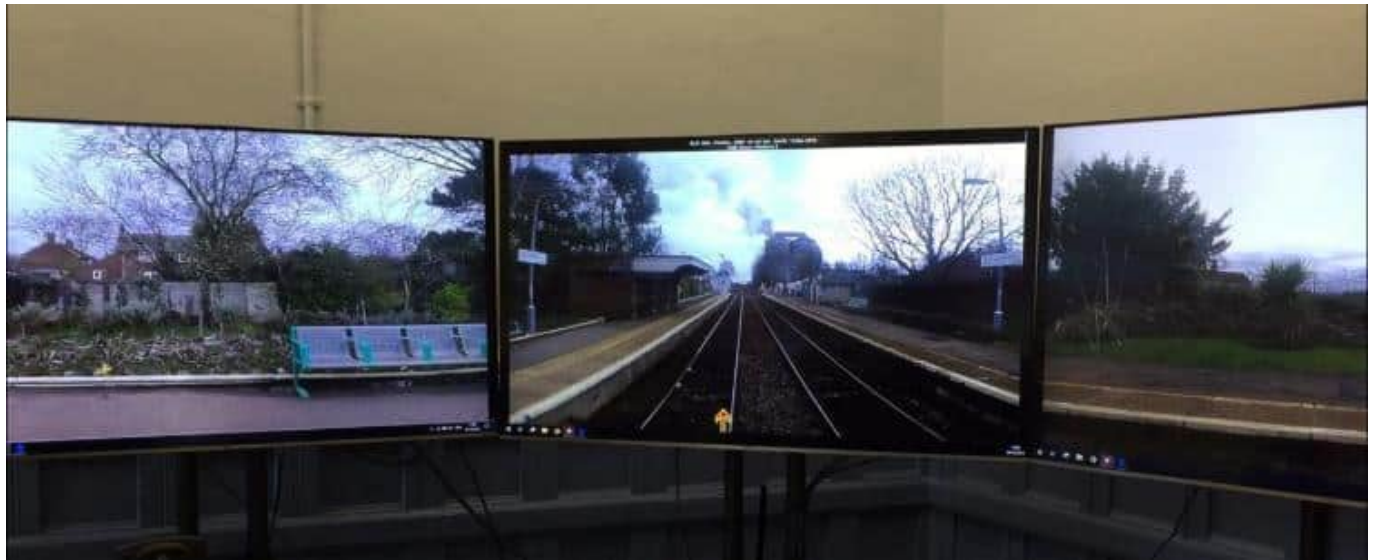


Immersive media used to measure up for new trains

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From the outside, it looks like an unassuming office on platform 3 of Ipswich Railway station. However, step inside, and the room is filled with large screens capable of showing 360 degree video of nearly every railway station in East Anglia.

The room is Greater Anglia's Mission Room, and it's where meticulous planning is taking place to make sure the railway company will be ready when all 169 brand new trains arrive on the network.

Andrew Goodrum, Greater Anglia Business Readiness Director, said: "There's so much we need to do to make sure that we will be able to make a smooth transition from our existing trains to our brand new state-of-the-art fleet.

"We need to measure the length and height of platforms, check where trains need to stop for wheelchair and bicycle access and work out where we need to put up signs for drivers or move benches.

"It's quite a task and would take a very long time if we had to go to every single station to carry out surveys and measurements.

"Instead we're using immersive technology - we can tap in a platform number and station name into our database and then view 360 degree video of that platform which is so accurate we can carry out detailed measurements and surveys from it.

"We can see the platform from every perspective as the video runs on three screens showing us the platform from all angles."

The videos were produced by initially attaching eight cameras on a train – two in the cab, two in the back and two on each side, and filming as the train travelled through stations.

The film was then processed into a programme which transferred the film into 360 degree video on software with measuring and reporting tools.

Greater Anglia is replacing every single train on the network with brand new trains – the largest wholesale replacement of trains in railway franchising history.

Every train will be longer, with more seats, and each of them will have wheelchair spaces and bicycle spaces.

Checks have to be made for each platform to make sure that everything is in place for when the new trains arrive, from the middle of next year.

At some stations, where the trains are going to be longer than platforms, either the platforms will be lengthened or selective door opening will be programmed into the trains, as is the case at some smaller stations now.

Current signs indicating to drivers where they need to come to a halt may need to be relocated. Furniture on platforms may need to be moved if it is going to be in the way of customers getting on and off the new trains in wheelchairs.

Some of the new trains have low level floors with a retractable ramp which bridges the gap between the train and platform edge – and measurements need to be taken to see where it will provide level access for customers in wheelchairs and where a ramp will still be needed.

Dr Bryan Denby, Managing Director of the technology provider, Mission Room Limited, said: “This is an excellent example of how Mission Room worked hand-in-hand with Greater Anglia to develop innovative solutions to real problems.

“Our ability to capture 360 degree footage of rail and trackside assets using scheduled trains is unique and we evolved it further during this project. It provided the background footage to enable the Greater Anglia teams to analyse and assess their platforms safely and efficiently.”

The first of the new trains have already arrived in East Anglia to begin rigorous safety and performance tests. They will start coming into service in the middle of next year and will have replaced all existing trains by the end of 2020.