CYNERGI LIGHTING

Levels

7 **Collaboration & Processes**
(Involving People & Business Processes)

6 **Application**
(Reporting, Analytics, Control)

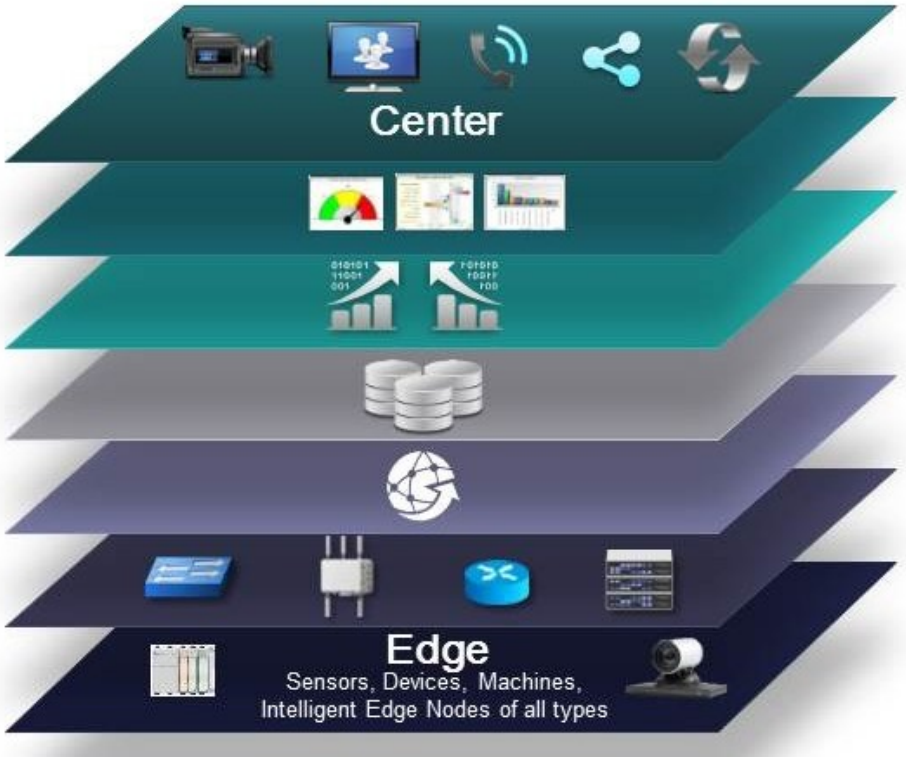
5 **Data Abstraction**
(Aggregation & Access)

4 **Data Accumulation**
(Storage)

3 **Edge Computing**
(Data Element Analysis & Transformation)

2 **Connectivity**
(Communication & Processing Units)

1 **Physical Devices & Controllers**
(The "Things" in IoT)



OUR FOCUS

Connectivity

We are focused on providing the most reliable, optimized, scalable and simple to use device **connectivity** to our customers.

Large-scale

We focus on **large scale IoT applications** where we can create unique value and an optimized solution for our customers.

Ecosystem

We focus **on building partnerships** so that we can together offer turn key solutions for end customers.

