

# Smarter Cities & Communities

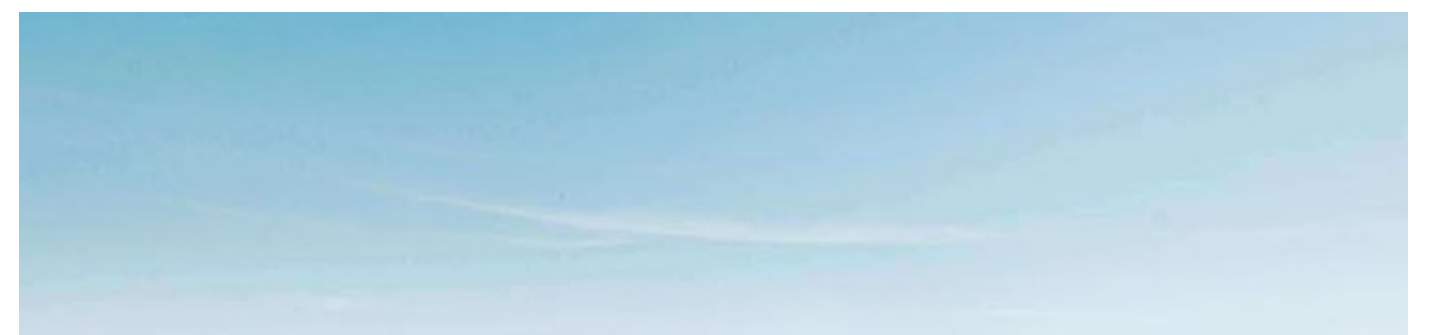
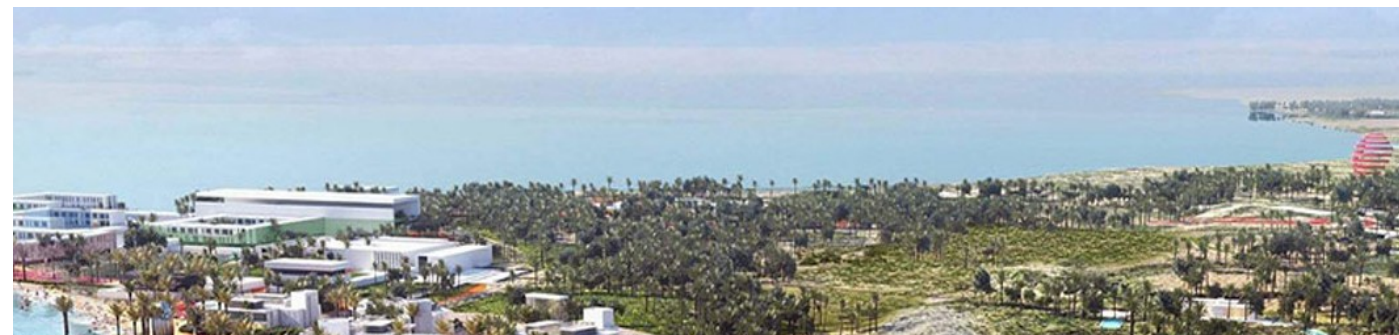
