How to (not) Fail at Hardware

Craig Smith
How do you hack what you don’t know?
But...

- I have never used X
- I do not know that industry
- I don’t know how that works
- I wouldn’t know where to start
- I’m sure others are more qualified
But...

- I have never used X
- I do not know that industry
- I don’t know how that works
- I wouldn’t know where to start
- I’m sure others are more qualified
The application stat

Women want to be 100% qualified

Men are comfortable if they are at least 60% qualified
#1 Reason for Failure:

Scoping
How did I get here?
But why?
Navigation Systems
Black box
Success!
Welcome to the Auto Industry
Production Lifecycle

Time From Development To Production: 5 Years
Average Vehicle Age in the United States: 11.5 Years
Total Time Supported by the Manufacturer: 16.5 Years
Functional Testing Environment
Prototypes & Scopes
Limit your scope
Blackbox == Reverse Engineering
DRM Validation Testing
Current State of OEMs and Tier Suppliers
SHDLC?
Rules of Engagement

- Limit scope to targeted areas
- Work with tier/component manufacturers directly
- Ensure a proper testing environment
- Scope creep & liability
- Development Milestone reviews
- Blackbox == Reverse Engineering
Target Success
Discussion