SYMPOSIUM ON STEPPING STONES TO THE FUTURE: STRATEGIES, ARCHITECTURES, CONCEPTS AND TECHNOLOGIES (D3)

Joint Session on Space Technology and Systems Management Practices and Tools" – Part I (4)

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METHOD OF COLLABORATIVE PRODUCT DEVELOPMENT AT VARIOUS STAGES OF PLM

Abstract

The collaborative engineering framework yields an important by – product: a vast amount of data and information captured in digital form during development of several generations of products. Special data mining tools can be used to process the accumulated data and produce new knowledge. All such information and knowledge can be made accessible over the network, and used in developing future generations of products. Knowledge Management (KM) is in fact, rapidly becoming an important part of Product Lifecycle.

The current paper focuses strongly on the methodology for the implementation of collaborative engineering in the different stages of PLM, including intelligent CAX, PLM and KM. A multidisciplinary collaborative design method, based on the product modeling framework, over the internet is developed with J2EE standards and multi – agents based information system infrastructure is presented in order to achieve the collaborative product development. Finally, a PLM prototype system is interfaced.

Key Words: Product Lifecycle Management (PLM), Collaborative Product Service, Product Lifecycle Process Management, Product Lifecycle Knowledge Management, Product Data Management, CAX