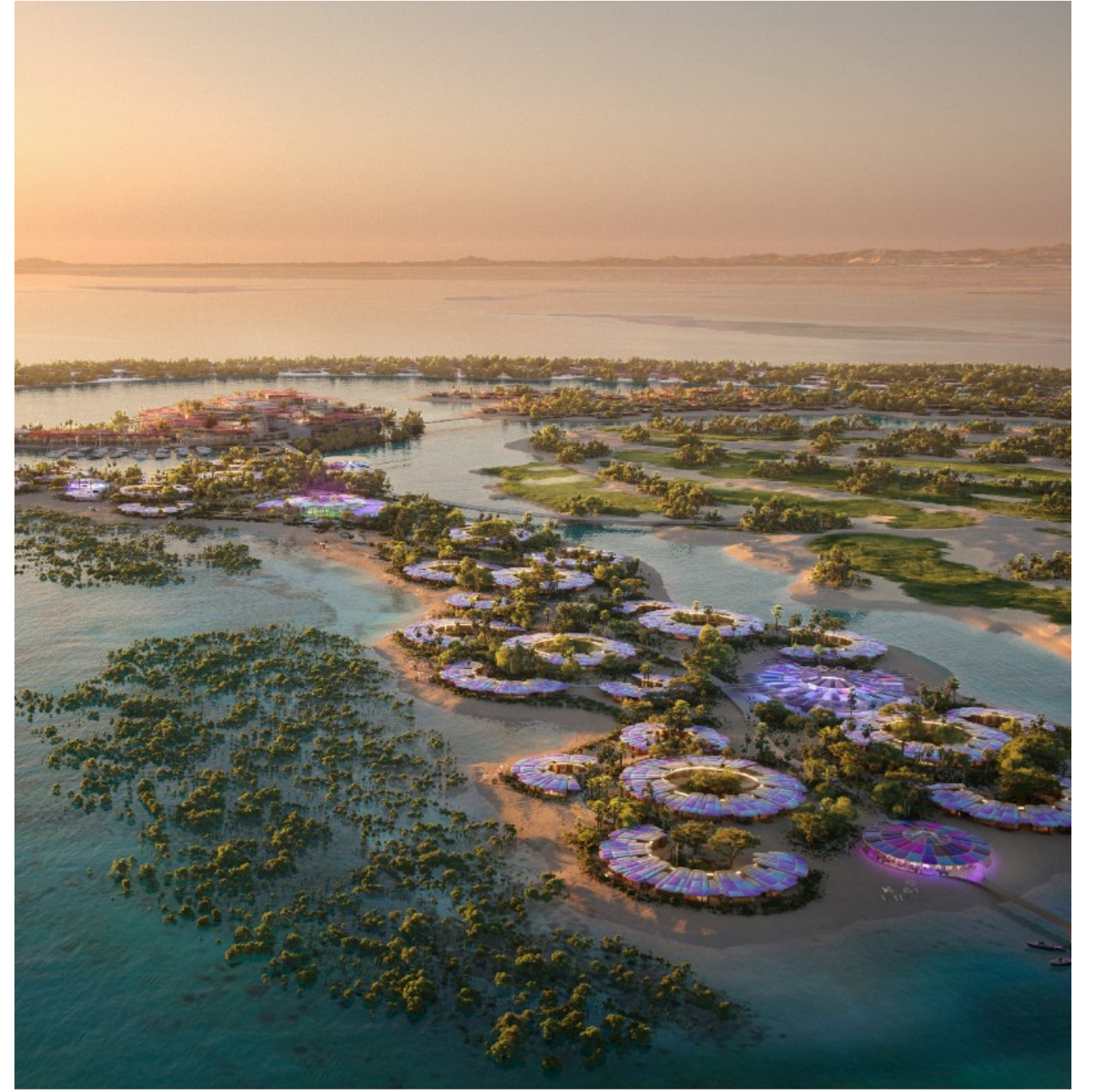
## Infrastructure Evolution not Revolution

