Some Context...

QUIET SUPersonic FLIGHT

AIR TRAFFIC

ELECTRIC PROPULSION

URBAN AIR MOBILITY
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.

TRADITIONAL | DIGITIZED | TRANSFORMED

ENTERTAINMENT

NAVIGATION

TRANSPORTATION
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
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

People

Process

Tools
KM through a DT lens...

More
• Sharing
• Experiments
• Participation
• Governance
• Data-centric

Less
• Control
• Structure
• Direction
• Specifications
• Final products
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