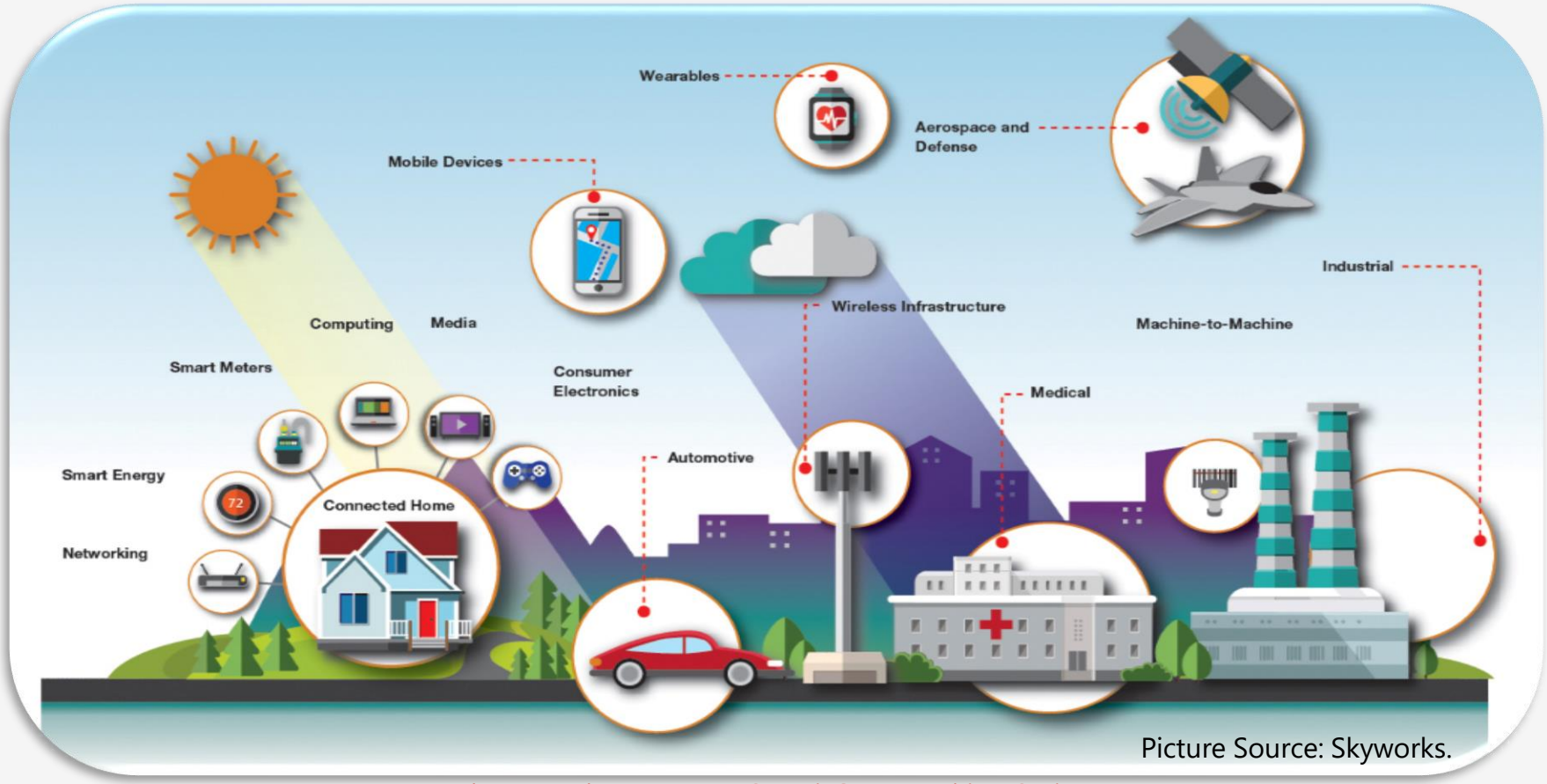
Cape Town Break: A Tour to IoT



Picture Source: Skyworks.

