



Planes, Trains and Automobiles: “The Internet of Deadly Things”

By

Bryan K. Fite

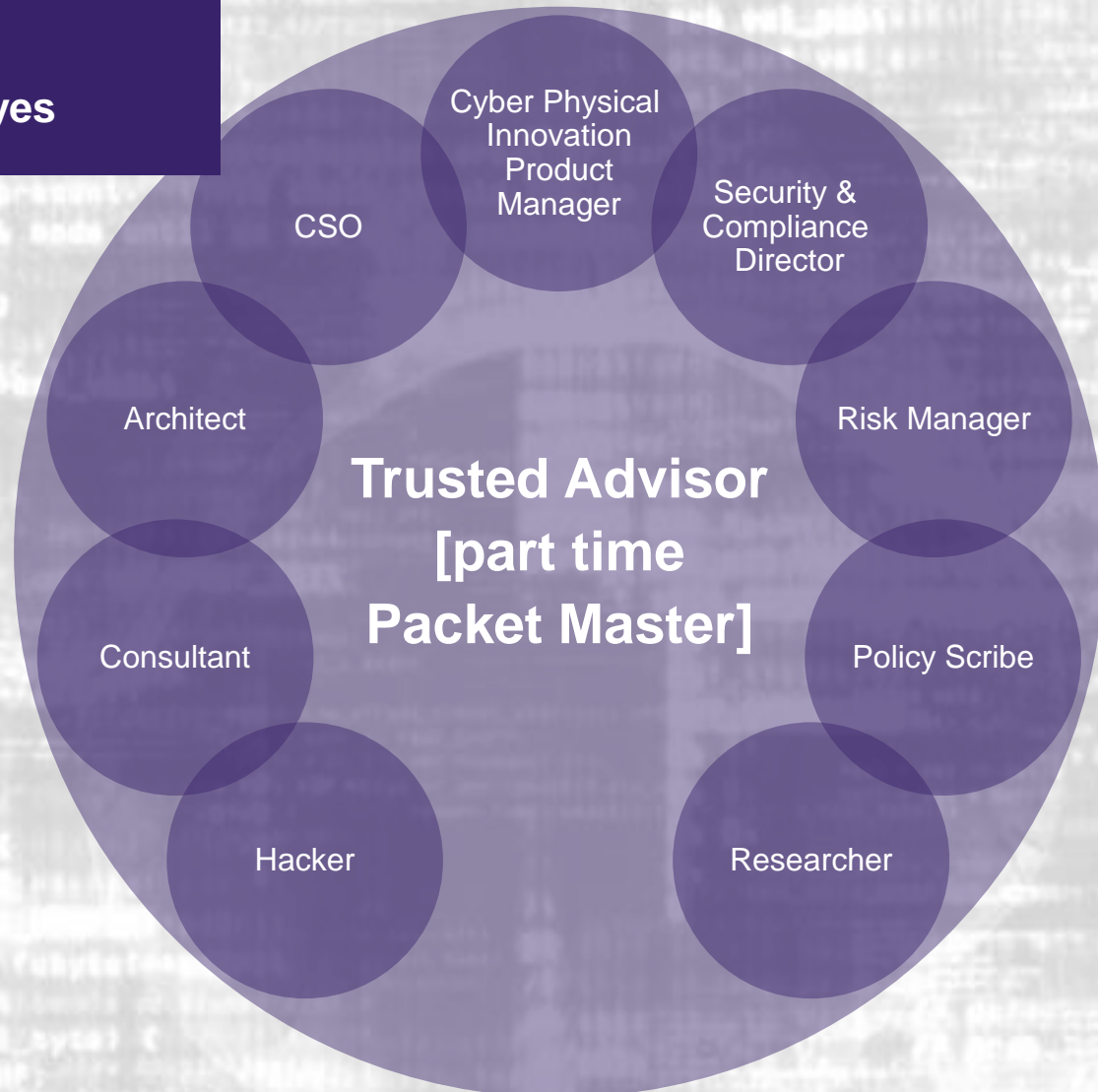
March 17, 2016

Disclaimer

This *presentation* is a Lightning Talk and work in progress. The opinions expressed in this *presentation* and on the following slides are solely those of the presenter and not necessarily those of my employer.

My Journey

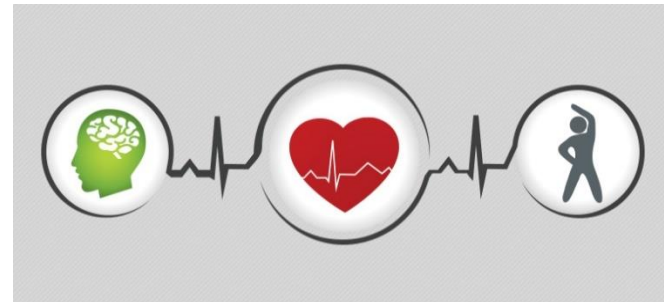
From the guy that said NO
to the guy that **facilitates yes**



Cyber Physical Systems (CPS)



