CASE STUDY

Micromobility

Creating a UK Micromobility vision

WHO WE ARE

The Connected Places Catapult (CPC) is an independent, trusted, expert broker operating at the intersection between the public and private sectors and between local, regional and national decision making. We promote UK innovation and broker relationships between government, academia and industry providing support and solutions for innovators to commercialise their projects and research. With our deep expertise in technology, we bridge the gap between buyers, suppliers, innovators and industry. Our agile approach enables us to convene our partners to act rapidly to create new market collaborations responding to public funders and industry needs. We boost demand for innovation to unlock wider economic and environmental benefits.

> **CPC were able to mobilise very quickly to provide DfT teams with a broad understanding of this emerging market, a summary of international regulatory approaches and the potential for delivering impactful trials on the ground in the UK.**
>
> **James Tichler Mbioch CChem** – Science and Innovation Strategy Lead, DfT Office for Science, Department for Transport

Challenge

The term Micromobility is used to define more than just the much-hyped e-scooter. It is used to describe new smart, electric and space efficient forms of mobility. It provides a powerful tool for cities to achieve their transport policy and sustainability goals.

The global Micromobility market is forecast to generate revenues of $800bn in the next decade. It encapsulates a wide range of vehicle-based product, service, analytics and software innovation opportunities.

More than 100 million journeys have been made on e-scooters over the past two years and the sector has attracted over $1.5bn in investment. E-scooter company valuations are some of the fastest growing in the world and UK business has the opportunity to attract significant levels of investment by exploiting this global opportunity.

However, no country has yet developed a mature Micromobility market or set of regulations. Only when there is a comprehensive understanding of how to develop a robust regulatory framework, can the UK pursue the ambition to be a world leader in shaping the future of transport.

Personal mobility devices are diversifying and evolving with new technology.

Solution

CPC supported DfT in setting a vision for the implementation of e-scooters into the UK transport system by analysing the market potential for Micromobility and defining a framework for developing and regulating Micromobility trials.

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Department for Transport
Department of Science

In the first exercise of its kind, DfT commissioned CPC to undertake two studies into Micromobility innovation. The first provided analysis of global shareable e-scooter regulation and considered the opportunities and challenges for future legislation and regulation of Micromobility transportation [Link]. The second study examined the commercial viability of the shareable e-scooter business model. [Link]

Outcomes

CPC evaluated the potential to design regulation around the core product, service, infrastructure and the data sharing capabilities of Micromobility innovation. CPC also identified novel approaches to regulating Micromobility use and trials to drive the innovation in a direction that would meet the requirements of the Future of Transport Urban Strategy. CPC findings include:

- E-scooters are the first mass-market example of a Micromobility form-factor – many new products types will follow.
- Micromobility technology and business models offer new ways to change travel behaviour.
- From a UK regulatory perspective e-scooters are currently illegal to use on public highway.
- It is essential to build a strong evidence base using trials to support effective Micromobility regulation.

CPC creates value

Building on the findings of this project, CPC has created UK Micromobility vision and a high level roadmap which outlines how both UK cities and businesses can benefit from Micromobilty innovation. After the project completed in 2019, CPC went on to provide advice to the DfT's e-scooter Project Board around the evaluation strategy for national e-scooter trials in response to Coivd-19 in July 2020.

Benefits

- Rapidly building a comprehensive understanding of the explosive growth Micromobility vehicles worldwide. Over 250 cities around the world have seen e-scooter growth and consumer demand remains strong.
- Identifying the many new types of Micromobility vehicle that need to be considered by regulation. We expect new Micromobility form-factors to come to market that are lightweight, electrically powered and well-suited for last mile trips.
- Characterising the addressable market size. 50-60% passenger travel are under five miles which is the effective range of Micromobility vehicles.
- Developing a framework for analysing regulatory approaches to managing the supply and demand of Micromobility use. There are complex trade-offs to be considered when regulating Micromobility.

Next steps

Micromobility has the potential to complement cycling and walking and can make our cities more sustainable, but this can only be achieved through well designed regulation.

Micromobility success is dependent on both regulation and innovation working together. CPC will act to support UK trials that provide evidence as to the gaps between what current Micromobility services offer, and the aspirations of transport policy makers.

In parallel with supporting Micromobility trials, CPC will work with UK businesses to develop of new innovative Micromobility solutions for the UK and global Micromobility markets.

CPC's collaboration with DfT will help them to work successfully with both cities, innovators and investors to drive success from Micromobility regulation so that the UK becomes a world leader in this sector.

To find out more about the Connected Places Catapult and how we can help you develop the future skills that address the needs of your organisation please contact ***info@cp.catapult.org.uk***

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