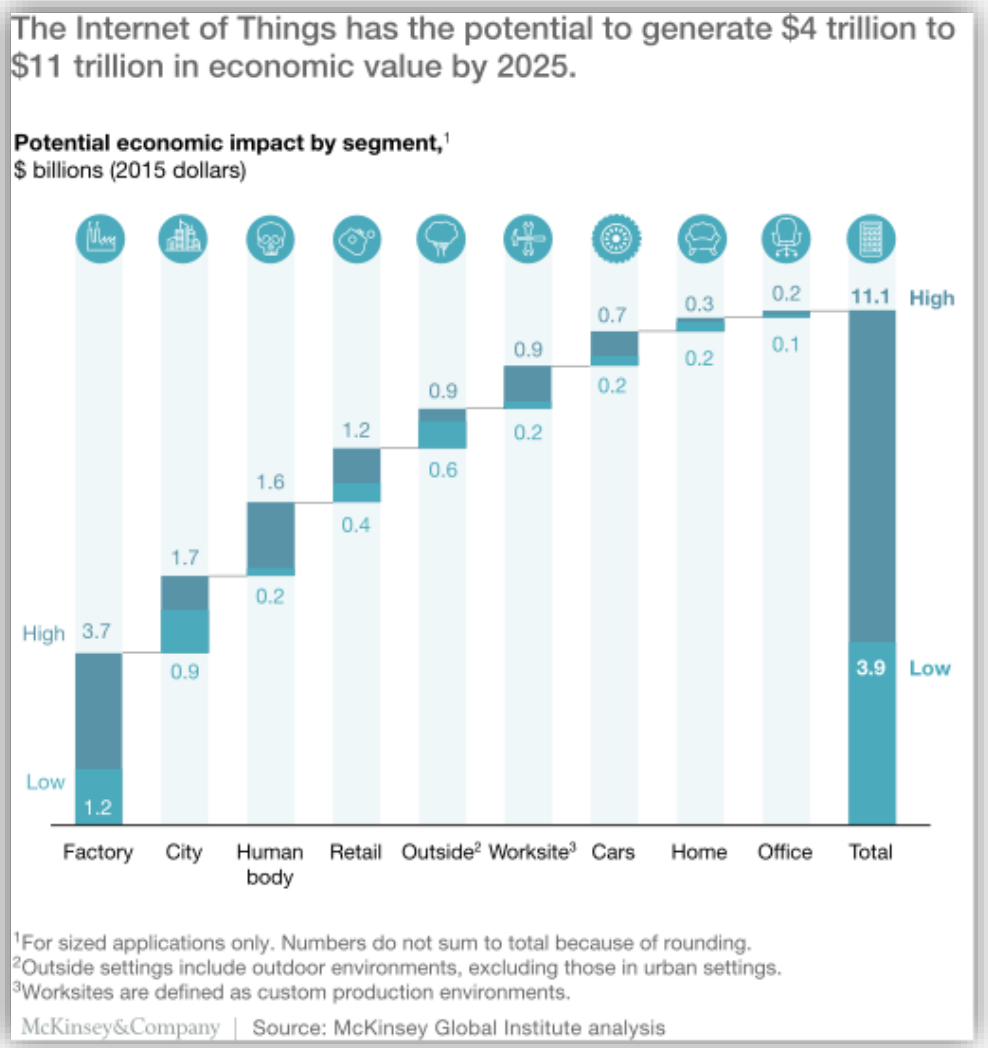
Cape Town Break: A tour to IoT

What is IoT?

McKinsey&Company

- "*The physical world itself is becoming a type of information system. In what's called the Internet of Things, sensors and actuators embedded in physical objects—from roadways to pacemakers—are linked through wired and wireless networks, often using the same Internet Protocol (IP) that connects the Internet.*"

- *" IoT systems, which we define as sensors and actuators connected by networks to software, can monitor and manage connected objects, machines, and even living things".*



