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NEWSPACE - EUROPEAN PERSPECTIVES

Abstract

Planet, Space X, Spire – these are some of the companies that are associated with the term "NewSpace", calling for a different approach to the way we conduct spaceflight and gain economic benefits from space. What started in the early 2000s with the advent of CubeSats, used primarily in the academic sector, has transformed itself into a powerful paradigm shift.

Without doubt NewSpace has made enormous strides; the emergence of numerous start-up space ventures within the last 15 years is a clear message. These start-ups cover such diverse areas like satellite communications, Earth observation, launchers, manned spaceflight and space tourism, or even energy from space as well as resource gathering in space. Companies have attracted over $18.4 billion of investment, including 4.5$ billion in debt financing, since 2000. Over 180 angel- and venture-backed space companies have been founded since 2000. 18 of these have since been acquired, at a total value of $3.6 billion$.

However, the NewSpace movement has so far been focused to a great extent on the United States, namely the West Coast. Mojave in California has been dubbed "the Silicon Valley on NewSpace", being home to several of these commercial space enterprises. In aiming to understand the NewSpace phenomenon better – especially from a European perspective - studies have been initiated in several European countries and at European level. While the first studies centred on understanding the driving forces behind the NewSpace ecosystem, later efforts assessed the shortcomings of the European framework as a whole, deriving recommendations how the framework could be adapted to allow for a more vibrant space start-up scene in Europe.

Study results show that at least 4 factors are of immanent importance for a NewSpace ecosystem creating market driven products and services. These factors are related to,

a) Business philosophy – creating and living an entrepreneurial spirit;
b) Financing – access to early stage risk capital and venture funding;
c) Technology management – focus on spinning-in technologies and ICT-processes and
d) Framework – favourable political and legal conditions supporting commercialisation.

This paper will summarise the insights gained and the lessons learned from success stories and failures in NewSpace. It will present the recommendations for strategies how NewSpace companies can be successfully established in Europe. Given the growing relevance of NewSpace, these insights are of high interest to stakeholders and decision makers worldwide.