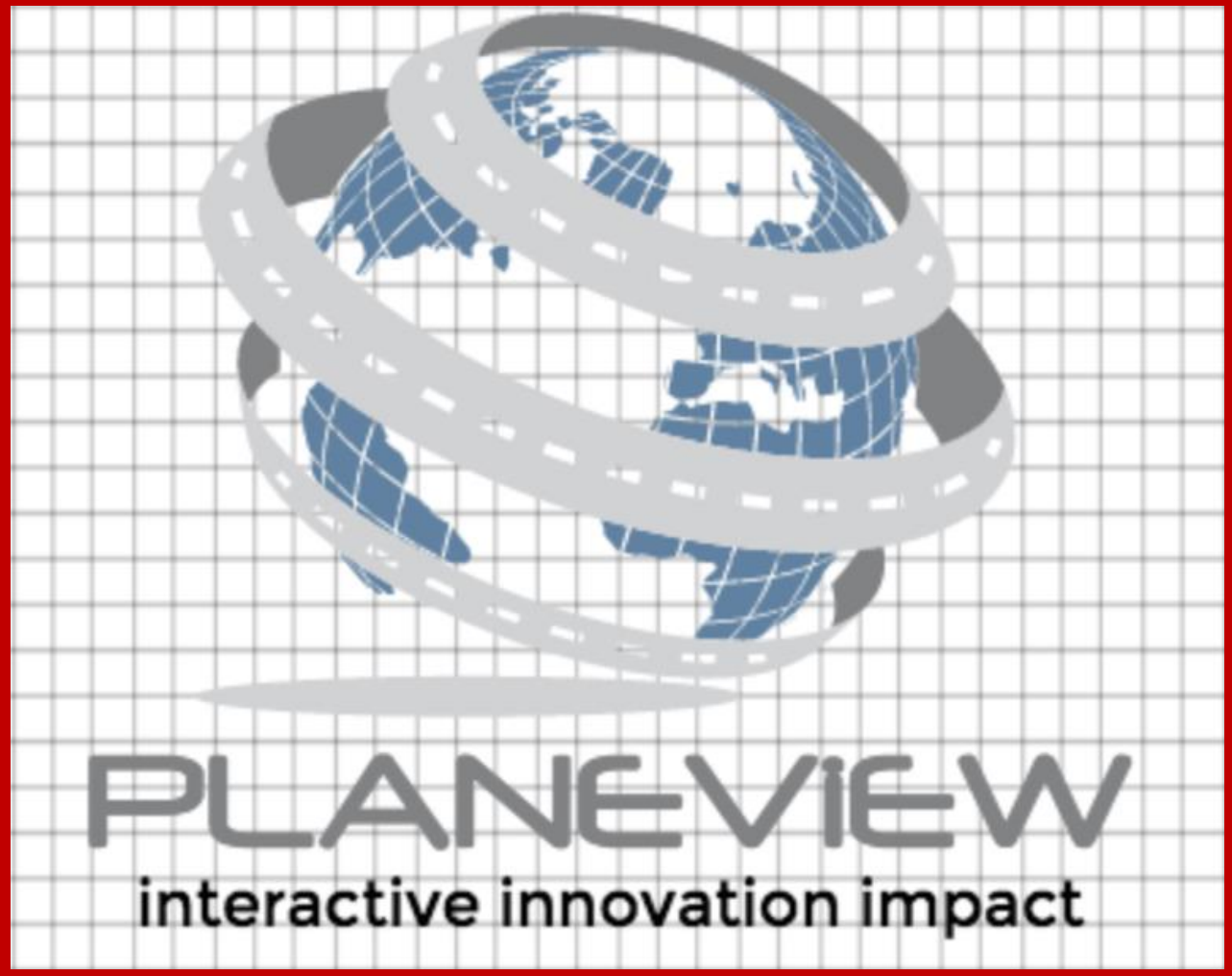

Next Steps

- Impact Statement
- What We Offer
- Current Target Users
- Potential Users
- Future Plan
- PlanView Team

Impact Statement

- Vision:

To provide innovative real-time footage on every aircraft in the world, that will enhance education, environment monitoring and animal welfare.

- Mission:

To produce a real-time interactive educational tool, which links live images from the air and ground with information from the local area.

What We Offer

PLANEVIEW
interactive innovation impact

Up/Down Link

Live-stream footage

Local info

GPS map link

Current Target Users

Passengers

Schools

General Public

Stake-holders

Airlines companies

Tourist Industry

Language Schools

UNESCO / NGOs

Potential Users

Air-traffic

Academic | Geologist | Ecologist

Met-office

Animal Couriers

Current Target Users: Passengers & Public

- **Live feeds:** live footage from the aircraft allows views from the sky to be shared with those on the ground. Cameras at key points on the ground allow live footage from countries to be observed so that individuals can see what is happening on land whilst the flight goes past.
- **Tour experience**: links to local maps and information about local history and culture to provide an in-flight guide, helping explain the views seen outside the plane.
- **Learning platform:** links to educational resources such as language learning apps.

Scenario: Parent

I recently went on an international flight with my two sons. I was amazed by the inflight web app PlaneView. The boys were able to track the countries we flew over and learn about their culture and history. I even picked up some phrases in Spanish on a link to a language app. When we landed my husband said that he had tracked our flight as we flew and had also learnt some new facts.

