AWS Public Sector IoT Solutions

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Agenda

- Partner Success Stories

- Smart Territory Framework

- Demos and Q&A

Smart City Solutions

Smart water
Water network asset management, AMR/MDM, water quality and level monitoring, leak detection/NRW, utility digital twins

Building management
Automation and optimization of services such as heating, energy, usage, lighting and ventilation

Air pollution control
Controlling CO, emissions of factories and monitoring car pollution

Citizen services
Digital administrative services, citizen engagement platforms, city call center/chatbot, queue management, etc

Smart transport
Connected public transport, public fleet management, optimizing traffic flow, anomaly detections

Smart lighting/Public Safety
Connected/smart lamp posts with intelligent video surveillance and crowd management
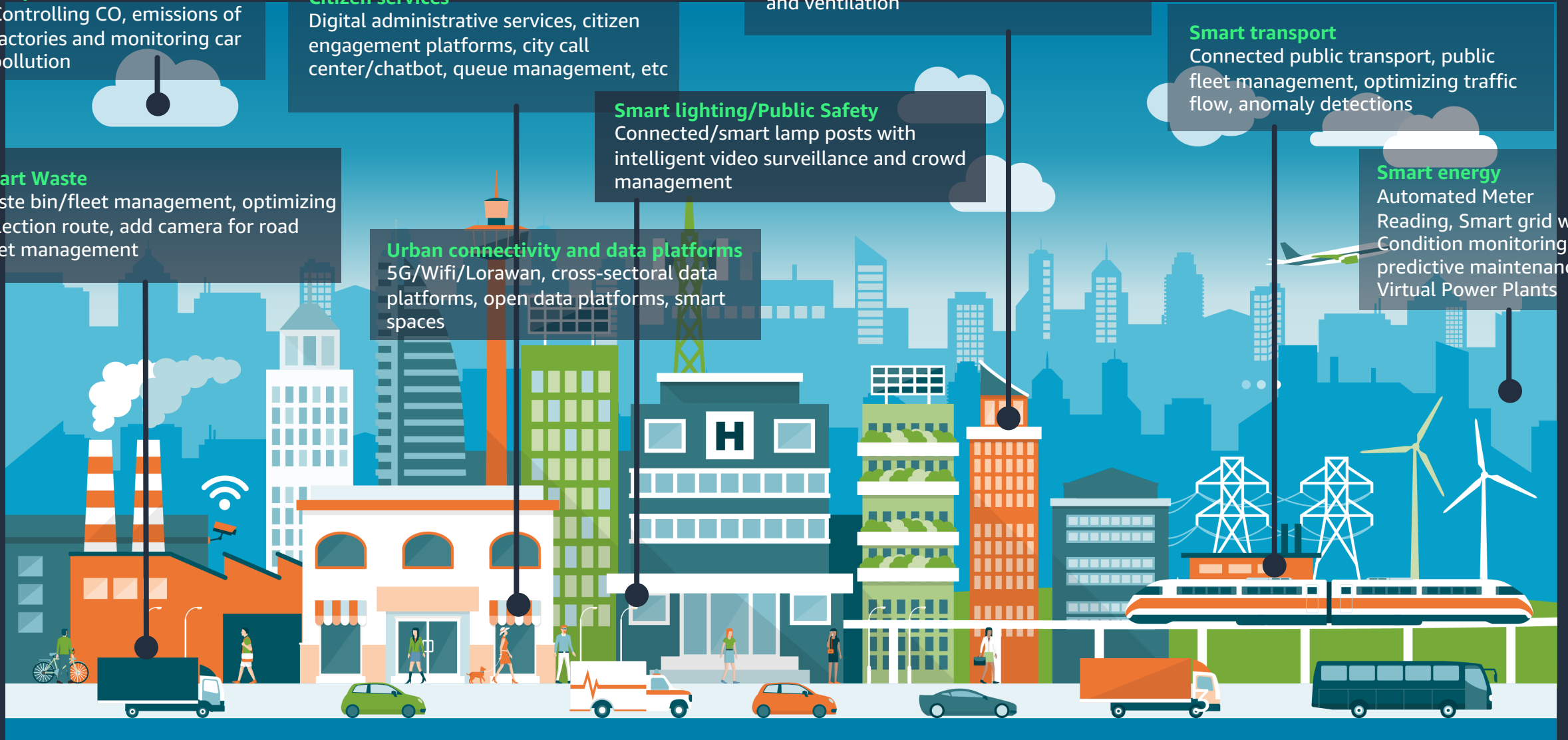
Smart Waste
Waste bin/fleet management, optimizing collection route, add camera for road asset management

