Iwo Podloch

LEAN MANUFACTURING IMPLEMENTATION EFFECTIVENESS MODEL IN A GLOBAL INDUSTRIAL CORPORATION

Abstract

The aim of the study was to examine the impact of cultural differences on employees' knowledge of the Lean Manufacturing system and to develop recommendations for improving the training system in the production plants of corporations with a global reach. The analysis included the identification of key issues for understanding the principles of LM, the construction of knowledge correlation models in different regions, and the development of methods for adapting training to local cultural conditions

The study adopted hypotheses assuming that the number of links between LM issues reflects the team's level of knowledge, cultural differences affect the understanding and implementation of the LM methodics, and that it is possible to develop a differentiated training model adapted to different cultural zones.

Correlation models made it possible to identify issues where improving knowledge had an impact on other areas, which enables targeted training planning. Correlation analysis made it possible to identify key issues affecting other areas, which enabled a better selection of training topics. A comparison of the models confirmed the presence of certain cultural aspects, especially in terms of collectivism and acceptance of uncertainty.

The study showed that the effective implementation of Lean Manufacturing in global organizations requires the adaptation of training programs, taking into account the level of knowledge on specific issues and local cultural conditions. The developed model and methodics can be applied in practice to design effective, differentiated training courses that increase both knowledge and the effectiveness of LM implementation in multicultural production teams.