

*The most remarkable symbol of globalization is the 20 foot long, 8 foot wide and 8 foot 6 inch high container. The trade of goods is increasing rapidly because of the gradient in production costs, mostly due to labor costs, between industrialized nations and developing countries. The discrepancy between cost-efficient supply in Asia and volatile demand in Europe calls for innovative strategies in international logistics.*

*The goal of this dissertation is to improve the logistic efficiency of international transportation chains through the development and evaluation of new consolidation and batching strategies. A focus is set on sea freight transportation of consumer goods from the dynamic Asian economies to industrialized countries in Europe. The methodological approach is the development of a simulation model for international transportation.*

*The outcomes of the experiments can be summarized as follows: due to the increased shipping volume, it is efficient to conduct direct store delivery between the origins and destinations having high container utilizations without the use of a central warehouse in Europe. Most efficient, and therefore highly recommended, is the relocation of the central warehouse from Europe to Asia to make profit of the costs advantages. Even when incorporating weaknesses like decreased flexibility the new consolidation and batching strategies offer savings of about 16 percent of the total costs.*

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