



Tony Scott

Federal CIO US Government (2015-2017)

CIO VMware (2013-2015)

CIO Microsoft (2008 – 2013)

CIO The Walt Disney Company (2005-2008)

CTO General Motors (2009-2005)

Security by Design in A Borderless World

Changing the Way we do Cybersecurity

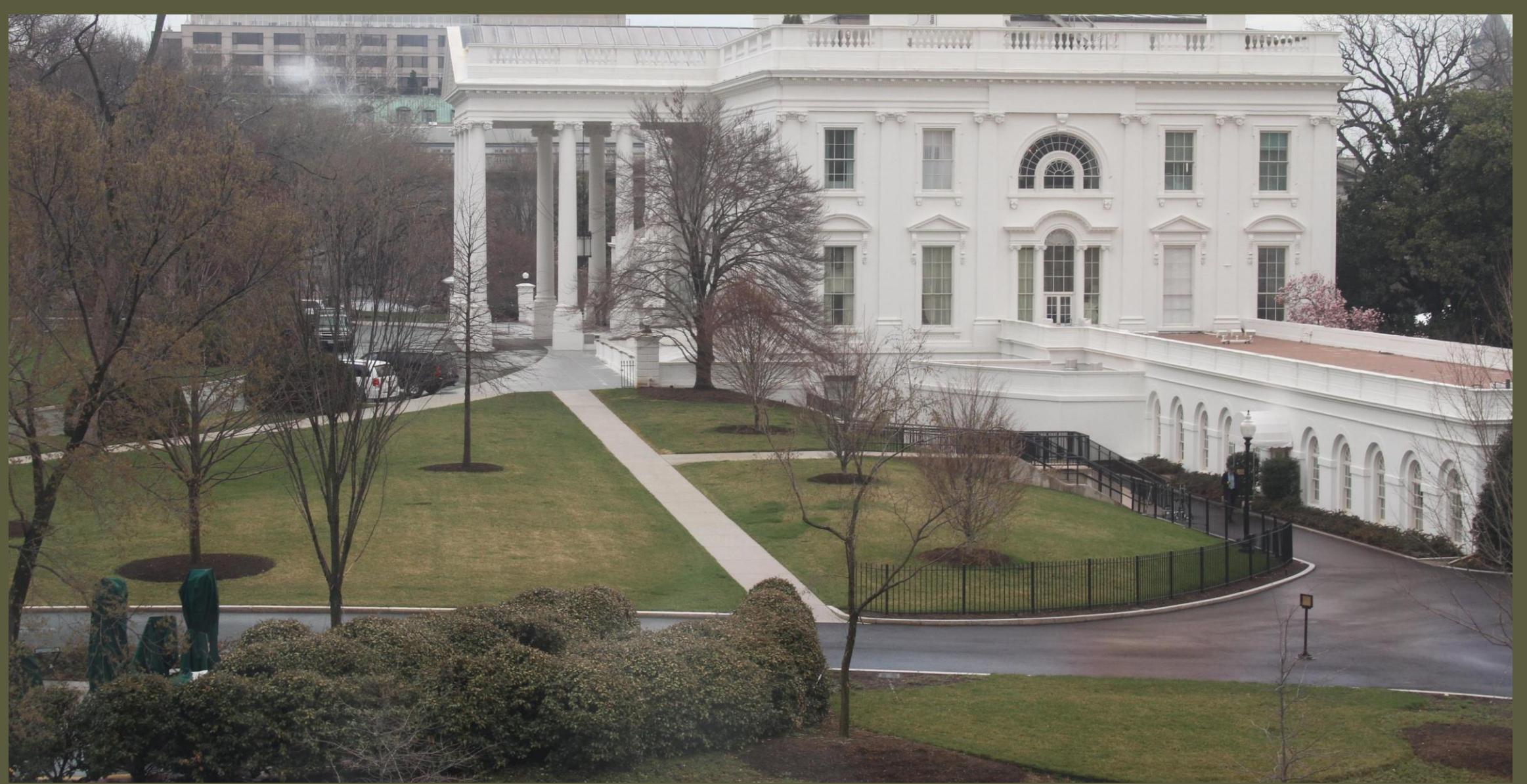
My Journey....



vmware®











A bad day at
work.....





Just a little trip down an
information systems memory
lane....