**By: Abdulrahman Almoaiqel**  
Chief Commercial Officer  
TAWAL



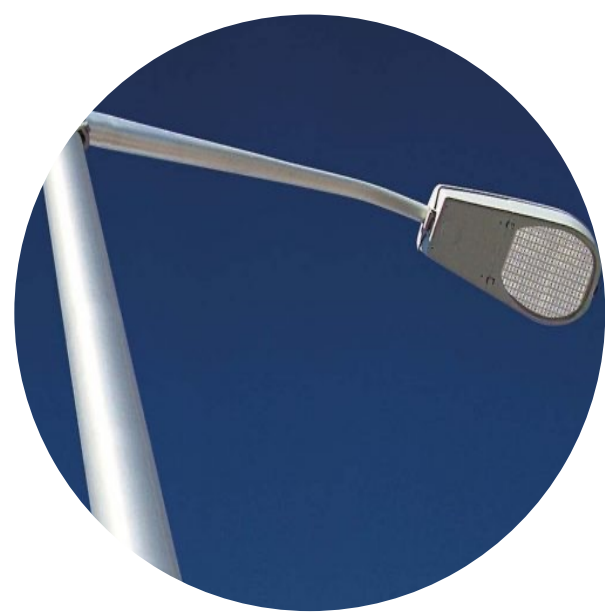








# Segregated ICT Infrastructure..



SMART LIGHTING



CCTV



DIGITAL SIGNAGE



SIREN



MOBILE NETWORKS



SMALL CELL



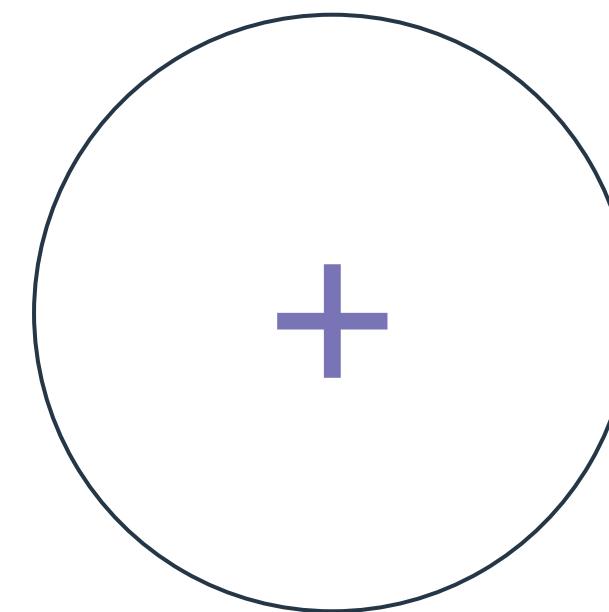
EV CHARGERS



WEATHER SENSORS



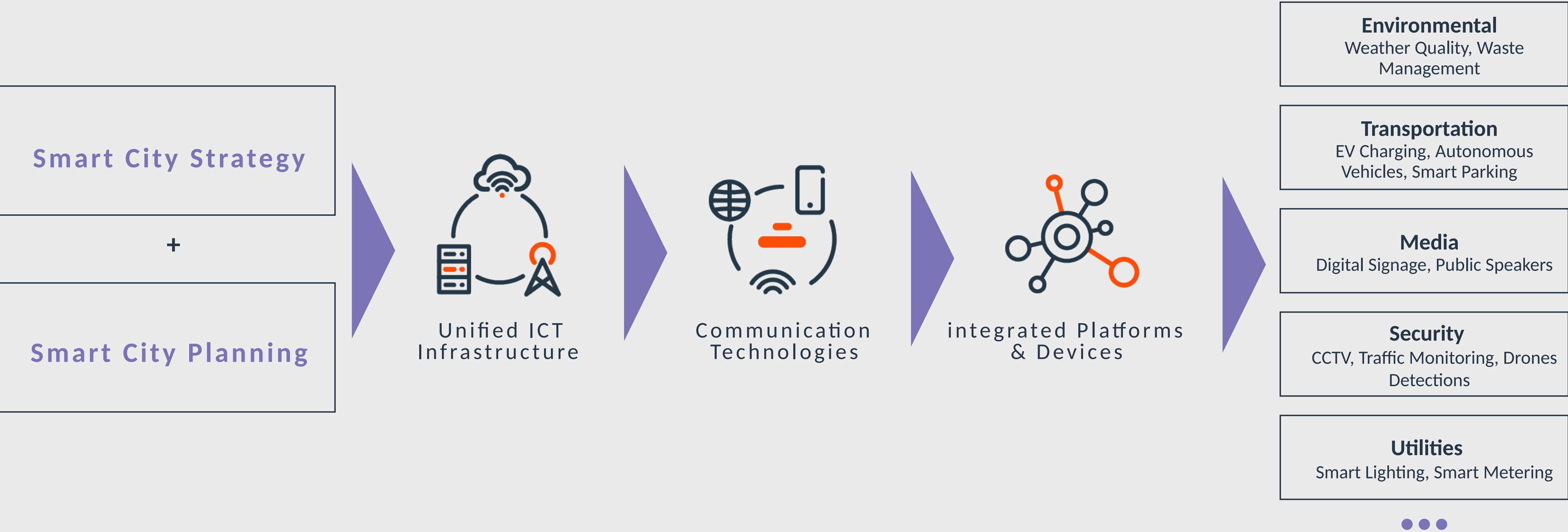
WI-FI NETWORKS





# The Clear Strategy & Planning

for the Infrastructure and Applications are the Key Factors of Successful Smart City Development