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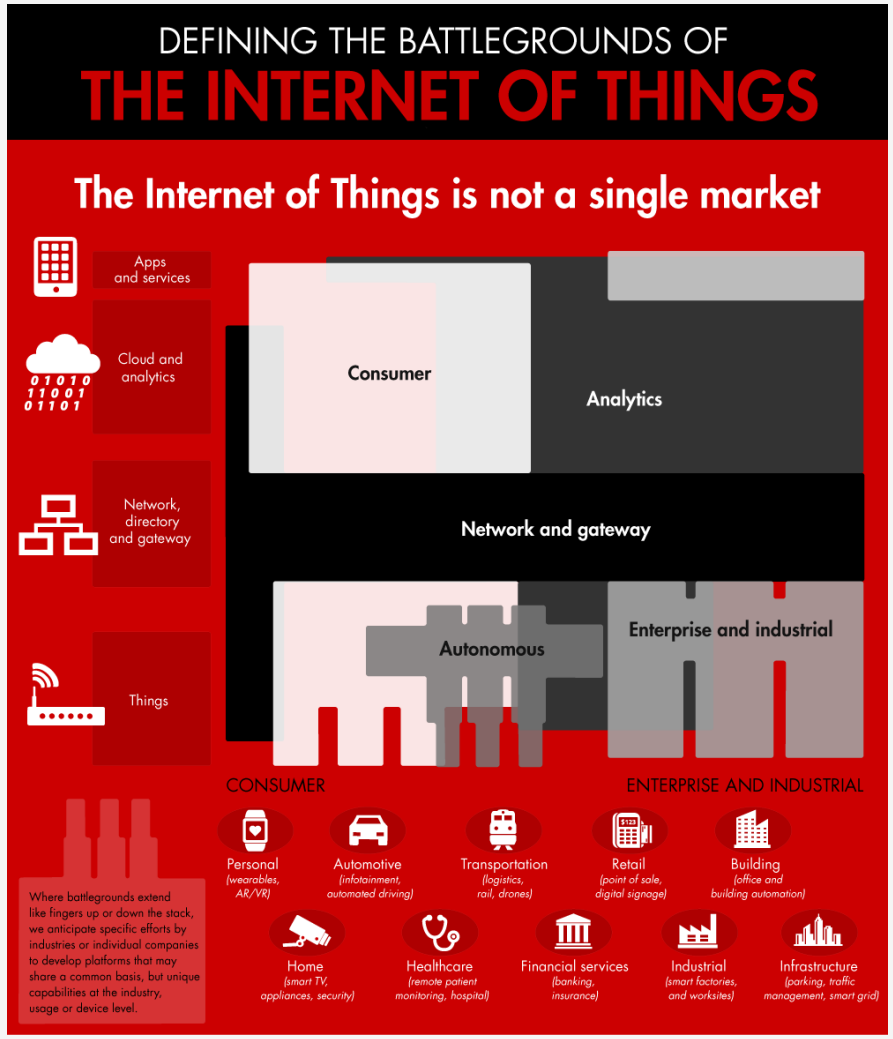
What is IoT?

BAIN & COMPANY

- *"The Internet of Things is a huge network of sensors and smart devices, combined with advanced analytics and cloud services to make sense of all the data".*
- *"The Internet of Things (IoT) requires a new business implementation approach and a totally different capability for various industries, particularly for information and communications technology (ICT). Of course, it also brings opportunities for new business and growth, which can be categorized into seven areas: parts, gateway devices, networking, M2M communications, cloud (XaaS), analytics as a service and application/services".*



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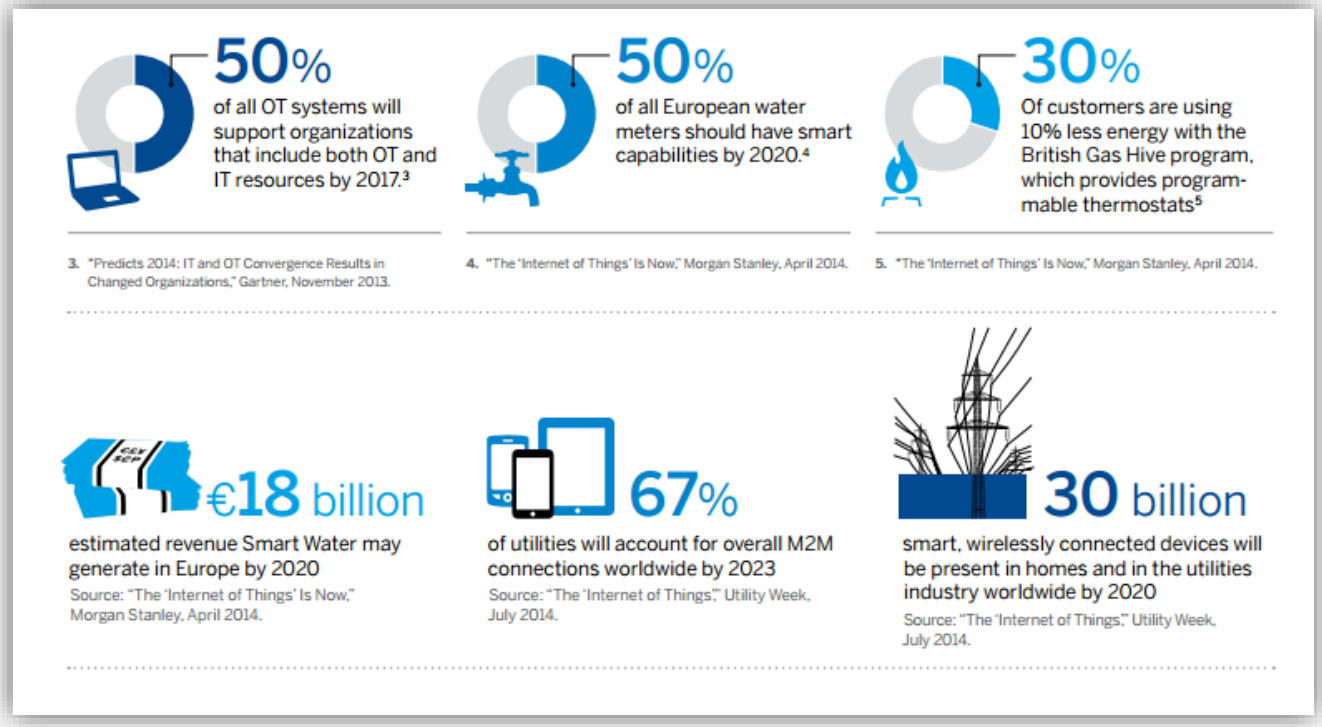
What is IoT?

