Lean Tools Application Failure

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ABSTRACT

There are less understanding of the large selection of lean tools and the management team of the companies does not have the sufficient confident in selecting a suitable lean for their companies. Lean tools provide additional value to the business and end users by reducing inefficient practices and improving the rate of product output. The purpose of this research is to provide lean area a clearer standardized process for easier implementation. This can be done by using Risk Priority Number (RPN) to quantify on the risk of failure of lean tools for their implementation in service organizations. RPN method is used to identify and figure out the critical risk that exists in service industries brought by the application of lean tools. This research objective is to identify the list of lean tools for service industries and to mathematically analyze the risk of failure of lean tools application for service industries in Malaysia.

Keywords: Lean tools, failure, service industry, Risk Priority Number (RPN).

1. INTRODUCTION

Service industry has showed its increasing importance for world economy recently. Some of the organizations treated the service activities as important as their main production lines [1]. Lately, taking United Kingdom economy as an example, the industries categorized to service-type industry are now occupy a large proportion for the UK economy than other type of industry. In 1948, the service industry composed of an estimated of only 46% expand to around 78% in 2012 [2]. While for Europe country, an industrial revolution had been taking place which transforms the manually intensive functions into mentally or intellectually intensive activities. From the transformation, we can know that there is rising dependency on the integrated high-end technology, for instance the implementation of information technology, job activities mainly focus on PC’s, and networks. As a result, the manual tasks or routine activities have been decreased and they are substituted by automated devices and robots [3].