Effective Integration of Operations Strategy Framework for Manufacturing SMEs

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Abstract

The informal nature of operations can be an issue especially for Small and Medium Enterprises (SMEs). Understanding the key problem and gaps will establish suitable framework in effectively integrating strategy for operations improvements. This can be done by exploring actions taken by 'competitive SMEs' to discover decisions, practices and tools which contribute towards improved operations.

By doing this, there are three contributions that can be made. First, it provides tools and actions required to improve operations. Second, it can show when the tools and action should be carried out. Finally, it can discover 'good practice' which may only obtained by speaking directly to 'competitive SMEs' managers and owners.

In general, this paper addresses the need to establish systems that would provide support to organisations by not only giving directions on where it should be and how to improve but also providing guidance when actions should be initiated. In the end it will benefit a new start-up and also organisations which is still unclear about the strategic operations direction that should be pursued.

Keywords

Operations strategy, Small and Medium Enterprises, Performance improvement

Biography

Adam Ali is a lecturer in the Faculty of Computing and Technological Science, Kolej Universiti Poly-Tech MARA, Kuala Lumpur, Malaysia. He is currently a full time PhD student in the School of Mechanical, Aerospace and Automotive Engineering, Coventry University.

Ivan Arokiam (Dr) is a Senior Lecturer and course director for Part Time BSc Engineering students at Coventry University. Ivan's areas of expertise include Agile/Lean manufacturing, Production planning, Manufacturing process and Simulation. He has taught both post and undergraduate students in these areas and also carried out applied research around production optimisation. Ivan's applied research has been mainly through ERDF projects and he was also the principal investigator/project director of one of the main grant – Performance Improvement Initiative.

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Richard Anderson (Dr) is a Senior Lecturer at Coventry University. He is Course Director for MSc Engineering and Management, and for MBA Engineering Management. Richard's areas of expertise include Business and Manufacturing Strategy, Financial Decision Making, and Change Management, and he is supervising a number of PhDs in the areas of manufacturing, business expansion, and marketing. Richard has undertaken applied research with manufacturing SMEs.

Keith Popplewell (Prof) initially worked in operational research in general, and specialised in computer-aided engineering and production planning systems in manufacturing and pharmaceutical companies. His recent research has included major contribution to the definition of an Enterprise Interoperability Science Base (ENSEMBLE), and coordination of the SYNERGY project researching knowledge sharing across collaborative SME networks and virtual enterprises.

Jean-Marc Vasnier is the Head of Continuing Education at Ecole d'Ingénieurs Ei.Cesi, France. He has 15 years experience working in the automotive industries in UK, USA, South Africa and France as manufacturing engineer and lean director. His areas of expertise are in lean manufacturing, problem solving and change management. He obtained a Fellowship in Manufacturing Management from Cranfield University, UK and also holds a Six Sigma Black Belt. He has supervised over 20 masters students in quality, supply chain and lean disciplines. His research interests are in manufacturing strategies, the deployment of innovation and new product design in SMEs.