

BUSINESS INNOVATION SYMPOSIUM (E6)  
New Space and New Science (3)

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ENTREPRENEURSHIP THINKING, CUSTOMER FOCUS AND LESSONS LEARNED FROM  
RELATED INDUSTRIES – WAYS TO FOSTER NEWSPACE INDUSTRY

**Abstract**

Industry has to quickly adapt to the current economic situation of financial uncertainty. Investors are setting lower values on high-risk, long-term projects. This is creating a situation of capital scarcity in the space industry that, together with the lower volume of projects in the backlogs of contractors, is hindering the future competitiveness of the industry. Competition and smaller projects' budgets put big space equipment providers under pressure, and trigger the appearance of more small/medium size companies, especially in developing countries.

There are various intrinsic factors of the space industry that hinder innovation and entrepreneurship. As in the challenge of the customer focus, the industry structure inherited from the times of government programs dominating the industry certainly pose challenges to innovation. Typically, space projects need big investments at the initial stages and long development times thereafter. These long development times translate into a long time to market, increasing the risk and the cost of capital of investments. These are undesirable characteristics for an entrepreneurial industry.

In a time in which governments are declining their expenditures and investors are lowering the value on high-risk endeavors and favoring flexibility in front of long term plans, aerospace companies should adapt themselves into a commercially driven, customer oriented industry. The use of market data and research tools ensures efficient use of resources in agency programs and commercial investments. In addition, it is especially important to commit resources to generate reliable insight into customers' needs at early stages of development as well as involving a wider range of stakeholders during the product development.

During the Space Generation Congress (SGC) organized by Space Generation Advisory Council in 2013 in Beijing, the Industry Working group focused on the challenges and barriers entrepreneurship is facing in space sector. These barriers hinder innovation, flexibility, and growth industry-wide. Based on the discussions held the Industry working group came up with following recommendations for the United Nations COPUOS assembly: to explore and integrate, where appropriate, best practices from adjacent high-tech industries to foster innovation and support the exposure of entrepreneurial thinking and practices to technical students and professionals through training, education, and external speakers.

This paper is a continuation of the discussions held as part of the SGC 2013. It supports the congress outcomes with direct evidence from NewSpace industry and presents examples of successful new companies

and initiatives which foster innovation, flexibility, and growth within the space science sector and industry-wide.