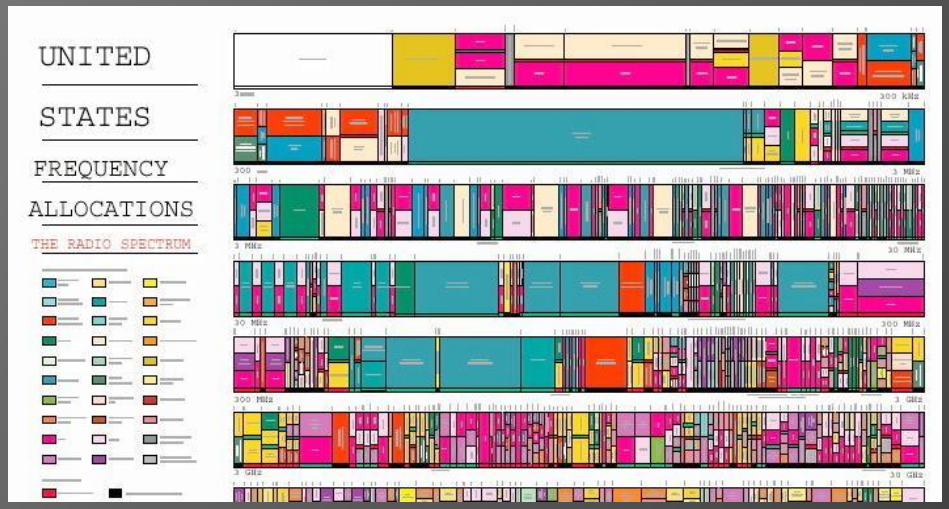


CHOOSING THE RIGHT CONNECTIVITY TECHNOLOGY FOR YOUR IOT APPLICATION

New communication technology is being deployed with bombastic marketing pitches.

No single connectivity solution can be all things to all problems –

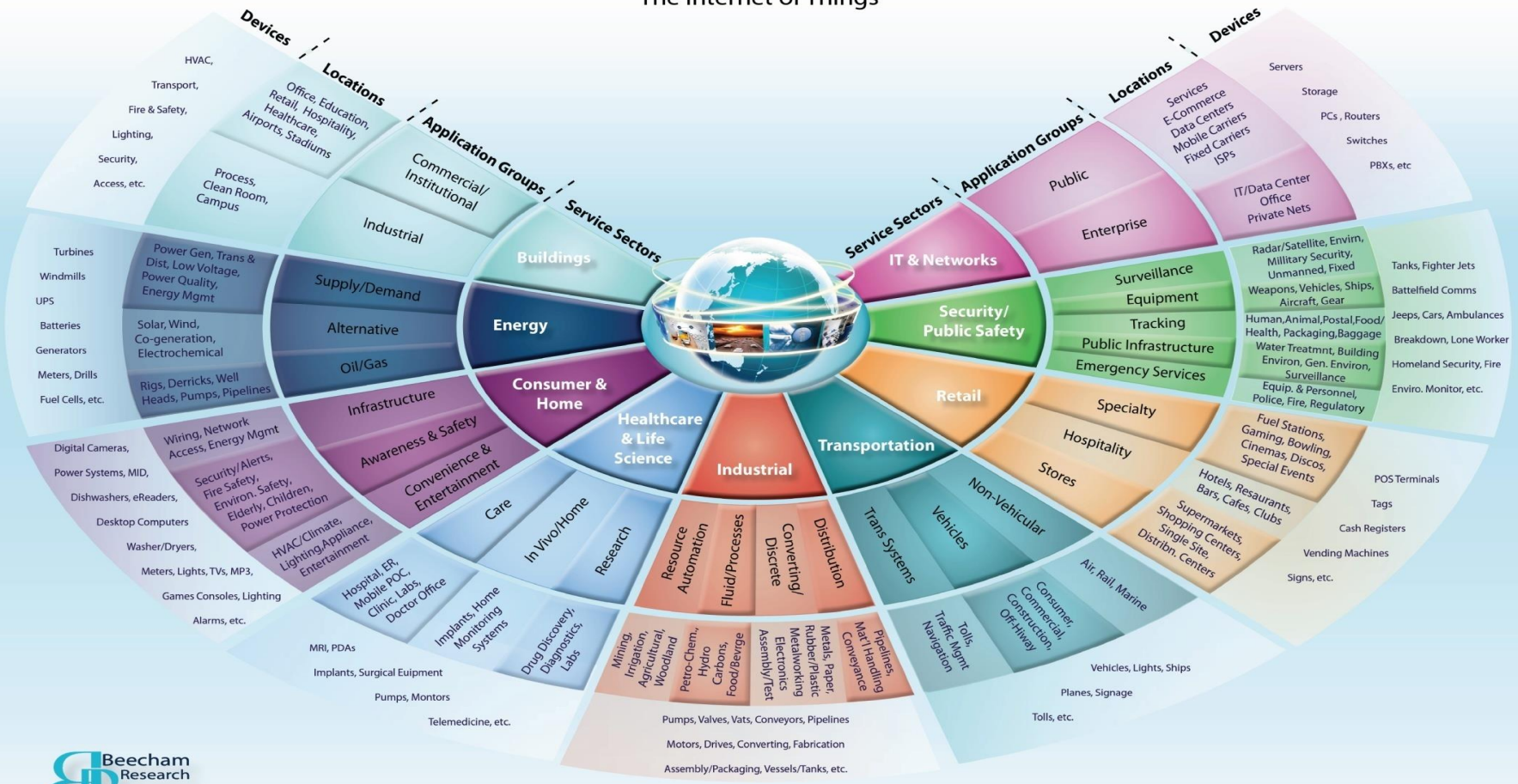
there is no single universal "best" answer.

