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CASE STUDY

Smart Mobility Living Lab

Executive Summary

In a game-changing collaboration, ITS Technology Group has been a driving force behind the success of Smart Mobility Living Lab (SMLL), turning it into a standout in the autonomous mobility arena – testing the next generation of clean, efficient, safe and reliable transportation systems throughout London. The project underpins ITS Technology Group's wider commitment to the InfraTech world, providing the necessary network infrastructure to understand the capabilities, opportunities and use cases of tomorrow's technology.

The partnership between SMLL and ITS has been underpinned by a solid, reliable, and fast full fibre network, giving SMLL the tools to rigorously test the next-generation of autonomous mobility solutions and set a new standard for innovation-led transport in the UK.

More than a regional effort, ITS has played a crucial role in enabling SMLL to set a connectivity standard that smart city technology relies on, allowing other regions to follow its lead in furthering smart city initiatives, all while minimising disruption by using existing Openreach ducts with essential code powers.

Background

SMLL kicked off in 2020, partially backed by government funding, to explore how new mobility services fit into city life, with an intention to explore the viability of smart city initiatives, including autonomous vehicles.

Using the well-connected Royal Borough of Greenwich and Queen Elizabeth Olympic Park as a testing ground for live traffic and other road users, SMLL discovered the opportunities of a tech-driven transport system, but a criticality remained clear: the need for a reliable connectivity model.

In a bid to overcome key budgetary restrictions, environmental disruption barriers and time pressures, ITS offered the vital infrastructure needed to understand fully how technology can be deployed in urban environments.

In summary, connectivity was the linchpin in understanding how systems work in real-life scenarios.



ITS-SMLL Relationship

The foundation of the ITS-SMLL connection was about keeping things running smoothly. SMLL's initial discussions with other providers presented costly builds, introducing budgetary challenges that could have endangered timelines and project progress. With this in mind, ITS worked out a practical solution throughout the tender process, using necessary code powers to reuse existing duct networks.

This allowed SMLL to deploy their revolutionary technology in a fraction of the time and ensure minimal disruption to the local community. Using 24km of private fibre network, SMLL and ITS sought to work together with a shared ambition for reliability, agility, and innovation.

The SMLL and ITS relationship is also underpinned by a shared philosophy to embolden and serve the needs of businesses across all sectors, including micro-SMEs to national players in automotive, insurance, manufacturing, road maintenance and telecommunications, and providing the next generation of ANPR technology and the ITS network to validate groundbreaking research and progress in digital transformation.

Role of Full Fibre in Powering Smart Cities

Full fibre's role in the success of SMLL's autonomous vehicle rollout demonstrates that full fibre isn't just about fast internet – it's the engine behind testing and validating smart cities of the future.



SMLL's need for the best quality equipment finds its match in ITS, delivering unlimited bandwidth crucial for feeding live traffic data through SMLL's data centres and validating groundbreaking research to deploy these technologies nationwide.



Future Tech and Team Success: Setting the Stage

One of the key features of SMLL and ITS' collaboration has been its commitment to setting a benchmark for the autonomous vehicle revolution in the UK. ITS's inherent network agility and flexibility have allowed SMLL and its key stakeholders to understand the maximum bandwidth requirements for its technology and work backwards to understand how other regions in the UK without the same ultra-fast infrastructure can deploy similar projects and their limitations.

SMLL noted that other smart traffic technologies require up to 200Mbps as a minimum, and while with ITS, this is entirely possible, other regions of the UK might not have this infrastructure in place, so this work is helping set the stage for other regions in the UK implement transformational initiatives in smart transport.

The success of this project isn't just about SMLL's ongoing operation; it's about the project becoming a model for similar solutions across the UK.



Real Success on a London Stage

SMLL itself has noted that the success of the project is exhibited through the fact that they're still actively working towards further smart transport systems in Woolwich and the rest of the borough.

ITS' simple yet effective solution provides SMLL with the autonomy to conduct their work, knowing they can rely on an always-on, resilient, future-ready network.

Going beyond local borders, this project stands out as a model for similar solutions nationwide.





Driving Towards Tomorrow

The shared ambition between ITS and SMLL goes beyond the current project, pointing to a future where autonomous vehicles and smart city initiatives take the lead. It's not just about infrastructure; it's a commitment to the world of tech innovation, ensuring ITS remains a vital force in shaping transportation technology's future.

The relationship is marked by mutual success, tapping into the zeitgeist of smart vehicles in an otherwise quiet part of London and establishing it as a driving force behind the UK's digital transformation initiatives. The collaboration underpins the ITS commitment to engage the wider world of InfraTech, ensuring that the UK has the infrastructure necessary to accommodate the technology that influences wider social change in transport systems, enabling a positive change on both regional economies, tech hubs and the environment.

“At the end of the day, ITS provide the plastic and glass, but the layers that SMLL have put on top of that plastic and glass is driving the thought leadership and innovation in the area.”

Justin Robinson, Client Director, ITS Technology Group.

“We've had minimal involvement with ITS because their network just works and was designed properly at the beginning...That's a testament to the network and ITS – it just works.”

Thomas Tompkin, Head of Network, Infrastructure and Operations at Smart Mobility Living Lab

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