Chapter VII

Knowledge Management for Enterprise Systems—First Empirical Insights

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Enterprise systems are comprehensive and complex applications that form the core business operating system for many companies worldwide and throughout most industries. The selection, implementation, use and continuous change and evolution of enterprise systems (ES) require a great amount of knowledge and experience. Empirical studies show that the management of knowledge is one of the main cost drivers of Enterprise Systems projects. Consequently, organizations have realized the need to better leverage their knowledge management for Enterprise Systems. This chapter proposes a framework for structuring knowledge for Enterprise Systems. This three-dimensional framework is derived from meta-case studies and comprehensive literature analysis. It consists of dimensions for the ES life cycle, the Knowledge Management life cycle and the types of knowledge. Preliminary empirical insights show that especially the lack of soft knowledge is a critical success factor that leads to significant consulting costs in ES projects.
THE SIGNIFICANCE OF KNOWLEDGE MANAGEMENT FOR ENTERPRISE SYSTEMS

Enterprise systems (ES)–synonyms are enterprise resource planning (ERP), enterprise-wide systems and enterprise application systems–can be defined as customizable, standard application software which includes integrated business solutions for the core processes (e.g., production planning and control, warehouse management) and the main administrative functions (e.g., accounting, human resource management) of an enterprise (Rosemann, 1999). In order to configure and use ES efficiently, components such as implementation tools (procedural models, reference information models, customizing guidelines, project management software), work-flow functionality, tools for the development of add-on modules and system administration, and office suites are usually embedded with the ES software.

Implementing comprehensive IT applications like Enterprise Systems is a knowledge-intensive task. As such, it requires a great amount of experience from a wide range of experts such as representatives from business departments, technical specialists from the IT department and project managers within the organization up to external business and implementation consultants.

“On one hand organizations want to reduce the engagement of costly consultants, but on the other hand hardly any organization has the internal knowledge and skills to implement an ERP system successfully without external help. Choosing the right consultants and using their skills and knowledge appropriately, as well as transferring and retaining essential knowledge within the organization becomes essential to the overall success of an ERP system implementation.” (Haines & Goodhue, 2000).

Organizations implementing Enterprise Systems recognize this and find that managing knowledge directly deals with the most significant costs of an ES project. Thus, there is strong motivation for better leveraging ES implementation knowledge and making this knowledge available to those involved in the ongoing management of the system.

This chapter proposes a three-dimensional framework in order to structure the knowledge which is required to manage an Enterprise System. This framework was derived from comprehensive literature reviews and analysis. This chapter also discusses pilot results of an empirical survey, which has been conducted in order to verify the framework. The results explicate what
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