So What's the Problem

What is the IoT

M2M World of Connected Services

The Internet of Things



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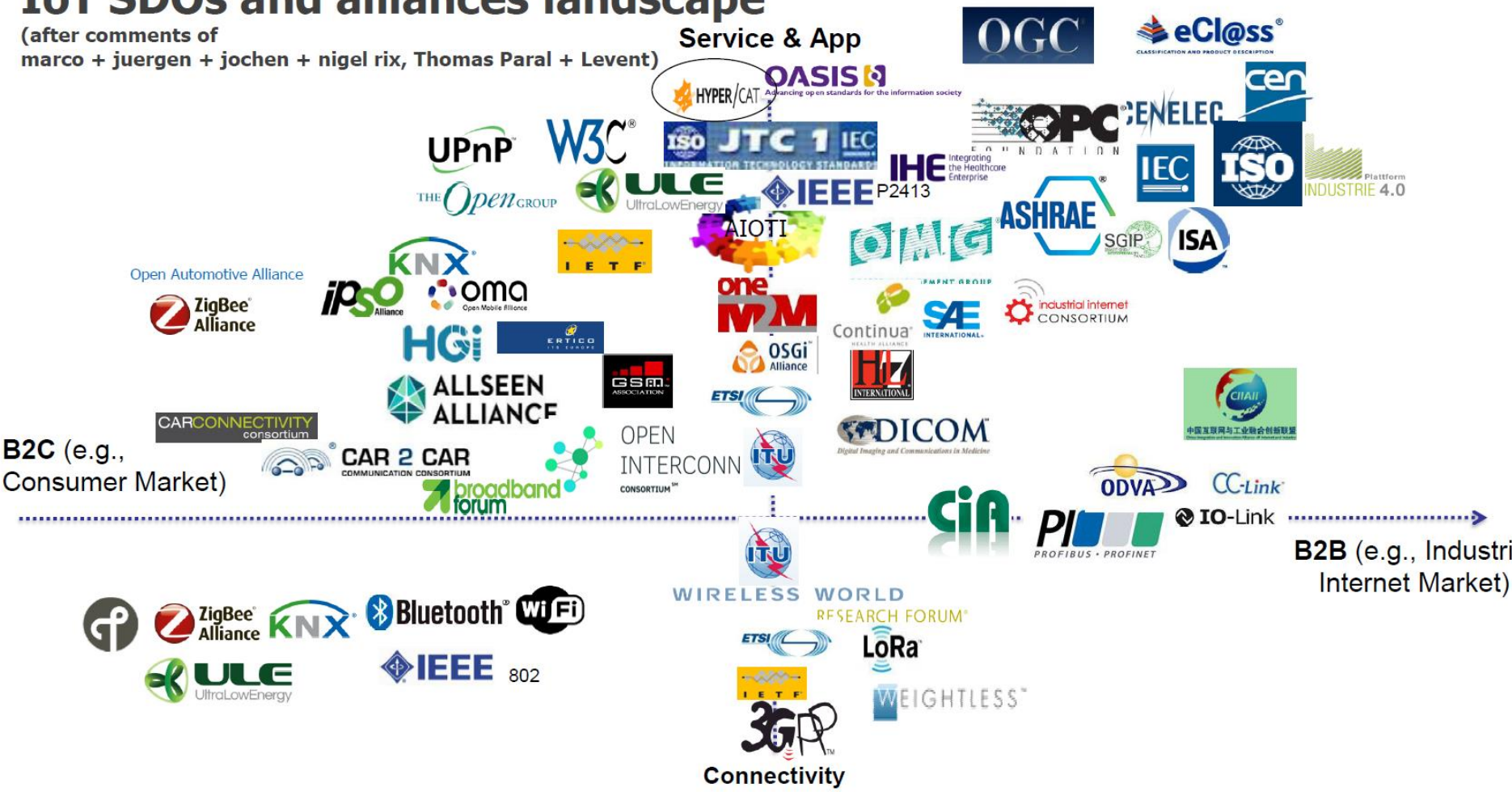
So What's the Problem