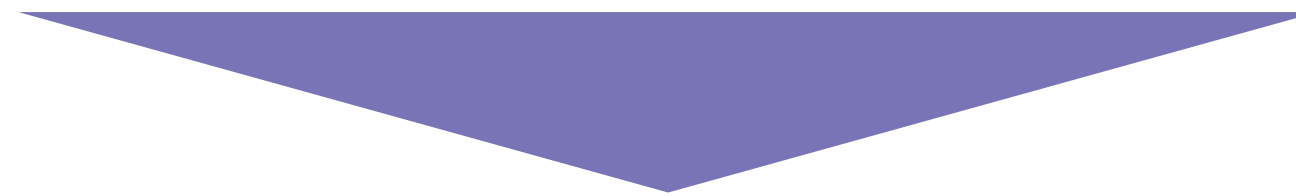
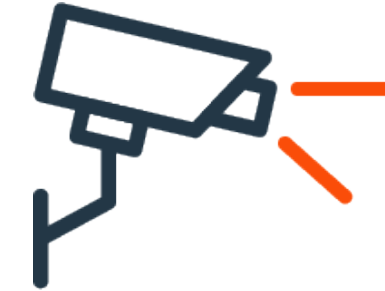




# Consolidated ICT Infrastructure

is the Optimal Model for Smart Cities & Mega Projects

Smart City Applications



Consolidated Infra.



