

Reducing Lead Time in Library Book Issue Counter Process (LBICP): A Value Stream Mapping Approach; A case study at the library in University of Kelaniya, Sri Lanka

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Abstract

At present, universities given high subscription for the social, ethical progresses as the developing the cultural and ethical behaviors. Libraries in the universities are very important for preservation of knowledge, publishing and take the educational matters. This paper discusses the time wastes in the library book issuing counter process (LBICP) of the University of Kelaniya, Sri Lanka. The purpose of the study is to reducing Lead Time in the LBICP of the main library in the University of Kelaniya. The main objective of this particular study is to explore the possibility of re-engineering the existing LBICP that is leading to reduce the Lead Time (LT). There are four specific objectives viz., 1) to recognize the existing LBICP, 2) to evaluate the major steps of the process that covers 80% of the total, 3) to calculate LT of the existing in the LBIC Process; 4) to develop the future state map for LBIC Process. It was used value stream mapping methodology to make current and future state maps. The process map was created through observations. The methodology applied in this empirical study is briefly explained under the five headings such as approach, sample, and collecting data, analyzing and data presentation. VSM is one of the best tools to map a process and to identify its main criticalities in order to enhance lean manufacturing. With the reduction of time waste using the methods introduces in this research, that objective would be efficiently reached without any excess efforts. This data sample is random selecting by university students, academic and non-academic staff at the library. Researcher applied the purposive sampling method to select the sample. Data was collected from two weeks and 100 users. To recognize the existing LBIC process, four steps of the existing book issuing process and two steps existing book return process covered 80% of the total. Based on these findings, it can be concluded that there are possibilities to improve the productivity of the LBIC process by simplifying and automating the LBIC process of the University of Kelaniya, Sri Lanka. In this case study it was studied production process of one product and draw the current state value stream map. From the current data analysis it was found out the problems and given some recommendations to improve the production lead time and to provide a future state value stream map.

Key Words – Reducing, Library, Process, Lean Manufacturing

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