



**Audio Visual
Suite**



University Hospitals of
Derby and Burton
NHS Foundation Trust

360° PROJECT

THE AUDIO VISUAL SUITE



Royal Derby
DERBY



Queen's
BURTON



Samuel Johnson
LICHFIELD



Sir Robert Peel
TAMWORTH



London Road
DERBY

THE PROJECT – 2 ARMS

- **Google Street View** – Assist patients to find departments and services, by allowing them to view areas before they arrive for appointments.
- **360 Video Productions** – Give patients a better understanding of a procedure or department and allow them to view a full 360 scene of an area.

GOOGLE STREET VIEW

Borrowed a camera from Google over Christmas 2017.

Spend a 2 weeks covering the main corridor in the Kings Treatment Centre and Maternity corridors within the Royal Derby Hospital.



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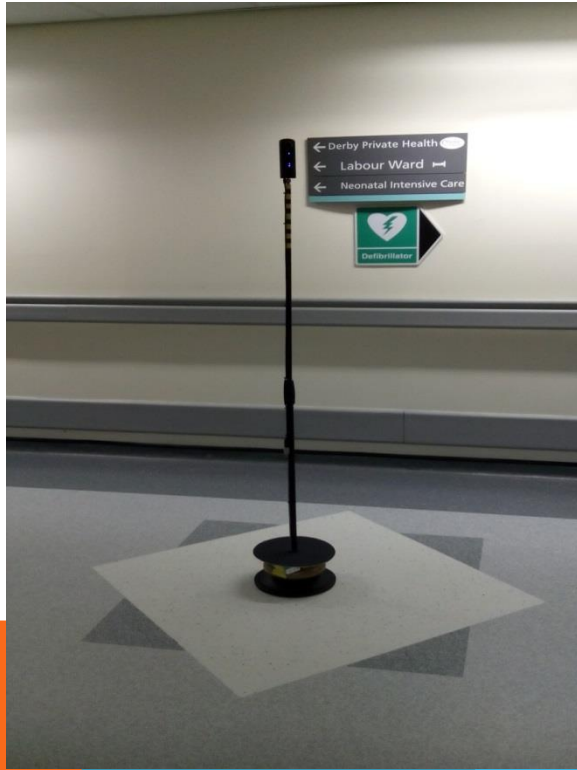


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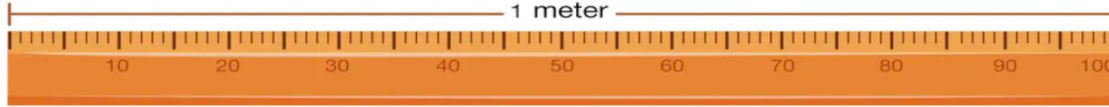
GOOGLE STREET VIEW



The camera which we borrowed from Google was one of the early Ricoh Thetas. Which had a camera lens on both sides of the unit and it did the stitching from both cameras automatically within camera.

Camera was controllable via its own wifi network and designated android / ios app.

