

# Demystifying IoT Technology: Beyond the Buzzwords



# IoT – 30K FT Level



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INTELLECTUAL PROPERTY LAW

# THE INTERNET OF THINGS?

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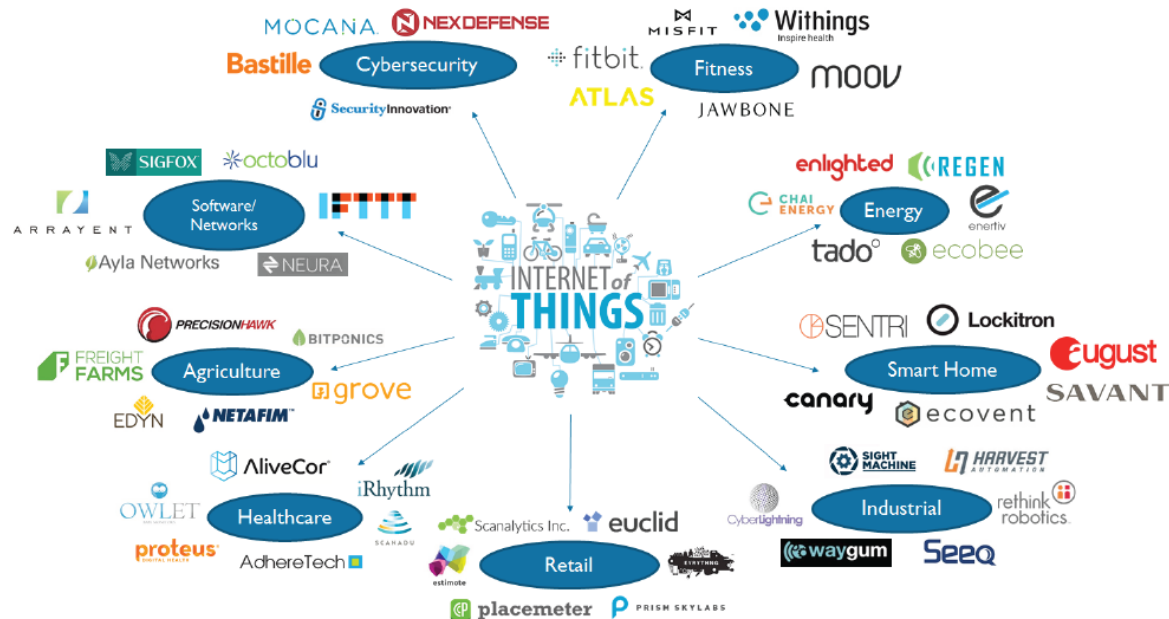


# IoT - Sample Industries

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The Internet of Things Map



# Key IoT Technology

- Seamless web” of Internet connectivity ?
- Tech of IoT comes from combination of:
  - Faster & smaller microprocessors
  - Smaller & better **sensors** (including cameras)
  - **Wireless** networks
  - Cloud Storage capacity
  - “Big Data” capabilities
- *Miniaturization* in terms of device size & cost



# IoT-Industry Segmentation



- **Industrial Internet**  
Connected devices to physical machinery, industrial processes and workplaces. Many of the firms listed primarily operate in the drone and/or robotics spaces
- **Healthcare**  
Remote patient monitoring or machine-to-machine products for the healthcare industry, specifically for use by physicians or home healthcare providers.
- **In-store Retail**  
Sensor, beacon and WiFi technologies within the physical retail store in order to help better track and understand in-store customers.
- **Connected Car**  
Wireless technology and/or hardware to help drivers be alerted of details including traffic, accidents, alerts and speeding.

