Connected Humber CIC Aims, Objectives and Plans for the Future

Aims

Use technology to empower and inform at a macro and micro level in the local community.

Empower

Give people technical tools and skills that will allow them to improve the quality of their lives.

- Macro empower – create publicly available resources and tools to that can be used to input data and guide policy.
- Micro empower – use our projects as the basis of education and training for those who directly engage with them.

Inform

Generate and distribute information that will allow people to make lifestyle choices that will improve the wellbeing of the community.

- Macro inform – build and promote publicly available views of datasets that are easy to use.
- Micro inform – produce tools and schemas to allow the creation of new products and services driven by the publicly available data.

The aim will be met by a number of specific project developments. The first project will act as an exemplar for future projects and also establish the company infrastructure.

Objectives

The first objective centres on the issue of Air Quality. The deliverables of the project are:

- establish the Connected Humber CIC
- design and construct Air Quality sensors for deployment in a variety of scenarios and using a range of connection technologies
- use the designed sensors as the basis of build events that engage local people with the construction and deployment of sensors in the local area
- create an underlying infrastructure for the management of the sensors and the data that they produce
- create tools that allow the visualisation of the data that is produced during the project

Plans

Sensor Design

The Connected Humber Hardware group at c4di is well advanced in the design and construction of prototype sensors and finalised designs will be available soon.

Build Events

The c4di has hosted "Build a Robot in a day" and "Build a LoRa node in a day" events for up to 10 delegates at a time. It is proposed that curriculum and resources be developed that will allow for the production of three such events. The group would engage in promotion to raise awareness of the project to encourage people to attend the build events and also run build events of their own.

Underlying Infrastructure

There is considerable expertise within group for the creating of a server infrastructure to support sensor management and data provision. This work would be performed in line with open data projects being initiated in the area and would serve as a useful exemplar of community and local authority working together.

Visualisation Tools

Members of the group are advanced in data visualisation. We would expect involvement of local academic institutions from both a research and a teaching perspective.

Version 1.0 Rob Miles and Robin Harris

What can you do for us?

Support

Statements of support would be most useful, particularly in respect of how the activities of the company will have a positive impact.

Equipment

Once we have a CIC in place we will be able to formally accept donations of equipment from organisations.

Engaging with the "Build a Sensor" Courses

While we are applying for funds to support three "Build an Air Quality Sensor" one-day courses it may be that other organisations would like to use the exercise as a training/team building exercise. The CIC would produce these for a charge using the same hardware and taught content. This would increase the uptake for sensor deployment and hopefully engage more people with the project.

Joint Projects

We would like to work with interested companies on joint projects for the deployment and calibration of air quality sensors and the visualisation of the resulting data.

Costing Breakdown

Hardware - £3,300

Components to create 33 air quality sensors. Three would be final prototypes of sensor designs that are for presentation and the remaining 30 would be kits that would be used during the three build events that are proposed.

Events - £1,500

Venue rental, tools, hospitality and event management for three build events.

Server Infrastructure - £2,500

Creation of a web presence for Connected Humber CIC and the hosting of the member management, data storage, data access and analytics software to be used by the project.

Establishing Connected Humber CIC - £2,500

Setup and running of the company for the first 12 months. Ongoing expenses beyond the completion of this project would be met by membership fees from interested organisations and individual members.