Fiber



Towers



Small Cells



IBS/DAS



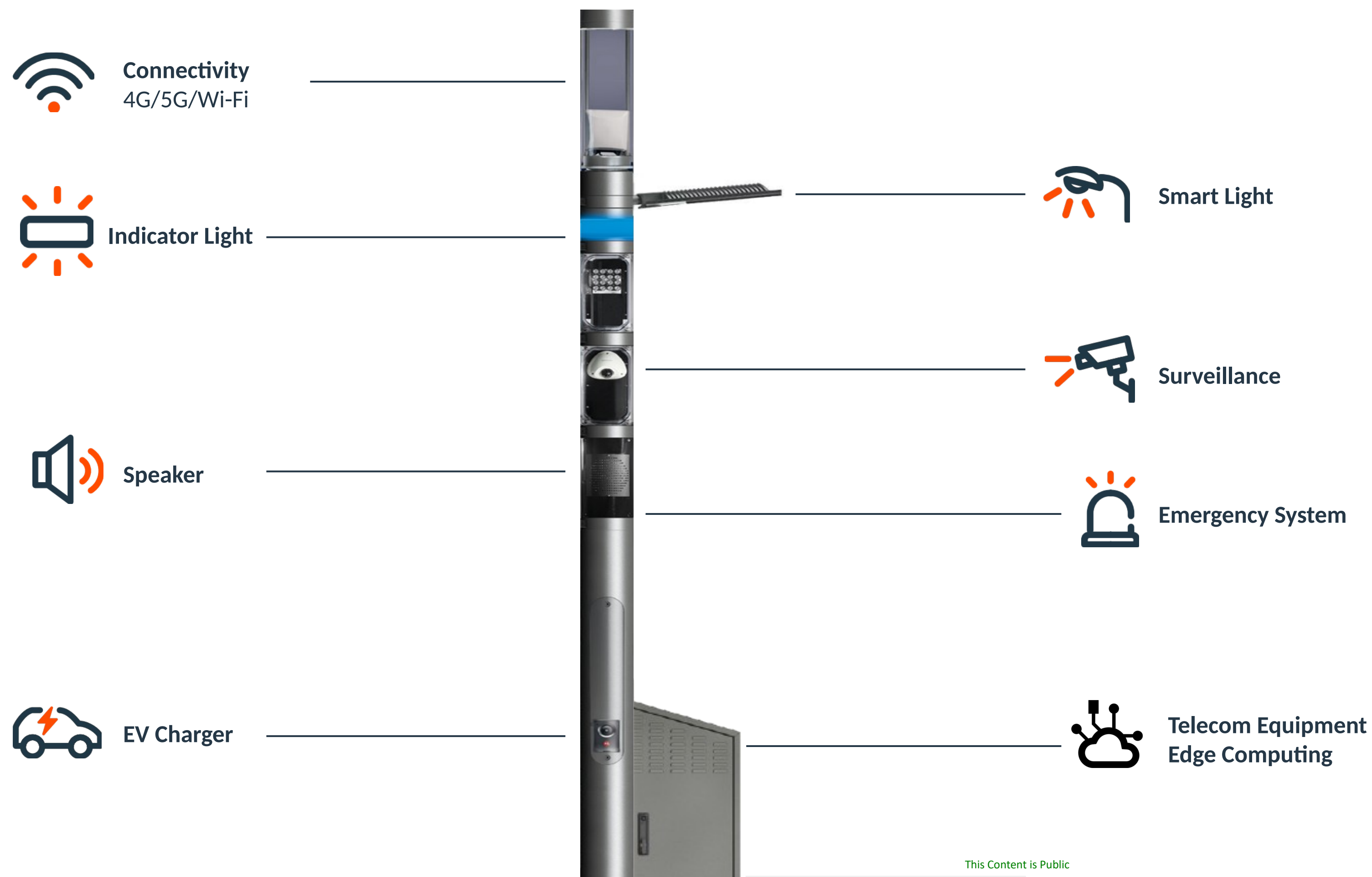
Smart Poles



Data centers



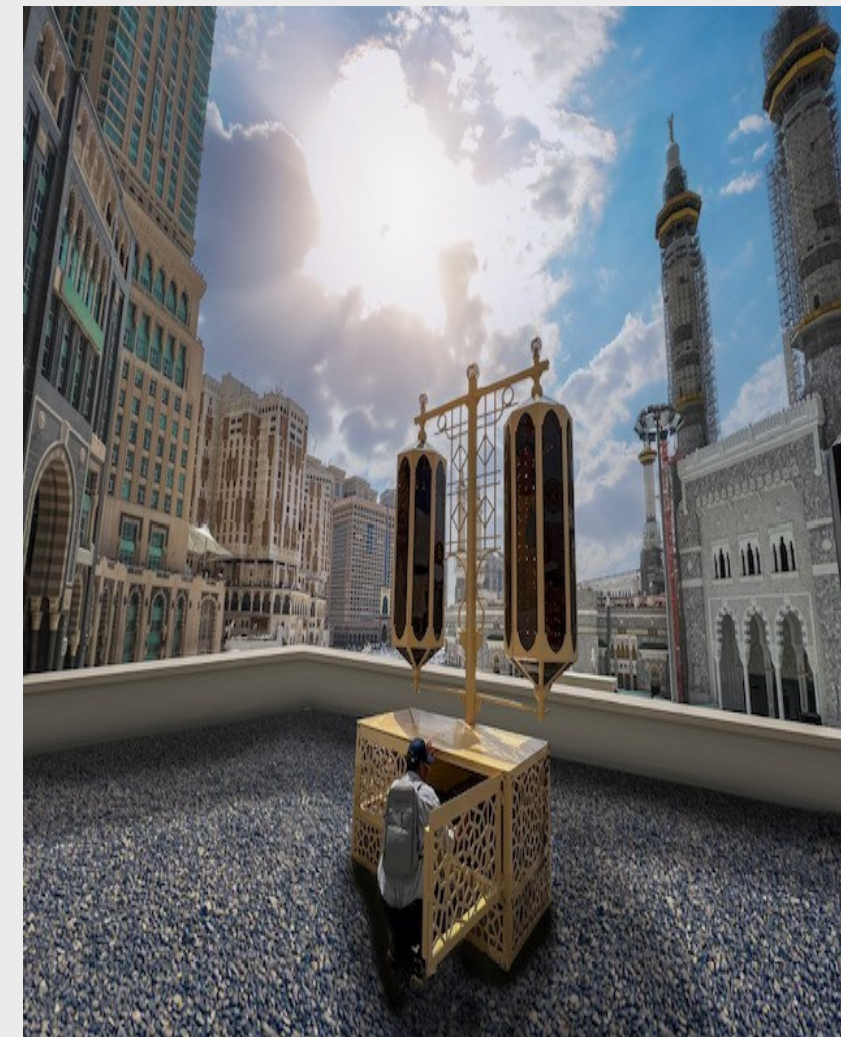
# Smart Pole is a clear example of Consolidated ICT Infrastructure..



