

# Abstract

Environmental Management System has become one of the basic means of competition in Thailand. Companies realize the importance of becoming ISO 14000 certified. More and more companies are going for ISO 14000 certification. Thus, implementing ISO 14000 becomes an important topic. Cost and benefit factors can help the company to understand the way to achieving ISO 14000 certification. The objectives of this study are : (1) to investigate perception of cost-benefit for each activity that relate to ISO14000 implementation; (2) to analyze the perception of costs and benefits relationship when implementing ISO 14000.

Literature is reviewed on general background of ISO 14000 EMS, the situation for implementing ISO 14001 standard in Thailand, what ISO 14000 sery is, benefits of ISO 14000 implementation, cost involved, cost-benefit analysis, competitive advantage, potential costs and benefits of an EMS.

This research formulates a conceptual framework to assess the perception of cost-benefit analysis in implementing ISO 14000 certification. In the framework, dependent variable is measured by benefits, which occur in each activity and costs, which occur in each activity as independent variables. There are nine hypotheses.

The mail survey is conducted among 61 ISO 14000 certified companies in the electronic industry in Thailand according to TISI (Thailand Industrial Standard Institute)--- electronics industry is chosen for this largest population of characterize industry certified companies. Of this forty-three questionnaires accounting for 70.49% response rate are returned. The data analysis methods include descriptive analysis and inferential statistics. The descriptive analysis indicated the average score of both costs and benefits. The result shows that the perceptions of benefits received in implementing ISO 14000 certification have higher average score than costs incurred. Inferential statistics tests in the form of bivariate correlation analysis are conducted with the Pearson correlation coefficient to evaluate the relationship between cost-benefit analysis in implementing ISO 14000 certification.

The result of testing in the relationship hypothesis found that there are positive relationship between costs of ISO 14000 implementation and benefits due to ISO 14000 in management system, technology development, procurement, operations, inbound logistics, outbound logistics, marketing and sales, and services activities. In addition, one hypothesis in human resource management activity has the negative relationship.

Finally, the recommendations are made to the result recommendation, general recommendation, and recommendation for further research.