## BUSINESS INNOVATION SYMPOSIUM (E6)

Public/Private Human Access to Space - Supporting Studies (2)

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## STRUCTURE ANALYSIS OF INDIAN AERONAUTICS AND SPACE INDUSTRY CLUSTERS

## Abstract

In late 2012, after observing new developments in the private space sector, the Space Generation Advisory Council (SGAC) established a project group to gather inputs and to conduct research into commercial space activities. In this capacity, the group is currently supporting a study group of the International Academy of Astronautics (IAA) on "Public/Private Human Access to Space" that aims to assess the viability potential of human orbital commercial space markets. For the long-term politicoeconomic decisions the study group intends to support, a solid knowledge of industrial and macroeconomic structures is necessary. This proper understanding of industries and their structure relies not on the consideration of a single influence or driver, but on a comprehensive examination of cultural, structural, political, economic, and historical drivers and environments that affect industries and their development. In order to fully comprehend the interactions and results of these forces, existing market data must be visualized using industry models. This paper builds on that analysis with a detailed description and analysis of the aeronautics and space industry clusters in India market made by examining their individual makeup, macroeconomic determinants, and other external influences. As a previous work, the influences of cultural and historical backgrounds on industry development in India were shown. This paper therefore puts a special emphasis on examining the historical development of each cluster and comparing the historically founded forces with the current economic determinants, and extrapolating the future of this market. This work is part of a larger research project at SGAC that focuses on the detailed examination and definition of industrial clusters in India. The ultimate goal is to obtain a better understanding of the Indian space industry as well as the roles she can play towards commercialisation.