Enhancing Organizational Efficiency through Simulation-Based Learning and Lean Administration: A Serious Game Approach to Process Optimization

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Abstract

Manufacturing companies have long been concentrating on enhancing production. In this context, the method of lean production, as a component of lean management that streamlines manufacturing workflows, is already widely adopted. The optimization is the result of a sustainable process orientation as well as a clear alignment of the processes based on the needs of the customer and the reduction of waste within the workflows. Less well-known, in contrast, is the adaptation of the methods to administrative areas in order to optimize processes in offices as well. There is also still a lack of evidence on the impact of process changes on the improvement of administrative processes.

For this reason, a business game was developed to demonstrate and convey the benefits of applying lean administration to process changes. This teaching and learning method enables participants to deal with the relevant issues in a realistic way and to experience the effects of their decisions by simulating decision-making processes.

In addition to quantifying the effectiveness of process changes, it was possible to increase awareness of the importance of administrative areas and contribute to raising the profile of previously less researched areas of lean management.

Keywords
Simulation-based learning, Lean Administration, Process Improvement, Organizational Efficiency, Serious Games.