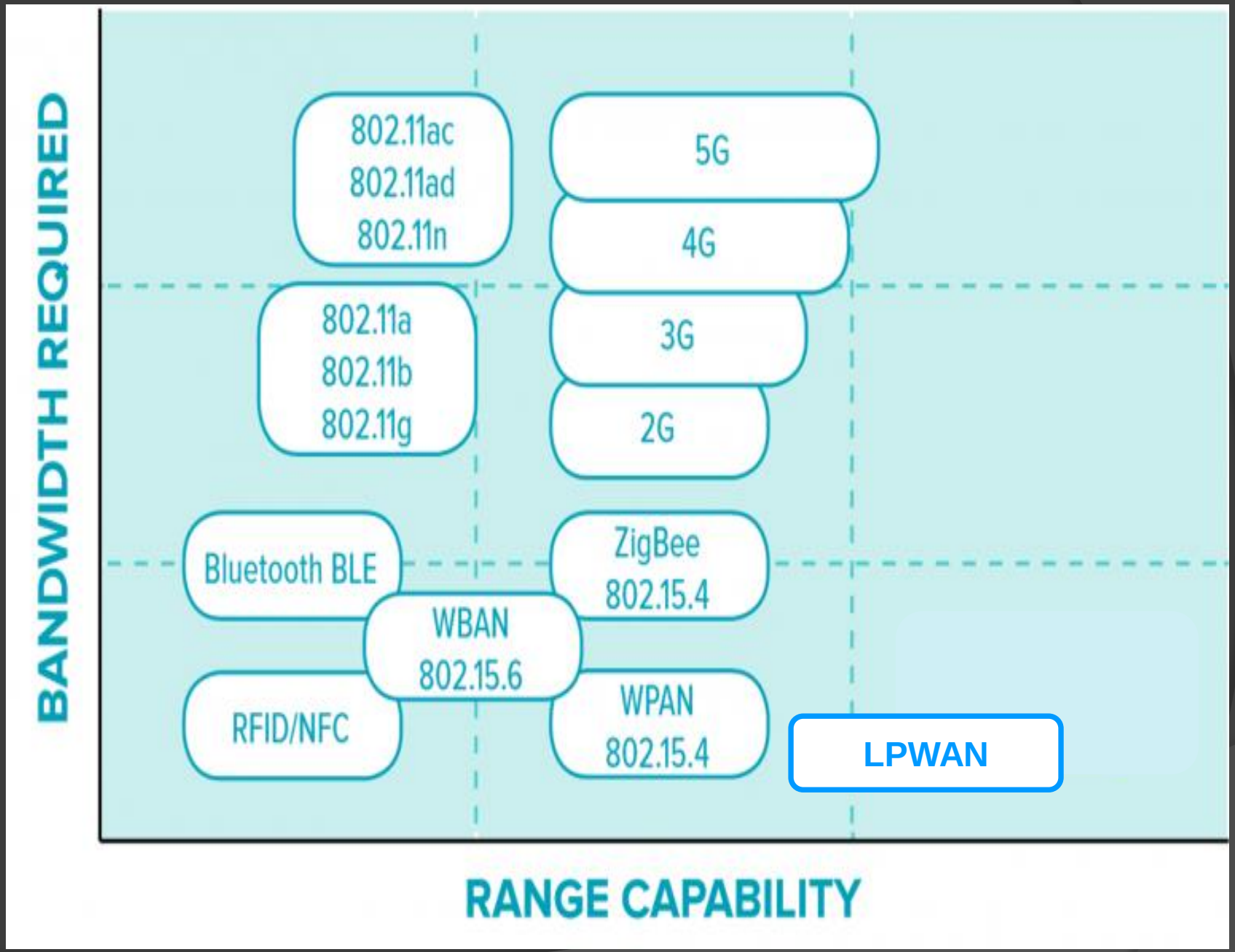
What is the IoT
By Whose Definition

IoT SDOs and alliances landscape

(after comments of marco + juergen + jochen + nigel rix, Thomas Paral + Levent)



