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## IAF BUSINESS INNOVATION SYMPOSIUM (E6)

Finance and Investment: The Practitioners' Perspectives (2)

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## SPACE BUSINESS AND INVESTMENT IN JAPAN TO CAPTURE GLOBAL MARKET SHARE

## Abstract

Evolution and revolution in commercial space have been changing the landscape in the global space industry and innovation has been brought into our daily life. Space-based information has been used with various kinds of terrestrial big data, which has created new value by using AI to provide solutions in our digital transformation society. Smallsat communication constellations will contribute to a 5G connected society and realize global connectivity. Space 3D printing manufacturing and AI robot assembly, RD in microgravity, on-orbit service, and even deep space activities have been steadily promoted. Such NewSpace products and services has created and broadened markets. Space is open to everybody by realizing space tourism which is one of the typical B2C businesses. The space economy landscape has been changed and now what is called Space 4.0 has come.

There are more than fifty space venture companies in Japan and a pretty good number of them have gotten VC funding. There are three startups which have received more than \$100M including the largest Series A funding in space startups in the world. About fifty is not a big number out of about 1500 space venture companies around the world. However, they are variety of enterprises both space infrastructure industry and space utilization and service industry. It is forecasted that space venture companies will be about 10,000 companies in 2030 around the world. An increasing number is also expected in Japan too. According to Start-up Space 2019 by Bryce, VC's in the world which invest in space start-ups has been dramatically increasing since 2015. And Japan is the second country with the UK following US. In addition to space venture companies, non-space companies have gotten into space business such as Canon and Sony. Particularly, they are not only starting their space businesses but making investment in space startups. CVC is one of the most characteristic traits in commercial space in Japan.

Space development is now a burgeoning commercial growth industry. The status in Japan aiming for increased competitiveness in the global market has been advanced based on active investments and government economic development policies. VC and CVC investment fund facilitate these goals. This paper will discuss the investment status in commercial space in Japan.