



"Drones for Good"

A Government Technology Success Story & A Roadmap for Success

Nextgov

Federal Tech Innovation in the Other Washington

"Technology as a Force for Change"

Seattle, WA., April 26, 2018

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<https://www.doi.gov/aviation/uas>

Objectives

1. *“Pay it Forward.”*
2. Share the roadmap Interior used to develop, implement, and sustain our *“Drones for Good”* program.
3. Provide you tools to successfully implement your own technology innovation.



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Why us?

1. 12 years proven.
2. 2nd only to DOD.
3. >12,000 drone flights.
4. >30 mission applications.
5. >\$50M in documented savings.
6. >30 favorable news articles, radio, TV coverage.
7. Industry award – 2017.
8. Zero public complaints to date.





1

Vision

2

Strategy

3

Planning

4

Execution

6

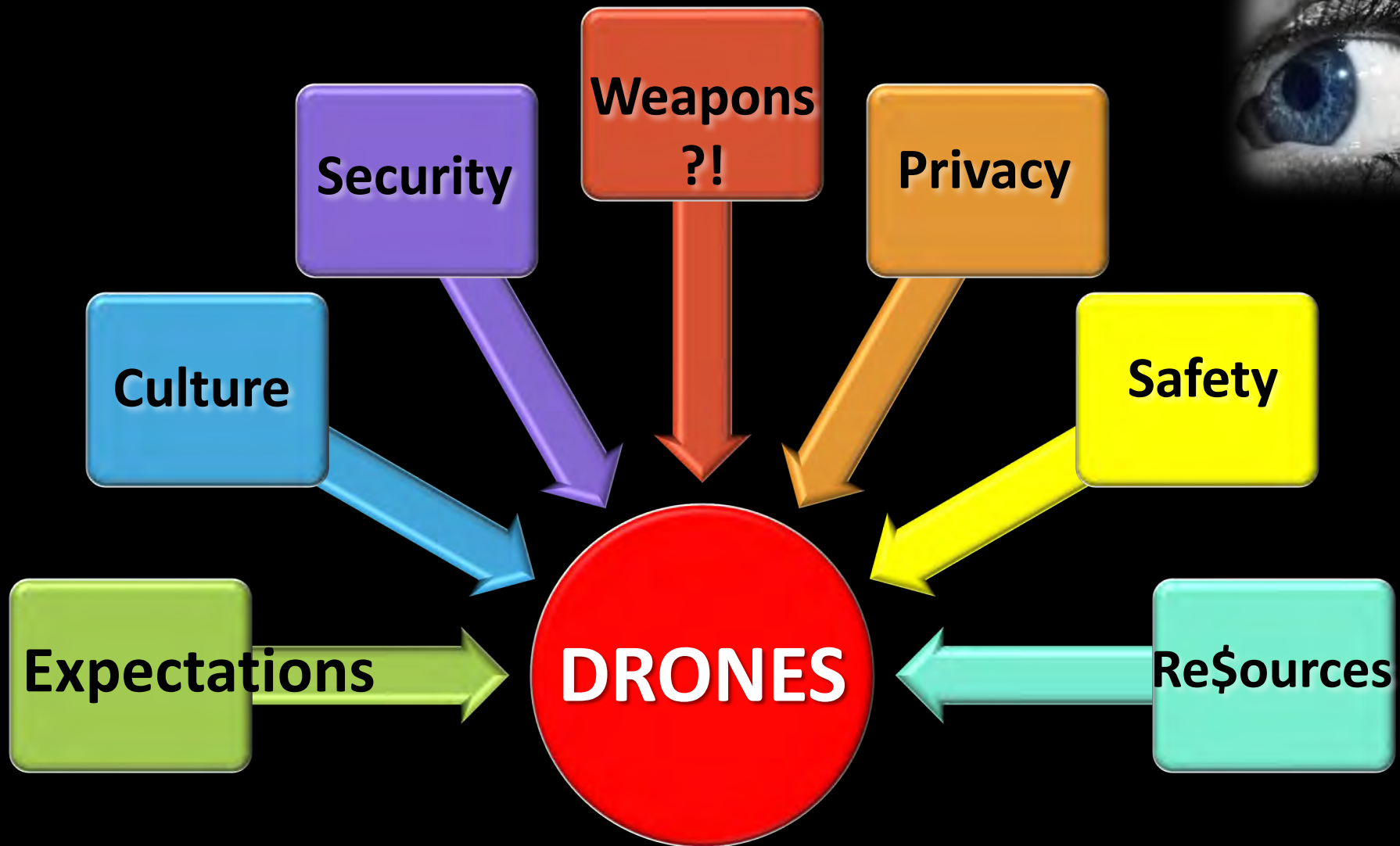
Incorporate,
Repeat

5

Measurement



Challenges



Vision



- ❑ **Compelling to multiple parties.**
- ❑ **Short = memorable.**
- ❑ **Relevant = sticky logic.**
- ❑ **Emotional linkage = sticky commitment.**
- ❑ **Story worthy.....stories sell....*what you own, what you remember is proof of that.***

Vision



“500M reasons”

Diverse, dynamic, remote,
sensitive landscape.

