Breaking Barriers to Deploy Emerging Technology

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Let’s start with a quick poll!

Text
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What do you think are the greatest barriers to deploying emerging technology?

A. Technology is not keeping up with demand
B. Lack of funds
C. No capacity to manage pilots
D. Unclear what issues require government action
E. No urgency or consensus to act
F. National/state/local regulation
G. Lack of private sector interest
H. Local opposition
I. No planning or policymaking capacity
Barriers to Cities’ Autonomous Vehicle Efforts - April 2017

Bloomberg Philanthropies & The Aspen Institute surveyed 30 cities actively working on AV strategy:

- Lack of funds
- No capacity to manage pilots
- Unclear what issues require city action
- No urgency or consensus to act
- National or state/provincial regulation
- Lack of private sector interest
- Local opposition
- No planning or policymaking capacity
Other barriers:

- Standards
- User expectations
- Management
- Coordination
- Security
- Inter-operability
- Interest
- DSRC
- Policies
- Planning
- Next steps
- Consensus
- 5G
Key Takeaway:

Adopting an approach based on the TSMO capabilities to enable emerging technology:

› 6 capabilities will help you identify and address your needs
› Support an approach that is proactive and iterative – not as trend dependent
› The institutional processes and arrangements will set up a platform for implementation
Hype Cycle

VISIBILITY

Peak of Inflated Expectations
Plateau of Productivity
Slope of Enlightenment
Trough of Disillusionment
Technology Trigger

TIME
Hype Cycle – Minimize the Trough of Disillusionment

› What are your needs?
› What are you trying to achieve?
› What is an iterative approach you can take to deploy this solution?
TSMO Capabilities to Enable Emerging Technology

- Business Processes
- Systems & Technology
- Performance Measures
- Culture
- Organization & Workforce
- Collaboration
Capabilities to Enable Emerging Technology

- Organization and Workforce
- Business Processes
- Culture
- Systems and Technology
- Collaboration
- Performance Measures
Develop a culture of iterative, continuous improvement:
Business Processes

› Legislation & policies on CAV
› Processes to prioritize innovative ideas & get them built
› Standard operating procedures
› Funding mechanisms and understanding the selection criteria

Example: Las Vegas Innovation District
Culture

› Continuous improvement

› Communicate objectives to wider range to achieve objectives

› **Everyone** focused on improving safety and mobility
Systems and technology

› Interoperability protocols
› Proactive communication with IT group
› End-of-life planning
› Operations and maintenance procedures

Example: Smart Work Zones
Organization and workforce

› Trained staff and formalized job responsibilities
› Data scientists, IT integration, unique areas of expertise
› Empowered to make decisions
Performance measures

› Managing big data

› Data you have to develop performance measures vs what you want to measure

› Process around taking action on performance measures

Example: TxDOT’s TMS Process
Collaboration

› Local agencies & cross-jurisdictional boundaries
› Pro-active communication
› Formalize shared responsibilities
› Coordination with private industry
Case Study: RTC FAST Roadmap

Organization and Workforce

Business Processes

Culture

Systems and Technology

Collaboration

Performance Measures
Case Study: FDOT District 7 Intelligent Mobility Roadmap
Case Study: Truck Platooning

Organization and Workforce

Business Processes

Culture

Systems and Technology

Collaboration

Performance Measures
Conclusion

- 5G
- User expectations
- Standards
- Management
- Funding
- Coordination
- Inter-operability
- Security
- DSRC
- Next steps
- Planning
- Interest
- Consensus
- Policies
Thank you

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