ARUP

G-Cloud 14 Built environment data advisory

G-Cloud 14 Service definition document

Our firm

Arup is a global collective of designers, consultants and experts dedicated to sustainable development, and to using imagination, technology and rigour to shape a better world



Our aims

The aims and principles laid out by Sir Ove Arup in his Key Speech, continue to underpin our firm today

- Social usefulness
- Humane organisation
- Straight and honourable dealings
- Quality of work
- Reasonable prosperity

Who we are

We combine digital expertise with market knowledge to advise on the role of digital and data in the built and natural environment

We deliver services and solutions that solve complex challenges for our clients



Our strategy

We work with clients, partner and practitioners who share our commitment to create a sustainable future for everyone



Our partnerships

From climate change to city resilience, our long-term collaborations help us to tackle some of the world's toughest problems























Some of our clients







































Our G-Cloud 14 services

Digital service design and development

Discovery phase

Alpha phase

Beta phase

Digital Asset Information Management

Digital Strategy and Architecture

Built Environment Data Advisory

Digital Transformation

Digital Energy

Digital Water

Digital Transport

Experience Design

Digital for Sustainability

Digital Twins

Digital Planning

Co-Design

GIS (Geographic Information System)

Built Environment Data Advisory

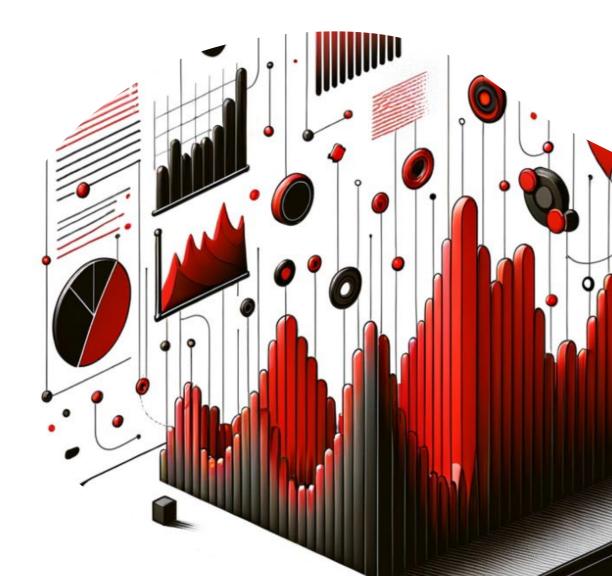


Built Environment Data Advisory

Introduction

Creating the strategic, policy, and technical framework required by complex infrastructure projects and asset management organisations.

Covering all aspects of the data lifecycle, from defining what data should be collected, to leveraging data to realise data science and Al outcomes.





Features

Features

- Co-design of a data vision
- Stakeholder engagement, comms, and usercentred design
- Data governance and information management policy
- Data specification, data architecture, and data modelling
- Data profiling, data quality, and data valuation.
- Ontology and taxonomy creation for interoperability

- Cloud data storage, data pipelines, and APIs
- Data analytics, dashboarding, and selfservice reporting
- Data science, Al and machine learning
- User engagement, adoption support, and training



Benefits

Benefits

- Prioritising investments in data around user needs
- Clarity on the roles and responsibilities for managing data
- Effective sponsorship and ownership of IT investment
- Identification and reduction of information security / data protection risks
- Better provision of meaningful information to users
- Scalable and extensible data platforms and data sharing

- Creating a 'single source of truth' for information
- Cost savings and efficiency improvements through leveraging data science and Al
- Retire legacy solutions
- De-risk delivery of new IT solutions



Who we've worked with







TRANSPORT FOR THE LOCATION THE





Network Rail, Exchange of Asset Information

Better information for a better railway

Arup defined the data architecture and data models (conceptual, logical and physical) to guide the system implementation approach (application, databases, integration) and to drive BAU configuration of the solution in line with a regularly evolving asset information specification of 1700 asset types





Transport for the North, Data Strategy

Better Data management for a single view of the truth

Arup led the development of a Data Strategy that helped TfN determine how they will use data to drive decision making. This defined the data governance approach, data management processes, KPIs and dashboards and data standards. The Data Strategy enabled TfN to establish a 'single view of truth' of its data, supporting more confident decision making and reducing the costs required to collect and maintain strategic data sets

