

A serious game for introducing set-based concurrent engineering in industrial practices

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Deskriptoren

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Abstract

This article proposes a Serious Game about ‘Set-Based Concurrent Engineering’, which is one of the elements of lean practices in product design and development. Although Set-Based Concurrent Engineering is becoming popular in academia, in practice, understanding and adoption of it are low. Thus, the game presented in this article is designed to bring hands-on experience to practitioners to understand its principles and associated enablers. The game is structured in two stages, simulating the traditional approach to concept development, called ‘Point-Based Concurrent Engineering’, and the lean approach, called Set-Based Concurrent Engineering, respectively. Performance metrics are provided in the game to track teams’ performances in the two stages. Several practitioners have played the game. This article also presents the feedback obtained from a game session to illustrate the educational purposes and effectiveness of the game.

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