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

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SUBORBITAL MARKET OVERVIEW AND APPLICATION OF DISRUPTION THEORY

Abstract

This report identifies the incumbent and new entrant companies of the suborbital payload market, their industry roles, and how the Christensen Disruption Theory characterizes their possible future interactions.

The existing suborbital payload market consists of service providers giving access to either (a) time in a microgravity environment, or (b) access to various launch and/or space environments (e.g., time at altitude, radiation levels, launch conditions, etc.).

The suborbital market is currently served primarily by sounding rocket launch vehicles or substitute capabilities in the form of drop towers and parabolic-trajectory aircraft. Traditional customers for this market include universities and government organizations in the following areas of research: physical and biological processes in microgravity, observation and data collection of Earth and its atmosphere, and astronomical observation.

The types of facilities and vehicles that characterize the suborbital cargo market and which are included in this report consist of drop towers, parabolic-trajectory aircraft, sounding rockets, and reusable launch vehicles. The types of payloads that make use of these facilities and vehicles can be classified by volume/form factor and intended purpose. Two types of suborbital research vehicles that focus primarily on atmospheric science, the airborne and balloon-based research sectors, are not covered in this report.

This report identifies the current suborbital payload market sectors using the classifications mentioned above. A listing of market competitors and customers are given. Using this information, possible new entrant strategies to the suborbital market are discussed using the terminology and constructs of Clayton Christensen's Disruption Theory.