

53rd IAA SYMPOSIUM ON SAFETY, QUALITY AND KNOWLEDGE MANAGEMENT IN SPACE
ACTIVITIES (D5)

Knowledge management for space activities in the digital transformation age (2)

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KNOWLEDGE MANAGEMENT IN ACADEMIC AND INDUSTRIAL INSTITUTION RELATED TO
AEROSPACE FIELD**Abstract**

With costs declining, technology improving, and public-sector interest increasing, members of the aerospace industry must surely have every reason to feel optimistic about the future of their field. Challenges in engineering are being conquered with unimpeded acceleration, and humanity's reservoir of knowledge about space and the universe is expanding with every breakthrough. Knowledge management, or KM, means ensuring that knowledge and information are created, shared, transferred, used, stored, and managed within an organization. Maintaining good KM practices is a challenge for organizations in any field, but there are two specific circumstances in the space industry that highlight why this is a more complicated challenge for this sector in particular. 1. A low ratio between senior experts and newcomers. 2. Wide range and large amounts of prior knowledge required. This work focuses on the implementation of communication and human interactions in KM processes in two specific contexts: academia and start-ups. The academic environment is an institution in which future young professionals arise from, and since old habits die hard, integrating good KM practices and attitudes to learning at an early stage can have a notable positive ripple effect later down a young professional's career. Even if there is no shared definition of what New Space is, a series of trends characterize the growing presence of start-ups in the space sector. The innovation brought by start-ups in the space sector has a relevant impact on the job market, and a young professional is often more likely to take a gamble on an entry-level job in a start-up than an established professional looking for a senior position. Nonetheless, for both small and medium enterprises, as well as for well-established companies, the importance of sharing good practices with the

new employees and senior staff is fundamental. While the issues raised here are generally true across the space industry, this work has focused on academic organizations and startups.