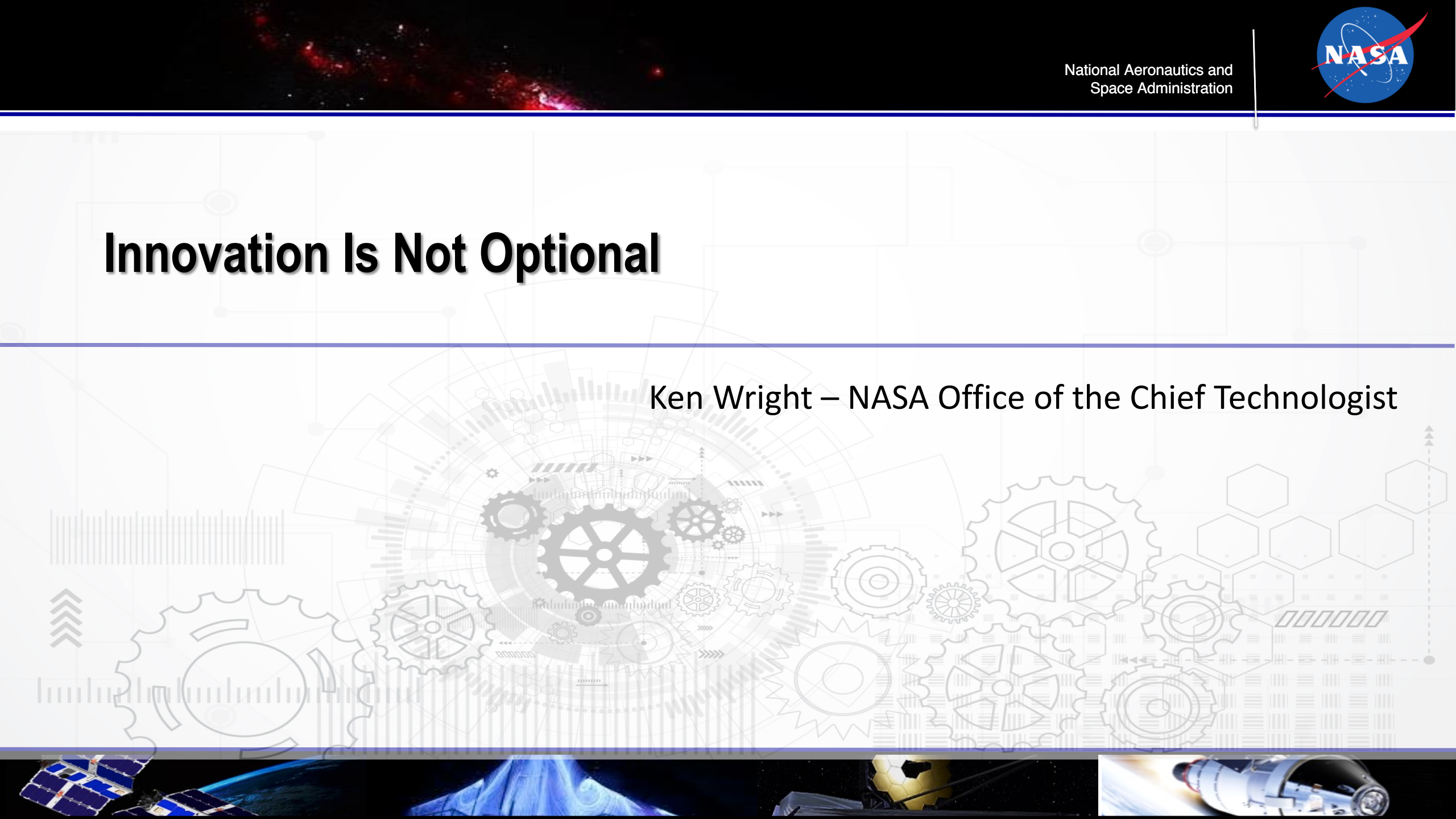




Innovation Is Not Optional

Ken Wright – NASA Office of the Chief Technologist



Discussion Topics



- Defining innovation in your organization
- Elements of an innovation portfolio
- Fostering innovation
- Innovation Strategy
- Communicating Innovation
- Embracing change
- Importance of Partnering



What is Innovation from a NASA perspective?