Close current outcome gaps.

“Leap-Frog” opportunities.

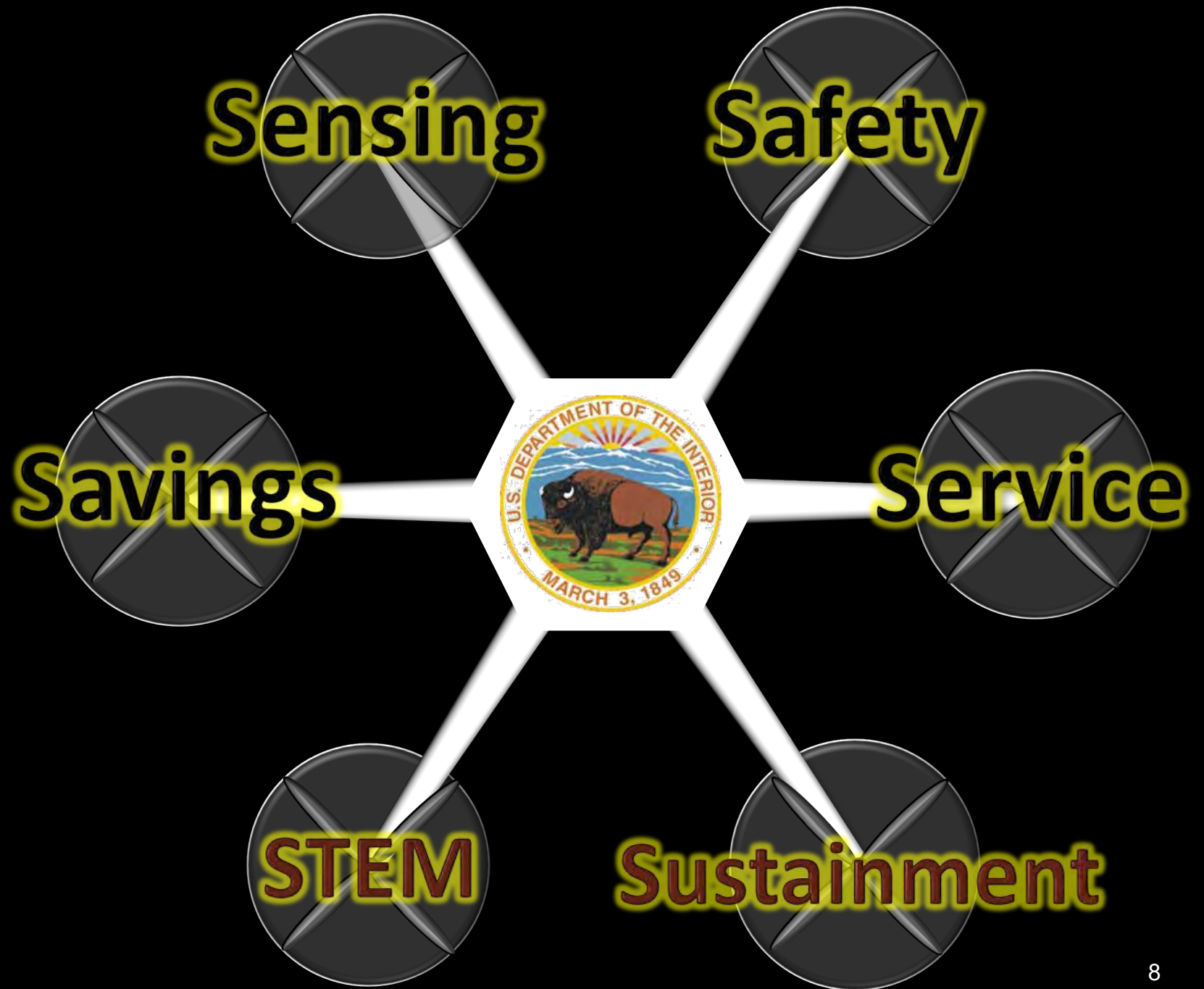
Public land – >415 million visits

National Critical Infrastructure

National Monuments & Icons

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6 S's
Of DOI's
Vision for
*"Drones
for Good"*



Strategy



- Where are you going and where will you avoid going?
- How will you get there - instruments?
- Unique differentiators that will enable success?
- Necessary sequence & speed of each move?
- What quantifiable metrics will indicate your strategy is working?