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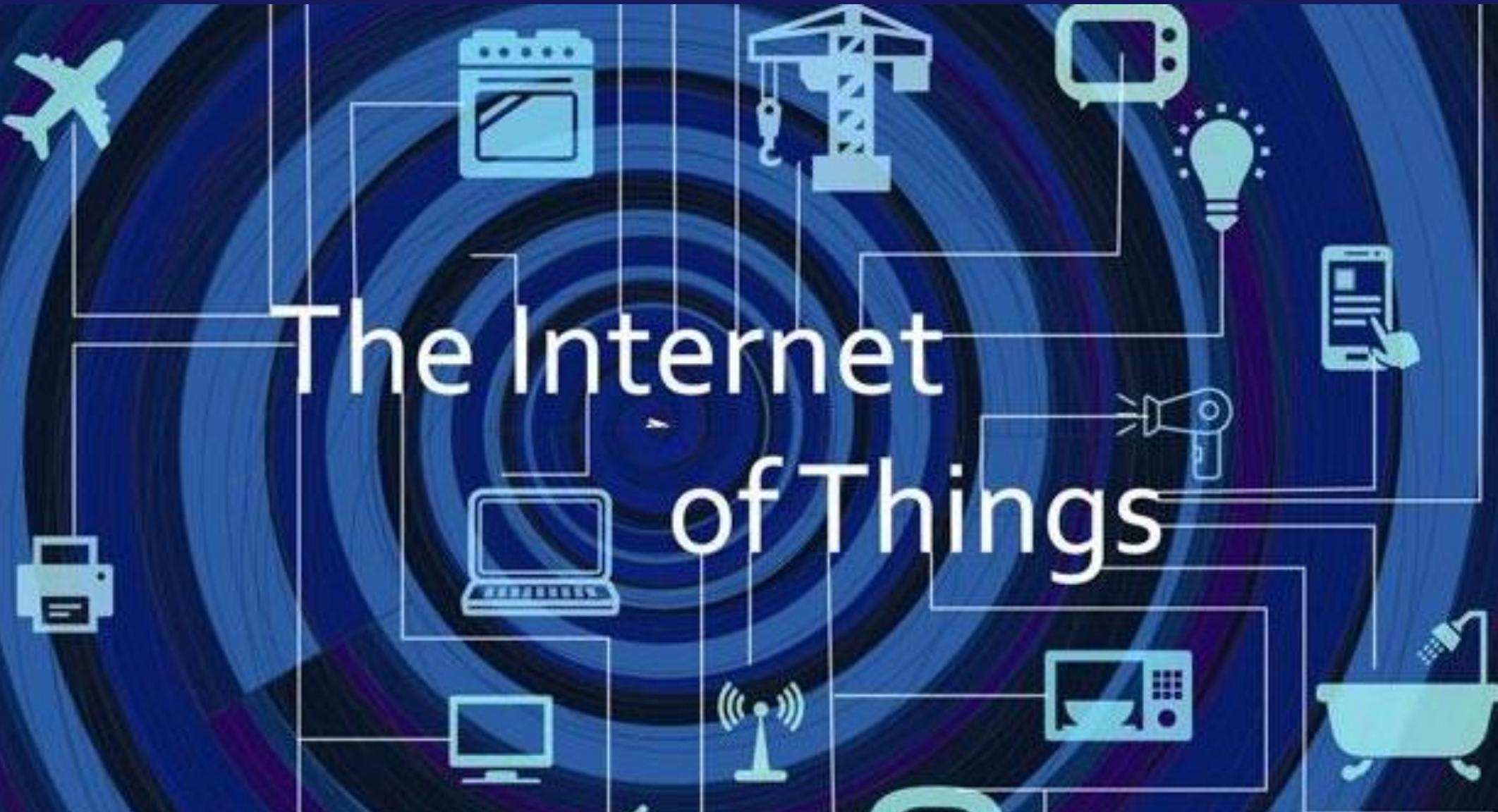








