Microsoft Smart City: Enabling a Sustainable Future

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Cities are where the action is...

84%
Population live in cities

80%
of GDP is created in cities

75%
of the countries carbon emissions

80%
of the world's energy is consumed in cities

180
zettabytes
of data available by 2025

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CITIZEN EXPERIENCE MAP

Digital City | Smart Mobility | Safe City | Smart Spaces | Educated City | Healthy City

Digital Hotspots

- E-government
- E-payment
- Digital kiosks
- Social Media
- City performance dashboards

- Traffic alerts on mobile
- Adaptive red light systems
- Contactless travel card
- Multi modal transport
- Pay as you travel

- 24X7 emergency support
- Integrated command and control center
- Safety alerts on mobile
- Weather forecast

- Sensor enabled
  - smart meters
  - Water and waste management
  - Smart parking
  - Smart grids
  - Intelligent lighting

- School performance benchmarking
- Predictive analytics for student curriculum planning
- Virtual classrooms
- Mobile apps

- E-healthcare and M-healthcare
- Mobile appointment scheduling
- Virtual care
- Advanced analytics for preventive healthcare

Air Quality
Carbon emission
Aging Infra
Total Waste
Fleet data
Traffic
Sewage level
Water Impurity
Energy consumed
Parking spaces
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What does this mean for you?

Save Time in daily commute

Make city greener Know your impact

New policies Based on people's needs

Safety & Health Always

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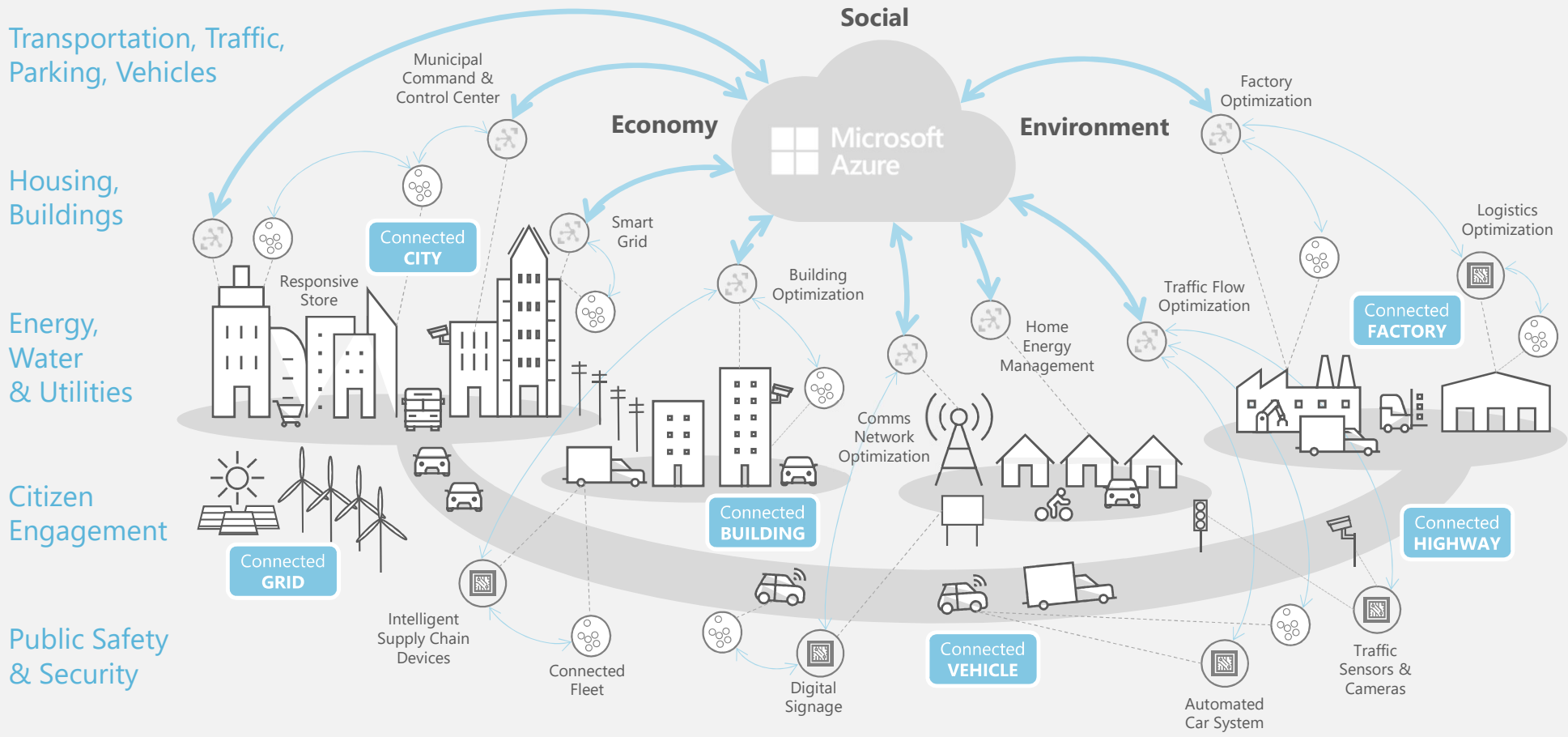
Connected City for Smart future



