

# **Important Conditions for integrating a Logistics Cluster**

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## **Abstract**

The interest in the cluster approach as a strategy for achieving regional competitiveness has become relevant nowadays. Organizations in common industries with similar operations are creating synergies to get access for services and customers that are more sophisticated. Agglomeration among companies of logistics service activities is a phenomenon becoming more evident in the current regional economies.

To reduce logistics costs, increase regional prosperity and create integrated strategies for a specific geographical region to compete in a changing environment is imminent. The purpose of this research is to identify the influence of agglomeration and the readiness to create synergies in some of logistics activities such as transportation services.

Since the Northeastern region in Mexico is very active on international trade operations, and a critical mass of transportation services is intensive, the region is the focus of this study. The data gathered was from transportation firms' executives and secondary data sources. The first part of the study is a comparison of the evolution in different regions where these groups of firms have been established and their impact in competitiveness according to the occupied personnel, wages and total investment.

On the second part of the research, the data analysis technique applied as part of the methodology was multivariate linear regression, to test the impact of the agglomeration and synergies in the specified region to affect competitiveness.

As a result, the statistical significance of geographical allocation of the agglomeration and their intent to create synergies was display to contrast the hypothesis associated to the capabilities of the transportation logistics firms to become a cluster in the selected region, and their implications on supply chains.

## **Keywords**

Geographical location, agglomeration, logistics clusters, competitiveness, regional growth, prosperity.

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## **Biography**

**Teresa Verduzco-Garza** is a Professor and Researcher at the Industrial and Systems Engineering School in University of Monterrey (UDEM) in Mexico. She received her BS in Industrial and Systems Engineering in 1998, an MS in Business Administration in 2005, an MS in International Commerce in 2006 at UDEM, and PhD in Management focused on logistics and supply chain operations at the Autonomous University of Nuevo León (UANL)

in Mexico in 2018. Her expertise focus on Clusters for competitiveness, Clusters supply chains, Operations Management, Logistics, and Soft Systems Management. Prior industry experience includes 12 years improving enterprises performance through project management and strategic planning. She is an active member of the American Production and Inventory Control Society (APICS) and The Competitiveness Institute (TCI). She has published and presented her work at international forums like IEOM Conferences, IISE World Conferences, TCI Global Conferences, SISE World Conferences and other regional conferences.