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Agile Supply Chains and Its Dependency on Air Transport Mode: A Case Study in Amazon

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Abstract: This article discusses the dependence on air transport mode of agile supply chains. The agile supply chains are the result of the analysis of the uncertainty supply chain model, which ranks the supply chain, according to the respective product. Thus, understanding the Uncertainty Model and life cycle of products considered standard and innovative is critical to understanding these. The innovative character in the intersection of supply chains arising from the uncertainty model with its most appropriate transport mode. Consider here the variables availability, security and freight as determinants for choosing these modes. Therefore, the research problem is: How agile supply chains maintains logistics competitiveness, as these are dependent on air transport mode? A case study in Manaus Industrial Pole (MIP), an agglomeration model that includes six hundred industries from different backgrounds and billings, located in the Brazilian Amazon. The sample of companies surveyed include those companies whose products are classified in agile supply chains, as innovative and therefore live with the variable uncertainty in the demand for inputs or the supply of finished products. The results confirm the hypothesis that the dependency level of air transport mode is greater than fifty percent. It follows then, that maintain agile supply chain away from suppliers base is expensive (1), and continuity analysis needs to be remade on each twenty four months (2), consider that additional freight, handling and storage as members of the logistics costs (3), and the comparison with the upcoming agile supply chains the world need to consider the location effect (4).

Keywords: uncertainty model, air transport mode, competitiveness, logistics

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