Connected City

Open standards in IoT deployments would accelerate growth by 27% and reduce deployment costs by 30% - InterDigital

Public Safety on Streets

Motion sensors on the streets associated with cameras at intersections monitor traffic and urban safety

Traffic Management

Cameras installed at intersections and traffic lights, combined with motion sensors installed on the streets, allow to better control and direct traffic

Adaptive Traffic Lighting

Remotely controlled traffic lights can be programmed according to traffic flows in order to avoid congestion

Intelligent Street Lighting

Smart sensors in lampposts automatically turn the lights on and off according to the ambient light or pedestrians' movement

Emergency Response

GPS devices in emergency vehicles enable locating and directing them to the best routes using smart cameras and traffic lights

Smart Spaces

Environment monitoring cameras and motion and temperature sensors installed on buildings, public spots provide remote surveillance and prevent risks and damage

Connected Citizens

Using mobile applications and smartphones with cameras and GPS, citizens can receive location-based alerts and useful information as well as send data to the government

Energy Monitoring

Sensors installed in the domestic power grid associated with Smart Grid features allow citizens to control energy at home and save money

Environmental risk control

Smoke, toxic gases, and temperature sensors associated with ambient cameras and warning systems prevent environmental disasters

Water Resource Management

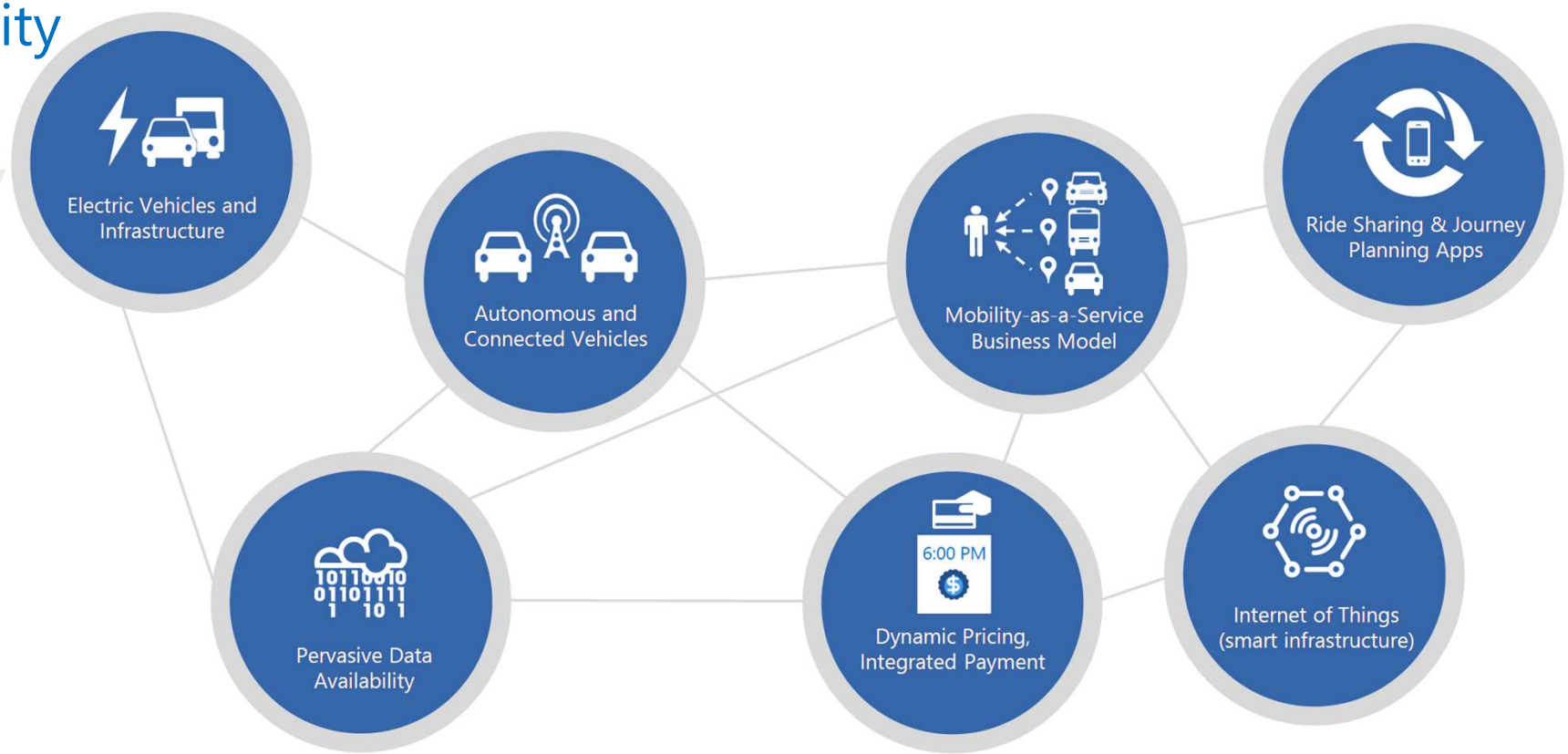
Water pressure sensors in the pipeline monitor the water flow and identify any leaks in the city's network

