



Clearview Intelligence

making journeys work

Can there be “Positive Parking”

Scott Gow – Senior Solutions Manager

Background to the parking industry

P

c.7000 Car
Parks
c.17000 including
Healthcare &
Higher Education
(BPA, 2013)

P

Local Authority
Private
TOC's
Retail
Airport

P

c. 8-11 million
spaces in UK
(under-
represents non-
regulated)
(BPA, 2013)

P

Europe North
America worth
c.£5 billion rise
to c.£32 billion
by 2025 (Frost &
Sullivan 2014)

P

34.5 million
licenced
vehicles on the
road
(Juggins, 2013)

P

Most of these
vehicles spend
90 % of time
parked up
(Juggins, 2013)

2 million smart
parking spaces
to be installed
by 2021
(Juniper
Research, 2016)

P

Saves 4.2 billion
man hours p.a.
by 2021, ,saving
a working day
p.a. (Juniper
Research, 2016)

P

Parking: My journey so far

- For me, the journey began 23 years ago
- Before parking was even decriminalised
 - 1st exhibition was Parkex – Telford
- Characters I met in my early years
 - Many advances in the parking sector since
 - Legislative changes – 84, RTA91 and TMA
 - Handhelds
 - ANPR
 - CEO changing Roles
- Parking has become a business
 - Large revenues
 - Office improvements



The Science of finding a space

- 30% of congestion is finding a space (average from studies 1927-2001):
- **6 Minutes 45 Seconds** – increased up to 20 Minutes for major cities
 - 2546 Hours = **106 days of your life**
- 61 Billion journeys P.A
 - 64% by car
 - 75% of journeys are negative
 - 12% of journeys find parking painful
- 4.3 billion painful journeys
 - 72% have smart phones
 - 54% consider this as essential for journeys
- On average driver would pay 42 pence per journey to find a space = **£1.8 billion potential revenue**

Why is Parking so Integral

Every journey starts with a parked car and ends with parking a vehicle:

Many parking stakeholders:

- Local Authority
- Leisure
- Retail
- Residential

Transport

Rail

Airports

Ferry ports

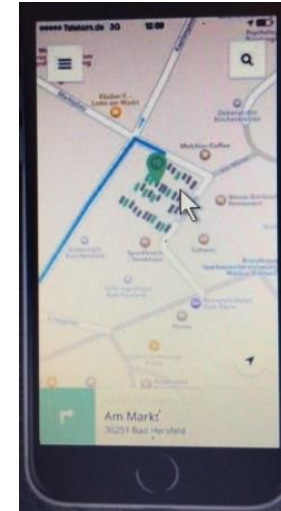
Park & Ride

Service Areas

All journeys are dependant on the network to park

How can technology make journeys better?

- Multi modal journey planning - most effective A to B
 - Car
 - Rail
 - Bus
 - Cycle
- Dependant on real-time availability
 - Otherwise car becomes the liability
- How can you collect space availability
 - Bay Sensor
 - Camera- computer vision
 - Loops/radar
- Present Space Availability
 - VMS – Full Matrix RGB multi purpose
 - APP - In Car – Sat Nav
- Utilising Journey Time to provide an added level of intelligence

