

IoT and Make: A View from the White House

Introduction

Geoff Mulligan

Worked on ARPAnet

Helped design IPv6

Created 6LowPAN

Founder of Zigbee Alliance

Founder & BoD of IPSO Alliance

President Proto6 – Internet Tech Consultants

Co-creator of White House SmartAmerica Challenge

Presidential Innovation Fellow - IoT

US Representative ISO Smart & Sustainable Cities

Chairman LoRa Alliance



Presidential Innovation Fellows

- Created by Todd Park – Second US CTO
- Bring outsiders to government
- Short term (6 – 12 month) government employee
- Working with agencies throughout government
- Open Data Initiative
 - Make government data available to create business opportunities
- <https://www.whitehouse.gov/innovationfellows>

IoT for the Economy and Lives

- ⦿ Not about finding the best tech
- ⦿ Not about tech for tech sake
- ⦿ How can the IoT drive new business
- ⦿ How can the IoT improve lives
- ⦿ What is impeding the IoT

SmartAmerica Challenge

- ◎ How can and will the IoT impact America's economic recovery
- ◎ Bring together Public sector, Private Businesses, Universities and Individuals
- ◎ 24 IoT projects:
 - ◎ “Crash to Care”
 - ◎ Smart Emergency Response Team
 - ◎ Injured Warrior Recovery

Lessons Learned

- ⦿ Concerns surround privacy
- ⦿ The Technologies are available NOW
- ⦿ As with Internet:
 - IoT depends on permissionless innovation
- ⦿ The difference between privacy and security
- ⦿ Lots of stove-pipes

The IoT – Privacy and Security

- ◎ Security is a technology
 - ◎ Encryption
- ◎ Privacy is a policy
 - ◎ Who should be able to access your data
- ◎ Who owns your data
- ◎ De-Aggregation Problem



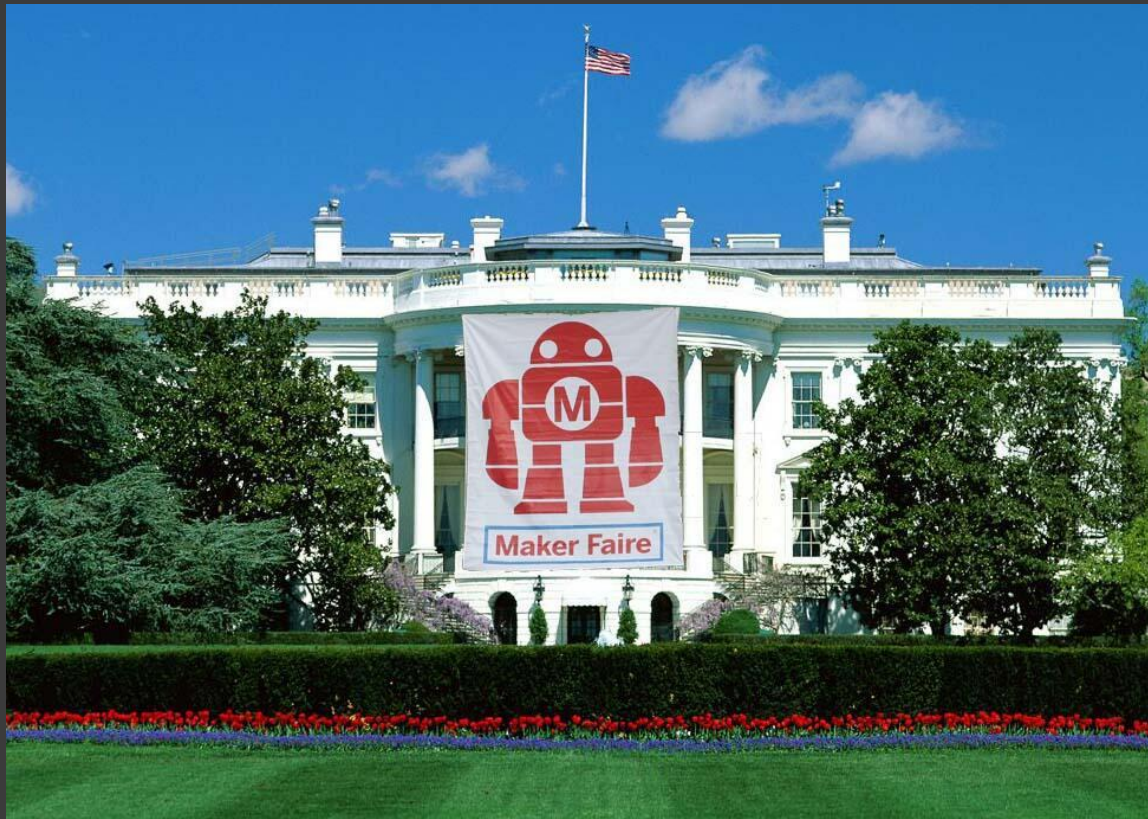
June 2014 – First White House Maker Faire

June 2015 – White House Maker Week

“...every company, every college, every community, every citizen joins us as we lift up makers and builders and doers across the country.” – President Obama

The President's goals:

- ◎ Help Makers launch new businesses and create jobs
 - DOD, HHS, DOE, NASA, NSF, USDA, DOC, DOT, DHS, EPA, and ED: SBIR and STTR
- ◎ Expand opportunities for students to become Makers
- ◎ Challenge Makers on pressing problems
 - Healthcare, Energy, Space, re-shore manufacturing



2016 White House Maker Faire

June 18 - 19

Make and the IoT

- ◎ *Things* can and will be printed
- ◎ Need computing and communications
- ◎ Standards are critical

IoT – Big Challenges

Who Owns the Data
Identity Management

Privacy

Security

Life-Cycle Management

HAROMONIZATION

Thank You

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