

HUMAN SPACE ENDEAVOURS SYMPOSIUM (B3)
How Can We Best Apply Our Experience to Future Human Missions? (2)

Author: Ms. Paivi Jukola
Aalto University, Finland, paivi.jukola@aalto.fi

USER-ORIENTED DESIGN STRATEGIES FOR HUMAN EXPLORATION AND HABITATS

Abstract

When current mindsets and approaches no longer meet the challenges being faced the ability to change is the key success factor. The opportunities and threats of today provoke a desire and determination to invest in the far future instead of focusing in daily problem solving and short term goals of next 4-25 years. Research and design for game changing technologies, services and products benefit from lessons learned within aerospace industry, from history, and from collaboration with partners and competitors. Lessons learned from other industry sectors and diverse professions add value, novel ideas and know-how to the creative process. This paper reviews three trends and major design principles of industrial designers, architects and urban designers of today: concept development and mass customization; user-oriented design, user-experience and the concept of Flow (Csikszentmihalyi 1990); green systems and sustainable development. An alternative long term strategy of multi-disciplinary Think Tanks and Design-Labs for designing future space missions and habitats, work and home environments, is proposed.