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# A Capacity Management Tool for Industrialization Projects\*

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## Abstract

The allocation of human resources to projects is a critical decision-making process in project management, and it is crucial to the organization's performance. The paper presents a study developed in an automotive company, focused on industrialization projects, where the project manager can manage more than one project simultaneously, being necessary to assign project managers to the projects. The main objective of this research was then to develop a tool to help in the capacity management of this type of projects, providing support to decision-makers (portfolio managers). A Design Science Research (DSR) approach was used to model and evaluate the tool developed, expecting to contribute to a better allocation of human resources. The main result obtained was a tool that allows to create the project schedule and the industrialization Project Manager (iPM) schedule. Additionally, it also includes a recommendation system for allocating an iPM to a project, and creates an automatic status report about the project.

**Keywords**: Industrialization Projects; Project Management; Capacity Management; Critical Path Method (CPM)

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