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# Geospatial as collaborative platform

Improving our built environment through a data driven approach

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# Drivers

Geospatial as a collaborative platform

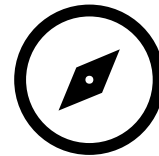


# Adoption

## Challenges



51.9209787°, 4.4810421°, 18m



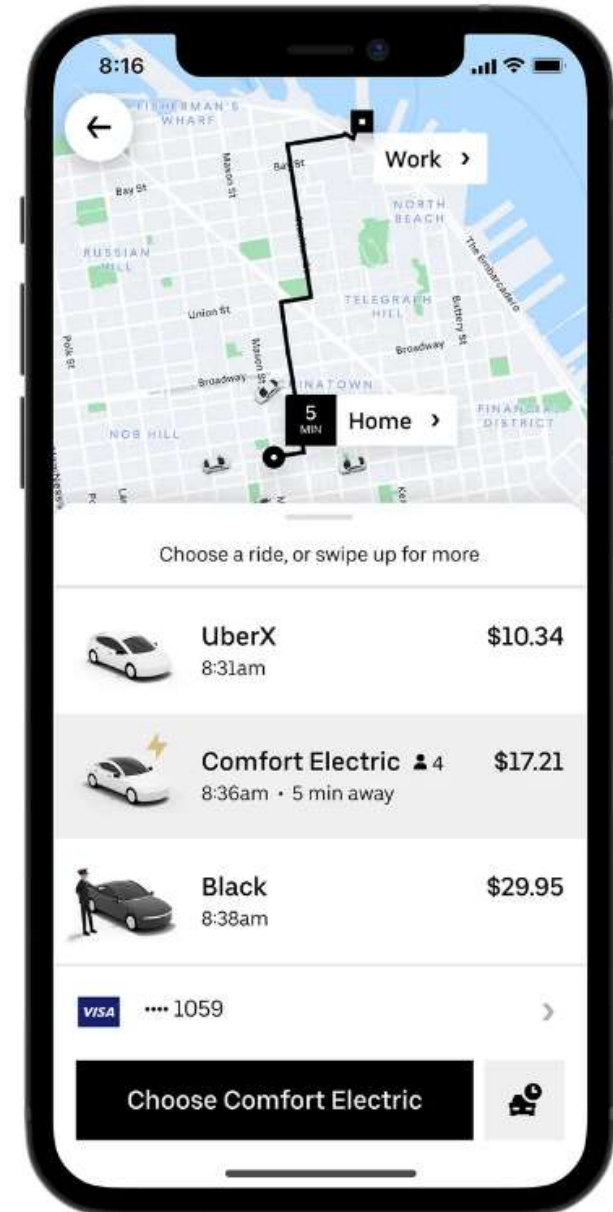
World Trade Center, Rotterdam

# Be More Uber

Simplify

Over **150 million** active users a month in Q4 of **2023**

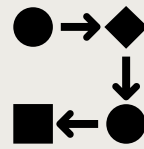
**28 million** trips per day on average in Q4 of **2023**