The Internet of Things



| Transformative
Opportunities

Relentless Digitization

Security and Privacy by Design

Machine Learning / AI

5G Wireless Networks

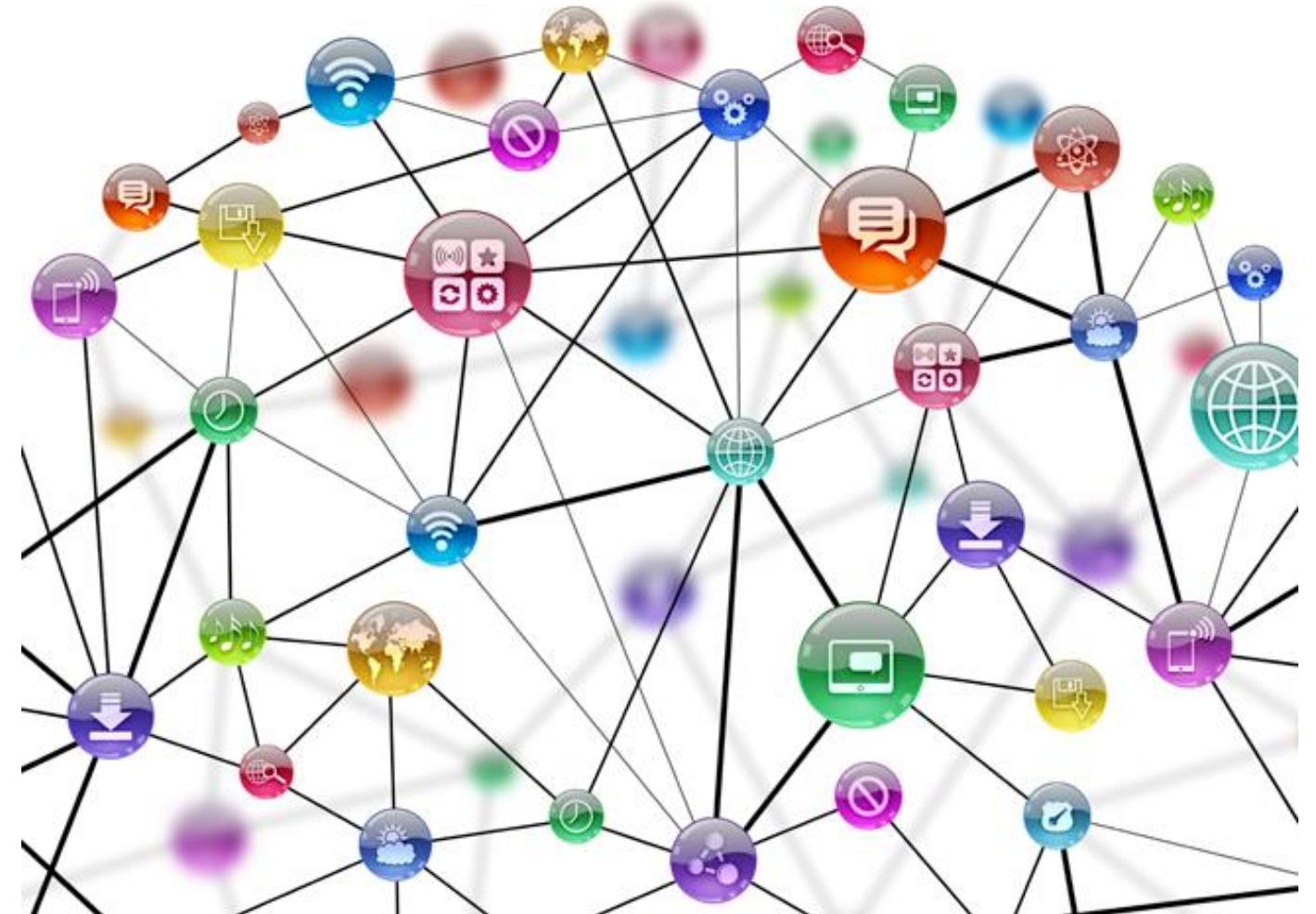
Relentless Digitization