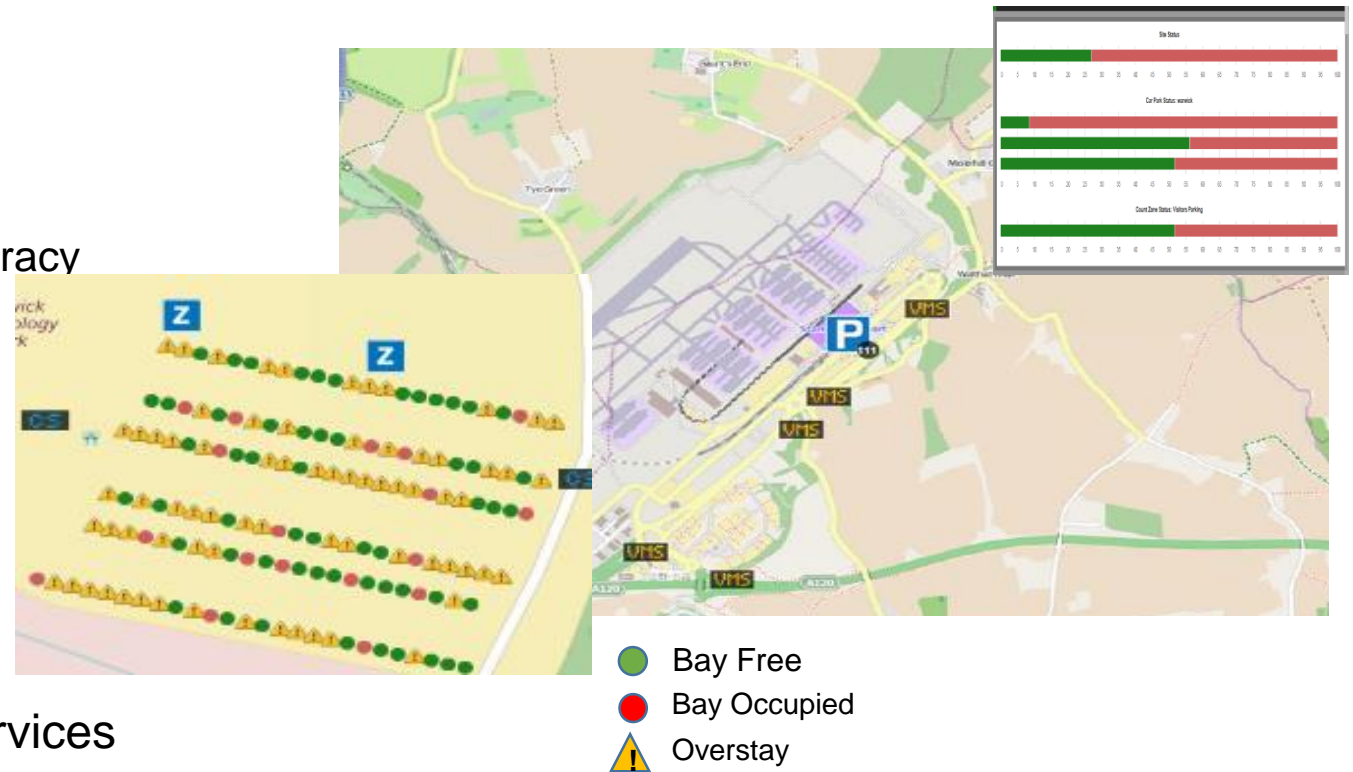


| | |
|--------------|------------|
| CAR PARK A | 27 SPACES |
| JOURNEY TIME | 5 MINUTES |
| CAR PARK B | 100 SPACES |
| JOURNEY TIME | 30 MINUTES |



Supporting effective car park management

- No silos - Integrated, innovative solutions
 - Combine technologies for increased accuracy
- Provide a holistic overview of the asset:
 - City/town
 - Street
 - Car park
 - Space
 - Reporting- heat mapping
- Enables the operator to provide better services
- With the Intelligence deliver a proactive and efficient service