Capgemini

- *"IoT is not a technology solution, but rather a technology enabler for companies to create new business models and become more operationally efficient".*
- *"The explosion in connected devices and platforms, abundance of data from field devices and rapidly changing technology landscape has made it imperative for companies to quickly adapt their products and services and move from physical world to a digital world. Companies will need to leverage Internet of Things (IoT) technologies for this transformation".*



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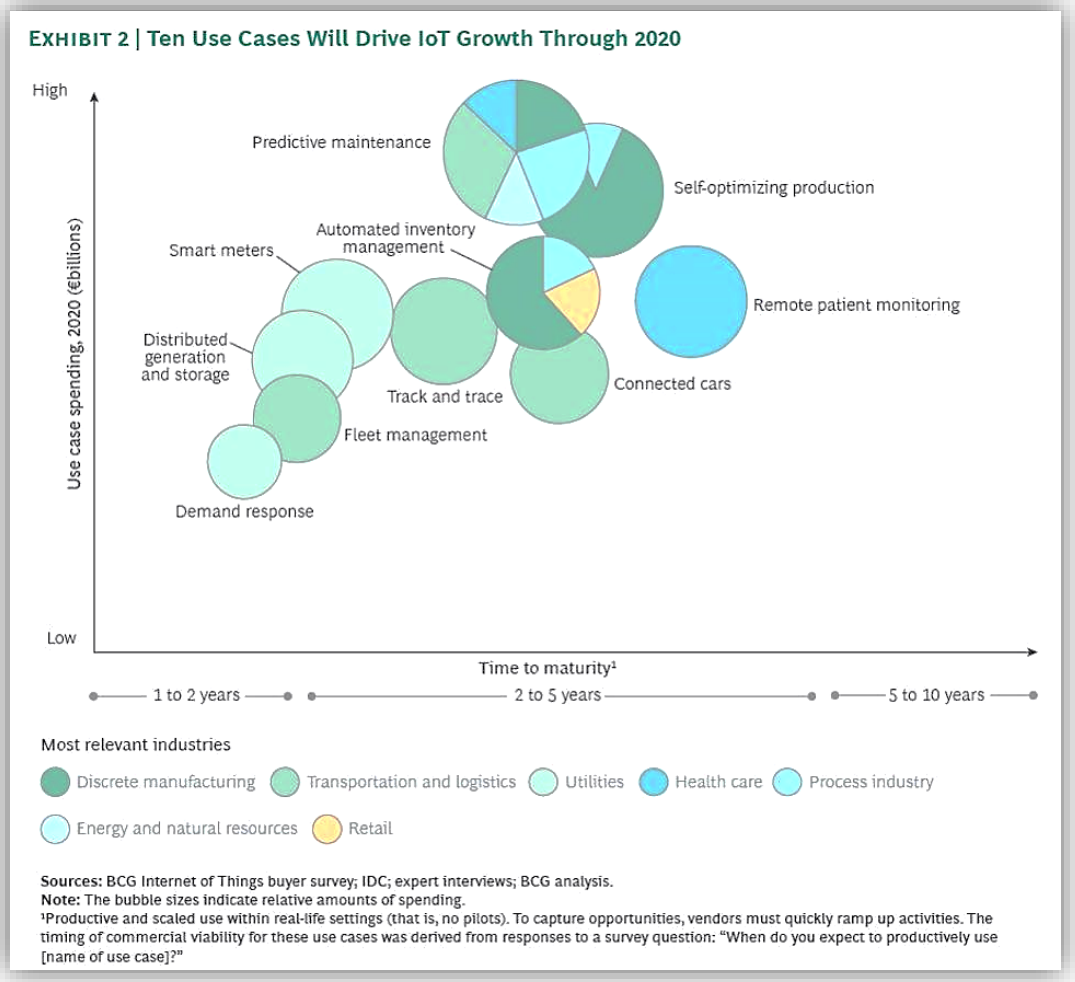
What is IoT?