Traditional Analog Business Model



Digital Business Reality



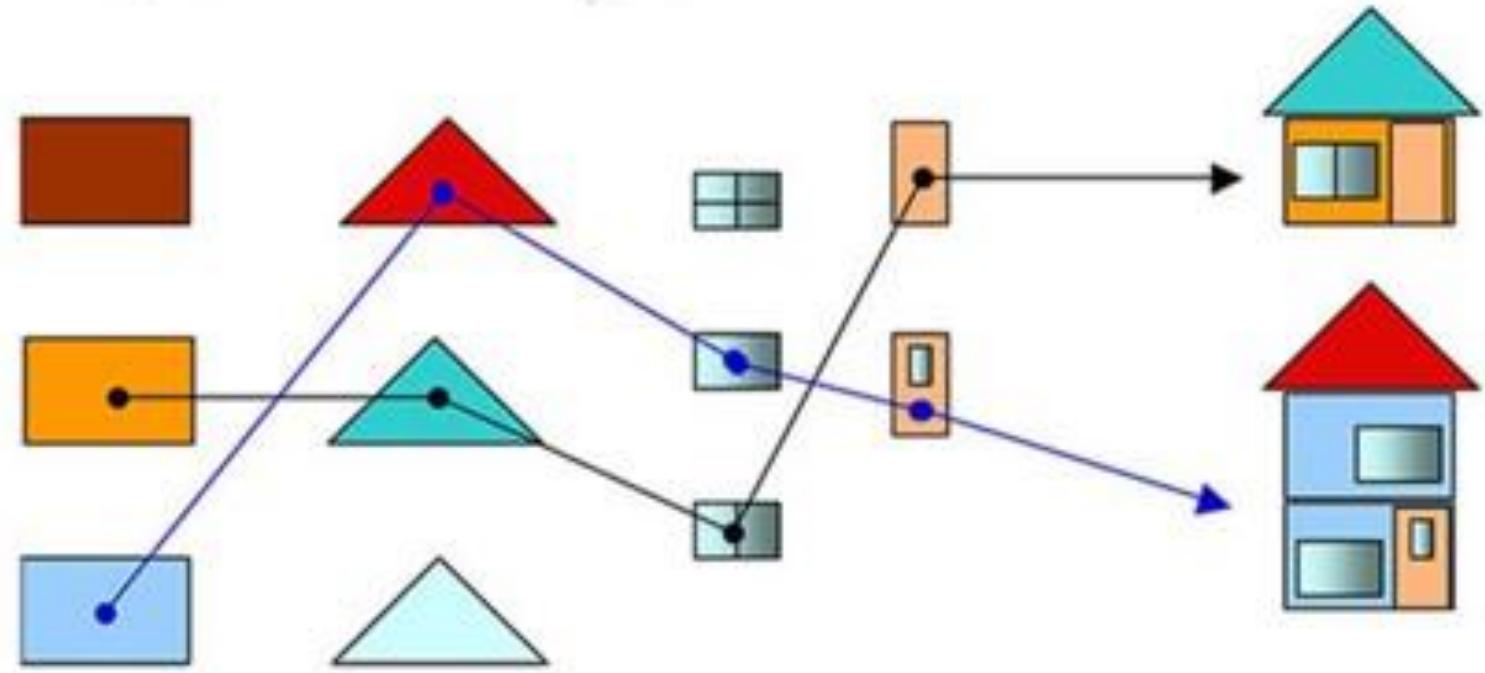


A large blue circle overlaps a smaller yellow circle, which overlaps a tiny gray circle. To the right, a dark gray shape curves upwards and to the left.