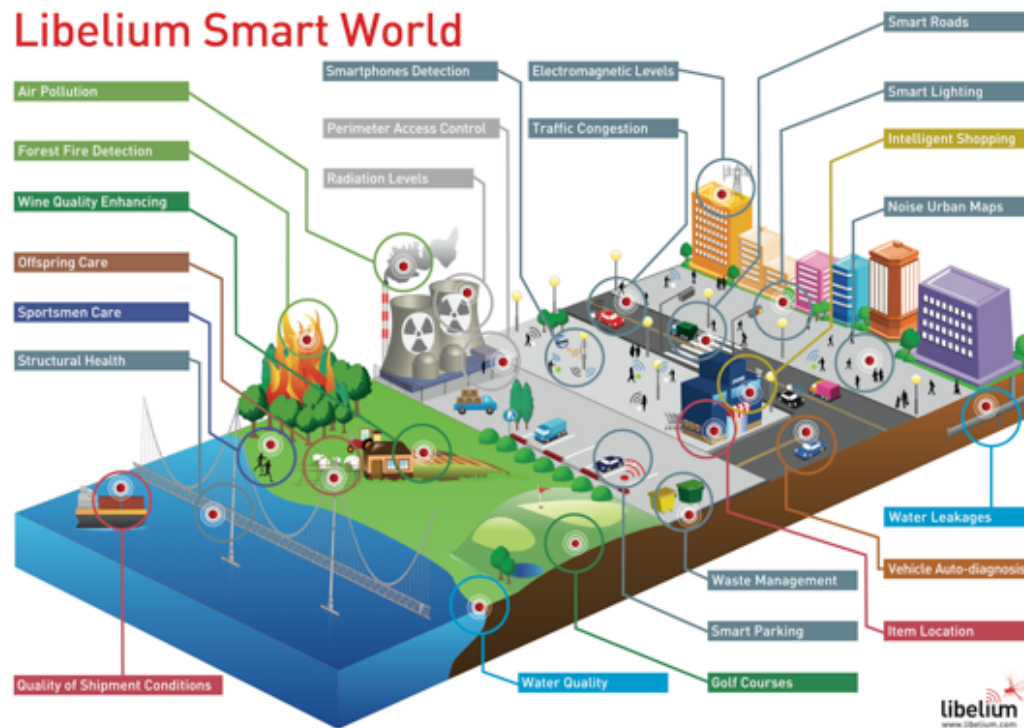
# IoT-Industry Segmentation



- **Wearable Tech**  
Clothing or accessory companies that fuse sensor and other connected technologies in order to help track primarily health-related matters such as calories burned, heart rate, steps taken, sleep and hearing but also more general use cases such as photos, email and GPS location.
- **Connected Home**  
Software platforms and hardware for your home in functional areas ranging from security, temperature management and lighting.
- **Building Blocks & Platforms**  
Companies that help power, facilitate and/or create the IoT universe. This ranges from open-source IoT toolkits to embedded chip makers to DIY electronics.

# IoT- SMART CITIES

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# IoT – HEALTH CARE

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## Glucose Monitoring

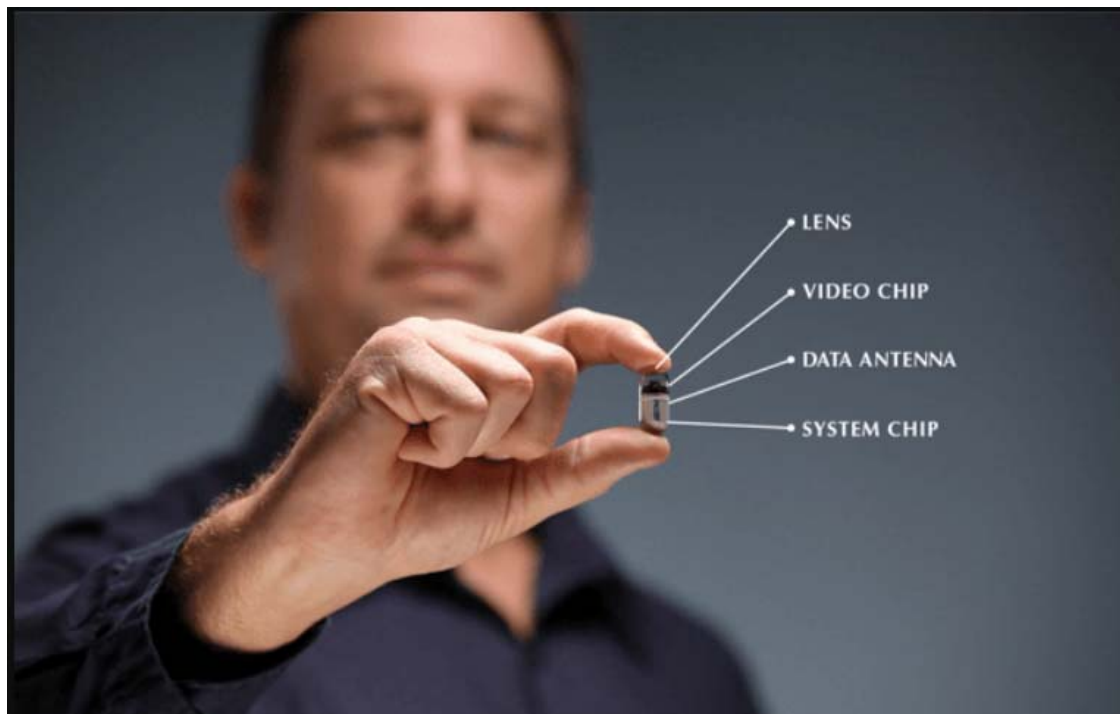
A cellular-powered glucose meter transmits each test result to a secure server and provides instant feedback and coaching to patients. This equips doctors, nurses, diabetes educators with real-time clinical data.



<http://www.telcare.com/>

# IOT - HEALTH CARE

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<https://www.solutionanalysts.com/blog/5-iot-applications-that-will-change-the-face-of-healthcare/>

# IoT - Connected Car Areas

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## Mobility management

Functions that allow the driver to reach a destination quickly, safely, and in a cost-efficient manner

Examples:

- Current traffic information
- Parking lot or garage assistance
- Optimized fuel consumption

## Vehicle management

Functions that aid the driver in reducing operating costs and improving ease of use

Examples:

- Vehicle condition and service reminders
- Remote operation
- Transfer of usage data

## Entertainment

Functions involving the entertainment of the driver and passengers

Examples:

- Smartphone interface
- WLAN hot spot
- Music, video, Internet, social media
- Mobile office

## Safety

Functions that warn the driver of external hazards and internal responses of the vehicle to hazards

Examples:

- Collision protection
- Hazard warnings
- Emergency functions

## Driver assistance

Functions involving partially or fully automatic driving

Example:

- Operational assistance or autopilot in heavy traffic, in parking, or on highways

## Well-being

Functions involving the driver's comfort and ability and fitness to drive

Examples:

- Fatigue detection
- Automatic environment adjustments to keep drivers alert
- Medical assistance

The connected c@r

Source: Management Engineers  
at Strategy& analysis

# IoT - Regulatory Points



1. **Privacy**
  - Reputation issues, fear of “profiling” & “discrimination”
2. **Safety**
  - Health & physical safety
3. **Security**
  - Hacking, cybersecurity, law enforcement issues
4. **Economic**
  - Industry disruptions
  - Automation, job dislocation,
5. **Intellectual Property**
  - Copyright, Patent, Trademark
6. **Global Data Transfer Issues - GDPR**

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