A review of strategies for knowledge management in the early stages of the product development process

Marcelo Gitirana Gomes Ferreira, Fernando Antônio Forcellini, Osmar Possamai, Adriano Heemann, Antônio Domingues Brasil

Abstract: This paper reviews the evolution of three general strategies for Knowledge Management (KM) in the context of the Product Development Process (PDP) Early Stages. The first strategy, ?storage and mapping? focused on the reuse of simple product information (Requirements, Functions, Solution Principles). Today this strategy approaches specialized forms of knowledge reuse: Decisions Taken, Best Practices and Lessons Learned during the PDP. The second strategy focuses on the ?sharing and transference?of knowledge among the PDP members. The development of Internet Portals and Internet-based systems to support collaborative work in the PDP represent this strategy. The third strategy, ?new Knowledge Creation?is associated with the use of Creativity Techniques in design, and highlights the importance of human beings as objectives of KM. It is concluded that the referred three strategies are not supposed to replace one another; and are therefore, complementary. These strategies are not static either; thus evolving according to the ever-changing business and technological environments. Finally, due to the interest boom concerning collaboration and innovation issues, as well as the availability of new supporting technologies, more research can be done in order to improve the KM in the PDP.

Keywords: knowledge management, product development process, informational design, conceptual design

Download PDF   Close window