# Digital To Augment The Human



The Human enables the digital workflow



Processes



Governance, QA/QC



Capability building

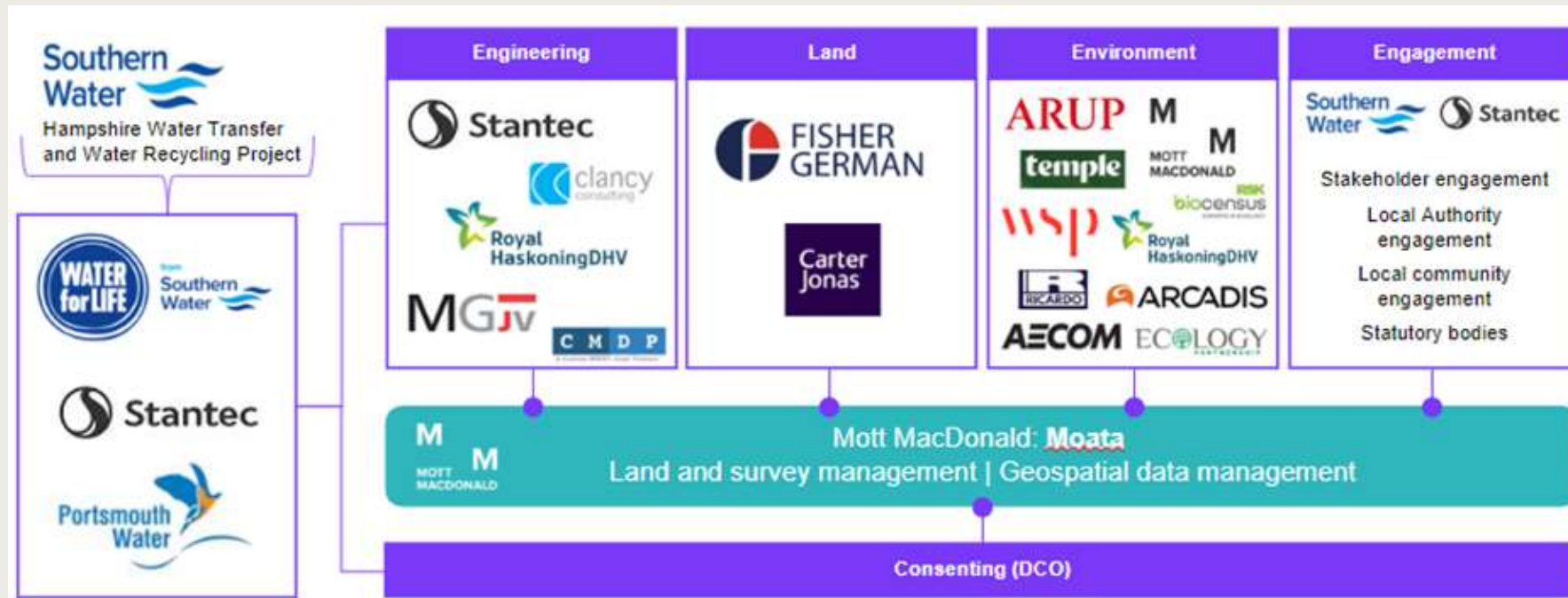
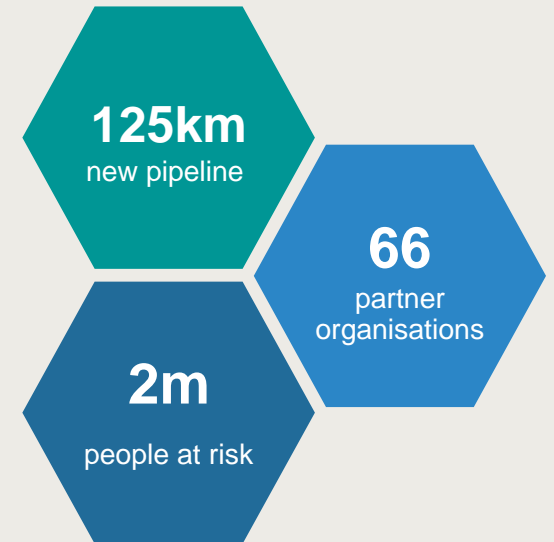