Smart energy
Automated Meter Reading, Smart grid with Condition monitoring and predictive maintenance, Virtual Power Plants

Urban connectivity and data platforms
5G/Wifi/Lorawan, cross-sectoral data platforms, open data platforms, smart spaces

AWS Smart City Competency

Best-in-class AWS Partners with proven customer success and deep technical knowledge across Smart City areas: urban data platforms & insights, urban infrastructure, and citizen services.

Identify

Customers can easily identify a shortlist of offerings on AWS Partner Solution Finder on a desired Smart City area, be it water, lighting, or citizen engagement, to name a few.

Validate

AWS Solution Architects validate these offerings following best delivery practices and sound architecture.

Promote

AWS provide resources to showcases these offerings to customers, partners and sales teams. AWS also build a community of partners for collaboration.

AWS Smart City Competency Partners 2022

ARQ

Urban Data Platform/Digital Twins
Asia

Deloitte.

Urban Data Platform
Global

ECUBE LABS

Smart Waste
North America, Asia

elitery

Urban Data Platform
Geos: Asia

FUSEFORWARD

Urban Data Platform/Digital Twins
North & South America, Europe

Kalkitech

Smart Urban Energy
Asia, North America, Europe

MIOVISION

Smart Transportation
North America, Europe

Quantela

Urban Data Platform
Global

REKOR
INTELLIGENCE DRIVEN INNOVATION

Smart Transportation
North America, Europe

RUBICON

Smart Waste
Geos: North & South America

VIANOVA

Smart Transportation
Geos: Europe & North America

Improving City Operational Efficiency with Urban Analytics AI Platform

Quantela | CORAL GABLES
THE CITY BEAUTIFUL

AWS Partner Quantela, with offices in the United States and India, assists the City of Coral Gables, Florida, with an Urban Analytics AI platform and Quantela Traffic and Lighting.

The solutions run on Amazon EC2 and uses Amazon S3 to store IoT data for analysis.

Read the case study

The platform normalizes data and gives city managers and administrators a single dashboard view to make data-driven decisions that help the city run more efficiently and effectively, reduce operating costs, and generate new business opportunities.

Livability   **Sustainability**   **Inclusiveness**

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Improving Traffic and Safety through Remote Management Solution

City of Detroit implemented a remote traffic management system based on TrafficLink by AWS Partner Miovision at 450 intersections.

TrafficLink runs on Amazon EC2, AWS IoT, Amazon Kinesis and AWS Lambda functions, and stores data in Amazon DynamoDB and Amazon S3. Live streaming from the hardware devices is built on Amazon Kinesis Video Streams. TrafficLink relies on Amazon Simple Notification Service to alert engineers via email or SMS about signal problems, such as light outages, signal timing issues, or signal failures.