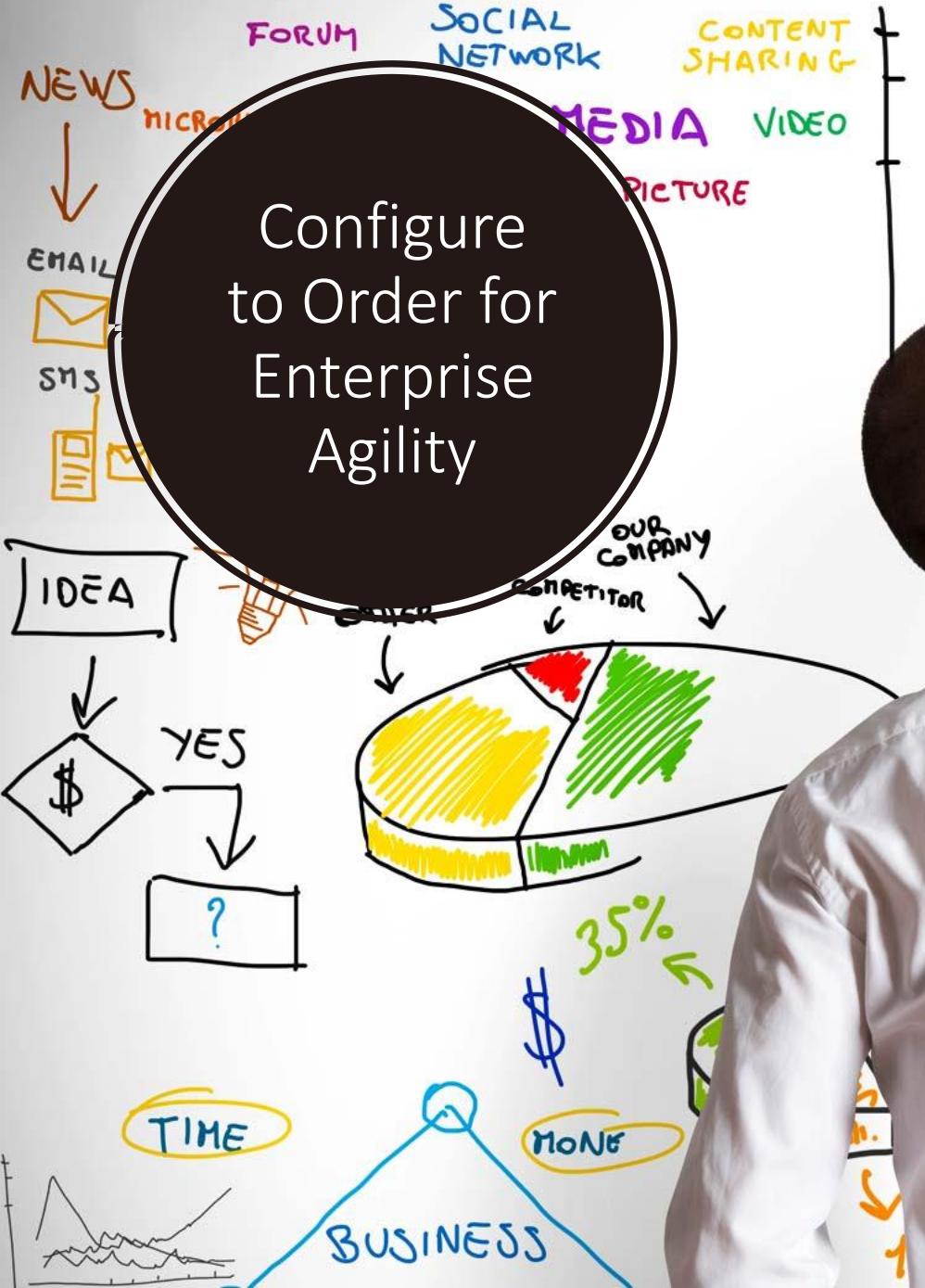
Age Old IT Dilemma

Buy or Build?

