

49th IAA SYMPOSIUM ON SAFETY, QUALITY AND KNOWLEDGE MANAGEMENT IN SPACE
ACTIVITIES (D5)

Knowledge management and collaboration in space activities (2)

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ESTABLISHING A CUSTOMIZED KNOWLEDGE MANAGEMENT SYSTEM FOR A NEW SPACE
PROJECT ORGANIZATION WITHIN AN EXISTING INSTITUTION ON A NANOSATELLITE
PROJECT EXAMPLE

Abstract

The paper describes detailed methodology for developing a knowledge management system for a new project organization with specific needs within an existing institution. It addresses issues which are related to customized needs in terms of collecting, storing, accessing, sharing and modifying project info by predetermined user groups and safety levels, while maintaining system flexibility and access to relevant information according to users' needs. It describes methods for combining local databases, internal networks, cloud services and external storage destinations, by keeping the information management at a satisfactory level with minimal cost and system complexity, while meeting enhanced requirements for a space project.

1. Mapping existing information management tools within the organization.
2. Determining requirements for the project.
3. Determining requirements for the project information.
4. Compiling project information management regalement for the new project organization and implementing chosen tools - methodology for determining the collaboration system and technological environment for the knowledge management. Assessing the existing systems to meet the project needs.
5. Implementing chosen tools.
6. Informing people about how to use the selected tools - defining and documenting each member's access and restrictions to the project planning phases, documentations and other knowledge tools.
7. Monitoring the system on a current basis and implementing changes.
8. Combing the system with established project plan and tasks: Building a continuous implementation road-map for the knowledge management to address the specific tasks identified by the project assessment. The road-map yields the achievements and milestones through the project line and clears the vision for the entire project duration, encouraging project participants to contribute into the system on a regular basis.

As an end result, the project shall have a knowledge management system with flexible architecture, which satisfies the projects' unique requirements and can also be applied on similar future projects on any level of complexity.