Sustainable Transport Futures: Mobility as a Service

Clare Cornes
Westfield Technology Group/Salford University
Mobility as a Service: A concept

“Bundled offerings that facilitate using multiple means for solving everyday travel needs”

“A mobility distribution model in which a customer’s major transportation needs are met over one interface and are offered by a service provider”

“the essential idea is to see transport mobility not as a physical asset to purchase (e.g. a car) but as a single service available on-demand and incorporating all transport services from cars to buses to rail and on-demand services”

“...a transport concept that combines services from different transport modes to provide customised mobility services via a single interface...MaaS can be offered to users based on a monthly payment package or based on a pay-as-you-go fee, similar to mobile phone services”

“...the widespread adoption of portable and/or wearable internet-connected devices such as smartphones has opened up new possibilities in the transport sector...these are referred to as ‘uberisation’ by some and the creation of Mobility as a Service by others”

“The Mobility as a Service (MaaS) model aims to provide seamless trips over one interface by combining different transport modes and services”
Mobility as a Service: interest in academia

Interest across a range of topics/genres:
• Transportation economics
• Transport business and management
• Parallel and distributed computing
• Travel behaviour and society
• Computers and security

Key interest areas:
• Willingness-to-pay studies
• Transport accessibility in low public transport provision areas
• Possibilities for implementation
• Reviews of trial implementations
• Literature reviews
Mobility as a Service: Key components

• Offer seamless mobility
• Competitively priced
• Offers convenience and reliability that replicates what’s offered by privately owned vehicles
• Combine traditional modes with better operational circumstances i.e. higher service levels or more affordable
• A “mobility provider” or “MaaS operator” would know the real-time network information and would offer trips
• Integrated platform for purchasing tickets/packages
Mobility as a Service: Key challenges

• Data requirements and ownership within the MaaS system
• Role of public bodies and private operators
• Customer protection
• Policy implications
• Impact on transport planning and provision
• Operational models
• Impact on traditional modes and new innovations
• Responsibility of being the overall “service provider” or “MaaS operator”
Mobility as a Service: Key points

• Assumption of “it” being highly complex
• Policy implications which haven’t been fully considered
• Uncertainty due to disagreements between different stakeholders
• Commercial/business plan unclear
• The role of the private car is unclear in MaaS
• The “revolutionary driver” of MaaS is not yet clear
• Timescales for implementation and mass uptake
• Lessons to be learned from current operations in different locations
• How new modes will fit into the transport landscape
Mobility as a Service: New modes
Westfield Autonomous PODs

4-6 seater electric, shared autonomous vehicle

Operated on-demand at Heathrow Airport for over 5 years

Designed to provide first-last mile transportation

Integration into wider transport network

Trials planned for 2019: Queen Elizabeth Olympic Park, Manchester Airport, Birmingham city centre, Beijing,
Thank you

Clare Cornes
Intelligent Mobility Manager
Clare.cornes@westfield-sportscars.co.uk
c.cornes@edu.Salford.ac.uk
References


Bibliography


