Architecting an Approach to Knowledge Management

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This paper sets forth a method to develop an architectural approach to the design, development, creation, and implementation of knowledge management at a specific organization. The research is derived from qualitative analysis of published case studies, interviews, and a knowledge architecture developed and implemented by the author at the National Aeronautics and Space Administration (NASA) and Jet Propulsion Laboratory (JPL). The paper looks at critical success factors for successful deployments of knowledge management solutions: culture, architecture, infrastructure, and services.

The steps in developing a knowledge architecture are similar to those in developing an architecture for any complex information system, with the difference being that culture and services play a critical role in successful deployment of knowledge-based systems. The intent of this paper is to help companies design and implement successful knowledge management systems by starting out with an analysis and architectural approach to meeting their business needs.