Things Are Happening

Mark Bachman, Ph.D.
Calit2 IoT Chief Evangelist
Calit2-Irvine
November 3, 1015
Today:
The Internet of People
Most data generated by/for *humans*

Tomorrow:
The Internet of Things
Most data generated by/for *things*
Why the hype? The SMART, CONNECTED world.
$7 to $17 Trillion market opportunity by 2020

“GOLD RUSH”
The Internet of Things (IoT)
The Internet of Things (IoT)

The Internet of Things (IoT) is expected to be up to a $17 Trillion dollar opportunity by 2020.

More than 50 Billion devices will be connected to the internet by 2020. Almost every device will contain at least one sensor.

Requires a build rate of 650+ Million (6,5000,0000) DEVICES PER MONTH for the next five years.

Large opportunities for hardware, software, services, and applications in the largest market in recent tech history.
Architecture of IoT system

The “EDGE”
- Mote
- Physical interface modules: sensors, controllers, actuators, effectors

“BACKBONE”
- Server/Router

The “CLOUD”
- Data services: storage, data mining, visualization, analytics
Physical interfaces make the “edge” of IoT

The “EDGE”

Physical interface modules:
sensors, controllers, actuators, effectors

50 Billion Devices
650 devices per month
IoT is the biggest revolution in recent tech history…

IT’S NOT ABOUT TECHNOLOGY!
IoT is powered by cheap, ubiquitous, commoditized technology. IoT value comes from innovative application ideas.
IoT applications are best designed by Application Experts
Calit2 IoT

Calit2 is fully committed to supporting IoT in Orange County

Market
Entrepreneurs
Funding
IP/Regulatory
Incubators

Applications
Design
Integration
Products/services
Installations

Research
Technology
Studies
Policy
New applications

Education
Students
Training
Workshops
Outreach
There’s a storm coming

It’s going to rain money…
But I can’t tell you where to put your bucket.
You must ride the wave.
You don’t have to ride alone...

Riding the IoT wave. Surf’s up!
Things Are Happening