Evaluation of critical success factors of implementation of ISO 14001 using analytic hierarchy process (AHP): a case study from Malaysia

ABSTRACT

The factors and sub-factors critical to the successful implementation of ISO 14001-based environmental management system (EMS) and benefits that can be reaped from the implementation were explored in this study. An empirical study using the analytic hierarchy process (AHP) was carried out to find the relative weights and priorities of these critical success factors and benefits. The study was carried out in Malaysia among companies in the electrical and electronics sector. The results of the study indicate that the critical success factors in the order of importance are as follows: management approach, organizational change, technical aspects, and external and social aspects. The results of the study also indicate the benefits that can be obtained by the implementation of ISO 14001: improvement in the company's image and reputation, improvement in company's processes and profits, improvement in customer loyalty and trust, and improvement in staff morale and employer-employee relations.

Keyword: ISO 14001; EMS; Analytic hierarchy process; Critical success factors; Implementation