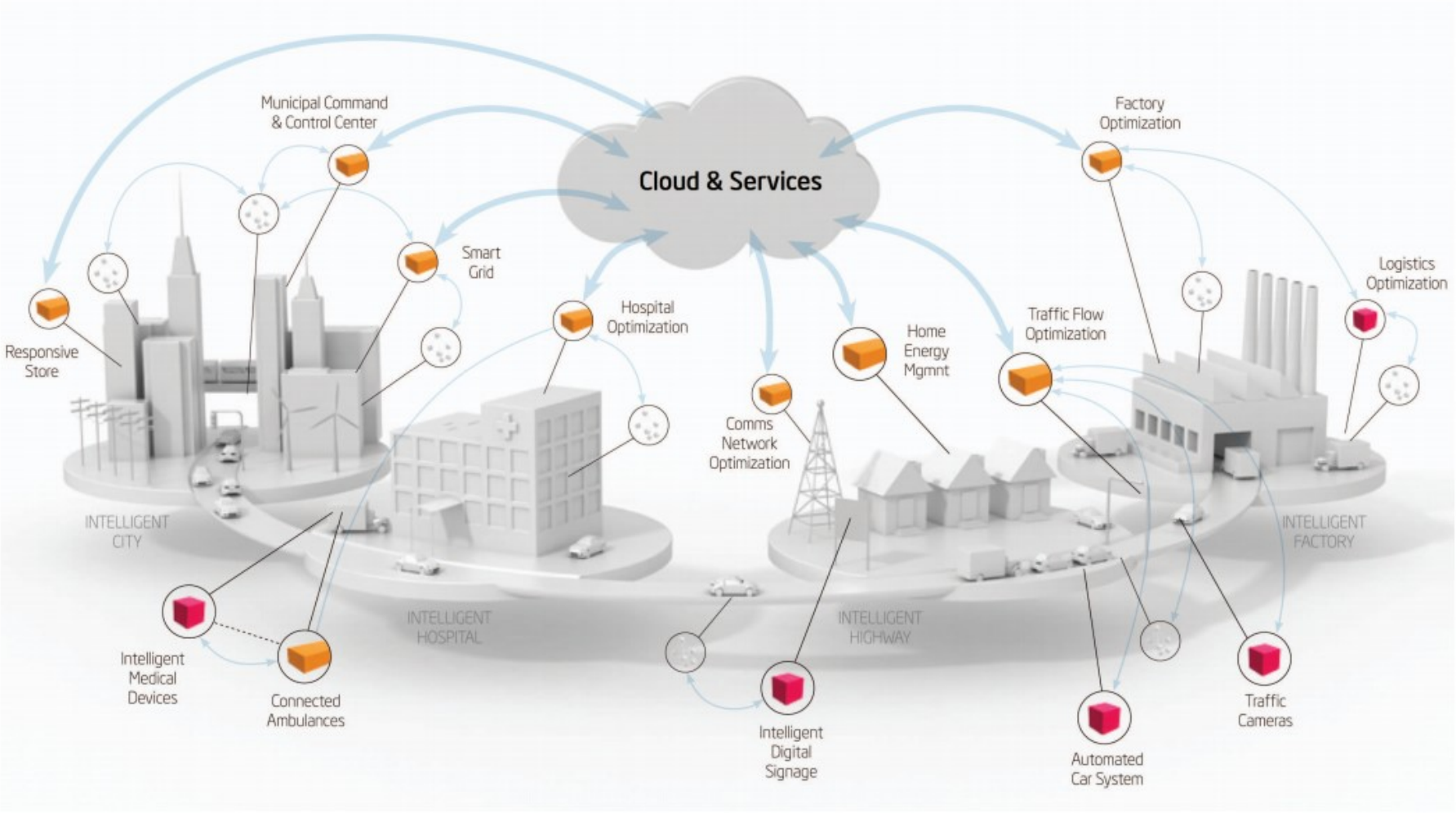
- The diversity of IoT applications and their requirements introduces a paradigm shift for connectivity solutions.
- The flexibly optimize the connectivity solution to the needs of the customer ’s business case, and Cynergi application is crucial to the development and growth of IoT based business.

URBAN CHALLENGE

- Deep indoors and basements coverage
- Diversity of application profiles
- Build or wait for an infrastructure
- Unpredictable capacity need

WHY SHOULD LIGHTING CARE ?

- Lighting is only one use case in smart cities and smart buildings
- Business needs are combination of lighting, sensoring, security and efficiency improvements.
    - Data analysis
    - Pattern recognition
    - Artificial Intelligence
- Connectivity shall adapt to the business needs, not only the lighting technology needs.


Municipal Command
& Control Center
Cloud & Services
Factory
Optimization
Smart
Grid
Logistics
Optimization
Responsive
Store
Hospital
Optimization
Home
Energy
Mgmnt
Traffic Flow
Optimization
Comms
Network
Optimization
INTELLIGENT
CITY
INTELLIGENT
FACTORY
INTELLIGENT
HOSPITAL
INTELLIGENT
HIGHWAY
Intelligent
Medical
Devices
Connected
Ambulances
Intelligent
Digital
Signage
Automated
Car System
Traffic
Cameras

TECHNOLOGY PRINCIPLES

De-centralized network All networking decisions are made locally	All nodes extends network All nodes are able to route	The network is multi-gateway Single point of failure resilient
Predictable and deterministic performance	Efficient spectrum usage & collision-free operation	Low latency message transfer with contention-based operation mode

APPLICATION RANGE

- **Measuring**
- **Sensoring**
- **Tracking**
- **Positioning**
- **Controlling**

Smart Parking, Structural health, Noise Urban Maps, Electromagnetic Field Levels, Traffic Congestion, Smart Lighting, Waste Management, Smart Roads, Fire Detection, Air Pollution, Snow Level Monitoring, Landslide and Avalanche Prevention, Earthquake Early Detection, Smart Grid, Tank level, Photovoltaic Installations, Water Flow, Silos Stock Calculation, Supply Chain Control, Intelligent Shopping Applications, Smart Product Management, Quality of Shipment Conditions, Item Location, Storage Incompatibility Detection, Fleet Tracking, M2M Applications, Indoor Air Quality, Temperature Monitoring, Indoor Location, Vehicle Auto-diagnosis, Green Houses, Meteorological Station Network, Compost, Offspring Care, Toxic Gas Levels, Energy and Water Use, Remote Control Appliances, Intrusion Detection Systems, Art and Goods Preservation, Fall Detection, Medical Fridges, Patients Surveillance, Ultraviolet Radiation, Pipeline control, Plant control, etc.