BCG

THE BOSTON CONSULTING GROUP

- *"Business leaders are asking how IoT can help their companies increase customer satisfaction, improve quality, support new business models (such as data-driven services), and reduce costs".*
- *BCG found the ten most valuable use cases include the ability to use sensors to predict when machinery will need to be repaired, self-optimizing production, automated inventory management, remote patient monitoring, smart meters, track and trace, connected cards, distributed generation and storage, fleet management and demand response.*



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What is IoT?

AT Kearney

- *"Internet of Things can be defined as a seamless combination of embedded intelligence, ubiquitous connectivity, and deep analytical insights that creates unique and disruptive value for companies, individuals, and societies"*

Figure 2
Eight vertical segments and more than 40 applications of IoT

Transportation	Healthcare	Housing and hospitality	Industry
• Accident avoidance • Car sharing • Private hire and taxi platforms • Driverless cars • Public transport fleet and route management • Telematics • Traffic jam reduction	• At-home recovery and rehabilitation • Chronic disease monitoring • Medicine consumption optimization • Non-observance reduction • Early identification of diseases or risk factors • Smart pharmaceutical R&D • Time savings from better treatment	• Energy savings • Fire alarm • House automation • Remote burglar alarms • White and brown goods • Telematics • Smart kitchen in restaurants • Smart energy in hospitality	• Express and parcel delivery • Smart construction • Smart logistics: Container tracking • Smart logistics: Rail car tracking • Smart logistics: Fleet management • Smart manufacturing

Retail and wholesale	Utilities	Primary sectors	Public administration
• Stockout and theft reduction • Smart logistics fleet management • Automatic checkout • Express and parcel delivery • Sports articles	• Smart grid • Smart water • Smart gas	• Precision farming: Crop management • Precision farming: Livestock management • Smart extraction (oil and gas, mining)	• Public administration efficiency • Street light control • Waste management • Education classroom management

