

Barriers Facing the Implementation of Lean Manufacturing in Libyan Manufacturing Companies

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Abstract : Lean Manufacturing has developed from being a set of tools and methods to becoming a management philosophy which can be used to remove or reduce waste in manufacturing processes and so enhance the operational productivity of an enterprise. Several enterprises around the world have applied the lean manufacturing system and gained great improvements. This paper investigates the barriers and obstacles that face Libyan manufacturing companies to implement lean manufacturing. A mixed-method approach is suggested, starting with conducting a questionnaire to get quantitative data then using this to develop semi-structured interviews to collect qualitative data. The findings of the questionnaire results and how these can be used further develop the semi-structured interviews are then discussed. The survey was distributed to 65 manufacturing companies in Libya, and a response rate of 64.6% was obtained. The results showed that these are five main barriers to implementing lean in Libya, namely organizational culture, skills and expertise, and training program, financial capability, top management, and communication. These barriers were also identified from the literature as being significant obstacles to implementing Lean in other countries industries. Having an understanding of the difficulties that face the implementation of lean manufacturing systems, as a new and modern system and using this to develop a suitable framework will help to improve the manufacturing sector in Libya.

Keywords : lean manufacturing, barriers, questionnaire, Libyan manufacturing companies

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