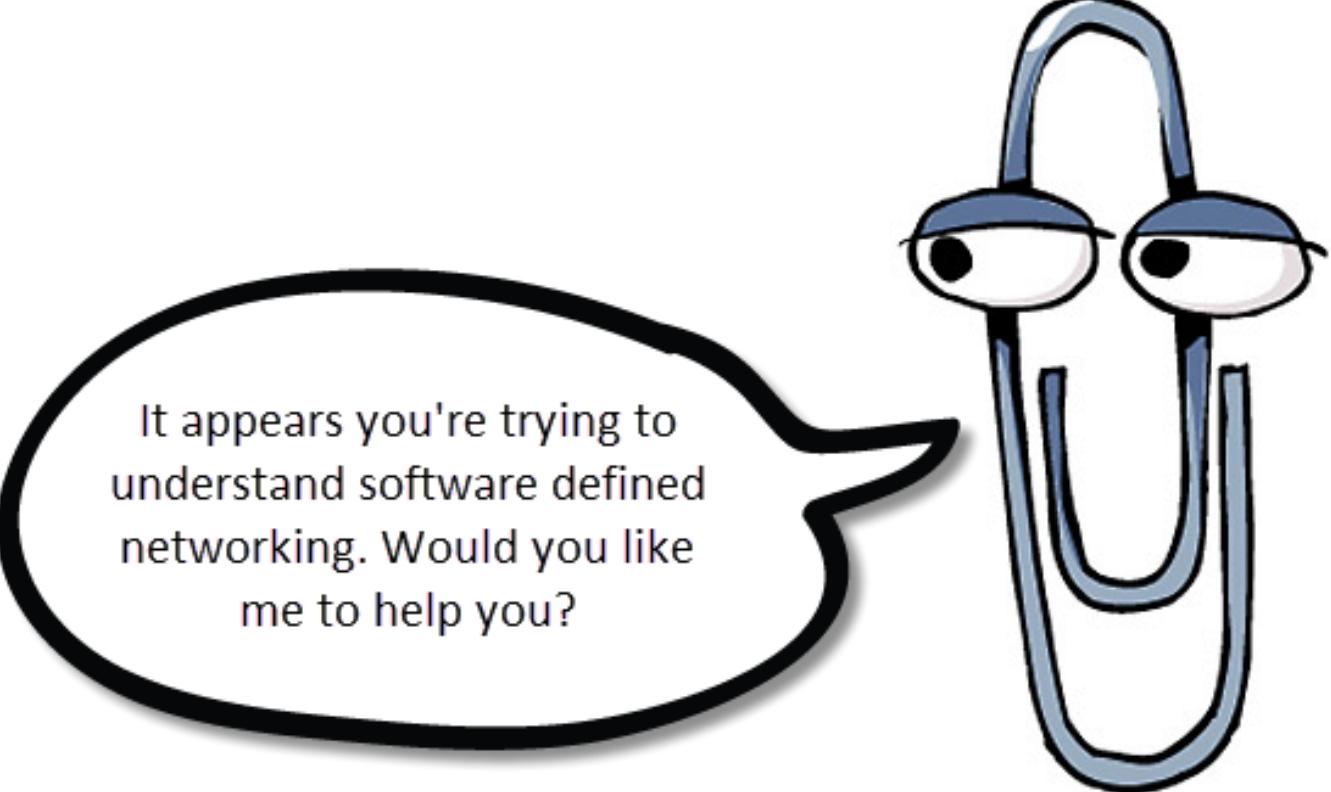
New Model
Emerging –
Config to
Order



Configure to Order for Enterprise Agility

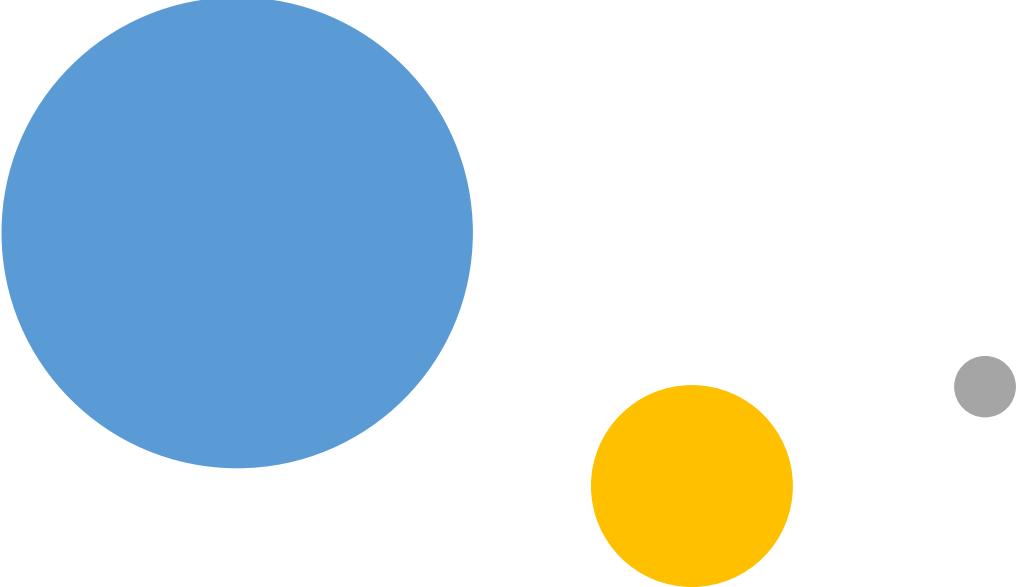


Software Defined Everything



It appears you're trying to understand software defined networking. Would you like me to help you?

Why does Security &
Privacy matter in the
design process?



Answer:

Because it is
hard and
expensive to do
after the fact

Security After the Fact, or Secure by Design?

1965 Mustang



2017 Mustang



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Security & Privacy by Design

- Component Provenance (Hardware and Software)
- Context & Data Aware Infrastructure
- Transparent & Externally Inspectable operations
- Self Health Check built in
- Self Healing
- Performant and Scalable
- Modern Identity and Access Management enabled
- Resilient (end-to-end)

Takeaways – Security and Privacy By Design

Replacing Legacy systems presents the biggest opportunity for reducing risk and saving money

Data and IP (intellectual property) are the most high value non-human assets of the Enterprise

