

## Intelligent navigation system to personalise shopping trips

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A ground-breaking indoor navigation system is being developed to help improve people's experiences of a range of businesses, including supermarkets, hospitals and leisure parks.

Mobile app developer RNF Digital Innovation has unveiled the <u>project</u>, which will use smartphones, tablets and iBeacons, following a £500,000 grant from the Technology Strategy Board, the UK's Innovation Agency.

A further £202,000 investment will come through RNF Digital Innovation and its collaborative project partners, the Bestway Group, plus the University of Lincoln, UK, and Aston University, who will both provide technical and research support for the project.

The grant was one of only a handful of successful applications to the £5m 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 – which enables a smart phone or other device to perform actions when in close proximity.

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.

Computer scientist Dr Patrick Dickinson, who is coordinating the project for the University of Lincoln, said: "We are really excited to be working on this project with RNF Digital Innovation, Bestway Cash and Carry, and Aston University, who 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."

Rob Mannion, RNF Digital Innovation Managing Director, added: "This system will allow us to deploy and utilise iBeacons in a way never seen before, enabling the creation of a user experience far in advance of what is currently available."

Jamil Mohammed, Group E-commerce Manager at Bestway Group, said that by embracing i-Beacon technology throughout its network of UK stores and depots, Bestway will be able to offer its customers a unique retail experience.

The <u>indoor navigation</u> system project, including research and development, is scheduled to take place over the next 18 months.

Provided by University of Lincoln

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