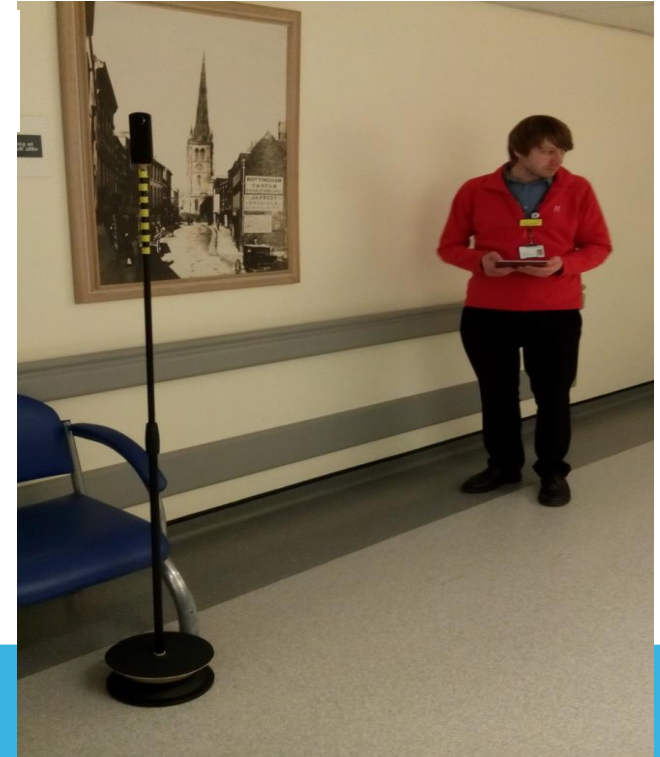
GOOGLE STREET VIEW



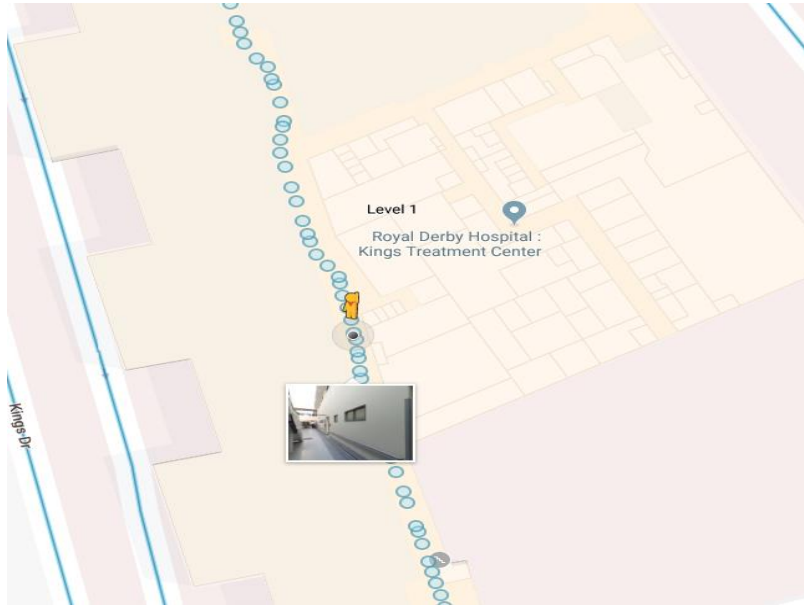
Photos were taken every 1 metre using the Ricoh App on the iPad.

Some of the problems we ran into whilst out taking the photos were:

- On the longer corridors the wifi tended to drop out.
- Finding places to hide as the camera captures everything, was also quite a challenge in some areas.



GOOGLE STREET VIEW



<https://goo.gl/maps/bkZta93XZE12>

The photos once taken were automatically downloaded to the iPad via the Google Street View app, and then plotted on a map of the area within the hospital.

The Street View app allows you to blur out areas of the images, which was particularly useful when we captured people walking down the corridors.

The images can then be embedded on the Trusts internet site for the services / departments within these areas, to give a visual representation to patients where they're located.

GOOGLE STREET VIEW - SUMMARY

- Currently taken 685 individual photos
- 745.75K views as of the 1st March 2019
- Ongoing project to map out the rest of the Trust. Currently having talks with the Endoscopy Unit and Children's Outpatient services about mapping out new areas.



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360 VIDEO PRODUCTION

Captures the whole scene, so it gives the patients a better idea of departments and areas within the Trust.

Allows the viewer to either click or drag to see different things within the scene, or use a VR headset to look around.



360 VIDEO PRODUCTION

We produced a pilot video in orthopaedic theatres showing a pathway into theatre.



The 360 camera was mounted to the neck of a mannequin to give the look of a real body.



<https://youtu.be/JBty9sV70mc>

360 VIDEO PRODUCTION

We had a few radio microphones set up to capture the audio from the consultant, anaesthetist and nurse within the operating theatre.

Then a wired microphone and radio microphone for our voice actor playing the part of the patient. The audio from the actor was played out live from a wireless speaker we placed at the back of the mannequin.

By doing this we tried to make it real as possible, as there was dialogue between the staff and patient that was important to capture.



<https://youtu.be/JBty9sV70mc>

360 VIDEO PRODUCTION



Whilst filming we had to make sure that we were not visible to the camera (as its captures everything around it). The camera was controlled over wifi with an app on the iPad.

The footage from the cameras, came off as 2 files that needed stitching together, using specialist software. Once stitched we could then edit the footage within Adobe Premiere Pro.

The final video was uploaded to YouTube, then it can be embedded into pages on the Trusts website.

Patients/viewers can view the videos within a VR headset if they have one, or via the YouTube app.

360 VIDEO PRODUCTION - UPDATE

- Currently working on the final drafts of a new 360 tour of the maternity unit. Covering ward 314, Birth Centre, Labour Ward and Antenatal Services.
- Started filming 360 videos within the Children's Hospital.
- Currently looking at working with Radiology and the Endoscopy Unit later in the year to film pathways through their services.

<https://youtu.be/7INbONqBQfg>

THE PROJECT – SUMMARY

Through the use of this technology we hope to continue to develop this within the Trust, and give potential patients more information visually before they come into hospital, thus easing any worries or fears.