



NASA Aeronautics:
Knowledge Management and Digital Transformation in Partnership
November 2019

Some Context...



Mission First



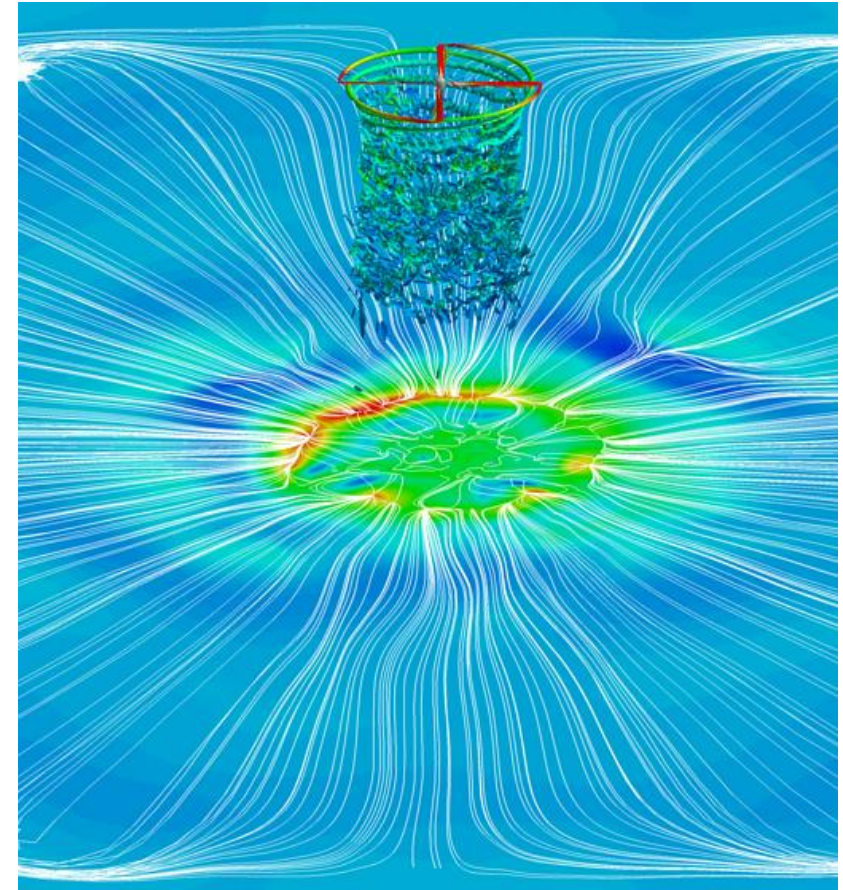
Digital Transformation (DT) at NASA

The transformation of NASA's activities, processes, competencies, capabilities, and/or products to maximize mission success by fully leveraging evolving digital technologies.



NASA DT Literature Review – Recommendations from Literature

- Undertake digital transformation to retain competitive advantages and realize full efficiency
- Align a digital transformation roadmap with the priorities of leadership and organizational investments
- Cultivate a culture of continuous improvement across digital transformation initiatives





Aeronautics Knowledge Management Steering Group

Mission

The KMSG seeks to improve knowledge access and transfer, support mission-focused learning, and create and enhance consistency and coherence.

Vision

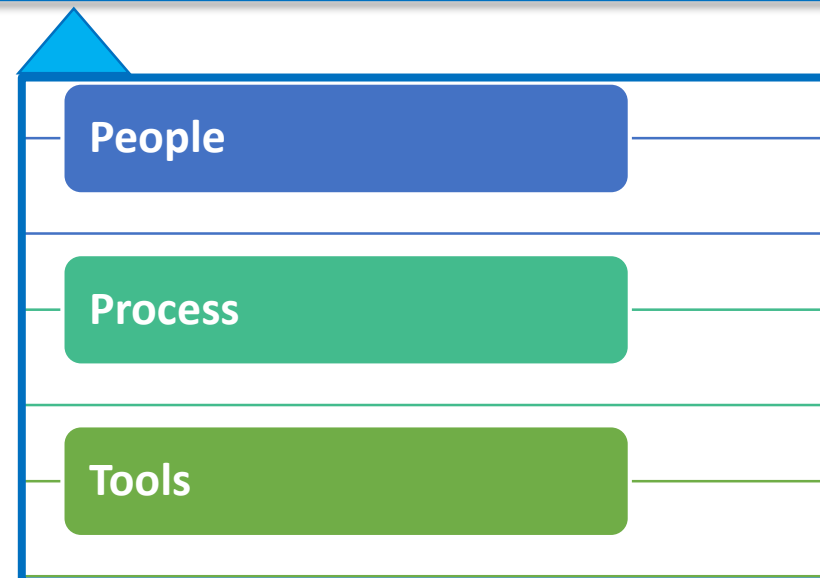
NASA Aeronautics employs exceptional knowledge, state of the art learning, and advanced technological agility to benefit the nation and humanity.



