

Optimization of Collaborative Planning and Decision Making in the Tourism Supply Chains

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ABSTRACT

In the tourism industry, planning and decision making are complex operations. Mutual operations and activities are required across tiers in the supply chain including suppliers, service providers, intermediaries (travel agents and tour operators) and customer (tourists). Such interdependent processes are also vary across various stages in the supply chain starting from planning, procurement, purchasing, productions, transports, inventory/storage, sales and proportion as well as customer services. By making decisions in these stages, the objective of all parties should be to maximize the overall profit of the supply chain as a whole, not for individual. By making a decision with collaborations across the supply chain, the collaborative firms could gain a better outcome. Such collaborations can be done in every stage especially forecasting, planning and execution. To support such collaborative decision making, a tourism supply chain optimization model was modeled. The model includes main supply chain players such as suppliers, hotels, travel agents and tourist attractions. The model was developed to maximize the profit of the whole supply chain. In comparison, the model was also compared to the scenarios where individual profit is the objective. The actual data from the tourism supply chain in Thailand was used to validate the model. The optimization found that the supply chain profitability can be reached when the decision making is made under collaborations in the supply chain. The outcome can be greater when the collaborations are supported by information sharing and team work.

Keywords: *Supply Chain Management, Decision Support Systems, Global Optimization.*

References

Note:

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