Supporting & awareness



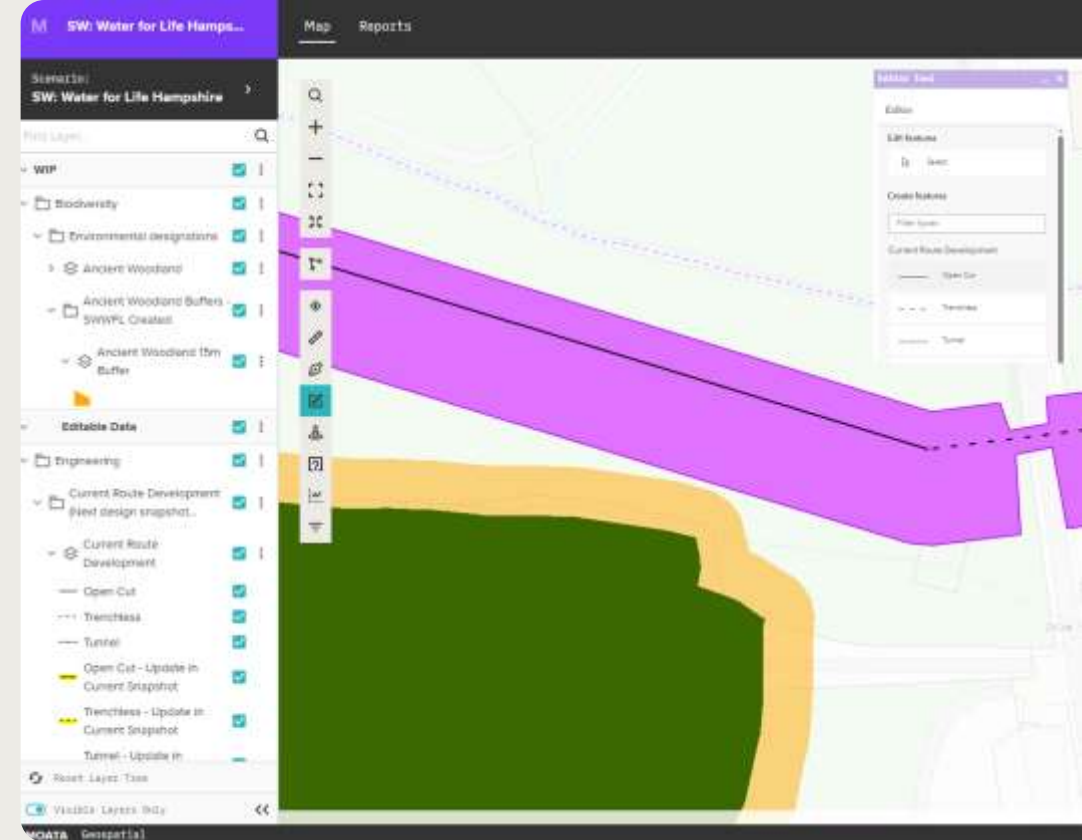
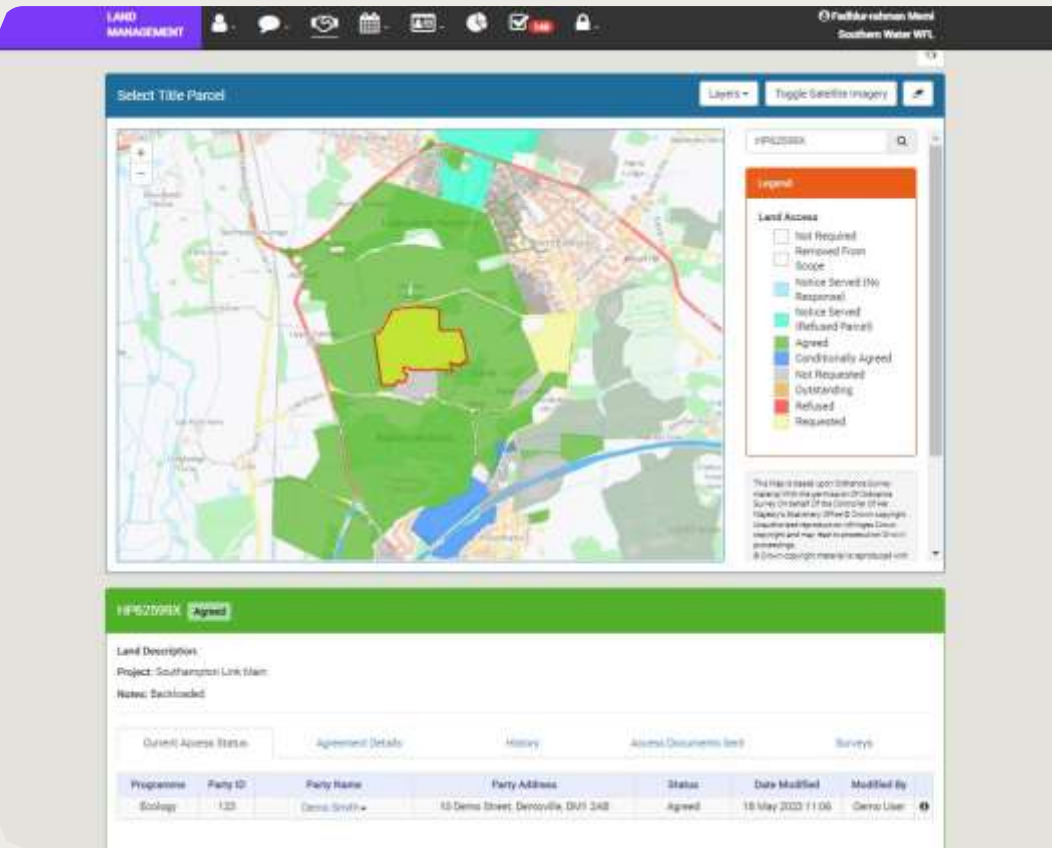
# Southern Water – Water for life

