

Q4.0 Implementation: Insights and Implications

Access to new resource related to Quality Management added to PMWL



Resource provided by [Ameena Hag](#)

02nd May 2024 – Rawalpindi, Pakistan – Access to a new resource has been added to the PM World Library (PMWL) related to Quality Management. The new resource titled **“Benefits, challenges, critical success factors and motivations of Quality 4.0 – A qualitative global study”** is a research paper by Jiju Antony, Olivia McDermott, Michael Sony, Aidan Toner, Shreeranga Bhat, Elizabeth A. Cudney and Mehran Doulatbadi, published in *Total Quality Management & Business Excellence* in 2023. The study contributes valuable insights into practical Q4.0 implementation across industries and global contexts.

The study explores the integration of Quality 4.0 (Q4.0) with Industry 4.0, aiming to understand its motivations, benefits, challenges, and critical success factors. Q4.0 combines traditional quality management methods with advanced digital technologies to enhance operational excellence and innovation. Organizations adopt Q4.0 to meet changing customer preferences, address technological disruptions, and pursue sustainable production goals, leading to improved decision-making, productivity, cost reduction, and product quality. The study also states that challenges such as systems thinking, resource availability, cultural transformation, and skill development hinder successful Q4.0 deployment. Critical success factors include data availability and analysis, alignment with organizational strategy, leadership commitment, training, and fostering a supportive organizational culture.

The study provides practical examples of Q4.0 projects implemented by senior quality professionals across various industries, showcasing benefits like improved accuracy, reduced costs, and enhanced process control. Managers are urged to prioritize leadership support, select suitable Industry 4.0 technologies, and digitize quality management practices to create new value propositions.

To access this new resource, go to the Basic PPM Processes and Topics section of the library at <https://pmworldlibrary.net/applications-and-topics/>, scroll down and click on “Quality”, scroll down to papers to find this resource. Must be registered and logged-in to access. If not yet registered, please consider the 30-Day FREE Trial at <https://pmworldlibrary.net/trial-membership/>

This new resource provided through the PMWL university research internship program; [to learn more, click here](#)

For PMWL Post

Antony, J., McDermott, O., Sony, M., Toner, A., Bhat, S., Cudney, E. A., & Doulatbadi, M. (2023). **Benefits, challenges, critical success factors and motivations of Quality 4.0 – A qualitative global study**; Total Quality Management & Business Excellence, May 19; 34(7-8), pp.827-846. Available online at <https://pmworldlibrary.net/wp-content/uploads/2024/05/240503-Benefits-challenges-critical-success-factors-and-motivations-of-Quality-4.0.pdf> (Haq)

Where to post in the library: <https://pmworldlibrary.net/quality-management/>