Jay Demmler is a graduate student of engineering at the Lyle School of Engineering at Southern Methodist University in Dallas, Texas. Jay previously received his BS from The University of Akron in Ohio. He then moved to Texas to work for Lockheed Martin on the F-35 Joint Strike Fighter project where he worked on designing and implementing enterprise systems for parts and services subcontractors. After a 2 year deployment abroad working on defense projects in Kuwait and Afghanistan, Jay moved back to the Dallas area to work for Dell Computer's services division (formerly Perot Systems). There he worked on a range of projects in the healthcare industry focusing on designing enterprise class systems in healthcare finance for Medicaid. Medicare, payer. and the revenue cycle industries. Jay is a frequent speaker and guest lecturer in the Dallas area where he often speaks to Systems Development Life Cycle, data center security and best practices, and IT transformation. His current research interests are STEM success rates at the Community College level, the use of asymmetrical learning tools in higher education, and efficiency and best practice development for enterprise class systems. Jay lives in Allen, TX with his lovely wife and two very large cats.

IoT and Its Impact on Government

JAY M DEMMLER

Lyle School of Engineering

World Changers Shaped Here

SMU

Lets Frame Today's Discussion

- Smart Cities
  - Simple example
  - What services can benefit from technology
  - Audit and management issues
- Connected Automotive
  - What is it
  - What are the benefits
  - Where government comes in

Smart Cities

Classifications of Smart Offerings

Urban infrastructure	Governance
Transport	Administration Services
Energy / Utilities	Participatory/Direct democracy
Safety	Quality of life Services

Public Safety

- **Broad Public Safety IoT Solutions**
  - Video, audio, sensor analytics and orchestration for mission control
  - Public Safety personnel situational awareness and augmented reality
  - Public Safety vehicle incident detection
- **Higher effectiveness in saving lives**
  - Quicker, more accurate and transparent decisions and actions
  - Preventing human casualties and increasing survival chances
  - Higher safety for first responders

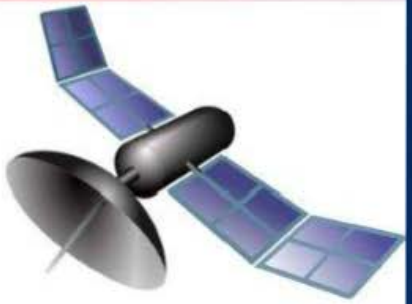

POLICE
INTERCEPTOR
001

Potential Issues

- **Increase in connectivity leads to increase in risk**
  - Increased data creation and sharing requires stricter cyber security protocols
  - Best of breed solutions can introduce unknown vulnerabilities to your environment
  - **Interoperability between services/departments introduce additional risks**
- **Auditing and Governance need to play catchup**
  - Emerging technologies do not fit neatly into existing audit and management frameworks
  - Data governance becomes significantly more complex as internal, external, and Cloud providers are added

Connected Automotive

Future Opportunities: The Connected Car



Communication
Telematics
Information
Location
Social networking
eCommerce

LOJACK

World Changers Shaped Here SMU.

How will this make life better?

- Safer Roads
- Less Traffic
- Lower Pollution
- Real-time Communication
- Big Data Collection

Obligatory Quote:

"It can't find the lane markings! You need to paint the bloody roads here”!

CEO of Volvo to the Mayor of Los Angeles

Where are at Today

- Uneven legal precedence across states
- Poor or non standard street infrastructure
- Large areas across the US with low or no cellular coverage
- Over 253 million vehicles on the road today, the average age is 11.4 years

Where Government comes in

- Policy creation and practice that allow for connected transportation systems both today and tomorrow.
- Implementation for standardization of roadways, stop lights, and signage.
- Interoperability between local, state, and federal transportation organizations.

Q&A

Khamis Abulgubein
Director of IoT Innovation Lab @ Nokia

References

- Smart Cities
  - Link 1
  - Link 2
  - IoT State of the Industry
- Traffic
  - The Simple Solution to Traffic
  - Volvo Concept 26

Thanks for Coming

- If you liked today's talk click the Thumbs Up Button
- Next Talks
  - UTA ISACA Awards Banquet, April 28th, 6:00 to 9:00
  - UNT Frisco 1 Day Cyber Security Training, May 19th, 8:00 to 4:00

Khamis and I are reachable via LinkedIn, Twitter, and email

jdemmler@smu.edu

khamis.abulgubein@nokia.com

World Changers Shaped Here SMU