

BUSINESS INNOVATION SYMPOSIUM (E6)  
New Space Markets + Investment Opportunities (3)

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INDUSTRY STRUCTURAL ANALYSIS OF COMMERCIAL CREW TO ORBIT SECTOR

**Abstract**

Commercial companies have been involved in spaceflight since the Apollo program. The prominence and independent capabilities of such commercial companies has increased substantially in recent years and commercial space companies are in the early stages of developing commercially available and economically viable commercial crew to orbit capabilities. As these capabilities continue to develop, business and economic obstacles will likely emerge as significant problems. In some cases these market driven business issues will rival the technical difficulties involved with accelerating humans from the surface of the Earth into orbit. Specifically to address these market driven business issues, numerous theories have been developed in an effort to better understand the dynamics of business markets. One such theory, pioneered by Michael Porter, is used in this paper to conduct an industry structural analysis of the commercial capability of delivering human crew to orbit.

As this commercial space industry continues to grow, information from an industry structural analysis will provide insight to not only companies, but also government entities. The information provided by an analysis such as this can be used as a tool by government while making policy decisions. It can also provide insight into effective acquisition strategies to encourage, facilitate, and promote safe and sustainable commercial space activities. Specifically, this paper will be a synthesis of the work done by the participants in the third Next Generation Exploration Conference as applied to the commercial crew to orbit industry. As this sector of the commercial space industry is gaining increased attention, the combination of astute business questions and complex technical challenges must be addressed. This project will serve as a union of both technically competent and business savvy participants sharing both an interest and passion for the exploration of space. The result of this collaboration will be an extensive industry structural analysis of commercial crew to orbit capabilities based on the business theory of Michael Porter.