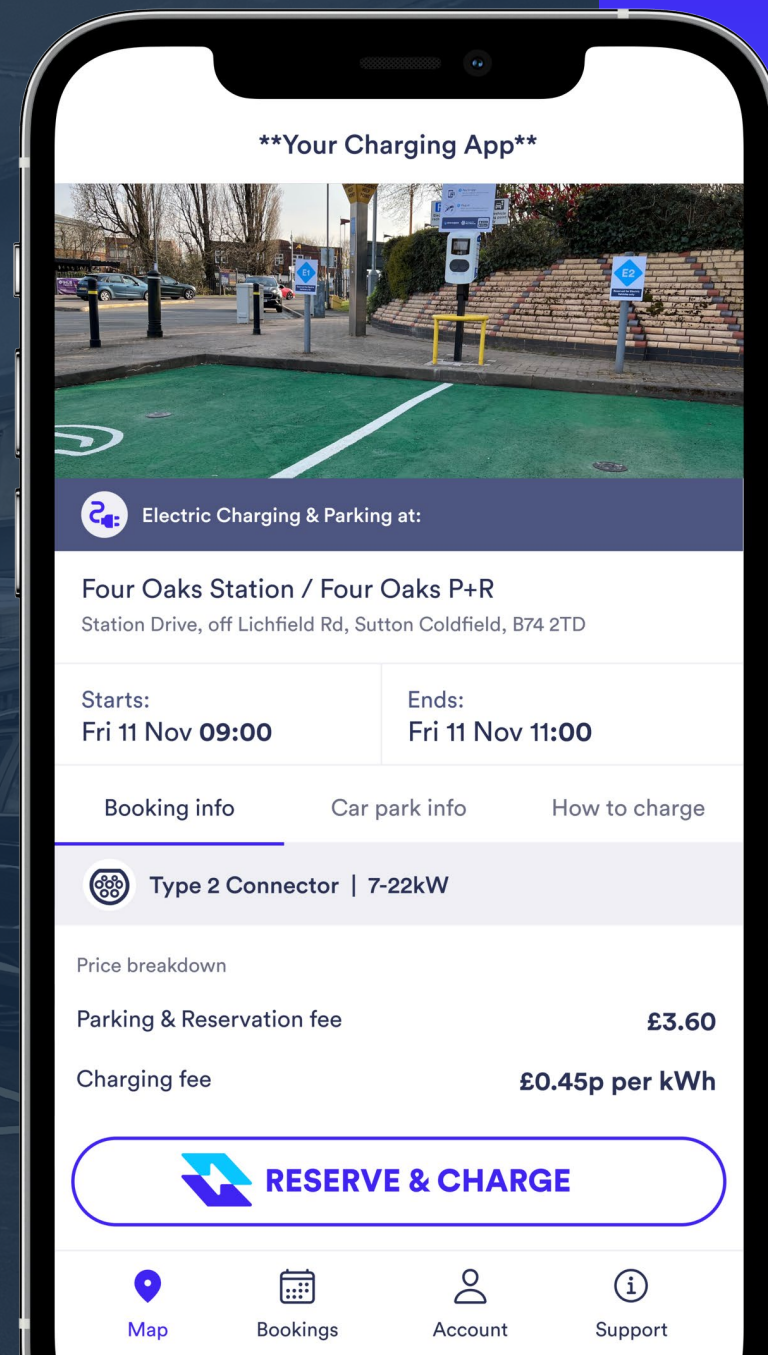




Smartly managed EV chargepoint reservations

Dr Ralf Kernchen, Founder & CEO

Transport Technology Forum - EV Working Group



Reserve & Charge

- **Based on** Save-a-Space parking reservation platform
- **15,000+ successful** parking space **reservations** across **10** train and tram station P&R car parks
- 8-month £360k **Innovate UK** demonstrator project to create Reserve & Charge
- **Technology developed** with **£900k** UK and European innovation funding
- Private investment secured



Parking reservations



EV charge point reservations

The EV infrastructure experience challenge



93%

Of EV owners use
public charge point
infrastructure ^[1]

3 of 4

EV owners unhappy
with EV charge point
reliability and
availability^[2]

£536M

Wasted time/energy
cost to UK EV drivers
per year ^[3]

More safe and convenient options to access EV charging, will encourage positive behaviour change and improve the public perception of owning an EV

Sources: 1 EV drivers survey-ZapMap, 2021 (online), 2 Which? Survey, 2022 (online), 3 Department for Transport, 2022