- A new, resilient and sustainable water supply to protect and enhance the county’s rare and sensitive chalk streams, while maintaining supplies for the communities and the local economy.
- Includes desalination and water recycling, new pipelines and a reservoir.
- The project’s scale required an **innovative digital approach**.



# Collaborative design process

- Intuitive, centralised system
- Full audit trail (used in consultation and reporting)
- Outline design in GIS



# Enhancing stakeholder engagement and survey management

- Intuitive, centralised system
- Full audit trail (used in consultation and reporting)
- Outline design in GIS



# Outcomes



*“It has given us a single source of truth on the Water for Life programme, saving us dancing around 5-6 versions of design across multiple organisations.”*

Civil Engineer, Southern Water

*It’s so important that the project stays on track, locals are relying on us to make sure their water isn’t cut off in summer, and we couldn’t have done it without Moata.”*

Project Design Lead, Southern Water

*“Moata Geospatial is so easy to use that it means people who have never used GIS before can pick it up instantly.”*

Engineer, Southern Water

# Strategic Pipeline Alliance

Partners: Anglian Water, Farrans, Mott MacDonald Bentley, Costain, Jacobs & Atkins

- Largest pipeline infrastructure project in the UK
- Creating a huge transmission system
- Delivering up to **500km** of new pipeline
- 315mm to 800mm in diameter
- Large pumping stations
- Large operational flow variations
- Complex control and automation
- Maximum move of **362 million litres a day**
- Investing **£400M** over 5 years



# The Alliance GIS



- Established during alliance mobilisation - enabled early collaboration and visualisation by alliance partners.
- Manages **1,200 datasets** from approximately **50 data providers**, from consenting through construction in to commissioning and handover.



- Standardisation of the technology stack.
- Joined-up approach across alliance partners.
- Consistent data model – single version of the truth.
- Improved data access and data quality confidence.



# The Alliance GIS



Digital Initiative of the Year at the 2021 British Construction Industry Awards.



*“It is an invaluable tool to catalogue all landowner engagement and track day to day interactions with those affected by the project. The geographical representation of the landownership is critical to best understand and help mitigate the impact of the scheme.”*

Land Programme Lead, Strategic Pipeline Alliance

*“Whilst the platform allows multiple layers of data, the real benefit for multiple teams using the tool is that they can view, upload, edit or delete data simultaneously without any loss of functionality to other users.”*

Andrew Holt, SPA Operations Manager





# Monitoring & Evaluation - Spatial Finance

Assets delivering on the promise of the design – feedback loop



## Baseline

What level of service might have been available and what were the local environmental conditions before the project?



## Environmental & Social Governance

How is the infrastructure performing against ESG goals through construction and operation phases?



## Improved Service

What has been the impact to the service user and how does it compare to the project design plans?



## Improved Operations & Maintenance

Are operation and maintenance cost and time reduced and health and safety metrics improved?



**Thank you**

