How does the IATF 16949 Standard Outperform ISO 9001 in Improving Operational Excellence? An Empirical and Comparative Investigation

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**Abstract.** Automotive companies are now adopting several approaches to improve their per- formance, achieve operational excellence, and maintain their market share. Operational excel- lence has emerged as a significant challenge for automotive organizations seeking to ensure their sustainability. The growing global use of quality management systems certification to the requirements of the international automotive standard IATF 16949 and the automotive market's obligation to obtain IATF certification increase the necessity for the automotive standard to be analyzed. In this context, this article aims to determine the contributions of IATF 16949 com- pared to the fundamental standard of quality management systems, ISO 9001, as well as the impact of the main managerial and operational requirements dictated in the automotive standard on the level of achievement of operational excellence. To accomplish this purpose, a detailed comparative analysis is carried out, followed by an empirical study conducted with 107 auto- motive equipment manufacturers located in Morocco whose data was subject to a linear regres- sion analysis carried out with SPSS software. The results of this study show that the IATF automotive standard is more demanding and more detailed in terms of operations management and leadership involvement compared to the ISO 9001 standard. Empirical results show that systematic compliance with the requirements dictated in Chapters "5: Leadership" and "8: Operations" enables automotive companies in Morocco to achieve better results in terms of operational excellence. The results obtained provide valuable insights and demonstrate how automotive companies can achieve operational excellence.

**Keywords:** automotive industry, IATF 16949, ISO 9001, linear regression, op- erational excellence