Evaluating the Processes, and Implementing Lean Principles into an Engineering Consultancy & Architectural Design Office

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Abstract

The business world is currently in a highly competitive state, where the slightest and smallest of strategies employed by management determines the success and profitability of the organisation. Through effective application of the strategies and concepts, a business entity might enhance the efficiency and effectiveness of business operations, reduce costs and increase profits on commodities produced and sold. One-Piece Flow, also known as Single Piece Flow, Continuous Flows, or Flow Manufacturing, is ideal for lean manufacturing (Bollinger, 2006). This concept entails building one item at a time to effectively and accurately meet consumer needs. It also involves the matching of demand and supply, where supply is only triggered when there is demand. Furthermore, supply has to match demand, for example, no excess commodities are produced and/or stored in anticipation of future demand trends. In this paper, a scenario has been presented of a design office that incorporates multiple disciplines, with architecture as the main one. Mechanical and structural design is also included in the firm’s services. The firm has experienced a number of problems appear to be having a negative effect on the firm’s reputation and image. The paper seeks to analyse the existing processes and identify how institutional changes can be made to improve the firm’s performance. Also it will highlight the concept of lean principles, and analyse how they can be employed to make the required improvements. A target system is proposed, relating to the identified problems and resulting alternatives discussed. This will lead to the development of an implementation plan.

Keywords: Evaluating the Processes, Lean Principles, Architectural Design