

New Project to Develop Leading Indoor Navigation System



RNF Digital Innovation, UK, has unveiled an ambitious new GBP702,000 project to develop a globally groundbreaking indoor navigation system, after securing funding from the Technology Strategy Board. The indoor navigation system project, including research and development, is scheduled to take place over the next 18 months.

The Leamington-based mobile app developer has secured a GBP500,000 grant from the Technology Strategy Board, the UK's Innovation Agency, to develop an indoor navigation service using smartphones, tablets and i-beacons that can be used across a range of businesses including supermarkets, hospitals and leisure parks. The further GBP202,000 investment will come through RNF Digital Innovation and its collaborative project partners, the Bestway Group, Aston University and the University of Lincoln, who will both provide

technical and research support for the project.

RNF Digital Innovation's grant was one of only a handful of successful applications to the GBP5million fund set up by the Technology Strategy Board to stimulate innovation in the UK location-based services sector. The aim of the competitive fund is to support projects that capitalise on the increasing accuracy, coverage and speed of global navigation satellite systems (GNSS) such as GPS and other non-satellite technologies including Wi-Fi and iBeacon.

Rob Mannion, RNF Digital Innovation managing director, said his company is delighted to have secured this funding and wanted to say thanks to bid writers JDF Associates for their role in this process. RNF has always prided itself on being at the forefront of modern mobile app development. With the support of the Technology Strategy Board's grant, their research and development activities in the field of beacons and indoor navigation will reinforce RNF's position as market leaders in the field, Mannion added.

This system will allow the deployment and utilisation of i-beacons in a way never seen before, enabling the creation of a user experience far in advance of what is currently available, he continued.

Retail sector

Mannion added that the technology will have applications for a range of sectors. For example, in the retail sector, indoor navigation systems would enable the user to work out their quickest and most economical route at the supermarket, alerting them to offers and product updates on the way.

Dr Patrick Dickinson, from the School of Computer Science, University of Lincoln, UK, said he was really excited to be working on this project with RNF Digital Innovation, Bestway Cash and Carry, and Aston University, which will exploit these services to enable market-leading mobile apps, and new and uniquely personalised experiences for Bestway customers.

Shoppers will be able to use an intelligent location-sensitive app which integrates with their shopping trip. It will combine their preferences and previous shopping behaviour with information about the store they are visiting, to plan their unique experience in real-time, alert them to points of interest, resulting in a more productive and enjoyable visit, Dickinson explained.

Jamil Mohammed, group e-commerce manager at Bestway Group, said this project represents a fantastic chance to take their consumer experience to a new level of interaction.

Digital strategy

By embracing i-beacon technology throughout Bestway's network of UK stores and depots, they will be able to offer their customers a retail experience far beyond anything currently available. It represents a big leap forward in the wholesale and retail sectors and is a key pillar of Bestway Group's digital strategy for the future, he added.

Dr Joanna Lumsden of Aston University said that by using the unique resources within the Aston Interactive Media (AIM) Lab, they will design as part of this project mobile applications that use innovative ways to allow users to interact with information. They will seek to use combinations of sound and touch, as well as vision, as part of the advanced user experience this sort of indoor navigation system will offer.