

## Design and Simulation on Technology Capabilities in Developing countries, Design and Engineering Approach

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**Abstract :** According to studies in the field of technology capabilities we identify the most important indicators to evaluate the level of "Design and Engineering" capabilities. Since the technology development correlates with the level of technology capabilities trying to promote its key importance. In this research by using FDM, the right combination of D&E capabilities indicators according to the auto industry is presented. Finally, with modeling evaluation of D&E capabilities by using FIS and check its reliability, five levels were determined to evaluate the D&E capabilities. We have analyzed 80 companies in auto industry and determined D&E capabilities of each level. Field of company activity indicators has been divided into four categories, Suspension group, Electrical group, Engine groups and trims group. The results show that half of the surveyed companies had D&E capabilities in Level 1 and 2 or in other words very low and low level of D&E.

**Keywords :** developing countries, D&E capabilities, technology capabilities, auto industry

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