

Methods of Improving Production Processes Based on Deming Cycle

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Abstract : Continuous improvement is an essential part of effective process performance management. In order to achieve continuous quality improvement, each organization must use the appropriate selection of tools and techniques. The basic condition for success is a proper understanding of the business need faced by the company and the selection of appropriate methods to improve a given production process. The main aim of this article is to analyze the methods of conduct which are popular in practice when implementing process improvements and then to determine whether the tested methods include repetitive systematics of the approach, i.e., a similar sequence of the same or similar actions. Based on an extensive literature review, 4 methods of continuous improvement of production processes were selected: A3 report, Gemba Kaizen, PDCA cycle, and Deming cycle. The research shows that all frequently used improvement methods are generally based on the PDCA cycle, and the differences are due to "(re)interpretation" and the need to adapt the continuous improvement approach to the specific business process. The research shows that all the frequently used improvement methods are generally based on the PDCA cycle, and the differences are due to "(re) interpretation" and the need to adapt the continuous improvement approach to the specific business process.

Keywords : continuous improvement, lean methods, process improvement, PDCA

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