
SOME ASPECTS OF DEVELOPMENT AND IMPLEMENTATION OF E-LEARNING IN NUCLEAR INDUSTRY

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Information technology has enabled organizations to re-engineer the way they operate. New infrastructures allow organizations to take advantage of the transactional and communication capabilities information technology provides.

During last decade international attention to nuclear industry dramatically increased. It accelerated already started process of implementation great number of innovations and modifications in existing plants and construction and commissioning of new units. As the number of modifications and innovations increased the volume of information increased as well and became fragmented. The sheer volume of information could be overwhelming. At the same time due to workforce ageing and distorted image of the profession the smooth process of generation substitution has been interrupted. The need to identify, elicit, preserve and disseminate important pieces of knowledge that enable effective operation in the interest of nuclear sector became critical. In order to meet this challenge new approach needed to be implemented. Turning information and data into knowledge became a prime priority. The most appropriate concept which could cover this enormous amount of information and data could be a knowledge management. Without such system staff spends large amounts of time reinventing the wheel and often repeating the past mistakes. Knowledge management enables the enterprise to maintain, develop, and distribute the knowledge expertise of its people.

Basic and most powerful instrument for establishing of such system are various applications of information technology. One of them is e-learning. E-learning and knowledge management have several features in common. Both deal with knowledge exchange and creating communities where knowledge is shared. Knowledge management is particularly challenged in attempting to explicate, share, and leverage tacit knowledge. Interactive nature of e-learning creates environment supporting sharing culture and transfer of tacit knowledge to the younger employees.

Knowledge that has not been articulated represents a lost opportunity to share and leverage that knowledge. If competitors have articulated and shared similar knowledge throughout their organization, they may obtain competitive advantage.

There are another intersection between e-learning and knowledge management – learning objects repositories. Learning objects could be viewed as reusable online learning resources. Creating central repositories of reusable learning objects is serving the needs of both e-learning and knowledge management.

The learning objects or knowledge elements as they are sometimes called represent a form of online content. The benefit of a learning object rests in the principle of "develop once, use many" such that the same learning object can be linked and appropriately used in multiple places.

Using e-learning tools you can create and store knowledge elements or learning objects in a relational database that's accessible plant-wide.

Distributing knowledge via e-learning system allows sharing culture to overcome traditional hoarding, just making knowledge acquired by experience more accessible.

In this article a small fraction of the knowledge management system, which is in the process of implementing in Kozloduy NPP, will be described. It is a new developed e-learning system. Multiple learning objects are accessible plant-wide via local intranet.