

# ISO 9001: Three Decades of Leveraging Business Success in A Constantly Changing World

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## Abstract

ISO 9001 return on investment over the last decades is most clearly tangible in life-critical industrial sectors such as, e.g. aerospace, semiconductor, medical device and car manufacturing where defect rates have been downsized by several orders of magnitude. To partially explain how ISO 9001 achieved such a spectacular result, it is shown how the standard managed to regularly adjust its requirements to take up both local and global business challenges over time, sometimes in a disruptive way. It is also illustrated how relevant key quality management principles are to achieve corporate success. It is also reminded that not all components of our societies have yet benefited from ISO best management practices. Finally, a tentative outlook of new quality management principles is provided, based on process digitization and machine learning.

**Keywords:** ISO 9001, quality assurance, quality control, total quality management, TQM, product out, market in, overseas manufacturing, business success, failure, sustainability, breakthrough management, digital transformation, artificial intelligence, machine learn

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