The Role of Parking in Smart Cities

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Definition of SMART CITY:

SMART CITY Definition

- A **smart city** .... incorporates information and communication technologies to enhance the quality and performance of urban services such as energy, transportation and utilities in order to reduce resource consumption, wastage and overall costs. (source: **Techopedia**)

- A **smart city** is a place where traditional networks and services are made more efficient with the use of digital and telecommunication technologies for the benefit of its inhabitants and business. (source **European Commission**)

Smart Dublin

Smart Dublin is an initiative of the four Dublin Local Authorities to engage with smart technology providers, researchers and citizens to solve challenges and improve city life

Source: https://smartdublin.ie/about/

SMART DUBLIN

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A Parking Tale

Dublin Airport – Mid 90's

How can Parking help cities to plan and react?

- Cities are in the Movement Business, helping people to move about and reach their destinations.

- Like any business, it is important for the City to understand the origin, destination and timing of movements within it.

- Who has the data relating to population movements?
  - Airlines, Ferries, Car Rental, Toll Roads, even Trains/Buses/Bicycles, all increasingly know who their customers are and what they are doing, through use of bookings, transactions and reporting systems.

  - Paid parking in our cities is a mainly anonymous act

  - Parking event data provides evidence to the data scientists

  - 'Big Data' finds the answers necessary to allow cities carry out Master Planning and create Smart Cities

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How to make Parking Smart?

What are other parking markets doing?

- Key phrases mentioned in video:
    - Last mile mobility services
    - Solutions to make end of journey effortless
    - Integration between technology providers and municipalities

- Emphasis on improving the customer's journey and integration of intelligent systems

- What would need to be done to make all that happen?

- **Buy-In** from
    - Parking industry players
    - Customers

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Parking Industry Buy-in

- For the **Parking Industry**, cooperation means involvement and agreement among:
  - Owners
  - Parking Equipment manufacturers
  - ANPR manufacturers
  - Toll tag suppliers
  - Access Control system suppliers
  - Bay monitoring system integrators
  - Reservation engine providers
  - Website developers
  - Cashless payment handlers
  - Network infrastructure providers
  - Car Manufacturers
  - Regulatory bodies

Customer Buy-In

Customers will buy-in if they get:

- Deals
- Convenience
- Reserved Spaces
- Dedicated lanes
- Trip history
- Receipts
- Loyalty rewards program
- VIP Parking Areas
- Added services – car wash, valet parking, etc.
- Communication channel
- Convenience!

With industry and customer buy-in comes BIG-DATA

Summary

In Summary

- SMART CITIES rely on intelligent technologies

- Parking has changed

- Data modelling is essential to effective 'Smart City' planning

- Open data flows between Parking Industry **suppliers** is essential

- Convenience and value are key to **Customer** Buy-In

- **BIG-DATA** is the essential by-product

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Thank you for your attention