

Work environment in Swedish Lean implementations

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Lean Production has spread from industry to the public sector and administration, and is now the dominating change concept in Sweden. The influence of Lean on the work environment has been debated. However, both positive and negative work environment consequences have been reported in different studies and in different contexts.

The aim of this presentation is to describe consequences for the work environment following Lean implementations and to further knowledge about conditions that influence the work environment.

Two programs that supported the introduction of Lean or Lean inspired change were followed in an interactive research approach. The programs supported participating organizations with courses and coaches and sharing of experiences between organizations and coaches. In total, 67 organizations were included, 60 medium sized companies in the manufacturing industry and 7 large hospitals and municipalities from the public sector. In total, the interactive research included 185 semi-structured interviews, 1965 questionnaire respondents and document studies.

The results show that there was a considerable difference between the organizations regarding goals, content, implementation ways and context in which lean was implemented. Further, the work environment consequences differed between the organizations. In a majority of the manufacturing organizations, a greater part of the employees were satisfied with the changes that had been introduced due to Lean, and they considered that their working conditions had improved. In a smaller number of manufacturing organizations but in most public organizations, the employees were not satisfied with the introduction of Lean and perceived that their working conditions had become less favourable. One reason was economic savings that had been introduced in several public organizations. Another reason was that five of the public organizations had decreased or terminated their Lean inspired change due to change of top management. The psychosocial work conditions were perceived to deteriorate in the organizations that had terminated their work with Lean, but improved in the organizations that worked with Lean from a long term perspective. The manufacturing companies had a more sustained approach to the Lean concept than the public organizations.

There were relatively few changes in the physical working conditions, including a few examples of improved lighting or similar changes. From a musculoskeletal point of view, work often had become more repetitive and monotonous. In some organizations but not all, job rotation was one counter measure. Physically heavy tasks had sometimes been eliminated and work postures improved. Participation in continuous improvement and in Lean tool usage was associated with the perception of improved working conditions, in particular when these activities were directed towards improvement of the working environment. The concept "Respect for the individual" contributed to a better psychosocial working environment, given that it had been discussed and interpreted in groups.

In conclusion, the Lean implementation improved the working environment in some

organizations and situations but deteriorated it in others. On average, the work environment consequences were perceived positive in the manufacturing organizations but negative in the public organizations. A long-term sustained approach to Lean was related to a more positive experience of the work environment.