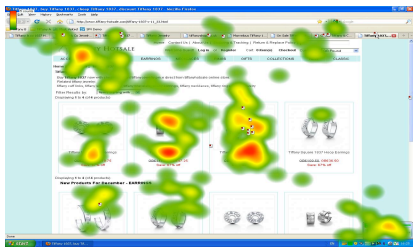


## CASE STUDY: THE S.O.L.I.D. PROJECT

### INDUSTRY – ACADEMIA R&D COLLABORATION



#### The Project

This case study focuses on the S.O.L.I.D. project which was an R&D collaboration between a company and an academic partner extending over a 6 month period from autumn 2009 to spring 2010.

#### The Partners

The company was First Cyber Security which specialises in internet security and brand protection and the academic partner was the Information Security Research Group within the Department of Computer Science at University College London.

#### The Sponsor

This R&D project was partly funded by the company and partly by the Technology Strategy Board which is the government funded organisation created to support technology innovation across the UK.

#### Collaborative Benefits

For the company the benefits included:

- identification of the software design elements to adapt to increase perceived speed and product intuitiveness
- robust review of the human interaction with the company's software
- product independently verified as one which helps prevent internet fraud
- built strong relationship with university partner for potential future research projects
- produced a very positive independent report and press release.

#### How the Partners Came Together

The team arose from a Digital Content Knowledge Network (DCKN) meeting where Rod Pugh, Managing Director of First Cyber Security networked with Professor Angela Sasse, Head of the Information Security Research Group within the Department of Computer Science, University College London. DCKN is an activity of South East Media Network ([www.semn.org.uk](http://www.semn.org.uk)).

Professor Sasse's specific research interests in usable and effective security, human-centred approaches to security, privacy, identity and trust matched well with First Cyber Security's business focus on internet security technologies and its specific project need.

#### The Project

First Cyber Security, in partnership with University College London, submitted an application for funding to the Technology Strategy Board (TSB) in the autumn of 2010. This was an application to the TSB's Digital Britain feasibility studies competition. This bid was successful and the resulting S.O.L.I.D. study ran from October 2009 to March 2010.

As part of this independent project, a team at University College London (UCL) led by Professor Angela Sasse investigated both consumer reaction to, and the usability of, First Cyber Security's S.O.L.I.D. Authentication® service. The resulting report entitled 'Effective and Usable Anti-phishing and web authentication tool' was published in the spring of 2010.

Uniquely targeted to protect an organisation's digital presence, the S.O.L.I.D. service allows customers to verify with just a glance that the website they are visiting is authentic and any associations claimed are real.

But one of the largest practical difficulties with current anti-phishing solutions is the failure of users to notice indicators from security software on the web page being viewed. The aim of the project was then to review and improve the human aspects of First Cyber Security's security technology when used by consumers transacting over the internet. The project looked at how easy the tool was to use, and how effective it was in assisting consumers to choose 'safe' sites to transact

## The Company: First Cyber Security

First Cyber Security ([www.firstcybersecurity.com](http://www.firstcybersecurity.com)) is a South East of England based company that has patent pending technology in the area of authentication of IP communication. Its foundation product S.O.L.I.D. Authentication® (Secure OnLine Identification) allows users to positively validate websites and protects them against fraudulent ones. S.O.L.I.D. Authentication® is significantly quicker than existing mechanisms for protecting against fraud as it can detect and warn in real time allowing fake sites to be blocked within minutes.

Banks, retail and government organisations can subscribe to the service and give their consumers a robust protection against fraud at no cost to the consumer. The SOLID 3PV™ and SOLID 3PX™ services protect brands against illegal use of their logos and trademarks, reducing sales of counterfeit products and protecting the brand.



### Academic Partner: University College London

Human Centred Security, Privacy, Identity and Trust team (HC-SPIT).

The HC-SPIT team is part of the Department of Computer Science's Information Security Research Group at University College London (UCL, [www.cs.ucl.ac.uk](http://www.cs.ucl.ac.uk)). It investigates new technologies and systems working independently with leading partners and within European projects. The interdisciplinary background of the team's members allow them to cover a broad range of research themes with a focus primarily on usable security systems (Biometrics, CCTV, general computer security) and secondarily on mobile systems, social networks, intelligent user interfaces and e-government.

A pioneer in this area, the HC-SPIT team provided the expertise First Cyber Security required in terms of design expertise, an evaluation of consumer engagement and undertaking usability trials. The absence of any IP conflict enabled the collaboration between the partners to proceed smoothly.

This project engaged Professor Angela Sasse, Head of the Information Security Research Group and Sacha Brostoff, Research Associate in the Department of Computer Science.

### The Sponsor: Technology Strategy Board

This R&D project was funded partly by the company and partly by the Technology Strategy Board (TSB) which is the government funded organisation created to support technology innovation across the UK ([www.innovateuk.org](http://www.innovateuk.org)). The TSB currently manages a range of programmes and delivery mechanisms to drive innovation. One of its activities is investing in and running competitions for funding for collaborative research and development (R&D), of which this project is an example.

The TSB invests in projects involving business and researchers working together to deliver successful new technology-based products and services. Over 700 collaborative R&D projects have received investment since 2004, amounting to over £1 billion (almost half from TSB and half from the businesses involved).

