

BUSINESS INNOVATION SYMPOSIUM (E6)
Entrepreneurship and Investment for Commercial in-Space Activities (2)

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PREREQUISITES FOR NEW MINING PARADIGMS

Abstract

There has been much speculation, professional and enthusiast, on the current and future prospects of mining the moon and near earth asteroids. Most writings on the topic have concentrated on only one or two fields, such as the economic, legal or technical requirements in isolation of the larger picture and the interconnectedness of the various disciplines. The establishment of a viable mining operation on the moon or asteroids would be a paradigm shift in the mining industry, and we gain much by comparing the situation to past paradigm shifts in the same industry. Understanding the pre-requisite factors for such paradigm shifts will allow us to pre-empt and facilitate such a change, and enable a more revealing analysis of proposed solutions that have relied on advancing technology, financing or legal solutions in isolation.

This paper examines several factors considered to be pre-requisites; price and the total addressable market, capital availability, technology, geological interpretation, and regulation. The inter-relation of these factors is considered in the context of a number of historic and contemporary examples, highlighting the implications for mining the moon and near earth asteroids.