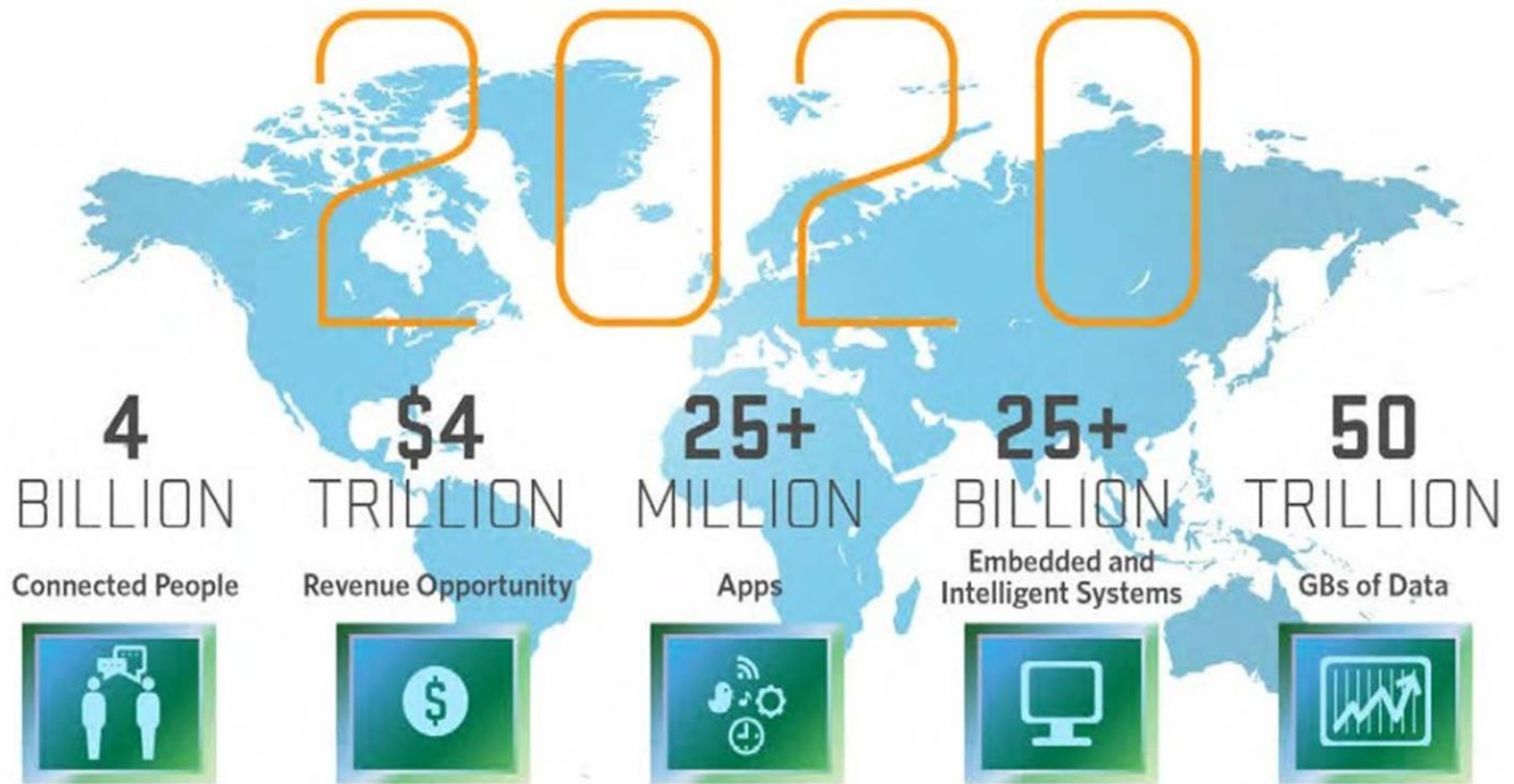
Humans Matter



Safety, Security & Privacy



Wicked Problem



Source: Mario Morales, IDC



meshco[™]
Real Hacking — Right Now!

 **TROOPERS**

Reasonable Response

- Create a Cross Domain Taxonomy
- Develop an Modeling & Assessment capability
- Establish known theoretical attack surface
- Agree relevant threat catalog (by stakeholder)
- Articulate control affinities, countermeasures and failsafes
- Rinse and repeat (life-cycle management)

Prior Art – Big Props



I Am The Cavalry

CPS Primitives



SINGLEFUNCTIONAUTOMATON



SENSORS



COMMUNICATION



ACTUATOR



HUMAN



meshco™
Real Hacking — Right Now!

 **TROOPERS**

Danger Drivers



Confidence Characteristics



Funky Fresh – What's Next?

- White Paper (June-ish)
- Use Cases
 - Hiding From Robots
 - Sophie's Choice
 - Connected Transport
- Tools
 - RRA
 - TERM
 - **Danger Index**
- DCX: Dayton Security Summit
 - <http://day-con.org>
 - Oct. 13-15, 2016



Conclusions



DON'T PANIC

“Its inevitable. Prepare accordingly!”