IAF BUSINESS INNOVATION SYMPOSIUM (E6) Entrepreneurship and Innovation: The Practitioners' Perspectives (1)

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ECONOMICALLY VIABLE LUNAR BUSINESSES WITH RELATIVELY LOW CAPITAL EXPENDITURES

Abstract

Commercial space companies tend to require large capital expenditures to develop and deploy their systems before generating substantial revenue. These large expenditures and extended timelines for covering development costs with revenue present hurdles to space start-up companies, especially in nations that are attempting to enter the space domain. However, as part of a larger study, we have identified multiple economically viable products and services that require only modest capital expenditures by leveraging existing commercial space transportation systems. These activities include the return of moon rocks for sale in terrestrial markets, the production of small artifacts (e.g. jewelry) on the moon or on the Earth, and memorials on the lunar surface for the deceased. In this paper, for each economically viable activity, we provide an overview of the product to be sold, the technologies required to deliver the product, the cost of the product, and an assessment of the demand for the product. Our demand assessments make extensive use of analogs to terrestrial markets and interview data.