Connected Urban Mobility

Public Safety and Security

Smart Hospital

Smart Education



Connected Urban Mobility

Public Safety and Security

Smart Hospital

Smart Education

Connected Urban Mobility

Public Safety and Security

Smart Hospital

Smart Education

Connected
Urban Mobility

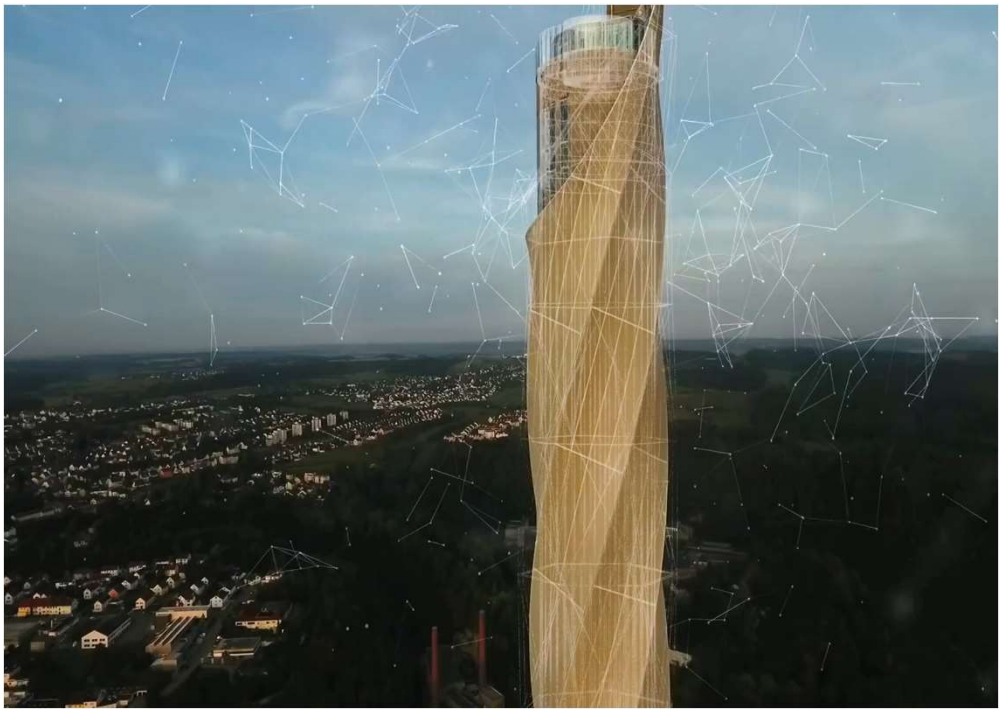
Public Safety
and Security

Smart
Hospital

Smart
Education

Technology Enabling Cities & Metros today

TECHNOLOGY ENABLING US TO DO MORE



5G & Digital Transformation

- All companies are **becoming software companies** that leverage a digital feedback loop
- A **planetary scale cloud platform** provides an opportunity to Digitally Transform and move CAPEX to OPEX