TrafficLink helps resolve traffic problems in less than 2 hours instead of 8 hours, reduce travel times by 30 percent, and improve emergency response times by 20 percent.
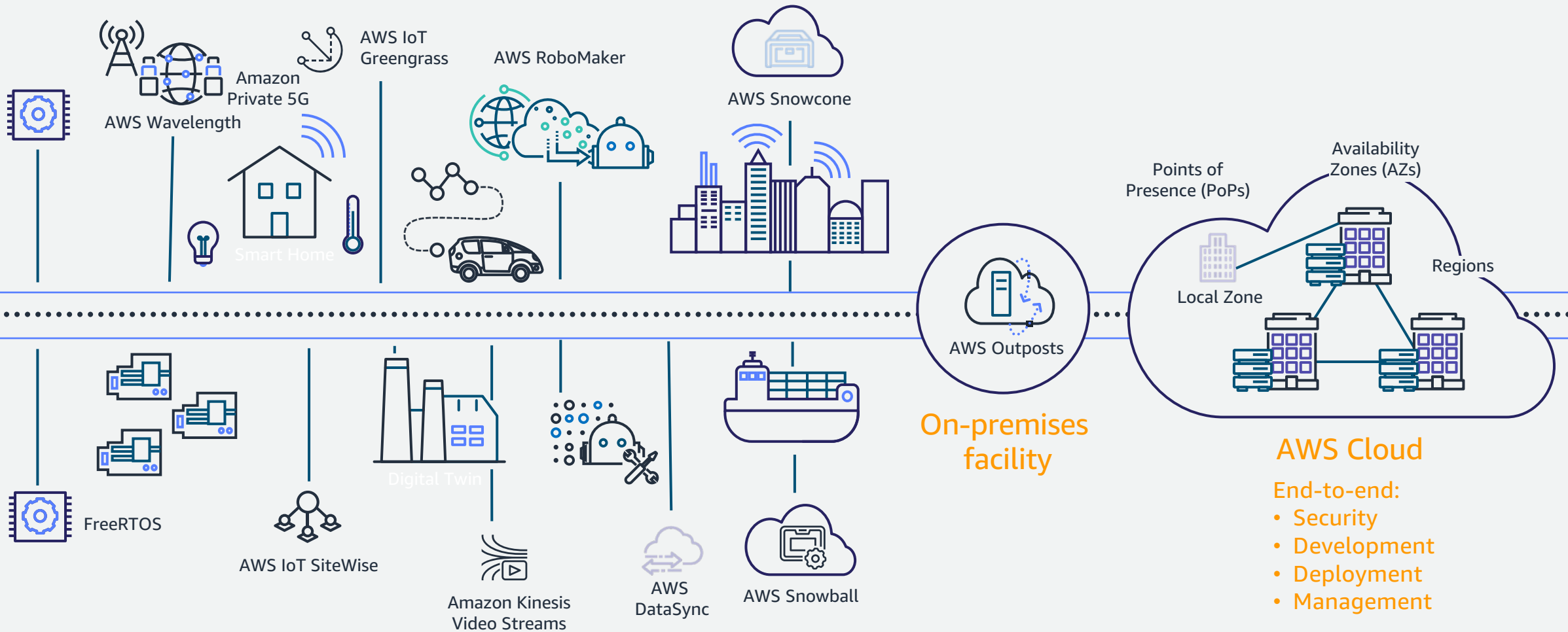
Read the case study

Livability

Sustainability

7

INNOVATING WITH IOT ON AWS

Edge-to-cloud continuum

IOT & LOCALIZED MACHINE LEARNING

AWS IoT Greengrass

AWS RoboMaker

Amazon Private 5G

AWS Wavelength

AWS Snowcone

Smart Home

Points of Presence (PoPs)

Availability Zones (AZs)

