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## Soft total quality management and lean manufacturing initiatives: model development through structural equation modelling

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Amjad Khalili\*, Md Yusof Ismail,  
A.N.M. Karim and Mohd Radzi Che Daud

Department of Manufacturing and Materials Engineering,  
International Islamic University Malaysia (IIUM),  
Gombak, Selangor, 50728, Malaysia  
Email: amjad\_alkhalili@yahoo.com  
Email: mdyusof@iium.edu.my  
Email: mustafizul@iium.edu.my  
Email: mradzi@iium.edu.my

\*Corresponding author

**Abstract:** Both soft total quality management (STQM) and lean manufacturing (LM) are philosophies for continuous improvement. Little is known about whether these can be integrated together or are in conflict. Furthermore, the nature of their integration together in the same enterprise is not clear. This paper tries to eliminate gap in operations management (OM) literature regarding the integration of these practices. To do this, it proposes a comprehensive model to be implemented in the developing economy of Malaysia, to investigate the linkages among elements of soft TQM and LM tools in the measured manufacturing sectors. A structured questionnaire was designed to validate the model and test the hypothesis. Structural equation modelling (SEM) through analysis of moment structure (AMOS 22) is utilised to empirically investigate the model based on primary data of 329 responses. Results obtained implied that hypothesis is significant and supported. Thus, both practices are complementary to each other.

**Keywords:** soft total quality management; STQM; lean; integration; AMOS; complementary; Malaysia.

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**Biographical notes:** Amjad Khalili is a PhD candidate in the Faculty of Engineering at IIUM. He is a researcher in industrial engineering, operations and quality management. He has strong experience in World Bank and European Commission funded projects for tertiary education. He participated in different workshops, training courses, seminars and study tours. He is a Lecturer in Palestine Technical University, and has many publications in international journals and conferences.