

Title: Performance Evaluation of Logistics Companies Using Data Envelopment Analysis

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ABSTRACT²

As Thailand is a member of ASEAN, the regional economic integration or ASEAN Economic Community will be launched by 2015 to transform ASEAN into a region with free movement of goods, services, investment, skilled labour, and free flow of capital. The structure of logistics companies in the region will be transformed and the countries which have high logistics competence are more likely to gain benefits from this economic integration. The main purpose of this research is to develop appropriate construct to benchmark performances of logistics companies so that deficiencies can be highlighted and possible strategies can be evolved to improve the performances of the industry. The study applies data envelopment analysis (DEA) and Malmquist productivity index (MPI) to explore the operation performances of 55 Thai logistics companies from 2007 to 2010. The results point out the reasons for the inefficient Decision Making Units (DMUs) and provide improving directions for the inefficient companies accordingly.

The study provides a simple but comprehensive methodology for improving logistics competences. By comparing the efficiency of logistics companies, this research contributes to find Thai logistics companies weaknesses in order to take effective measures to improve the their level of input and output so as to improve their logistics efficiency. The method can be adopted by practitioners to assess present performance and find a suitable peer which it should follow to improve own technical and scale efficiency . This will build competence of its performance and as a whole of the industry.

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