Source: Modified from an initial contribution from Huawei

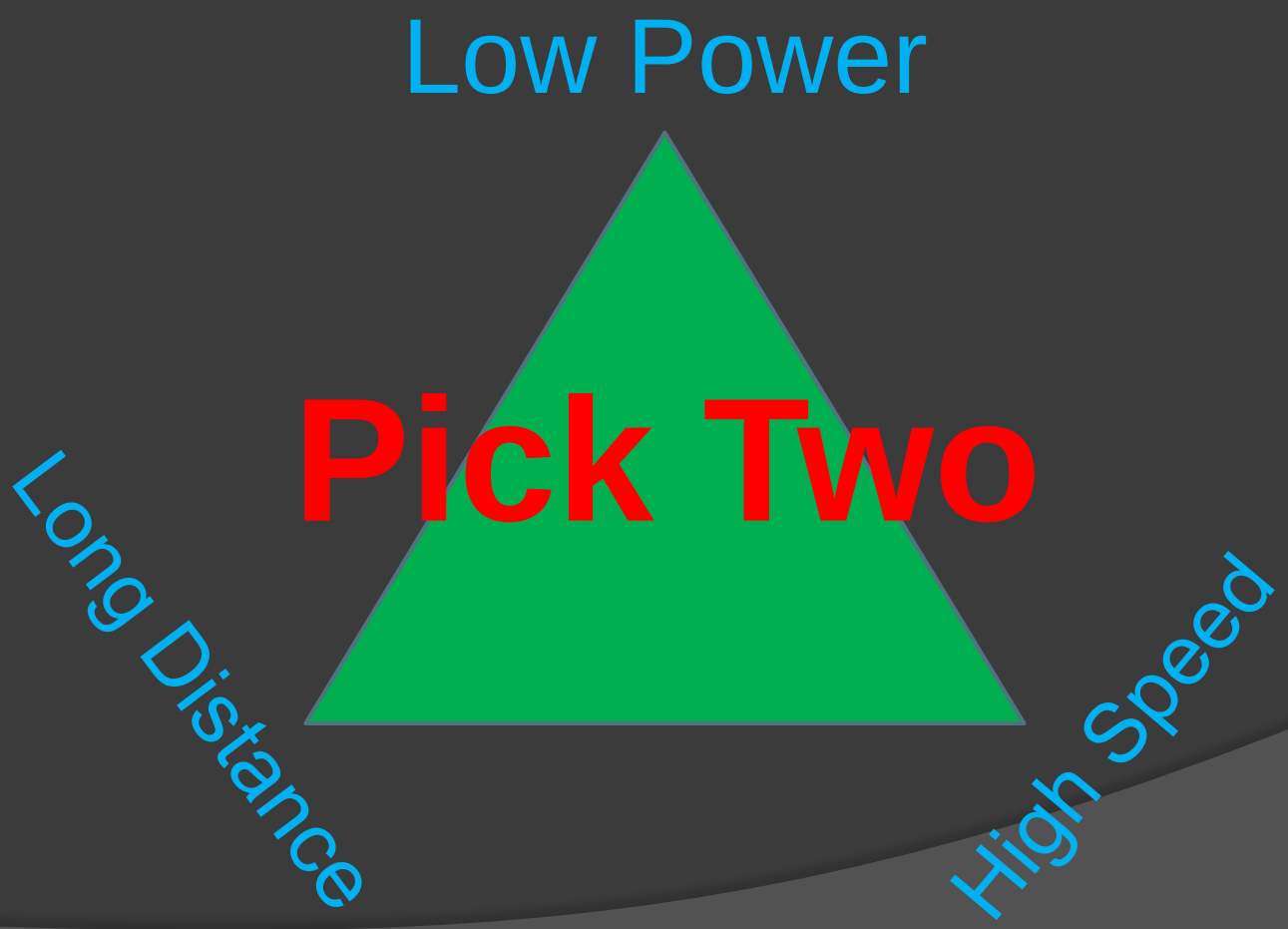

BANDWIDTH REQUIRED
802.11ac
802.11ad
802.11n
5G
4G
802.11a
802.11b
802.11g
3G
2G
Bluetooth BLE
ZigBee
802.15.4
WBAN
802.15.6
RFID/NFC
WPAN
802.15.4
LPWAN
RANGE CAPABILITY