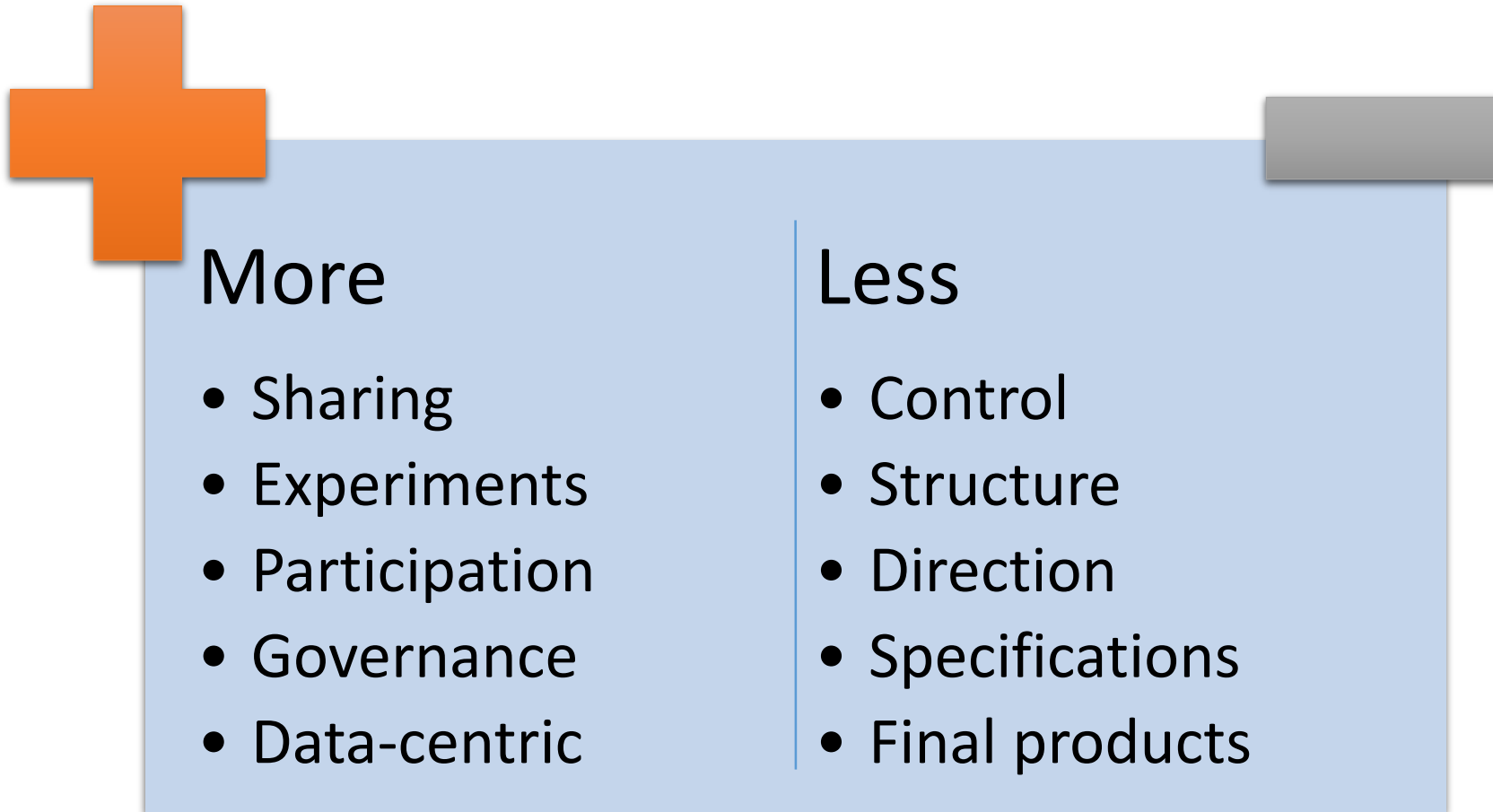
Knowledge Management Approaches

Technology

Facilitation



KM through a DT lens...



From here to there...



