

Unlocking Shared Mobility with Analytics

Smarter, Safer, More Convenient, Greener,
Optimised



Introduction



- Shared micromobility is built on top of a wave of new technologies: IoT, A.I., E.V., Big Data Analytics, Embedded Technology and more.
- Shared mobility is also at the leading edge of a sociological wave; the sharing economy.
- These two broad trends give us the opportunity to massively improve urban life. Cleaner air, less noise, fewer serious accidents, more open spaces, smaller carbon footprint.
- But there have been several false starts. Analytics is vital to the future of shared micromobility to ensure it is profitable and safe.

What's stopping the shift to shared micromobility?



- Cities & Authorities
 - Concerns about Safety, Compliance, Regulation and Control
 - Lack of data analysis for infrastructure planning and measuring impact
- Operators
 - Lack of profits – poor financial performance
 - Operational inefficiencies / 'gut feel' operations
 - Poor Compliance and 'Scooter Apocalypse'

Mobike's bad planning the problem, not Manchester
Manchester Evening News

The battle between regulators and e-scooter operators is about to heat up
Wired

Ofo cycle hire firm pulls out of London
The Guardian

Chinese bike-sharing start-up Ofo on verge of bankruptcy
The FT

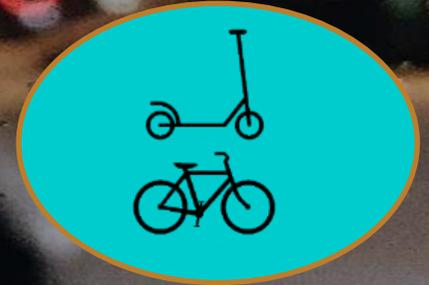
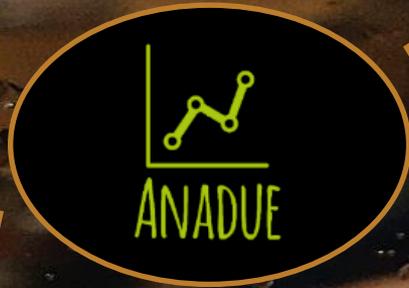
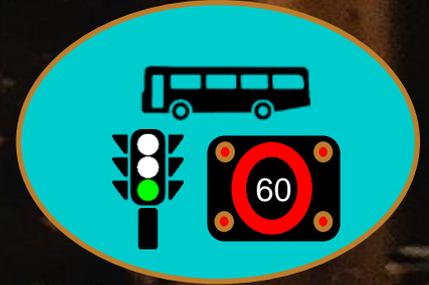
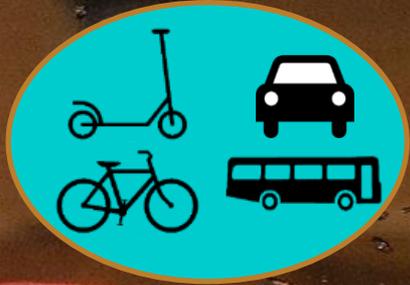
New law bans electric scooters in San Francisco until companies obtain city permits
ABC News



Shared Micromobility is a data-rich environment

- Most operators have detailed GPS tagged data on every event
 - Unlocking & Parking events
 - Individual trip data every few seconds of a ride (speed, direction, etc.)
 - Detailed data from the app on all customer interactions (adding credit, looking for a ride, etc.)
- Cities/Regulators can require Operators to share data:
 - Unlocking & Parking events
 - Aggregated Trip data
- What is generally inadequate is ANALYTICS

Analytics: Turning data into insights



Data Inputs

Mobility Dashboards

Analytics Provides:

- For local government – enabling smarter mobility: data-driven policy decisions
 - Plan pilots and infrastructure for micromobility
 - Manage compliance of shared mobility schemes
 - Measure impact on economy and environment
- For shared mobility scheme operators we provide:
 - Demand prediction to improve utilisation of fleet (increased revenue)
 - Analytics to alert compliance violations
 - Reports to make operations efficient and greener

Smarter Cities can better:

- Monitor compliance to scheme SLA
- Micromobility parking
- Scooterocalypse detection
- Cap on number of vehicles deployed
- Measure footfall to key locations using micromobility
- Plan safer streets for riders and pedestrians
- Introduce bike lanes on most popular routes
- Allocate correct capacity and location of designated micromobility parking
- Use micromobility to solve transport poverty (areas with poor public transport provision)



Smarter Mobility Operators

- Analytics and Operational Orders for
 - Avoiding compliance violations
 - Where/When to deploy bikes/scooters for maximum profit
 - When to recharge batteries for maximum cost/benefit
 - Streamlining operations to be cleaner & more efficient
 - Detecting fraud & vandalised scooters/bikes
- Increased Profits for sustainable operation
- Improved Service to customers
- Increased benefits to local economy and environment



IoT capabilities will expand. More data to analyse!

Fine weather ✓

No helmet X

One rider on scooter ✓

Free-moving traffic

Approved cyclepath ✓

Clear sidewalk ✓

No potholes ahead ✓

Speed appropriate for conditions ✓



SUSTAINABLE

Mobility

Mike Manchip: CEO
mike.manchip@anadue.com