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TOWARDS AN ESA KNOWLEDGE MANAGEMENT STRATEGY

Abstract

The European Space Agency (ESA) is in charge of designing and conducting European satellite missions ranging from scientific and technological projects to Earth observation and Human space flight ones. In order to fulfill the scope of this mandate, the Agency is split into several directorates which are distributed over five establishments: HQ (France), ESTEC (The Netherlands), ESOC (Germany), ESRIN (Italy) and ESAC (Spain). More than 2000 staff are employed within the Agency.

Within the past decade several initiatives were started in ESA at directorate, project or division level with the aim of developing dedicated Knowledge Management (KM) applications for individual communities. Examples are the Rosetta knowledge heritage project (1997), the knowledge breakdown structure initiative for ESOC[?] (2008), as well as several wikis and portals.

ESA is currently running a new phase aimed at drawing an overall ESA-wide knowledge management strategy which must be user-driven – that is serving ESA's core business - and should also integrate and build upon the current local KM achievements.

The fundamental characteristics of the corporate approach can be described by the following key elements: - Integrated approach. It is not sufficient to provide tools, procedures and user manuals that satisfy individual, isolated needs, but it is necessary to build methodologies and supporting tools that

integrate information, communication and social networking, education, organizational mechanisms and human resources management as a whole. - Pragmatic approach. To be effective and to be accepted by staff, the definition and the implementation of a corporate KM system must be carried out in a pragmatic way. Here the reality of the ESA organizational vision, people's involvement in processes, challenges posed by the current corporate culture and status of the approach to reuse must be carefully considered. - Business approach. Knowledge management should not only be meant for the professional development of the staff, but it should also be emphasized as a strategic business factor, underlining the potential for improved work efficiency and effectivity. - Open approach. Here 'openness' has several meanings such as being/becoming open to internal exchange of knowledge, and being/becoming open to contributions from and collaboration with external social networks.

The paper will discuss in detail the as is situation, the collection and consolidation of the requirements, the definition of the preliminary strategy and implementation plan, and the selection of representative use cases to provide realistic scenarios to test and validate the proposed system within the ESA context.