Demystifying IoT Technology: Beyond the Buzzwords

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Demystifying IoT Technology: Beyond the Buzzwords

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IoT – 30K FT Level

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THE INTERNET OF THINGS?

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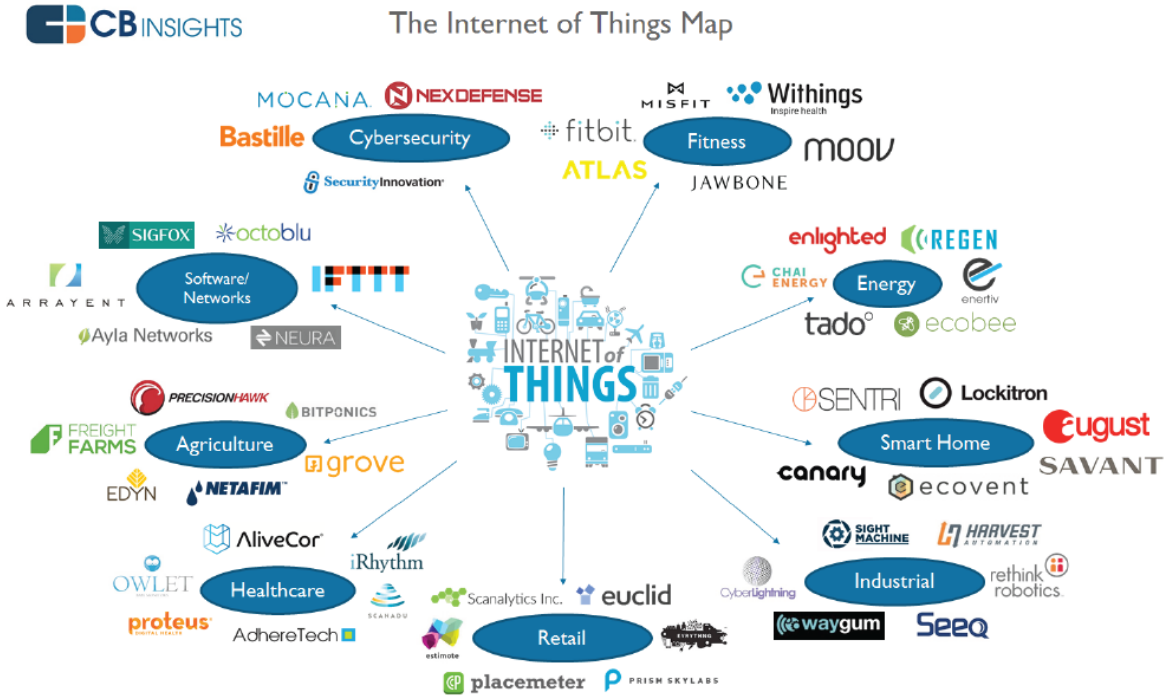
IoT - Sample Industries



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

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- **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.

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IoT- SMART CITIES

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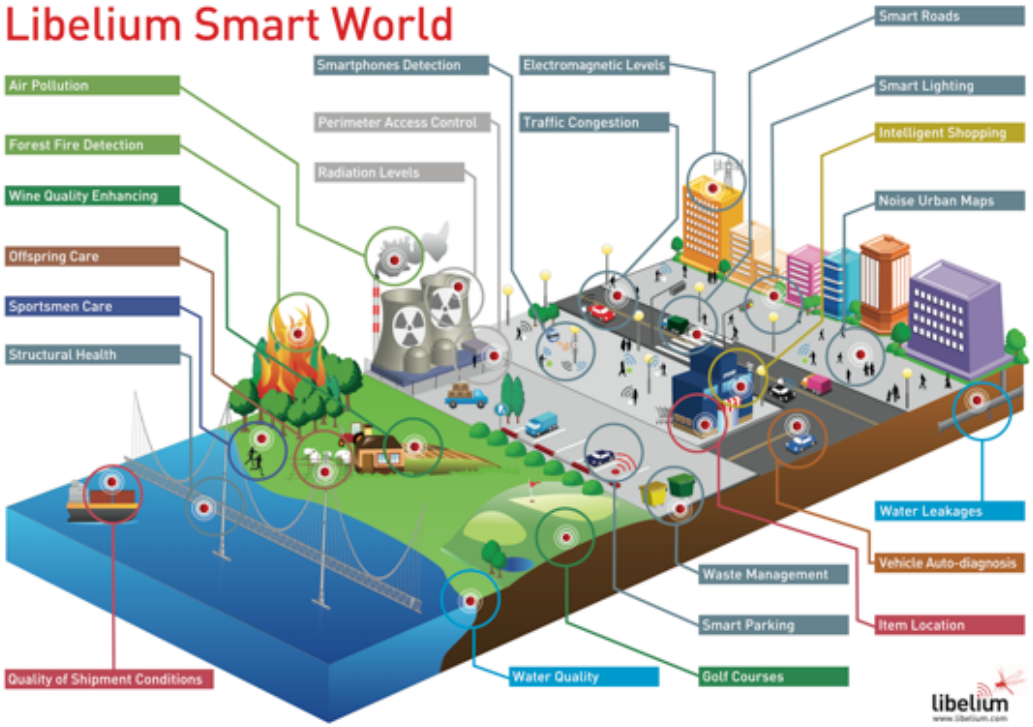