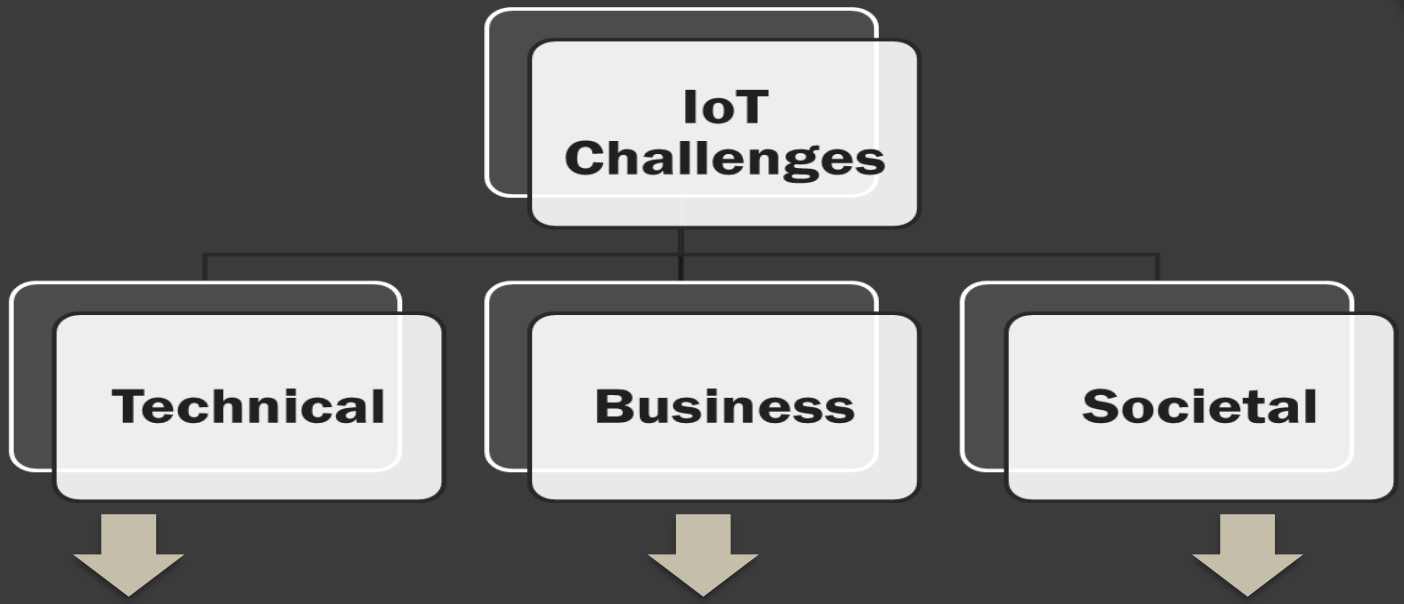
A Poll

Build or use for IoT

- Bluetooth
- WiFi
- 1G / 2G / 3G / 4G
- 802.15.4 / Zigbee / Zwave / WiSun
- LPWAN (LoRa, Sigfox, Ingenu, …)
- LTEm / NBiot
- 6lowpan

Wireless Tradeoffs





- Definition of Things
- Complexity
- Communication Paradigms
- Data Schema
- The Software Platform

- Silos vs. Horizontal
- The Revenue Challenge
  - Per device
  - Connectivity
  - Data
- The Value Chain
- New Biz Models

- Privacy
- Data Ownership
- Security
- Easiness of Use
- Social Cooperation

Open standards

Drive

“Permissionless Innovation”

Would just observe/ reverse the problem

Presidential Innovation Fellows

- Created by the White House
  - The “Talent Act” of 2016
- Bring outsiders to government
  - Government Innovation
- Applications open now
  - VA, DIUx, NIH, NIST, …
- Apply by July 11 (today) for Fall 2018
- presidentialinnovationfellows.gov
  - pif.gov

Internet Data

Really ???

Thank you....

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