Source: A.T. Kearney analysis

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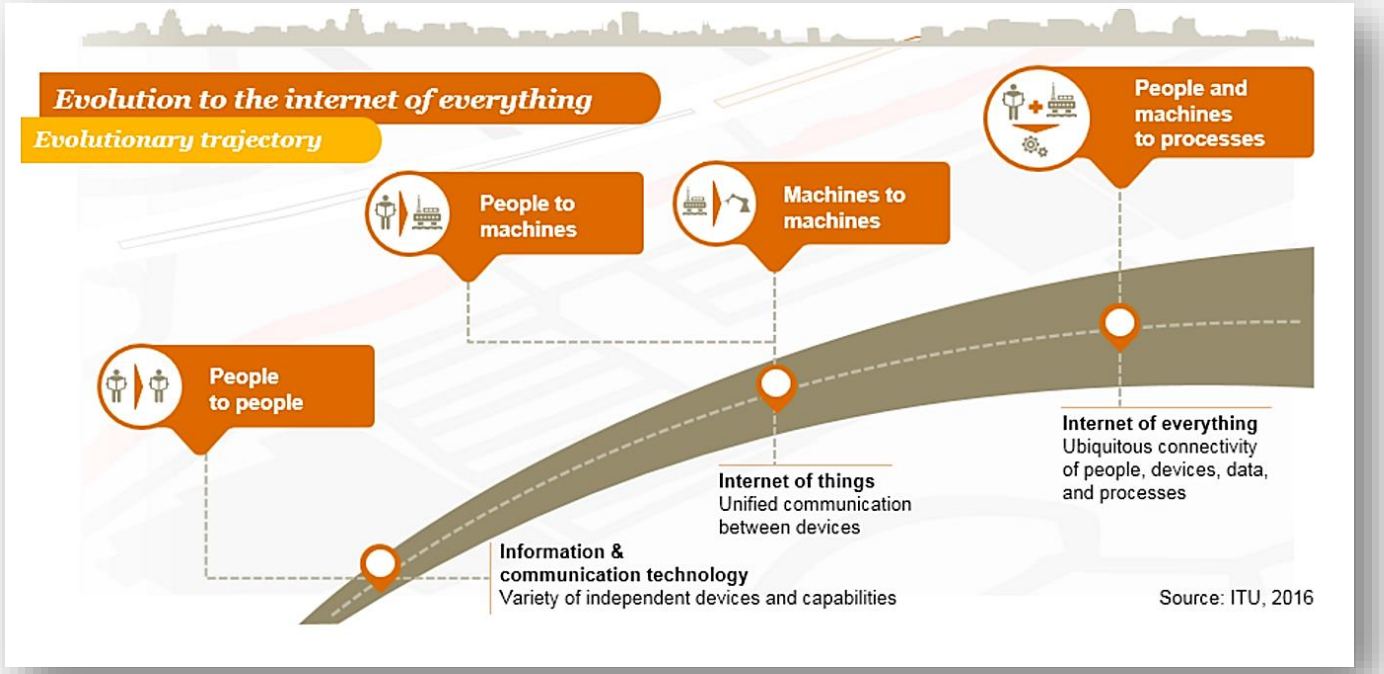
What is IoT?

- *"As the Internet of Things rapidly expands, it is introducing new risks that are not well understood and could have sweeping implications. The management of risks to cybersecurity and privacy must not be an afterthought in development and adoption of connected devices — it needs to be a greater priority."*
- *"The six technology trends driving IoT include the decreased cost of memory, storage, and processing; the increase in sensors; cloud and big data, and the convergence of the Internet and industrial networks".*



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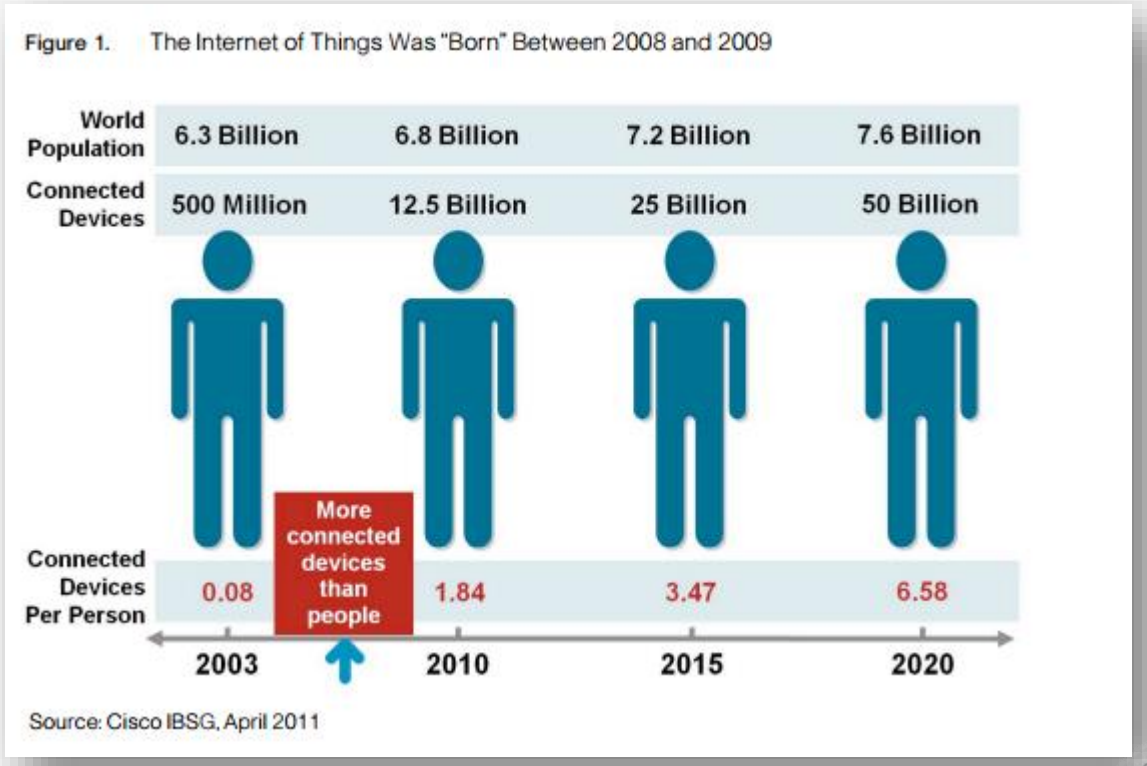
What is IoT?