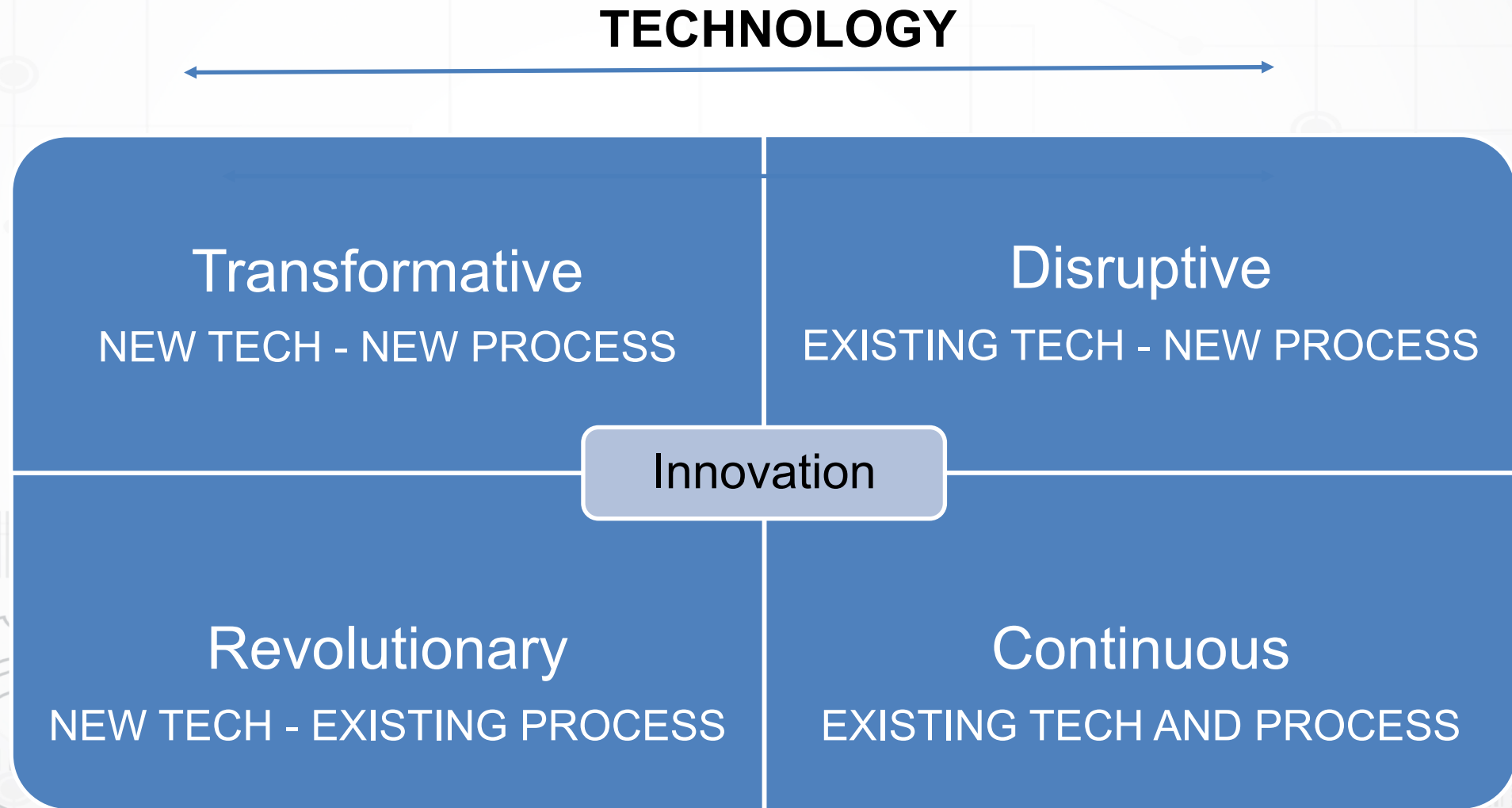
Transforming Original Ideas into Value

- Not limited to technology areas
- Significantly improves ability to accomplish Agency Mission
- Changes the status quo but not criticism of the status quo
- Scalable, progress through sharing, not secrecy
- Customers/Stakeholders willing to support with resources

When Was the last time you were innovative?



Strategic management of the innovation portfolio



Fostering Innovation



- Building a healthy innovation culture is analogous to building a good football team
 - Need players who put team first
 - Need good coaches
 - Need good plays
 - Need to practice
- Need to develop innovation strategy – “Playbook”



Developing an Innovation Strategy



- Focus innovation activities around “pain points” in an organization –
 - What are the biggest challenges that need help to solve
 - Online “problem market” to capture ideas
 - Sit management, technical people, and customers together when possible to clarify areas to focus innovation
- Improve decision velocity – minimizing steps and sign offs for decisions improves speed and increases ownership
- Build trust
 - Transparency – helps to build trust
 - Encourage “managed” risk taking
- Communicate the benefits of innovation
 - Provide Mechanism to link stakeholder challenges to ideas
 - Important to promote storytelling



Communicating Innovation



- Be able to clearly communicate how your leadership is fostering an innovative environment
- How can you implement an idea when you lack required resources or skills?
- What aspects of other organization's successes are transferrable to your organization?
- Are the innovative methods you are implementing having a positive effect? If not, how can you more effectively facilitate change?
- Are staff members encouraged to offer solutions?
- What changes can be made to your office environment that would make it more conducive to innovation?
- How do you foster a sense of urgency without creating stress (which can reduce innovation)?



Innovative partnering inside and outside your organization



