Technology-driven product platform development

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Abstract:

In designing product platforms it is essential to consider the role of technology and its evolution to avoid frequent redesign costs or even premature obsolescence of key components. The Technology-driven Platform Development Method (TPDM) enhances existing platform design methods by identifying underlying technologies and the potential for change in their intrinsic characteristics – performance level, principle of operation, and technology architecture. A set of four heuristics is applied to determine the technology-driven platform elements. Application of the TPDM to the iPod portable music players showed that existing platform elements would require additional platforming and interface design to form a technology-driven platform.