Smartly managed EV charge point reservations

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Problem

Inadequate EV infrastructure experience hinders EV uptake



Lack of EV infrastructure

Biggest barrier for the 40% of residents that don't have off-street parking



Charging anxiety

Uncertainty of finding available chargepoint, when and where needed



No demand management

Imbalanced site utilisation, 63% EV drivers experienced queuing for a charger

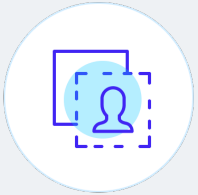


Charging anxiety solutions



Real-time availability

CPO, eMobility Service Provider and navigation apps use OCPI or other means to provide live charger status



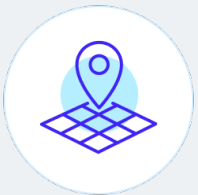
Virtual queuing

EV drivers can enter a virtual queue through apps and get notified when it is their turn



Reserve NOW

Remote locking of EV chargers when in vicinity (e.g., 15 mins in advance) using OCPI ReserveNow function

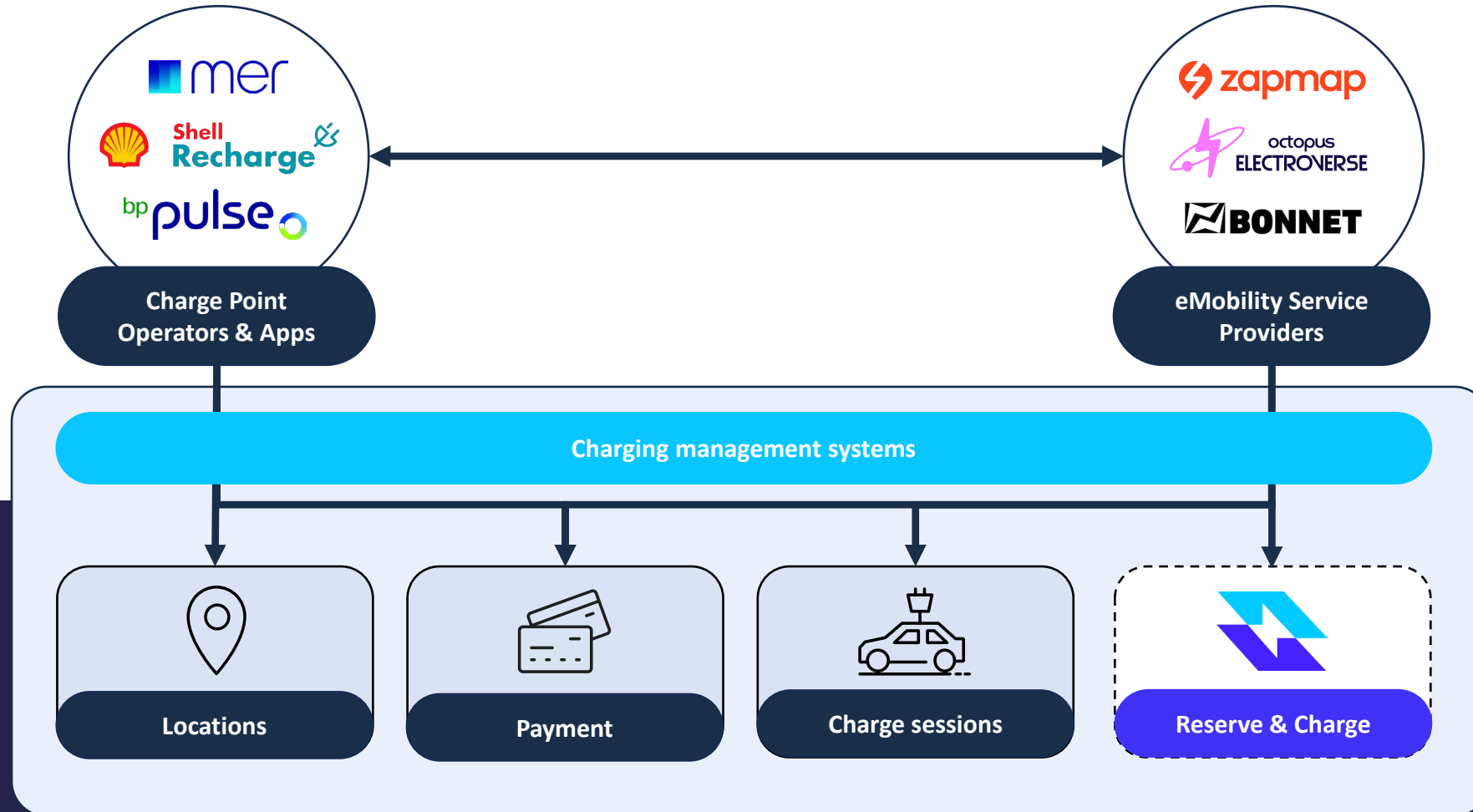


REAL reservations

EV Drivers reserve EV charge points in advance at specific locations with a date & time for their personal charging needs



