Building an IoT ecosystem for local businesses

Hartree Centre
Science & Technology Facilities Council

The Science and Technology Facilities Council's (STFC) Hartree® Centre was one of seven partners selected to be part of the IoT UK Boost innovation support programme for SMEs to develop and prototype their IoT products and services.

Challenge

Internet of Things (IoT) technologies have the potential to play a key role in boosting the UK's digital economy. Businesses working to connect devices and sensors to create innovative new products and digital solutions need support to be able develop and prototype their ideas. The Hartree Centre took part in the Digital Catapult's IoT UK Boost programme as one of a network of partners selected to build local testbeds. This enabled local businesses and entrepreneurs to experiment with their early stage IoT products.

Solution

By integrating the SIGFOX LPWAN (Low Power Wide Area Network) platform with the existing IoT network at Sci-Tech Daresbury, nine SMEs from across the country were able to test and develop prototypes for their IoT products. Combining expertise in data analytics and cognitive technologies, the Hartree Centre held data-centric workshops open to local businesses covering a wide range of technologies linked to IoT such as big data, blockchain and a two-day session with SIGFOX focused on giving practical support in developing applications with SIGFOX.

Benefits

The IoT UK Boost programme helped build an ecosystem of local SMEs applying emerging IoT technologies in innovative ways across a variety of sectors. From pollution monitoring in urban areas and health tracking devices for the elderly to predictive factory maintenance in manufacturing and devices used to make cycling safer, companies involved in the programme were able to unlock value and insight for a variety of technology areas. Several SMEs went on to access support from the ERDF-funded LCR 4.0 project, providing access to rapid prototyping support and variations of LPWAN technology to further develop their products. As a direct result of the IoT UK Boost programme, SIGFOX is now a significant part of the IoT network capability on offer for over 100 businesses in the Sci-Tech Daresbury ecosystem.

> *"The potential of IoT technologies is huge and brings with a it a breadth of applications across industry sectors. It has been incredibly rewarding to see local businesses accessing the IoT network on campus and our practical support to go on and develop product prototypes."*
>
> **- Dr. Tom Kirkham, Business Development Manager, Hartree Centre**

Work with us

We collaborate with industrial clients and research partners on projects that create insights and value using high performance computing, big data analytics, simulation and modelling.

By combining our world-class facilities with access to our specialists and computational scientists, we can enable your organisation to produce better outcomes, products and services more quickly and cost-effectively than through conventional R&D workflows.

With our partners we are developing the next generation of supercomputing architectures and software, combining existing best practice with innovation to deliver faster, cooler and more sustainable solutions capable of meeting the challenges of data intensive computing.

For more information:

📞 +44 (0)1925 603708

✉ hartreecomms@stfc.ac.uk

🐦 @hartreecentre

in /company/stfc-hartree-centre

www.hartree.stfc.ac.uk