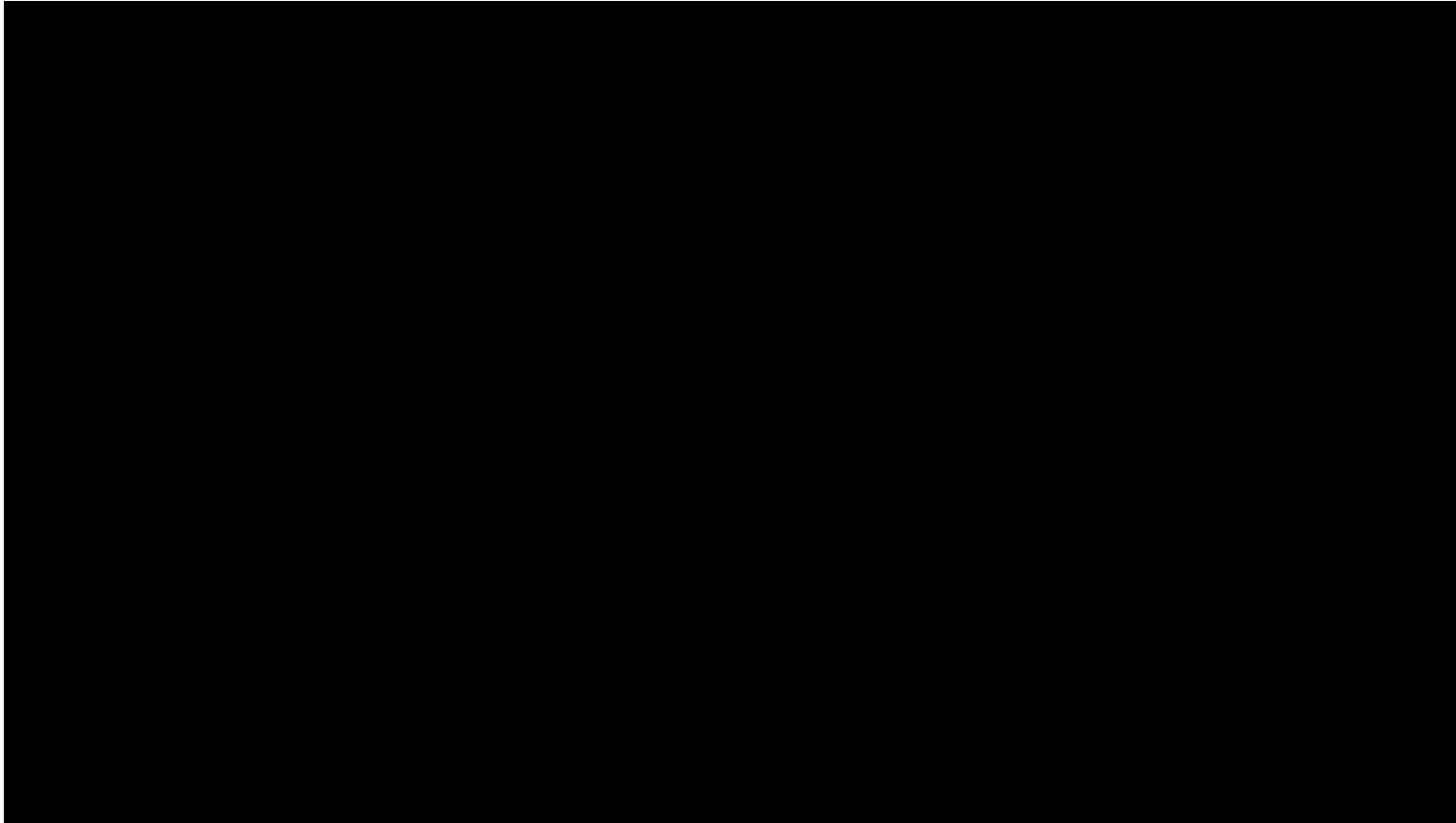


What is next?

- With Real-time availability:
 - Book/reserve in advance
 - Connected car – pay.....the car is the sensor collecting/sending data
 - Dynamic guidance to available spaces based on Customers preference.
- Dynamic pricing based on car park utilisation:
- Autonomous car !!!
- Buying time, not the car
- What is clear is that the parking industry has come a very long way

Bad parking at its best!

Finally, some emotions we have all experienced: initial amusement; confusion; disbelief; frustration, amazement; and (eventually!) exhausted relief to see the end!





Clearview Intelligence

making journeys work

www.clearview-intelligence.com