"The Internet of Things (IoT), sometimes referred to as the Internet of Objects, will change everything—including ourselves. This may seem like a bold statement, but consider the impact the Internet already has had on education, communication, business, science, government, and humanity. Clearly, the Internet is one of the most important and powerful creations in all of human history".

IoT is simply the point in time when more "things or objects" were connected to the Internet than people. In 2003, there were approximately 6.3 billion people living on the planet and 500 million devices connected to the Internet. Cisco IBSG estimates IoT was "born" sometime between 2008 and 2009."



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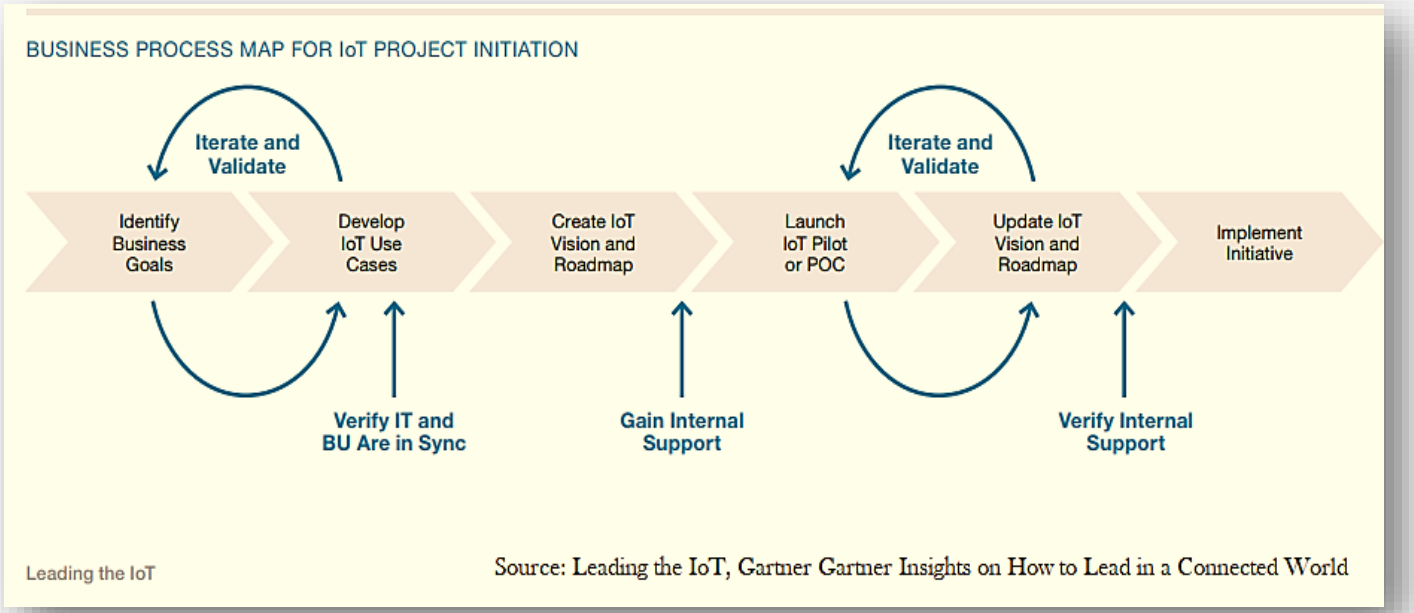
What is IoT?

Gartner®

- *"The Internet of Things (IoT) is a network of dedicated physical objects (things) that contain embedded technology to communicate and sense or interact with their internal states or the external environment. The connecting of assets, processes and personnel enables the capture of data and events from which a company can learn behavior and usage, react with preventive action, or augment or transform business processes. The IoT is a foundational capability for the creation of a digital business".*

"



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All Pictures from sail-world.com, volvooceanrace.com, www.plastimo.com.

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