Adapt from other disciplines

Human Centered Design

- Empathize first
- Iterate with stakeholders

Agile Development

- Develop Minimally Viable Product
- Gather user stories
- Build for scale



Understand the environment



Reduce clutter and organize data



Build a framework



Test and iterate



Initial Results

Knowledge Access and Transfer

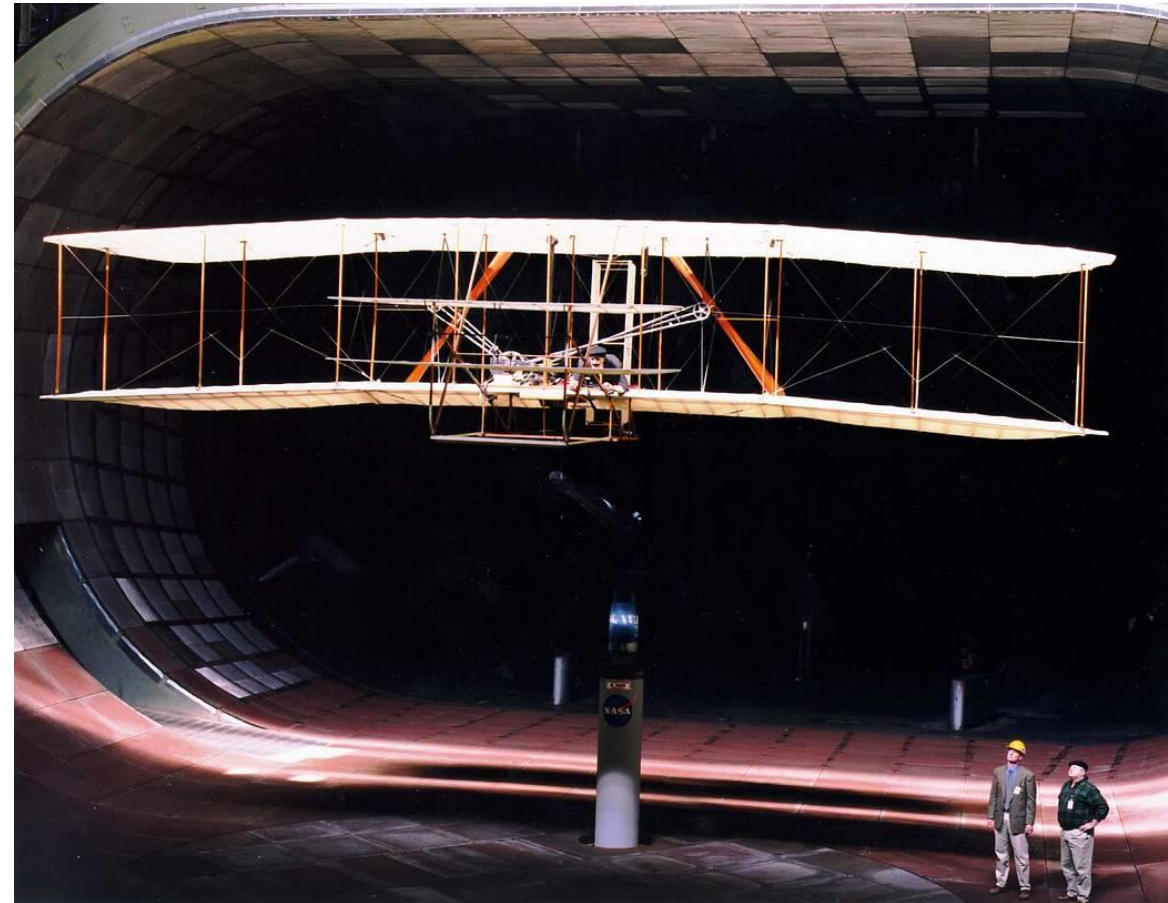
- Intranet structured to scale for Aero workforce

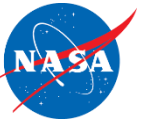
Mission Focused Learning

- Prototyping and datafication of collaborative workshops

Consistency and Coherence

- Identifying and prioritizing critical information
- Building lexicon and reference data





Questions and Discussion



An aerial view of a city, likely New York City, with the Empire State Building prominently visible. The sky is filled with various aircraft, including a large white jet, a smaller white jet, a red and white jet, a black and white jet, a black drone, a white drone, and a helicopter. The scene is overlaid with a network of white lines, suggesting a flight path or data network. The overall color palette is a mix of blue, white, and orange, with a bright light source on the right side.

EXPLORE FLIGHT

WE'RE WITH YOU WHEN YOU FLY