Strategy



*Aligned to resources,
infrastructure, personnel.*

“Try before you buy.”

1,000 years, smart partners.

*Partnerships, Policy,
Preparation, Performance,
Public Outreach.*

*Sensing, Safety, Savings,
Service, **Public Acceptance.***

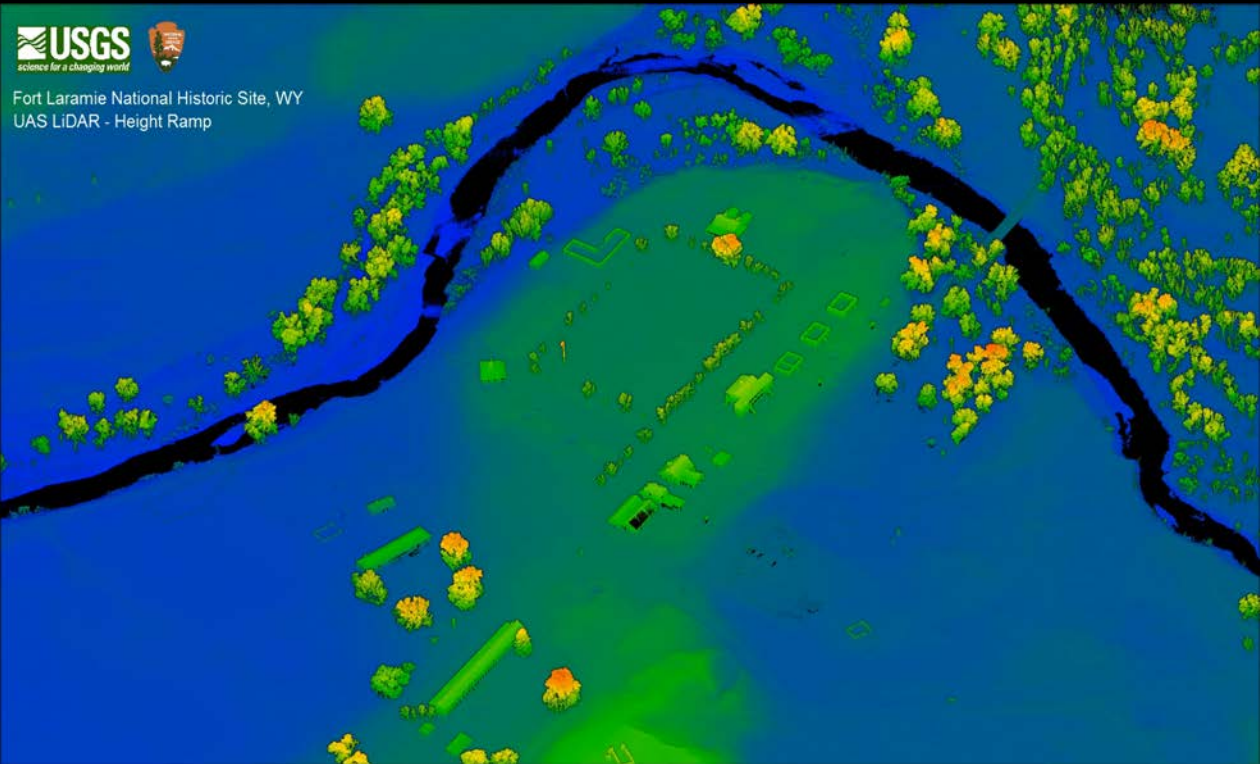
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Planning



