

IAF BUSINESS INNOVATION SYMPOSIUM (E6)  
Innovation: The Academics' Perspectives (3)

Author: Dr. Ken Davidian  
United States, ken@impossibleresearch.org

Dr. Greg Autry  
Arizona State University, United States, greg.autry@thunderbird.asu.edu

## SPACE SECTOR DESCRIPTION

**Abstract**

Whereas space scientist and engineers insist on accuracy in terminology, business practitioners and policy analysts often conflate terms, using the same or similar words to describe different aspects of the space industry structure and capabilities. In English, as in other languages, the word “space” is often followed by words such as industry, industry segment, industrial base, market, ecosystem and others.

The practice of casually using words with indistinct meanings may often be appropriate for informal discussion if it facilitates the communication and exchange of ideas and all parties understand the casual usage. This practice, however, is problematic for detailed and analytical applications requiring precision and order of thought.

This paper defines specific descriptive terms (including: organization, firm, population, industry segment, community, industry, ecosystem, field, market, and sector) describing space sector organizations and activities for use by practitioners, analysts and academics requiring specific language to communicate precise ideas for any reason. Grounded in contemporary economic practice and organization theory, this paper provides background discussions of two constructs: (1) different levels of analysis that characterize embedded hierarchical social systems of organizations and (2) different types of ecosystems.

The paper seeks to construct a taxonomy that identifies the specific terminology that fits within each level of analysis discussed and provides descriptions and examples of each. The paper also discusses space ecosystems focused on a subset of space organizations and activities comprising “core subsystems and critical infrastructure.”