

**BUSINESS INNOVATION SYMPOSIUM (E6)**  
**Interactive Presentations (IP)**

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**DEFINITION AND ANALYSIS OF THE INTERNATIONAL COMMERCIAL SPACEFLIGHT  
INDUSTRY, 2006-2014****Abstract**

Through exclusive access to proprietary information, this paper presents a uniquely accurate analysis of the emerging commercial spaceflight industry, building upon a dataset that extends back to 2006, currently being updated through 2014.

The commercial spaceflight industry is a self-identified industry sector representing companies working on or supporting commercial human spaceflight or with a strong interest in spaceflight innovation. Since 2006, the market for commercial spaceflight has transitioned from one dominated by development activities funded by investors and governments to an industry realizing meaningful revenues from commercial sources. Revenue from government remains important, and in some cases the government revenue is now coming from programs specifically designed to support this industry.

The paper provides quantitative measures of the overall size of the industry by revenue; the amount of investment raised and spent; the relative percentage of investment sources; facility space devoted to these activities; and overall industry employment. In addition, it measures deposits for spaceflight tickets for future flights. The paper also provides measures by industry segment, which are orbital spaceflight providers, suborbital spaceflight providers, lunar/beyond earth orbit service providers, spaceports, engineering and technical support services, and ancillary/institutional infrastructure.

This paper examines U.S. versus international industry participants. This is a new addition to the methodology from previous versions of the study. It focuses on the distribution of companies by industry segment and revenues, as well as any trends.

Results from the 2013 study showed a commercial spaceflight industry with 2012 revenues of \$765 million and a cumulative annual growth rate of 28 percent from 2006 to 2012. The 2015 study will likely show results that continue this positive trend.

The study this paper summarizes was conducted with the cooperation of the Commercial Spaceflight Federation (CSF) and its member companies. Data from non-member companies was also obtained for a broader and more global depiction of the industry. Over 100 organizations were included in the study. The purpose of the study is to provide an accurate picture of the commercial spaceflight industry that is useful to investors, entrepreneurs, regulators, media, and industry analysts.

The cooperation of CSF, and the protection of individual organization data through aggregation and other measures, makes this measurement of the industry uniquely accurate. Results show cumulative investment levels committed to the industry through 2014; revenue and deposits for spaceflight services by year; and additional revenue to commercial spaceflight companies for hardware, hardware development, and support services.