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The Demand Side of the Space Economic Equation: Understanding and Evaluating the Changing Market Dynamics in Space Activities (3)

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EARTH OBSERVATION MARKET DYNAMIC CHANGING AND NEW ACTORS

Abstract

The Earth Observation (EO) Market growth is driven by fast-developing and emerging governmental programs as well as the new small constellations. The emergence of these "low-cost" constellations has the potential to disrupt the market by opening up new services areas and application that requires high revisits and by offering data and solution at a lower price. New markets have been opened up by technological advances in small satellites beyond their traditional role of technology demonstration applications. Small satellites have given birth to a fresh set of new businesses, some of which have generated particular murmur in the venture capital community. Due to relatively low capital requirements, small-satellite efforts are also tapping into types of financing that have historically not been available to the space sector. Over the past few years, a large number of start-ups have entered in the space community; their activities are based on the use of relatively inexpensive small satellites, which enable these companies to provide today services almost equivalent to gigantic and heavy satellites launched by national space organizations. This kind of market presents some key characteristics of a potentially disruptive innovation: they are much simpler, cheaper and non-competitive in the traditional space market parameters. Disruptive technologies together with the new business model represents a new challenge for the industry, they can be envisaged as a part of a new trend which underpins global econoic cycles, leading a prospect of growth potential in the long term. Small satellites show another way of thinking about doing space and a new approach in manufacture, operations, financing and risk management. Commercial data supply expected to go through a significant expansion, together with lighter of commercial resolution control, improving spectral and temporal resolution, the adoption of cloud/"big data" solutions that facilitate the utility of EO data to end-users, increased availability of venture capital funding and increased popularity of small satellites. What will be the main market implications? Are we ready to reach this goal? The market dynamic changing and new actors are opening the gates for innovation and applications using satellite imagery driven by numerous other applications to support wider economic development, such as in infrastructure, engineering and natural-resources monitoring. North America remains by far the largest consumer of commercial EO data followed by Europe but other regions, such as Asia, are displaying a much stronger growth profile.