World Academy of Science, Engineering and Technology International Journal of Mathematical and Computational Sciences Vol:14, No:12, 2020

Agile Project Management: A Real Application in a Multi-Project Research and Development Center

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Abstract : The aim of this study is to analyze the impacts of integrating agile development principles and practices, in particular to reduce project lead time in a multi-project environment. We analyze Arçelik Washing Machine R&D Center in which multiple projects are conducted by shared resources. In the first part of the study, we illustrate the current waterfall model system by using a value stream map. We define all activities starting from the first idea of the project to the customer and measure process time and lead time of projects. In the second part of the study we estimate potential improvements and select a set of these improvements to integrate agile principles. We aim to develop a future state map and analyze the impacts of integrating lean principles on project lead time. The main contribution of this study is that we analyze and integrate agile product development principles in a real multi-project system.

Keywords: agile project management, multi project system, project lead time, product development **Conference Title:** ICSRD 2020: International Conference on Scientific Research and Development

Conference Location : Chicago, United States **Conference Dates :** December 12-13, 2020