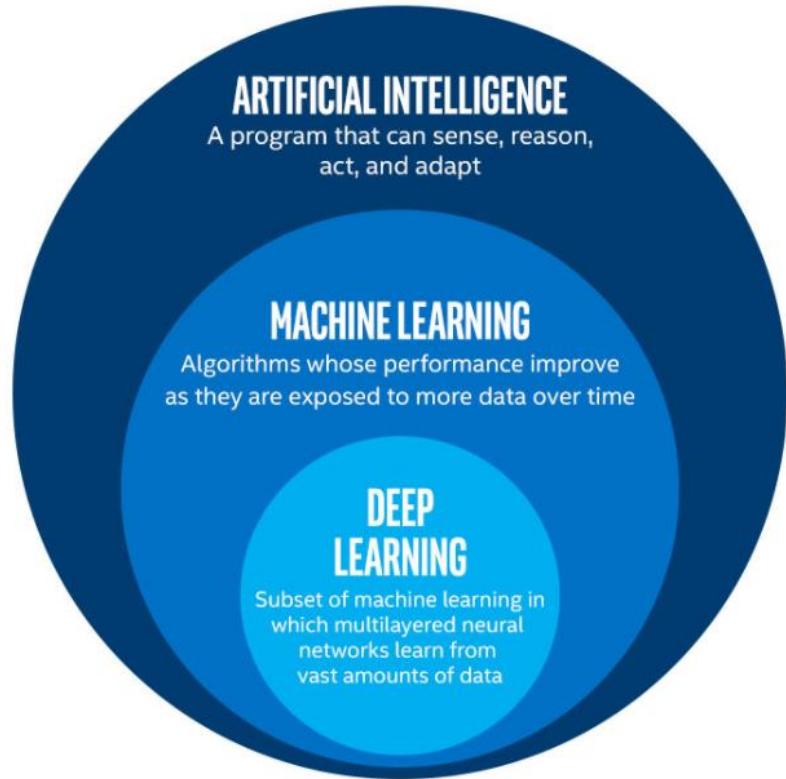
Enterprise trustworthiness is a core Consumer/Citizen Issue for any “Brand”

Redefinition of “Privacy” is required to meet modern reality

Citizens / Customer Digital “rights” and data ownership regulations on the rise globally - GDPR

Machine Learning

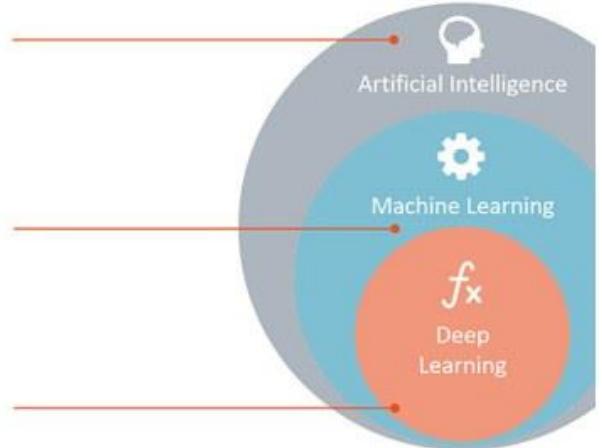




Artificial Intelligence
Any technique which enables computers to mimic human behavior.

Machine Learning
Subset of AI techniques which use statistical methods to enable machines to improve with experiences.

Deep Learning
Subset of ML which make the computation of multi-layer neural networks feasible.



