Innovation Is Not Optional

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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

**TECHNOLOGY**

**PROCESS**

**Transformative**
NEW TECH - NEW PROCESS

**Disruptive**
EXISTING TECH - NEW PROCESS

**Revolutionary**
NEW TECH - EXISTING PROCESS

**Continuous**
EXISTING TECH AND PROCESS

Innovation
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)
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