

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

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ENHANCING QUALITY OF LIFE IN SPACE, A DRIVER FOR SPACE COMMERCE

Abstract

For long duration space activities on the ISS and Space Hotels which will be operated in the near future, the elements of comfort, amenity, and healing will be more important for living in space in addition to basic safety and reliability. People living in space infrastructures – even for short stays - should be satisfied both physically and mentally, especially in the case of commercial activities for paying customers. Also, the longer time duration that people are in space, the more important it is that they reduce stresses and refresh themselves.

Using the power of color is one of the solutions to enrich mental health aspects in space. Color in a closed space habitat has relationship with lighting, fabric and other materials of space interior design. Color can encourage our enthusiasm, give us healing, reset for fresh mind, and improve appetite. Thus, color power can be effective for living in space in any item such as wear, food and drink, interior design, and so on..

Fashion is another element for “Quality of Life in Space”. Fashion has been never important in space development up to now. Safety and reliability related issues are everything in government space activities. However, there should be some new elements in commercial space activities. Fashion is one of these elements for personal space flight. Every industry has fashion essence such as design and colors in addition to the core technology of its original purpose. Now, the space tourism age has come. Fashion technology, including fabric formulation, printing technology, construction and testing all need to be developed for this new area of creative expression. It is time to have fashion taste and technology establish its own style in the space marketplace. In these areas the economic power of the mainstream terrestrial economy can become a major contributor to space commercialization by making space design aspects a “Big New Thing” in the terrestrial marketplace.

One research project has been started with JAXA which will enrich living in space using additional commercial elements such as color power and fashion. This paper will consider new ideas for products and services in space which will also be used in our ordinary life on Earth as commercial items with strong “space standards”. Products and services from living in space can drive space commercialization and contribute our lives and economic development both space and terrestrial.