

Lean Six Sigma and Innovation: A Theoretical Framework

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Abstract

Lean Six Sigma (LSS) is now treated as a business model in service and manufacturing sector. LSS is the aim of removing waste and decreasing the defects and variations in organization's processes. The aim of this paper is to describe a theoretical foundation for LSS with innovation. It has been anticipated that Six Sigma projects improve technological innovation of the organizations but only where while steady environments with in the firm. Since Six Sigma programs are focused on variance reduction and efficiency, these initiatives are not very effective in dynamic environments, where the rate of technological change is dramatic. In addition, due to the focus of Six Sigma projects on existing customers, they may inhibit innovation for new customers. Accordingly, implementation of lean in Six Sigma projects in dynamic environments the level of innovation often have to face some challenges, therefore could not give an effective outcome. We have developed a theoretical frame work for lean six sigma in business world regarding innovation and discusses all challenges and difficulties during implementation of lean six sigma in all types of sectors either dynamic or stable technology changes. The developed framework can handle these challenges effectively.

Keywords

Lean six sigma, Innovation, challenges, business model

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Biography

Adel A. Alharthi is a PhD researcher in Advanced Manufacturing and Enterprise Engineering, Brunel University (London, UK). He received his master degree in production and mechanical system design , College of Engineering, King AbdulAziz University (Jeddah, KSA) and his Bachelor in production and mechanical system design , College of Engineering, King AbdulAziz University (Jeddah, KSA) . He has published 2 research papers in different conferences and journals. He has a Master Black Belt (LSS) , his expertise in Lean SixSigma and Safety Engineering. He is working in Information and culture Ministry (KSA).He has worked on projects related to the application of Lean Six Sigma and risk management in media industry of Saudi Arabia.

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