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Knowledge management for space activities in the digital era (2)

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CORPORATE KNOWLEDGE MANAGEMENT AT THE EUROPEAN SPACE AGENCY

Abstract

During the last years, ESA has gathered an extensive experience in Knowledge Management (KM) defining and setting up a corporate knowledge management strategy. The Knowledge Management strategy applicable to ESA seeks to achieve two strategic goals. The first is to establish and entrench a 'knowledge culture' within the Agency; and the second is to enhance the operational efficiency. The former requires that the Agency takes steps to evolve into an organisation where the produced knowledge can be efficiently used and shared inside the community; the latter is expected to yield more efficiently the design and implementation of space projects. As a first step, a KM governance model has been implemented and described in the paper illustrating the interactions amongst the different stakeholders. Then, the set of projects and initiatives developed or under development are described which pursue the KM objectives corresponding to the following pillars: knowledge creation, capture, preservation, sharing and exploitation. These projects are for example the knowledge mapping, Expertise Directory, Knowledge Capture, Lessons Learned Harmonization and others.

For example, knowledge capture aims to ensure that the core knowledge and the gathered experience remain in ESA after leaving/retirement of key staff and that is available to the communities. To this purpose, the lesson learned project will be presented. Knowledge sharing aims to increase the collaboration within teams and to improve consequently the effectiveness and the performance. The paper discusses the many initiatives that the corporate KM conducts on the various topics which can be associated to KM.

To monitor the KM strategy development, a set of Key performance Indicators, KPI, are proposed and aligned with the agency's goals. Some of the benefits of KPIs are applicable on the medium and long term. For example, the KPIs are paramount in order to know the health of the KM system parts and its impact as a whole in the organization. Finally, the most important advantage is that the use of indicators is essential for gaining the support of the managerial layers of the organization, as by these means, KM turns into a more tangible and systematic discipline which can be measured against the business goals.