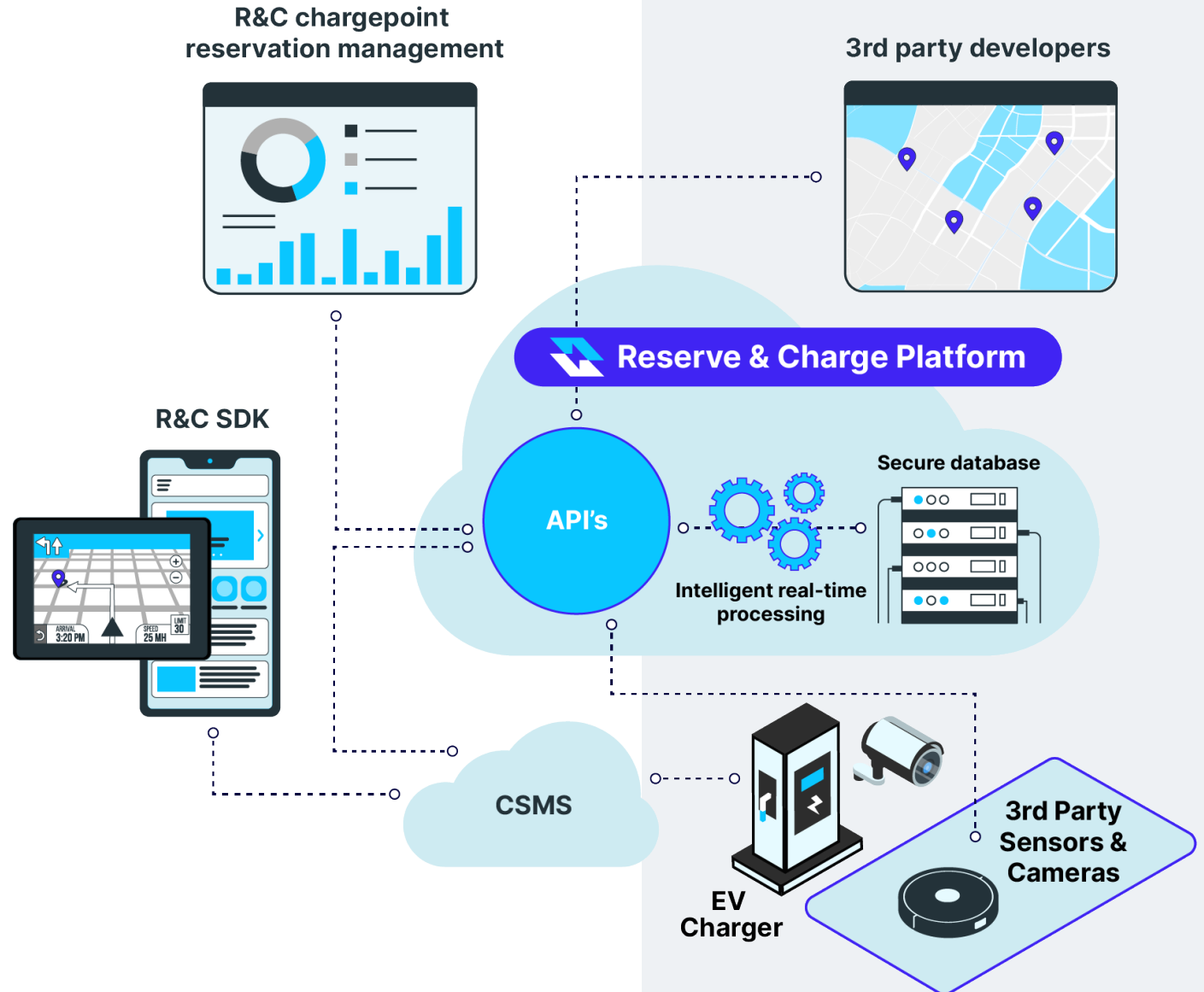
EV charging ecosystem integration



Reserve & Charge platform

Reserve & Charge is a system agnostic reservation platform

- Provides APIs for easy integration
- Design to work with any of your current CPO partners
- Fully configurable – Allows you to create individual parameters for each of your EV charging locations



