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### **LEAN SIX SIGMA AND THE DMAIC FRAMEWORK**

Lean Six Sigma (LSS) has rapidly established itself as the key business process improvement strategy of choice for many companies since its introduction in 2010. The LSS approach provides significant benefits to companies through its dual focus on reducing waste and increasing value whilst resolving critical to quality issues that affect consistency and repeatability in a product and process. The implementation of LSS is finding wider application in many different environments. Through a case study approach, this presentation describes the novel implementation of an integrated LSS framework and outlines how it was used to identify the factors that affect customer service performance in a food eatery facility. The study outlines the application and measures effectiveness of integrated LSS framework through its ability to achieve new and enhanced performance through simultaneously reducing complaints and stabilizing order to receipt times. The presentation will give an insight into the journey of applying a DMAIC (Define-Measure-Analyse-Improve-Control) framework for root cause analysis in companies that operates under the process approach and have experienced gaps between data collection, data analysis, the actions taken towards improving the statistical processing and the controls put in place to ensure that the new process does not revert to former performance levels. The actual benefits attained from applying the changes are also mentioned. As a conclusion, the presentation shares the lessons learned during use of LSS projects for process improvement and considerations to consider when selecting and carrying out LSS Projects.

**Keywords:** Lean Six Sigma, Statistics, Process Improvement