

PERFORMANCE MEASURES FOR CEMENT INDUSTRY IN INDIA: A CASE STUDY ANALYSIS

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ABSTRACT

Purpose: The purpose of this paper is aimed at development and validation of an instrument for factor analysis implementation in cement industry of India. It provides consolidation of the quality literature by identifying 11 performance measure factors of analysis.

Design/Methodology/Approach: The paper presents the case study approach of current green manufacturing strategies of cement companies and provides the Industrial Environmental Impact Data Collection, Design & Control of Manufacturing Systems and Integration-Product & Manufacturing system with questionnaire with employees, top and middle managers in fourteen cement factories.

Findings: It has been found that the fourteen factories under investigation have low productivity and production levels when compared with the design values. There is no clear TPM strategy and it has been found that the lack of training and personal development is the main cause of this problem. In addition, employees are found not to be motivated because of the lack of a management strategy and reward structure.

Research Limitations/Implications: Based on the findings, a new framework for GM has been developed. A broad range of survey and research was reviewed, and all revealed the methods to recognize the key influences for development of green technology. The characteristics examined are firm size, the degree of capital intensity, the degree of diversification, the timing of TQM implementation, and the maturity of the program. We find that smaller firms do significantly better than larger firms do.

Practical Implications: The current challenges have been identified and comparative analysis is developed into a model for the implementation of Green manufacturing.

Originality/Value: The paper highlights limitations in some of the cement factories in relation to GM and production strategies. The importance of adopting a realistic strategy and framework by managers is discussed. The results for size and capital-intensity validate the importance of TQM practices for smaller firms and environments that are more frequent intensive. Investing to achieve a broader, deeper, and more mature TQM implementation (possibly by targeting an independent TQM award) should also result in higher benefits from TQM implementation. These measures can be used to assess the status of factor analysis, in order to imply further development.

KEYWORDS: Green Manufacturing, Cement Industry, Total Quality Management, TQM, Performance Measures, PMs, Quality Management