



TRACE CASE STUDY: PRIVACY SERVICES

**TRACE SUPPORT
SMART DATA FOUNDRY**

**DATA STRATEGY GROUNDED
IN PRIVACY BY DESIGN**

CLIENT TESTIMONIAL

"Smart Data Foundry seeks to harness financial data to empower citizens, organisations and governments for social, societal and economic benefit. Data privacy, ethics and developing public trust in our research is very important to us. As a new initiative with a growing pipeline of projects, we are fortunate to build on extensive experience at the University (of Edinburgh) in hosting sensitive data for research, such as health data. We've been delighted to work with Sorcha at Trace Data who enabled us to put Privacy by Design principles into practice quickly and effectively. This has enabled us to accelerate progress against our mission whilst putting the right process and policy foundations in place, including building the right culture within our start-up team. The University has a strong ethos of working with industry including our local SMEs. Our work with Trace Data is a really great example of how the University can work with SMEs in a way that delivers mutual value beyond just a simple supplier relationship."

Kevin Collins
Interim CEO, Smart Data Foundry

EXECUTIVE SUMMARY

Smart Data Foundry is on a mission to safely unlock the power of financial data to drive innovation and solve big societal issues. Funded by UK Research and Innovation with a recent award of £22.5 million, £52 million of matched funding to catalyse its mission, Smart Data Foundry spun out of the University of Edinburgh.

In April 2020 Smart Data Foundry appointed Trace to provide Data Governance and Privacy expert services, with Sorcha Lorimer as their lead in this area. Sorcha's remit as interim Chief Privacy & Risk Officer was crucial to Smart Data Foundry and its Data Driven Innovation (DDI) wider initiative - the core principle of which is 'doing data right', which means using data as a force for global good, whilst always respecting user privacy, compliance and data ethics.

The appointment of Trace came at a crucial time for Smart Data Foundry, as one of its key projects was a longitudinal study of how humankind earns, spends and saves, through the lens of both consumers and businesses. These insights were critical to the development of public policy, particularly in the context of an economic crisis such as the one that has followed the COVID-19 pandemic.

The global health emergency heightened the need to tap into the power of data-driven innovation and insights, and for ethical data sharing to be fully leveraged to inform good public policy design. Trace worked closely with the legal and data science teams to champion an ethos of Privacy by Design, deliver data governance leadership and ultimately unlock the safe exchange of banking data.



RESULTS

Trace's work delivered:

- The unlocking of safe data exchange from a major bank for the first time, based on a Privacy by Design initiative and bespoke Data Governance Framework which was overseen and endorsed by the ICO, the UK data regulator;
- A data sharing framework which was adopted by the key stakeholders, including UK government departments;
- The architecture and design of a safe data model, in collaboration with with the Chief Data Scientist;
- The design of a Safe Data Haven for financial data rooted in a risk-based approach with particular consideration given to a custom process for mitigating the the risk of the mosaic effect (whereby individuals may be identified through a patchwork of data points);
- The delivery of a bespoke Data Governance Framework online course and suite of playbooks for both taught and self-directed Learning & Development; and
- A BluePrint and pathway for synthetic data and Privacy Enhancing Technology (PET) adoption.

Trace's work on this multidisciplinary and truly pioneering project drew on the team's extensive GDPR and data governance knowledge, and provides a classic case study illustrating our capacity to translate that knowledge into pragmatic frameworks, and data architecture and models to be used by data scientists and researchers.

We have since further expanded into the AI governance space, in recognition that this represents a nexus of highly sought after - and yet hard-to-find - skill sets spanning ethics, product design, information security and deep knowledge of the world's increasingly complex web of data protection and AI regulations.

This project and similar experience, including the creation of custom AI assessments for technology partners, means we are now well positioned to support *practical* AI adoption. For us, that means applying privacy engineering skills and toolkit design to deliver real world solutions.