

## Review on Lean and Agile Implementation in Gear Manufacturing Industries

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### Abstract

Ever increasing customer demand and competitive environment among manufacturers across the world has engaged the industry to adapt advanced manufacturing strategies. The combination of both lean and agile manufacturing can be integrated to achieve customer demand and satisfaction. The integration of lean and agile manufacturing concepts would meet complete and qualitative manufacturing system. The main purpose of Lean and agile manufacturing is the customer satisfaction with a cost-effective price. The integration of Lean and agile manufacturing has been adopted in most of the manufacturing enterprises. Lean mainly leads to eliminating the non-value-added activities while agility focuses on rapid response to market demand. Some of the industries use Lean concept and lean tools to improve the productivity, but few manufacturing industries use Agile concept to rapid response to customer demand. The integration of Lean & Agile concepts meets customer requirements and also increases the productivity which in turn increases profit of the industry. The main aim of this paper is to increase profit, productivity and meeting customer demand by integration of Lean & Agile implementation in Gear manufacturing industry.

Lean manufacturing is focused on maximizing customer value by minimizing waste, or any activity that doesn't add value, through continuous improvement. Lean manufacturing which mainly focuses on improving the efficiency of operations by eliminating and reducing wastes. Agile manufacturing is a production methodology focused on achieving rapid, flexible, and innovative responses to quickly changing customer demands and market conditions.

