

Research Report: ZLC-2009-9 Global Logistics Parks

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MIT SCALE RESEARCH REPORT

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EXECUTIVE SUMMARY

Globalization has opened a wide range of possibilities for new markets, customers and opportunities, in particular, for companies capable of scaling their operations without losing their customer service, cost advantages, quality, and innovation. These new challenges have increased complexity in aligning processes and stakeholders, but more importantly, have made supply chain efficiency a distinctive advantage in competing and evolving in a fast-changing environment.

Background:

Location is an important factor in decision-making in order to achieve supply chain efficiency. Logistics parks have became an appealing option to take into consideration in this process for different companies and industrial sectors, increasing their demand and creating massive construction of these facilities around the world. In China, more than 1,000 logistics parks have emerged in the past decade. In other areas of the world, both developed and developing, logistics parks are being promoted as a key component of regional economic growth.

Objectives:

However, given their origins and fast growth, the concept of logistics parks is not clearly defined across languages, countries, continents and sectors. For example, in Germany, logistics parks are called freight villages, in Japan they are called distribution parks, and in other countries they are called logistics centers, logistics platforms, or Distriparks.

In the beginning, logistics parks were areas that enabled companies to centralize their operations, using shared warehousing and transportation infrastructures, but government support and an increase in outsourcing and logistics providers have enhanced their attractiveness and amplified the services they offer.

The scope of this thesis is identifying common characteristics across logistics parks related to location, transportation modes, general services, and value-added services. This will help to create a framework to define and characterize them. The sample size used in this research was 86 parks in 14 countries.

Findings:

Location of logistics parks was found to be the most crucial issue to secure competiveness. Location is influenced by the distance to the nearest city and principal modes of transportation. Logistics parks located near a main city should be a maximum travel distance of 30 kilometers and 30 minutes of travel time.

On the other hand, logistics parks located near a secondary city, defined as a city with a population between 0.1% and 2% of the country's population, should be a travel distance from the facility of a maximum of 20 kilometers.

Similar findings were specified related to travel distance and time to the nearest airport and seaport; the analysis showed some differences in these results depending on the continent. Additionally, it was found that just 27% of the parks offer 4 modes of transportation, and highway access is the minimum requirement to be competitive.

Value-added services and general services were analyzed to find which are the more commonly offered in logistics parks. Using this information, it was found that Rotterdam Distriparks and Trade-port Singapore offer the widest number of services in the sample.

Final remarks:

The advantages of logistics parks are achieved through a conscious planning of the location chosen, infrastructure provided, and services and partnerships involved in the process. It is important to define the optimal characteristics to secure the success of the project in the short- and long-term. A competitive location for logistics parks is defined by the maximum time and distance to the main transportation modes and nearest city as well as their impact on companies' information, physical, knowledge and financial flow.

Logistics parks are an attractive option for supply chain management, but their impact on cost reduction and operation improvement depends on each company's characteristics and strategies. Each park offers a wide range of services that could be more suitable, depending on individual requirements.

The value of logistics parks is complemented by the correct combination of diverse companies co-located in the park, such as third-party logistics providers, manufacturers, government institutions, and corporations that offer additional services.