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Application of Holistic Process Improvement in Aerospace Industry: A Case Study

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Abstract: In this paper, we discuss some tools and techniques that are used as part of Lean, Six Sigma, Ergonomics and Supply Chain that are implemented as a whole leading to a synergistic system. It insists that taking a holistic approach and applying all of these methodologies in unison is the best way to improve a system. This Holistic Process Improvement (HPI) method is then applied in a case study to an aerospace manufacturer. Implementing specific tools and techniques, it was found that all of the components of HPI could be used to improve the operations and enhance productivity of the manufacturing operations in an aerospace manufacturing facility. This paper details a selection of specific tools and techniques that can be implemented to alleviate some of the problems holding back the manufacturer from operating more effectively and generating more value.

Keywords: Holistic Process Improvement, Lean, Six Sigma, Ergonomics, Supply Chain