Local Zone

Regions

AWS Outposts

On-premises facility

AWS Cloud

FreeRTOS

Digital Twin

AWS IoT SiteWise

Amazon Kinesis Video Streams

AWS DataSync

AWS Snowball

End-to-end:
• Security
• Development
• Deployment
• Management

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Smart Territory Framework

Breaking down data silos

Application / Analytics / BI

Smart city solution providers →

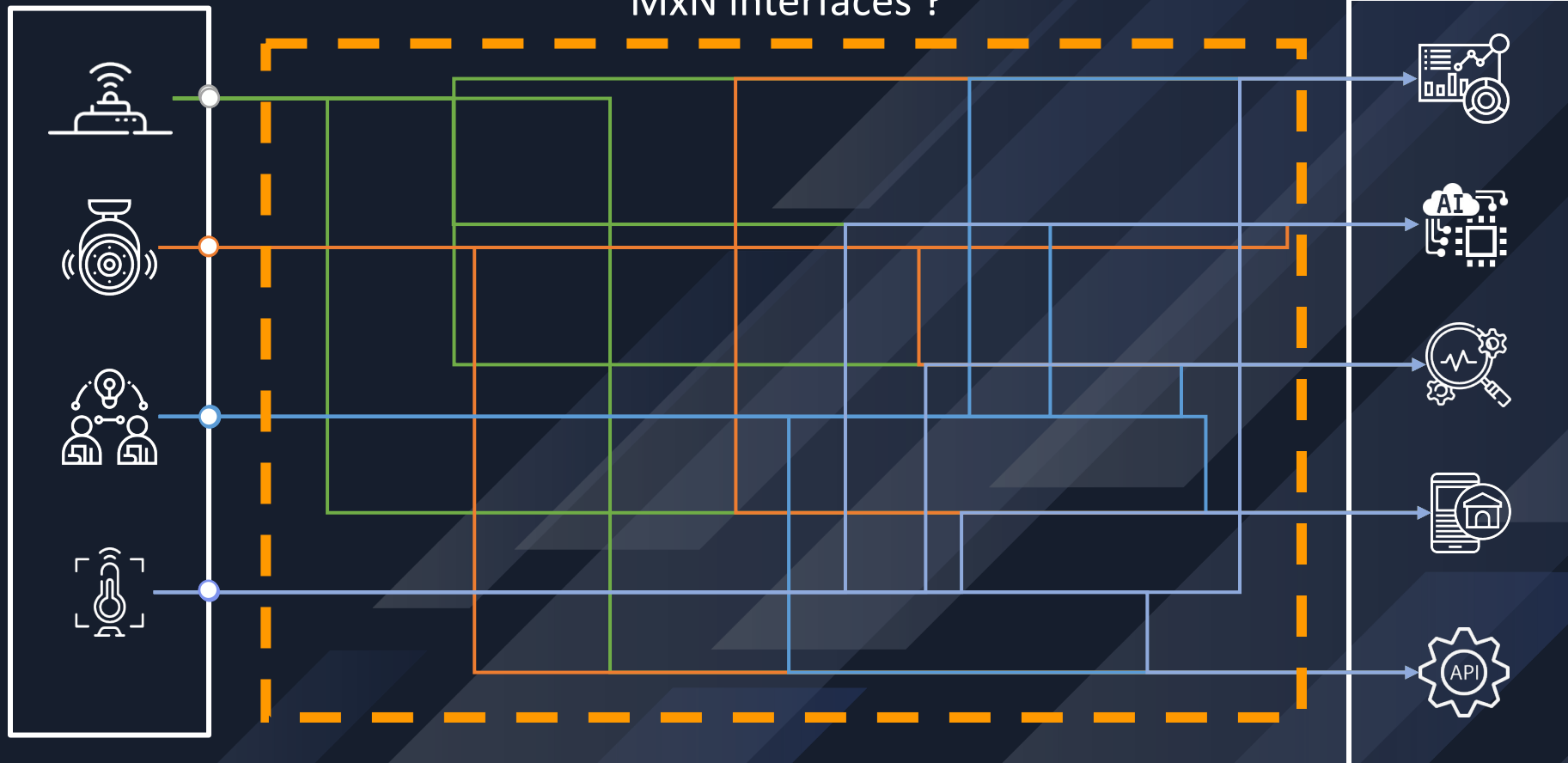Data storage / Data lake

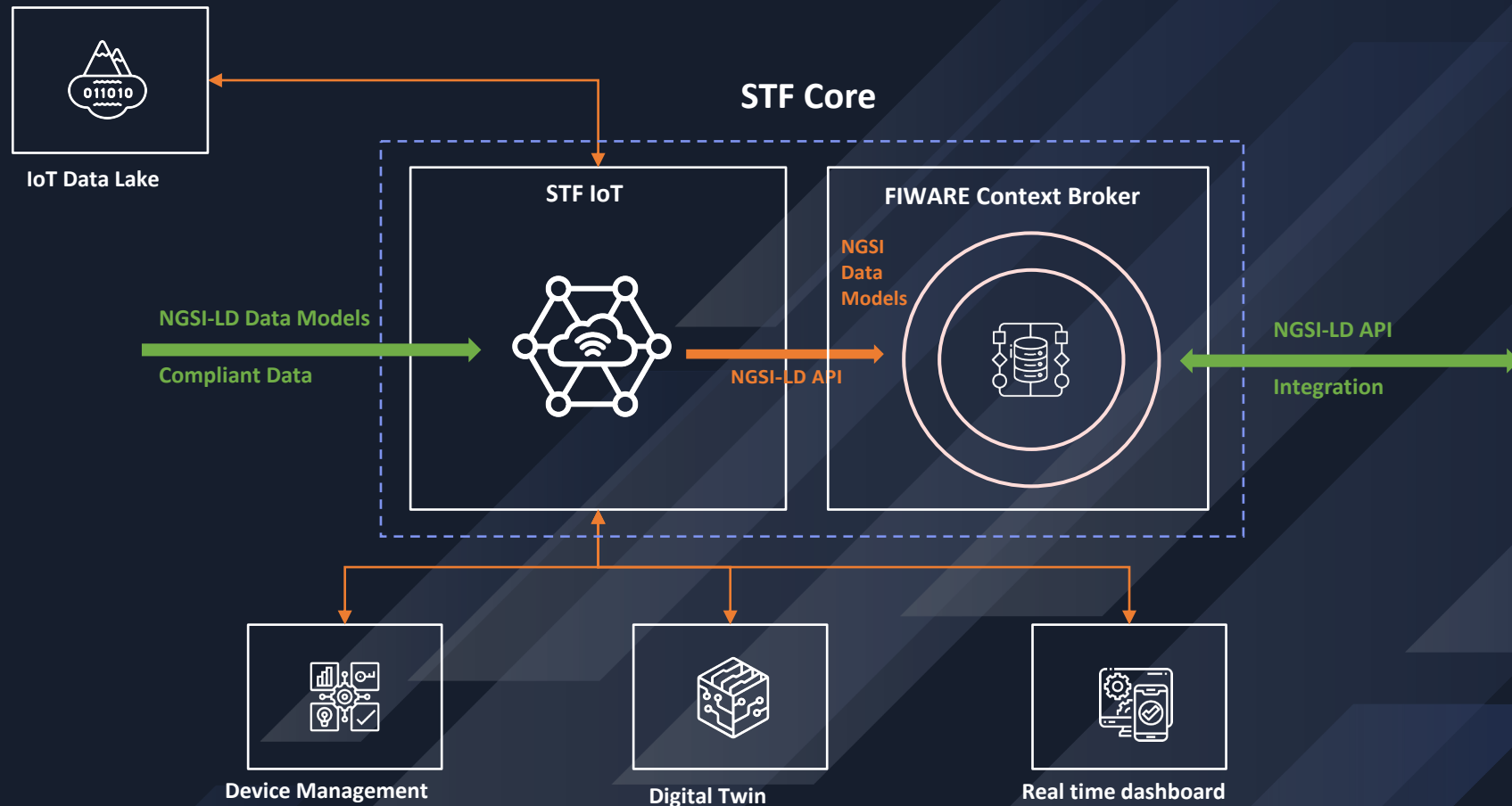Data acquisition / ingestion

Problem statement

M x Data Producers

MxN interfaces ?
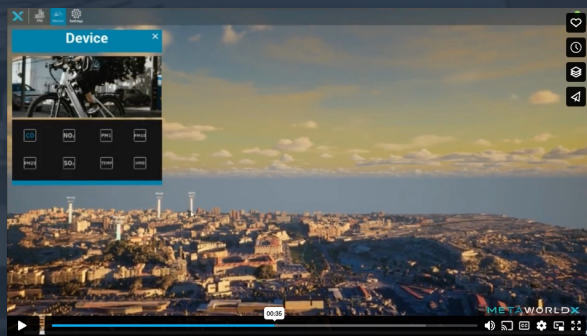
N x Data Consumers

What is the Smart Territory Framework (STF)?

A modular framework for building smart cities solutions leveraging industry open source standards

Customer use case: Cartagena, Spain (Demo)

Digital Twin

STF Core

Smart Parking

Air Quality outdoor

Demos and Q&A

MetaWorldX digital twin demo's built on AWS Smart Territory Framework

Cartagena, Spain
Toronto, Canada

Thank you!

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