## Better pricing for UK train operators and rail travellers

Dr Katharina Burger from the University of Bristol, with Raffaello Rossi from the University of Bristol and Elisa Becker from the University of Exeter, are collaborating with transport solutions company Esoterix, to interrogate rail travel data and make pricing recommendations to benefit both the train operators and rail travellers.

A recent Rail Delivery Group review called for more flexible, individualised, 'fairer' fare models, highlighting that many current fare structures (season tickets or one-off fares), do not offer good value, particularly for those working part-time, the majority of whom are women.

Dr Katharina Burger from the University of Bristol says 'This collaboration with Esoterix will allow us to offer insight into which combinations of travel patterns and fare rebates have the greatest potential to shift peak demand. We will make recommendations as to how the operator can ease capacity constraints and at the same time offer best price value for the different demographics of travellers.'

This includes insight into how socio-demographics affects travel demand behaviour and response to fare rebates and rewards, and how the effect of a rebate scheme can be predicted with confidence, using passenger travel demand history and socio-demographic information.

Liz Davidson says 'At Esoterix we spearhead new transport demand and simulation techniques, road-test new service models, and market-test new business models. The railway industry is our key focus and this is particularly relevant now with changes in travel patterns due to Covid-19. The outcomes from this project will help us refine the scope of future real-world trials.'

## Additional information

Project title: ELICIT - BEhaviouraL Incentive Capacity Trial

Funder: this project is funded by the Economic and Social Research Council Accelerating Business Collaboration fund.

People:

- Dr Katharina Burger is a Lecturer in Management at the University of Bristol, focusing on Behavioural Operational Research & Sustainable Urban Transitions. She contributes knowledge in the design of behavioural interventions and smart cities.
- Raffaello Rossi is a PhD student in the Department of Management at the University of Bristol. His research aims to identify whether gambling advertisement on social media is appealing to young people and children, in order to help improve advertising regulations.
- Elisa Becker is a PhD student in the Department of Psychology at the University of Exeter. Her research investigates how we might use emotion to our advantage when it comes to changing our food habits.

Company information: Esoterix develop innovative solutions at the interface of new technologies, mobility services, and social inclusion. Esoterix Systems <u>https://esoterix.co.uk</u>

For more information about the project contact: Dr Katharina Burger katharina.burger@bristol.ac.uk

## About the University of Bristol

The University is ranked within the top 10 universities in the UK and top 60 in the world (QS World University Rankings 2021); it is also ranked among the top five institutions in the UK for its research, according to analysis of the Research Excellence Framework (REF) 2014; and is the 4th most targeted university by top UK employers.

The University was founded in 1876 and was granted its Royal Charter in 1909. It was the first university in England to admit women on the same basis as men.

The University is a major force in the economic, social and cultural life of Bristol and the region, but is also a significant player on the world stage. It has over 20,000 undergraduates and over 7,000 postgraduate students from more than 100 countries, and its research links span the globe.