- **5G becomes the catalyst technology** between the Intelligent Cloud and Intelligent Edge
- **AI in the Cloud and Edge** become required to meet scale and innovation needs
- 5G provides an opportunity to **use cellular as a primary network** in many verticals

5G Enabled Network Edge eg: 1ms AI ML Video Processing

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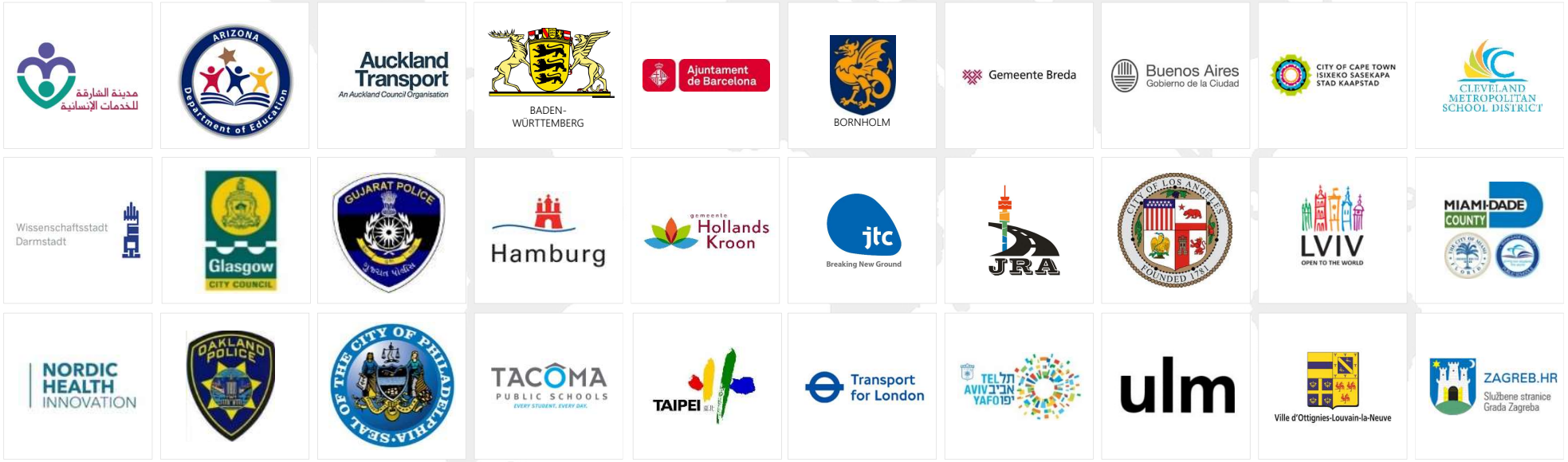
Missing equipment
Flammable equipment
near heat source
No hat

Working with communities around the world



Our mission

Empower every citizen and every institution on the planet to achieve more

Thank You

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