

Driving retail competitiveness with data-driven insights

The STFC Hartree® Centre helped Liverpool-based company Margin Guardian to quantify benefits of a data insight and targeting app for fashion retailers and consumers through the ERDF-funded LCR4 START programme.

Challenge

As consumers are increasingly drawn to the convenience of online shopping, whether through websites or apps, the retail analytics sector is also expanding in its potential to drive sales, boost revenue and enhance customer satisfaction. Margin Guardian offers data insights and targeting services to fashion retailers. By highlighting elements like price or viewed/saved products from the consumer, they enable fashion retailers to make informed decisions on markdowns of stock to enhance profit margins. Their Squished app also allows consumers to set the price they want to pay and notifies when prices drop to meet their preferences This service is valuable to both consumers and retailers, but Margin Guardian were looking to be able to quantify the benefits the app could deliver and identify additional insights they could offer retailers to enhance their product.

Approach

The Hartree Centre's data science team carried out some exploratory data analysis which identified the initial benefit value of working with Margin Guardian's Squished app for the retailer in competitiveness and profit. The project combined insight and expertise from both the retail sector and the data science field to identify other valuable insights for the company and created a roadmap that can be built out in future and developed as the app grows in user numbers.















- Using data science to quantify benefits of using a data insights app for retailers
- Demonstrated how data-driven decision-making can drive sales, revenue and customer satisfaction
- Data-informed approaches to build competitive advantage and help expand into new sectors
- Created a digital adoption roadmap to support future growth of Margin Guardian and Squished app

Who we are

- 70+ computational scientists and technologists
- World-leading supercomputing and AI infrastructure
- Bespoke small teams built around your project
- Tailored business development support
- Access to our network of industry, academic and technology partners

What we do

- Boost productivity and enhance innovation for industry
- Big data analytics and artificial intelligence (AI)
- High performance computing and quantum simulation
- Training and skills development
- Insights into future technologies



Our impact on UK industry and society

The Hartree Centre was created by UK Government to help businesses and public sector organisations accelerate the adoption of high performance computing (HPC), big data analytics and artificial intelligence (AI) technologies. We play a key role in realising UK Government's Industrial Strategy by stimulating applied digital research and innovation, creating value for the organisations we work with and generating economic and societal impact for the UK.

The Science and Technology Facilities Council (STFC) Hartree Centre is part of UK Research and Innovation.

