

Critical Success Factors of Lean Six Sigma to select the Most Ideal Critical Business Process
Using q-ROF CRITIC-ARAS Technique: Case Study of Food Business by: Ahmet Aytekin, Basil
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Abstract

The current market conditions have forced Lean Six Sigma (LSS) upon businesses as one of the must-have practices. The practices have been credited with enhancing the efficiency of the operational and functional processes of enterprises from production to marketing, from personnel management to finance, all the while helping them augment their growth and profitability. LSS has the customer as its main focus and works to create added value for businesses through cost reduction and waste prevention hence can be considered as a process improvement practice. One priority area of improvement in most organizations is the assessment of Critical Business Processes (CBPs) as key processes in the success of businesses that must be tackled in line with the objectives of the businesses due to their extensive impact on customer satisfaction. For this purpose, this study evaluates and ranks the CBPs, and then select the most ideal CBP in food companies with corporate identity in Istanbul following the LSS success factors. Hence, the components attained from the literature are assessed using the suggested “q-ROF CRITIC-ARAS” method which is based on CRiteria Importance Through Intercriteria Correlation (CRITIC), Additive Ratio Assessment (ARAS) techniques and q-Rung Orthopair Fuzzy Sets (q-ROFSs). The findings demonstrate that the most important criterion for LSS success in food businesses is “*Top Management and Support*”, while “Education and Culture” is the least important. Furthermore, “*Enlightenment Approach*” is found to be the most ideal CBP based on LSS success factors.

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