MONETIZING IoT

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IoT Product Developer

The Convergence of Wireless Networked Communications, Cybernetics, Sensors, and Computing to create new value and near boundless opportunities.

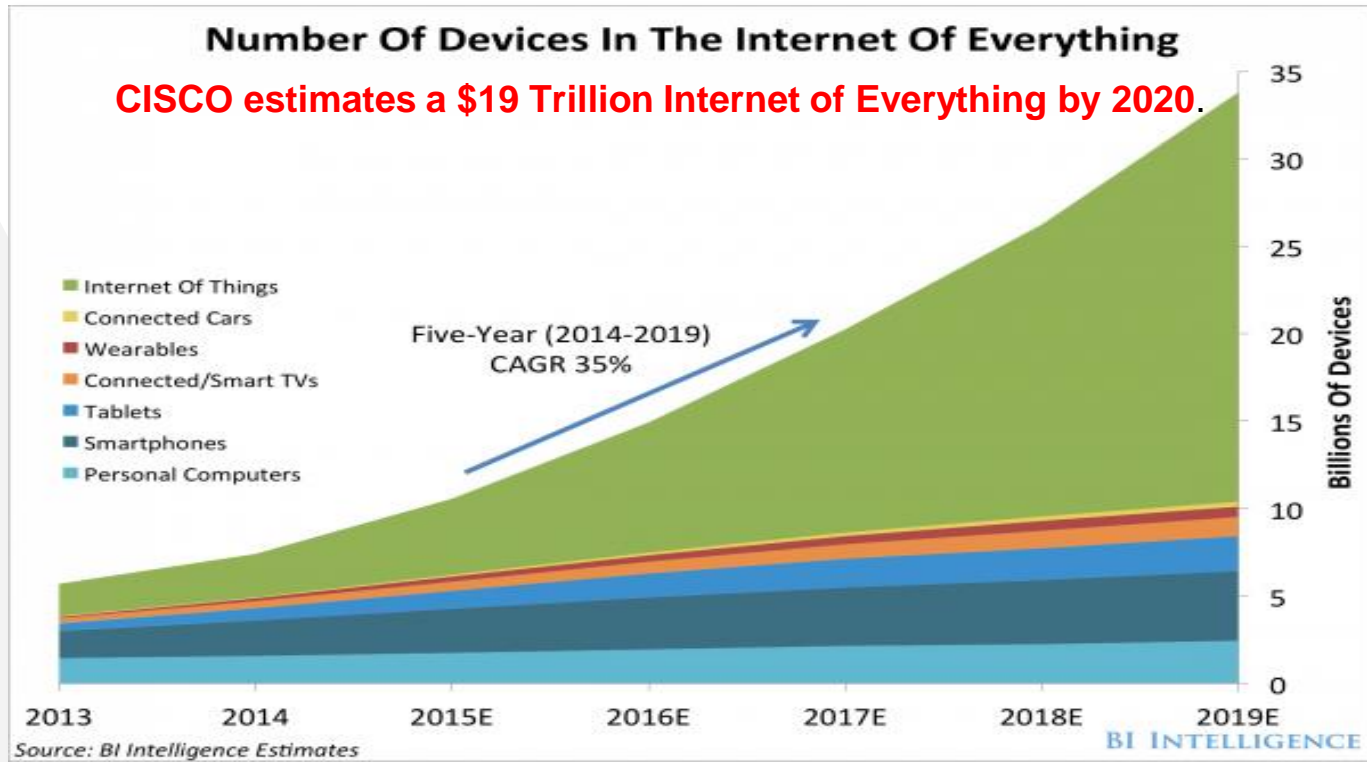# The Trillion $ Tech. Opportunity Cycle

▶ **40 years** ago Personal Computing spawned, and Silicon Valley

▶ **20 years** ago The Internet birthed amazon.com, ebaY, social media and online gaming

▶ **Today** the **IoT, 5G & FOG computing** will change everything with billions of online **Things** being deployed & **Trillions** in revenue.
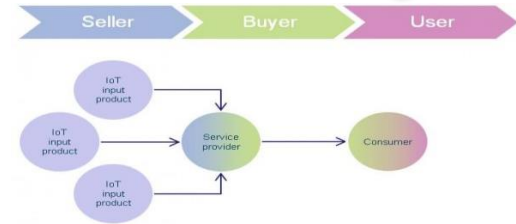
IoT Monetizing Growth= a new KPI

Number Of Devices In The Internet Of Everything

CISCO estimates a $19 Trillion Internet of Everything by 2020.

Five-Year (2014-2019) CAGR 35%

Legend:
- Internet Of Things
- Connected Cars
- Wearables
- Connected/Smart TVs
- Tablets
- Smartphones
- Personal Computers

Billions Of Devices

2013 2014 2015E 2016E 2017E 2018E 2019E

Source: BI Intelligence Estimates

BI INTELLIGENCE

Monetizing Drives new Jobs and Skillsets

Engineering & ICT

Firmware, Electronics, Controls, Cybernetics, Appliance design, Autonomous comms. Cybersecurity

Business & Management

**Chief IoT Officer
IoT Business Mgr
IoT ancillary staff
IoT Marketing**

High Demand Skills (source www.CIO.Com)

1. **IoT CIRCUIT DESIGN @ 231% growth Year over year**

2. **Microcontroller programming @ 225%**

3. **AutoCAD – (Engineering design software @ 216%)**

4. **Machine learning coding algorithms @ 199%**

5. **Security Infrastructure @ 194%**

6. **BIG DATA analytics@ 183%**

7. **Electrical Engineering @ 159%**

JOBS= $$$

Monetizing via Education

▶ **Delivery of Applied Training**

▶ **Certification with Accreditation**

▶ **Examples : M.I.T., COURSERA, KEYSIGHT**

▶ **Minimal Prerequisites & Online Delivery**

IoT MICRO-ENTREPRENEURSHIP

▸ **Concept Development & Prototyping**

▸ **Distribution channels influences design. Think Global**

▸ **Limit feature creep. Time to market is critical.**

▸ **Business/Service opportunity drives the Tech features.**

▸ **Test to failure and achieve robustness & hack defense**

▸ **Leverage IoT features into recurrent revenue streams…..**

Case#1: IoT LED signage Lighting and Sequencing

IoT Product Differentiation & Monetization

- **Very Compact & Weatherproof**
- **Wi Fi controlled or Standalone**
- **Single IoT Chip driven, 8 Channels**
- **Retail Revenue & service revenue**
- **Customer can alter a LED Sequence via a web page anytime = a small service fee**
- **Every Customer is 'registered' online.**

#2: Battery Regeneration: Auto, Marine, Cell Tower

- Portable 25cm Cube, **B2B leased** regenerators with IoT

- 25 % return to service = re-certified battery + Warranty

IoT PROVIDES:
1. IP defense and Global system management
2. Science data on every battery regenerated
3. Real time Diagnostics & remote access
4. Customer usage patterns & service cycles

- Server side analytics to create long term revenue via subscription to the battery failure database across regions. This is a World's first for batteries & big data. **Can be used for predictive maintenance**

Summary: Technology is a net creator of Jobs

- **Acquire or contract the competencies and gain experience**

- **Monetize by becoming IoT employable as H.R. demand outstrips supply**

- **Monetize by offering support services such as Training, Cybersecurity or System Prototyping**

- **Monetize via Design, Manufacture, and Deployment of your own THINGS, capturing customers with online 'thing' services**