Reserve & Charge Benefits

Short Term

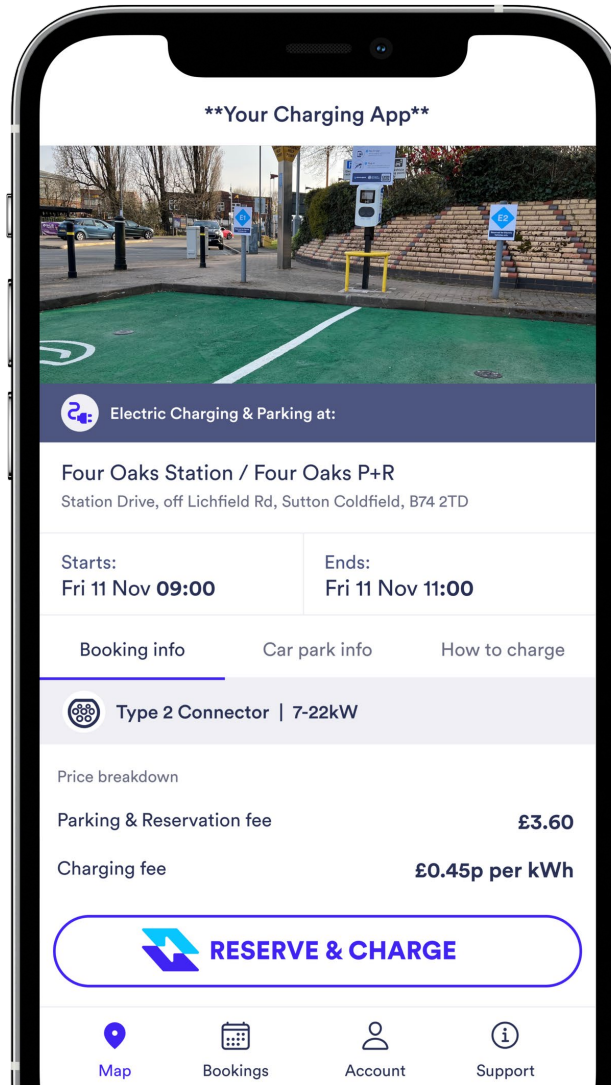
- ✓ Removes **charging anxiety and uncertainty**
- ✓ Reduces **time waste** and **congestion**
- ✓ Reduces **barriers to uptake** for EV drivers without off-street parking

Mid Term

- ✓ Accelerate **EV adoption**
- ✓ Help achieve **net-zero** targets
- ✓ Inform roll-out with localised data.

Long Term

- ✓ Actively **manage demand**
- ✓ Help **prevent** excessive infrastructure investment and maintenance **costs**



1 Reserve & Charge survey, West Midlands with 101 respondents, 2022

User feedback and surveys

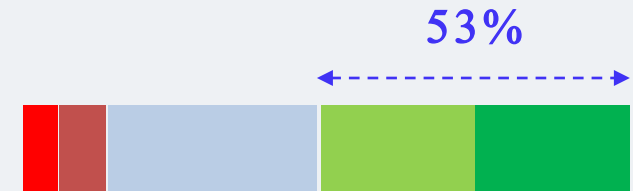
A short survey ran from 11-30 March.
It was distributed by TfWM and via social media



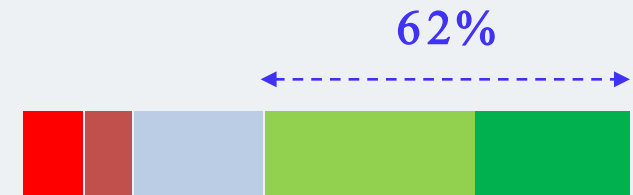
67% of respondents agreed or strongly agreed that using the Reserve and Charge service could **reduce** their **stress** around **finding available chargers**.



53% of respondents agreed or strongly agreed that **being able to reserve** a certain **brand of charger** might make that **brand more attractive** to them.



62% of respondents agreed or strongly agreed that knowing they could **reserve a charger** might encourage them **to drive longer distances in their EV**.



Strongly disagree Disagree Neither agree nor disagree Agree Strongly agree



Any Questions?



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