

# Methods of Lean Production in Improving the Activities of the University Unit

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## key words

educational services, consumer, learning process, concept of Lean production

We have shown the possibility of applying Lean production approaches and methods in analyzing and improving the activities of department. It's one of the most important structural divisions of the university. Seven categories of losses are defined by analogy with the categorization of production losses. The analysis of the data of the questionnaire of the teaching staff, teaching and support staff and the survey of students was carried out. Based on the analysis, the losses of the educational process are described, taking into account the specifics of the process under consideration and the necessary adaptation. The scoring of all types of losses is conducted, the results are presented graphically. The most critical categories of losses have been identified. A fragment of the analysis on the category of Unnecessary movement is given, a description of losses is given, implementation at the department, an assessment is made, ways to minimize losses and recommendations. A pie chart is presented showing the ratio of estimates by loss categories in percentage terms. The analysis of losses estimated below four points, in particular, Poor workplace organization, was carried out. The application of the 5S Lean production method is shown. The object of research is the laboratory premises of the department. The current state of laboratories, as well as areas that require optimization, has been revealed. For each step of the 5S method, 5 criteria were identified, an assessment was carried out on a five-point system, comments were given, recommendations were given aimed at implementing the step and implementing this method. The results of the audit on four steps and a generalized petal diagram on five steps of the 5S method are presented.

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