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BUSINESS MODELS WITHIN THE SATELLITE SERVICES AND APPLICATIONS SECTOR

**Abstract**

Within the Space Economy, the satellite services and applications sector is rapidly developing. This sector is formed by that set of activities ranging from the design and production of the satellite to its management in orbit, up to the management and processing of data collected in space. The paper analyzes the satellite sector with the aim of understanding the main competitive dynamics and the main business models adopted by companies operating within this sector. The starting point for the analysis was the construction of a dataset, by databases and collection of information on the various companies in the European and American sectors. The analysis of the dataset lead to the identification of three main business models that companies in the satellite services and applications sector can adopt: the upstream model, the downstream model, and the vertical integration model. For these models, a further segmentation was made according to the companies' core business, such as Earth observation business or telecommunications activities. Furthermore, for all the models addressed, a comparison between the European and the US cases was made. The analysis allowed to highlight some results. The downstream model is the most widespread and it is associated to the best economic and financial performance. Furthermore, it emerged that companies in the upstream model tend to rely more on economies of scale, while those in the downstream model prefer an activities' specialisation. All models tend to address both the commercial and government markets, but to a different extent depending on the scenario. A common element of every business model is the presence of innovation as a basis for the creation of value. Skills, technologies, and knowledge represent the pillars on which innovation is based, that in turn constitutes the primary source of the competitive advantage and the product and service offer. The satellite sector is developing more and more and understanding the business models of the companies that compete in this sector is essential to understanding the sector itself and its implications, similarities and connections with other economies of the world. This analysis allows the construction of an evaluation model for understanding the competitive elements of the satellite operators' business models, as well as an analysis of the risks associated with each business model. It can therefore be useful for the operators themselves to better understand how to carry out their business and how to compete better in the sector.