PLANEVIEW
interactive innovation impact

Current Target Users: Schools

- **Live feeds:** real-time footage from both the aircraft and the ground allows students to compare their current environmental and cultural experiences with those around the world. This can lead to a deeper understanding of key concepts such as time difference, night & day and seasons. These abstract concepts are difficult to visualise without live comparison between an individuals experience and views from around the world.
- **Education platform**: By collating information from each country about it's culture, places of interest and history individuals can research about specific countries using a centralised resource. The language learning function would compliment school lessons allowing children to explore languages for themselves.

Scenario: School Teacher
My class are researching about different countries as part of our global schools topic. Plane view allowed them to look at aerial views of their chosen country and look at images from the ground. Some of the class were fascinated that while they were having their lunch pupils in other countries are sleeping. It really imbedded the idea about the earth turning to give day and night and helped them understand geographical and seasonal differences.

PLANEVIEW
interactive innovation impact

Potential Users: Air Traffic Control

- **Flight review**: flight footage can be reviewed, including evaluating smoothness of take-off and landing.
- **Training**: live footage can improve accuracy of training simulations.
- **Scenario analysis**: plane and pilot responses to dust clouds and bird-strikes can be monitored.
- **Crash Investigation**: access to footage of a planes decent at the time of a crash can reduce investigation time as there is no delay whilst waiting for black box data.

Scenario: Crash Investigator

Following a recent crash we used PlaneView to replay footage. This allowed us to see the plane during its decent and allowed us to locate the aircraft swiftly. The footage gave us a detailed picture about the weather conditions and circumstances surrounding the incident.

PLANEVIEW
interactive innovation impact

Potential Users: Academia – Ecology

- **Real-time ground cameras:** animal populations can be observed as planes pass above to compare the effect of flight paths on animal behaviour.
- **Ground level sensors:** air pollutants can be measured to compare pollutants in areas of frequent flights with those of infrequent.
- **Aerial footage:** regular aerial footage allows tracking of populations e.g. bird flocks, surfacing cetaceans and large mammal groups. These can be tracked over time and potentially link to citizen science and crowdsource projects to spot populations.

Scenario: Behavioural Ecologist
We are really concerned about the expansion of airports on the local wetland bird population. We used PlaneView to compare footage of the birds when flights were overhead with times when there were no aircraft. The information allowed us to establish the effect of flights on bird behaviour and whether frequent flights were more disruptive than less frequent ones.

PLANEVIEW
interactive innovation impact

Potential Users: Academia – Geography

- **Repeated aerial imagery:** planes following regular flightpaths allow repeated data collection over long periods of time. This allows changes in landscape to be monitored. Waterbodies and ice-coverage on mountains can be traced throughout seasons to measure both seasonal fluctuations and identify more permanent changes.
- Land use can also be monitored to investigate the impact of developments on landscape

Scenario: Geography Student
I am a human geography student investigating the effect of landuse and urban sprawl on the environment. The easiest way to examine urban sprawl is to compare aerial footage. Flights to take images for this purpose are too expensive so we currently rely on out of date photos. PlaneView allows me to compare changes in land use as they happen as the images are constantly updated.

PLANEVIEW
interactive innovation impact

Potential Users: Animal Couriers

- **In hold cameras:** In hold cameras stream live data from the plane's hold. This allows individuals to monitor animals throughout the flight. Airlines report an average of 80 animal deaths whilst in transit per year[1]. This figure may be significantly reduced if animal welfare could be monitored during flights and subsequently improved. Animal cargos are often highly valuable both emotionally and monetarily. Airlines transport all manner of species; prizewinning racehorses, zoo animals and pets, and access to live monitoring could be a valuable resource.

[1]Source (www.seattletimes.com)

Scenario: Thoroughbred Horse Breeder

I am a regular user of animal couriers to transport my stud horses internationally. They are highly valuable and although we send staff with our horses, I often worry about their welfare. PlaneView allows me to view my horses whilst in transit and monitor their behaviour. This has provided me with the reassurance that they are ok. Knowing how they respond throughout the flight allows me to prepare them better for travel.

PLANEVIEW
interactive innovation impact

Potential Users: MET Office

- **Mass data collection**: regular aerial footage provides a detailed stream of data on cloud cover, wind-speed and temperature both at altitude and at ground level. This data can be used to reinforce weather predictions.
- Images have the potential to measure cloud density and could lead to further educational resources such as cloud identification apps.

Scenario: Weather Reporter
PlaneView allows us to compare wind-speed and temperature on the ground and in the air. This adds to our own predictions of weather-fronts and gives me more confidence in the accuracy of our forcasts. I like the fact that you can watch storms live from planes and watch as the aircraft moves through different weather conditions.

PLANEVIEW
interactive innovation impact

The Future… (18 months plan)

0-6 Months

Stage 1: Develop full working prototype

Development team:

Back-end developers

Front-end developers

7-12 Months

Contact potential partners and further development

-Partnership with British language council, UNESCO, Language Learning schools, Museums

-**PlaneView takes off!**
Version 1.0 available to market

13-18 Months

Stage2: Invest in hardware, develop social media links.

- install further cameras on planes and on the ground

- Social Media interaction (linking a users previous life events and memories as they pass relevant countries)

-**Revenue stream starts!**
-Sale of advertising space
-Grants and funding from tourist information and NGOs
-Sell advertising space to social media companies

PLANEVIEW
interactive innovation impact

PlaneView Team

Kenny Chelikuzhiyil

Backend Developer

Malek El- Qallali

Business Analyst

Bruno Orozco

Backend Developer

Sarah Spooner

Educator/ Marketing

Vivek Warriar

Frontend Developer

Yu Xie

Designer

Yuhan Zhou

Frontend Developer

PLANEVIEW
interactive innovation impact