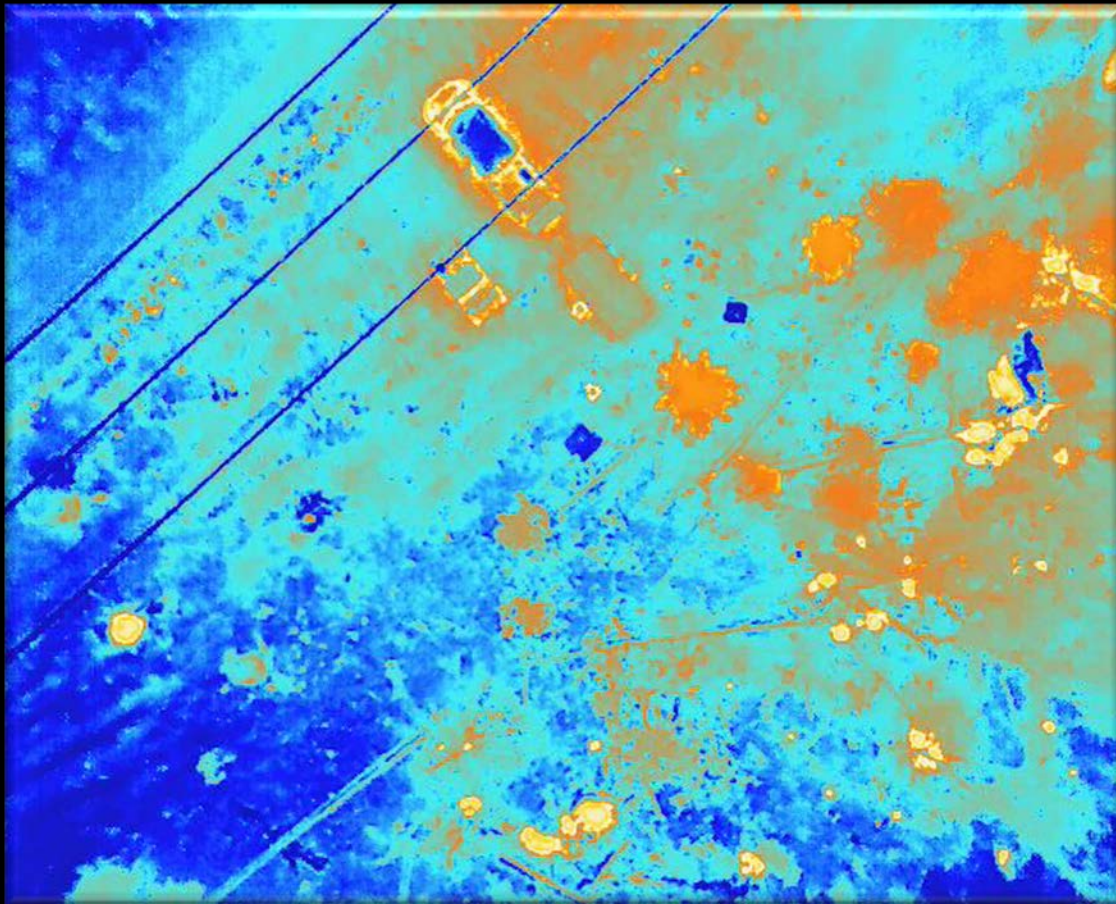
- ❑ Plan small, plan short, succeed big and succeed long – “MVP.”
- ❑ Magic words: “Pilot,” “Prototype,” “Interim,” “Temporary.”
- ❑ Minimize “show-stopping” dependencies, focus on courting those that remain.
- ❑ “No plan survives first contact with reality” – plan for agile flexibility. Plan for “Haters.”

Execution



- “A great idea, poorly executed is **NEVER** a great idea.”*
- Practiced.**
- Meticulous.**
- Disciplined.**
- “Unconscious competence.”*
- “Just culture.”*
- Compliance = 1.**
- Commitment = ∞**

Measurement



\$50M saved when a drone detected a spot fire beyond the fire line and was able to direct firefighters there to extinguish it.

- “If you don’t know where you are, you can never be lost or late.”*
- “Progress, no matter how slight is still progress.”*
- “No single measure is perfect.”*
- “Best is the enemy of Better and Better is the enemy of Good Enough, but NOTHING is the enemy of all of these.”*
- “If you can’t measure it, it didn’t happen.”*

Incorporate - Repeat



Big Thicket National Monument, Texas
Hurricane Harvey damage assessment

- ❑ *Insanity : Doing the same thing in the same way, over and over again and expecting different results.*
- ❑ *Stick with it until the data screams "pivot."*
- ❑ *....."Expert" requires no license.*



Key Takeaways

1. **Success** in technology innovation is less about the technology than how you go about it.
2. **Vision** inspires.
3. **Strategy** guides planning and execution decision making.
4. **Planning** defines the milestones, provides needed flexibility.
5. **Execution** is “game time” – there is no OT in the game of life.
6. **Measurement** provides proof of progress.
7. **Incorporate-Repeat** is evolution.“*Today’s dinosaurs are tomorrow’s jet fuel.*”



Thank you,
Questions?

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UAS Homepage: <https://www.doi.gov/aviation/uas>

DOI Bureau National Aviation Managers:

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