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Space Architecture: Designing Human Systems Interaction (3)

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LIVING LAB II – DESIGN RESEARCH STRATEGIES ON HUMAN FACTORS AND USER-CENTERED DESIGN

Abstract

Creative minds and innovative ideas are qualifications many companies seek after and expend considerable efforts and financial resources when they recruit talent. Diligence, Professionalism, Dedication to success, Experience and Education are keys for an ideal job candidate according to a job seekers website. People skills, team building skills and leadership skills as well as the ability to cope with work-related stress are standard requirement for practically any job. Astronaut selection is one of the keys to successful missions. This paper reviews past research and reports of new surveys among astronauts and space tourists focused in human factors, ergonomics and the concept of Flow. The optimal state of inner experience is one in which there is order in consciousness. Flow is the way people describe their state of mind when consciousness is harmoniously ordered, and they want to pursue whatever they are doing for its own sake (Csikszentmihalyi, 1990).

According to the study it is beneficial to select people with personal research interests and creative minds. We propose an international study to investigate decision making and problem solving skills in extreme environments. Spatial quality and volume of the work place increase safety and well-being. Living lab is a concept that brings together interdisciplinary experts to develop and test in actual living environments new technologies and strategies for design (MIT Living lab). The paper proposes novel design strategies to improve living and working conditions for crew safety and well-being. A room of one's own, An inflatable Bubble Space, is explored as a case study on personal space.