

Mediated effect of environmental management on manufacturing  
competitiveness: An empirical study

楊振隆, 林淑萍, 詹雅慧, chwen Sheu

Technology Management

Management

clyang86@chu.edu.tw

Abstract

The extant literature has not thoroughly examined the inter-relationships among continuous improvement(CI), supplier management(SM), environmental management(EM), and manufacturing competitiveness. This study posits that environmental management is partially an extension of advanced manufacturing practices, continuous improvement and supplier management, since a significant portion of EM programs is based on the foundations of those practices. Therefore, EM can be regarded as a mechanism through which CI and SM practices reinforce their contribution to manufacturing competitiveness. A meditational regression model is constructed and the statistical results suggest that firms with closer supplier partnerships and solid continuous improvement practices are more likely to develop a proactive EM program, which in turn enhances competitive advantage through cost savings, quality improvement, and process/product innovation. The influences of SM and CI on cost and delivery performance are lessened with the presence of EM programs. Environmental management must not function separately from SM and CI. Finally, the effect of culture and industry is discussed with suggestions for future research.

Keyword : Green supply chain management, Supplier management, Environmental management