- Diversity of backgrounds and thought makes for better overall experience, products and services
- To build a culture of collaboration look outside of your team or organization's silo to deliver your mission, and include them in your process to co-create the future
- Also, celebrate the successes as well as the failures (lessons learned)



Space Act Agreements – Promotes Innovative Partnering with NASA



The National Aeronautics and Space Act provides NASA with the unique authority to enter into a **wide range of "other transactions," commonly referred to as Space Act Agreements (SAAs)**. The Agency enters into SAAs with various partners to advance NASA mission and program objectives



Types of SAA's



- **Reimbursable Agreements** - Agreements where NASA's costs associated to the activity are reimbursed by the Agreement Partner (in full or in part).
- **Nonreimbursable Agreements** - Agreements that involve NASA and one or more Agreement Partners in a mutually beneficial activity that furthers the Agency's Missions. Unlike Reimbursable Agreements, each partner bears the cost of its participation and no funds are exchanged between the parties.



SAA's establish a foundation for an enduring partnership



- Mutual Trust
- Partnership Benefits Both Parties
- Share Risks and Rewards
- Clear Roles and Responsibilities
- Sense of Urgency
- Advocates from both Partners
- Common Interest
- Enduring



Benefits of SAA's



- Addresses NASA Goals and objectives
- Potential for future collaborations
 - Joint proposals
 - NASA Contracts
- Creates student pipeline
 - Near term benefits
 - Long term benefits as students become future NASA leaders
- One mechanism to address diversity
 - Workforce
 - Contracts
- Optimize utilization of technology investments
 - Sharing specialized equipment
- Strengthens NASA and University Programs
- Complimentary to existing NASA activities with College/University



Summary



- Leadership should develop innovation strategy
- Communicating strategy is important
- Follow up on partnering opportunities
- Innovation is not optional for healthy organizations

