

BUSINESS INNOVATION SYMPOSIUM (E6)  
Case Studies and Prizes in Commercial Space (1)

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21ST CENTURY WAYS OF DOING BUSINESS: THE IMPACT OF OPEN INNOVATION AND  
PRIZES ON NASA

**Abstract**

In an increasingly connected and networked world, NASA recognizes the value of the public as a strategic partner in addressing some of our most pressing challenges. The agency is working to more effectively harness the expertise, ingenuity, and creativity of individual members of the public by enabling, accelerating, and scaling the use of open innovation approaches including prizes, challenges, and crowdsourcing. NASA recognizes that these methods present an extraordinary opportunity to inspire the development of transformative solutions by offering a means to engage with non-traditional sources of innovative ideas, all in a remarkably cost-effective way.

At NASA, open innovation complements our other traditional problem solving approaches to create a robust toolset of innovation approaches for use by a variety of programs. NASA has been a leader in the United States' use of prize competitions for quite some time. The White House recognized this leadership in their 2011 Report to Congress on prize competitions: "From the Centennial Challenges Program, to the NASA Open Innovation Pavilion, to the NASA Tournament Lab, NASA leads the public sector in the breadth and depth of experience and experimentation with prizes and challenges. . . [NASA is] best positioned to demonstrate results from the use of prizes and challenges. Examples and case studies from prizes and challenges run by [NASA] highlight[s] what can be expected from all Federal agencies as they begin using prizes for open innovation." Thus NASA is not only seen as a leader in this space, but also as setting the pace for future experimentation and teaching the rest of the government and the world.

NASA is supporting and learning from other Federal agency's prize competitions as well through the NASA Center of Excellence for Collaborative Innovation (CoECI). The COECI was launched in November 2011 to advance the use of innovation techniques to improve Government missions. The COECI helps NASA centers and other US government programs run their first challenge driven open innovation activities.

This paper will highlight several case studies that show the diversity of purposes and impacts open innovation have in stimulating space-related activities, including: (1) realizing new cost savings and encouraging the development of better products and solutions "on demand"; (2) enabling NASA to bring out-of-discipline perspectives to bear and reach beyond the "usual suspects" to increase the number of minds tackling NASA's problem; and (3) stimulating the development of new commercial markets and thus new opportunities for businesses to form.