Connectivity, solution for the Smart Cities and Buildings

Features & Benefits:
Low infrastructure cost. Standard radio components. Long range radio (400m – 1500m – 10 km)
Easy incremental deployment
Connected lights provides an access point for variety of IoT sensors
Low latency
Low energy connected sensors
Ready for beacon broadcasting, both lighting and sensors

LIGHTING PLATFORM

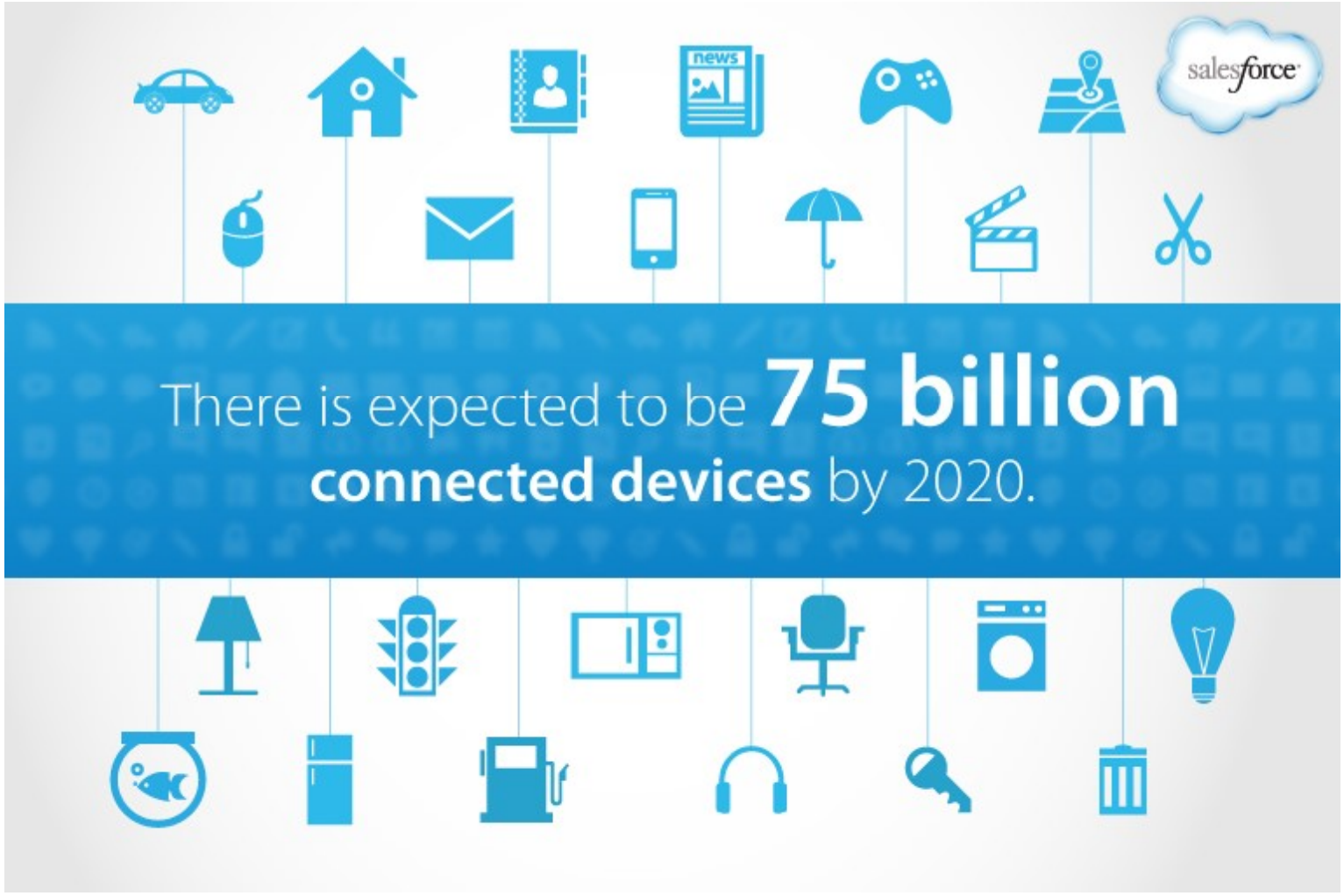
LTE – WiFi - BLE

Parking/Trafic

Sensors

Trash Monitor

Water Consumption


news
salesforce
There is expected to be 75 billion
connected devices by 2020.

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