

BUSINESS INNOVATION SYMPOSIUM (E6)
New Business Models in Traditional Space Industry Applications (2)

Author: Mr. Ken Davidian

Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST), United States

Mr. Jeff Foust

Futron Corporation, United States

Mr. Dustin Kaiser

Futron Corporation, United States

Mr. Ian Christensen

Futron Corporation, United States

ARE COMMERCIAL CARGO AND CREW SPACE TRANSPORTATION MARKETS EMERGING?

Abstract

Industries are cyclic similar to the familiar product life cycle. The four stages (introduction, growth, maturity, and decline) are defined by points of inflection in the industry sales growth rate. Unlike products that follow an “S” curve growth rate based on the rate of innovation diffusion, industries can affect their growth trajectory in many ways such as through innovations and repositioning. All industries start out with certain barriers to entry, position strength of the buyers and suppliers, etc., and these evolve toward a different structure due to processes such as investment by existing firms and new entrants.

Emerging industries are created through a variety of forces, including technological innovations, changes in cost relationships, identification of new customer requirements, and other forces that increases the visibility of business opportunities. Regardless of the specific industry, all emerging industries have common characteristics that have been identified through rigorous academic research.

This paper begins by identifying the structure of emerging industries as defined in the text “Competitive Strategy” by Dr. Michael Porter of Harvard Business School. Next, the paper proceeds to cite examples and counter-examples from the current commercial space transportation industry for both cargo and crew. The desired goal of this activity is to support the claim that the commercial cargo and crew space transportation industries are both emerging, uniquely different from the established space transportation industry that currently services national space agencies. This claim could be a positive indicator that, provided appropriate levels of encouragement and support, both the cargo and crew commercial space transportation industries could develop into a lucrative and mature industry unto itself.