Custom modules developed for customer needs



# Consolidated Infrastructure is a driver for city esthetics improvement as well





# A robust digital infrastructure is vital to enable these smart city use cases

## Hardware Layer

Gathers data

- Sensors
- IoT Devices

## Connectivity Layer

Transmits of data through the communications network

- High Speed Broadband
- Cellular Network / IoT Network
- IoT Platforms / Devices Management

## Application Layer

Converts of raw data to alerts, insights and action

- High Speed Broadband
- Cellular Network / IoT Network
- IoT Platforms / Devices Management



Fiber



Towers



Small Cells



IBS/DAS



Smart Poles



Data Centers



# Consolidated Infrastructure will result in...



Cost Saving



Scalability



Fast Time-to-Market



One-Stop-Shop



Avoid Redundancy



Variety of Choices



# Some of The Use Cases That Could be Enabled through Consolidated Smart City Infrastructure







# EV Charging Infra.







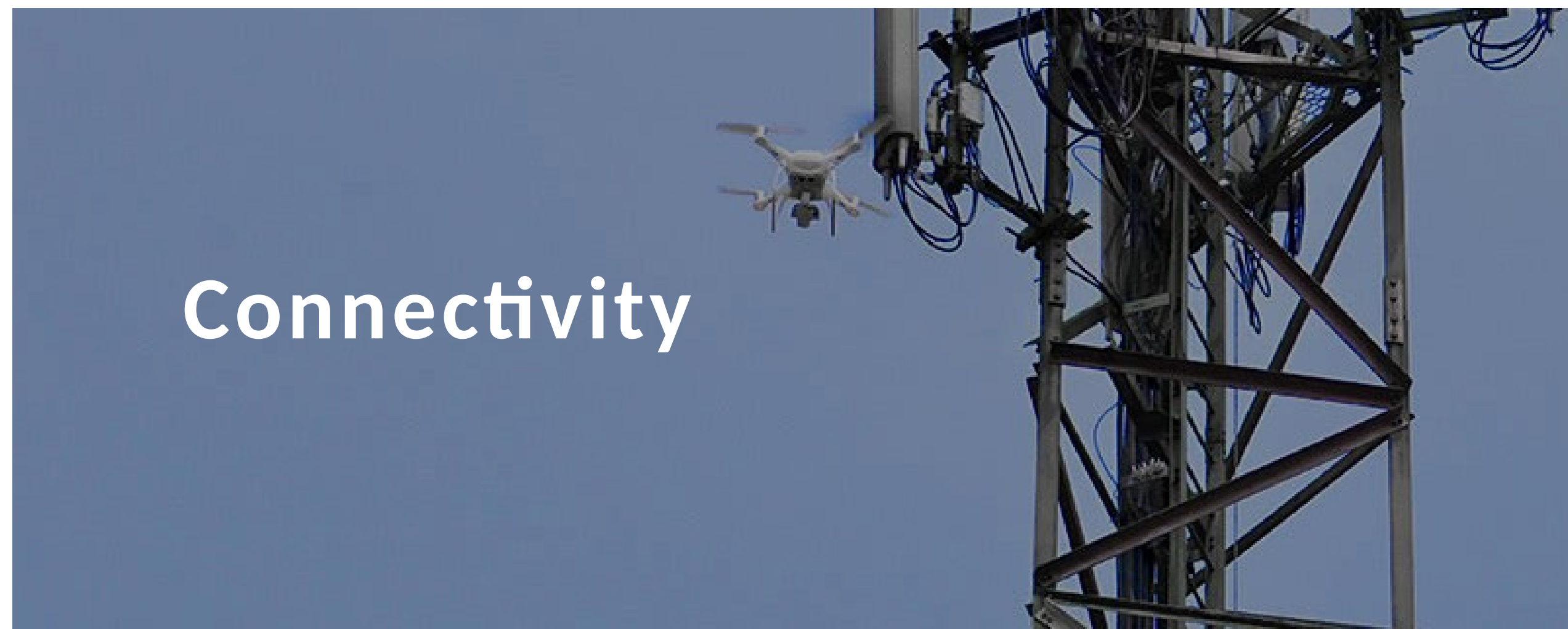
**Charging Station**



**Drones Infra.**



**Drone Detection**

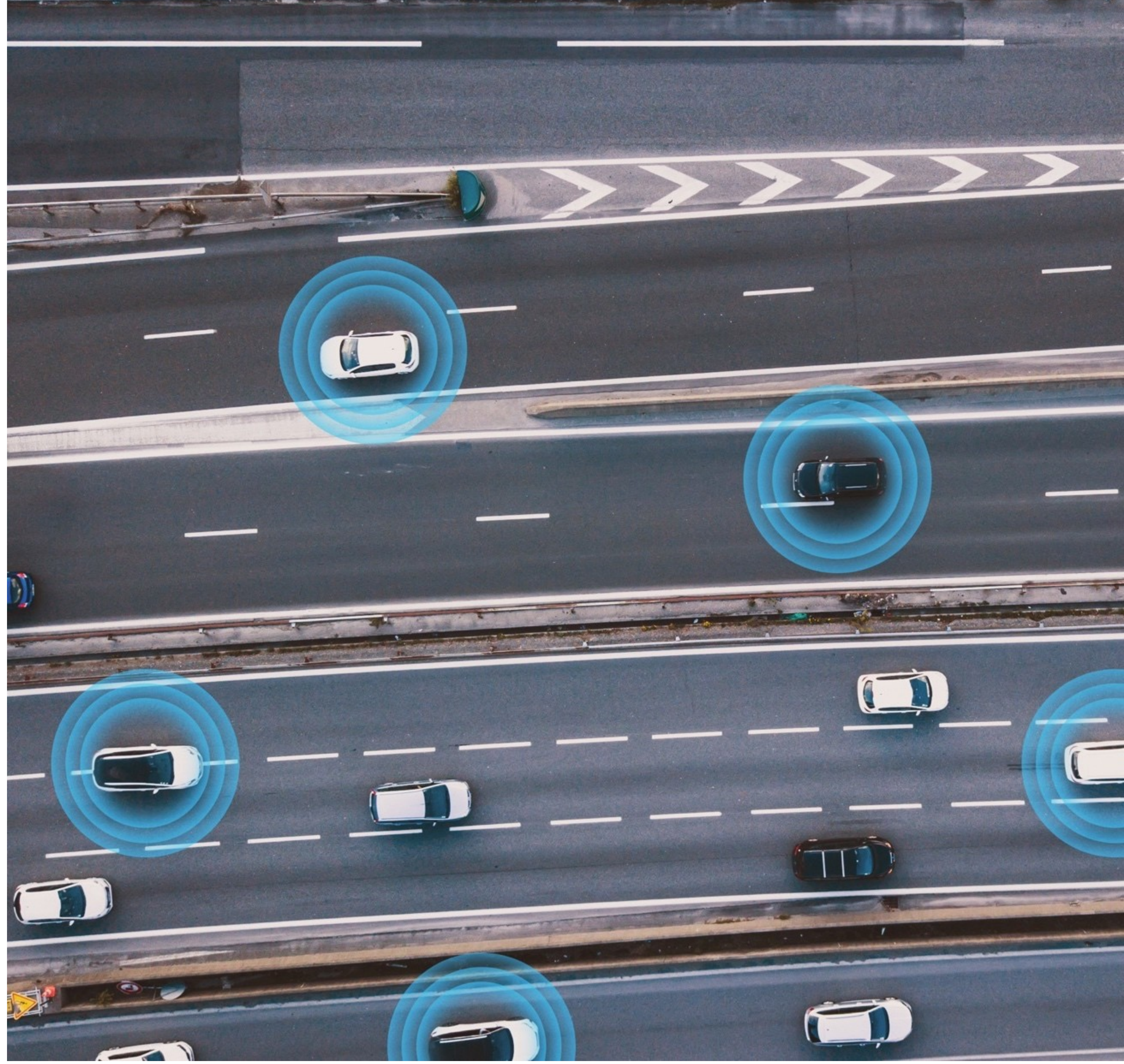