IoT – HEALTH CARE

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IOT - HEALTH CARE

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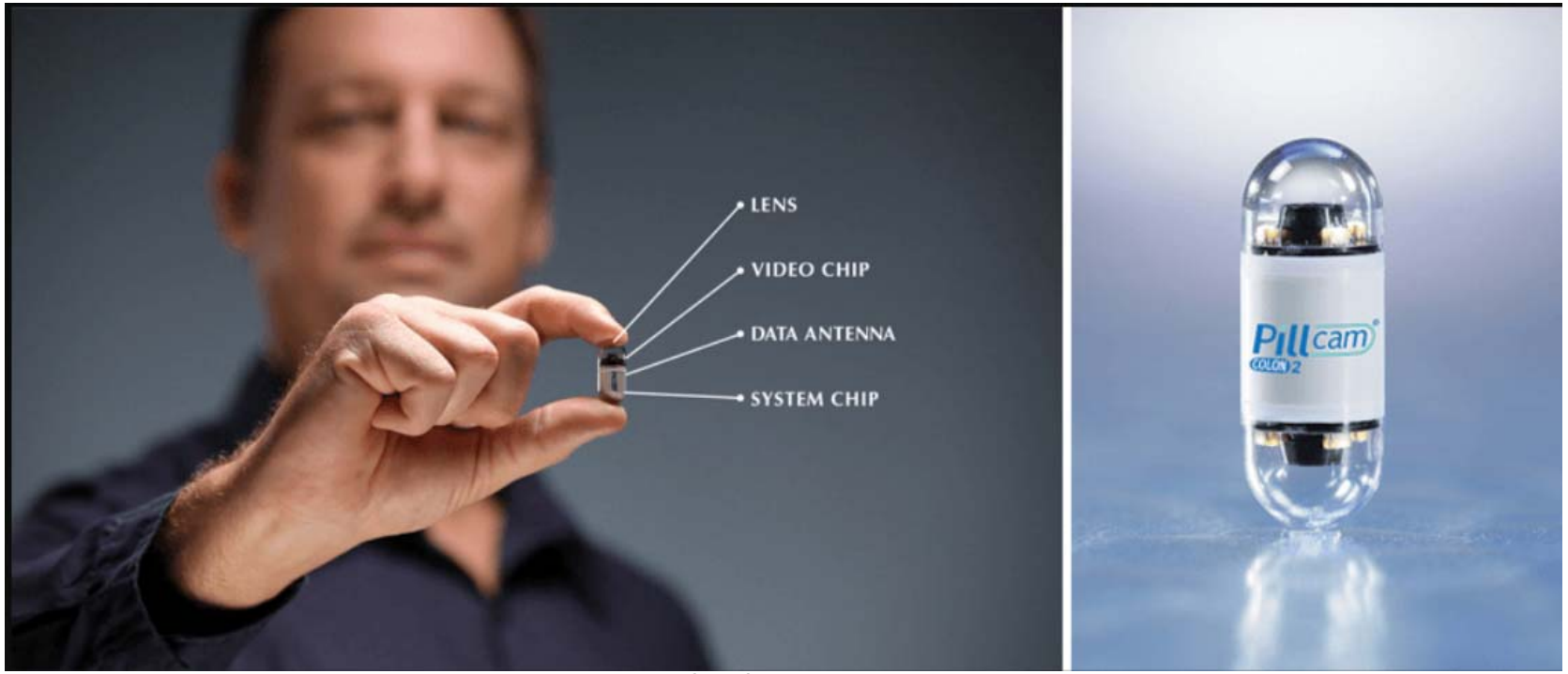

https://www.solutionanalysts.com/blog/5-iot-applications-that-will-change-the-face-of-healthcare/

IoT - Connected Car Areas

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Mobility management	Vehicle management	Entertainment
Functions that allow the driver to reach a destination quickly, safely, and in a cost-efficient manner	**Functions that aid the driver in reducing operating costs and improving ease of use**	**Functions involving the entertainment of the driver and passengers**
Examples: - Current traffic information - Parking lot or garage assistance - Optimized fuel consumption	Examples: - Vehicle condition and service reminders - Remote operation - Transfer of usage data	Examples: - Smartphone interface - WLAN hot spot - Music, video, Internet, social media - Mobile office
Safety	**Driver assistance**	**Well-being**
Functions that warn the driver of external hazards and internal responses of the vehicle to hazards	**Functions involving partially or fully automatic driving**	**Functions involving the driver's comfort and ability and fitness to drive**
Examples: - Collision protection - Hazard warnings - Emergency functions	Example: - Operational assistance or autopilot in heavy traffic, in parking, or on highways	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

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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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