

BUSINESS INNOVATION SYMPOSIUM (E6)

New space at the national, international, and overall industry levels: innovation, entrepreneurship & investment at the macroscopic level of analysis (3)

Author: Mr. Daniel Sagath
Vrije Universiteit Amsterdam, The Netherlands

Dr. Elco van Burg
Vrije Universiteit Amsterdam, The Netherlands
Prof. Joep Cornelissen
Erasmus University Rotterdam, The Netherlands
Dr. Christina Giannopapa
European Space Agency (ESA), France

NURTURING THE FUTURE: BUSINESS INCUBATION PRACTICES IN THE EUROPEAN SPACE
SECTOR

Abstract

Access to technology from other sectors is an important condition for innovation and entrepreneurship in high-tech industries such as the space sector, where many inventions come from cross-fertilization from other sectors. Organizations that perform research and development permanently seek mechanisms for distributing technology, supporting products development and market opportunities, or promoting business and entrepreneurship. In the last decade, the public sector organizations such as the European Space Agency (ESA) and its member states have acknowledged the importance of technology transfer and the need for business incubation centers to support new ventures. ESA has initiated a network of business incubation centers (BICs) throughout Europe when also other attempts outside the ESA scheme are emerging. These centers essentially work as ‘brokers’ who specialize in bridging technologies from disparate industries to identify game changing technologies and encourage the adaptation of technologies to other industries. This study adopts a science-based design to investigate prevailing business incubation practices in the European space sector. Objective of this study is to develop a set of design principles for designing technology transfer and incubation practices, based on the current body of literature and the existing incubation practices in the sector. This study focuses on new entrepreneurs (start-ups and SMEs) in the sector, conducting or finishing their incubating period in one of the two business incubation models (e.g. ESA BICs) in the Netherlands and in the United Kingdom. The empirical part of this study follows a cross-country case strategy and qualitative methodology. Semi-structured interviews are chosen as a data collection method accompanied by archival sources of business incubation organizations. This study accumulated more than 30 interviews with representatives of start-ups (e.g., BIC incumbents), incubation centre managers, or representatives of national space programs responsible for technology transfer and entrepreneurship development in the sector. The data obtained enables an in-depth qualitative analysis of technology transfer practices that takes place between organizations and start-ups. Therefore, the focus of the analytical part lies in aggregation of technology transfer components (e.g., actors, motivations, direction of transfer or transaction types), mechanisms (e.g., infrastructure, establishments, or behavior) and processes (e.g., prospecting, developing, disseminating, implementing, or adopting new technologies). Given those conditions, our study shows when and how some entrepreneurs, with the help of (or regardless of) the business incubation practices, are able to venture their own route to a reasonable business.