AI/Machine Learning Model

Takeaways – Machine Learning & AI

Will be a de facto part of every consumer interaction

Key Element in Cybersecurity Strategy

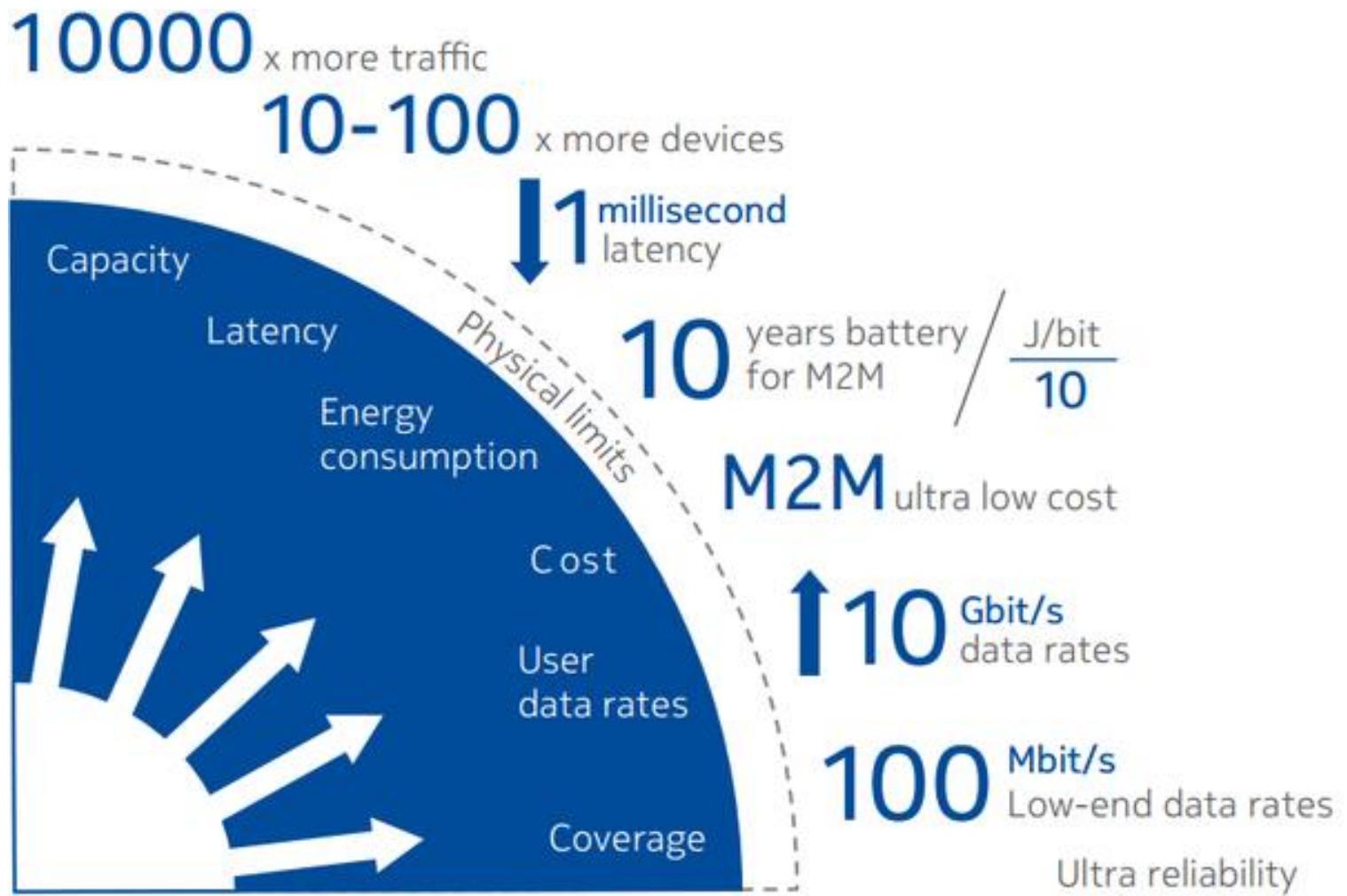
Training data and models – new & emerging Digital Supply Chain Opportunity

Different Technology approaches by the Big Four (Google, Microsoft, Amazon, IBM)

5G Wireless Networks



5G Networks



Takeaways – 5G Wireless Networks

\$12 trillion market value opportunity

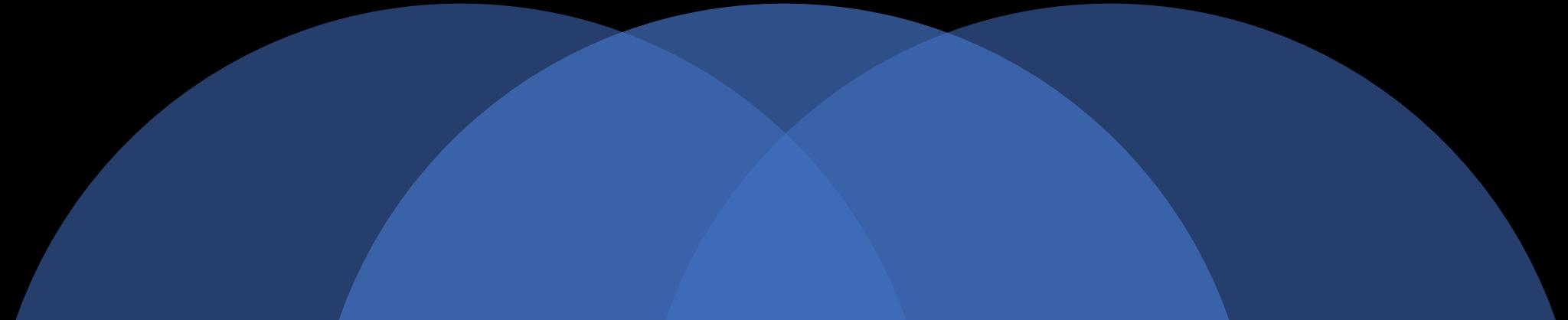
Key enabler for IOT generally

VR and AR become mainstream interface for mobile

Healthcare is biggest single opportunity

Final Thoughts

- **Leadership will have to understand:**
 - **The Strategic Opportunities presented by technology**
 - **The Risk associated with underinvestment in the right tech**
 - **The Need for Tech talent in the Executive team**
- **Speed and Agility is the new Growth Strategy**
- **War for Talent will continue to intensify**



Thank You!



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