**Connectivity**





# Autonomous Vehicle Infra.



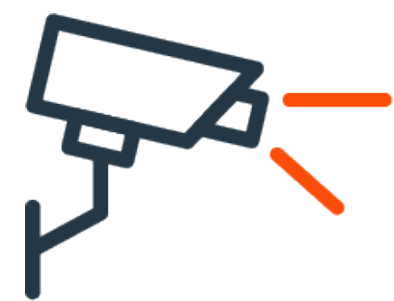




# Edge Computing







## Transportation & Traffic Management Infra.

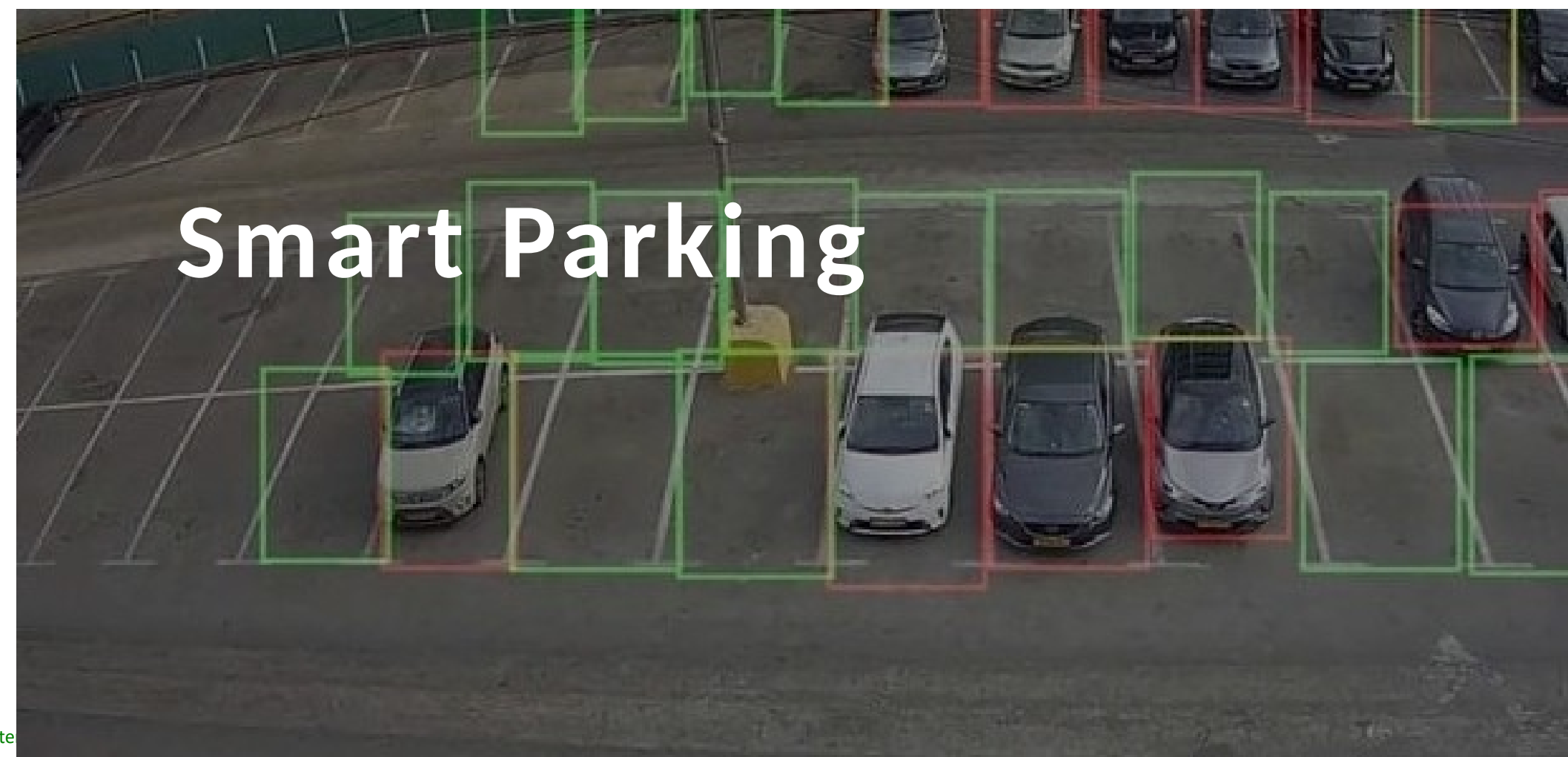
Speed Radars



Traffic Enforcement



Smart Parking







# Smart Kiosk





# Infra. Marketplace

Technology Providers





# The Main Factor To a Successful Smart City Deployment is The Partnership Model





# SMART CITY

BUILDING TOMORROW'S CITIES







**SMALLCELLS**  
WORLD SUMMIT

**Thank You ..**